

APPROVED BY:

COMMITTEE CHAIRMAN

BLUE CRAB CONFERENCE CALL SUMMARIES

January, 2013

Participants:

Steve Jacob – York College of PA, York, PA
Ryan Gandy – FFWCC, St. Petersburg, FL
Glen Sutton – TPWD, Rockport, TX
Traci Floyd – DMR, Ocean Springs, MS
Alex Miller - GSMFC, Ocean Springs, MS
Jason Herrmann – ADMR, Dauphin Island, AL
Jeff Marx – LDWF, New Iberia, LA
Darcie Graham – GCRL, Ocean Springs, MS
Harriet Perry – GCRL, Ocean Springs MS
Steve VanderKooy – GSMFC, Ocean Springs MS
Debbie McIntyre – GSMFC, Ocean Springs MS

The Blue Crab TTF was unable to meet at one location due to funding issues; therefore, a series of conference calls/webinars was held over a period of several days to review and update individual sections of the FMP revision. Summaries of each conference call follow.

Economics Section

The conference call began at 8:30 a.m. on January 14, 2013. Moderator, **VanderKooy**, welcomed everyone and pointed out that the purpose of this call is to discuss the progress being made on the *Economics* section of the Blue Crab FMP.

GSMFC economist, Alex **Miller**, showed the group some of the tables and graphs he has been working on. **Miller** explained that a fire at NOAA many years ago had destroyed some very early data so he was only provided data since 1993, which is where Keithly had begun. Miller has spend considerable time figuring out Keithly's tables and data. Mississippi is missing processor data from 2006-2011, so **Miller** and **Floyd** will both investigate this with NOAA and the DMR. **Miller** will send the table with the missing Mississippi data to **Floyd**. There is a possibility that the missing data is a result of crab processors either not working following the hurricanes and/or sending the business to Alabama. **Sutton** stated that there are currently only two processors in Texas and have been since 2006. **Miller** pointed out that these processors are only those who report crabs.

Categories on these tables are similar to the ones Keithly used but they have now been updated regionally. **Miller** will make graphs to show trends over time to go with the tables. He will also provide figures from the processor data.

While some landings data has been provided by Mexico, **VanderKooy** has not had any response to requests for data from Venezuela so there are limited "non-U.S." landings.

It was agreed that the economic data used should go through 2011 to match the landings, and the processor data would start at 1973. **Miller** will use whatever dollar value he deems appropriate to adjust for inflation.

VanderKooy reminded all that we do not use color in our publication, so they should keep that in mind when making tables and graphs. **VanderKooy** will need the original data/spreadsheets used to generate all figures and tables.

There was discussion of the terms “nominal” and “real”. **Miller** explained that “nominal” indicates dollars in the current year while “real” means adjusted or deflated to the Consumer Price Index (CPI). **Miller** will determine which terms are the most accurate and understandable and will add these to the tables and graphs appropriately. Terms such as CPI and any other new terms should be added to the glossary.

Miller stated that he has to add marketing, certification, and the economic profiles of harvesters, processors, and dealers to this section. He would like to be able to give their average costs/earnings on a regional basis and track that through. **Sutton** stated that there is a big difference in price/cost of crab products in Texas. **Miller** stated that there is really not a good source of information available to provide us the prices that crabs or crab products are being sold for. **Gandy** stated that some of the Florida fishermen get top dollar for prime crabs and lower dollar for miscellaneous crabs. There is not any economic data available to represent these numbers.

The fishing income section will include information from our survey results and from the processor survey **Miller** has already completed.

The previous crab FMP showed values in “thousands of dollars”. It was decided that this should probably remain this way because we commonly report in thousands or millions of dollars and pounds. This can be better determined when all tables, etc are turned in and are being formatted but large numbers can clutter a table quickly.

VanderKooy discussed the timeline and asked that everybody get section updates to him by March 7th for distribution before GSMFC’s Annual March Meeting in Destin. The Blue Crab Subcommittee will meet then and will review all section drafts. **VanderKooy** stated that he was still unsure if IJF would be able to cover travel for the TTF members to attend this meeting due to funding issues and delays. He would let them know.

There is a deadline of March 29th for response to the Social Survey. Once those are received, Dr. **Jacob** will analyze the results and work it into the Sociology section.

VanderKooy does not have a firm target date for completion of the entire FMP but pointed out that this information is all necessary for the stock assessment Review Workshop. He anticipates all sections to be complete by the first or second week in May. After the stock assessment, the TTF will meet again to finish the FMP. Funding, scheduling, the stock assessment review, and the social survey will all come into play when determining the final target date for FMP completion.

VanderKooy reminded all that the next conference call would be this afternoon at 1:30 pm and will cover the *Biology* section.

Biology Section

The conference call began at 1:30 p.m. on January 14, 2013. Moderator, **VanderKooy**, welcomed everyone and pointed out that the purpose of this call is to discuss the progress being made on the *Biology* section of the Blue Crab FMP.

Perry presented and explained the change in the structure of the *Table of Contents*. She stated that they had scaled back the *Parasites & Disease* section, focusing on only major diseases of concern specifically in the Gulf. *Distribution and Abundance* includes trends of abundance for juveniles in each state. *Predation Affecting Survival* is discussed only in terms of mortality. *Predator/Prey* has been included under *Foraging*.

Gandy stated that Dr. Eric Schott from Maryland suggested considering HABs, pollution, etc. under biotic factors. **Gandy** is going to handle the section on *HABs*. He is going to send the suggestions from Dr. Schott to **VanderKooy** to cut and paste. **VanderKooy** typed in changes as per **Perry** and **Gandy**. **Perry** will handle the section on *Eutrophication* and sum up the impact on mortality. **Perry** has rearranged the structure here and asked that anyone who has any suggestions, please send them to her. **VanderKooy** will add this back into the *Table of Contents* and return to **Perry** formatted.

Perry stated that the *Geographic Distribution* and *Biology Description* sections have been rewritten. She has made some additions to *Larvae, Age, Growth, and Maturity*. She also added some Smith and Chang observations as well as the pond work and Chesapeake information. The *Nutrition* section has been added. New figures were worked up through the independent monitoring data for *Width-Weight Relationships*, and *Autotomy* was moved up to this section. New information has been added to the *Maturation* and *Age* sections. **Perry** stated that she would welcome a contribution from anyone that would expand on the calcification technique.

Graham reworked and updated the *Reproduction* section. *Spawning* has also been updated although **Sutton** may have some changes to suggest. **Perry** stated that there was not much change to *Distribution and Abundance* other than new megalopae information being added. **Perry** added the 2003 Spitzer et al study to *Megalopal Settlement* and *Juvenile Abundance*.

There will be a summary of some of the independent data added to *Juvenile Distribution and Abundance*. There was a question as to whether juvenile abundance should be discussed by state or in more general statements. **VanderKooy** pointed out that it is more important here to discuss the biology, environmental effects, and physiology of the animals that drive their distribution and abundance more so than what the actual abundances are. Then in the *Habitat* section, habitat quality will be described and preferred habitats of these various life stages, i.e., whether they need structure, soft bottom, etc. That amount of habitat leads to abundances. They are separate things and it may not be appropriate here to talk about trends in abundance of juveniles over time. That is actually what is driving the stock assessment. **Perry** suggested and **VanderKooy** agreed that general statements should be made about overall abundance and

decline, and then make reference to the other sections for more detailed information.

VanderKooy stated that this is actually salinity and fresh water driven as well as habitat. The details about how distribution and abundance fluctuated over time can be covered later where it is appropriate.

Perry stated that she will write some text up on *Adult Distribution and Abundance*. She has reorganized the *Food and Feeding* section but has not yet this section with the relevant Chesapeake. She does plan to have something soon.

Sutton stated that he will send **Perry** a paper regarding size and salinity for possible use in the *Maturity* section. He will also forward two papers regarding sheepshead east and west of Apalachicola as well as one that discusses the geologic feature of the divide.

As far as the *Growth* section, **Sutton** mentioned that a grad student is finishing up a tagging study which will yield growth rate per day and per month. It will be a published abstract soon. **Sutton** will provide a paragraph for **Perry**.

Perry is working on the references and literature cited for *Section 3*.

VanderKooy will clean everything up and replace it on the website, then send it to **Perry**. **Perry** would like for the GDAR analysts to read Chapter 6 in the Chesapeake Bible re: age and growth. They talk about models they developed which include determinate and indeterminate growth. **Perry** feels that everyone should be familiar with this so she will bring the book to **VanderKooy** so that he can distribute that chapter to the group.

It was decided that only general statements, not specific to the DWH, would be made in reference to the effects of long and short term petroleum exposure on the environment. DWH can be used as an example however. This is already in the *Habitat* section but needs to be added to the *Table of Contents* under *Factors Affecting Survival*.

Graham indicated that the *Aquaculture Appendix* should be complete by the end of January. **Graham** will also do a summary paragraph on mariculture to be included in the *Fisheries* section and forward to **Floyd**.

VanderKooy will forward some Oyster Habitat bottom-type information to **Perry** that he thinks she will find helpful. **Perry** plans to finish *Section 3* by the end of January to the middle of February.

VanderKooy reminded everyone to please release their surveys and that the next call is tomorrow at 1:30 p.m. with Dr. **Jacob**.

Sociology Section

The conference call began at 1:30 p.m. on January 15, 2013. Moderator, **VanderKooy**, welcomed everyone and pointed out that the purpose of this call is to discuss the progress being made on the Sociology Section of the Blue Crab FMP.

Dr. Steve **Jacob** introduced himself to the group and explained his basic approach to the social survey. He said that about 75% of the questions on the original survey had to remain the same to allow for comparison. **Jacob** and **VanderKooy** had a meeting in Pennsylvania at which time they reviewed the first survey and developed some additional questions. There is some concern about the length of the survey. **VanderKooy** stated that we are now in the pilot stage and polled the state reps who were participating in the call to see who had sent the survey out to their chosen fishermen for a trial run. **Sutton** responded yes. **Marx** responded no but will check with **Bourgeois** to see if he is handling this. **Herrmann** responded no. **Floyd** responded yes. **Gandy** was not present on this call but **VanderKooy** stated that **Gandy** will get the survey to **Capo** for his assistance. **VanderKooy** needs the results in electronic form as well as paper. **Jacob** stated that he and **VanderKooy** may need to meet again in person before finalization.

Sutton pointed out that Texas fishermen are limited to 200 traps, and the last category in some "trap" questions ended at the Texas max. **VanderKooy** will adjust these numbers down one to better accommodate Texas. A few of the options overlap as well. **VanderKooy** will fix this problem. This survey is Gulf-wide so we cannot be state-specific but on the paper form, there will be a way to determine from which state the survey originated. There will be marks at the top of the form (paper only) specific to individual states.

Once the surveys are received back from the pilot fishermen, **VanderKooy**, **Miller**, and **Jacob** will follow up with some of them. Each state rep should also ask for feedback from the pilot fishermen as to how long and invasive the questions were.

Miller stated that we really do not have a lot of economic information on the crab fishery. He explained some of the economics-related questions indicating that the purpose of these questions is to get a look at the financial performance of crab businesses. He would like to be able to put together a cash flow/income statement. **Miller** stated that there are also some economic questions in the inactive section. **VanderKooy** has some number ranges to adjust in this section of the survey, similar to the active fishing section.

Graham pointed out that there are no questions on the survey regarding cost of gear or how often it is replaced. There are also no questions about estimated loss of traps and the cost for the maintenance of the traps. **VanderKooy** will add these questions under *Effort*.

Graham stated that we should also include: "What are the reasons you would switch fisheries?" and "What are the factors that make you stop/start fishing?" **VanderKooy** will also add these questions under *Effort*. We are also trying to find out *who* is in the fishery (both long and short term) as well as *why* they are in the fishery.

Another question to consider is "Why would you buy a license and not use it?" **Sutton** stated that a lot of Texas fishermen wait until the end of the year to buy a license, anticipating that the license value may go up – an investment for future resale. Since 2006, there has been a limit on the number of Texas licenses sold. These are transferrable. We may need another question or set of questions to address the selling and transferring of licenses. In Texas' buy-back program, the license value is evaluated every year. **Wagner** and **Sutton** found that a number of licenses

are not being used. This type information would be valuable from all five states. **VanderKooy** stated that licenses sold in the Gulf of Mexico total about 4,700.

VanderKooy will make adjustments to the survey and send the final draft out in mid-February. Paper surveys will also be placed at physical locations and give 20 or so to each state office. The deadline for returning the survey is March 29th and **VanderKooy** anticipates having the results complete by the end of April.

Jacob will work with **VanderKooy** to develop the Sociology Section. **VanderKooy** would like to submit the work to a journal for publication after the FMP is completed.

VanderKooy pointed out that he still needs addresses from Florida. **VanderKooy** and **McIntyre** will print the envelopes and the letters for GSMFC. **VanderKooy** has received draft letters from Florida and Louisiana. Mississippi and Texas both have received approval but TPWD is still working on addresses. **Perry, Graham, and Floyd** have a derelict trap clean-up scheduled soon in Mississippi and they will hand some paper copies of the survey out at that time.

Sutton asked if there was a way that he could possibly demo the survey online for the fishermen who are having difficulty. **VanderKooy** stated that, if there is a technical problem, there really is nothing that we can do, but he will create a dummy survey for that purpose (sort of a primer to work through). **VanderKooy** pointed out that if only one-half of the survey is completed and the participant quits midway, that only as far as they fill out will be reported.

State reps should make sure that their crab task forces are aware of this survey and talk it up. Also, be sure that receptionists and staff members are aware of where to direct questions regarding this survey.

Jacob stated that, as data comes in, we will be able to print it out and forward it to TTF members. He indicated that most fishermen will respond in the first three days or will not respond at all.

VanderKooy reminded all that the next conference call in this series will be Thursday, January 17th at 8:30 a.m. and will address the Habitat Section.

Habitat Section

The conference call began at 8:30 a.m. on January 17, 2013. Moderator, **VanderKooy**, welcomed everyone and pointed out that the purpose of this call is to discuss the progress being made on the Habitat Section of the Blue Crab FMP.

Rester reported that he had made minor changes in the general Habitat description section. For the most part, this section is boilerplate for most FMPs, but modified when necessary for specific species.

He said that **Perry** had mentioned at a previous meeting that she would like to see an accounting estuary-by-estuary. **Rester** stated that, although there is information that is 40 years old, he had difficulty finding anything new. He does have some information on seagrass. **Rester** asked the group for any suggestions or resources they may know of that would have some updated information. **VanderKooy** said that Doug Fruge had done an extensive section for the Striped Bass FMP. **VanderKooy** will forward this to **Rester** just in case that work would be helpful. **Perry** also suggested the **Rester** take a look at the table that was updated for the last Crab FMP. **Perry** pointed out that there is also some habitat-specific information included in Section 3 which she will forward to **Rester**.

VanderKooy pointed out that the lack of updated, published habitat values is a common problem with all GOM FMPs and that most of the boilerplate material originated with **Rester** in the 1998 EFH amendment from the Gulf Council.

Regarding the threats section, **Rester** discussed human population increase and coastal development, and the impact and problems in the estuaries, i.e. oil and gas, development of ports and marinas, HABs, climate change, weather-related events, etc.

Rester would like to get this section in its final format and send out to the Habitat Subcommittee for review. Hopefully they will be able to suggest more recent resources for **Rester** to use.

Marx stated that his *Life History Stage* descriptions are complete to date. He is ready for everyone to review the *Adults* section. He pointed out that there was not much new information regarding adults like there was for juveniles and larvae.

VanderKooy indicated that the *Essential Habitats of Particular Concern* section is a joint effort and everyone should submit their work to **Marx**. The group was undecided as to whether each state should provide a separate state-specific paragraph or whether there should be a more generalized paragraph, common to all five states with some state-specific examples included. The group will think about this and get back with **VanderKooy**. He pointed out that, when the group makes recommendations later in the document, it is better to have already established the issues and, if water rights are a problem, it should be presented early in the document.

VanderKooy will blend together **Marx's** and **Rester's** sections and forward to everyone. When everyone is reviewing these sections, if you think of an example of a threat that is specific to your state, let **VanderKooy** know.

VanderKooy reminded all that the next conference call in this series will be this afternoon at 1:30 p.m. and will address the Fisheries Section.

Fisheries Section

The conference call began at 1:30 p.m. on January 17, 2013. Moderator, **VanderKooy**, welcomed everyone and pointed out that the purpose of this call is to discuss the progress being made on the Fisheries Section of the Blue Crab FMP.

VanderKooy first reminded the group that the GSMFC Annual Meeting will be March 19, 20, and 21 and will be held at the Sandestin Hilton in Destin, Florida. Larry Simpson will be awarded the Charles H. Lyles Award at the Wednesday luncheon. This will be an extended luncheon and will follow immediately after our Crab Subcommittee meeting.

Both the Blue Crab TTF members and the Crab Subcommittee members will be invited to attend their combined meeting which will be held Wednesday March 20, 2013 at 8:30 a.m.

VanderKooy will send out Travel Authorizations in the next week. For states like Louisiana, both **Bourgeois** and **Marx** will be invited to participate.

A Sustainable Fisheries Forum – Application of Stock Assessments to Management will be held Tuesday March 19th at 1 p.m. to talk about stock assessments and biological reference points. **VanderKooy** would like all TTF and Subcommittee members to attend. The menhaden folks are at a point in the SEDAR assessment where they are going to have to start thinking about management goals and crab folks should also start thinking about management goals now that we are close to finishing up our assessment. It is now time to start thinking about recommendations for the FMP. **VanderKooy** and **Mahmoudi** are arranging for outside speakers who are familiar with the application of sustainable measures, proxies for MSY, and how management goals were developed in other fisheries – federal and state. There will probably be a couple of speakers from the gulf and maybe the south Atlantic and this will be conducted in a joint, round table type workshop. Both TTF members and Subcommittee members will be authorized to arrive on Tuesday morning to attend the Forum that afternoon, the Crab Subcommittee meeting the next morning, and then the luncheon at noon.

Due to the luncheon probably lasting approximately two hours, the TCC meeting will start later than usual on Wednesday afternoon. **Gandy** should be able to give the report to the TCC.

Sutton will provide a general results overview of the stock assessment to-date to the Subcommittee. At that point, we should be pretty far along. If not, we will have a webinar in April to review what the assessors came up with. At that point, we will be deep in the writing aspect of the final report. **VanderKooy** will get this report out in May to our independent reviewers who are: Rom Lipcius, Genny Nesledge, and Tom Miller.

These reviewers will be coming in for the Assessment Review Workshop which will be held June 11, 12, and 13. **Mahmoudi** will moderate this workshop which will be held at the DMR building in Biloxi. **VanderKooy** encouraged everyone to mark this workshop on their calendars although, at this point, he is not sure who exactly will be invited to attend. Tuesday will be dedicated primarily to a few key people making presentations to the reviewers about the biology specific to the gulf, habitat, fishery, and answering any questions they may have on background information as to the assumptions and how we handled the data, the independent data programs, and the data that we used. The analysts will talk about the standardization. Wednesday will give the reviewers the opportunity to ask specific questions of the analysts, look at the models, do some adjustments, do some sensitivity runs, and tease out some of the questions. Once the reviewers are satisfied, they will spend about half a day on Thursday putting together individual reports, working with our workshop coordinator, **Mahmoudi**. Robert **Leaf** is trying to find a grad student who may be interested in helping to organize the report, doing some of the write-up

and summary, the rapporteur. As the time gets closer, **VanderKooy** will provide more information and send out travel authorizations. This activity is not funded in the IJF budget but is being scheduled in lieu of a TTF meeting; therefore, **VanderKooy** may not be able to include everyone he would like to. If you are local and would like to drive over for a day or two, something can probably be worked out.

Floyd has made the changes in Section 6 that were discussed at our Apalachicola meeting. Most of these changes came from GDAR. She added a couple of paragraphs of summary information for the past decade under *Effort*. She is going to double check her numbers and possibly add some references.

Floyd stated that the non-US (Mexico) landings in the GOM had only the 2010 breakdown of blue crabs. These numbers were looked over by the group. It would be interesting to find out where these crabs ended up but **Sutton** stated that importation records may be difficult to come up with. **Capo** had stated at our Apalachicola meeting that product from Venezuela ends up on the East Coast. **Miller** may have some import information which contains country of origin.

Sutton stated that he and Tom Wagner were working on some terrapin, stone crab, and flounder data to include in Incidental Catch and ByCatch.

Floyd included a paragraph regarding crab clean-ups. **VanderKooy** stated that we want the data from 2012 and 2013 but we will only use data in the FMP through 2011.

VanderKooy reminded all that they should be providing their state updates to **Floyd** for inclusion. Also, post these on the website for everyone to have access to.

Texas – **Sutton** stated that he had added some material to the existing Texas section through 2011 to be consistent and he will update **Floyd** if any of these numbers change. In the Soft crab section for commercial and recreational, **Sutton** stated that Texas does not separate the soft crab data from the hard crabs. **Sutton** asked if this would be the place to add information collected from interviewed recreational crabbers. **VanderKooy** pointed out that there is some old information from GCRL but it may be useful. **VanderKooy** will send this file to **Graham**.

VanderKooy reminded everyone to “Steve” their sections up to be a better descriptive narrative – a kind of time capsule by state. Please provide the interpretation necessary for the trends in landings over time.

Louisiana – **Marx** shared his lawyer-approved section through 2010. He is not sure if he will have to get this re-approved when 2011 data is added.

Alabama – **Floyd** stated that she had added some summary information to this section. **VanderKooy** suggested that **Herrmann** get with Van Hoose and Steve Heath in order to get a historical perspective to add here.

Mississippi – **Floyd** updated her section with some voluntary trip ticket data. **Graham** advised **Floyd** that she can use **Graham’s** CPUE work also. **VanderKooy** asked **Perry** to get with

Guillory, Heath, Van Hoose, and Tom Wagner to interject some good historical data into this section as well as the other states' sections.

Florida – **Gandy** updated the numbers from the Florida West Coast: landings, hard shells, and soft shells. He will try to get Steele to help him “Steve” up his narrative historical section.

TOC – Most items are complete or near complete in Section 6. **Graham** will add a paragraph on Mariculture viability as a commercial enterprise to the Fisheries section.

User group conflicts - The question about loss of traps will be interesting. When we get social survey results, if there are perception issues, we can beef this information up.

Habitat recovery – No one in the group could quite remember what this pertained to. When someone remembers, he/she will let everyone else know.

Once again, **VanderKooy** reminded everyone to provide state information to **Floyd**. Tables and figures must be submitted separately and we need the Excel spreadsheets. Give specific instructions to **Floyd** as to exactly where these go in the state sections, i.e. positioning between paragraphs, etc.

March 7th is the deadline for section drafts so that **VanderKooy** can distribute these out prior to our annual meeting. He would like to have a formal sit-down meeting in April, possibly, and then wait for the Assessment Review Workshop to finalize recommendations. By August, we should be able to have a final draft to review and edit which can then go to the TCC in October for approval.

Perry pointed out that, of interest to each state may be how management has changed, why, and what its effect on the fishery has been over the years.

Lastly, **Gandy/VanderKooy** will need agenda items for the Blue Crab Subcommittee meeting. Sutton will do presentation on stock assessment. **Gandy** will present the formal report to the TCC.

Flounder TTF Conference Call Summaries

February, 2013

Participants:

Cherie O'Brien
Chester Moore
Karon Aplin
Wes Devers
Jason Adriance
Ava Lasseter
Mike Stahl
Steve VanderKooy
Debbie McIntyre

The Flounder TTF is unable to meet at one location due to funding issues; therefore, conference calls/webinars are being held to review and update individual sections of the FMP revision. Summaries of each conference call follow.

February 19, 2013

The conference call began at 8:30 a.m. as **VanderKooy** welcomed everyone and pointed out that the purpose of this call is to discuss the progress being made on several sections of the Flounder FMP revision. Another call is scheduled later this week to address those sections not reviewed today.

Description of Fishery

History - **VanderKooy** pointed out that everyone is supposed to be sending their state's portion of this section to him. Thus far, he has received graphs and excel files from **Stahl** for Texas. **Sempsrott** has sent her updates for Florida to the website and to **VanderKooy**. **Adriance** forwarded his updated section for Louisiana to **VanderKooy**. **Devers** is very close to being finished with Mississippi. **Aplin** is still working on Alabama's portion and waiting on information from the commercial biologists.

VanderKooy asked all to make sure that recreational history is also included in their states' sections. **Aplin** will write a background history of the recreational fishery and **Devers** will write one for the commercial fishery.

Devers stated that he will piece-meal all of these sections into one. As soon as possible, **McIntyre** will begin to edit each section assuring that the document flows as smoothly as possible.

Economics

Adams stated that he had intended to construct tables from the data on the NMFS website but

VanderKooy had informed him that there was some discrepancy between actual trip ticket data and NMFS data for the states of Texas and Florida. **Stahl** has asked Cindy Bohannen, the trip ticket person in Texas, for this data and **Adams** is getting this information for Florida. The other states' trip ticket data matches up closely with NMFS data. A caveat may need to be added stating that the data may not match NMFS data exactly.

There was a discussion about the revision of tables in this section and what time span should be used. **VanderKooy** suggested keeping table 7.2 and adding a 7.3 (two 5-year tables). We want to make sure that this is a source document and that the reader does not have to refer back to another document for clarity. Once **Adams** receives all of the data and looks at the trends, he will decide what to include and how to include it.

Adams asked if NMFS data can be used for table 7.5, gear type. **VanderKooy** stated that much of this data is housed at GSMFC and can be generated from here.

Adams pointed out that there is not really any new information to provide insight without doing another survey. He stated that in 2000, for the white trout survey, excellent results were gotten by walking into the fish houses and asking questions. **VanderKooy** pulled the old survey up and reviewed it with the group. The survey itself is very simple but key questions can certainly be added. **Adams** and **VanderKooy** will further review the old survey and modify it as necessary, then they will route it to the group.

In the recreational sector, there is not much change. **VanderKooy** will follow up with Gregg Bray regarding MRIP data targeting statistics. **Adriance** has posted the USFW survey to the Economics section of the website.

Section 7.3, restitution, only reflects Texas and Louisiana information thus far. Louisiana now bases theirs on trip ticket values. **Adriance** forwarded this to **Adams**. **Devers** pointed out that Mississippi uses AFS guidelines. **Stahl** will check on what Texas does as they have recently changed. **Aplin** will also check on what Alabama does.

Mariculture references are still needed.

Adams still needs value and restitution data (annual and monthly) from 1986-2011. **Stahl** will check on when the trip ticket system was implemented in Texas. It was implemented in Florida in 1986.

Biology

Much of this section has not been updated because there is not any new information available.

Per **Devers**, *Geographic Distribution* is good to go at this point. He did add a disclaimer and some personal communications. He updated the abundance of juvenile flounder under *Description* and will forward these updates to **VanderKooy**.

Devers made some changes, per the AFS names book, in the classes under *Classification* and

updated the AFS authors. His part is done.

Taxonomy has been edited by **Aplin** and is complete.

Adriance has completed the *Age and Growth* section but he is open to suggestions and changes. He has not found any age and growth being done in the wild but will add it if he finds any. **Adriance** asked all states to review Section 3 tables for accuracy and completeness.

Stahl has updated *Reproduction* which is ready for review and suggestions. He will get with **O'Brien** regarding what to do about the Christmas Bay vs Galveston Bay discrepancy. Texas will make this decision. **Semprott** has completed *Genetics* and it is also ready for review by everyone.

Devers has not had a chance to work on *Parasites and Disease* but he and **VanderKooy** did meet with Dr. Overstreet at GCRL. Once this section is edited, **Devers** will send it to Overstreet and ask him to take a look at it.

Feeding Prey and Predators will be addressed by **Devers** also.

Section 05 - Enforcement

Bannon was not present on the webinar but **VanderKooy** stated that these updates are complete and each state is responsible for reviewing their portion of this section.

Stock Assessment

VanderKooy informed the group that, due to lack of funding, IJF will not be able to finance and organize a formal stock assessment for flounder. Instead, each state will need to provide its most recent assessment to **VanderKooy** and this will be attached as an appendix. The TTF may or may not be able to make recommendations based on these stock assessments. **Devers** stated that he is not sure if one has ever been done in Mississippi but he will look for some sources.

Miscellaneous

Devers stated that he has tried making contact with two recreational fishermen from Mississippi for **Lasseter** to interview but he has yet to hear back. He also is trying to contact a commercial flounder fisherman. **VanderKooy** has also sent in a name for **Lasseter** to contact.

Chester **Moore**, our recreational rep, is on board and will participate in our webinar on Thursday.

Chris **Granger**, our commercial rep, does not have an email address, so it is more difficult for us to contact him. **VanderKooy** will call him this week and update him on our progress.

VanderKooy reminded all that there will be another webinar/conference call this Thursday and asked that each state rep be able to provide some idea as to the status of a most recent assessment/analysis of stock.

The call concluded at 10:20 a.m.

February 21, 2013

The conference call began at 8:30 a.m. as **VanderKooy** welcomed everyone and introduced Chester **Moore**, our recreational rep. **VanderKooy** told **Moore** that several meetings have taken place and explained that, since **Moore's** career is centered on flounder, he would serve as more or less a "sanity check" for this group as to management tools, etc. **VanderKooy** will speak with our commercial rep on the phone this week as he does not have an email. Both reps will be invited to attend the next TTF meeting. The insight we will get from these two reps will be invaluable.

VanderKooy reviewed the high points of the conference call held two days ago and explained that, due to lack of funds, there will not be a full-blown stock assessment on flounder as was originally planned. We will instead rely on each state to provide its most recent stock assessment or analysis and go from there. These will be summarized and also attached in the appendix.

Habitat

O'Brien reported that she has spent some time removing conflicting data and checking out all of the literature cited from the previous FMP. The biggest problem was the physiological detail driving fish to the habitat. **O'Brien** brought up her screen and pointed out some of her changes. She did remove mariculture information.

O'Brien is currently waiting on information from **Rester** regarding leaking salt domes. There was a discussion as to whether or not this is actually a potential habitat threat. The EIS statement will say whether or not this is a significant change to the habitat. **Adriance** will send **O'Brien** a report that was done regarding this issue off of Louisiana. As far as Texas is concerned, this is not an issue, per **O'Brien**.

There remains a lot of boilerplate verbiage in this section. **O'Brien** asked that all states review this section and please let her know if there are any other state projects that may be of potential impact to flounder habitat.

Sociology

Lasseter reported that she has not conducted any interviews yet but plans to start with **Moore** next week and go forward from there. She has received some reports from **Miller** recently and **Sempsrott** has forwarded a list of updated agency information to **Lasseter**. She has not contacted Cindy Bohannon from Texas regarding that survey but will do so next week. Any state that has not provided such information to **Lasseter** should do so ASAP.

Lasseter estimates that she should have a draft of this section complete by the end of March. **VanderKooy** pointed out that the *Economics* and *Sociology* sections will be the last to be completed as they are actually being re-written, where the other sections are having material added to what already exists.

Stock Assessment

During the last webinar call, **VanderKooy** had asked each state rep to provide a status of the flounder stock in each state. **Adriance** provided a 2010 assessment from Louisiana. **Aplin** reported that the most recent stock assessment for Alabama was used in the last FMP. She stated that she had run some data in 2011 though, and she is checking to make sure that she can share this information. **VanderKooy** encouraged the remaining states to provide this information.

Miscellaneous

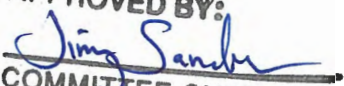
VanderKooy would like to have this document near final form by mid to late summer and perhaps present it at the GSMFC Annual Meeting this October, then possibly put it out for public comment early in 2014. The entire process can speed up now that we are not actually doing a stock assessment.

Depending on funding, **VanderKooy** would like to have a meeting of this TTF in April or May. If funding does not come through, we will finalize each section through webinars/conference calls.

If anyone has any questions or needs anything, please contact **VanderKooy**.

The call concluded at 9:30 a.m.

**JOINT GSMFC & ASMFC ARTIFICIAL REEF SUBCOMMITTEE
MINUTES
Wednesday, March 6, 2013 & Thursday, March 7, 2013
Tampa, Florida**

APPROVED BY:

COMMITTEE CHAIRMAN

Chairman **Bill Horn** called the meeting to order at 8:30 a.m. The meeting began with introductions of the members and guests. The following were in attendance:

ASMFC Members

Hugh Carberry, NJ DWF, Port Republic, NJ
Jim Francesconi, NC DMF, Morehead City, NC
Bill Horn, FL FWC, Tallahassee, FL
Bob Martore, SC DNR, Charleston, SC
Mike Meier, VA MRC, Newport News, VA
January Murray, GADNR-CRD, Brunswick, GA
Mark Rousseau, MA DMR, Gloucester, MA
Jeff Tinsman, DE DWF, Dover, DE
Erik Zlokovitz, MD DNR, Annapolis, MD

GSMFC Members

Michael Bailey, NOAA, St. Petersburg, FL
Jon Dodrill, FL FWC, Tallahassee, FL
Craig Newton, AL DCNR, Dauphin Island, AL
Doug Peter, LA DWF, Baton Rouge, LA

Staff

James Ballard, GSMFC, Ocean Springs, MS
Ali Catchot, GSMFC, Ocean Springs, MS

Others

Larry Beggs, Reef Innovations/Reef Ball Foundation, Sarasota, FL
Steve Bortone, GOM Fishery Management Council, Tampa, FL
Megan Caldwell, ASMFC, Washington, DC
Chris D'Ario, Collier County, Naples, FL
Bryan Fluech, FL Sea Grant Extension, Naples, FL
John Froeschke, GMFMC, Tampa, FL
Sean Keenan, FL FWC, St. Petersburg, FL
Katie Laakkonen, City of Naples, Naples, FL
Charles Mangio, Pinellas County Artificial Reef Program, St. Petersburg, FL
Mike Marano, Pinellas County Artificial Reef Program, St. Petersburg, FL
Joshua Maxwell, Turrell, Hall & Associates, Inc., Naples, FL
William Maxwell, NJ Artificial Reef Program. Forked River, NJ
Rich Meeker, Hesperides Group-Martin County, Stuart, FL
Keith Mille, FL FWC, Tallahassee, FL
Tim Mullane, American Marine Group, LLC, Philadelphia, PA
April Price, Sea Life Habitat Improvement Project, Inc., Port St. Lucie, FL
Jimmy Sanders, MS DMR, Biloxi, MS
Brooke Shipley-Lozano, TPWD, Dickinson, TX
Joe Weatherby, Reefmakers, Key West, FL

Adoption of Agenda

A motion was made to adopt the agenda, and the motion passed unanimously.

Approval of Minutes

The minutes from the meeting held on March 13-14, 2012 in St. Petersburg, FL were approved with a minor change. Rousseau made a motion to adopt the minutes. Tinsman seconded the motion, and the minutes were approved.

Update on the Mohawk Reefing Project

Campbell gave a PowerPoint presentation entitled "*Sinking the Ex-USCGC Mohawk*". The ship was sunk on July 2, 2012, with over 125 spectator boats on site for the sinking. Southwest Florida dive shops are now offering weekly charters to visit area attractions. Diving activity has increased in the area.

Complications during the sinking were weather, holes in the ship caused by a busted valve that caused flooding in forward compartments, mishandled paperwork, and shoaling. GoPro Cameras were used to document the sinking.

The sinking of the ship captured international media markets and over 350 national media markets. There was television and magazine coverage, and the advertising value was estimated at two million dollars. Thousands of fish have been sighted since the sinking, including a whale shark. The life expectancy of the vessel is estimated to be approximately 60-70 years.

Tinsman asked about toxins being released into the water. **Campbell** replied that the vessel had been tested for PCBs, and all traces were removed.

Update on the Hoyt Vandenberg – Economic Study, Biological Data, and Artwork Project

Horn gave a PowerPoint presentation entitled "*Vandenberg Reef Biological Monitoring 2011-12 2-Year Report*". Two FWC grants totaling \$58,422 were received in 2008 and 2009. A 4-year fish census from mid 2009 through 2012 was done. Seven survey events were done on four pairs of deep and shallow reefs (2 artificial, 6 natural). Two types of methods were used for the census: roving diver on all of the reefs, and point census on the artificial reefs.

Over 61 hours of bottom time was performed for the 4-year project. Results of the project revealed that the shallow reefs have more fish species than the deep reefs. There were a total of 174 species of fish on all of the reefs, with 120 species cumulative on the Vandenberg. Future work will include the completion of report summaries of all three years of data collection, and possible new grants will be pursued in order to continue monitoring the site.

Invasive species are being monitored on the reef, and orange cup coral was sighted. However, it has since disappeared. Divers are watching for the invasive large barnacle, but so far have not found any. The vessel came from Jacksonville, where the barnacle has been problematic.

Weatherby showed a video entitled "The Sinking World" and discussed a project that was done by Andreas Franke on the Vandenberg Project. In 2010, the internationally renowned photographer dove the Vandenberg and took photographs of the vessel. He then photographed people in every-day life situations. The photos were superimposed onto the photos of the Vandenberg. In August 2011, Franke installed dozens of these digitally composed images onto

the sides of the Vandenberg. The images were sealed in plexiglass, framed in a stainless steel frame, and mounted onto the sides of the ship with magnets. The images remained on the ship for four months, in which time the photos became adorned with salt, algae, and microorganisms. The project was a huge success, and generated \$5 million in international free press. There are future plans to do similar art projects with Franke on several other artificial reefs. The artwork from the Vandenberg is being sent to several art shows around the world (www.thesinkingworld.com) This kind of positive press results in increased interest in all artificial reef programs.

Overview of MARAD Position Statement

Horn spoke on the development of a white paper on artificial reefing of large vessels that was discussed at the last meeting. However, it was too difficult to write the paper without comparing reefing to scrapping. In September 2012, MARAD developed a new policy that no ships built prior to 1985 could be reefed due to the high presence of toxic chemicals. **Horn** requested a copy of the policy in writing from MARAD, but was told that the policy was not available in writing, and the official policy was still being reviewed in Washington. The policy has since been released in June 2012 as "MARAD Artificial Reefing Program Frequently Asked Questions". The reference to not reefing ships built prior to 1985 is found on page 7, but no justification is given, except that the policy was instituted to reduce the State's cost and time required to obtain a MARAD non-retention vessel for reefing, and to reduce MARAD's cost to maintain the vessel as an artificial reef.

Tinsman asked if there is any new data on PCB levels in fish found on the Oriskany site. **Doddrill** stated that PCB levels have been below the screening standards for the Department of Health and EPA. **Horn** stated that sampling is now done once per year. **Mille** pointed out that the Oriskany is an unfair comparison because the Navy requested a special permit to sink the ship even though it contained PCBs. The other vessels have been properly prepared and had PCBs removed.

Francesconi suggested that a document be created to be sent to the Commissions to reconsider the policy. Data from economic studies should be pointed out in the letter. **Horn** has taken the initiative and drafted a letter to MARAD requesting that MARAD review their new policy of not allowing vessels built prior to 1985 to be reefed. He provided copies of the letter to the members and stated that they should edit the letter and send him their changes/comments. The Commissions would then send the letter through their approval process and submit it individually. **Ballard** suggested that references and facts supporting the benefits of the programs should be provided.

Ballard made a motion to draft a letter to MARAD from the Commissions asking them to reconsider MARAD's policy, which prohibits new applications for ships with initial construction dates prior to 1985 to be used for artificial reefs. Meier seconded the motion.

Estuarine Artificial Reefs in North Carolina

Francesconi reported that a grant (Fishing Opportunity Enhancement of Oriental Reef) was given to the town of Oriental for an artificial reef enhancement project that provided further development of the Oriental Reef in the lower Neuse River by deploying 360 Reef Balls, 36 Layer-Cake Reef Balls, 3 Pallet size Reef Balls, and 10 Ultra Reef Balls onto the reef to develop different fisher-friendly patch reefs, as well as enhanced habitat for juvenile finfish and oysters.

This project has created ten unique fishing habitats covering four acres, as well as over 20 new angler stations to increase angler satisfaction with the artificial reef experience.

Dealing with Debris from the Sunken Subway Cars in NJ and MD

Carberry gave a PowerPoint Presentation entitled “Movement of Pieces of Stainless Steel Subway Cars by Hurricane Sandy”. In 2006, 1,600 stainless steel subway cars were received from the New York Transit Authority to be deployed as artificial reefs in NJ, DE, MD, VA, SC, and GA. It was estimated that they would last at least 25-30 years. Within six months, most of the stainless steel subway cars had collapsed. From 2008 to prior to Hurricane Sandy, the pieces were manageable, and there were only a few reports from commercial fishermen who had caught pieces in their gear. Pieces brought in to New Jersey in 2009 had sharp, jagged edges. In January 2013, pieces of subway cars were caught during New Jersey’s Ocean Trawl Survey southwest of the Cape May Reef. During a meeting in January 2013 in Ocean City, MD, commercial fishermen reported that subway car debris was being caught daily at a distance of 10-15 miles away from the original reef sites. Photos of the debris were also shown. The issue was raised again one week later at the Coastal Fisheries Advisory Committee meeting in Ocean City. The majority of the debris is being caught by dragger fleet.

The DNR staff has requested the coordinates for debris locations, but the commercial fleet has not provided any as of 3/04/13. Reports from commercial fishermen have not been fully verified, but they may be an indication of major damage and scattering of material as a result of Hurricane Sandy. The DNR staff has requested NOAA disaster-related funding (Hurricane Sandy) to conduct side-scan sonar surveys in and around the four MD reef sites where subway cars were deployed.

Dealing with Marine Debris Accumulation on Artificial Reefs – Update on Florida’s Efforts and Texas’ 160 Acre Reef Site Permit that was on Hold Because of Concerns with Sea Turtles Becoming Entangled in Lost Fishing Line

Horn gave a PowerPoint Presentation entitled “Recent Marine Debris Event on an Artificial Reef in Florida”. A “ghost net” incident was reported to Dade County in January 2013. A dead sea turtle was found in a ghost net at Tenneco Tower, a shallow artificial reef located two miles offshore off the Miami-Dade/Broward county line. The reef is a decommissioned oil production platform that was transported from the Gulf of Mexico in a pilot “Rigs to Reef” program to be used as a fishing and diving attraction. Before its removal, the 30’ x 200’ net extended from the top of the tower platform in 70 feet of water down to the ocean floor (104 feet). This caused a hazard for both divers and marine life. The FWC and partners hired Industrial Dive Corporation to remove the net from the artificial reef and tow it to Port Everglades. The net was transported to Coventa Energy and will be burned and turned into energy. The cost to remove the net was \$11,500. NOAA Marine Debris Program, Save the Sea Turtles.org, FDEP, and FWC paid for the removal costs.

FWC is looking into their scientific divers participating in marine debris cleanup activities. However, OSHA 29 CFR-1910.402, *Definitions* describes “scientific diving” as diving performed solely as a necessary part of a scientific, research, or educational activity by employees whose sole purpose for diving is to perform scientific research tasks. It does not include performing any tasks usually associated with commercial diving such as placing or removing heavy objects underwater. FWC divers can participate in cleanup activities. However, it is restricted to locating materials and documentation, and no heavy materials lifting.

Shipley-Lozano gave a PowerPoint Presentation entitled *Texas Artificial Reef Program Ghost Gear*. She reported that a Texas 160-acre reef site permit has been put on hold due to concerns with sea turtles becoming entangled in ghost gear. TPWD received a federal allowance via a FONSI (Finding of No Significant Impact) grant if TPWD agreed to monitor and report any findings of ghost gear on reef sites. If the reefs are declared as SMZs, an off-limits buffer would be placed around the sites to prohibit commercial fishing/shrimping.

Human Dimensions of Artificial Reefs as a Means of Stakeholder Engagement – Using Social Science (Focus Groups, Surveys, Etc.) to Help Us Plan and Develop New Artificial Reef Sites

Mille gave a PowerPoint Presentation entitled “Human Dimensions of Artificial Reefs as a Means of Stakeholder Engagement: Using Social Science) Focus Groups, Surveys, Etc.) to Plan and Manage Artificial Reef Sites”. Key needs identified to achieve the conservation mission are to reduce tensions between stakeholder groups; increase partnering; understand current and emerging stakeholders. The strategy is to involve people, learn from them, and adapt with new information. The Human Dimension Theory draws from social psychology, sociology, and economics, which are all three used to ascertain different views that stakeholders have about the resource. Understanding how the stakeholders value the resource is important, as management can then be incorporated. Social science data is gathered via observations, individual interviews, questionnaires (on-site or mail-back; phone surveys; email/web surveys), nominal groups, and focus groups.

Artificial reef stakeholders should be asked if they want an artificial reef, how they will use it, how much they value it, and how they will react to changes to it. Existing artificial reef human dimension studies include economic studies and user studies.

Update on NRDA and RESTORE Funded Artificial Reef Projects

Florida

Dodrill gave a PowerPoint Presentation entitled “*Artificial Reef Workshop – Escambia County Pre-deployment Plan for NRDA-funded Artificial Reefs*”. He reported on Escambia County's Reef Program and new projects. Responses to bid solicitation will determine the actual number of reef modules available for deployment. Relative sizes for each patch reef is determined by available forage area around each patch reef. Escambia County currently holds permits for Nearshore Reef Sites, Perdido Key snorkeling Reef, and LAARS (East and West). Additional permit applications have been submitted. The total proposed cost estimate using Florida modules is \$1,992,835.

Funding for Phase I has been received. The funds will be used to address the loss of use due to the BP oil spill. Sand dunes in Escambia County were destroyed by people and machinery cleaning up tar balls and oil residue. Two boat ramp projects are planned, property for parking and a boat ramp has been purchased, and docks will be refurbished. They are also working to reduce lighting impacts to nesting sea turtles and hatchlings. Signs for nesting birds are being placed in designated areas.

Alabama

Construction and maintenance of inshore and offshore reefs are the main priorities for using the funds.

Mississippi

Funds are being used to enhance all of the inshore reefs and around piers with #57 limestone.

Louisiana

Funds are not currently being used for any of their projects.

Texas

At the Corpus Christi Nearshore Reef Site, 1,200 pyramid reefs will be deployed. At the Matagorda Nearshore Reef Site, 1,600 pyramid reefs will be deployed. At the George Vancouver Nearshore Reef Site, between 800 and 950 pyramid reefs will be deployed. A ship-to-reef location has been proposed at HI-A-424. Funds may be used to purchase some gear to conduct vertical longline sampling as part of the SEAMAP inshore survey.

State/Federal Artificial Reef Program Updates

North Carolina:

Francesconi reported that several reefs were created. Reef ball deployments are ongoing. A 50-foot sailboat was sunk at mid-depth AR-330. Two permits were obtained to create one new ocean artificial reef, and one estuarine enhancement. EFH Estuarine habitat utilization sampling and material evaluation is ongoing. Major refitting of ocean and estuarine buoys is ongoing. Francesconi reported on future plans for 2013. They received \$120,000 CRFL for web site enhancement and water-proof Reef Guides. In preparation of the Reef Guides, side scan updates for every reef will be done in 2013. DMR is working on their new Master Plan, inclusive of all habitat development. Two new Neuse River reefs and material testing on Bayview reef are being finished. Thirty-five existing ocean buoys will be rotated. Twenty-eight estuarine 4th and 5th class buoys will be rotated. Tires from an artificial reef washed ashore on the beach and were removed. Hurricane Sandy had a minor impact.

Alabama:

Newton reported that they continue to be active in developing new artificial reef projects in the Gulf of Mexico offshore of Alabama. Two nearshore artificial reef permit areas were established in 2011 within State waters offshore of Baldwin County. Only AMRD will be deploying materials within nearshore reef zones, which prevents the reefing of non-stable materials that could result in conflict with multiple user-groups. AMRD has invested \$374,000 to increase finfish habitat in these shallow water reef zones. They will deploy 220 pyramid reefs and 34 low-relief anchored reefs by June 2013.

AMRD continues to deploy unique reef materials up to 65 nautical miles offshore in the USACOE general reef permit zones. In June 2013, a 270' coastal freighter will be reefed 25 nautical miles offshore in 110' of water. A 70' steel supply vessel will be reefed in 2013 24 nautical miles offshore in 108' of water. AMRD is in the process of developing a contract to deploy 25' pyramid reefs by July 2013.

AMRD has enhanced natural oyster reefs and monitored existing inshore artificial reefs. They plan to construct and maintain existing inshore reefs. They have initiated the permitting process to supplement several reefs with oyster shell cultch material and/or limestone gravel.

AMRD is in the permitting process to construct three artificial reefs within the Mississippi Sound in water depths of 6'-14'.

AMRD has acquired property adjacent to the Gulf Intracoastal Water Way. The property will be used to store reef materials until they are loaded onto transport barges and reefed. To determine where reefing projects should be conducted, AMRD has developed a side-scan mapping project in coordination with local research institutes in an effort to quantify existing hard bottom substrates, existing artificial structures, and map the distribution in the general permit reef zones in the Gulf of Mexico.

Florida:

Dodrill gave a PowerPoint Presentation entitled "Florida Artificial Reef Program Update March 2012-March 2013". For Federal Aid in Sport Fish Restoration, the SFR apportionment to FWC in 2012 was \$11,373,231. In 2012 and five years prior, the FL SFR split was 49% to freshwater and 51% to marine projects. Beginning Federal fiscal year 2013, the split will be 41% to freshwater and 59% to marine (resident angler ratio). Three employee salaries, operating expenses, and much of the FWC reef construction managed projects are funded with the Reef Program SFR grant. Public artificial reef funding sources in Florida are local government, sport fish restoration, and the state. During 2012, there were 80 state-wide artificial reef deployments. For current-year projects for FY 2012-13, grant applications totaled \$1.3 million. A total of \$800,000 was appropriated, and \$675,215 was funded. Federal SFR funding was reduced by \$124,785. Grant applications for FY 2013-14 are due by 3/15/13. Appropriation will be determined by 7/01/13.

Nine 2013 FWC construction grants were awarded to several counties in Florida. Monitoring and research is ongoing in Bay, Broward, Dixie, Escambia, Franklin, Miami-Dade, Palm Beach, Pinellas, and Wakulla County. In Palm Beach County, a 110 foot steel-hulled tugboat was sunk on 2/22/13. Goliath Grouper research on South Florida artificial reefs is ongoing.

The Florida Panhandle Shipwreck Trail was instituted in June 2012 by the Florida Department of State's underwater archaeology team, DEP, NOAA, and local communities to stimulate tourism, and to highlight the panhandle's underwater historical and ecological assets. Twelve historic steel-hulled shipwrecks between Pensacola and Port St. Joe were selected. A "passport" booklet was created and is sold in dive shops. After each dive, the passport is signed. Upon visiting all sites on the trail, a certificate and t-shirt are issued to the divers.

Dodrill spoke on the BP Gulf Seafood and Tourism Promotional Fund. BP gave \$57 million to promote tourism and seafood industries on the Gulf Coast. Florida artificial reef-related financial assistance from this fund will be given to Okaloosa County (\$.45 million) and Collier County and cities of Naples and Marco (\$1.3 million total) sometime in 2013. This funding is independent of NRDA or RESTORE Act funding.

PCB Monitoring of the USS Oriskany has had National implications. Sampling Round #10 was done in April 2012. The Sierra Club and Basal Action (BAN) petitioned the EPA to halt deepwater sinking of partially cleaned naval vessels during "sink-ex" military exercises. Raw PCB data from the first two years of the Oriskany sinking was used in BAN's supporting arguments. The EPA will no longer issue PCB risk-based disposal permits for AR vessel sinking. All future vessels sunk as artificial reefs must not have regulated PCBs on board.

Dodrill spoke on the issues of marine debris on artificial reefs. Reefs should be constructed to minimize fishing gear loss and entrapment or marine turtles; "Adopt a Reef" programs should be

promoted; voluntary reef cleanup activities by divers should be encouraged; funds should be available to address large tangling gear hangs.

Lionfish derby divers have removed over 4,000 lionfish from Florida. In 2011 and 2012, commercial fishermen harvested over 12,000 lionfish, with a dockside value of more than \$57,000.

County and reef user assistance is being sought and utilized in an effort to ground truth public artificial reefs for location and condition confirmation. Some older public artificial reefs have not been ground-truthed. Being targeted are public reefs for which only LORAN C information is available, and also reefs beyond 130 foot recreational diver depths.

There is a movement towards artificial reef placement in shallower state waters. A trend of small (1/4 mile square) reef permits is being considered/sought in state waters in both the Panhandle and off NE Florida by the County Reef Program. The reasoning for the rationale for this approach appears to be a combination of cheaper permit costs for a general DEP permit (\$250) vs \$750 for an individual permit, quicker DEP permit authorization, increased ease of access, and more fishing sites in state waters should Florida go inconsistent with Federal fishing regulations.

A NW Florida Artificial Reef Workshop was held in February in Niceville, FL.

A GMFMC Artificial Reef Substrate Advisory Panel initial meeting to discuss an Essential Fish Habitat (EFH) designation as related to Gulf of Mexico artificial structures was held on February 28, 2013.

NRDA Phase I and Phase II Project Implementation has begun. An initial public meeting on the RESTORE Act was held on 2/28/13 in Panama City.

The damage assessment and restoration process from the Deepwater Horizon oil spill is long-term and can take decades. The DEP is the lead trustee agency for Florida. The FWC is the co-trustee agency. On April 21, 2011, the NRDA Early Restoration Framework Agreement was signed by Trustees and BP to provide \$1 billion for early restoration projects. Florida's portion is \$100 million.

Florida's NRDA Early Restoration Phase I includes boat ramp construction and repair to compensate for boater opportunity loss during the spill (Ongoing in Escambia County), and 4.2 linear miles of dune vegetation planting to compensate for damage by oil and vehicular traffic, oil removal machines, and foot traffic (Completed in Escambia County).

Florida's NRDA Early Restoration Phase II in Escambia through Franklin Counties includes restoration and protection of habitats for beach nesting birds, and reducing artificial lighting impacts on nesting habitats for sea turtles. The projects are partnered with the USFWS and were prioritized to initiate before the 2013 nesting seasons.

Florida's NRDA Early Restoration Phase III consists of the counties of Escambia, Santa Rosa, Okaloosa, Walton and Bay all proposing artificial reef construction to compensate for fishing opportunity loss during the oil spill. These projects are on hold.

Dodrill next spoke on the Gulf Coast RESTORE Act. BP, Anadarko, Transocean Limited, and other liable parties will pay civil penalties under the Clean Water Act, which will provide Gulf Coast communities and ecosystems guaranteed funding to assist with recovery from the Deepwater Horizon oil spill. Civil penalties could reach \$21 billion, and 80% of oil spill civil penalties go into a Gulf Coast Restoration Trust Fund. The Gulf Coast Ecosystem Restoration Council was formed to help restore the ecosystem and economy by developing a restoration plan. By July 6, 2013, the Council will release an initial comprehensive plan after public workshops in February 2013 and comment on the draft.

Georgia:

Murray reported that public interest in their artificial reefs is high.

The Sapelo Saltwater Fishing Club donated a 39' vessel to GA DNR, which was deployed to the "KTK" offshore artificial reef site.

The "DRH" offshore artificial reef site was identified for reef enhancement and 274 pallet balls were deployed to enhance the existing site.

DNR is in the process of obtaining a donation of a hopper barge to be deployed at the "KC" offshore artificial reef site.

Negotiations are underway with the GA Department of Transportation to obtain bridge rubble from the future demolition of the Back River Bridge in Savannah.

Three of 22 offshore reef sites were surveyed via on-site inspections and monitoring in order to help ascertain the long-term structural integrity and performance of deployed materials. Photo/video/inventory records were obtained by program divers. Significant fish assemblages and invertebrate communities were observed.

Annual on-site inspections were conducted via side-scan sonar and aerial surveys at all of Georgia's 15 inshore artificial reef sites.

A Coastal Marshland Protection Act Permit and a U.S. Army Corps of Engineers (USACE) Regional Permit were submitted for the 15 existing and one new inshore artificial reef site throughout the state of Georgia. If the USACE Regional Permit is approved, it will be the first of its kind in the nation.

South Carolina:

Martore reported that they have lost some of their Sport Fish Restoration Program funding, but have made up for the loss with state saltwater license funding.

A local concrete plant continues to manufacture 4-foot tall cone-shaped reef units for DNR from end-of-day concrete free of charge.

Another 46 armored personnel carriers were deployed on two separate reef sites during the past year. Plans are currently underway to prepare another 54 vehicles to be deployed later this year.

There were 19 material deployments during the past year utilizing both manufactured and surplus materials.

Work is progressing on DNR's Artificial Reef MPA. Two barges, a crane, a radio tower, and numerous steel beams and shipping containers have been obtained for deployment in late summer.

Field work was completed on a study comparing fish communities on reefs made of similar materials but of different ages and their comparability to natural live bottom areas.

DNR's website has been upgraded, with all artificial reef site coordinates that can be downloaded into a person's GPS unit.

Louisiana:

Peter gave a PowerPoint Presentation entitled *The Louisiana Artificial Reef Program*. The program continues to be very active in accepting new platforms into permitted artificial reef sites. Currently, there are 70 established offshore artificial reef sites. In addition to developing offshore reefs, the Program has been developing several inshore artificial reefs.

Mississippi:

Sanders reported that since 2011, DMR's Artificial Reef Bureau has done 13 offshore deployments. An inshore reef enhancement project using NRDA (National Resource Damage Assessment) money began in December, with five inshore reefs receiving a total of 4,000 cubic yards of limestone. The project will restart in March to enhance the remaining inshore reefs. Bids to deploy 20,000 tons of concrete culverts on selected offshore reefs by this summer are being sought.

Virginia:

Meier reported that they continue using concrete demolition material for reef structure. No other demolition refuse, such as dirt, bottles, and plastics and other floatables are accepted. Last year, over 5,000 tons of concrete were deployed on several reef sites. Another 20,000 to 30,000 tons of material is expected.

Stability monitoring will be conducted using side-scan sonar and ROV footage.

Meier stated that they continue to maintain a presence at boat shows, and maintain contact with sport fishing clubs in the Tidewater area.

As of last July, Virginia's program was cut back to a one-man operation, and lost \$30,000 in funds.

The buoy system on the Chesapeake Bay Reefs is being updated.

Texas:

Shipley-Lozano gave a PowerPoint Presentation entitled "Texas Artificial Reef Program 2013 Update". A contract is out for deployment of structures for a Corpus Christi nearshore reef site. Over 2,000 tons of concrete are inventoried and waiting for deployment to the center of the reef site. Four hundred pyramids have been contracted for deployment in 2013. In the Matagorda Nearshore Reef Site, 1,600 pyramid reefs will be deployed. In the George Vancouver Nearshore Reef Site, between 800 and 950 pyramid reefs will be placed.

Rigs-to-Reef Program:

Ten platforms were reefed during April 2012 – February 2013. Another five new projects are in various stages of completion.

Shively visited with Sandridge Energy to discuss two deep-water reefing projects that fall outside the General Permit area and the Rigs-to-Reefs Addendum requirements. Shively received U.S. Coast Guard approval on the 90-foot clearance for the program's proposed first deep-water reef, EB-110A. Negotiations are beginning on the structure and U.S. Army Corps of Engineers permits will be needed for both sites.

Shively met with staff from Representative Hunter's office regarding Rigs-to-Reef issues; mainly the Idle Iron impacts to TPWD. **Shively** also met with Congressman Farenthold, Harte Institute (TAMU-CC) staff, and constituents on updates to his House Bill on placing a 2-year moratorium on removing rigs from the Gulf of Mexico.

The ARP met with representatives from the Bureau of Safety and Environmental Enforcement (BSEE) in July 2012 in order to complete the planning zones. The long-awaited approval letter for the Corpus Christi Proposed Planning Zones was received from BSEE in September 2012.

The discussion of HI-A-389 and how and where the reefing might happen continues. It is located in the Flower Gardens National Marine Sanctuary. TPWD has a draft agreement with W&T Offshore to tow it to HI-A-349, but that agreement has not been finalized.

Two lionfish have been collected in recent reef surveys. They have also been documented by divers on the Texas Clipper Reef off South Padre Island, and the reef sites in the Mustang and Matagorda protraction areas.

Nearshore Reefs:

Several Eternal Reefs were placed at the Freeport Liberty Ship Reef Site in Federal Waters.

The Corpus Christi Nearshore Reefing Project has been awarded, and 400 pyramid structures will be built. The construction and reefing is scheduled to be completed this year.

Over 2,000 tons of concrete were received as a donation and will be reefed later this year.

Public Relations:

The new Artificial Reef Program website was launched in November 2012. In July, the TPWD ARP created an Artificial Reef Program Facebook page. As of February, there are over 400 "likes".

Shively participated in an offshore Gulf of Mexico Foundation Industry/Agency cruise in the vicinity of the Flower Gardens National Marine Sanctuary. Additionally, Chris Ledford completed a Gulf of Mexico Foundation Film Cruise in which artificial reefs and natural reefs were filmed for an upcoming public service announcement and TV. The importance of artificial reefs and the amount of marine life they preserve was emphasized.

Maryland:

Zlokovitz reported that they have completed annual deployment of concrete reef balls in upper Chesapeake Bay at Memorial Stadium Reef.

Expansion of the reef ball site within Cook's Point oyster sanctuary has been completed.

Limestone and granite have been deployed at the shallow-water site in Hail Cove off Eastern Neck Refuge shoreline. The project will be completed in 2013.

In Horseshoe Bend in the St. Mary's River, construction has begun on a private artificial oyster reef site by St. Mary's College and St. Mary's Watershed Association. Reef balls and other concrete/stone material are being used.

Dive surveys and photography of oyster growth on four bay reef sites have been completed.

Work is continuing with DNR Fisheries staff to develop a more strategically rigorous monitoring program which can be maintained with limited staff and budget.

Deployments of concrete, steel and concrete pipe, and a steel-hulled water taxi were completed at several ocean reef sites.

Reports are being investigated of subway car debris being caught daily by commercial fishermen at a distance of 10-15 miles from the original reef sites. Stainless steel subway cars were deployed at four reef sites off the coast of Maryland. The damage and scattering of debris could have been caused by Hurricane Sandy. DNR staff has requested natural disaster-related NOAA funding to conduct an extensive side-scan sonar survey in the area in and around the four reef sites where subway cars were deployed.

Delaware:

Tinsman reported that they received Special Management Zone Status from MAFMC. Video monitoring of various reef sites is ongoing. Over 4,000 tons of recycled concrete products on three bay sites were deployed. Cooperative epibenthic monitoring of invertebrates colonizing the A.W. Radford with the EPA III dive team has begun. Plans for 2013 include possibly reefing two vessels; possible additional deployments of concrete products at nearshore ocean sites; a final decision on the SMZ issue.

The Radford has attracted black sea bass, Atlantic cod, summer flounder, and monkfish. Three barracuda were also spotted.

New Jersey:

Carberry reported that their funding for Sport Fish Restoration was discontinued on April 12, 2011 by the Chief of the Program, due to conflicts between commercial and recreational fishermen on New Jersey's Reef Network. New Jersey's Reef Program participated in its first ever reefing of a sculpture as habitat. A private artist constructed the concrete sculpture and paid for all of the expenses associated with the project. It was intended that a lift crane would lower the sculpture to the sea bottom. However, during the process, a strap supporting the deck barge broke, and the structure dropped to the bottom and broke into pieces.

Sandstone dredge rock was deployed on the Axel Carlson Reef in July 2012.

Massachusetts:

Rousseau reported that he has been working to create artificial reef sites in Nantucket Sound. The ACOE permit application has been submitted. DMF is attempting to develop a permit plan that does not specify the configuration of materials.

DMF is attempting to secure some dedicated funding for the artificial reef program with funds generated from the Massachusetts saltwater sportfish license.

DMF is geo-referencing and photo monitoring artificial reef sites to obtain background information. Information on invasive species (invertebrates) will be also be collected on a regular basis.

Rhode Island:

A draft of a Rhode Island Artificial Reef Plan has been completed. The Rhode Island DEM Division of Fish and Wildlife has been engaging the recreational fishing community for their input on the plan and gave a presentation and brief overview of the plan at a Rhode Island Saltwater Anglers Association meeting in early February. The Division expects the plan to be finalized in the coming months after internal review and review by RISAA.

The Rhode Island Department of Environmental Management, in cooperation with The Nature Conservancy, received federal sportfish money in 2013 to start a new five-year research project on artificial reefs. Results from this study will be incorporated into the state artificial reef plan, and will allow DEM DFW to make more informed decisions regarding future artificial reefs in RI waters.

Other Business/Public Comment

There being no further business to discuss, Horn recessed the meeting at 5:00 p.m.

Thursday, March 7, 2013

Chairman B. Horn called the meeting to order at 8:30 a.m. Horn asked the members if they had any information regarding how the sequestration would impact Sport Fish Restoration Funds. Ballard replied that GSMFC and several states submitted letters stating that Sport Fish Restoration Funds should not be part of the sequestration; however, approximately 9% of the funds will be withheld for 2013. Zlokovitz stated that in Maryland, SFR fund are reserved for striped bass and shad management and that those programs have also been impacted by the sequestration.

Update on SMZs and Artificial Reefs: Delaware's Petition to MAFMC for SMZ Status for 5 Ocean Reef Sites in EEZ

Tinsman gave a PowerPoint Presentation entitled "SMZ Status for the Delaware's EEZ Reef Sites? Request for Special Management Zone (SMZ) designation for five artificial reefs in the EEZ - June, 2011 – February, 2013". The goals of the Delaware Reef Program are to enhance fish habitat by providing protective structure and trophic support for fish; increase invertebrate biodiversity; increase invertebrate biomass: Provide hook and line fishing opportunities. Criteria for selecting reef sites are to avoid live bottom and have no existing structure; avoid existing shipwrecks; avoid areas supporting existing commercial fishing; avoid navigational conflicts.

The Sportfish Restoration Program – Wallop-Breaux, funds 75% of the reef program. Other sources of funding come from mitigation for fisheries impacts; in-kind donations of labor, services, and materials to the program; and cash donations, memorial gifts, etc. Delaware provides no tax payer funds for reef development.

In June 2011, Delaware requested SMZ (Special Management Zone) designation for five artificial reefs in the EEZ. The area of Delaware's five permitted reef sites is 4.6 square nautical miles. The percentage of the area impacted by SMZ designation is less than 0.2%. None of this area had existing structure, live bottom, or existing fisheries prior to reef development. The request was made to address the gear conflicts between commercial fishermen and hook and line fishermen. Reef site user conflicts include: commercial pots and lines fouling hook-and-line fishing gear; commercial toadfish potters; commercial sea bass, lobster and conch potters. The USFWS has informed states that they must be able to control gear types on their reefs in order to use Sportfish Restoration funds for reef development activities. At reef sites in state waters, control of gear types is done by state regulations. At reef sites in the EEZ, control of gear types is done by SMZ designation, through the MAFMC. Delaware House Bill 270 was passed by the 145th General Assembly and signed by the Governor in April 2010, giving the Division of Fish and Wildlife authority to manage gear types on permitted reef sites in state waters by regulation. In the fall of 2011, Regulation 3536 went into effect. It states that it is unlawful to take or attempt to take finfish within the geographical boundaries of any artificial reef site under Delaware jurisdiction by any means other than hook and line or spear.

The origin of SMZs in Federal waters is the snapper-Grouper Plan (SAFMC). SMZs are common in the south Atlantic. The Black Sea Bass Plan contains language allowing reef permit holders to petition the MAFMC for SMZ designation for their permitted sites. Once a reef site has been designated an SMZ, gear restrictions can be used to eliminate conflicts with recreational and commercial hook and line fishing.

The benefits of SMZ designation include the elimination of gear conflicts, which result in enhanced hook and line fishing opportunities; providing a level playing field for hook and line fishermen and pot fishermen; benefiting Delaware's tautog stock by eliminating quota-based out-of-state fish potters. With SMZs in place, Delaware could continue to manage ocean reefs for both recreational and commercial hook and line fishermen and conduct many other surveys and activities, essential to fisheries management, with Sportfish Restoration Funds.

The MAFMC Monitoring Team August 2012 findings from Vessel Trip Reports revealed that gear conflicts were documented at two sites. The value of landings was approximately \$34,000 annually. The value of the recreational fishery exceeds \$1.5 million annually. SMZ status would not impact a significant number of entities. The monitoring team provided a range of SMZ measures, including no action, seasonal and full time SMZ status and SMZ status for only certain sites.

In fall 2012, the BSB Advisory Panel convened and made recommendations. Three public hearings were held in Ocean City, MD, Lewes, DE, and Toms River, NJ. Dr. John Organ of USFWS SFR Funding Office was consulted by MAFMC about which SMZ measures would meet Delaware's needs for continued funding. Dr. Organ's response indicated that all ocean sites must be SMZs; SMZ status must be year round – not seasonal; fishing must be limited to hook-and-line and spear.

Through discussion by MAFMC in February 2013, it was established that this is a gear limitation request and not an attempt to restrict commercial fishing. Commercial hook and line would not be affected. The MAFMC voted to support Delaware's request by sending it to John Bullard, NMFS Northeast Regional Administrator.

SAFMC's Process to Modify/Add to the Current Series of MPAs to Assist with the Rebuilding of Warsaw Grouper and Speckled Hind Stocks

Martore gave a PowerPoint Presentation entitled "Modifying MPAs to Rebuild Warsaw Grouper and Speckled Hind Stocks". In 2007, the SAFMC established 8 Type II MPAs along the Southeast coast. Type II MPAs prohibit bottom fishing, but allow for other types of fishing. Fishermen highly contested these MPAs. In 2011, the SAFMC prohibited bottom fishing over 240 feet, but removed the regulation in 2012 due to the fact that catch and release cannot be done at that depth. Fish brought up at that depth come up dead.

In December 2012, SAFMC convened an MPA Expert Working Group. The group is working on the proposal to expand and extend the MPA system. The expansion is intended to provide a more comprehensive network to create more protection as the fish move. South Carolina, Florida, and Georgia would have additional MPAs with the expansion of the network. The proposal has not received unanimous support. The group is split between fishermen and scientists. A minority group submitted a grievance with the MAFMC stating that their proposals were not adequately considered, and generally disagree with the network of MPAs. Studies have been conducted which support the benefits of MPAs.

Status of the GMFMC's Designation of Artificial Reefs as EFH

Froeshke reported on the GMFMC's activities related to the designation of several artificial reefs as essential fish habitat (EFH) for red snapper. The need to provide additional protection for the red snapper population is the reason that the artificial reefs should be designated as EFH. This has been a challenge, due to the fact that artificial reefs do not currently fit under any of the traditional descriptions for habitat. Additionally, oil rigs would also need to be categorized under artificial reefs so that they will not be removed from the Gulf. The oil industry opposes the EFH designation because it would complicate the process for deciding the fate of oil platforms. The Council has explained that an EFH designation would only provide guidance when considering actions on the platforms. The oil industry is being encouraged to reef more platforms, but these recommendations are only advisory.

The Council's Advisory Panel is making recommendations to the Council on how to provide additional protection for red snapper.

Discussion on the Status of Idle Iron

Peter gave a PowerPoint Presentation on Louisiana's Artificial Reef Program, and discussed the Bureau of Ocean Energy Management (BOEM). The 2010 "Idle Iron" Notice to Lessees states that a systematic approach to idle infrastructure will be established. Within 3 years, lease areas defined as no longer useful for operations will be returned to their natural state. The platforms should be removed as soon as possible, but no later than 5 years. However, if a well in the lease area is still active, then all of the wells can remain in place. In Louisiana, there are over 1,700 platforms in 0-100 feet of water.

Shipley-Lozano reported that Texas does not have the planning zones that Louisiana has. When scrap iron was at a high price, the industry was scrapping the platform rigs. The larger

contractors are more willing to donate the rigs, whereas the smaller contractors tow them in because it is cheaper and it reduces their liability. The oil industry benefits by disposing of the rigs because the original owners, who bonded the site, are ultimately liable for the rig.

There is a regulation that allows the industry to remove platform rigs with explosives. NMFS monitors the removal process to ensure that there are no sea turtles or marine mammals in the immediate area. It is known that there are some fish kills, but the overall effect on fish stock status is minimal. Approximately 50-60% of removals use explosives.

There is legislation for a Rigs-to-Reef plan in Alabama, but an actual plan has not been developed. Louisiana has an artificial reef plan that includes 8 sites for artificial reefs. The plan has been reviewed and accepted by BSEE.

Update on Lionfish, National Prevention and Management Plan, New Monitoring Project in the Northern Gulf, Adopt-a-Reef Efforts, Lionfish Derbies, Etc.

Ballard shared a new report entitled "Invasive Lionfish: A Guide to Control and Management". Where lionfish were present, there was a 76% reduction in prey species. Lionfish densities are highest in the Caribbean. **Ballard** reported that he is coordinating the effort to draft the National Invasive Lionfish Prevention and Management Plan. Lionfish derbies are effective at controlling the population at the local level, but it is evident that they are not going to be eradicated. They should be used as a "poster child" to ensure that future aquarium-traded species are not released into native populations. The intent is to identify sensitive areas and control the population on a local level so that the native species can return. An attempt is being made to "train" grouper to eat lionfish. NOAA and REEF are no longer suggesting feeding lionfish to snapper. Trapping lionfish is also an option being looked at. By-catch could be a problem, but it may be beneficial in deeper waters where lionfish are now appearing. Once lionfish are removed, native species return to reefs.

A lionfish brochure was created by Florida and has been distributed to dive shops. Pet Amnesty Days are beneficial so that people can bring in unwanted pets and not release them into the wild. Florida FWC is setting up a lionfish summit meeting to discuss efforts to control lionfish.

Discussion of Gulf-Wide Artificial Reef Monitoring Protocol

Ballard reported that GSMFC has received NRDA funding for establishing a Gulf-wide standardized monitoring protocol to collect baseline data on how the artificial reefs are being impacted by hurricanes or oil spills. This standardized protocol is necessary for artificial reef data which will be used in stock assessments. The funds would be used for conducting a 10-year monitoring survey/collection of information, and would be a multi-state cooperative project. The GSMFC will distribute the funds to the states to conduct the monitoring, and also handle all of the data storage. Data will be submitted to the GSMFC and they will handle the storage. This effort will cover both shallow and deep water artificial reefs.

Ballard asked each panel member to identify who is providing their state's monitoring. SEAMAP vertical longline protocol is being used by several states. Louisiana is using the SEAMAP longline, but would need to contract out if it needs to be expanded. Texas A&M Corpus Christi is conducting vertical longline and ROV. Mississippi has their own vessel to use for conducting surveys. Alabama and Dauphin Island Sea Lab work together on side-scan sonar and vertical longline. Florida has its own vessel for SEAMAP vertical longline.

Ballard suggested incorporating side-scan sonar and asked the panel members what their opinions were. Mississippi, Alabama, and Florida all have side-scan sonar. Louisiana prefers multi-beam because it provides more information, especially in deeper waters. Texas does not have multi-beam, but would consider contracting out. Several states expressed concern about the manpower that would be needed to read all of the video. Storage of the video is another consideration.

Ballard asked the panel members what their thoughts were on incorporating traps. Mississippi and Florida both stated that they are using Chevron Traps. Louisiana is experimenting with LSU on different methodologies to determine what will work. NOAA uses Chevron traps. Traps would probably work better on concrete reefs, as the steel reefs could cut the lines.

Ballard then asked the panel members about doing surveys on traps, and what other gear types could be incorporated. **Newton** stated that they place cameras on their long-lines. In Louisiana, camera arrays would work better because of the vertical relief. Florida has a grant with FSU for a rotating GoPro camera. Since Mississippi has water clarity problems, a camera would not work on some days. Texas has inshore areas that would have the same problem. Handheld cameras with lasers work better for them. Alabama uses GoPro cameras and splash cameras. **Newton** stated they are using bandit reels. **Horn** stated that they have mixed results with ROVs.

Ballard stated that he will contact the members to get their current protocols to design a standard protocol for all of the states.

Next Meeting/Other Business/Public Comment

The next meeting location suggestions were North Carolina or South Carolina.

The next meeting date will be sometime in February or March.

Horn reminded the panel members about sending him comments/suggestions regarding the MARAD letter. He will revise it and then send it to James.

There being no further business to discuss or public comments, Horn adjourned the meeting at 12:00 p.m.

APPROVED BY: 
COMMITTEE CHAIRMAN

**S-FFMC MENHADEN ADVISORY COMMITTEE
MINUTES
Tuesday, March 19, 2013
Destin, Florida**

J. Smith called the meeting to order at 8:31 a.m. with the following in attendance:

Members

Joe Smith, NMFS, Beaufort, NC
Matt Hill, MDMR, Biloxi, MS
Rick Schillaci, Omega Protein, Inc., Moss Point, MS
John Mareska, AMRD, Gulf Shores, AL
Jerry Mambretti, TPWD, Port Arthur, TX
Harry Blanchet, LDWF, Baton Rouge, LA
Ron Lukens, Omega Protein, Inc., Gainesville, FL
Borden Wallace, Daybrook Fisheries, Inc., Empire, LA
Behzad Mahmoudi, FWC, St. Petersburg, FL

Others

Dale Diaz, MDMR, Biloxi, MS
Dan Ellinor, FWC, St. Petersburg, FL
Fernando Martinez-Andrade, TPWD, Corpus Christi, TX
Tommy Williams, Daybrook Fisheries, Empire, LA
Ellie Roche, NOAA Fisheries, St. Petersburg, FL
Robert Leaf, GCRL, Ocean Springs, MS
Ben Landry, Omega Protein, Houston, TX
Scott Herbert, Daybrook Fisheries, New Orleans, LA
Cyreis Schmitt, Oregon Dept of Fish and Wildlife, Portland, OR
Matt Cieri, Maine Dept of Marine Resources, Boothbay, ME
Liz Scott-Denton, NOAA, Galveston, TX

Staff

Larry B. Simpson, Executive Director, Ocean Springs, MS
Steve VanderKooy, Program Coordinator, Ocean Springs, MS
Debbie McIntyre, Staff Assistant, Ocean Springs, MS
Jeff Rester, Program Coordinator, Ocean Springs, MS

Introductions

Chairman Smith led the introductions of the MAC and the audience.

Approval of Agenda

Wallace asked to add a brief update from **Smith** under other business related to any research NOAA may be conducted specific to Gulf menhaden. The agenda was modified and approved.

Approval of Minutes (October 16, 2012)

The Committee reviewed the draft minutes. Wallace moved to accept the minutes as written, Lukens seconded, and the minutes were accepted.

Review of 2012 Gulf Menhaden Season and Forecast for 2013

Smith provided an overview of the 2012 season for the Gulf. The final landings came in at 578,000 mt which was down 6% from 2011 but up 24% over the previous 5-year mean. The fleet had their best start since 2000 and the May landings were the best since 1987. The remainder of the season was relatively stable, but the fish were skinny (low oil yields) despite being plentiful. June and July were good fishing months; August saw two weeks of bad weather due to TS Ernesto and Hurricane Isaac. In late September, rain and wind stirred up the Gulf and the landings declined accordingly. The weather moderated during the last half of October and landings improved. The fleet cut out November 1.

Smith reported that the age structure of the catch was skewed this year towards age-2s which supports the notion of a strong 2010 year class phasing through the fishery. The fish plant at Cameron, which typically lands younger fish (age-1s), was swamped with age-2s. **Smith** noted that the vessel captains and the plant manager at Cameron concurred that on average larger fish were available on the western fishing grounds in 2012.

During 2012, 37 vessels were active in the fishery - 35 regular steamers, one run boat, and one bait vessel that unloaded for reduction purpose infrequently at the Abbeville fish factory. Nominal fishing effort in 2012 was down 9% from effort in 2011. Landings in 2012 exceeded the 2012 NMFS forecast (provided last March) by about 20%. Based on historical catch/effort data and anticipate effort for 2013, **Smith** is forecasting that the 2013 landings could exceed 475,000 mt.

Update on the Atlantic Menhaden Fishery

Smith also reported on the Atlantic 2012 season. The landings in 2012 of about 160,000 mt were down slightly from 2011, but were close to the previous five-year average. Eight vessels out of Reedville landed fish for reduction in 2012; about five Virginia bait boats also unloaded for reduction periodically at the Reedville plant. Also, 6-8 small vessels in New Jersey landed menhaden for bait in 2012.

Smith updated the group on the status of the Atlantic menhaden assessment update from 2012 which was supposed to be a 'turn-of-the-crank' analysis, where only three years of additional data were added with no modifications to the model structure. **Smith** reported that the BAM model encountered some issues, some stemming from conflicts between the juvenile and adult indices. A consensus was reached within the Technical Committee (TC) that overfishing was probably occurring, but the magnitude was unknown. The TC recommended that the Atlantic Menhaden Management Board (AMMB) consider managing on an "ad hoc" basis, that is, reducing recent average landings by 0-50% until a new benchmark assessment can be completed (possibly in 2014).

In December 2012 the AMMB approved a 20% reduction in the total Atlantic menhaden landings coast-wide; the coast-wide TAC (reduction and bait combined) was set at about 170,000 mt; each state's portion of the TAC was based on its recent three-year (2009-11) average landings. Virginia will get 85% of the TAC, New Jersey will get 11%, and Maryland will get just under 1.5%. All the other Atlantic coast states will get <3%. Omega is reporting that in 2013 they will only fish 7 boats and have laid-off some personnel; the 2013 allocation to the New Jersey bait fishery will be about half of their landings in 2012. Menhaden bait prices are already high and expected to go higher as demand continues in the lobster and crab fisheries.

Louisiana Forecast for 2013

Blanchet reported that the LDWF is unable to provide a forecast for 2013 due to ongoing litigation through the NRDA process. There was a lot of discussion however regarding the value of that forecast, not only for industry, but eventually as a potential annual recruitment index between stock assessments.

Understanding the concerns with LDWF, the MAC made the following motion: *The Menhaden Advisory Committee strongly urges the Louisiana Department of Wildlife and Fisheries to provide appropriate analysis on the abundance of juvenile menhaden to the Committee on an annual basis as an index.* The motion passed with one abstention.

Review of the Texas 'Cap' in 2012

Mambretti indicated that the Texas Cap was not met last year and that the industry only removed 46% of the allocated fish from Texas waters. The TPWD and **Smith** monitor the cap with industry reporting from the CDFRs.

Gulf Menhaden SEDAR and FMP Revision

VanderKooy explained the current state of the Gulf menhaden stock assessment and the progress of the FMP revision. The SEDAR32A is underway and the Assessment Workshop is scheduled in Beaufort for April 23-26. Schueller and the MAC/analysts have had a number of conference calls and webinars preparing data and getting ready for the workshop. The assessment should be much stronger this time with indices that are much better correlated. Most of the reviewers concerns from SEDAR27 have been addressed and the report should identify the solutions to most of those concerns. The Review Workshop is scheduled for the last week of August in Morehead City, NC, and will be rolled into the South Atlantic Fishery Management Council's blue-line tilefish and gray triggerfish reviews. The SAFMC is providing two of their own SSC members to participate in the review and the GSMFC is once again sending Dr. Will Patterson to represent the Commission. In addition, the SEDAR program will be providing three CIE reviewers for the Workshop in August.

Pending completion of the assessment, the results will be incorporated into the draft FMP revision that has been on hold until the assessment could be resolved. **VanderKooy** and **Smith** will update a few of the minor sections with additional landings and effort data and then the

MAC will be ready to review the complete draft and coordinate management goals and recommendations.

Restoration Act Proposal

VanderKooy reviewed the work to date on the menhaden sampling proposal which will be submitted for either early Restoration funds through NRDA or the Restore Act funds once the BP case is settled. There is no guarantee of funding for the projects, but fishery-independent monitoring and ecosystem management was identified in the RFPs. Jeff Rester has been working with the various states already on expansion of the SEAMAP sampling program and **VanderKooy** is including the 'baitfish' proposed sampling in with that package. There is an additional proposal which may need to be submitted separately to address fishery-dependent sampling of the reduction fishery.

Finally, the aerial survey proposal is still in the drafting stage. **Leaf** and **Mahmoudi** have spent considerable time writing and rewriting the proposed sampling scheme based on the conference calls the MAC has had over the last few months. The original plan to use protocols from the NW Pacific sardine fishery (and proposed for the Atlantic menhaden fishery). For various reasons these procedures were determined to be inappropriate for the gulf menhaden fishery. After discussions with industry personnel, including a spotter pilot, the project is being revised and is still in the draft phase. It is hoped that the project will fit in the independent sampling package, but due to its size and early draft stage, it may need to be submitted as a separate project. **VanderKooy** hopes to have something to distribute in the next few weeks for discussion.

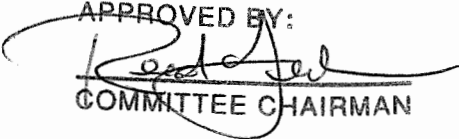
Other Business

Wallace had requested information on any dedicated menhaden work by NOAA at the October 2012 MAC meeting. The SEFSC had not replied to the request for information. **Smith** did not have any information that suggested NOAA research directly related to gulf menhaden other than the routine catch/effort data, port sampling, and CDFR program.

With no further business, the meeting adjourned at 11:45 am.

TCC SEAMAP SUBCOMMITTEE
MINUTES
Tuesday, March 19, 2013
Destin, FL

APPROVED BY:


COMMITTEE CHAIRMAN

Chairman R. Hendon called the meeting to order at 1:00 p.m. The following members and others were present:

Members

Read Hendon, *Chairman*, USM/GCRL, Ocean Springs, MS
Bob McMichael, FWC/FWRI, St. Petersburg, FL
John Mareska, ADCNR/MRD, Gulf Shores, AL
Chloé Dean, LDWF, Grand Isle, LA
Fernando Martinez, TPWD, Corpus Christi, TX
Butch Pellegrin, NOAA Fisheries, Pascagoula, MS
John Froeschke, GMFMC, Tampa, FL

Others

Terry Henwood, NOAA Fisheries, Pascagoula, MS
Ellie Roche, NOAA Fisheries, St. Petersburg, FL
André DeBose, NOAA Fisheries, Pascagoula, MS
William Driggers, NOAA Fisheries, Pascagoula, MS
Courtney Hall, SAS Institute, Inc., Raleigh, NC
Doug DeVries, NOAA Fisheries, Panama City, FL
Gary Fitzhugh, NOAA Fisheries, Panama City, FL
Myron Fischer, LDWF, Grand Isle, LA

Staff

Larry Simpson, *Executive Director*, GSMFC, Ocean Springs, MS
Jeff Rester, *SEAMAP/Habitat Program Coordinator*, GSMFC, Ocean Springs, MS
Cheryl Noble, *Staff Assistant*, GSMFC, Ocean Springs, MS
Donna Bellais, *ComFIN Programmer*, GSMFC, Ocean Springs, MS
Lloyd Kirk, *SEAMAP Data Manager*, GSMFC, Ocean Springs, MS

Adoption of Agenda

J. Mareska moved to adopt the agenda as submitted. B. McMichael seconded the motion and the motion passed.

Approval of Minutes

B. McMichael moved to approve the TCC SEAMAP minutes from the October 16, 2012 meeting as submitted. F. Martinez seconded and the motion passed.

Administrative Report

J. Rester reported that since the last meeting in October, the Fall Shrimp and Groundfish Survey were completed with no major problems. The Winter Plankton Survey took place earlier this year and the Spring Plankton, Bottom Longline, Vertical Line and Trawl Surveys should begin as scheduled.

J. Rester asked the Subcommittee to submit their data in a timely fashion as some data requests at the beginning of the year could not be fulfilled because GSMFC did not have the data. **J. Rester** also asked the Subcommittee to use the templates they received from L. Kirk for submitting the vertical line and bottom longline data.

J. Rester informed the Subcommittee the Joint SEAMAP meeting will be in Puerto Rico in July or August 2013, but due to budget constraints, only the Chair, Vice Chair and Coordinator may attend. He will keep the Subcommittee updated. He said if this is the case, the Subcommittee will meet via conference call a week or so before the meeting to discuss the budget the Gulf will present at the joint meeting.

The Subcommittee asked E. Roche if she had any new information on the budget. She said she does not know anything at this point. She also was asked when they should start cancelling sea days and she said when their award is over and the budget has not passed, do not start any new work. **R. Hendon** asked if they should submit the 2013/14 budget to grants online and she said to do whatever Kelly Donnelly instructs them to do.

SEAMAP Trawling, Plankton, and Environmental Data Collection Operations Manual Review

J. Rester said the work groups have reviewed the manual and there are a few minor things that need to be discussed. He said several of the forms need to be updated, as some of the fields are now obsolete. He stated they still need the forms for back up of the shipboard systems and asked the Subcommittee to send him the forms they are currently using and he will update them for the manual.

J. Rester said there is not a consensus among the work group on collecting chlorophyll. He said they need to standardize this or not collect it. He said it was suggested to collect chlorophyll and then compare that to the satellite data. **B. McMichael** stated the argument is the satellite is a broader reading whereas the chlorophyll reading is in the exact same spot.

The Subcommittee decided to collect surface, mid and bottom water column information at the last meeting. The full profiles are available upon request. **J. Rester** asked that each state and NMFS have a back up (bottle) to collect environmental data in case of equipment failure. He also asked the Subcommittee to take separate CTD recordings for the trawl and plankton. He said that will be on the new data sheets.

The Subcommittee decided to change red snapper to a select species. The new protocols should be included in the manual. The manual should be changed to read all red snapper should be weighed, measured, etc., not just twenty. **J. Rester** will make the changes to the manual.

After discussion on the lionfish being a species of interest, **B. McMichael** moved to treat lionfish as a select species and to send it in the datasets to **J. Rester** who will then submit the information to the USGS. All fish should be individually weighed, measured and sexed. **J. Mareska** seconded the motion and it passed. It was suggested that L. Kirk create a subset in the database for lionfish so it will be in the final dataset and no edits would be required.

J. Rester pointed out that in all SEAMAP publications, reports and the operations manual, the bongo frame size is 60cm. The actual size is 61cm. He will change the operations manual and all future SEAMAP material to 61cm. He will also change the 40 ft net to 42 ft because that is the actual size.

J. Rester stated SEAMAP uses fathoms in the trawl database for the measurement of water depths but all of the other databases use meters. The Subcommittee said this is just an historical issue and they decided to change everything to metric formats. **J. Rester** will ask L. Kirk to make a global change in the databases and all future depth recordings will be in meters.

J. Rester will send all other issues to the Environmental and Plankton Work Groups for their input, insert any changes, and then send it back to the Subcommittee to finalize the manual.

B. Pellegrin said in reference to the mud rollers email, they are 4" x 8" plastic mud rollers. He then said it is up to the individual state on how to handle trash in the catch. He said the trash can either be weighed in the total catch or separated before it is weighed. If it is separated before weighing then further subsampling and accounting would not be needed. He said if it is in the total catch like mud, then take a subsample and treat it as a species and give it a number of one because that is in FSCS, it has to have a number. **B. Pellegrin** said that that is being written into the new ingest software to that trash category and expand it to a total catch rate.

B. Pellegrin then informed the Subcommittee that OMEO, developers of FSCS, will no longer give support for FSCS so they are sure the NMFS IT department will develop their own FSCS software that will be tailored to the Gulf region's needs. He does not have a timeframe but he will keep the Subcommittee informed on the progress.

Vertical Line Survey Issues

J. Rester reviewed the vertical line survey issues that need to be resolved. The Subcommittee decided to have a Vertical Line Work Group meeting to discuss some of the issues further. **J. Rester** informed the Subcommittee that funds are not available to reimburse the work group and that they would have to pay their own way. The work group will discuss fishing 2 or 3 lines simultaneously; the process of choosing sampling sites; choosing sampling seasons; target number of stations; use of GO Pro and ROV video; using acoustics to map habitat; and biological sampling objectives, protocols, disposition of samples and data reporting.

Fishery Independent Data Sampling Restoration Proposal Review

The Subcommittee reviewed and extensively discussed the restoration proposal. There were concerns that due to the expense of the plankton section, it seems to be the most important part

of the proposal. It is actually two-thirds of the budget, but that is because they are proposing to build a plankton sorting center in the Gulf and to expand sampling. One way to decrease the budget would be to rent or lease initially, and to ask the states and NOAA to take on the cost of building a center. The Gulf will eventually need a center especially if they expand sampling. This will not replace the Poland Sorting Center; the extra samples would go to the new center. They do need to consider the possibility that in the future Poland may close their center.

It was suggested to prioritize each component of the proposal but the Subcommittee agreed that until they know the extent of the funding, they should not spend a lot of time prioritizing. They will do that when they know the amount of funding they will receive. **E. Roche** said that as a grants person, she would suggest having each component separate so if the whole proposal cannot be funded, they may go back to the Subcommittee and ask which of these is most important. She also suggested adding to the text that they are cooperatively deciding on station locations so there will be no duplication of effort.

J. Rester said a baitfish sampling proposal will also be added to this and that will cost approximately \$15 million for the ten year period. The Subcommittee decided to add sampling in 2-5 fathoms, the states would sample inshore, and NMFS will sample offshore.

J. Rester stated the proposal should be structured in such a way that they can determine what the priorities are and if there is only a certain amount of funding, they fund the top priorities. They agreed not to cut the plankton section, just add to the other sections. As with plankton, they need to send each section to the experts in the field and to the stock assessment people, and ask for their input. It was suggested to add spring and winter sampling to the groundfish survey, include the west Florida shelf or just double the effort as it is. They should add biological analysis for all of the surveys. They should expand the vertical line and bottom longline sampling. The Subcommittee needs to decide minimum sample sizes and which species they will analyze first. The Subcommittee also decided to do side scan or acoustics with all surveys where possible. The Subcommittee will also go through each section and expand the language and justification for each item, particularly the need for the plankton sorting center and the \$15 million ship. This will strengthen the proposal.

J. Rester will add a section for GSMFC to do the data management. NMFS will continue the data management for plankton and reef fish. They will also add work group meetings for the sampling and budget for meetings to discuss methodologies for otolith, gut content, reproductive, etc. **R. Hendon** suggested adding fish measuring boards, field laptops, and any other equipment that may be needed for the surveys.

The Subcommittee discussed the fact that this is a cooperative effort based on a long term plan of expanding current programs, and what will happen if SEAMAP funding gets cut to the point that they will not be able to do all the surveys. **B. McMichael** suggested a budget amendment to request a change in the focus. After more discussion, the Subcommittee decided not to mention anything in the proposal that they will decide a plan of action if that happens.

J. Rester asked the Subcommittee to send him their new language and justifications as soon as possible. He will incorporate that into the proposal then distribute it to the center directors, G. Fitzhugh, and stock assessment personnel for their input.

Other Business

There being no further business to discuss, **B. McMichael** moved to adjourn. **J. Mareska** seconded the motion and it passed. The meeting adjourned at 4:30 p.m.

**TCC DATA MANAGEMENT SUBCOMMITTEE
MINUTES
Tuesday, March 19th, 2013
Destin, FL**

APPROVED BY:
Christine Murrell
COMMITTEE CHAIRMAN

Chairman Christine Murrell called the meeting to order at 8:35 a.m. The following members and others were present:

Members

Chris Denson, AMRD, Gulf Shores, AL
Nicole Shaffer, AMRD, Gulf Shores, AL
Richard Cody, FWRI, Saint Petersburg, FL
Page Campbell, TPWD, Rockport, TX
Vicki Swann, TPWD, Austin, TX
Christine Murrell, MDMR, Biloxi, MS
Michael Harden, LDWF, Baton Rouge, LA
Vince Cefalu, LDWF, Baton Rouge, LA
John Froeschke GMFMC, Tampa, FL
David Gloeckner, SEFSC, Miami, FL

Staff

David Donaldson, Assistant Director, Ocean Springs, MS
Larry Simpson, Executive Director, Ocean Springs, MS
Donna Bellais, ComFIN Programmer, Ocean Springs, MS
Gregg Bray, Programmer/Analyst, Ocean Springs, MS
Alex Miller, Economist, Ocean Springs, MS

Others

Linda Lombardi, NOAA Fisheries, Panama City, FL
Beverly Barnett, NOAA Fisheries, Panama City, FL
Joey Shepard, LDWF, Baton Rouge, LA
Terry Cody, Rockport, TX
Frank Helies, GSAFF, Tampa, FL
Claude Petersen, Bluefin Data, Gonzalez, LA
Andrew Petersen, Bluefin Data, Gonzalez, LA
Dale Diaz, MDMR, Biloxi, MS
Troy Williamson, Corpus Christi, TX

Adoption of Agenda

The agenda was approved and adopted as written.

Approval of Minutes

The minutes of the Data Management Subcommittee (DMS) meeting held on October 12th, 2012 in Point Clear, AL were approved as written.

Status of Biological Sampling Activities

Status of collection and analysis – **Bray** provided a description of the biological sampling analysis matrix provided in the meeting folder. Alabama, Louisiana, and Texas have completed sample data entry for 2012. Mississippi needs to complete November and December sample data entry. Florida has not provided any 2012 data as they are still unable to access the FIN Data Management System. **Gloeckner** asked what needed to be fixed to accomplish data loading. **Cody** described that computer problems with JavaScript have been the biggest problem. **Cody** stated that it might be necessary to bulk load much of the electronic data from FWRI to GSMFC and eliminate data entry in the FIN DMS. **Gloeckner** suggested loading FWRI data to the SEFSC database and then setting up a database link to GSMFC to load biosampling data to the GSMFC oracle database. **Cody** agreed that might be a viable alternative and suggested **Gloeckner** contact Bridget Cermak at FWRI to work out the programming details. Age sample processing is ongoing. Texas is fully completed with processing, reading and data entry. Alabama, Louisiana, and Mississippi are in the process of completing the reading and continue with data entry. All states expect to be completed by summer of 2013. **Bellais** reminded Alabama, Mississippi, and Texas to inform her when data are clean so she can move data to the permanent data table in the FIN DMS.

- a) *Discussing of adding trip_id variable* – **Bray** stated this issue was discussed at the prior Data Management Subcommittee meeting and most states were concerned at the difficulty in identifying biological samples to unique fishing trips. Since that meeting, the subcommittee had a conference call and NOAA stated that depending on potential biases in the data, not having a unique trip identifier for each record might render FIN data useless. **Bray** mentioned that if all commercial biological samples were linked to a trip ticket number that would solve the problem for commercial samples. Texas and Alabama stated that this would be difficult as they are still collecting all commercial samples from dealers. **Denson** also stated that if the sampling unit is the trip then the productivity of collecting age structures is going to be impacted negatively. **Lombardi** stated that NOAA analysts have determined that there are some biases associated with low sample sizes at the trip level so we need to be able to weight the sample at the trip level. This issue has come up since NOAA has started using a new model for stock assessment purposes. **Gloeckner** stated if NOAA uses random age sampling analyses then all samples have to be linked back to the individual trip since ages need to be reweighted by the lengths. **Lombardi** stated the need for more specific spatial landings data is increasingly more important under these analysis methods. **Bray** stated that a potential fix to the recreational sampling problem would be to collect them specifically from MRIP dockside interviews that would allow for an easy way to identify angler trips. This would involve getting NOAA Statistics and Economics staff in Silver Spring, Maryland to allow for methodological changes to the Access Point Angler Intercept Survey (AP AIS) and would also likely require two samplers on every field assignment. Texas does not participate in MRIP so changes in Texas procedures would still need to be modified for recreational sampling methods.

- b) *Other issues* – **Bray** stated that some additional changes to NOAA analyses will likely require sampler average percent error's (APE's) to be used in the model. If samplers have APE's above a species specific threshold then their data would likely be excluded from the model. Lombardi shared a handout discussing some issues that NOAA would like changed for FIN data provided for future assessments. Most were all simple data coding issues that GSMFC can format before providing future datasets. There was also some discussion about having some quality control methods setup prior to delivering biological data to help address some key entry mistakes with regards to outlying lengths and weights. NOAA agreed to provide some more details with specific scatter plots or quality control methods to help with the FIN data.

Bray also discussed that Alabama has some biological funds that they are unable to spend for 2013. Since biological sampling was funded using some additional stock assessment and enhancement funds these monies cannot be carried over and must be spent for 2013. After obtaining permission from Alabama, the proposal was too redistributed the approximately \$62,000 across the five Gulf States using the current distribution of biological sampling funds. **Bray** asked if the money provided to each state would be sufficient to collect additional samples for the 2013 sampling year. **Cody** asked if there was an end date to when the money had to be used. **Bray** stated that he assumed the money had to be spent in 2013. **Denson** asked if the money could be spent on equipment instead of directly collecting additional samples. **Shepard** asked if the money could be spent by GSMFC to address data management issues. **Bray** stated he would have to get that answer from **Donaldson** on using the money for reasons other than sampling.

Discussion of Web-based Commercial Landing Reporting

Petersen provided a presentation on the history of the commercial trip ticket system. **Petersen** stated that unified trip ticket does not indicate that all states have to collect the same data. From 2000-2010 the dealer reported to Bluefin data and there were 5 different versions of trip ticket reporting for each Gulf State. The program was PC based which means the program runs locally on each dealer computer and the database also resides on the dealer computer. In the present, Bluefin Data has revised the state reporting programs to provide a state and federal file. Bluefin Data is now sending data to the states along with SEFSC, GSMFC, Northeast Fishery Science Center (NEFSC), along with the state data feeding into the Trace Register system. **Petersen** mentioned that the PC based programs might not run correctly on Windows 8. This started the discussion of unifying the trip ticket program which would be a single code based program that would be customizable for each state. After testing, the older PC based version does work on Windows 8 and because of this the PC based programs were unified. **Petersen** discussed that he has been receiving calls from dealers that are asking for data entry options that PC based reporting will not support such as entering data on tablets, mobile devices, or Apple computers. This has prompted the need for creating a web-based reporting system. A web-based system would not eliminate the PC based system but just provide an additional option for data entry.

- a) *Unifying Species Codes* – **Petersen** is asking for one unified data structure that would

still allow states to collect the data they require. In four of the five Gulf States there is no control over species, condition, market and unit combinations. **Petersen** is asking for an all-in-one species table created with a standard data structure. **Petersen** provided an example of what is currently being used in the Northeast. This would allow for more cost-effective development of new generation data entry methods. Before Bluefin Data can proceed with developing a unified trip ticket program, **Petersen** needs agreement that all states are willing to create this all-in-one species table. **Bellais** plans to coordinate with the states on additional discussions to get **Petersen** an answer ASAP. Texas is already working towards developing this species table.

Discussion of Adding/Modifying Codes to FIN DMS

Bellais discussed needing a technical review of adding or modifying codes to the FIN DMS along with the annual data quality assurance and quality control (QA/QC) process that the committee holds during the fall subcommittee meeting. If codes need to be added to FIN DMS please contact **Bellais** and she will coordinate a call with the states to make sure the code is standardized across all states. **Denson** asked if they could also review the codes added for the Highly Migratory Species data collection program. **Bellais** stated she can share those codes with the subcommittee.

Discussion of Federal Trip Ticket Editing System

Gloekner discussed that this is a new system being used to review trip ticket data. The new system is being beta tested with the federal port agents. The goal is to provide state partners assistance in error checking trip ticket data as it is received electronically. Each state partner will be queried as to what they will like to see as useful program output. The biggest hurdle will be finding a unified output format that everyone agrees to and can be utilized. As port agents find invalid codes they could be working with the states and dealers to update data tables and save time for state staff. Currently during testing the port agents are reviewing data straight from GulfFIN prior to the states receiving it. Alabama and Louisiana both asked if the port agents are wasting their time because state personnel are cleaning up the data at the same time the port agents are reviewing the data. **Gloekner** asked if there was an easy way to parse the data so the federal port agents review federal trips and the state agency's focus on reviewing state trips. **Denson** said it would take too much time to attempt to subsample the tickets based on state trips or specific species landed. **Campbell** stated she would like to see what the federal port agents are identifying as errors and then possibly determine a method for how the review process would actually work. **Gloekner** asked if NOAA assistance is even useful during the early data submission process. Most of the states generally agreed that some additional review might be useful after the states complete their internal review process.

Discussion of New MRIP Intercept Survey Methods

Bray discussed that the new MRIP Access Point Angler Intercept Survey (APAIS) was implemented in March 2013. Samplers are following new site selection protocols and have

additional responsibilities for counting anglers along with collecting dockside angler interviews. Samplers are now restricted to 6 hour time blocks that are predetermined and all sites for an assignment are selected through the random draw process. States are in constant contact with GSMFC and NOAA with problems or concerns and data are still being processed by GSMFC.

Status of Recreational Choice Experiment Survey

Miller updated the states on the recreational choice experiment survey that NOAA and GSMFC are implementing in 2013. **Miller** discussed that the states are collecting addresses from anglers that have taken a charter fishing trip over the last 12 months for use as a mail survey sampling frame. Addresses from charter mode are being collected using a dockside add-on form in West Florida, Alabama, and Mississippi. Field forms have been delivered to the states and sampling has started. The 3-day charter passenger license database is being used for charter mode in LA. Private boat mode addresses are being obtained via the national angler license database. **Miller** provided a frequently asked questions white paper and a question and answer sheet based on initial questions received from the states. **Miller** asked the states to continue to send him questions and concerns about the survey.

Discussion of Fish Tags for the Red Snapper Fishery

Bray mentioned that this issue was discussed back in the fall of 2010 for the gag grouper fishery. Fish tags are not something currently addressed by MRIP. In 2010 this committee agreed that a state implemented fish tag data collection system would be extremely difficult for multiple reasons. **Froeschke** stated that the Gulf Council Private Recreational Advisory Panel (GCPRAP) had a recommendation for a tag or permit system as an effort tracking system. It was not designed as an effort limiting system. The concern is that fishing effort is overestimated in the red snapper fishery which results in overestimation of total harvest. **Froeschke** stated that if implemented the end users would need to be integrated into this process to help determine the success or failure of the program design. **Denson** stated the difficulty of assigning tags to individual anglers or boats would require immense amount of state manpower for a fishery like red snapper. **Froeschke** stated that the Gulf Council is trying to figure out if a fish tag system would improve effort estimates which in turn would potentially provide additional fishing days in the red snapper fishery. **Froeschke** stated that some of the potential benefits brought up by the GCPRAP were providing real time data, data from private access anglers, additional discard data, and implementation at electronic and internet sales points. **Froeschke** stated that it would be unrealistic to expect a fish tag or permit system to provide exact counts of angler trips but hopefully over 5 or 10 years it might possibly provide another index of fishing effort. If that additional index would not be useful in the stock assessment process then this tag system would not be worth attempting. **Cody** stated that Florida has a snook stamp and tarpon tag but that information does not seem to directly improve stock assessment process from an angling effort standpoint. **Cody** stated that the chances of a red snapper tag system achieving a census of angling effort is highly unlikely. **Cody** would prefer to obtain a sample through normal statistical procedures instead of trying to obtain a census of trips. The GSMFC plans to draft a

letter to the Gulf Council providing their concerns regarding the feasibility, costs, and likelihood of success of a red snapper tag or permit program in the Gulf of Mexico.

Update on GMFMC Private Recreational AP Meeting

Due to time constraints, **Froeschke** consolidated these comments into the prior discussion of fish tags for the red snapper fishery.

Status of Metadata Data Compilation

Bray stated that he will email the presentation developed by Ralf Reidel on his progress on metadata compilation due to time constraints at the meeting.

Other Business

Being no further business, the meeting was adjourned at 12:17 p.m.

APPROVED BY:


COMMITTEE CHAIRMAN

TCC CRAB SUBCOMMITTEE MINUTES
Wednesday, March 20, 2013
Destin, Florida

Chairman, R. Gandy called the meeting to order at 8:30 a.m. with the following in attendance:

Members

Martin Bourgeois, LDWF, Baton Rouge, LA
Jason Hermmann, AMRD, Dauphin Island, AL
Traci Floyd, MDMR, Biloxi, MS
Ryan Gandy, FWRI, St. Petersburg, FL
Harriet Perry, GCRL, Ocean Springs, MS
Glen Sutton, TPWD, Dickinson, TX

Others

Julie Anderson, LA Sea Grant, Baton Rouge, LA
Darcie Graham, GCRL, Ocean Springs, MS
Harry Blanchet, LDWF, Baton Rouge, LA
Robert Leaf, GCRL, Ocean Springs, MS
Wade Cooper, FWRI, St. Petersburg, FL
Steve Heath, Summerdale, AL
Matt Freeman, MSU, Starkville, MS
David Capo, Capo Crab Ranch, Cross City, FL
Ginny Vail, Tallahassee, FL
Dan Ellinor, FWC, Tallahassee, FL
Gary Graham, TX Sea Grant, West Columbia, TX
Joe Powers, LSU, Baton Rouge, LA
Ron Lukens, Omega Protein, High Springs, FL

Staff

Steve VanderKooy, GSMFC, Ocean Springs, MS
Debbie McIntyre, GSMFC, Ocean Springs, MS
Jeff Rester, GSMFC, Ocean Springs, MS

Introductions

Chairman Gandy led the audience and the committee members in introductions.

Adoption of Agenda

*Floyd moved to adopt the agenda as written. **Graham** seconded the motion, and the agenda was adopted.*

Approval of Minutes

The Subcommittee reviewed their minutes of the October 16, 2012 annual meeting. *Bourgeois moved to accept the minutes with one minor change, Floyd seconded, and the minutes were approved unanimously.* **McIntyre** will make the indicated change to the minutes.

The group reviewed the Blue Crab TTF summary of several conference calls/webinars which were held during the month of January, 2013, in lieu of an on-site meeting. *Floyd moved to accept the summary as written, Graham seconded, and the summary was approved unanimously.*

Atlantic Horseshoe Crab Management

Gandy reported that horseshoe crabs have become a big issue in the northeast as there is an increasing demand for their use as bait. The Atlantic states approved a ban on the import of horseshoe crabs which were being imported to New York from Vietnam due to the likelihood of disease coming in. **Gandy** stated that the Gulf States may be asked to follow suit in the near future. Another issue of concern is the harvesting of horseshoe crabs. Florida's Atlantic coast has a bait landing quota of 9400 horseshoe crabs. While there have been no recorded landings of these crabs for the past couple of years in Florida, the fact that no quota exists on the west coast of Florida has become a concern. If the harvesting of these crabs develops as a fishery, we will need to regulate it even if there is only a small population. A bleeding permit is required to harvest for the blood and a permit is required to harvest for bait as well as filling out trip tickets. **Gandy** wanted to make the committee aware of this issue going on with the Atlantic states. He asked that each state representative look into his/her own state's regulations on exotic species to see if any exist.

Blue Crab Assessment Results

VanderKooy provided the group with a quick overview of what has been accomplished thus far concerning the stock assessment, explaining that the Commission has taken the SEDAR approach to stock assessment. Once the assessment is complete and passes review, the TTF and the Blue Crab Subcommittee will be prepared to make recommendations for the fishery management plan. The Review Workshop is scheduled to take place in June in Biloxi.

Sutton presented an overview of where he and the other analysts (**Cooper**, **West**, and **Leaf**) stand with the stock assessment process. With the Data Workshop and the Assessment Workshop completed, the analysts are ready to submit a final report to the review panel in May for the June Review Workshop.

Sutton explained that the goal of fisheries management should be to sustain stocks and make decisions. The goal of stock assessment is to provide a quantifiable analysis of how stocks might react to management choices. Stock assessment not linked to management choices has limited utility.

Sutton pointed out that we may want to consider the management implications of the western stock as currently defined. The western stock consists of four states: Texas, Louisiana, Mississippi, and Alabama east to Apalachicola, Florida. The results of the model indicate that MSY reference points are approximately 78 million pounds for the west coast and 10.7 million

pounds for the east coast stock. Neither is currently undergoing overfishing in this assessment model. After discussion, it was decided that the analysts will run the western model state-by-state, thereby allowing an allocation to each state of overall MSY.

VanderKooy explained where we are in the reporting process. The CIE reviewers will get the final report from us in May. **VanderKooy** will send a draft report out to the committee/TTF for review prior to it going to the reviewers. Much of this is already in place and drafted. The remainder will come from the analysts. The first draft should be ready mid-April. The analysts will make conclusions and we will make decisions as to what to do with these results. MSY is the limit and thresholds will need to be determined by the state managers on the Subcommittee and the TTF.

When asked about dealing with Boom/Bust years, **Capo** stated that, from a market standpoint, he would rather consistently catch crabs, even if at a lower rate. As far as industry survival, the middle road is better so there might not be pushback to more conservative targets and goals.

The group discussed the need to limit marshland destruction on all of the Gulf Coast. There are more and more changes happening to habitat. For the next assessment, it would be helpful to do a spatial model. This could account for production but also separate out into state. Biostatistical sampling and landings data would be very useful.

The analysts will prepare a broad sensitivity about western and eastern stock and then break it down by state. The time frame for finishing the sensitivity runs is approximately one week.

Derelict Trap Cleanups

Sutton stated that Texas completed their cleanup in February. Approximately 30,000 traps have been removed since the program started, most from Galveston. A total of 877 traps have been removed this year. One dead diamondback terrapin was reported.

Bourgeois reported that Louisiana joined Louisiana SeaGrant for what they now refer to as a “rodeo” for the second consecutive year. The closure in Plaquemines (February 16–25) was for 10 days, the weather was poor, and 500 traps were removed during that time by staff and one volunteer boat. The next closure was in St. Bernard Parish (March 9-18) with nice weather. 15 boats worked and 411 traps were removed. 89 volunteers, including some students from Purdue, assisted in the effort. Total traps removed since the program started is 23,000+.

Gandy reported that Florida has been alternating odd and even years with the Gulf/Atlantic sides since 2011. 1500 traps were retrieved in 2012 on the Atlantic side. No numbers have been reported yet in 2013 for the Gulf side.

Herrmann reported that Alabama did not have a cleanup due to not enough derelict traps being observed by air.

Floyd reported that Mississippi held a “Crab Trap Roundup” February 21-23 and 281 traps were removed. Fishermen were notified in advance and had one week to remove their traps from the

area. The majority of the volunteers were commercial crabbers with additional help from GCRL and some CCA members. Simms Management picked up the traps and recycled them.

Capo stated that his business is located in the big bend region and participates every year with Florida's cleanup. 90% of the traps they picked up were cut-offs which are traps that would not be observed from above. Air boats would be much better to use and you would get near 100% retrieval. He has not observed a lot of death in these traps. Most species escape from the trap when it is being pulled up. We need to find ways to retrieve traps that are in the deeper water. Florida pays \$10 per retrieved trap as an incentive. **Capo** pointed out that traps with biodegradable panels are much better to use.

State Report Summaries (Individual state reports available at GSMFC office)

Bourgeois indicated that Louisiana landings from October 2012 to present are right around average. He pointed out that shrimpers are having an issue with what to do with derelict crab traps. The Louisiana Crab Task Force is considering a resolution endorsing the Louisiana Blue Crab Stock Assessment. Findings from the MSC audit should be back in a few weeks.

Gandy reported that Florida landings for 2012 are still preliminary but appear down from 2011. Landings in 2009 were the lowest on record for the state and regionally the lowest on record for the Atlantic coast. Regarding the effort management plan, approximately 275,000 total traps have stabilized with endorsements dropping slightly by almost 2%.

Sutton stated that Texas preliminary 2012 landings data reflects over 5.6 million pounds, up almost 100% from 2011. Total number of commercial fishermen equaled 190 with five bought back. Indices of abundance were down for all FIM gears: bay trawl by 20%, gulf trawl by 15%, bag seines by 35% and gill nets by 32%. Wagner and **Sutton** have been collecting some data re: sex and maturity which will help with stock assessments in the future. **Sutton** reminded everyone of the grad student who is conducting an ongoing project to estimate growth of blue crabs in the wild using Coded Wire tags. It was once again agreed that the Subcommittee would invite this TPWD intern to the GSMFC Annual Meeting in October 2013 to present to them the results of this work.

Herrmann reported that Alabama is continuing to test tissue, working closely with the Alabama Dept. of Public Health. Of the 148 samples sent for testing so far in 2013, no crabs tested with levels of concern. Landings were down and lower numbers of both sexes were seen. Preliminary data reflects 2,950 trips for 2012, down from 3,784.

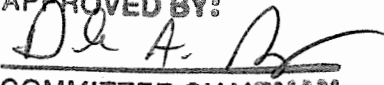
Floyd reported that Mississippi commercial crab license sales were down from 223 to 175. Cooperation from fishermen seems to be good with very little opposition to the new trip ticket system. Landings data reflects the additional reporting that occurred due to trip tickets. Preliminary landings for 2012 were 782,114 pounds with a value of \$723,685. This was up from 2011 which was 396,786 pounds with a value of \$318,117 for the same time period. TEDs are still being distributed to crabbers, both commercial and recreational volunteers. There have been no levels of concern in any crab tissue sampled so far since DWH.

Other business

VanderKooy reported that the "Commercial Blue Crab Survey" was mailed out to 4,300 fishermen in the five states and followed up with reminder post cards to each. To date, 370 electronic responses have been received.

There being no further business to discuss, ***Perry** moved to adjourn, **Sutton** seconded, and the meeting was adjourned at 12:00 noon.*

APPROVED BY:


COMMITTEE CHAIRMAN

**TECHNICAL COORDINATING COMMITTEE
MINUTES
Wednesday, March 20, 2013
Destin, FL**

Chairman Dale Diaz called the meeting to order at 2:00 p.m. The following members, staff, and others were present:

Members

Dan Ellinor, FL FWC, Tallahassee, FL
Randy Pausina, LDWF, Baton Rouge, LA
Richard Cody, FWC/FWRI, St. Petersburg, FL
John Mareska, AL DCNR, Dauphin Island, AL
Mark Schexnayder, LDWF, New Orleans, LA
Chris Denson, AL DCNR, Gulf Shores, AL
Dale Diaz, MDMR, Biloxi, MS
Harry Blanchet, LDWF, Baton Rouge, LA
Jerry Mambretti, TPWD, Austin, TX
Roy Crabtree, NOAA Fisheries, St. Petersburg, FL

Staff

Alex Miller, GSMFC, Staff Economist, Ocean Springs, MS
Dave Donaldson, GSMFC, Assistant Director, Ocean Springs, MS
Gregg Bray, GSMFC, RecFIN Programmer/Analyst, Ocean Springs, MS
Ali Catchot, GSMFC, Staff Assistant, Ocean Springs, MS
Joe Ferrer, GSMFC, Systems Administrator, Ocean Springs, MS
Angela Rabideau, GSMFC, Accountant, Ocean Springs, MS
Steve VanderKooy, GSMFC, IJF Coordinator, Ocean Springs, MS
Ralph Hode, GSMFC, Fisheries Disaster Coordinator, Ocean Springs, MS

Others

Jean Cowan, NOAA Restoration Center, Baton Rouge, LA
Christine Murrell, MS DMR, Biloxi, MS
Troy Williamson, GSMFC Commissioner, Corpus Christi, TX
Ryan Gandy, FWC/FWRI, St. Petersburg, FL
Ron Lukens, Omega Protein Corp., High Springs, FL
Ellie Roche, NOAA Fisheries, St. Petersburg, FL
Glen Sutton, TPWD-Coastal Fisheries, Dickinson, TX
Jolvan Morris, Florida A&M University, Tallahassee, FL
Elizabeth Scott-Deaton, DOC/NOAA/NMFS, Galveston, TX
Joey Shepard, LDWF, Baton Rouge, LA
Mike Ray, TPWD, Austin, TX
Cara Cooper, Three Little Birds Consulting, LLC, St. Petersburg, FL

Wade Cooper, FWCC-FWRI, St. Petersburg, FL
Steve Heath, Summerdale, AL
Joseph Smith, NMFS Beaufort, Beaufort, NC
Benny Gallaway, LGL Ecological Research Associates, Bryan, TX

Adoption of Agenda

A motion to adopt the agenda with a minor change was made by John Mareska, seconded by Jerry Mambretti, and passed unanimously.

Approval of Minutes

A motion to approve the minutes as written for the October 17, 2012 meeting was made by Chris Denson and passed with no opposition.

Overview and Discussion of the NOAA MRIP Angler Access Point Survey Methods

John Foster of NOAA Fisheries was not present, but gave a presentation via the internet on the new MRIP Access Point Angler Intercept Survey. **Foster** explained the changes that have occurred from the previous MRFSS intercept methodologies and that there are now finer levels of stratification.

Foster explained that site day is now site cluster, alternate sites are now sites in predefined clusters, alternate modes are now drawn mode, interview limits now have no limits, there are now no scheduling of assignments, and sampler discretion is now based on fixed procedures. **Foster** pointed out that the sampling time intervals are now 24-hours and are broken down into 4 6hr sampling intervals. **Foster** noted that alternate sites are now completely predetermined and clustered by mode, fishing pressure, and geographic proximity. Google Maps are used to create a driving distance matrix and sites are clustered together using a process of simulated annealing. **Foster** stated that to sample a site cluster, the date, time interval, site cluster and fishing mode are all preselected by the draw program. The draw program also includes the visitation order of the individual sites. **Foster** noted that the sampler remains at a site for the fixed duration with allowances made for variable transit times. **Foster** explained that all anglers are now intercepted, as the previous cap of 20 to 30 interviews per site has now been removed. **Foster** further explained that samplers are no longer responsible for determining sub-sampling scheme, that high pressure sites (5 or more) may require subdivision of sampling time into counting anglers and interviewing angler periods, and that night sampling intervals will be covered by two samplers and unsafe sites are not included in sample frame. **Foster** also pointed out that rescheduling of assignments is no longer allowed, that samples drawn may account for some assignments not being completed, and that staff levels are input by state (and state sub-region if required) to constrain the sample draw. **Foster** noted that sample draw tasks are hosted by NOAA Fisheries and will be initially run by NOAA Fisheries. A Web-tool will be developed to allow contractor access in the future. **Foster** also pointed out that finer levels of stratification are being implemented to increase control of sample allocation across states which may improve the precision of the estimates. Discussions were held with states at the recent WAVE meeting on March 12-13, 2013. Implementation will occur in Wave 3 (May/June) 2013. **Foster** concluded

his presentation by noting that stratification is being implemented to facilitate survey operations, that there are no plans to produce catch or effort estimates by sub-state region, and that there are public-use datasets and domain estimation template programs available.

Richard Cody asked if there are a minimum number of sites in a cluster and **Foster** explained that the minimum is one and the maximum is three. **Chris Denson** asked if there are site assignment schedules for major holidays and **Foster** explained that there are not allowances to reschedule for major holidays but would want to work it out. **Dave Donaldson** asked if it is possible for states to sub-stratify if they wanted to and **Foster** noted that it was certainly possible and suggested to follow-up with NOAA Fisheries HQ. **Donaldson** also asked about the status of the Florida MRIP stratification project and the use of funds. **Foster** also suggested to follow-up with NOAA Fisheries HQ. **Gregg Bray** asked if it will be possible to produce estimates for the eight sub-regions in Florida and if the precision will be sufficient. **Foster** explained that they will be able to produce estimates for the Florida sub-regions. **Foster** also noted that the precisions wouldn't be as precise as the state level estimates or the standard two state region estimates for Florida (east and west Florida).

Overview of and Discussion of the Kemp's Ridley Stock Assessment

Dr. Benny Gallaway of LGL Ecological Research Associates gave a presentation on preliminary results of the Kemp's Ridley stock assessment. From 2010 to 2011, the number of Kemp's Ridley strandings increased for a variety of potential reasons such as the BP oil spill, unusual weather events, and shrimp trawling interactions. As a response, a stock assessment was proposed to gain a better understanding of the population and funding was provided by the GSMFC to conduct a workshop and stock assessment. **Gallaway** explained that the overarching purpose of the project was to conduct a Kemp's Ridley stock assessment that involved objective and quantitative examination and evaluation of selected key factors that contribute to its population recovery trajectory.

Gallaway noted that a Kemp's Ridley Stock Assessment Workshop was held on November 26-30, 2012 to develop the stock assessment. The objectives of the workshop were to study the population status of Kemp's Ridley, examine status and trends of shrimping effort, examine other factors that might cause strandings, and develop a demographic model. Data used in the workshop included: shrimp effort data, capture & tracking data, mark recapture data, strandings data, and prey abundance data.

Gallaway pointed out that the results from the workshop showed that turtle nesting trends reflected an unexplained 2010 event requiring mortality adjustment to fit the data. Fixed parameters included maturity schedule, female nests, and female sex ratio. Model predictions included number of nests, increment in growth, and strandings. A major assumption was made that shrimp trawl mortality is the largest source of anthropogenic mortality. **Gallaway** explained that the objective for the growth component was to use individual growth information to estimate age at length, size frequency of strandings, numbers by age, selectivity, and growth by age. Results from the model included estimates for: mortality rates, growth, selectivity, mark recapture increments, nests, and strandings. **Gallaway** explained that in 1988 anthropogenic deaths were 2,715 and in 2012 anthropogenic deaths were 16,128 (despite TEDs). **Gallaway**

noted that Kemp's Ridley population estimates were presented and estimated at about 200,000 females for age 2+ in 2012. Using a sex ratio of about of 50% male and 50% female would put the population at about 400,000 Kemp's Ridley turtles.

Gallaway noted and explained the next steps for fixed parameters, growth analysis, and shrimp effort. **Gallaway** concluded his presentation by explaining that the authors plan to create a refined presentation for use around the country, submit a final report, develop a manuscript for publication, and prepare a proposal for additional funding from GSMFC.

Chris Denson asked if the Kemp's Ridley stock assessment team had contacted the U.S. Army Corps of Engineers for data and information. **Gallaway** noted that they did not, and they should have, because it is potentially a key source for data. **Roy Crabtree** asked if the trawl survey without TEDs could be done with tow time restrictions of 45 minutes. **Gallaway** noted that, yes, it could be done using some type of technology. **Richard Cody** asked about the unexplained mortality event in 2010 and wanted to know if it was related to the oil spill. **Gallaway** noted that the current preliminary evidence and data doesn't point to it being related to the oil spill and that further work was needed. **John Mareska** asked if there was discussion at the workshop about mortality to eggs during the nesting stage, or to zeros and ones, and how it might be affecting the rate of recovery. **Gallaway** noted that there was discussion and that it was included in the pre-model as a fixed parameter. **Dale Diaz** explained that the Kemp's Ridley stock assessment team did a good job pulling the best people together for this effort and asked what the population needed to be to upgrade Kemp's Ridley's from endangered to threatened. **Gallaway** explained that there needed to be at least 10,000 nesting females with a certain number of eggs produced per year.

Update on the Natural Resource Damage Assessment Program

Jean Cowan of the NOAA Restoration Center gave a restoration planning update presentation on the Deepwater Horizon Oil Spill Natural Resource Damage Assessment. **Cowan** explained that there are two stages to the NRDA restoration process. The two stages are (1) Early Restoration and (2) Long-term Restoration.

Cowan noted that the Deepwater Horizon-Related Gulf Restoration and Science funding opportunities include the RESTORE ACT, NRDA, NFWF, and National Academy of Science. There are restoration distinctions for criminal penalties, RESTORE, and NRDA.

Cowan explained that the potential collaboration goal is to maximize efficiency and effectiveness of work. NRDA includes trustees who have the responsibilities to determine the amount of injury and develop restoration plans. These plans and data are available online.

Cowan pointed out that the restoration goals are to restore and conserve habitat; restore water quality; replenish and protect water; provide and enhance. NRDA restoration planning includes early and long-term phases and an agreement with the trustees at \$1 billion. Two phases have been completed. Phase I of the Early Restoration Plan was completed in February 2012 while Phase II of the Early Restoration Plan was completed in December 2012. The Draft Phase III – Early Restoration Plan is currently under development.

Cowan also explained that the NRDA Restoration Plan is possibly the largest, most diverse restoration plan ever considered for the Gulf of Mexico. It will require development of new restoration techniques and applications of existing techniques to address all affected resources. This includes finfish restoration of coastal habitats, restoration of MPAs, *Sargassum*, marine debris removal, invasive species management and water quality.

Cowan closed her presentation by noting that there are opportunities to engage in the NRDA process online.

Dale Diaz asked if the early NRDA restoration process had stalled because the oil spill legal trial is currently taking place. **Cowan** explained that it has not stalled because of the trial. **Richard Cody** asked about increasing fishery independent and dependant monitoring and what the limitations and timescale would be. **Cowan** noted that they are still trying to understand what the compensation needs will be. **Diaz** asked if the funds could be used in Mexico as it relates to turtle beach work. **Cowan** noted that this would certainly be an option and may be feasible. **Jerry Mambretti** asked if the funds could be put in a trust fund to address future questions and needs. **Cowan** noted that that option is being considered and explored.

Subcommittee Reports

Crab

Ryan Gandy stated that there were no major issues with the states and that the subcommittee mainly discussed Horseshoe Crab issues and the Blue Crab stock assessment.

Gandy explained that a resolution is needed to look into a ban on the importation of Asian Horseshoe Crabs that are used as bait in the conch and whelk fisheries because they harbor diseases. The price of bait has soared as the availability has dropped. The subcommittee proposed to notify the Atlantic States Marine Fisheries Commission (ASMFC) of the issue.

Gandy further explained that the Blue Crab stock assessment will be reviewed in June 2013. This assessment follows the SEDAR process. Three reviewers will be used from the Atlantic region.

Mareska made a motion to accept the report and it passed unanimously.

SEAMAP

Jeff Rester stated that the fall shrimp ground fish survey and winter plankton surveys have been completed since the last meeting. They are about to start the spring plankton survey. Vertical and bottom line sampling has started.

Rester noted that the SEAMAP trawling operations manual was reviewed. They are trying to determine if certain collected data is still relevant.

Rester explained that the subcommittee discussed minor sampling problems with the vertical line survey. A work group meeting will be held in the near future.

Rester concluded his report by noting that a fishery independent data restoration proposal was discussed to enhance the SEAMAP program. Additional work is needed before submission can occur.

Jerry Mambretti asked when the routine vertical line survey would start. **Rester** noted that it has been underway for a while and that it should start soon.

Denson made a motion to accept the report and it passed unanimously.

Data Management

Christine Murrell stated that all states have finished with 2012 biological sample data entry.

Murrell noted that the group discussed data issues needed to standardize data that will be submitted for future stock assessments. It's not expected that major changes will occur. Identifying samples to unique fishing trips would present a change however.

Murrell explained that **Claude Peterson** gave a presentation on commercial reporting and discussed the need for a web-based system. A web-based site for commercial landings is needed for dealers that have different types of computer and mobile applications. A unified data table is needed before the web-based system can be developed. An all-in-one species table is also needed for cost effective development.

Murrell stated that **Dave Gloeckner** discussed a new system that is being tested for Federal commercial trip ticket editing.

Murrell also noted that there was also a presentation of the new MRIP methodology and it is going well with the states.

At the conclusion of her report, **Murrell** also explained that **Gregg Bray** discussed fish tags for recreational red snapper. All states are concerned about this initiative. Manpower and legislative approval might be needed. A letter from the subcommittee will be sent to the Council that outlines their concerns.

Denson made a motion to accept the report and it passed unanimously.

Artificial Reef

James Ballard was unable to attend the meeting, but provided a written report to the committee members. He will provide a full report at the next meeting.

Stock Assessment

Steve VanderKooy gave a PowerPoint Presentation on a GDAR overview. **VanderKooy** stated that the GSMFC is starting to follow the SEDAR process to develop assessments in Fisheries Management Plans (FMPs). Two stock assessments are underway through the GSMFC: Menhaden (SEDAR 32A) and Blue Crab.

VanderKooy proposed a TCC review committee to approve stock assessments for inclusion in the FMPs. After a discussion by the committee, it was agreed to continue the FMPs with the existing infrastructure, as it is working well. The recommendation was agreed to by the members. The TTF will incorporate the assessment directly into the FMPs.

Denson made a motion to accept the report and it passed unanimously.

State/Federal Reports

Written reports were provided to the TCC members for their review prior to the meeting. During the meeting, the reports were adopted into the minutes of the meeting. To see the full reports please see the minutes from the Commission Business meeting held on Thursday, March 21, 2013.

Other Business

Richard Cody mentioned regional stratification as it deals with the MRIP methodology, and stated that NOAA Fisheries has been accommodating with regards to establishing a regional draw. **Cody** noted that it doesn't automatically qualify Florida for a stratified regional draw where they would have the ability to produce estimates directly. There would need to be other changes for that to happen. **Cody** further explained that it does give Florida the ability to calculate regional CPUE and characterize regional intercepts however. Doing so would give Florida the ability to look at sampling power and think about different options for future sampling.

The Chairman and Vice Chairman remained the same:

Dale Diaz: Chairman

Chris Denson: Vice Chairman

With no further business to discuss, Denson made a motion to adjourn the meeting. Diaz adjourned the meeting at 4:56 p.m.

**SEA GRANT- FISHERIES EXTENSION
ADVISORY COMMITTEE
MINUTES
Wednesday, March 20, 2013
Destin, FL**

APPROVED BY:

COMMITTEE CHAIRMAN

Members present: Tony Reisinger, Julie Anderson, Dave Burrage, Rhonda, Peter Nguyen, Charles Adams, Gary Graham, William Walton

Guests: Gwen Hughes, Frank Helies, Joanne McNeely, Ben Posadas, Matt Freeman, Steve Otwell, Camp Matens, Sherry Larkin, Amanda Seymore, David Veal, Mark Schexnagder, Thor Lassen, Chris Nelson, Tony Lowery, Mike Ray

The meeting was called to order at 2:10 pm by Chairman Reisinger and the primary theme was sustainability in Gulf fisheries. It was determined he would be chair for two more meetings.

Due to a prior commitment conflicting with our meeting Mike Ray, Associate Director with Texas Parks and Wildlife, Coastal Fisheries was allowed to open the meeting, speaking on red snapper management. A new recreational season is proposed by NOAA Fisheries, opening June 1, 2013 under an emergency rule. The season could be from 0 to 12 days for recreational fishing and several states in the Gulf region are in opposition to the proposal. Currently the Gulf of Mexico Fisheries Management Council is not supporting regional/ state management. Gulf states recreational fishing seasons are not compatible and states are facing a reduced number of fishing days in federal waters off each state. Large economic losses are predicted for each state due to a shortened fishing season. Texas losses could be \$1 million/day. Tony Reisinger asked Mark Schexnayder about LA thoughts on the issue, but he refused to speculate.

Introduction of attendees was next and the agenda was adopted with alterations as speakers could fit in due to conflicts with a simultaneous meeting. Chuck Adams motioned to accept, Dave Burrage seconded.

Approval of the minutes:

Motion to accept- Julie Anderson; 2nd: Chuck Adams. Unanimously approved.

Election of new members:

Bill Walton from Auburn and Betty Staugler from Florida were elected unanimously to the committee. Betty will replace Chuck, but Chuck will stay on Ad Hoc.

REPORTS

Chuck Adams (FL):

There are still several TAA individuals that haven't completed their trainings. MarketMaker is

running through 2015. Focus in FL is on the certified seafood dealers. They have been trying to remind dealer to obtain licenses and integrate HAACP language into MarketMaker. The information is going out right now.

Steve Otwell: The Florida Sustainability Project is jointly funded with FL Sea Grant and NOAA. He stated 3rd party certification is costly and taxing, however fishery management is for sustainable fisheries. Two products came out of the project: 1- Elevate sustainable management emphasis on websites and 2- The Domestic Seafood Heritage Program. Nominations come from within industry to the Heritage Program and members qualify if they have been a domestic industry across the years. There will be an invitational meeting in 2013, to see how the retailers respond to these ideas. The meeting will be in the Gulf, probably in New Orleans. Thor Lassen questioned what is being introduced to the industry at the meeting. Gary Graham brought up that at a meeting in Texas, even TED certification is being brought up as part of sustainability. A discussion arose about who would be the certifier? Tony Reisinger said the Brownsville shrimpers balked at any sustainability certification, as eventually they would have to pay no matter what. Gary said meetings have been held where 3rd party has been brought in and it has never gone well.

Thor Lassen with Ocean Trust: Certifying Sustainability

Thor stated several science and sustainability forums have been held worldwide and he is looking at FAO ecolabeling criteria with the management of fisheries, not the fisheries themselves, for both federal and state stocks. If the management is sustainable then it would meet the ecolabeling requirements. Thor believes there will be a significant amount of conformance between the state/ federal management and FAO criteria. NOAA is presently evaluating their fisheries management and looking at the states and how they manage their fisheries. Thor is planning future meetings to present information to insure the FAO criteria will be accepted. A Gulf sustainability forum might be the next step. This may be in 2014 in conjunction with a large retailer meeting. Chuck Adams asked what the certification consists of and Ocean Trust's role. Thor replied Ocean Trust would evaluate NOAA versus FAO criteria and peer review process would occur. Dave Burrage asked how far along are you? Thor said he had looked at Louisiana and federal management. He explained, instead of looking at a fishery like North Atlantic cod, he would look at the country or state that landed the cod. Bill Walton asked about the Seafood Heritage Program and Steve Otwell said it is all still very preliminary. It's a voluntary participatory program.

Julie Anderson (LA):

Trade Adjustment Assistance is wrapped up from Sea Grants role. TAA was used to promote MarketMaker and sign up clients, but to her knowledge it's not going anywhere. However, Delcambre Direct has morphed into Louisiana Direct. Alan Matherne organized a Fishery Summit based on last years Shrimp Summit. Registration was capped and 300 people signed up. A focus on the second day was professionalism and better handling for shrimp. The crab industry is beginning to ask for professionalism training. In terms of sustainability, LA has a partnership with Audubon Nature Institute to create a Louisiana sustainable certified program using 3rd party criteria called G.U.L.F., working on blue crabs first, as they are MSC certified. Julie has continued partnering with the state to clean up traps. A reporting database now exists for any

reports. Rex Caffey sent his regards and hopes to see some of us at CNREP this weekend in New Orleans. There was a question about professionalism and what that means. Julie gave a short explanation.

Dave Burrage (MS/AL):

Dave read a headline about Gulf red snapper issue in Louisiana; which indicated it was not going well. Dave said they have been involved in crab trap cleanups since 1999. Only 291 traps were collected this year. Dave suggests this could be lack of effort as crab fishery is really low. Dave brought up the false labeling of seafood that is a major challenge.

Dave yielded to Amanda Seymour for MarketMaker (MM); started in June 2011, in Mississippi. About 30% of restaurants registered. Eat healthy MS is another program that can tie in and 9 fishermen have been registered for the program. Some focus is on educating the extension agents. In April they will host a MM and social media workshop. Currently it's about 50:50 AL and MS registrants. There is one success story using it for catfish.

Bill Walton from Auburn reported on Gulf oyster projects. He began by informing us his wife runs AL MM, which has secondary success stories and she has become the contact for these stories and other resources. Bill is working with John Supan on off bottom oyster culture for cost effective fouling control to avoid constant cleaning and an effective price point. A forced low tide achieves bio-fouling control. An optimal price of \$0.40 per oyster for market size is based on information from several growers in LA and MS. He can also achieve spat to full market size in 12 months. This product is not in competition with standard bulk oysters and is in a premium niche. Sixty acres in MS and 25 acres in LA have been designated as oyster parks. There is a need to streamline the permitting process. Ben Posadas stated this is a potential success story as he's talked to someone that plans to actually do this as part of his existing leases in LA and MS. Bill clarified that off bottom is not for large scale. For large scale, growers need to do on-bottom culture. He is working on a National Sea Grant proposal to continue this and expand the cages work. The off bottom method helps avoid the crown conch predator problem. He mentioned the crown conchs have been accepted as a replacement for queen conch meat in the market due to protection measures for queens, whose population has been decimated in some areas.

Dave requested a 10 min break for ice creamlike product.

Dr Benny Gallaway: Update on Preliminary Results of Kemp's Ridley Sea Turtle Stock Assessment

Benny began acknowledging the data he would present was courtesy of STSSN and CMTTP network data. A workshop assessing the known information on the Kemp's ridley was held November 2012. This assessment resulted from the 2010 and 2011 increase in Kemps ridley strandings. Kemps lent themselves to a stock assessment begun by Dr. Caillouet, and was endorsed by LDWF, Sea Grant directors, and the GSMFC. Shrimp trawling has historically been identified as the greatest threat to Kemps at sea (1990s NSF study). As effort is the greatest in N. GOM, this area was the focus. Objectives were to look at the stock and impacts for the N GOM, based on distribution using shrimp effort, Kemp's capture and tracking, Kemp's mark recapture,

strandings, prey abundance, etc.. Turtles tend to occur where their prey is. Blue crab, *Callinectes sapidus* was shown as an example of this relationship. Gary Graham stated more *Callinectes similus* were found offshore Texas than *C. sapidus*, and the ridleys may be feeding on them too, implying definition of habitat based solely on blue crabs could skew the findings. Weighted habitat coinciding with shrimp effort data were presented by Galloway. He said Mexican effort is not integrated yet, although the data exists. However, the Mexican data is in very different formats. From 2002-2003, a second wave of shrimp imports hit the U.S., and shrimp effort declined according to Chris Nelson. Galloway also said: "Preliminary analysis was the nesting trend reflected an unexplained 2010 event requiring a mortality adjustment to fit the data". Preliminary results of the group's findings generated lots of questions and assumptions being made on growth, shrimp trawl mortality, strandings, etc.. The Lorenzen curve demonstrates natural mortality is much higher for younger turtles. Mark recapture indicates a really wide range of growth patterns of 0 to 15 cm per year from similar sized captures. Nest predictions from the generated model are pretty accurate and 2010 was a very unusually low year, but the only big deviation since late 1970s. However 2011 and 2012 nestings were back to predicted levels. With the available beach accessibility for nesting ridleys, we could be close to carrying capacity for nesting availability. When looking at stranding curves from 1980-1987, the predicted and actual curves are incompatible, but gets better from 1988-1995. In 1990 see a huge decline in total anthropogenic mortality corresponds to introduction of TEDs. It was also low in 2010, but there was a huge total mortality. Anthropogenic mortalities are increasing due to population growth. However there is still the large total mortality event in 2010, which is unexplained. A comparison of 1988 where anthropogenic impacts caused 75% mortality vs. 2009, 24.1% and 2012, 20% demonstrated anthropogenic mortality attributed to shrimp trawls tended to become a smaller and smaller % of the total mortalities. The population in 2012 was almost 200,000 age 2+ females. Galloway stressed we need a naked net study to correlate these results.

Gary Graham: TEDs & BRDs

Gary presented a table in the four tiers of NOAA TED inspection violations. Each violation corresponds to certain level of a fine based on if it impacts threatened or endangered sea turtles. We need to reach 88% survival compliance and last estimate was 87%. There are three stages of non-compliance measures planned for implementation by NOAA Fisheries if survival drops below 88%. They range from outreach to area closures.

BRD usage is confusing and varies from port to port. Texas Sea Grant installed expanded mesh Composite BRDs on 3 boats at Brownsville and the fishermen removed the BRDs before they returned from their fishing trips. Some boat captains are swearing by them but others refuse to change from the fisheye BRD. The 3" square mesh on the expanded mesh panel can shrink once installed, so it was stressed to install a little larger mesh to counteract the shrinkage. Tow time is important, 2.8 to 4.8% shrimp loss was the average for the Composite with expanded mesh, while fisheye is 10%. Gary and Tony Reisinger are going to do proof of concept on new BRD designs in late summer 2013

Joanne McNeely: Gulf Seafood Marketing

In the interest of time, Joanne was willing to move to October. Go look at eatgulfseafood.com!

Frank Helies: Gulf & South Atlantic Fisheries Foundation Inc.

Frank gave an update on current Foundation projects. Grouper forensics is promising to be a useful tool in determining correct species labeling. A hand held device is used to ID grouper filets from substitutes. The Foundation is conducting a study on the impact of shrimp imports on shrimp communities and a final report is forthcoming. The Ricky BRD's continued development and assessment is on track as a potential certified BRD in the future. Gulf Coast Seafood promotion, TED and BRD compliance are major program thrusts. An Electronic Logbooks (ELBs) on shrimp vessels project has started in South Atlantic as they are continuing work on Gulf ELBs.

Ralph Bode on behalf of Alex Miller: Report on GSMFC Sustainability Objectives

In terms of sustainability work by the GSMFC, all the efforts are driven by FAO guidelines, one project looking at management and the other (Gulf Trace) certifying where product originated. A total 15 million lbs. have been traced through the program. Gulf Fish Watch is also still going.

Tony Reisinger (TX):

About 100 tiger shrimp turned in by shrimp fishermen from Texas for genetic testing to determine their origin. More and more are being caught, and the Brownsville - Port Isabel Shrimp Producers Association has established a bounty for most caught, the smallest and largest.

Lionfish are showing up more and more off the Texas Coast on reefs. Tony was told some fisheries scientists don't think lionfish will displace red snapper on reefs due to size differentiation of snapper on the reefs at different life stages, i.e. smaller snapper do inhabit reefs until they grow larger than lionfish can eat. However there are questions as to competition for food once both species are abundant on the reef areas.

Chuck Adams asked if gravid female tiger shrimp were found. Tony said yes, off Louisiana and Texas.

Next meeting's topic- sustainability (again)

The Meeting was adjourned at 5:15 pm.

Minutes prepared by:

Julie Anderson
Louisiana Sea Grant

Approved by:

Tony Reisinger
Texas Sea Grant at Texas A&M University
Chair

**COMMISSION BUSINESS MEETING
STATE-FEDERAL FISHERIES MANAGEMENT COMMITTEE
MINUTES – 63rd Annual Spring Meeting
Thursday, March 21, 2013
Destin, Florida**

APPROVED BY:

COMMITTEE CHAIRMAN

1st Vice Chairman R. Pausina called the meeting to order at 8:35 am.

L. Simpson noted that a quorum was present and reviewed pertinent rules and regulations regarding voting procedures.

The following Commissioners and/or proxies were present:

Commissioners

Chris Blankenship, ADCNR/MRD, Gulf Shores, AL (*Proxy for N. Gunter Guy*)
Chris Nelson, Bon Secour, AL
Randy Pausina, LDWF, Baton Rouge, LA
Camp Matens, Baton Rouge, LA
Bret Allain II, LA Senate, Franklin, LA
David Heil, FWC, Tallahassee, FL (*Proxy for Nick Wiley*)
Mike Ray, TPWD, Austin, TX (*Proxy for Carter Smith*)
Troy Williamson, Corpus Christi, TX
Dale Diaz, MDMR, Biloxi, MS

Staff

Larry Simpson, Executive Director, Ocean Springs, MS
Dave Donaldson, Assistant Director, Ocean Springs, MS
Ginny Herring, Administrative Officer, Ocean Springs, MS
Nancy Marcellus, Administrative Assistant, Ocean Springs, MS
Steve VanderKooy, IJF Program Coordinator, Ocean Springs, MS
Jeff Rester, SEAMAP/Habitat Program Coordinator, Ocean Springs, MS
Joe Ferrer, System Administrator, Ocean Springs, MS
Ralph Hode, EDRP Program Coordinator, Ocean Springs, MS
Alex Miller, Staff Economist, Ocean Springs, MS
Alyce Catchot, Staff Assistant, Ocean Springs, MS
Angela Rabideau, Sr. Accountant, Ocean Springs, MS
Gregory Bray, Data Programmer/Analyst, Ocean Springs, MS

Others

Roy Crabtree, NOAA/NMFS/SERO, St. Petersburg, FL
Joanne McNeely, Gulf & South Atlantic Fisheries Foundation, Tampa, FL
Gwen Hughes, Gulf & South Atlantic Fisheries Foundation, Tampa, FL
Ellie Roche, NOAA Fisheries, St. Petersburg, FL

Frank Helies, Gulf & South Atlantic Fisheries Foundation, Tampa, FL
Thor Lassen, Ocean Trust, Reston, VA
Tony Reisinger, Texas Sea Grant, San Benito, TX
Cara Cooper, 3 Little Birds Consulting, LLC, St. Petersburg, FL
Joseph Smith, NMFS Beaufort Lab, Beaufort, NC
Elizabeth Scott-Denton, NMFS Galveston Lab, Galveston, TX
Wade Cooper, FWC, St. Petersburg, FL
Mark Schexnayder, LDWF, Baton Rouge, LA
Benny Galloway, LGL Ecological Research Associates, Bryan, TX

Adoption of Agenda

The agenda was adopted as presented without objection.

Approval of Minutes

Minutes from the October 18, 2012 meeting were adopted as presented without objection.

GSMFC Standing Committee Reports

Technical Coordinating Committee (TCC) Report – **D. Diaz** reported that the TCC met on Wednesday, March 20, 2013. The following subcommittees reported to the TCC: Crab, SEAMAP, Data Management, Artificial Reef and Menhaden and Blue Crab Stock Assessment activities. He briefed the Commissioners on their activities. There were no action items.

John Foster, NOAA Fisheries gave a presentation via the internet on the new MRIP Access Point Angler Intercept Survey. **B. Galloway**, LGL Ecological Research Associates gave a presentation on preliminary results of the Kemp's ridley stock assessment. **J. Cowan**, NOAA Restoration Center gave an update on restoration planning on the Deepwater Horizon Oil Spill Natural Resource Damage Assessment.

The TCC was provided reports from the five Gulf States and NOAA Fisheries. No action was required.

D. Donaldson reported that the Commission had written a letter to the DOI, Bureau of Safety and Environmental Enforcement in regards to the issuance of the "Idle Iron" policy directive and its impact on the GOM marine ecosystem. They have responded but no action has been taken.

M. Ray moved to accept the TCC Report. **D. Diaz** seconded. **Without objection the report was accepted.**

State-Federal Fisheries Management Committee (S-FFMC) Menhaden Advisory Committee Report (MAC) - **J. Smith** reported that the MAC met on Tuesday, March 19, 2013. He provided an overview of the 2012 season for both the Gulf and Atlantic. In the Gulf the landings came in at 578 K mt, the best start since 2000, and the May landings were the best since 1987.

Tony Reisinger, Texas Sea Grant, San Benito, TX
Cara Cooper, 3 Little Birds Consulting, LLC, St. Petersburg, FL
Joseph Smith, NMFS Beaufort Lab, Beaufort, NC
Elizabeth Scott-Denton, NMFS Galveston Lab, Galveston, TX
Wade Cooper, FWC, St. Petersburg, FL
Mark Schexnayder, LDWF, Baton Rouge, LA
Benny Gallaway, LGL Ecological Research Associates, Bryan, TX

Adoption of Agenda

The agenda was adopted as presented without objection.

Approval of Minutes

Minutes from the October 18, 2012 meeting were adopted as presented without objection.

GSMFC Standing Committee Reports

Technical Coordinating Committee (TCC) Report – **D. Diaz** reported that the TCC met on Wednesday, March 20, 2013. The following subcommittees reported to the TCC: Crab, SEAMAP, Data Management, Artificial Reef and Menhaden and Blue Crab Stock Assessment activities. He briefed the Commissioners on their activities. There were no action items.

John Foster, NOAA Fisheries gave a presentation via the internet on the new MRIP Access Point Angler Intercept Survey. **B. Galloway**, LGL Ecological Research Associates gave a presentation on preliminary results of the Kemp's ridley stock assessment. **J. Cowan**, NOAA Restoration Center gave an update on restoration planning on the Deepwater Horizon Oil Spill Natural Resource Damage Assessment.

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M. Ray moved to accept the TCC Report. D. Diaz seconded. Without objection the report was accepted.

State-Federal Fisheries Management Committee (S-FFMC) Menhaden Advisory Committee Report (MAC) - **J. Smith** reported that the MAC met on Tuesday, March 19, 2013. He provided an overview of the 2012 season for both the Gulf and Atlantic. In the Gulf the landings came in at 578 K mt, the best start since 2000, and the May landings were the best since 1987. The Atlantic landings were down, at 160 K mt in 2012, but they were still near the ten year average.

Louisiana was unable to provide a forecast for 2012 due to ongoing litigation through the NRDA process. Understanding the concerns with the LDWF, the MAC approved the following motion: **The Menhaden Advisory Committee strongly urges the Louisiana Department of Wildlife and Fisheries to provide appropriate analysis on the abundance of juvenile menhaden to the Committee on an annual basis as an index.**

S. VanderKooy discussed the current state of the Gulf menhaden stock assessment and the progress on the FMP revision.

D. Diaz moved to accept the report. **C. Blankenship** seconded. The report was accepted with two opposed.

Sea Grant Fisheries Extension Advisory Panel (SG-FEAP) and Mercury/Selenium Workshop Reports

T. Reisinger reported that a Mercury Selenium Discussion was held on the morning of Wednesday, March 20, 2013. He thanked the Commission on behalf of this group for allowing them to meet during the last two meetings. The group found that the mercury ratio is less than the selenium ratio in most of the pelagic fish of the GOM. This is a good indicator since selenium tends to bind to mercury, so the initial concern of mercury in GOM fish stocks is not valid. Shark, tile fish and Spanish mackerel remain a concern. The Mercury-Selenium forum will seek another forum for future meetings.

T. Reisinger reported that the SG-FEAP met on Wednesday, March 20, 2013. The SG-FEAP received reports from the various States present: Florida, Louisiana, Mississippi/Alabama, and Texas.

There were several special reports submitted to the group as well. On behalf of the Gulf & South Atlantic Fisheries Foundation (G&SAFF) **J. McNeely** gave them an update on the activities of the Gulf Seafood Marketing Coalition and **F. Helies** reported on the industry activities of the G&SAFF. **R. Hode** gave an update on GSMFC activities in relation to fisheries sustainability under the GSMFC Oil Disaster Recovery Program (ODRP). **T. Lassen** gave an assessment of State Fishery Management Systems. **M. Ray** reported on behalf of the Texas Parks and Wildlife Department (TPWD). He discussed the red snapper recreational fishery issue in Western Gulf waters. **G. Graham** and **F. Helies** gave a status report on sea turtle mortalities in the Gulf and the implications to the Gulf shrimp fleet. The group as a whole discussed sustainability of Gulf fisheries and avenues for sustainability certification.

There were no action items.

NOAA Fisheries Southeast Regional Office

R. Crabtree reported on the activities of the NOAA Fisheries Southeast Regional Office. He provided a written report that is included in these minutes. He addressed the recreational red snapper concerns. He stated that the red snapper stock is recovering. But the success has created problems with recreational fishing regulations that are becoming too restrictive and the season is

being shortened each year. Red snapper landings are three times higher now, with 18,000 landed per day versus 6,000 in 2007. The fish landed are twice as big. The quota has been raised each year for the last three years and will probably be go up next year. Even though the catch limit has increased by 62% the increase in the recreational catches per day has gone up by 107%. So the problem is the recreational catch limit is not keeping up with the increased catch rate. NOAA Fisheries is required by law is to keep the catch limit within the quota and that results in shorter season. The Gulf Council is looking at several options to address this. No action will be taken until June. **B. Allain** asked **R. Crabtree** to explain why Louisiana's season was so short. He stated that Alabama and Mississippi use the federal season which is 28 days. Any State that adopts regulations that are less restrictive than those established for federal waters will have a shorter season.

SUSTAINABLE FISHERIES

Status of Gulf of Mexico Disaster Requests: On September 6, 2012, Governor Scott (Florida) asked the Secretary of Commerce to declare a fishery disaster for the oyster industry of Apalachicola Bay. That request is currently under review.

Regulatory Actions of Interest: The Gulf of Mexico Fishery Management Council (Gulf Council) began developing amendments to the Reef Fish Fishery Management Plan which consider re-allocating red snapper between the commercial and recreational sectors and establishing separate red snapper catch limits for the for-hire and private sectors. But the Gulf Council tabled further action on those amendments pending completion of the ongoing red snapper stock assessment.

Reef Fish Amendment 34 eliminated the income requirement for the commercial reef fish fishery and increased to four the maximum number of crew members allowed on dual-permitted vessels that are operating as a commercial vessel. The notice of availability of Amendment 34 published on July 10, 2012, with a comment period through September 10, 2012. The final rule became effective on November 19, 2012.

Reef Fish Amendment 35 addressed the greater amberjack rebuilding plan. Greater amberjack have been in a rebuilding plan since 2003, but the stock remains overfished and undergoing overfishing. Amendment 35 reduced the annual catch limits and annual catch targets to end overfishing and established a 2,000-pound commercial trip limit to reduce the likelihood of a derby fishery developing. The final rule became effective on December 13, 2012.

Reef Fish Amendment 37 follows a 2012 interim rule that reduced gray triggerfish catch limits to end overfishing. Amendment 37 would make those catch reductions permanent, set restrictive bag limits and commercial trip limits, and require both the commercial and recreational sectors pay back any overages. NOAA Fisheries is accepting public comments on Amendment 37 and proposed implementing regulations through March 26, 2013. If finalized, the rule should be implemented by mid-2013.

Reef Fish Amendment 38 modified post-season recreational accountability measures for shallow-water groupers, allowing for in-season closures; changed the trigger for accountability

measures to single year overages; and revised the framework procedure. The final rule became effective March 1, 2013.

Gag is under a rebuilding plan that allows for an increase in the recreational annual catch limit and annual catch target for 2013. A framework action set the recreational fishing season to open on July 1 and specified the closure date will be determined by projecting when the annual catch target will be met. Because gag fishing is being constrained by the rebuilding plan and none of the other shallow-water grouper species are overfished or undergoing overfishing, the Gulf Council opted to restrict the shallow-water grouper season closure to areas deeper than 20 fathoms during February and March. NOAA Fisheries is currently accepting public comment on the proposed rule.

NOAA Fisheries and the Gulf Council, working cooperatively with the South Atlantic Fishery Management Council, have developed a Generic Dealer Reporting Amendment intended to require a federal seafood dealer permit for all federally managed species except shrimp, and increase the reporting frequency. These actions are expected to be implemented in early 2013.

The Gulf Council asked NOAA Fisheries to publish an emergency rule that gives the Regional Administrator the authority to adjust the federal recreational red snapper fishing season off states that have less restrictive regulations in state waters. NOAA Fisheries is reviewing that rule. A related rulemaking is under development to increase the allowable catch for red snapper for 2013 by about 400,000 pounds. That allowable catch level may be adjusted again, later in 2013, following the results of an ongoing stock assessment.

Updated stock assessments indicated annual catch limits and annual catch targets for vermilion and yellowtail snappers could be increased. NOAA Fisheries is working with the Gulf Council on a framework action to make those changes and to remove the requirement to vent reef fish that are to be released. That rulemaking should be finalized in the summer of 2013.

Also, the Gulf Council is considering: (1) modifying its red snapper individual fishing quota (IFQ) program based on a review of the first five years of the program; (2) establishing regional management strategies for red snapper and gag grouper; (3) designating artificial fixed structures as essential fish habitat; (4) modifying the current requirement for shrimp vessels to participate in an electronic logbook program; and (5) establishing electronic reporting requirements for headboats and commercial vessels.

Fishery Openings and Closings:

Recreational: The red snapper season will open on June 1. If all states implement regulations that are compatible with federal regulations, then NOAA Fisheries projects the federal season will last 28 days. If the red snapper emergency rule discussed above is implemented, then the federal season would be shorter off of any Gulf States that adopt regulations that are less restrictive than those established for federal waters.

A fixed seasonal closure for shallow-water grouper is in effect February 1 through March 31.

A fixed seasonal closure for gray triggerfish occurs June 1 through July 31.

A fixed season closure for greater amberjack fishing occurs June 1 through July 31.

NOAA Fisheries expects that when final 2012 recreational landings for hogfish and the jack's complex are available, their respective annual catch limits will have been exceeded. In response, NOAA Fisheries will monitor those annual catch limits and close all fishing in-season if the 2013 annual catch limits are projected to be met.

Commercial

A fixed seasonal closure for greater amberjack fishing is in effect March 1 through May 31.

A fixed seasonal closure for gray triggerfish fishing occurs June 1 through July 31.

The fishing year for king mackerel began on July 1, 2012. The western zone (Alabama through Texas) closed August 22, 2012. The northern zone (west coast of Florida north of Collier County) closed October 5, 2012. The southern zone (Collier and Monroe Counties) hook-and-line component of the fishery is open, as is the Florida east coast zone. The gillnet component of the southern zone did not fill their quota. The boundary dividing the Gulf and Atlantic groups of king mackerel shifts back to the west coast of Florida (between Monroe and Collier Counties) on April 1, 2013.

NOAA Fisheries expects that when final 2012 recreational landings for hogfish and the jack's complex are available, their respective annual catch limits will have been exceeded. In response, NOAA Fisheries will monitor those annual catch limits and close all fishing in-season if the 2013 annual catch limits are projected to be met.

PROTECTED RESOURCES DIVISION

Conservation Measures: On December 7, 2012, NOAA Fisheries published a proposed rule to list seven species of reef-building coral that occur in the Southeast Region; some species occur in the Gulf of Mexico.

- On January 30, 2013, we published a negative 90-finding for a petition requesting we list the white marlin under the Endangered Species Act.
- We completed Section 6 Cooperative Agreements with the Georgia Department of Natural Resources, the South Carolina Department of Natural Resources, and the Florida Fish and Wildlife Conservation Commission.
- We participated in a partnership meeting with the Florida Fish and Wildlife Commission, NOAA Office of Law Enforcement, and NOAA's Office of General Counsel for enforcement and litigation regarding dolphin feeding issues and strategies in Florida, and addressed intentional acts of retaliation against bottlenose dolphins.
- We are coordinating with Mississippi/Alabama Sea Grant on soliciting a Request for Proposals for dolphin/fishery interaction research in the Southeast Region.
- We participated in Cape Coral's Burrowing Owl Festival and provided educational information on bottlenose dolphin conservation and the Dolphin SMART program.

- We planned, implemented and executed two Dolphin SMART training sessions in Clearwater and Ft. Myers, Florida.

National Resource Damage Assessment (NRDA): NOAA Fisheries participates in weekly/bi-weekly calls of the NRDA Marine Mammal Technical Working Group.

Biological Opinions: NOAA Fisheries completed biological opinions for the Jacksonville District Corps of Engineers on the following projects:

- “Installation of a Seawall, Dock, and Boatlift within Smalltooth Sawfish Critical Habitat in Lee County, Florida.” The opinion analyzes the project’s effects on sea turtles and smalltooth sawfish, and on critical habitat for smalltooth sawfish.
- “Installation of a Seawall within Smalltooth Sawfish Critical Habitat in Lee County, Florida.” The opinion analyzes the project’s effects on sea turtles and smalltooth sawfish, and on critical habitat for smalltooth sawfish.
- “Installation of Riprap within Smalltooth Sawfish Critical Habitat in Charlotte County, Florida.” The opinion analyzes the project’s effects on sea turtles and smalltooth sawfish, and on critical habitat for smalltooth sawfish.
- “Tampa Bay Navigation Project in Hillsborough County, Florida.” The opinion analyzes the effects on sea turtles (Northwest Atlantic loggerhead distinct population segment, Kemp’s ridley, leatherback, hawksbill, and green), smalltooth sawfish, Gulf sturgeon, and blue, fin, humpback, North Atlantic right, sei, and sperm whales.
- “Edgewater Drive Bridge Expansions in Charlotte County, Florida.” The opinion analyzes the project’s effects on sea turtles and smalltooth sawfish, and on critical habitat for smalltooth sawfish.
- “Installation of a Jet Ski Ramp within Smalltooth Sawfish Critical Habitat in Charlotte County, Florida.” The opinion analyzes the project’s effects on sea turtles and smalltooth sawfish, and on critical habitat for smalltooth sawfish.

NOAA Fisheries completed a biological opinion for the Mobile District Corps of Engineers on the “Bayou Casotte and Lower Pascagoula Sound Channel Widening Project in Jackson County, Mississippi.” The opinion analyzes the project’s effects on five species of sea turtles and Gulf sturgeon, and on Gulf sturgeon critical habitat.

NOAA Fisheries completed a biological opinion for the Galveston District Corps of Engineers on the “Freeport Harbor Channel Improvements Project in Brazoria County, Texas.” The opinion analyzes the project’s effects on loggerhead, hawksbill, Kemp’s ridley and green sea turtles.

HABITAT CONSERVATION DIVISION

Decommissioning Oil Rigs and Platforms: NOAA Fisheries has actively participated in efforts and activities responding to concerns raised by several constituency groups regarding the net decrease of oil and gas structures in the shallower offshore environment of the Gulf of Mexico. Several non-governmental organizations, largely representing various factions of the recreational fishing and diving sectors, are seeking to slow or halt the removal of “idle iron” or non-producing oil and gas structures in the Gulf of Mexico.

Gulf of Mexico Fishery Management Council: Some non-governmental organizations are advocating for the designation of oil and gas structures in the Gulf of Mexico as essential fish habitat under the Magnuson-Stevens Fishery Conservation and Management Act. The Gulf Council established an Ad Hoc Artificial Substrate Advisory Panel to gather scientific and academic expertise on that issue, as well as input from the affected industries, including oil and gas and the shrimp trawl fishery. The Advisory Panel met in late February and the Gulf Council will consider their recommendations at their next meeting in mid-April.

CEQ/National Ocean Council Interagency Working Group: NOAA Fisheries informed a series of senior-level meetings facilitated by the National Ocean Council and the Council on Environmental Quality to develop factual baseline information regarding decommissioning of non-producing oil and gas platforms in the Gulf of Mexico. Frequently asked questions (FAQs) produced by the Department of Interior's (DOI) Bureau of Safety and Environmental Enforcement, DOI's Bureau of Ocean and Energy Management (BOEM), the National Oceanic and Atmospheric Administration, the U.S. Coast Guard, the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency, address federal agency roles in decommissioning and platform removal, the rigs-to-reefs program, and reefing in the Gulf of Mexico, as well as the status of oil and gas structures as essential fish habitat.

Programmatic Essential Fish Habitat Consultation on Oil and Gas Activities on the Outer Continental Shelf: In 1999, BOEM consulted on a programmatic level with NOAA Fisheries to address essential fish habitat issues related to operational activities, including pipeline rights-of-way, plans for exploration and production, and platform removal in the Gulf of Mexico Central and Western Planning Areas. That programmatic essential fish habitat agreement was periodically reviewed and modified during various outer continental shelf program activities in the 2000's to also include operational activities within a small portion of the Eastern Planning Area. Following the Deepwater Horizon MS252 event in April 2010, BOEM requested re-initiation of Endangered Species Act consultation with both the U.S. Fish and Wildlife Service and NOAA Fisheries. In response, NOAA Fisheries requested a periodic review of the essential fish habitat consultation as well, and NOAA Fisheries and BOEM staff agreed to procedures which would incorporate a new programmatic essential fish habitat consultation into the Environmental Impact Statement prepared for every subsequent five-year program. The programmatic EFH consultation for the Western and Central Planning Areas 2012-2017 Program was completed in June 2012. A separate essential fish habitat consultation for including a small portion of the Eastern Planning Area will be conducted in early 2013.

Habitat Conservation and Restoration Activities:

- NOAA Fisheries is actively involved in conserving, protecting and restoring essential fish habitat across the Gulf of Mexico. In the first half of federal fiscal year 2013, we completed 443 essential fish habitat consultations: 92 in Texas, 301 in Louisiana, 6 in Mississippi, 16 in Alabama, and 34 along the Gulf coast of Florida.
- Under the Coastal Wetlands Planning, Protection, and Restoration Act Program (CWPPRA), the \$43M construction contract for the NOAA-led Pelican Island restoration project was completed ahead of schedule, and created 227 acres of dune and Gulf shoreline and over 350 acres of intertidal saline marsh in Louisiana.

- NOAA Fisheries also completed engineering and design activities on the Grand Liard Marsh and Ridge CWPPRA restoration project, which would create more than 300 acres of saline marsh, nourish 140 acres of existing marsh, and create 34 acres of maritime ridge habitat in Louisiana. We expect that project to be awarded in the 3rd quarter of fiscal year 2013.
- NOAA Fisheries continues to promote the beneficial use of dredged sediment. We worked with the port of Houston to complete 266 acres of marsh creation through beneficial use in lower Galveston Bay.
- NOAA Fisheries worked with the State of Mississippi to restore about 20 acres on Deer Island through beneficial use.
- We are working with the Port of Mobile to develop a beneficial use plan.
- We are participating on the RESTORE Act Council's Regulatory Obstacles Work Group and numerous other activities concerning planning for implementation of the RESTORE Act.
- We have been invited to participate in Louisiana's Regional Regulatory Team pertaining to RESTORE Act potential projects.
- We continues to review and comment on draft National Environmental Policy Act documents for Natural Resource Damage Assessment-related activities.

NOAA Fisheries Budget Updated

R. Crabtree stated that there was not a lot to report. The agency is operating under a continuing resolution through the end of March. The Senate passed a budget last week and he feels like the House will also. He does expect sequestration to be involved and that will reduce grants and cooperative agreements by 5%.

L. Simpson stated that this is an extremely difficult time when the federal government cannot establish a firm budget. He reported that the three Commissions had presented testimony before the Congressional Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard in support of the Interjurisdictional Fisheries Program (IJF). **D. Donaldson** presented on behalf of the Commission. **L. Simpson** is optimistic that increased funding will be made available for priority programs dealing with data collection and IJF. **D. Donaldson** reported that the Senate Budget currently has \$2 million for IJF.

Discussion of Legislative Issues and Actions

L. Simpson discussed HR 4348, Restore Act. He pointed out that he was extremely optimistic about this funding, but at this point the initial information regarding distribution by percentages has changed. A coordinated effort by all agencies involved will determine distribution. He is anxious for the process to begin.

Testimony on the Reauthorization of the Magnuson-Stevens Fishery Conservation Act (M-SFCA) began last week. **R. Crabtree** reported that it is still in the early process but the general consensus is that the M-SFCA is a good statute, but improvements can be made and will be addressed by the end of December.

C. Blankenship had requested a discussion of State waters for Fisheries Management. MS and LA have extended their state waters by 9 miles. He reported on current legislation (referred to as

“Gulf Fisheries Fairness Act”) introduced in the House that would extend State waters out 20 fm (or 9 miles, whichever is further) Gulf wide for reef fish management. This would impact both commercial and recreational reef fish management. The House version that was released on March 15 would put reef fish management under the States for out to 20 fm and would also change the charter boat requirement that would allow them to fish under state management or the least restrictive management. The States will continue to watch this process and legislation

D. Donaldson provided the Commissioners with a draft resolution “Regarding Fishery Stock Assessments Conducted by NMFS”. The resolution requests that the U. S. Government Accountability Office (GAO) examine: (1) the frequency with which NMFS conducts stock assessments; (2) the amount of federal resources spent annually on such assessments; (3) how NMFS determines which assessments to undertake and the frequency for doing so, including the relative costs and benefits considered when committing resources to improving stock assessments and prioritizing them; (4) the extent of discrepancies, if any, in the number and frequency of stock assessments conducted across regions of the country; (5) what resources are necessary to adequately sustain regular collection of information for fishery stock assessments; and (6) the various options for involving stakeholders in gathering valid fishery data directly supportive of regional council fisheries management decision-making and what gaps, if any, could be filled by guided stakeholder input. **C. Blankenship moved to approve the resolution. D. Diaz seconded. The resolution was approved.**

D. Donaldson briefed the Commissioners on a Senate Bill and House Bill that are designed to strengthen Federal consumer protection and product traceability with respect to commercially marketed seafood and other purposes. The Senate Bill targets salmon but refers to other purposes. The House Bill is broader in regards to seafood and marketing. These are newly introduced bills and he will keep the Commissioners updated on progress.

Kemp’s Ridley Stock Assessment Findings

Dr. Benny Gallaway of LGL Ecological Research Associates gave a brief presentation on preliminary results of the Kemp’s ridley stock assessment. From 2010 to 2011, the number of Kemp’s Ridley strandings increased for a variety of potential reasons such as the BP oil spill, unusual weather events, and shrimp trawling interactions. As a response, a stock assessment was proposed to gain a better understanding of the population and funding was provided by the GSMFC to conduct a workshop and stock assessment. His presentation highlighted the number and diversity of the group involved in the workshop. He was very pleased at how data that had previously not been released was shared during the workshop. A detailed report of his presentation is included in the TCC minutes of March 20, 2013.

D. Diaz took the opportunity to thank **Dr. Gallaway** on behalf of the Commission for the professional and excellent job he has done. This was an important task that needed to be addressed and all were pleased with the outcome.

Discussion of Fish Tags for the Red Snapper Fishery

D. Donaldson stated that the Gulf Council had requested the Commission to initiate discussion with the State Directors regarding their support of and process necessary to begin a fish tag system for red snapper. The TCC Data Management Subcommittee (DMS) had discussed the issue and reported to the TCC earlier in the week. **G. Bray** reported that the DMS were concerned about the feasibility, costs, and likelihood of success of a red snapper tag or permit program in the GOM.

C. Matens questioned the discussion taking place during the Commission meeting since the same agencies sit on the Gulf Council. **R. Pausina** discussed his concerns and was doubtful that it would work. **M. Ray** reported that Texas steers away from fish tags of any sort and stated that this was indeed a Gulf Council concern. **C. Blankenship** stated that Alabama shares the concerns of the other States and the DMS. **T. Williamson** feels like fish tags would be an inefficient use of funds for the States and the Commission.

The Commission staff will prepare a letter to the Gulf Council incorporating the DMS comments and the Commissioner's concerns. The letter will be sent out for review by the Commissioners prior to it being sent out.

Status of GSMFC's Restoration Proposals

D. Donaldson provided the Commissioners with three Restoration proposals prepared by the Commission staff. They have been or will be submitted in the near future.

The first is a "Cooperative Regional Monitoring Project" that expands the existing IJF management plan development and creates a stock assessment program, Gulf Data, Assessment, and Review (GDAR); the Artificial Reef Subcommittee funded through the SFP will draft a standardized monitoring protocol for artificial reef sites in the GOM; and FIN proposes to work with the various Gulf States to provide for the collection and analysis of biological data from the recreational and commercial fisheries. The annual cost for this proposal is \$2,418,000, with inflationary increases over a ten-year time period, the total cost would be \$27,578,000.

The second is "Long-Term Gulf of Mexico Fishery-Independent Monitoring Project", a cooperative effort between NMFS, FL, AL, MS, LA, TX as well as the Commission that has developed a comprehensive, ecosystem-level approach to monitor the GOM for the next ten years. There are three main components: to expand stock assessments; expand utilization of existing acoustic equipment; and to expand collection of Ecosystem data. The total cost of this proposal is being determined.

The third proposal "Regional Fisheries Economic Development Project" is a continuation and expansion of the work currently being done under ODRP and the Economics Program. The major components include expansion of the Economic surveys currently being conducted under the Economic Program; continuation of the ODRP marketing program; continuation of ODRP sustainability programs; and, ODRP traceability programs. The annual cost for this proposal is \$2,968,925, with inflationary increases over a ten-year time period, the total cost would be

\$33,866,122. **D. Donaldson** pointed out that after discussion with **J. Cowan** he has determined that the marketing component may not meet the requirements of the restoration program. He stated that he will not move forward with this component because the chances of getting funding with restoration funds are very slim.

Interjurisdictional Fisheries Program (IJF) Report

S. VanderKooy reported on the spring 2013 IJF activities that included the following:

Gulf Menhaden FMP Revision: The 5th revision to the gulf menhaden FMP continues to be on hold while SEDAR 32A is being completed. The assessment was conducted through the SEDAR program in 2011, but due to some methodology issues, was not accepted by the Center for Independent Experts (CIE) so we are continuing to work on it through the SEDAR program. The Assessment Workshop will be held in April, 2013, in Beaufort NC and the Review Workshop is scheduled for the end of August. At that time, pending acceptance of the SEDAR32A final report, the menhaden FMP will be completed and the assessment will be integrated into the FMP's management goals, considerations, and recommendations. The IJF program has hosted innumerable conference calls and webinars with all the assessment principles in an effort to ensure a successful assessment. We have much more confidence going into this SEDAR that we are able to resolve some of the original reviewers' concerns and have much more confidence in our indices of abundance. It is expected that the FMP could be completed and reviewed by the Menhaden Advisory Committee by the next Commission meeting in October, 2013.

Blue Crab FMP Revision: The third installment of the Blue Crab FMP is well underway, and the regional stock assessment has been completed through the Gulf Data, Assessment, and Review Program as GDAR01. The states have provided analysts to work with the TTF on the abundance indices and to ultimately run the surplus production models to evaluate the stocks using both Louisiana and the Chesapeake as examples. The Assessment Workshop took place in late November in Ocean Springs and the analysts and the IJF staff are in the process of putting together the final report at this time. The Review Workshop is scheduled for June, 2013, and will bring in three outside reviewers to look over the assessment. It is expected that, upon acceptance of the stock assessment, the FMP will be finalized and the results incorporated into recommendations over the summer. It is hoped that the FMP will be ready for review in the fall of 2013.

The Blue Crab TTF and the Commission staff have finalized the content of the 2012 socio-economic survey of the commercial blue crab fishery in the Gulf of Mexico. The 12-page survey was made available in mid-February and will be active through the end of March. The Gulf's 4,548 licensed commercial crabbers were sent letters informing them of the survey, how to take it electronically, and where to find paper copies in their respective states. In the first week, 15 surveys were filled out through Survey Monkey (the online electronic form). It is hoped that we will achieve a high response rate as we re-examine the fishery and compare it to the social survey the TTF conducted in 1998. There is a \$250 gift card raffle as incentive to those who actually participate in the survey.

Gulf and Southern Flounder FMP Revision: The Flounder Technical Task Force (TTF) met several times in 2012 but has not met since December. At this time there is no IJF funding, so the TTF is utilizing conference calls and webinars to continue work on the FMP revision. It was hoped that a formal stock assessment could be conducted for Gulf and southern flounder through the GDAR program, but without funding, there is no way to complete the FMP and an assessment in a timely fashion, so the FMP will rely on previously published and unpublished assessments available from the five Gulf States. It is expected that this FMP revision should be completed by mid to late summer and may be available for internal Commission review by the October, 2013, meeting.

Law Enforcement Committee (LEC): The GSMFC Law Enforcement Committee (LEC) continued to work toward regional enforcement goals but has not met formally since the October 2012 Commission meeting in Alabama. A lack of funding in the IJF program and a lack of material to support a full agenda made it impractical for the LEC and the Council's LEAP to meet at this meeting. It is expected that they will meet again in October, 2013, and any additional discussions will be handled through conference calls and webinars.

Other IJF Activities: The IJF Program Coordinator participated in Stock Assessment Training provided by the Atlantic States Marine Fisheries Commission in late January. The staff is currently compiling the 2012 *GSMFC Annual Report* as well as preparing this year's versions of the other 'routine' publications like *License and Fees* and the *Law Summary*. As always, all of the GSMFC publications, minutes, and past resolutions can be requested electronically from the IJF Staff.

He briefed the Commissioners on "Sustainable Fisheries Forum – Application of Stock Assessments to Management" hosted on Tuesday, March 18. Because we have two stock assessments that are in various stages (blue crab and Gulf menhaden) he stated that there is coming a time when we need to apply the results of those assessments. How do we determine management goals, reference points, and benchmarks necessary to manage these species at a State level. These questions were addresses during the forum. The meeting was very successful in as much as the groups involved could see the benefit of stock assessment as a management tool.

SEAMAP Program Report

J. Rester reported on recent activities of SEAMAP. In 2013, SEAMAP begins its 32nd year of fishery independent sampling in the Gulf of Mexico. SEAMAP will conduct a Winter, Spring, and Fall Plankton Survey; a Summer and Fall Shrimp/Groundfish Survey; the Vertical Line Survey; the Reef Fish Survey; and a Bottom Longline Survey this year.

The Winter Plankton Survey began in February. The main goal of the Winter Plankton Survey is to assess the occurrence, abundance and geographical distribution of the early life stages of winter spawning fishes from mid continental shelf to deep Gulf waters. The Bottom Longline Survey, the Vertical Line Survey, and Spring Plankton Survey will all begin sampling in the next few weeks.

In order to study the impacts of the Deepwater Horizon oil spill, the Commission along with all five Gulf States and NMFS has developed a comprehensive, ecosystem-level approach to monitor the Gulf of Mexico for the next ten years. This fishery independent monitoring program would not target the monitoring of specific restoration actions, but would encompass the entire U.S. Gulf of Mexico in order to monitor the ecosystem for any long-lasting deleterious effects. The fishery independent monitoring program would build upon and expand current SEAMAP sampling in the Gulf of Mexico.

Sport Fish Restoration Program Report (SFP)

J. Ballard (Program Coordinator for SFRP) provided the following written:

The Program Coordinator is working with the state Artificial Reef Program Coordinators to develop a standardized monitoring protocol for artificial reef habitat across the Gulf of Mexico. This protocol will be modeled after existing long-term monitoring programs that focus on natural reef habitats, utilizing comparable gear types and methodologies where possible. The goal of this effort is to develop a program that would provide baseline data for artificial reefs. This will allow states to assess impacts from natural and man-made disasters in the future, and to understand how their reefs are functioning over time compared to natural reefs. The Artificial Reef Subcommittee will be discussing the specific methodologies to incorporate into this protocol at their March 2013 meeting in Tampa, Florida. Once a standardized sampling protocol is developed and agreed upon by all states, the Program Coordinator will purchase and supply to the states all necessary sampling equipment to carry out the artificial reef monitoring across the Gulf of Mexico. All data collected by this new program will be compiled and housed at the GSMFC to establish a database of baseline data for artificial reefs in the Gulf of Mexico that can be utilized for future assessments.

The Program Coordinator is exploring funding opportunities to support the previously mentioned Gulf-wide Artificial Reef Monitoring Program.

The Program Coordinator secured funding for the Mississippi Bight Lionfish Response Unit (MBLRU) through a USFWS branch of invasive species proposal. This new project is a cooperative effort between the GSMFC, Mississippi DMR, Alabama DNR, the National Park Service and the U.S. Fish and Wildlife Service. The objectives of this new project are to:

1. Establish a lionfish monitoring program at established sites in the near coastal waters between Pensacola, FL and the Mississippi River Delta to monitor and track the invasion.
2. Perform diver surveys of density and richness of associated species at all sites to aid in future assessment of impacts as a result of the invasion.
3. Removal of lionfish encountered during normal monitoring operations.
4. Coordinate reporting activities with the established USFWS hotline and the USGS online reporting system.

5. Establishment of a "Strike Team" to harvest lionfish at locations beyond regular sampling sites reported to the MBLRU.
6. Engage in outreach activities in the region to help inform the public about the seriousness of the lionfish invasion.

The funding for this new project was made available on June 27, 2012. Since that time we have purchased all the necessary gear, including custom-designed dive slates for conducting surveys of the habitat and associated species. We have held a meeting to distribute all the gear to the different agencies that will be conducting the lionfish monitoring dives. We have developed a database that will house all the data collected during the course of the project, and developed an internet-based entry form that will let the members conducting the surveys enter their results directly into the database, which will allow for almost real-time data entry. We have also established all the necessary agreements between the states of Alabama and Mississippi to permit GSMFC to reimburse them for the costs they incur carrying out the regular monitoring component of this project.

This project will give us a clear picture of where we stand in regards to the invasive lionfish population in northern Gulf waters, and will provide much-needed information for future management decisions.

Fisheries Information Network (FIN) Report

D. Donaldson provided a written report in the briefing material. He gave a power point presentation reviewing FIN activities during 2012.

FIN consists of two major components: ComFIN and RecFIN(SE). He highlighted effort and accomplishment during the year.

Under Recreational catch/effort almost 53,000 interviews were conducted in LA, MS, AL, and the FL east and west coast. This exceeded 2012 quotas for all modes Gulf-wide by almost 35%. It also included sampling in Puerto Rico where almost 2,500 interviews were conducted.

The Commercial Trip Ticket Programs are fully implemented in TX, LA, AL and FL. MS is making progress toward full implementation. He reported that we are very close to full trip ticket implementation in the Gulf. The electronic trip ticket reporting is being conducted in all States. They currently have 740 dealers utilizing the on-line system. This has been assisted by the federal requirement for federal dealers to report electronically. Gulf-wide we are collecting about 67% of the landings electronically. This is a significant portion of total landings.

The FIN Data Management System has loaded over 30 million records. This data includes commercial trip tickets from 1985 to 2012; historical data from NMFS; biological data from 2002 – 2012; and, recreational catch and effort data from 1981-2011 (including Puerto Rico). The system has been online since July 2002 for confidential and non-confidential users. There are about 55 users with access to confidential data.

He reviewed biological sampling and reported almost 29,000 otoliths for almost 30 species have been collected. He provided exact numbers collected by species. This data has become important in stock assessment reviews. This may be the last year this data is available due to a lack of funding.

Habitat Program Report

J. Rester reported that he is the TCC Habitat Subcommittee representative for the Blue Crab Technical Task Force (TTF) which is currently conducting a Blue Crab FMP revision. He has completed the habitat section and it is currently under review by the TTF. Another representative from the Subcommittee is working with the Flounder Technical Task Force.

In addition he has worked with **Dr. Galloway** on the Kemp's ridley stock assessment project for the Commission.

Aquatic Nuisance Species (ANS) Program Report

J. Ballard provided a written report on ANS activities.

The Gulf and South Atlantic Regional Panel (GSARP) on Aquatic Invasive Species held its fall meeting on October 9-11, 2012 in New Orleans, Louisiana.

The Program Coordinator attended/participated in the Aquatic Nuisance Species Task Force's (ANSTF) fall meeting held November 14-15, 2012 in Arlington, Virginia.

State Aquatic Nuisance Species Plans:

- Georgia, Louisiana and South Carolina have completed plans and are actively implementing them.
- Alabama's and Texas' plans have been conditionally approved.
- Mississippi's plan has gone through the preliminary review by the ANSTF, they have incorporated the recommended changes, and the plan is currently out for a final public review before it is sent to the Task Force for final approval.
- Florida has a completed plan, but it has not been approved by the ANSTF.
- North Carolina is in the preliminary stages of formulating their plan.

The Program Coordinator and GSARP are exploring other funding possibilities to secure money so the Panel can start to be more proactive in their efforts to monitor and control aquatic invasive species in the Gulf and South Atlantic Region.

The Invasive Lionfish Control Ad-Hoc Committee (ILCAC) that is coordinated by the GSMFC's ANS Program Coordinator is continuing to draft the "National Invasive Lionfish Prevention and Management Plan" (NILPMP). The ILCAC is made up of 22 members from federal and state agencies, universities, NGO's, and the pet trade industry. The Vision of the NILPMP would be to serve as a guide to the ANSTF and other interested parties involved in managing lionfish and natural resources in U.S. waters. The ILCAC hopes to have a completed draft of the plan ready for the ANSTF to review prior to their May 2013 meeting.

Several Panel members are collaborating on efforts to understand more about the Asian tiger shrimp (*Penaeus monodon*). In 2011, there was a 20-fold increase in reported collections of tiger shrimp from 2010, with 678 reports. In 2012 the reported collections dropped to 153, however; this decrease is most likely the result of reporting fatigue as opposed to less individuals being collected. Along with increasing in abundance, it appears that this species is also expanding its invaded range, with a number of specimens being collected in coastal rivers. At this time, it is unclear if this invasive species has established a breeding population in this range or if they are being introduced. To try and answer this question, the group is setting up a tissue repository and has started to run genetic analysis on the samples to get a better understanding of the population genetic structure of this invasive species. The preliminary results of this analysis show no genetic variation, suggesting that individuals of the population are highly related or inbred. The group is going to continue this DNA work with more samples from across the invaded range to get a better picture of the population. The next big question is what impact this species may have on the invaded environment or native species, which is widely unknown.

The Program Coordinator recently received the data collected during the 2011 TexRAT in Galveston, and is working on getting it entered into the current database of RAT data that is housed at the GSMFC. Once that is complete, he will work on acquiring and entering the data from the RAT that was carried out in LA. This will provide one central location for all RAT data that has been collected in the Gulf States.

Subcontract Awards

The Invasive Species Traveling Trunk: This project has been completed and the PI presented the final report and the finished trunks at the GSARP's spring 2012 meeting. This project produced two complete trunks and enough extra components to put together a third, which has now been finished. Before the trunks were made available to the public, the GSARP's Education and Outreach workgroup performed a final review of all the talking points that accompany the included PowerPoint presentation. The PI addressed all the recommended changes from the review, and the finished trunks were made available through the GSMFC in July. Since they have been available, the trunks have been utilized by 18 different organizations ranging from federal and state agencies, schools, and NGO's. These organizations have presented the enclosed material to thousands of people. The reviews that we have received have all been very positive, and the trunks have been so popular that we have had to turn down requests to borrow them. Because of the current demand for the trunks and the expressed interest, the Program Coordinator has started to collect materials to produce additional trunks.

Trojan Y Chromosome Eradication of Invasive Fish – Development of Sex-specific DNA Markers: The sex-specific DNAs for three invasive fish species (Nile tilapia, African jewelfish, and silver carp) were used in PCR reactions containing random 10-mer oligonucleotides to produce DNA fragments for analysis by gel electrophoresis. Approximately 200 primers were designed for screening and are now being applied towards the isolation of sex-specific markers in the three invasive fish species. At this time, no sex-specific markers have been identified for any of the three species of invasive fish. This is not unexpected because most RAPD PCR primers are not linked to a sex-determination locus, so it is expected that a true sex-specific

marker will be rare. Others using this method have screened 250 primers or more before identifying a sex-specific marker for a single species, so it is expected that the screening of many more primers will be required to identify a useful and reproducible sex-linked marker.

Reproductive Sterility as Tool for Prevention and Control of Invasive Aquatics: Snails have been irradiated at different radiation doses using two different methods, and it has been determined that a gamma dose range of 100Gy – 130Gy is a workable range for sterilization of adults. Following a successful, small-scale, nine-month experiment with snails irradiated with gamma doses in this range, the PI performed a larger experiment to simulate the release of a larger number of irradiated individuals. Although the irradiation was successful at producing sterility, the 130Gy dose caused higher mortality rates, resulting in the death of all the snails in three months. The basis for this higher mortality is not yet clear, but it may reflect the normal variation in radiation sensitivity between batches of snails harvested at different times of year. As an alternative to radiation-induced sterility, methods to induce triploidy in snails are also being explored.

The spring GSARP meeting is set for April 9-11, 2013 in Atlanta, Georgia.

The spring ANSTF meeting is set for May 8-9, 2013 in Duluth, Minnesota.

Emergency Disaster Recovery Program (EDRP I & II) Report

R. Hode reported on the EDRP I and EDRP II status and activities.

The Emergency disaster Recovery Program was established by GSMFC in 2006 following Congressional supplemental appropriations amounting to \$128,000,000; and an additional appropriation of \$85,000,000 in 2007 for use by Gulf States affected by Hurricanes Katrina, Rita, and Wilma in 2005. The purposes of the appropriations were to aid in restoration of oyster beds, fisheries habitat and for cooperative research aimed at mitigating the effects of natural disasters (EDRP I); and for economic assistance to fishermen, businesses and industries recovering from economic losses as a result of the disasters (EDRP II).

R. Hode provided categorical summaries of budgets and expenditures through February 19, 2013 by State. A total of seventeen individual sub award agreements are in place under the EDRP I appropriation and will remain eligible for reimbursement through **August 31, 2013**. He reported that GSMFC will not make reimbursements for any work performed under these programs after the grant expiration date.

Oyster Rehabilitation: The combined unused balance of funds that were programmed for the Oyster component amounts to approximately \$1.34 million Gulf wide. Reports from individual States indicate that the majority of these are currently scheduled for use in the spring and early summer as Florida, Mississippi and Louisiana anticipate additional cultch plants and related oyster work. All States expect to fully utilize allocated funds before the August 31, 2013 deadline.

Habitat Restoration: Funds available to be used under this component currently amount to approximately \$1.12 million Gulf wide. Because the Habitat Sub-award included provisions that permitted additional oyster as well as other fish and shellfish habitat restoration, the majority of the work planned over the remaining grant period is also expected to be used for further oyster habitat restoration. The bulk of these efforts will be in Texas, where cultch plants were originally programmed under the Habitat Component; and, in Florida, where Habitat funds were predominantly utilized to aid in commercial lease oyster restoration and habitat access restorations.

Cooperative Research: Cooperative research components have been completed in all five Gulf States. However, even though funding is no longer available for work performed under this component, most states are in the process of finalizing research and/or related summaries and are preparing final reports for inclusion in the GSMFC final report to NOAA Fisheries in late 2013.

EDRP II

R. Hode provided categorical summaries by State of budgets and expenditures through February 19, 2013. A total of sixteen individual sub award agreements are in place under the EDRP II appropriation and remain eligible for reimbursement through September 30, 2013. GSMFC will not make reimbursements for any work performed under these programs after the grant expiration date. Combined fund balances currently amount to nearly \$5.3 million dollars.

Assistance to Business and Industry: Of the \$976 K remaining unused to date in this component, nearly \$875 is currently scheduled in Florida and Texas to complement oyster restoration in the form of cultch plants and waterfront access projects similar to those initiated/implemented under the EDRP I program. Neither State provided direct financial assistance through this component; choosing instead to implement programs/projects that resulted in longer term benefits to the industry as a whole for their respective regions. Unused funds in the Mississippi program are also scheduled for use in additional oyster cultch plants. All remaining funds are expected to be utilized prior to the September 30, 2013 deadline.

Assistance to Fishermen: Unspent balances under this component amount to approximately \$2.6 M – with two states having balances of <\$100 K and two having balances >\$1 M. Texas did not have Assistance to Fishermen sub award – choosing to include this assistance element with the Assistance to Business and Industry component. Louisiana, likewise, did not have Assistance to Business and Industry component, choosing instead to fund all their planned economic assistance under the Assistance to Fishermen sub award. Work programmed during the remainder of the grant period includes close-out of at sea surveys in the for hire sector in Florida; continued support for the reconstruction of the Claude Peteet Mericulture Center and offshore and near shore artificial reef construction/enhancement in Alabama; cultch plants on public oyster reefs in Mississippi; and development of web based marina information systems, and oyster cultch plants in Louisiana. All remaining funds are expected to be utilized prior to the September 30, 2013 deadline.

TED and BRD Compliance: With the exception of \$6,600 remaining in the Mississippi TEDS and BRDS program, all requirements and programmed funding scheduled for this

component have been met. The Mississippi balance is currently being used for outreach efforts to in the shrimp industry to further promote proper use of TEDs; and for related purposes. All remaining funds in this sub award component are expected to be utilized prior to the September 30, 2013 deadline.

Domestic Product Marketing: Mississippi and Louisiana were the only States participating in Domestic Product Marketing programs with combined budgets amounting to nearly \$2.0 M. Approximately \$822,000 remains un-reimbursed to date. In Mississippi, the State will collaborate with the Coast Conservation Association to once again conduct junior fishing rodeos in all three coastal counties during the spring and early summer of 2012. Additionally, post Katrina economic impact studies being performed under contract with the MSU Extension service is expected to be finalized.

The Louisiana Seafood Marketing Board will finalize its support of the Lake Pontchartrain Basin Foundation Museum as it began the process of re-building the Lake Pontchartrain Light House and the establishment of a Louisiana Maritime Museum. Marketing funds through the EDRP II grant will be used to conduct the "...first-ever research initiative to document the history of the many generations of commercial fishermen" in Louisiana and to provide exhibits at the museum when completed.

Concurrently, the Department is working closely with the Nicholls State University's John Folse Culinary Institute in the planning and potential funding of a culinary degree program at the University; and, a Statewide Consumer Media Campaign designed to encourage consumer loyalty, industry awareness and consumption of Louisiana seafood with an emphasis on historical aspects of the industry.

Reports from both agencies indicate that all work is expected to be completed by the September 30, 2013 deadline.

Seafood Testing: Mississippi is the only State to participate in a Seafood Testing program. To date, most of the scheduled testing of local waters and monitoring of oyster grounds has been completed through multiple agencies including the MSU Extension Service, USM and MSDEQ. Fund balances amounting to \$822 thousand are programmed to meet the States commitment to the Gulf Of Mexico Alliance.

It is the intent of MDMR through this program to work in collaboration with the Gulf of Mexico Alliance, the Northern Gulf Institute and other Federal and State agencies to facilitate needs awareness and a plan of action that will result in improvement of Gulf water quality with emphasis on healthy beaches and shellfish beds; conservation of coastal wetlands; environmental education; characterization of Gulf habitats for informed management decisions; and reduction in nutrient loading which impacts the quality of Gulf waters.

Under this component MDMR continues to provide financial support for GOMA administrative and coordination efforts involving the Alliance Management Team, Alliance Coordination Team, Priority Issues Team, and the Alliance Business Council, public awareness, and grants

management. All remaining funds in this sub award component are expected to be utilized prior to the September 30, 2013 deadline.

Economic Data Program (EDP) Report

Miller provided a written report on the EDP status and activities. He gave a brief power point presentation reviewing and updating the Commissioners on EDP activities.

The EDP three main components include economic data collection, economic research and analysis, and economic outreach and dissemination. These initiatives were further developed and implemented throughout early 2013.

Data Collection: Economic data collection projects in progress during early 2013 included an economic survey of the GOM inshore shrimp fleet and an economic survey of seafood dealers. Economic data collection projects currently undergoing analysis included data from an economic survey of seafood processors, data from a marine angler expenditure survey, and data from a marine recreational use economic survey. Completed economic data collection projects included an economic survey of the GOM inshore shrimp fleet for data year 2008. Surveys planned for 2013 included a stated preference choice experiment survey of anglers in the GOM.

Research and Analysis: While economic data from initial collection activities is often presented in a simplistic format, further analysis and research investigations allow for a better understanding of the economic performance, impact, and tradeoffs associated with Gulf fisheries. Currently, the research and analysis component of the economics program consists of an impact analysis initiative for the data collection activities of the program and a stated preference choice experiment for anglers.

Outreach and Dissemination: The third component of the economics program is outreach and dissemination. The objective of this branch of the program is to present the information collected and analyzed within the data collection and research and analysis components of the program. Additionally, this component of the program involves the organization of meetings for economists and associated stakeholders who are interested in or actively engaged in fisheries economic projects and activities throughout the Gulf.

In order for there to be a location where stakeholders of fisheries resources can log-on and access fisheries economic data, the Commission successfully worked with the NMFS headquarters office in order to develop a national interactive fisheries economic impacts tool. This tool can be accessed [here](#).

The Gulf States Fisheries Economics Workshop is an initiative of the economics program that is aimed at promoting communication, coordination, and professional development among fisheries economists and associated stakeholders throughout the GOM.

Oil Disaster Recovery Program (ODRP)

R. Hode reported on ODRP status and activities. The Oil Disaster Recovery Program, which was authorized October 1, 2010, continues to move forward in all of the elements approved by the ODRP Ad Hoc Committee. Sub awards or contracts are currently in place which addresses Marketing, both traditional and nontraditional; Sustainability and Traceability; and Seafood Testing. Additionally, a stock assessment element was added during the year to address the impact of the oil disaster on the Kemps Ridley turtle population in the Gulf.

He reviewed all activities in detail. He provided the following financial status report.

ODRP Summary Budget Through February 2013			
Sub component	Budget Amount	Contracted	Expenditures to date*
Administrative	2,017,882.00		34.8%
Direct Marketing		7,080,812.00	42.9%
Seafood Certifications		3,340,719.00	54.3%
Seafood testing		538,359.00	82.2%
Kemps Ridley Assessment		267,681.00	64.6%
Un-awarded funds	1,739,547.00		
Totals		11,227,571.00	

State Director's Reports

Florida – **D. Heil** reported on behalf of the Florida Fish & Wildlife Conservation Commission, Division of Marine Fisheries (FWC). He gave a comprehensive report at the October 2012 meeting. There was not a great deal to update since the last meeting. The Florida legislature is currently in session. He stated that even though he expects the FWC budget to take a hit the State is basically in very good fiscal conditions. (The following report was presented in TCC.)

Fishery Dependent data collection activities

Commercial: Work continues on the upgrade to the Marine Fisheries Information System (MFIS). Currently, the database which was previously in Oracle, is in SQL Server and is not considered stable. Table structures and scripts used to upload and error check data were written for Oracle and have been patched to work in SQL Server. Early this year, with the help of FWC Office of Information Technology, specifications were written to build a database structure from the ground up in SQL Server. The database would also for the first time be linked to the commercial saltwater license database, which would allow for more efficient handling of landings requests. The ability for license holders and members of the general public to query landings is a component of the rebuild and the project is expected to be completed by August, 2013. The volume of paper trip tickets submitted by wholesale dealers has steadily decreased over the past few years and now stands at about 30-35% of the overall totals for trip tickets and species records. Up until this year, contractor services had been used to key punch trip ticket information. Starting in April, 2013 trip data entry for paper tickets will be conducted by FWC

Trip Ticket Office personnel. Several months of side by side data entry (by the current contractor and FWC staff) are planned to make the transition in-house data entry as smooth as possible.

The quality or resolution in Marine Life harvest information has been a concern for FWC for some time. A collaborative relationship fostered between industry and FWC staff has allowed the agency to focus limited resources toward refining harvest information in terms of species composition and quantities. The Fisheries Dependent Monitoring group is working closely with the FWC South Florida Regional Lab (SFRL) in Marathon to develop a cooperative monitoring program. Another commercial data collection concern (highlighted by the recent concerns from various entities involved in the commercial oyster harvest) is under-reporting by wholesale dealers. Examination of commercial trip ticket data did not support the assertion of a reduction in product availability. We are in the process of examining reporting patterns in the commercial data for potential indicators of reporting issues.

Recreational: FWC was able to meet all NOAA MRIP recreational angler intercept quotas in 2012. We are currently in the start up phase of the new APAIS methodology. To date, there are no major problems to report. The biggest adjustment has been in the allocation of personnel resources to accommodate the new protocols which require two samplers to be present at busier sites and for night-time assignments. NOAA has been able to accommodate our current distribution of manpower by allocating sample regionally based on available staff at those locations. Essentially, the five regions used to select vessels for the NOAA Fisheries For-Hire Telephone Survey (FHTS) were used to draw assignments for the APAIS in March and April. We are currently examining various options for regional drawing APAIS assignments that more accurately reflects regional differences in angling characteristics (e.g., species targeted, CPUE, waters fished). In the recent MRIP Wave meeting in New Orleans, Florida representatives presented NOAA with an eight region draw which Science and Technology staff involved in the sample draw will be able to accommodate. The draw is an important first step toward producing a more regionally representative sampling of recreational fishing trips, which show distinct regional characteristics in both angler behavior as well as target species and catch composition. The intent for FWC is to produce regional CPUE estimates for select species and develop and allocate sample to improve the precision of those estimates. A request to NOAA Fisheries for an examination of the effort component of the catch estimation process is expected as the next step toward producing robust regional catch estimates.

We are in the final year of reef fish tagging study in the Gulf. Thus far, more than 20,000 fish have been tagged on a variety of for-hire trip types, the majority coming from trips in the Panhandle, and Tampa Bay regions. Species tagged included red snapper, red grouper and gag. The overall tag return rate is approximately 10% with some fish remaining at large for almost three years before being recaptured. EDRP II funds were used to augment the number of tagging trips by paying for directed sampling trips on charter vessels. EDRP II funds will be unavailable after August 2013.

Alabama – C. Blankenship presented a report on behalf of the Alabama Department of Conservation and Natural Resources, Marine Resource Division (AMRD).

The Alabama Marine Resources Division (AMRD) purchased property adjacent to the Claude Petet Mariculture Center (CPMC) in Gulf Shores; contracts have been secured. The property is approximately 12.4 acres, contains 1,115 feet of frontage along the Gulf Intracoastal Waterway, and has an existing barge basin. Plans for the property include the use as a staging area for materials to be used as part of AMRD's artificial reef program.

Construction continues on a new laboratory and office facility located at CPMC. Once completed, the laboratory will encompass approximately 23,000 square feet and will house hatchery rearing tanks and equipment. Funding for construction activities are derived from the Coastal Impact Assistance Program (CIAP) and the Gulf of Mexico Energy Security Act of 2006 (GOMESA). Hatchery equipment for the lab is being acquired using Emergency Disaster Recovery Program (EDRP) funds. Construction is scheduled to be completed during April 2013.

AMRD is currently evaluating several properties for purchase as part of Alabama's oyster management program. The property(s) would provide water access to oyster management station(s). The acquisition of a mobile office trailer for use in the program is currently in process.

SEAMAP operations are planned to continue with trawl, vertical and bottom long line work for 2013 but is dependent on continued NOAA funding.

AMRD has joined the Mississippi Bight Lionfish Response Unit (MBLRU) along with the Mississippi Department of Marine Resources, Gulf States Marine Fisheries Commission, National Parks Service, and U.S. Fish and Wildlife Service. AMRD continues to document reports of the invasive lionfish, *Pterois volitans*, and plans to conduct SCUBA surveys beginning in May 2013.

AMRD's turtle excluder device (TED) study for skimmer trawls, which is funded through National Fish and Wildlife Foundation (NFWF), is scheduled to continue and will observe TED's with smaller bar spacing. A total of 17 observation trips have been conducted from May 30, 2012 through November 20, 2012.

AMRD participated in several outreach events by providing educational opportunities to learn about the marine environment. These events included the Alabama Coastal Birdfest and the multiday Mobile Boat Show.

AMRD continued the State's Fishery-independent Assessment and Monitoring Program (FAMP) by collecting up to 44 samples each month using a 16' shrimp trawl, beam plankton trawl, 50' seine, and water quality meter. The gillnet sampling target remains at 240 sets per year.

The Biological Sampling program was continued during 2012. A total of 83 recreational samples and 199 commercial samples were collected from October 1, 2012 through December 31, 2012. Targets were not obtained for some species due to fisheries closures. Samplers collected additional weights and measurements from recreationally caught fish where target numbers had been exceeded. All 2012 samples have been entered into the database, and age data entry for 2012 is near completion.

From October 1, 2012 through February, 2012, MRFSS interviewers collected a total of 789 interviews: 249 in SH mode, 96 in PC mode, and 444 in PR mode. Interview quotas were exceeded in all modes in Wave 5, but Wave 6 and Wave 1, 2013 presented shortfalls due to weather. In February 2013, samplers were trained for the new MRIP APAIS, including fish identification tests and procedure training.

AMRD continues to register anglers in the Angler Registry Program. AMRD continues to publicize the Registry through posters and business cards displayed and handed out at public fishing access sites. Exempted individuals such as lifetime license holders and residents over the age of 64 are required to register annually at no cost to them.

AMRD is working on several new additions to its artificial reef program. A bid for the deployment of 220 pyramid reefs and 34 low-relief anchored reefs in the newly established R. Vernon Minton nearshore reef zones offshore of Baldwin County was recently awarded. AMRD is currently bidding the deployment of up to 15 large pyramid reefs in our general offshore reef permit areas. These unique pyramid reefs with 25' of vertical relief will be deployed in multiple single-file lines to create several "ship-effect" reef complexes. A 70' steel supply vessel will be deployed in one of the general offshore reef permit areas. AMRD is working with the Alabama Gulf Coast Reef and Restoration Foundation for the reefing of a 270' coastal freighter with 55' of vertical relief. EDRP funds will be utilized for the deployment of these reefs scheduled to begin in the Spring of 2013.

AMRD has submitted a permit application for the construction of 3 additional inshore artificial reefs to be located in Mississippi Sound. The permit will authorize AMRD to enhance 26 acres of seabed with 6-8" limestone gabion rocks.

Renovations to AMRD's Cotton Bayou boat ramp began on February 18, 2013 and are scheduled for completion on April 1, 2013. Renovations include the replacement of existing launching and docking facilities.

Enforcement Section: From October 1, 2012 to February 28, 2013, AMRD enforcement officers conducted 5,025 commercial fishermen intercepts, 5,450 recreational fishermen intercepts, 5,348 patrol hours, and 4,265 vessel boardings.

AMRD officers have been conducting joint investigations with NMFS regarding Gulf Reef fish and Red Snapper in retail markets across the state. This has resulted in 12 citations issued.

Four additional AMRD officers received SCUBA certification. SCUBA certifications are essential during search, rescue and recovery operations.

All AMRD officers have completed ALERT training. This training is a nationwide effort to establish standard responses to active shooter situations.

AMRD received a Port Security Grant to expand the Alabama's Coastal Remote Monitoring program comprised of a series of closed-circuit cameras used for SAR, Port Security and fisheries enforcement. The work has begun on the installation of 5 new camera locations bringing the total to 19. Two cameras will be completely self-sufficient by utilizing solar and wind power.

AMRD Oil Spill Response and Activities: AMRD, in conjunction with the Alabama Department of Public Health (ADPH) and the Alabama Department of Agriculture and Industries (ADAI), continued the 3-year seafood tissue testing program. The testing program is broken down into 2 projects: (1) Direct Sampling Effort Project and (2) Dealer/Processor Sampling Project. Both programs are testing polycyclic aromatic hydrocarbons (PAH) levels using the LC-Fluorescence method, dispersants and key heavy metals. The Direct Sampling Effort Project, operated by AMRD and ADPH, is testing seafoods collected directly from Alabama waters or reef zones. The Dealer/Processor Sampling Project, operated by ADAI, is testing seafoods obtained from processors and dealers regardless of harvest location. The results of this program will be distributed to the public. AMRD has submitted a total of 717 composite samples for testing; all results have been returned as being below the FDA's level of concern. This multi-agency program is administered by AMRD.

Alabama continued a seafood promotional campaign under the direction of the Alabama Seafood Marketing Commission. The Alabama Seafood Marketing Program consists of public relations, television commercials, print ads and articles, radio ads, billboards, speaking appearances, distribution of marketing materials, sponsorships of events and participation at community festivals and chef events. The website eatalabamaseafood.com has been developed and has received rave reviews from the public. The program to date has been very successful. The Seafood Marketing Program is managed by AMRD.

AMRD continues to participate in the Natural Resources Damage Assessment program.

Mississippi – **D. Diaz** presented the report on behalf of the Mississippi Department of Marine Resources (DMR).

Marine Patrol: The Office of Marine Patrol, Marine Law Enforcement Joint Enforcement Agreement activities for this time period consisted of 2,692 man hours with 1,846 contacts which resulted in 32 citations issued

Shrimp and Crab Bureau: Mississippi's 2012 Shrimp landings were the highest seen in the last five years; over 6.7 million lbs (headless) were landed through October (NOAA preliminary data). Additional shrimping waters of the East Biloxi channel were open at 6 a.m., Monday, Nov. 12, 2012 when sampling determined the size of the shrimp in the area larger than legal size (68 shrimp/lb). Mississippi Territorial Waters North of the Intracoastal Waterway closed to shrimping at 12:00 a.m. on January 1, 2013. Shrimping will remain open south of the ICW until April 30, 2013. Since the season opened, there have been a total of 22 tiger shrimp taken (*Penaeus monodon*), by local shrimpers and live bait boats.

The Bonnet Carre' Spillway was opened from May 9, 2011 to June 20, 2011. In the western Sound, salinities were reduced to as low as 1ppt. Mississippi blue crab landings were down 50% from May through December 2011, when compared to the prior 10 years (Excluding Hurricane Katrina 2005). Though it took a year of applications, bureau requests to NOAA to declare a federal disaster were successful. On September 12, 2012, the Secretary of Commerce declared a commercial fishery failure due to a fishery resource disaster for the Mississippi blue crab fishery under Section 308(b) of the Interjurisdictional Fisheries Act of 1986 (IF A) and Section 312(a) of the MSA. "Natural causes" are an allowable cause under the IF A and the MSA, and the resulting damage caused a significant loss of access to fishery resources with revenue declines that have greatly affected this commercial fishery. This determination provides a basis for Congress to appropriate disaster relief funding under the IF A and the MSA. If Congress appropriates disaster relief funding, NOAA will work with the State of Mississippi to develop our recovery plans.

The Shrimp & Crab Bureau has again partnered with the Mississippi Gulf Coast National Heritage Area, this time to record oral histories for an educational video to tell the story of Mississippi's crabbing industry. On-going interviews of local crabbing icons began October 24, 2012. Also on October 24, the Mississippi Crab Task Force held a meeting to discuss the upcoming Derelict Crab Trap Clean up (Feb 23, 2013), the 2011 Bonnet Carre' Spillway Fishery Failure Declaration, GCRL's CPUE study, Market Makers and Gulf Seafood Traceability Opportunities, and the filming of the Heritage Program's video.

The Mississippi Seafood Safety Newsletter continues to be updated online at MDMR's website. The report contains a summary of the on-going efforts and results of the data that the Office of Marine Fisheries has been gathering in cooperation with the Mississippi Department of Environmental Quality to ensure that Mississippi seafood is free of polycyclic aromatic hydrocarbons (PAHs) and safe for consumption. To date, none of the 564 samples have been found to contain PAH concentrations above the FDA levels of concern.

The Shrimp and Crab Bureau and partners held a "Marsh Dwellers" free public science seminar on October 30, 2012. The seminar is the ninth part of an ongoing series aimed at enhancing familiarity between interested groups and increasing awareness of the programs, needs and opportunities that are relevant to marine research in Mississippi waters. Prior seminars in the series include: "Oyster Resource Management and Associated Environmental Monitoring", "Hypoxia", "Harmful Algal Blooms", "MS Coastal Invasive Species", "Mississippi Artificial Reefs" and "Mississippi Living Shorelines", "Gentle Giants of Mississippi and the Northern Gulf", and "Spotted Seatrout in Mississippi". The next seminar in the series, "Artificial Reef Program", is scheduled for March 6, 2013.

Artificial Reef Bureau: The Artificial Reef Bureau monitored fish assemblages on selected inshore reef sites. Staff continued to stockpile reef material on staging areas for future offshore reef developments. There were 5 inshore reefs restored and enhanced in Jackson County with a total of 4,000 cubic yards of limestone. Funding for this deployment was through the National Resource Damage Assessment. Staff participated in eight public outreach efforts at various events to promote Mississippi's Artificial Reef Program.

Artificial reef staff continues to work with local contractors for donations of reef material. This material consists of concrete culverts and clean concrete rubble and is delivered to our staging site in Gulfport for future offshore deployments.

Finfish Bureau: The Marine Recreational Information Program (MRIP) collected 484 interviews between October and January 2012. All quotas were met in Wave 5. Quota for the shore and private boat modes were met for Wave 6. However, the party/charter boat mode fell short, as is typical for this time of year. Most of the charter boat activity winds down toward the end of November, and excluding the occasional trip, does not pick up again until late February. Cold weather, wind and rain have gotten 2013 off to a slow start with only 27 interviews being collected in the first two weeks of January.

In late 2011 the Mississippi Commission of Marine Resources approved a motion to implement a trip ticket program for commercial fisheries. Seafood dealers/processors and commercial fishermen began reporting their landings in March of 2012. Trip tickets are reported electronically by computer or manually by filling out a paper trip ticket. The program is going well with improvements being made as needed.

Two conventional tackle recreational fishing records and one new fly fishing tackle record was accepted from October 1, 2012 to January 16, 2012.

Conventional Tackle:

Atlantic Croaker (*Micropogonias undulatus*) 5 lbs. 1 oz.

Scamp (*Mycteroperca phenax*) 26 lbs. 15 oz.

Fly Fishing Tackle:

Southern Flounder (*Paralichthys lethostigma*) 4 lbs. 14 oz.

Shellfish Bureau: As part of the routine oyster reef monitoring protocol, numerous oyster reef sites were sampled and evaluated using 1 minute dredge tows to determine the condition of the oyster reefs. Additionally the twice monthly phytoplankton and dermo samples in these areas were collected and analyzed.

Shellfish Bureau personnel were actively involved in consultation with the MDEQ and their contractors with the planning and implementation of the early Oyster Reef Restoration Projects. These projects are designed to mitigate potential damage of the oyster reefs due to the Deepwater Canyon oil spill of April 2010.

The fall cultch plant deployed a total of 20,372 cubic yards of limestone over 203 acres in the Pass Christian oyster reef area in September and October. Funding for these projects was from the Deepwater Canyon oil spill early oyster reef restoration program.

The new permanent oyster check station opened in November in the Pass Christian Harbor. The check station provides an office area to distribute oyster tags to the harvesters and includes a patrol station for the marine enforcement officers. The new building houses storage space as well as an educational classroom and meeting area.

A special, limited 2012-2013 oyster season opened November 5th through December 29th. Dredge boat sacks limits were set at 20 sacks per boat per day and 12 sacks per boat per day for tonging vessels. A limited tonging season was extended past December 29th, but areas have remained closed due to the river stage exceeding management plan criteria. A total of 53,251 sacks were harvested over 3,454 boat trips.

A new oyster map was created by the Department detailing the commercially approved and conditionally approved oyster harvesting areas and reefs. These maps are beneficial for the public and harvesters to help them determine what areas are open for harvest. The maps can be obtained from the MDMR website as well as paper copies in the Shellfish Bureau office.

Plans and funding were formalized with The Gulf of Mexico Foundation for the Deer Island project which will run from January through December 2013. A "Living Shoreline" will be created along the north end of Deer Island west of Grand Bayou. Coconut fiber coir logs will be placed along 1600ft. of shoreline and bagged oyster shell will be placed on the seaward side of the coir logs 10' x 1600'. The purpose of the project is to reduce erosion and create an inter-tidal oyster reef.

A day on the sound was hosted by the Shellfish Bureau staff on October 10-11 with the oyster harvesters and processors aboard the R.V Conservationist. The purpose of this trip was to investigate firsthand the status of the oyster's reefs and discuss the upcoming oyster season.

Shellfish Bureau personnel collected site specific bacterial source tracking samples in the Pascagoula River area and the NERRS in Jackson County. The purpose of collecting these samples is to help determine the cause and location of the source of these bacteria.

The R/V Conservationist began cultivating oyster reefs using bagless dredges in January. The purpose of this project is to enhance the commercial oyster reefs by removing hooked mussels and providing a clean substrate surface area for optimal oyster larvae recruitment.

Louisiana – R. Pausina presented a report on behalf of the Louisiana Department of Wildlife and Fisheries (LDWF).

Deepwater Horizon Disaster

Disclaimer: This report does not rely on information collected as part of the *Deepwater Horizon* Oil Spill Natural Resource Damage Assessment (NRDA), and is not intended to analyze impacts resulting from the *Deepwater Horizon* Oil Spill and related response for NRDA purposes.

The *Deepwater Horizon* Oil Spill has impacted many aspects of Department operations.

Fishery Openings/Closings:

In response to the emergence of tar mats and large concentrations of tar balls on adjacent beaches during Hurricane Isaac, the LDWF took emergency action on September 4, 2012 to close a portion of state outside waters extending one-mile seaward of the shoreline from the western

shore of Caminada Pass westward to the eastern shore of Belle Pass to all commercial fishing and recreational fishing except for recreational and charterboat angling until further notice.

Tissue sampling for seafood safety: Since May 2010, the Louisiana Department of Wildlife and Fisheries has continued to test and analyze seafood coast wide on a regular, ongoing basis. The state sampling plan collects and tests samples from inshore species, near shore reef fish, and pelagic species along with corresponding water and sediment samples. Since the beginning of the overall sampling program, over 3,000 tissue samples of crabs, oysters, finfish, shrimp, from coastal Louisiana have been tested for hydrocarbon contamination, along with corresponding sediment and water samples in many cases. A website (www.gulfsource.org) is available for the public to access the results of those samples. All of those samples tested below the FDA established levels of concern.

Habitat issues:

LDWF Fisheries staff along with other state and federal trustees are actively assisting with the *Deepwater Horizon* Oil Spill Natural Resource Damage Assessment (NRDA) to determine impacts to Louisiana's natural resources and the human use of those resources. Some NRDA workplans are available online here: <http://losco-dwh.com/viewworkplans.aspx>.

Marine Mammal and Turtle Stranding Response:

Response for marine mammals and sea turtles for the *Deepwater Horizon* Oil Spill was initiated the first week of May 2010. Since that time, LDWF and other entities have investigated over 824 total marine mammal and sea turtle strandings and incidental captures throughout the entire coast of LA including offshore. Of these animals, the following are included:

- 345 marine mammals (including dead and live animals; whales and dolphins)
- 479 sea turtles (including dead and live animals)

The Louisiana Department of Wildlife and Fisheries is the lead stranding and rescue response organization covering the coastline of the State of Louisiana.

Data Management:

Since the *Deepwater Horizon* Oil Spill over 6,400 requests for trip ticket landings have been processed to assist with commercial fishermen's claims. After BP announced that it would require certified copies of trip tickets from LDWF, the Department started receiving multiple sets of trip tickets from previous years, 2008 and 2009 in particular. All late submissions were thoroughly reviewed and forwarded to LDWF Enforcement for investigation. Several citations have been issued and two arrests for fraud have been made to date. Investigations are still continuing. Since October, data management has completed approximately 290 data requests, bringing the total to 6,420 total requests.

Inshore / Nearshore Sampling:

In response to the need for information to assess the status of living marine resources in inshore waters, and in the shelf waters off of Louisiana, a long-term sampling program has been designed and implemented. Inshore sampling done under the independent monitoring program in

response to the *Deepwater Horizon* Oil Spill is based upon LDWF's existing sampling program, and includes the addition of new stations and the incorporation of a stratified random sampling design. LDWF is also conducting nearshore sampling as part of the independent monitoring program in order to generate fisheries-independent data on the species composition of groundfishes and shrimps found in the coastal waters of the Northern Gulf of Mexico as well as track environmental parameters. Sampling began in October 2010. Offshore sampling consists of a series of trawl transects across Louisiana. Sampling for these programs began March 1, 2011. LDWF is also conducting nearshore sampling as part of the independent monitoring program in order to generate fisheries-independent data on the species composition of groundfishes and shrimps found in the coastal waters of the Northern Gulf of Mexico as well as track environmental parameters.

Hurricane Recovery Programs

The LDWF is in the process of completing many of the projects related to hurricane damage assessment and recovery following Hurricanes Katrina, Rita, Gustav and Ike.

Cooperative Research Surveys:

The final report has been written and is currently under review.

Commercial Fisherman/Dealer Reimbursement Program:

This program has been closed. A total of \$29,031,410.50 in payments was disbursed to 2,987 vendors under this program.

Seafood Certification Program:

Sustainability:

Louisiana's blue crab fishery was Marine Stewardship Council (MSC)-certified in March of 2012 and is the first MSC-certified blue crab fishery in the world. As is required by the program, this certification is currently being updated through a surveillance audit, which should be concluded March 4, 2014. Specific conditions to be addressed:

- By the first annual surveillance audit provide evidence to the CB that the harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving management objectives reflected in the target and limit reference points described in the stock assessment. This can be achieved by presenting evidence that the principles outlined in the 2011 stock assessment and control rule have been endorsed by the LA Wildlife and Fisheries Commission and incorporated in an official document or a state fishery management plan.
- By the first annual surveillance audit provide evidence to the CB that the tools are effective in achieving exploitation levels required under the harvest control rules. This can be achieved by presenting evidence that the principles outlined in the 2011 stock assessment and control rule have been endorsed by the LA Wildlife and Fisheries Commission and incorporated in an official document or a state fishery management plan.
- By the first annual surveillance audit provide evidence that bycatch concerns, specifically related to Diamondback Terrapins, are adequately being addressed.

o Blue Crab Bycatch Survey: the purpose of this survey is to collect and analyze data on incidental bycatch in the Louisiana crab trap fishery with special emphasis on diamondback

terrapins (*Malaclemys terrapin*); and, to collect and analyze blue crab sex, stage and size frequency distribution. This study was started in winter of 2012 and will run for 2 years.

o Terrapin Abundance Study: the purpose of this study is to provide a “baseline abundance” of terrapins in Louisiana, including a spatial and temporal distribution. This study was started in the fall of 2012.

Louisiana has also embarked on an FAO-based certification scheme. The Audubon Nature Institute has been contracted by LDWF to begin developing a third-party assessment program that will have the ability to assess the Gulf Coast fisheries to the FAO Code of Conduct for Responsible Fisheries – the International standard of good fisheries management. Audubon Nature Institute will also develop a fishery improvement plan process for fishery that won't be fully certified to the FAO Code and will conduct outreach regarding fisheries management through the Audubon Aquarium facility.

Professionalism:

LDWF continues to work with Louisiana Sea Grant to develop a professionalism program for Louisiana's commercial fishing industry.

LDWF's LOFT *Series* (LOFT I/II) in April 2012 and June 2012 was an outreach that provided training and continuing education. Topics such as Vibrio Control Plan, Oyster Harvesting Tag and Requirements and Refrigeration/Cooler Equipment/Fabrication were amongst the featured topics. The LOFT *Series* received extremely positive reviews by fishermen, industry professionals (processors) and industry figures/leaders. The LOFT *Series* topics are noted as having a crucial and positive impact as recognized by the FDA's Regional Shellfish Specialist. As a result of the LOFT *Series*, the Louisiana Oyster Harvesting Tags & Requirements Video was produced (this is the first of several LOFT *Series* projects). LOFT *Series* projects in the pipeline for 2013 included, but are not limited to the following: Operation Outreach, Lot Identification, Human Waste Disposal System, Best Practices For Producing Quality Seafood video and Vessel Equipment & Gear Technology video. Currently, LDWF is reviewing and considering a Louisiana Seafood Academy Professionalism Program (LSAPP) proposal for fishers, docks, processors, and distributors. LSAPP is an effort to bring expanded professional education programming to the Louisiana seafood industry. This proposal represents a partnership effort of LSU AgCenter/Sea Grant MEP and LDWF that will develop and disseminate educational, technical and business related information and materials and provide learning opportunities specifically designed to meet the needs of commercial fishers, dock owners, processors and distributors within a timeline of 3 years. The LSAPP programming will provide a mechanism to deliver industry education and training essential for economic sustainability.

Origin Certification:

The Louisiana Wild Seafood Certification Program (LWSCP) was officially launched in October of 2012. Through collaboration with LDWF, the Louisiana Department of Health and Hospitals (LDHH), and the Louisiana Department of Agriculture and Forestry (LDAF), the program allows the State to certify that seafood bearing its label / logo was caught in the Gulf of Mexico or Louisiana waters, landed in Louisiana, and processed or packaged in Louisiana. Anyone using the logo must apply for and receive a permit through LDWF. In addition to an application,

certain applicants are required to complete a 45 minute – 1 hour online training. All application materials and training are available online at certified.louisianaseafood.com.

Initial response to the programs launch has been underwhelming. This is most likely due to the fact that the complete marketing strategy has yet to be implemented and that it will take some time to build interest and a large enough supply chain to create demand. In response LDWF initiated a phone campaign to licensed dealers and processors to encourage participation. In addition, LDWF has been increasing its efforts to have a physical presence at the docks and processors to promote participation.

LDWF is working through the Louisiana Seafood Promotion and Marketing Board (SPMB) to continue to develop marketing materials to advertise the program. Point of sale and labeling materials will also be available online through the SPMB.

Habitat Programs

LA released 2012 Comprehensive Master Plan for a Sustainable Coast. This master plan is revised every 5 years.

Fisheries staff review coastal use, consistency, and 404 permit applications for possible impacts to fish resources and fish habitats. Since the beginning of October 2012, staff have reviewed and commented on 220 permit applications including the EIS for the Morganza to the Gulf levee project.

Fisheries habitat staff serve as the state representative on the Aquatic Nuisance Species (ANS) panels for the Gulf States and Atlantic Regional Panel (GSARP) and the Mississippi River Basin Panel (MRBP). These panels work with state and Federal partners to help implement the state and national ANS plan.

Research and Assessment:

LDWF fisheries staff participated in an assessment workshop for the Gulf of Mexico Data, Assessment, and Review (GDAR) of blue crab where a non-sex-specific version of the latest Chesapeake Bay blue crab assessment model was used along with non-equilibrium surplus production modeling to estimate status of blue crabs stocks in the Gulf of Mexico. A review workshop is currently scheduled for early June 2013.

LDWF fisheries staff continued an update of the annual stock assessment of striped mullet in Louisiana waters. This updated assessment explores alternative population models appropriate to available data (statistical catch-at-age, virtual population analysis, and non-equilibrium surplus production modeling). The updated assessment will be completed spring 2013.

Age and Growth:

The collection of age, growth, and reproductive information used to develop age-structured stock assessments is coordinated through the Louisiana Department of Wildlife and Fisheries Fish Assessment Laboratory, in Baton Rouge, La. The Fish Assessment lab in Baton Rouge monitors 15 species of fish. Monitoring is done by the collection of otoliths and spines (Gray Triggerfish),

for ageing purposes. Length, weight, gender, and location are also recorded when these fish are collected in the field. The 15 fish species consist of 12 saltwater and 3 freshwater fish. Currently, the saltwater species are Black Drum, Gray Snapper, Greater Amberjack, Gray Triggerfish (spines), King Mackerel, Red Drum, Red Snapper, Sheepshead, Southern Flounder, Spotted eatrout, Striped Mullet, and Vermilion Snapper. The 3 freshwater species are Black Crappie, White Crappie, and Largemouth Bass. All saltwater otoliths/spines are obtained through fisheries dependent sampling. That requires our field Marine biologists to collect the otolith or spine, when they interview a recreational angler. But, freshwater otoliths are obtained through independent sampling, done by our field biologists. That requires the field Inland biologist to go out and target a particular species. Therefore, our lab usually receives otoliths (and spines) throughout the month.

Since the fall of 2012 the Fish Assessment lab in Baton Rouge has received 6,941 otoliths and 10 Gray Triggerfish spines. Out of the 6,951 structures received 4,432 have been aged. Within that total 2,693 of those otoliths are fresh water. At this time the Age & Growth lab has received otoliths for Black Crappie, White Crappie, and Striped Mullet. These otoliths are usually sent to us during the fall months. Right now Largemouth Bass is our most collected species, for the year. However, that should remain, because Largemouth Bass has been our most collected species the past three years. The totals for each species are: Black Crappie-575; Black Drum-317; Gray Snapper-364; Greater Amberjack-73; Gray Triggerfish-10; King Mackerel-25; Largemouth Bass-1,413; Red Drum-341; Red Snapper-680; Sheepshead-544; Southern Flounder-297; Spotted Seatrout-822; Striped Mullet-768 Vermilion Snapper-17; White Crappie-705.

All the otoliths we have received have been cataloged and prepared for ageing.

In the past four months we received the Gray Triggerfish reference set. That reference set consisted of 115 slides from all of the Gulf States that read Gray Triggerfish. This is the last reference set the lab received in 2012 and since the annual GSMFC (Gulf States Marine Fisheries Commission) Otolith Processor's meeting in May.

In 2013 there are several new projects headed to the Age & Growth laboratory. A few of these projects started in 2012 and will begin to get established in 2013. The main projects are the Vertical Line otolith study and Red Drum and Red Snapper Rodeo otolith project. Around three thousand Red Snapper and Red Drum otoliths have been sent to the lab from the Rodeo project. So far about two thousand otoliths have been sent to the lab for the Vertical Line otolith study. These two studies are definitely in the initial stages of operation. However, several issues must be addressed, before the lab staff can begin. The main issue is data entry and age tagging. A few more new projects have been mentioned in the past couple of months, that could begin this year, but none of those potential projects have been officially set in motion. These new projects present a few different opportunities for the lab staff in the upcoming year.

Fisheries Research Lab

The Fisheries Research Lab (FRL), located in Grand Isle, has a primary mission to conduct the research required to manage Louisiana's marine, estuarine and freshwater fisheries. The laboratory is available for the use of other LDWF personnel and other entities engaged in

fisheries research, management, enforcement, coastal restoration, and marine education. In addition to research performed by lab staff, this facility also serves as a field station for Coastal Study Area III in the Barataria Bay estuarine system. The laboratory supports the monitoring of the Freeport Sulfur Mine Reef offshore and Independence Island Reef inshore for the Louisiana Artificial Reef Program, Elmer's Island Wildlife Management Area (WMA) and a local operations center for LDWF enforcement agents.

Nearshore Independent Monitoring :

The Nearshore waters of the Gulf of Mexico within the 5-40 fathom contour comprise the habitat of many of Louisiana's commercially and recreationally important species such as brown and white shrimp, red drum, red snapper, and Gulf menhaden, among many others. LDWF conducts nearshore groundfish and shrimp cruises to provide enhanced fishery-independent monitoring and assessment information essential to management of Louisiana Gulf of Mexico fisheries resources in light of the *Deepwater Horizon* Oil Spill in a coordinated and cost-efficient program. This effort is funded through an agreement with BP in direct response to the *Deepwater Horizon* Oil Spill to ensure the proper information was available for fisheries management purposes. Spatial and temporal distribution and abundance of fishes in relation to measured environmental and oil impacts is also utilized by LDWF biologists to make management recommendations.

Fisheries Research Lab biologists participated in sampling cruises in November and December 2012 and February 2013 aboard the R/V Blazing Seven. The October 2012 and January 2013 cruises were cancelled due to inclement weather and rough seas resulting in the inability to work offshore.

During the period of October 2012 to March 2013 FRL biologists performed 78 shrimp and groundfish surveys within waters nearshore to the Louisiana coastline. In addition, FRL biologists collected 43 shrimp samples for laboratory testing. These nearshore cruises are continually ongoing with a broader scope of purpose and meaning for Louisiana's commercially and recreationally important species. The Nearshore Fisheries Monitoring project will now be conducted every other month beginning with the February 2013 cruise.

SEAMAP Vertical Line Survey:

As part of SEAMAP resource monitoring, the vertical line survey collects information on the spatial and temporal distribution of commercial and recreational reef species off the Louisiana coast. Through the project, we obtain fisheries-independent data characterizing population dynamics of fish assemblages on three bottom habitats, including petroleum platforms, artificial reefs, and natural bottom. Sampling site selection is random within longitudinal corridors, utilizing standard commercial and recreational methods. The Vertical Line project also incorporates a Hook Selectivity study. Lab personnel are collecting information on hook selectivity in the reef fish fishery's in order to assess the use of hook size (8/0, 11/0, and 15/0) for management purposes. The main objective is to assess the use of hook size in reducing the catch of regulatory discards in a vertical line fishery. Sampling site selection is randomized and sampling is scheduled monthly, utilizing standard commercial harvest methods (i.e. bandit rigs). The sampling frame is subdivided into three sampling blocks between the longitudes 89°15.0 and 91°15.0, with the water depth ranging between 60' and 360'. Each block is sampled

quarterly in rotation. Otolith and female ovaries are removed and processed in the lab for age and growth. Environmental parameters are collected on each site at fished depths using a Conductivity/Temperature/Depth (CTD).

SEAMAP Bottom Longline:

The SEAMAP Bottom Longline Survey is conducted to obtain fishery-independent data essential for monitoring and assessment of Gulf of Mexico fishery resources. One of three corridors are sampled (eastern, central, western) monthly, beginning in March and going through October, and the corridors are alternated each month. Sites are randomized in each corridor by longitude and depth (longitude 89.00°- 91.00°, depth (1-100 fathoms). A different set of depths is sampled monthly. October was the final sampling cruise of the 2012 season. During this cruise 14 sites were sampled. Elasmobranchs consisted of 83% of all catches and teleost consisted of the remaining 17%. Dominant species include Atlantic Sharpnose, Smooth Dogfish, Blacktip Sharks, Red Snapper, and King Snake Eels. Sampling is scheduled to resume in March 2013 with a 4 day cruise that is expected to sample 14 sites. During this sampling season LDWF employees will be tagging sharks with dart/T-bar tags prior to their release.

SEAMAP Ichthyoplankton Survey:

Plankton sampling is conducted in conjunction with the National Marine Fisheries Service (NMFS) SEAMAP Spring and Fall Plankton Surveys and stations are selected from their sampling grids.

From January 29th through February 12 of 2013, representatives from the FRL were guests aboard the NOAA vessel Oregon II to observe NOAA plankton sampling and review NOAA protocols to enhance the sampling procedures for LDWF surveys.

SEAMAP Shrimp/Groundfish Survey:

During the Fall 2012 survey biologists sampled at 18 groundfish stations in Louisiana's territorial sea and the adjacent EEZ (between latitudes 28° 14.95 and 29° 11.14 and longitudes -89° 30.00 and -91° 30.00). Totals of biological and length frequency will be available when data entry is complete. Louisiana also collected 7 plankton stations between latitudes 28° 30.00 and 29° 00.00 and longitudes -89° 30.00 and -91° 30.00.

Assessment of fish assemblages on artificial structures in the northern Gulf of Mexico:

This project includes the development and testing of methods for evaluating species distributions, diversity, and relative abundance, as well as the actual assessment of offshore fish communities residing on artificial structures. During the period of November 2012 – March 2013, biologists at the LDWF Fisheries Research Lab on Grand Isle, LA began analyzing video data for maximum counts of each species present. These maximum counts will be used as part of a Min-Max analysis, which helps refine abundance estimates. In addition, dive personnel continued training in preparation for the 2013 survey season and seven personnel obtained the Rescue Diver certification. Diver surveys of the project sites will resume the last week of February and continue through October 2013. This project is scheduled to complete in April 2014.

Green Stick:

Working in conjunction with the National Marine Fisheries Service Office of Highly Migratory Species, lab staff is characterizing the catch and bycatch of green-stick fishing gear when used to target Atlantic tunas in the northern Gulf of Mexico. Data collection focuses on reporting the features which contribute to the gear's success at catching target tuna species which include the types of artificial baits used, hook size, wind speed, water color, wave height, sea surface temperature and the location/description of capture. Data elements are also collected which characterize both target and non-target species caught (e.g. species, curved fork length, total length and total weight). In addition, data which characterizes the release condition of incidentally caught species is recorded in order to evaluate the gear's ability to provide lower incidental bycatch mortality. Lastly, economic variables are collected (e.g. total fish worth, fuel costs and bait costs) in order to evaluate the economic feasibility of using this gear type in the region. Since October 2012, LDWF biologists have conducted two sampling cruises, one in October and one in November. No fish were captured during the October, two-day sampling cruise. Two little tunny were captured as bycatch and were released alive during the November sampling trip. Greenstick cruises scheduled during December and January were cancelled due to inclement weather, and one sampling cruise is scheduled for March 2013.

Red Snapper Tournament Sampling:

Louisiana Department of Wildlife and Fisheries was issued an Exempted Fishing Permit by National Marine Fisheries Service in June of 2012 to allow for the collection of up to 1,600 red snapper, during the closed season, by recreational anglers at select fishing tournaments. The main objectives of this project are to broaden the existing dataset on red snapper life history by collecting specimens that are not regularly sampled, and to assess the viability of single-use tags as a management tool. LDWF has been working with the other four Gulf States fisheries department in the execution of this project and in the collecting of biological data, (including lengths, weight, sex, ovaries, otoliths, and tissue samples and the resultant age and reproductive data).

This project consists of five out-of-season tournaments, (originally it included seven, but a season extension incorporated two into the regular season) that took place between July 20th and October 31st. At the five tournaments sampled, 1,199 tags were handed out, resulting in 657 (55%) fish collected, 381 (32%) tags returned unused, and 161 (13%) missing tags (Table 1). Laboratory work-up of otoliths and ovaries is currently underway and will be completely in 2013. All data will then be made available for stock assessments of the Gulf of Mexico red snapper population.

Tarpon Tagging:

Lab staff participates in a Tarpon DNA Tagging project in partnership with the Florida Fish and Wildlife Conservation Commission and Mote Marine Laboratory. The objective is to calculate the geographic range of the Atlantic Tarpon using DNA fingerprinting techniques. This project will yield valuable information relating to the recapture rates and migratory paths. This project will also provide fishery managers with necessary information needed to make decisions regarding management of this species. Louisiana submitted 26 DNA samples back to Florida with no Louisiana recaptures as of yet. The project has had 143 recaptures to date. Outreach

efforts, such as Tarpon DNA Tagging Tournaments, are being planned for 2013 and will continue for this on-going study.

Larval Fish Traps:

LDWF biologists at the Grand Isle Fisheries Research Laboratory will begin studying the ontogenetic movements of ichthyoplankton moving into Barataria Bay on flood tides during full and new moons in March of 2013. Sampling will take place in both Caminada and Barataria passes, which are two of the major inlets leading into the Barataria Basin. Light traps will be used in shallower, less turbulent waters, in and around the passes to sample late stage fish larvae. A close-open-close plankton net will be used to characterize the assemblages of commercially and recreationally important fish larvae entering through Caminada and Barataria Pass, as well as to investigate the vertical migration of larvae in Barataria Pass.

Histology:

The Fisheries Research lab's recently installed histology section has processed a total of 706 fish gonad slides since October 2012. Staff have engrossed and processed 67 slides of red drum gonads while 30 amberjack slides, 321 vertical line samples and 201 red snapper tournament samples have been processed, embedded, cut, stained and cover slipped. In addition, 87 bottom long line samples were engrossed and processed, while 15 of these have been embedded, cut, stained and cover slipped. Analysis of slides relating to fecundity studies is ongoing.

Research Tank Systems:

The Lab designed, closed recirculation research tank systems and open flow race ways have been completed and are in use at the Grand Isle FRL. A recirculating tank system consisting of four 2,375gal, 10.5ft x 4ft tanks and a 600 gallon sump is pumped through 2 polygeyser bead filters and 4 UV sterilizers by two 5,400gph performance pro pumps. Using filtered bay water, this closed system provides over 10,000 gallons of parameter controllable water. This system is currently being used for ta tag retention study on spotted seatrout and future uses will include determining the best conditions for growth of various fish species, as well as for holding, growth, and larvae/fry rearing studies. A system consisting of eight 310 gallon tanks with similar pump and filtration is currently operating and housing various Gulf and Estuarine species for education and display uses. Also present are six fiberglass 165gal, 10.5ft x 30in x 12in raceway tanks which were installed as an "open" tank system. The raceway tanks, with the ability to pump a constant supply of bay water through the system, make for an idea set up for sorting, handling or holding species for study. In January of 2013 a 20.5' diameter panel tank was assembled and installed at the FRL increasing our total gallon and holding capacity, thus expanding our capabilities for future projects.

Micro Hatchery:

The micro-hatchery lab installation was completed at the FRL with the aim of producing artemia and rotifers as "first feed" for species reared at the FRL as well as supplemental food for the holding and display systems. A reverse osmosis deionized (RODI) system was installed capable of producing up to 300 gallons of laboratory grade, 18 mega ohm water/day. RODI water is circulated throughout the two hatchery rooms for use in cleaning, calibration of instruments, and mixing of synthetic sea water for the FRL. A synthetic saltwater production system was installed consisting of two 165gal tanks, UV sterilizers, 5 micron filters, and fluidized bed bio-filters. This

system produces biologically active and pH stabilized synthetic sea water ready for use in our phytoplankton and zooplankton cultures as well as the Lab's holding, display, and research tank systems and aquaria. Eighteen 2L separatory funnels were installed into shelves to be used as hatching vessels able to produce approximately 35 million *Artemia nauplii* per day. The use of many small funnels allows for daily adjustments in total production based on need, and/or spacing of hatching throughout a 24 hour period. Twelve, 5gal tanks are used for the continuous culture of rotifers, with each tank culture containing over 16 million rotifers. The ability to enrich rotifers, via feeding, allows for the delivery of the optimum nutrients required by the various potential species being held or cultured throughout the FRL. Mother cultures of the rotifer *Brachionus plicatilis* and the micro algae *Isochrysis galbana* are growing in the hatchery and cultures are being expanded in preparation for future project needs.

Artificial Reef Program

The Artificial Reef Program continues to assess and permit reef deployments related to offshore oil and gas structures. The Program has accepted 10 new structures and another 3 have been recently deployed. Forty-six (46) structures are permitted for deployment as permanent artificial reefs. Permitting of an additional 26 structures is currently underway. The multibeam surveying of the Program's offshore reefs has been completed and can be viewed on the Program's website. The Program is currently reviewing ROV video footage of 68 deployed artificial reef structures. The Program is also developing inshore reefs to facilitate access and create additional fishing opportunities. The Coastal Conservation Association of Louisiana deployed 10,003 tons of recycled concrete material from the old Buras High School within the newly permitted 33 acre California Point Reef in Breton Sound. Deployment of 5,000 tons of recycled bridge material is currently underway to create a reef between the two I-10 bridge sections being converted to a fishing pier in Lake Pontchartrain.

Shrimp Fishery

INSHORE SHRIMP SEASONS:

The fall inshore shrimp season opening dates were set by the Wildlife and Fisheries Commission (WFC) on August 2 and opened as followed:

- That portion of state inside waters from the Mississippi/Louisiana state line westward to the Atchafalaya River Ship Channel red buoy line opened at 6:00 pm August 13
- That portion of state inside waters from the Atchafalaya River Ship Channel westward to the Louisiana/Texas state line opened at 6:00 am August 13

The 6:00 pm fall inshore shrimp season opening east of the Atchafalaya River deviated from the traditional 6:00 am opening due to requests made by the Louisiana Shrimp Task Force to LDWF and by several shrimp fishermen attending the WFC meeting in August. Fishermen and task force members commented that white shrimp catch rates drop rapidly following the first few hours of daylight and a considerable amount of fuel is consumed trying to find shrimp schools before dropping anchor and waiting for darkness. They advocated that a 6:00 pm opening would allow fishermen to work continuously through the night, enhance catch rates and reduce fuel consumption and costs.

Due to large numbers of sublegal size white shrimp, the fall inshore shrimp season was temporarily closed in that portion of state inside waters from the western shore of Bayou

Lafourche westward to the Atchafalaya River Ship Channel red buoy line for a 2-week period beginning at 6:00 pm August 27 and ending at 6:00 pm September 10.

Fall inshore shrimp seasons were closed as follows:

- That portion of state inside waters west of the eastern shore of South Pass of the Mississippi River westward to the Louisiana/Texas state line closed to shrimping at official sunset December 18, 2012 except for the following waters:
 - o The portion of state inside waters within the Terrebonne Basin south of 29 degrees 13 minutes 00 seconds north latitude from 90 degrees 18 minutes 00 seconds west longitude westward to 90 degrees 34 minutes 00 seconds west longitude, and those inside waters south of 29 degrees 06 minutes 00 seconds north latitude from 90 degrees 34 minutes 00 seconds west longitude westward to 90 degrees 46 minutes 00 seconds west longitude which closed at official sunset December 20, 2012.
- That portion of state inside waters from the Mississippi/Louisiana state line southward to the eastern shore of South Pass of the Mississippi River closed to shrimping at official sunset January 18, 2013 except for the following waters:
 - o The open waters of Breton and Chandeleur Sounds as described by the double-rig line in R.S. 56:491(A).

OFFSHORE SHRIMP SEASONS:

Due to significant numbers of small, sublegal size white shrimp over-wintering in portions of state outside waters, the shrimp season in the state's territorial sea was closed as follows:

- That portion of state outside waters, south of the Inside/Outside Shrimp Line as described in LA R.S. 56:495 seaward a distance of three nautical miles, from the northwest shore of Caillou Boca at 90 degrees 50 minutes 27 seconds west longitude westward to the Atchafalaya River Ship Channel at Eugene Island as delineated by the Channel red buoy line closed to shrimping at official sunset on December 18, 2012.
- That portion of state outside waters, south of the Inside/Outside Shrimp Line as described in LA R.S. 56:495 seaward a distance of three nautical miles, from the Atchafalaya River Ship Channel at Eugene Island as delineated by the Channel red buoy line westward to the western shore of Freshwater Bayou Canal at 92 degrees 18 minutes 33 seconds west longitude closed to shrimping at official sunset January 7, 2013.

LANDINGS:

Preliminary statewide brown and white shrimp landings (heads-on weight) for January-October, 2012 totaled 27.7 and 54.6 million pounds, respectively. Excluding 2010, brown shrimp landings through the first nine-months of 2012 rank as the lowest total among the past 13-years examined and are approximately 38% below the 13-year average of 42.5 million pounds. The most significant declines occurred in May and June, which are historically the two highest landings months of the year.

White shrimp landings through September rank four highest among the last 13-years and are approximately 15 percent higher than the 13-year average. Hurricane Isaac has caused considerable damage to infrastructure supporting the shrimp fishery in Jefferson, Plaquemines, St. Bernard, Orleans, St. Tammany and St. John the Baptist Parishes. As a result, Governor Bobby Jindal formally requested the Secretary of Commerce to declare a fishery failure and enact fishery disaster assistance clauses in the Magnuson-Stevens Fishery Conservation and

Management Act to assist impacted fishermen and the commercial fishing industry. However, to date, Congress has yet to authorize any funding for this assistance.

The LDWF continues to encourage and receive reports of Asian tiger prawns (*Penaeus monodon*) in commercial shrimp catches. All reports continue to be forwarded to the USGS for inclusion in their database and LDWF is continuing to encourage fishermen to report captures.

The Louisiana Shrimp Task Force met on November 21 and discussed proposed changes to skimmer net regulations, proposed changes to federal TED regulations, experimental shrimp gear permits, enhanced management opportunities Louisiana Seafood Academy, fisheries improvement program and the Louisiana Certified Seafood program.

Crab Fishery

The Louisiana Crab Task Force last met on December 6, 2012. Discussions included potential changes to the serviceable crab trap law, nominees to the Louisiana Seafood Promotion and Marketing Board and a proposed Wildlife and Fisheries Commission resolution endorsing the Louisiana Blue Crab Stock Assessment as the best available information on the fishery. This proposed resolution would allow the Commission to take necessary management actions should the blue crab stock approach the overfished or overfishing limits defined in the assessment. However, a quorum of Task Force members was not present and the resolution did not receive an endorsement from the Task Force. The Task Force is scheduled to meet on February 26 and plans are to again include this item to their agenda.

In December, 2012, the LDWF initiated a coastwide crab trap bycatch survey designed to collect and analyze data incidental bycatch in commercial blue crab traps with special emphasis on diamond back terrapins (*Malaclemys terrapin*). Trap sets will be deployed twice monthly in each coastal basin over a 30 month period to account for inter annual variation and to incorporate refinements in study design.

In January, 2013 a final rule was ratified and published in the state register that closes a portion of Plaquemines Parish east of the Mississippi River to the use of crab traps for purposes of a trap clean-up over a 9-day period beginning at 6:00 am Feb. 16, 2013 through 6:00 am February 25, 2013 as well as a portion of St. Bernard Parish over a 9-day period beginning at 6:00 am Mar. 9, 2013 through 6:00 am Mar. 18, 2013. All crab traps must be removed from the closure area during the closure period and any remaining crab traps within the closure area during the closure period will be considered abandoned and subject to removal. However, crab fishermen will be allowed to remove their traps from the water and stack them on the bank within the closure areas, provided they have permission from the landowner. During the crab trap closures, traps may be removed only between one-half hour before sunrise to one-half hour after sunset. Anyone may remove these abandoned crab traps from within the closed area. Abandoned traps must be brought to LDWF designated disposal sites and may not be taken from the closed area.

A mailout announcing the closures with maps and descriptions was mailed in January, 2013 to approximately 3,100 resident commercial and recreational crab trap license holders and wholesale/retail seafood dealers located in Plaquemines, St. Bernard, Jefferson, Orleans, and St. Tammany parishes.

LDWF is again partnering with Louisiana Sea Grant for the 2013 crab trap removal efforts. Louisiana Sea Grant will help organize volunteers, provide educational outreach on marine debris, as well as establish a recycling effort for crab traps.

Oysters

Biological Monitoring:

LDWF biologists continue to perform both fisheries independent and dependent sampling on the public oyster seed grounds. Dredge sampling during the fall and winter have yielded a continuation of troubling reproductive failures in some areas of the public oyster seed grounds east of the Mississippi River in Plaquemines Parish as very few oyster spat were observed in the southern portion of the Breton Sound basin. In the northern portion of this basin (between the Mississippi River Gulf Outlet to the north and Stone Island to the south), however, sampling showed the presence of a strong spat set in October. Continued monthly sampling has shown troubling signs of spat mortality with the loss of over 50% of these spat in December 2012 sampling. In public areas west of the Mississippi River, dredge sampling has shown normal oyster population dynamics. Data from Hackberry Bay and public oyster grounds in Terrebonne Parish indicate low oyster mortality and healthy oyster populations.

2012/2013 Oyster Season:

A portion of the public grounds were opened on September 5, 2012 for the harvest of seed oysters only and the majority of the remaining public oyster areas were opened to commercial harvest of both seed and market-size oysters on October 29, 2012. LDWF biologists have completed weekly boarding surveys of commercial vessels fishing on the public grounds and documented very low harvest effort. As of January 31, 2013, total public ground harvest was approximately 81% below the 2011/2012 oyster season with the majority of the harvest occurring in Calcasieu Lake. Of the estimated 42,000 sacks harvested, the traditional primary public oyster seed grounds east of the Mississippi River in St. Bernard and Plaquemines contributed less than 6,000 sacks.

Cultch Planting:

This oyster enhancement technique continued in the fall of 2012 as two cultch plants were completed. Two additional cultch plants, Drum Bay and 3-Mile Bay, are in the bid process and bids will be opened on February 26. These projects are planned for construction in the spring of 2013.

Oyster Hatchery Activities:

The LSU Bivalve Hatchery located at the LDWF Fisheries Research Laboratory on Grand Isle, Louisiana provided nearly 12 million oyster spat and approximately 300 million oyster larvae for oyster rehabilitation projects in public oyster areas. Two cultch planting projects that occurred previously in the fall of 2011 in Mississippi Sound (St. Bernard Parish) and California Bay (Plaquemines Parish) have shown poor oyster recruitment results to date and hatchery-raised spat have been deployed at these locations through the summer. The oyster larvae produced by the hatchery were deployed in Calcasieu Lake east of the ship channel. This area has shown poor oyster recruitment over the last two years and it is hoped that the addition of hatchery-raised oyster larvae will reverse this trend. Biological sampling has occurred on these locations and no

significant difference in oyster spat abundance between treated (sites where spat/larvae were deployed) and un-treated (no deployments) sites has been found to date. An LSU graduate student who works for the hatchery is continuing to analyze the sampling data and will provide results of those analyses in the summer of 2013.

Finfish

Final rules requiring a no cost Recreational Offshore Landing Permit published in the December 2012 Louisiana State Register. Recreational anglers and charter captains must now have a Recreational Offshore Landing Permit when landing tunas, swordfish, billfish, snappers (except gray), amberjacks, groupers and hinds. Permit rules also require the reporting of all recreationally landed yellowfin tuna prior to offloading. Charter captains are permitted to use a LDWF issued landing tag and may report landings after offloading yellowfin tuna. Along with the publication of final rules requiring this permit and yellowfin tuna reporting, LDWF launched a website, a toll free phone number, an Android application and an iPhone application to facilitate permit registration and yellowfin tuna reporting. Information regarding the program can be found at www.wlf.la.gov/rolp . Public meetings were held regarding the new program, news releases were issued and letters were sent to all reef fish and highly migratory species permitted charter/headboat operators.

The LWFC, at its December meeting, adopted a Notice of Intent to modify existing rules for the harvest of large coastal sharks. Proposed rule modifications would adopt a 36 shark possession limit consistent with federal regulations. At that same meeting the LWFC also adopted emergency rules allowing the 36 shark limit to be in effect immediately with the current season.

All Louisiana waters closed to the commercial harvest of small coastal sharks on December 31, 2012 consistent with federal regulations.

All Louisiana waters closed to the commercial harvest of spotted seatrout on December 31, 2012 and re-opened on January 2, 2013.

All Louisiana waters closed to the commercial harvest of striped mullet with a mullet strike net on January 16, 2013.

All Louisiana waters were opened to the commercial harvest and possession of small coastal and large coastal sharks on January 1 consistent with federal regulations.

The LWFC set the 2013-14 commercial king mackerel season to open July 1, 2013 consistent with federal regulations.

The LWFC set the 2013 recreational greater amberjack season with creel and size limits consistent with federal regulations, including the June through July closure.

The LWFC set the 2013 commercial greater amberjack season consistent with federal regulations, including the adoption of emergency rules to implement the 2,000 pound commercial trip limit.

An annual Assessment of Striped Mullet in Louisiana Waters was completed and presented to the LWFC on February 7, 2013 prior to transmittal to the Louisiana Legislature. Based upon this assessment of striped mullet, for all natural mortality rates examined, if fishing mortality rates continue at current levels, then striped mullet are not being harvested at a rate that would drive the stock below the target SPR of 30% established by the Louisiana Legislature.

The final rule modifying state reef fish harvest regulations to implement a weekend only Louisiana State waters recreational red snapper season beginning on the Saturday preceding Palm Sunday and ending September 30 of each year were published in the Louisiana State Register on February 20. The season will allow a recreational bag limit of three red snapper per day at 16 inches minimum total length. A weekend would be defined as Friday, Saturday and Sunday, with the exception of the Mondays of Memorial Day and Labor Day which would also be classified as a weekend. The rule also includes provisions allowing the Secretary of the Department to modify the portions of that rule pertaining to red snapper recreational harvest limits and seasons if the National Oceanic and Atmospheric Administration Fisheries Service institutes sub-regional management for red snapper or as the Secretary otherwise deems necessary.

LDWF Fisheries staff is participating in the Southeast Data and Assessment Review (SEDAR) 32A assessment workshop for gulf menhaden. Fisheries staff also continues to participate in the Flounder FMP Revision TTF.

LDWF Fisheries staff attended the NOAA Highly Migratory Species Advisory Panel January meeting in Silver Spring, Maryland.

Texas – **M. Ray** presented a report on behalf of the Texas Parks and Wildlife Department (TPWD).

REGULATORY ISSUES

Proposals for the 2013 Legislative Session: House Bill 1903 has been filed in the current Texas legislature by Rep. Craig Eiland, Galveston, (companion bill Senate Bill 694 by Tommy Williams, Houston area). This bill would re-allocate a portion of the \$0.33 per sack fee paid by oyster dealers to help cover water sampling costs by the Department of State Health Services to fund laboratory testing by Texas A&M University-Galveston of post-harvest processed oysters. Additionally, this bill provides language that would allow any remaining surplus funds to be allocated to the Oyster Shell Recovery and Replacement Program that's facilitated by TPWD.

TPWD is working with the Texas Legislature to modify the Department's current appropriations authority for the Oyster Shell Recovery Program, approved during the 2011 legislative session. The Department is seeking the authority to expend all funds received for this program which is currently capped at \$50,000 per year. Funding for this program comes from a \$0.20 Oyster Harvester Tag that is required to be affixed to each sack of oysters at the time of harvest.

Regulatory Changes and Proposals: During January, scoping meetings were conducted in Dickinson, Corpus Christ, and San Antonio to receive feedback on possible regulation changes for 2013-2014. Coastal Fisheries is interested in comments regarding a recreational possession limit clarification and clarification of language regarding fish harassment. Removing the

prohibition regarding simultaneous possession of the red drum tag and bonus red drum tag is also being considered. Additionally, TPWD is also scoping a change that would make it a state violation for possession in state waters of aquatic resources taken in violation of federal regulations in the EEZ.

A proposed amendment would create a new definition for “residence.” The intent of the current definition of “permanent residence” is to prevent the use of temporary accommodations as final destinations for purposes of avoiding compliance with possession limits and documentation requirements. The department considers that a person may maintain more than one residence and should not be required to return to his or her domicile with a daily bag or possession limit. Therefore, the department has determined that the current rule is unintentionally restrictive and proposes a modification to define a “residence” as “a permanent structure where a person regularly sleeps and keeps personal belongings such as furniture and clothes,” while retaining the current prohibition on temporary abodes or dwellings such as a hunting or fishing club, club house, cabin, tent, or trailer house or mobile home used as a hunting or fishing camp, or any hotel, motel, or rooming house. The proposed amendment would eliminate the current reference to “hunting, fishing, pleasure, or business trip” and replace it with “temporary basis.” The department has determined that the rule should not attempt to characterize or list the possible purposes for the use of an accommodation but instead establish the permanency of use.

On 8 February 2013, the Gulf of Mexico Fishery Management Council passed a motion that would grant authority to the NMFS Southeast Regional Administrator to shorten the red snapper season in the EEZ for states whose regulations are inconsistent with federal rules for red snapper. These accountability measures would have a very significant impact on Texas, potentially reducing the 2013 federal season in the EEZ for red snapper from 27 days to 11 days and resulting in \$17 million in lost retail sales.

COASTAL FISHERIES PROGRAMS & PROJECTS

Hatchery Highlights: Exceptional drought conditions across the state of Texas continue to impact hatchery operations at all three saltwater hatcheries. Hatcheries incoming seawater salinities were very high (35-58 ppt) along the lower Texas coast during 2012. Without significant rainfall in 2013, hatchery production may be significantly limited.

Staff members continue refining southern flounder broodfish spawning techniques, larviculture, and fingerling grow-out methods.

On 23 February, Sea Center Texas celebrated its 20th anniversary, in conjunction with TPWD's 50th anniversary, with a Nature Day Event that was attended by over 800 people and an array of accomplished speakers. Fifteen natural resource organizations served as exhibitors and provided hands-on family activities, including a youth fishing activity and a wetland scavenger hunt.

Current 2013 Fish Stocking Total: Southern flounder = 9,517

Genetics Research: Sample collection and processing for alligator gar genetic variation studies is continuing.

Samples were collected, processed and analyzed for a SWG grant on mid-coast oyster genetics, and a final report was drafted.

A genetic survey of gulf menhaden along the Texas coast was continued, sample collection and processing is ongoing.

A manuscript on the genetics of Green sea turtles continues to be in press for a peer-reviewed journal.

Life History Research: Gray snapper samples continue to be processed for a life history study.

Routine monitoring otolith collection and aging from gill net samples continued, as was processing and aging of otoliths collected in previous years.

The GSFC funded FIN-Biological Sampling project for otolith collection and processing for various marine species was continued, collection of samples for 2012 was completed, and all samples and data were successfully processed and entered in the FIN database.

Juvenile red drum temperature and salinity tolerance trials for a SWG grant project were conducted and a report was written.

Temperature and salinity tolerance trials for larval flounder were conducted, and results were summarized.

A study on potential sex determination of alligator gar based on snout length comparison to body measurements was initiated.

Artificial Reef Program - RIGS-TO-REEFS: During October 2012 through February 2013, 5 petroleum platforms were reefed, generating \$805,000 in donations. Another 10 new projects began and are in various stages of completion.

In January, the Saltwater-Fisheries Enhancement Association was instrumental in getting Hanson Pipe and Precast to donate over 2,000 tons of concrete culverts and deliver them to the reef material storage site at the Port of Corpus Christi that has been leased from the TxGLO by the City of Corpus Christi, where Gulf Coast Crane Services unloaded the materials at cost. These materials include approximately 100 culverts that range in size up to 10ft x 8ft. Several thousand more culverts have been ear-marked for delivery this year. The storage site has been leased from the TX GLO by the City of Corpus Christi. The Artificial Reef program awarded Callan Marine, Galveston, a contract to build 400 pyramid reefs, which will be deployed to the Corpus Christi Nearshore Reef for \$634,000. Coastal Conservation Association has ear-marked another \$100,000 towards this Corpus project. When all this material is finally reefed at the 160 acre nearshore reef, it will create a great fishing opportunity for residents and the habitat value will be tremendous.

Several Eternal Reefs were placed at the Freeport Liberty Ship reef site in Federal Waters on 29 October 2012. Due to conflict with the TX General Land Office, Eternal Reefs are not allowed to be reefed in state waters as the GLO insists this would constitute the creation of an underwater state cemetery; deployment of these reefs outside state waters avoids this restriction.

HI-A-389A & FLOWER GARDENS NATIONAL MARINE SANCTUARY: The discussion of HI-A-389 (large 8-pile) and how and where the reefing might happen continues. HI-A-389 is located in the Flower Gardens National Marine Sanctuary (FGBNMS) and if the structure base was left in place. TPWD has a draft agreement with W&T Offshore to tow it to HI-A-349 but that agreement has not been finalized. Ultimately the discussion rests with W&T Offshore. If the structure is reefed in place and monitoring is required, a decision will need to be made on who would do the monitoring and how it would be funded. Funding for the monitoring would be through the W&T Offshore donation. Recent discussions with the FGBNMS and TPWD ARP have resulted in a possible compromise on the degree of monitoring required to a level that may be feasible to carry out. The habitat at the platform is of significant value and corals are growing on the cross members. Divers frequently witness turtles, whale sharks, and manta rays at the site in addition to the tremendous amount of fish and invertebrate marine life. A suitable resolution to HI-A-389 may determine how other structures in the Sanctuary are handled for future reefings.

As of February 2013, there are over 400 “likes” on the Artificial Reef Program Facebook page, <https://www.facebook.com/TexasParksAndWildlifeArtificialReefProgram>. There is hope to use this as a method of outreaching to the public and letting them know when we are reefing, diving, or working on important projects.

In late November, the new Artificial Reef Program website went live. There are still a few tweaks to be made to correct a few items but overall it is functioning well. It can be accessed at: http://www.tpwd.state.tx.us/landwater/water/habitats/artificial_reef/

Coastal Fisheries staff participated in an offshore Gulf of Mexico Foundation Industry/Agency cruise in the vicinity of the Flower Gardens National Marine Sanctuary (FGBNMS). Dr. Quenton Dokken of the Foundation arranged for the trip on the M/V Fling. There were 18 divers from various entities including: FGBNMS, TPWD, Gulf of Mexico Foundation, Bureau of Safety and Environmental Enforcement, Sea Jay Environmental, Petroleum Companies (Hess, BP, W&T Offshore, ConocoPhillips, Anadarko, Chevron), UT-Brownsville, and Louisiana Wildlife and Fisheries Artificial Reef Program.

Coastal Fisheries staff participated on a Gulf of Mexico Foundation Film Cruise in which artificial reefs and natural reefs were filmed for upcoming television public service announcements that will emphasize artificial reefs and the amount of marine life they preserve.

Buyback Programs: Since October, TPWD has opened a buyback round for commercial shrimp, crab, and finfish licenses utilizing donated funds. It has not officially closed, but we did see an increase in crab buyback applications. Otherwise, this buyback round has been small and steady as it has been the past few years.

SPECIAL EFFORTS, STUDIES, AND TOPICS

In late November 2012, streaks of discolored water inside Corpus Christi Bay were reported but no other impacts, such as fish kills or respiratory effects, were reported. Water samples collected by TAMUCC found both *Karenia brevis* and *Karenia mikimotoi*, each at concentrations of ~50/ml. Texas Department of State Health Services was notified, and on 3 December 2012, the approved area of Corpus Christi Bay was closed to the harvesting of shellfish due to elevated cell counts.

TPWD continues to work with NOAA Fisheries Marine Mammal staff and USFWS Wildlife and Sport Fish Restoration staff to address concerns with the Coastal Fisheries' marine mammal Incidental Take Authorization application.

Dr John Gold, a Texas A&M University Regents Professor, received a \$218,000 grant from the National Oceanic and Atmospheric Administration's (NOAA) National Sea Grant Program Office to use recent advances in technology that should show the extent of the genetic differences between populations of red drum living in different bays and estuaries. He will test whether red drum populations are genetically linked to specific bays or estuaries along the U.S. Gulf of Mexico Coast, which could possibly increase the profitability of fish farming and streamline governmental permitting processes. The two-year grant is part of the 2012 National Sea Grant Aquaculture Research Program, which funds projects that support the development of environmentally and economically sustainable ocean, coastal or Great Lakes aquaculture in states with Sea Grant Programs. The Texas Sea Grant College Program is based at Texas A&M University.

OTHER

In January, Coastal Fisheries was awarded a \$500,000 federal grant from the National Coastal Wetland Conservation Grant Program administered by the U.S. Fish and Wildlife Service. The funds will be used to restore and enhance approximately 27 acres of estuarine intertidal emergent wetlands and tidal channels along the Dickinson Bayou part of the Galveston Bay estuary as part of the Dickinson Bayou Wetland Restoration Project. This project also will improve water quality and enhance recreational fishing and birding opportunities for the public. The project is part of \$20 million in grants to 24 critical coastal wetland projects in 13 states and territories and was the only award given in Texas.

In January, Coastal Fisheries staff participated in the "Drought Impact and Recovery in Texas Estuaries" workshop in Houston. The goal of the workshop, co-sponsored by NWF, TPWD, TWDB, LCRA and the Harte Research Institute, was to bring together bay and estuary scientists to share research findings on the impact of the Texas drought and to identify and prioritize future data needs regarding monitoring drought impacts.

Future Meetings

G. Herring reported that a site for the Annual meeting to be held in Texas October 15-17, 2013 has not been finalized but after discussion with the Texas Commissioners, South Padre Island has been selected for the location.

The Annual Spring meeting to be held in Louisiana March 18-20, 2014 has not been finalized.

Review of State Representation on GSMFC Committees

A complete listing of State representatives on the various GSMFC Committees was provided for informational purposes. This listing will be updated annually or as needed.

Publications List

A new listing of publications was provided for informational purposes.

There being no further business, the meeting adjourned at 1:48 pm.

APPROVED BY:
Leslie D. Hart
COMMITTEE CHAIRMAN

**GULF & SOUTH ATLANTIC REGIONAL PANEL
ON AQUATIC INVASIVE SPECIES
MINUTES**

**Wednesday, April 10, 2013 & Thursday, April 11, 2013
Atlanta, GA**

On Wednesday, April 10, 2013 Chairman Hartman called the meeting to order at 8:30 a.m. The meeting began with introductions of the members and guests. The following were in attendance:

Members & Proxies

James Ballard, GSMFC, Ocean Springs, MS.
Tim Bonvechio, GA DNR, Waycross, GA
Robert Bourgeois, LA Dept. of Wildlife & Fisheries, Baton Rouge, LA
Earl Chilton, TPWD, Austin, TX
Rob Emens, NC DENR, Raleigh, NC
Chris Furqueron, National Park Service, Atlanta, GA
Lisa Gonzalez, HARC, The Woodlands, TX
Leslie Hartman, TPWD, Palacios, TX
Jeffrey Herod, USFWS, Atlanta, GA
Chuck Jacoby, Indian River Lagoon National Estuary Program, Palatka, FL
David Knott, At-Large Member, Charleston, SC
Herb Kumpf, At-Large Member, Stuart, FL
Robert McMahan, UT Arlington, Arlington, TX
Dennis Riecke, MS DWFP, Jackson, MS
Don Schmitz, FWC, Tallahassee, FL
John Teem, FL DOA, Tallahassee, FL

Staff

Ali Catchot, GSMFC, Ocean Springs, MS

Others

Lad Akins, REEF, Key Largo, FL
Susan Mangin, USFWS, Arlington, VA
Gregory Moyer, USFWS, Warm Springs, GA
Mike Pursley, MDMR, Biloxi, MS

Public Comment

Chairman **Hartman** provided the opportunity for public comment. No public comments were received.

Adoption of Agenda

A motion to adopt the amended agenda was made, and passed unanimously.

Approval of Minutes

The minutes of the meeting of the October 11, 2012 meeting in New Orleans, LA were presented for approval.

A motion was made to approve the minutes. The motion was seconded, and the motion passed.

Overview of the Asian Swamp Eel Project

J. Herod gave a PowerPoint Presentation entitled “Local Area AIS Control Plan: Swamp Eel”.

Asian swamp eels are similar to the American eel, lampreys, and salamanders. Possible sources of introduced populations are from Korea, Japan and China. They are opportunist predators, consuming a wide range of prey, including aquatic invertebrates. The eels spawn in the summer. They are hermaphroditic. They mature as females, and some later become males. Their populations are dominated by females. Their habitat is tropical and temperate freshwater systems. They have a high tolerance for temperature change and have the potential to spread across a large portion of the United States. Swamp eels also pose a threat to humans and other vertebrates because they are vectors of non-native parasites. Live swamp eels sold in markets in Southeast Asia are commonly affected with nematodes of the genus *Gnathostoma*. The eels are also a general predator that feed on largemouth bass.

In 1994, eels were found in a Chattahoochee Nature Center pond. It is thought that they were spread into surrounding ponds and marsh areas by dumping. In 2000, eels were found in three more ponds. In 2005, eels were persistent in three ponds, and the Chattahoochee River marsh area. Leaf litter traps were set out, and many juvenile eels were found in them.

Ponds have been renovated by outflow alteration to deepen the water and alter the eel habitat to make it unfavorable. However, no follow-up was done.

In 2008, specimens were collected from mid-July to late August in the Chattahoochee River Marsh area. Otoliths were examined to determine daily age and hatching timing.

Future plans include: Reinvigorate interest by NPS and USFWS in 2012; determine current distribution in the Chattahoochee River and tributaries; understand population demographics for a control project; gather a panel of experts to inform the plan; develop a suite of population control measures; develop an exploit model; monitor population demographics for response.

Overview of the Satilla River Flathead Removal Project

Bonvechio gave a PowerPoint Presentation entitled “Satilla River Flathead Catfish Removal Spring 2013 Update”.

The first confirmed flathead catfish was caught in June 1996. It was tied back to initial 1994 year-class with lapilla otoliths.

The Rooster Red Sunfish have almost disappeared from the Satilla River due to consumption by flathead catfish. Impacts on other native fish species have also occurred and were documented in publications.

There are no regulations in place for the removal of flathead catfish from the Satilla River. A full-time removal crew was assembled by the GA DNR in 2006. Volunteers also assist with the removal project.

Flatheads are captured using boats rigged with low amperage electrofishing. As the catfish come to the surface, they are caught in nets and removed. Electrofishing is broken down into 11 river stretches encompassing a total of 129 river km.

To date, 45,043 fish have been removed from 1996-2012. All proportional stock densities have declined. Mortality rates have been high.

There appears to be a shift in sexual maturity.

An Atlantic Sturgeon was found in the stomach of a flathead catfish.

Blue catfish were captured in 2011 in the Satilla River, possibly via inter-coastal. None were found in 2012.

Redbreast sunfish have been impacted by the flathead catfish invasion. Their sizes have been reduced significantly.

Maintenance control of the flathead catfish in the Satilla River is possible. An electrofishing removal program is a reasonable management option for state agencies.

Experimental Use of a UAV Camera Platform for Detection of AIS

Pursley gave a PowerPoint Presentation entitled "Experimental Use of a UAV Camera Platform for Remote Early Detection of AIS". Post-Katrina salvinia eradication efforts are ongoing. There are 1,000s of acres of inaccessible marsh habitat possibly harboring giant salvinia. They were able to remain dormant from 2005-2011. Other small patches may remain hidden in Pascagoula River marsh. Conventional water craft cannot access the areas.

Marsh searches can be extended by using a remote controlled DraganFlyer X6 helicopter. It is rechargeable, stable, and easy to fly. It takes 10MP geo-referenced images. The cost is approximately \$27,500.

An unanticipated setback occurred after the order was placed for the helicopter. State and federal agency use in NAS is regulated. Commercial use is prohibited. These FAA regulations were not learned of until after the order for the helicopter was placed. A COA (Certificate of Authorization) is required. The cost to hire a contractor to apply for a COA is over \$20,000. Six months later, the COA was obtained. However, there were conditions attached to the COA that were not revealed prior to application. An experienced and qualified UAV crew was found to instruct on how to fly the helicopter.

Several flights were performed. Small clusters of salvinia were detected at altitudes of 20-30 feet.

Update – Reproductive Sterility as a Tool for Prevention/Control of AIS

Teem gave a PowerPoint Presentation entitled “Reproductive Sterility as a Tool for Prevention and Control of Invasive Aquatics”.

The U.S. currently allows only *P. brigesii* to be sold and shipped in the U.S. They are produced in Florida and leave aquatic plants intact. However, *Asolene spixi* eats aquatic plants and is no longer in the trade. Studies are being conducted to determine if reproductively-sterile *P. brigesii* and *A. spixi* can be produced as new ornamental snail products. Sterile *P. brigesii* could be sold without any requirement for USDA approval. Sterile *A. spixi* cannot be sold without USDA approval. The question is whether or not there would be a potential market for these two sterile snails.

Irradiation of chromosomes produces translocations that pair abnormally during meiosis. The snails are irradiated, the irradiated snail is mated to a wildtype, the eggs are collected, and a determination is done to see if eggs hatch into snails that survive. The viability of irradiated *P. brigesii* adults decreases at doses of radiation above 130 Gy. Mortality is high when snails are irradiated to produce translocation chromosomes.

Directed recombination is being investigated as an alternative to irradiation treatment to produce chromosomal translocations. Getting DNA components into snails is done by transfecting DNA into snail tissue, then mating the transfected snail. The eggs are collected for DNA. The gene expression is detected, and the DNA is detected by PCR. Studies are being done to determine if GFP plasmid DNA can be introduced into snails so that they can be easily identified by green fluorescence. Males transfected with DNA are viable and fertilize females to produce viable eggs. GFP-transfected snail hatchlings can be viewed under UV light to look for green fluorescence. No green GFP-positive hatchlings have been detected as of yet.

Update – Trojan Y Chromosome Eradication of Invasive Fish Project

Teem gave a PowerPoint Presentation entitled “Trojan Y Chromosome Eradication of Invasive Fish: Sex-specific DNA Markers for Tilapia”.

Females with two Y chromosomes produce only progeny, half of which are Myy. Myy males are viable and produce only male offspring. Four different matings are possible (Fyy; Fxx; Mxy; Myy), which leads to increased male production. The male/female ratio will increase over time if Fyy is added. The addition of a Trojan Y female (Fyy) to a target population will cause females (Fxx) to become extinct over time. The carrying capacity of the system becomes occupied by Myy fish (males with two Y chromosomes).

Sex-specific DNA markers can greatly reduce the time required to generate YY fish by allowing YY genotypes to be detected by DNA analysis instead of test crosses.

The production of YY fish requires selective breeding and the use of hormone-induced sex reversal techniques.

For some fish, sex-specific DNA markers have been identified by using the RAPD PCR method. Three invasive fish species were screened for sex-specific DNA markers using RAPD PCR: Nile Tilapia; African Jewelfish; Silver Carp. African Jewelfish have been the first priority because broodstock are being developed for this species by USGS. A DNA pool is created from only females, and another from only males. Each pool is tested with PCR using a collection of short DNA primers that will amplify sequences at different locations in the genome. For each primer, female-specific DNA amplified products are compared with male-specific amplified products using gel electrophoresis. The goal is to find a primer that gives a band in one DNA pool, but not the other pool.

No sex-specific markers have been identified as yet for any of the three species. Experiments to determine the sex-determination system for African Jewelfish are in progress in collaboration with USGS.

Discussion of the Draft GSARP Research Priorities List

Ballard spoke on the creation of the GSARP Research Priorities List. Eighteen priority items are listed, and each one was discussed by the committee members. After numerous suggestions from the members, changes were made to the list. It was also decided that the name of the list should be changed to "GSARP Research Management Priorities".

Ballard also provided a list of GSARP ANS research needs by state, and the members discussed the list. Suggestions were made, and it was decided that further discussion would be done during the work group session on Thursday, April 11.

Update on AFS AIS Resolution

Riecke reported that the Resolution on the Federal Funding for Programs to Prevent, Control, and Manage Aquatic Invasive Species was adopted by the Southern Division American Fisheries Society on January 27, 2012. The key provision urges Congress of the U.S. to appropriate \$59,000,000 funding on an annual basis for Regional Panels and State/Interstate Plans for prevention, control, and management of nonnative aquatic invasive species. A similar Resolution was adopted by the Parent Society of the American Fisheries Society on March 6, 2013. The key provision urges Congress of the U.S. to appropriate \$61,000,000 on an annual basis to fund the Regional Panels, the State/Interstate Plans, the Quagga-Zebra Mussel Action Plan, and to fund the USGS Aquatic Nuisance Species Database for prevention, control, and management of nonnative aquatic invasive species. It was adopted by the Southern Division American Fisheries Society on February 8, 2013. The key provision urges Congress of the U.S. to appropriate \$286,000,000 over 20 years to fully implement all the strategies and recommendations contained in the *Management and Control Plan for the Bighead, Black, Grass, and Silver Carps in the United States* as approved by the Aquatic Nuisance Species Tack Force in 2007. This resolution is currently being considered by the AFS Parent Society Resolutions Committee. It will be sent to the AFS membership in 2013 for a 30-day online comment period and a 30-day voting period. If passed, it will be posted online and published in *Fisheries*.

Riecke provided a written synopsis of the resolutions in each member's folder, and listed links to view the resolutions, justification, and cited literature.

National Invasive Lionfish Prevention and Management Plan Update

Ballard reported that the update is near completion, and reminded the members to email their drafts to him.

The Plan will hopefully be finalized this summer, and will be presented to the Task Force for approval at their Fall meeting.

FY12 USFWS Region 4 AIS Program: Collaboration, Coordination, and Cooperation on AIS Issues

Herod gave a PowerPoint Presentation entitled "FY2012 USFWS R4 AIS Program: Collaboration, Coordination, and Cooperation on AIS Issues". He reported that there has been a lot of progress on State ANS Management Plans in the last 3-4 years. He stated that there are 41 approved plans – 38 state, and 3 interstate.

There have been 49 new species introduced to Region 4 since 2000. These species have never been collected from any of the states in Region 4. Since 2000, 160 species were recorded as new to a particular state, either spread of an established population, or new introductions. Puerto Rico and the Virgin Islands experienced the largest proportional increases. In terms of total number of species, the two highest were Florida and Puerto Rico.

Early detection and planning efforts include: the development and enhancement of molecular detection and surveillance tools for invasive fishes in freshwater habitats in the southeast; the expansion of USFWS eDNA monitoring capabilities for aquatic invasive species in Region 4; refinement of NAS data for SARP use.

Control and research include: the Mississippi Bight Lionfish Response Unit, which is a joint taskforce to combat lionfish populations in the Gulf of Mexico; phylogeographic analyses to identify dispersing, reproducing and founding populations of Asian tiger shrimp; investigating management of invasive apple snails by using chemical and biological control methods; biology and ecology of non-native aquatic species in Florida.

Herod explained that a regional biosecurity framework is needed that consists of: an EDRR Plan; ICS training; regional perspective on national issues; surveys; control plans and pilot projects; species-specific risk assessments/management; pathway risk assessments/management; GSARP priority species and science needs.

Future directions for FY2013-2014 in the southeast include WIT training, lionfish workshops, Asian carp impacts/potential spread, eDNA, National Invasive Lionfish PMP, snakehead NMP, and a national Asian carp surveillance plan.

Herod stated that continued support is needed for state ANS coordinators and invasive species plans/strategies; to prevent AIS introductions regionally through RA/RM focused on pathways; to provide resources and education to develop capacity in the region for prevention, detection,

and control; to test all biosecurity elements on a suite of species; capacity building for ED (eDNA and WIT); to complete the EDRR plan and find resources to run drills.

Critical Keys to Success Learned from Florida's Aquatic and Wetland Invasive Plant Management Program in Public Natural Areas and Why Invasive Plant Research and Outreach are Essential for Advancement

Schmitz gave a PowerPoint Presentation entitled "10 Critical Keys to Success Learned from Florida's Aquatic and Wetland Invasive Plant Management Program 1970 – 2012".

Aquatic invasive plants and animals were introduced into Florida through different pathways: captive wildlife escaped or were released; tourists; fish farms and aquatic plant nurseries; ballast water; cultural introductions; contaminants. Florida has a large ornamental plant industry. There have been over 1 thousand plant species introduced into Florida, and 124 are considered invasive. Several invasive plant species have affected over 1 million acres.

Critical Key #1 is to designate a lead state or provincial agency that is responsible for IPM. The Florida FWCC is designated by the Florida Legislature as the lead agency for coordinating and funding two statewide control programs on PCLs and waterways for invasive aquatic and wetland plants and upland invasive plants. The lead agency coordinates management operations; coordinates inventories; handles statewide goals, plans, and priority fund distribution; reduces administrative costs.

Critical Key #2 is that IPM funding is the key to success. Funding in the amount of \$23 million has been spent for FWC aquatic plant management, and \$6 million on upland plant management. The overall IPM goal should be defined. In Florida, maintenance control lowers ecological impacts, lowers cost to taxpayers, and lowers the amount of herbicides used.

Critical Key #3 is to identify the problem, and prevent and rapidly respond to new invasions. FWC conducts aerial surveys and on-site ground surveys and inventories of aquatic plants in approximately 450 public waterways covering over 2 million acres. The Florida Invasive Species Partnership has developed an Early Detection & Distribution Mapping System. There is also an "IveGot1" app for iPhones.

Critical Key #4 is to prioritize species for management that are causing the most harm. The greatest ecological impacts of invasive species in Florida are species that modify habitats, and species that produce novel habitats. Overall management funding priorities should be established. Highly invasive and disruptive plant species should be targeted. Critical wildlife habitat areas or imperiled species need to be protected. Plants blocking access and navigation, and floating plants such as hyacinth and lettuce need to be priorities.

Critical Key #5 is that local participation and ownership of the issue is critical to success. Regional management working groups should be established. Florida's regional working groups develop local management plans, establish local control priorities, assist with local surveillance of invasive plant populations, and help raise local public awareness about invasive plants. Project site managers should be assisted by establishing licensed applicators and IPM contractors and specific regions. The local site manager would have oversight of the contractors. An

herbicide bank should be established for site maintenance of previous management projects, and statewide bid contracts to reduce herbicide costs. Florida has spent over \$5 million, and treated 185,000 total treated acres.

Critical Key # 6 is to not overlook private lands. The Florida Invasive Species Partnership (FISP) is a collaboration of federal, state, and local agencies, along with non-government organizations, with a stake in managing invasive non-native species in Florida. The goal is to connect private landowners and public land managers with invasive species expertise and assistance programs across boundaries. Both public and private stakeholders can benefit from collaborative efforts to reduce the threat.

Critical Key# 7 is that invasive plant control efforts must balance competing management interests. Some shared uses and competing interests are lake homeowners' access, endangered species habitat, recreational users, flood and mosquito control, power generation, navigation, potable water supply, fishermen, and duck hunters.

Critical Key# 8 is that regional invasive species research infrastructure must be developed. The total spent for invasive plant management research in Florida in the 1970s was \$5.2 million. From 2000-2010, the total spent was \$11.5 million.

Critical Key# 9 is that biocontrols can help. From 1970-2012, funded biocontrol research resulted in 12 plant species being targeted for biocontrol research, over 900 insects/pathogens discovered and evaluated, 22 insects/pathogens released, and three insects that may be released in 2014-2015. In March 2010, the USDA-ARS released a new biocontrol insect, *Megamelus scutellaris* (a plant hopper) that targets water hyacinth. The nymphs and adults feed on the hyacinth, which creates a choke point between the leaf and the petiole. Released biocontrol agents onto melaleuca have reduced their reproductive ability by over 90% by prohibiting their seed capsule production.

Critical Key#10 is that outreach must be generational. FWC Outreach hosts research reviews, tracks IPM research in the Southeast, and publishes an annual newsletter. FWC funds education initiatives such as their 3-day "Plant Camps" for science teachers. The camp covers plant and animal invasive species and provides student lessons, activities, and materials. A public "Plant Management in Florida Waters" website was created that provides information about developing management plans, and has an encyclopedic guide to plant management in Florida waterways. The site covers over 400 topics.

Aquatic Nuisance Species Task Force Update

Mangin reported that there are now 41 state ANS management plans approved. The Task Force has approved Recreational Guidelines and Water Garden Guidelines. The next step is to have them put into the Federal Register for public comment.

The Task Force Prevention Committee will provide guidance for pathway management plans, and a list of pathways to be considered for plan development.

The Task Force will be holding a 2-day webinar in late Spring that will focus on the highest priority issues of the Task Force. More information on the webinar will be provided to the panel members in the near future.

The Snakehead Plan is near completion.

Funding is being cut by at least 6.8%. Funding for panels will tentatively be distributed in May 2013.

Invasive Species Advisory Committee Update

Chilton reported that he is no longer on the ISAC committee. The sequestration has posed problems for ISAC. The Fall meeting was to be held in conjunction with the National Invasive Species Awareness Week. However, both were cancelled. The next meeting will possibly be held in June.

National Invasive Species Awareness Week Update

Due to the sequestration, the National Invasive Species Awareness Week was reduced to several receptions. Also, some lobbying was done on The Hill.

Public Comment

Hartman provided the opportunity for public comment. No comments were received.

The meeting recessed at 5:00 p.m.

Thursday, April 11, 2013

The meeting reconvened at 8:30 a.m. The Chairman again provided the opportunity for public comment. No comments were received.

Work Group Updates and Future Directions

Chilton provided the update for the Pathways and Prevention Group. The GSARP Strategic Plan states that the Pathways and Prevention Group is charged with identifying pathways through which non-native species are known or thought to be transported into the Gulf and South Atlantic Region and have the potential for effective interdiction, and to develop plans and recommendations for measures to help prevent the transport of non-native species into the Gulf and South Atlantic region by addressing their transport pathways. **Chilton** referenced page 7 of the Strategic Plan under *Objective 2; Task 1; Strategy B* whereby the Pathways/Prevention Work Group will conduct an inventory of existing state and federal species prevention plans using conference calls and email. It was decided that the most important pathways listed in the Pathways and Prevention document developed by **Pam Fuller** would be discussed with the states to see how they are addressing those issues, and recommendations on solutions will be made.

Bonvechio provided the update for the Eradication Group. Emails will be sent to each state requesting their priority lists of species, and to decide if management or eradication is the answer for each species. This will then be summarized by region.

Teem provided the update for the Research and Development Group. An update was done on the survey of aquatic invasive species issues in the Gulf. A Species of Concern list was compiled. The list is a combination of which invasive species are presently a concern in the states, and which invasive species have the potential to become a threat. The list will be put on the website. **Teem** asked the panel to decide if the list was acceptable, and to also work towards getting it finalized. It was decided that the list can be updated as needed. **Ballard** will put a date stamp on the list when it is updated. **McMahon made a Motion to put the Aquatic Invasive Species of Concern List up as it is so that it is a living document. Riecke seconded. The Motion passed unanimously.** **Teem** spoke on a funding method called Crowdsourcing. There is a website where scientists trying to obtain funding for projects can present their proposals. The public then looks at the proposals and can assist with funding the projects. **Teem** suggested that some projects that GSARP are involved in (TexRAT) could perhaps be put on the website. **Teem** will provide the links to the panel members.

Jacoby provided the update for the Education and Outreach Group. The Strategic Plan was looked at. Task level efforts will be revised. Focus will be placed on “Train the Trainer” sessions, and see how they can be moved forward. The Traveling Trunk will be translated into Spanish, and he will seek someone to translate it into Vietnamese as well. A template will be developed that lists costs of dealing with invasive species. **Schmitz** stated that in Florida, they surveyed all of the 67 counties. They received 54 responses, and determined that \$19 million was spent dealing with invasive plant species on county-owned properties. **Schmitz** is also working on putting together a yearly cost survey for the North American Invasive Species Network. They are compiling a list with contact information for the states and provinces of North America, and who the surveys should be sent to. The first survey will be sent out electronically this summer and will consist of approximately 25 questions. He asked the panel members to please complete the survey when they receive it. He will keep the panel members informed of the progress.

Hartman provided the update for the Early Detection and Rapid Response Group. After reviewing the existing second edition, it was decided that a new document will be created by combining content from the GSARP plan, the Western Panels, and various EDRR plans.

Knott suggested putting each state’s Tier 1 contact names and phone numbers on GSARP’s website so that the public would be able to report invasive species concerns to the appropriate person.

Schmitz provided the update on the Information Management Group. He reminded the members to please fill out the surveys he spoke of earlier. Additional surveys will be done, and he asked the members to provide him with suggestions if they have any.

Opening Remarks on the Use of eDNA in the Gulf & South Atlantic Region

Herod gave a PowerPoint Presentation entitled “Environmental DNA (eDNA) and Coordination”. **As an Action Item, GSARP members were asked to consider including eDNA in the EDRR Plan.**

Update on Lionfish Activities in the Gulf and South Atlantic Regions

Akins gave a PowerPoint Presentation entitled "Lionfish Update...Most Recent Status, Research, and Happenings".

Lionfish prefer structure, but are also found on shorelines and in very deep water.

Lionfish consume prey over half their size. They consume commercially and recreationally, and are growing larger here than in their native range.

Additional invasion factors are fewer parasites than in their native range; faster growth; less competition; prey naiveté; genetic vigor.

Local control can be effective for keeping lionfish populations under control. Training, focused effort, regular visitation, prioritizing sites, removal targets, and resource allocation are all important in control efforts.

The dive industry has taken the initiative and developed lionfish control methods.

Models were developed to predict the number of lionfish that reefs can support without causing degradation. Preliminary results have found that removal of lionfish from reefs allow native fish to recover.

Lionfish are being caught on hook and lines. They are also being found more in commercial lobster traps. Observations showed that lionfish were using the traps as shelter. When lionfish are present in the traps, the catch rates for lobster is lower.

Lionfish derbies started in 2009 and have spread throughout South Florida and the Bahamas. Derbies can provide outreach and awareness; training for removers; media interest; samples for research; tasting opportunities; lionfish removal. A study done last year found that the derbies reduced the local lionfish population by 69%.

Lionfish (1,043) that were collected at a local derby would have consumed 2-8 million prey in Palm Beach if they had not been removed.

The GCFI Annual Lionfish Session will be held in Corpus Christi in November 2013.

An effort is underway to develop a Regional Lionfish Survey. It is in final review and will hopefully be finalized by the end of the year.

There is a demand for lionfish meat. **Akins** stated that restaurants have contacted him to inquire where they can get lionfish. Cookbooks have been published with recipes.

Ciguatera is a roadblock for promoting mass demand for lionfish meat. It has been found in some lionfish in the USVI. Testing has been done through the FDA and NOAA, but there have

As an Action Item, GSARP members were asked to consider having an eDNA session at a future GSARP meeting. The purpose of the session will be to provide the current understanding of the technology, as well as capacity, and need among GSARP members.

As an Action Item, GSARP members were asked to consider developing a Community of Practice (COP) for the eDNA effort. This COP would be a committee of GSARP. Knott made a motion to develop a Community of Practice (COP) for the eDNA effort. The motion was seconded, and the motion passed.

Herod reported that eDNA is a surveillance tool that can be coupled with traditional sampling. There are current projects using eDNA, such as Asian Carp.

There are six elements of the USFWS Region 4 eDNA strategy: The creation of a Community of Practice (COP) with the partners; the establishment of critical infrastructure; biosecurity; the implementation of standard operating procedures for eDNA studies; cross-validation of all procedures and results; to provide necessary training for the partners and potential volunteers.

eDNA: A Tool for Inventory and Monitoring of AIS

Greg Moyer gave a PowerPoint Presentation entitled "eDNA: A Tool for Inventory and Monitoring of Aquatic Invasive Species". Dr. Moyer spoke on eDNA, and defined it as the detection of target taxon's genetic material (cellular or extracellular) from its environment without seeing/capturing the taxon. Environmental DNA was first used for AIS monitoring in 2008. In 2010, it was used for the first time for AIS monitoring in U.S. rivers.

Applications for eDNA include early detection, surveillance, and to determine routes of invasion of AIS into natural systems. It can also be used to identify and monitor endangered species and declined populations, as well as to assess ecosystem health, biodiversity, environmental impact, trophic interactions, and changes in species distribution, climate, and niche stability. The strategy is to develop a suite of primer/probes for regional AIS needs, collect water samples, and test DNA of the sample for eDNA of target taxa. The cost depends on the methods used, and various factory discounts, overhead, etc.

The AIS goal is to establish early detection and rapid response with predictive modeling using GIS and the incorporation of urban growth and climate change forecasts; eDNA sampling (there are still some major hurdles); and the establishment of an eDNA COP.

Ongoing research for eDNA detection is being done on bullseye snakehead and African jewelfish in the Loxahatchee National Wildlife Refuge, and lionfish, mayan cichlid, and Asian swamp eel in Savannah.

Actions, Questions, and Discussions on eDNA for AIS

Herod explained that a simple way to coordinate the eDNA for AIS effort is to include it as a separate component in the EDRR plan. However, it would be better to establish the COP and develop a process and special session. Other considerations are what role GSARP should play, and if a business plan should be developed; the role of individual GSARP members in the strategy; what species should be chosen; costs.

been no known cases of CFP. A regional workshop will be held involving the FDA, NOAA, REEF, and 16 countries. Mercury testing is also being done on lionfish.

An iPhone app is being developed that will help divers search for lionfish.

State Reports/ Members Forum

Alabama

Newton reported that several invasive species have been documented in Alabama coastal waters. The Bocourt swimming crab, tessellated blenny, Australian spotted jellyfish, and Asian green mussel have been documented, although non-validated or undocumented reports of additional invasive species likely exist. Prey of Australian spotted jellyfish include early life history stages of commercially and recreationally important finfish. The Bocourt swimming crab could compete for resources of the native blue crab. The current status of these two species does not indicate that they do not pose an imminent concern.

The giant tiger shrimp (*Penaeus monodon*) has been a species of concern since 2006. Captures of this species have continued to increase. The 43 confirmed reports during 2011 indicate that the giant tiger shrimp now occurs within all of Alabama's primary estuary basins. The concern for *P. monodon* has decreased within the commercial shrimping community, which has resulted in fewer validated reports. AMRD acquired 16 tiger shrimp from January 1, 2012 through April 2, 2013. It appears that the tiger shrimp has become established in Alabama's waters. AMRD continues to document occurrence, characterize the population structure, and process samples for genetic investigation.

The first confirmed report of a lionfish was documented in June 2011 by a spear fisherman who collected one from an oil/gas platform approximately 43 miles south of Dauphin Island. Numerous unconfirmed reports of lionfish have been made that indicate lionfish are abundant on Trysler Grounds, an area of natural hard-bottom about 16 miles south-southeast of Orange Beach. Scuba divers reported observing up to 30 lionfish during single dives in this area during the 2011 dive season. Recent reports in 2012 indicate that lionfish are even more abundant than previous years. Over 60 lionfish were observed by a recreational diver during a dive at Trysler Grounds during the 2012 diving season. Unconfirmed reports are being made by scuba divers that indicate lionfish are widespread throughout Alabama's artificial reef permit zone. A local dive shop donated 26 lionfish to AMRD after a month-long lionfish rodeo in June and July 2012. Since 2009, AMRD has been storing lionfish specimens donated by dive shops, tournament coordinators, and recreational scuba divers. Alabama Marine Resources Division has joined the Mississippi Bight Lionfish Response Unit (MBLRU).

Florida

Schmitz reported that the Florida Fish and Wildlife Conservation Commission's Invasive Plant Management Section and the University of Florida Institute of Food and Agricultural Sciences Center for Aquatic and Invasive Plants held a Research and Outreach Review Meeting on March 12-13, 2013. The purpose of the meeting was to exchange current scientific research and outreach information on invasive plant management in Florida. Approximately 100 people

attended the meeting, and included federal, state, and local government resource managers, university and government scientists, and outreach professionals.

FWC is presently funding numerous invasive aquatic plant management research projects in Florida.

Schmitz provided an information sheet on the North American Invasive Species Network (NAISN) that listed ten essential core invasive species resource services that are critical to preventing new invaders, and managing invasive species that have become established in North America.

Georgia

Bonvechio spoke on the Satilla River Flathead Catfish Removal Project. In 2006, the Georgia legislature appropriated funding for three positions to the Wildlife Resources Division Fisheries Management Section. These personnel were assigned to reduce the flathead population levels through direct removal. One position was eliminated in FY2009. The crew removed 2,861 flatheads. Since the implementation of the full-time flathead management program in 2007, over 26,000 fish have been removed from the river. The size structure of the population has also declined. In addition, the age structure has also been truncated by removal efforts.

Water levels appear to affect recruitment. During the drought years, catch rates were down in 2007, 2008, 2001, and 2012. During the high water years of 2009 and 2010, catch rates were considerably higher.

There appears to be a compensatory shift in sexual maturity due to over a decade of increased exploitation. Intensive harvest must be maintained to prevent flathead populations from rebuilding within 2 to 5 years.

During sampling in 2011, the WRD removal crew documented the non-indigenous range expansion of the Blue Catfish occurring in the Satilla River. Seven blue catfish were recovered this season. No blue catfish were recovered during sampling in 2012.

The Program Manager at the Chattahoochee River National Recreation Area has recently received a grant to develop a control strategy for the Asian rice eel, which has several characteristics that make it difficult to manage.

There is another possible population of apple snails in Withlacoochee River drainage.

There have been multiple sightings of lionfish off of Georgia's coast in St. Mary.

Louisiana

Bourgeois reported that since October, there have been no reports of tiger shrimp from the public. LDWF biologists continue to search for them in their Fishery Independent sampling. They are reviewing videos and other data collected on their rig surveys. Exotics will be recorded as part of their data review.

LDWF staff continues to monitor the spread of lionfish in the Gulf of Mexico. There have been reports by the public, divers, and spear fishermen. The LDWF research dive program has been monitoring fish assemblages at oil rigs, and a lionfish-specific study is being developed that will be implemented in summer 2013. A ROV survey was done on 24 LDWF artificial reef sites. Lionfish were recorded at 5 of the 24 sites. Possible surveys will be done on all of the 64 sites.

LDWF received reports of a single tilapia in one of the pools of the Red River in North Louisiana. It was confirmed as a tilapia, but not definitively identified to species.

A report of an apple snail shell in the Calcasieu area on the Inter-coastal Waterway was received. Follow-up trips by fishery biologists have not shown the presence of egg masses or snails. A staff member will continue to survey the areas on personal fishing trips.

Drift net sampling for Asian carp will soon begin, which is part of a 2012 ANS grant.

Mississippi

Pursley reported on early detection and rapid response activities. Common salvinia weevils were obtained from the LSU Ag. Center and released with permission from MDWFP at Stennis Space Center in an effort to further manage an infestation of common salvinia in their barge canal system. The barge canal system connects directly with the Pearl River and has an intermittent connection with Bayou La Croix. Water hyacinth in a Biloxi drainage ditch was reported by a citizen. The report was investigated and found to be accurate. Management efforts are under way.

Pursley next reported on coordination and outreach activities. There have been no reports of Asian tiger shrimp. Tissue samples from seven previously caught shrimp were sent to NOAA-NMFS Tiger Shrimp Tissue Repository as part of a nationwide effort to better understand the species.

Final edits and updates for the Mississippi State Management Plan for Aquatic Invasive Species were received. After a 30-day public comment period, the plan was approved by the Governor's office and sent to the ANS Task Force for pending approval at their next meeting.

DMR participated in the MS Cooperative Weed Management Area (CWMA) meeting, SARP ANS conference calls and working groups, the MS Bight Lionfish Response Unit (MBLRU), a regional cogon grass summit meeting, and an AIS Incident Command System training workshop.

At a public artificial reef science seminar, a presentation was given entitled "*Invasive Species – A Threat to Mississippi's Artificial Reef Habitats*".

A multi-state, multi-agency aquatic AIS project pre-proposal was submitted to MASGC to try to secure funding in order to better document aquatic invasions and their effects.

The MS-CWMA was provided with approximately 1,000 "Stop Aquatic Hitchhikers" brochures for distribution at the Gulf Coast Garden and Patio Show and other public venues.

Riecke reported on new activities since October 2012. As AFS Resolutions Chairman, he worked to guide consideration and voting on a *Resolution on the Federal Funding for Programs to Prevent, Control, and Manage Aquatic Invasive Species*. In January 2012, the SDAFS membership approved the resolution and voted to send it to the Parent Society for consideration. In July 2012, the AFS Resolutions Committee sent a revised version of the SDAFS resolution to the AFS membership for a vote in August 2012. On March 6, 2013, the resolution was adopted by the AFS members. It will be published in a future issue of *Fisheries*.

A SDAFS *Resolution on Federal Funding for Implementation of the Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States* was adopted. This resolution is currently being considered by the AFS Parent Society Resolutions Committee.

MDWFP formed an aquatic plant treatment team to deal with invasive aquatic plants that are impacting boating access sites.

In October 2012, giant salvinia was found at a boat ramp site on the Ross Barnett Reservoir. Most of it was manually removed, and the remainder was chemically treated. The DMR is monitoring and treating giant salvinia and other invasive plants in Mississippi's coastal river systems.

In January 2013, silver carp were reported in Pickwick Lake in northeast MS.

The *Mississippi State Management Plan for Aquatic Invasive Species* was sent out again for public comments. Governor Phil Bryant approved the plan and it was sent to the National ANS Task Force in April 2013. It is hoped that the plan will be approved at their Fall 2013 meeting.

"Stop Aquatic Hitchhikers" signs are being posted at new boat ramp sites. "Stop Aquatic Hitchhikers" cards are being reprinted and distributed along with all boat registrations or renewals that are mailed out.

The MS Museum of Natural Science has a permanent exhibit on exotic species.

Riecke reported on future activities. Freshwater fishing bait regulations will be composed to specify what bait can be legally sold, possessed, transported, and used in MS.

A list of approved, restricted, and prohibited species as specified in the *Mississippi State Management Plan for Aquatic Invasive Species* will be adopted.

An EDRR monitoring program comprised of state and federal personnel who sample aquatic species in MS public waterways on a routine basis will be established.

North Carolina

Emens reported that hydrilla was found in Lake Waccamaw. It is believed that introduction took place at a boat ramp. It is the first time that they have had to deal with hydrilla in a natural lake. It will cost approximately \$450,000 annually to treat the areas with Sonar, a herbicide.

The Wildlife Resource Commission is discussing the possible development of an invasive species program.

South Carolina

Knott reported that projects are under way to screen for invasive species. Recently, juvenile tiger shrimp diets are being studied.

Tiger shrimp are being monitored and a tissue repository is being kept. An effort to create a manuscript is under way. Early indications have found that there is very little genetic variation. Reports of sightings have declined, and smaller shrimp are being captured.

A new virus (EMS – Early Mortality Syndrome) is killing tiger shrimp at shrimp farms in Asia.

There is an interest from the regulatory branch to develop a list of invasive marine species. It is in draft form.

Texas

McMahon reported that they are working on the zebra mussel problem, which has gotten worse. In spring 2012, they found zebra mussels in new locations. There is a huge concern that many reservoirs that supply water to millions of people will become infested with zebra mussels and cause disruption to water service due to the mussels clogging the intakes.

Chilton reported that they will be hiring two invasive species biologists. One biologist will be located in east Texas and will focus on aquatic plant species and biological control. The other biologist will be located in Austin and will focus on zebra mussels, and riparian and stream habitats.

Chilton stated that they have requested \$18-\$19 million in funding.

TPWD is considering listing golden bamboo as a prohibited species.

Hartman reported that they are not getting a lot of *Penaeus monodon* reports.

HARC

Gonzalez reported that development of invasion potential score cards for aquarium species is continuing.

A stakeholder meeting will be held later this year.

MBLRU (MS Bight Lionfish Response Unit)

Ballard reported on the MBLRU (MS Bight Lionfish Response Unit). MBLRU is a new cooperative project between the GSMFC, Mississippi DMR, Alabama DNR, the National Park Service and the U.S. Fish and Wildlife Service. A lionfish monitoring program will be developed at 30 established sites in the near coastal waters between Pensacola, FL and the Mississippi River Delta to monitor and track the invasion of the Indo-Pacific lionfish. Diver surveys will be conducted, and lionfish encountered during monitoring operations will be

removed. All equipment has been purchased and delivered to the agencies that will be carrying out the monitoring dives. This project will provide a better understanding in regards to the invasive lionfish population in northern Gulf waters, and will provide much-needed information on the associated species composition and densities at these 30 sites. This information will be useful for assessing the impacts the invasive lionfish have on native species, and for informing future management decisions.

Discussion of ANSTF Recommendations

After discussion by the members, it was decided that recommendations would be discussed at the next GSARP meeting in October.

Other Business

Bourgeois mentioned that a new Southeast Asian aquarium freshwater colored shrimp is being marketed, and could possibly become a future problem as an invasive species if released. The shrimp are being sold in a "shrimparium", which is an aquarium stocked with aquarium plants and shrimp.

Riecke recommended that a list of GSARP's accomplishments be published on its website.

Next Meeting Time and Place

It was decided that Raleigh, North Carolina would be the location of the next meeting. The next meeting will take place during the first week in October.

Public Comment

Hartman provided the opportunity for public comment. There was none.

A motion was made to adjourn the meeting, and the motion was approved. There being no further business, the meeting adjourned at 3:30 p.m.

APPROVED BY:

Red P. Ly
COMMITTEE CHAIRMAN

**FISHERIES INFORMATION NETWORK (FIN)
MINUTES**

June 25th, 2013

Saint Pete Beach, FL

Chairman **Tom Sminkey** called the meeting to order at 9:00 a.m. The following members, staff, and others were present:

Members

Chris Denson, AMRD, Gulf Shores, AL
Craig Lilyestrom, PRDNER, San Juan, PR
Dave Gloeckner, NOAA Fisheries, Miami, FL
Christine Murrell, MDMR, Biloxi, MS
Michael Harden, LDWF, Baton Rouge, LA
Justin Esslinger (proxy for Vicki Swann), TPWD, Rockport, TX
Thomas Sminkey, NOAA/NMFS, Silver Spring, MD
Richard Cody, FFWCC, St. Petersburg, FL
Nicole Shaffer, AMRD, Gulf Shores, AL
Ken Brennan, NOAA/NMFS, Beaufort, NC
Nick Farmer (proxy for Andy Strelchek), NOAA/SERO, St. Petersburg, FL

Staff

David Donaldson, GSMFC, Ocean Springs, MS
Gregg Bray, GSMFC, Ocean Springs, MS
Donna Bellais, GSMFC, Ocean Springs, MS
Alex Miller, GSMFC, Ocean Springs, MS

Others

Beverly Sauls, FWC/FWRI, St. Petersburg, FL
Mike Cahall, ACCSP, Arlington, VA
Geoff White, ACCSP, Arlington, VA
Todd Phillips, Ocean Conservancy, Austin, TX

Approval of Agenda

The agenda was approved as presented.

Approval of Minutes

The minutes of the Fisheries Information Network (FIN) meeting held on June 6, 2012 in Charleston, SC were approved with minor editorial changes.

Discussion of Economic Activities

A. Miller presented Power Point presentations on the various economic projects. The project reports included the following: Economic Status and Performance of the Gulf of Mexico Seafood Processing Industry in 2009, Marine Angler Expenditures and Economic Impacts in the Gulf of Mexico in 2011, and an update on the Stated Preference Choice Experiment Survey of Anglers in the Gulf.

Preliminary Results of Fishing-Related Business Project - This survey effort obtained responses from 106 seafood processors who were selected from a pool of 196 seafood processors who participated in the NOAA Fisheries survey of seafood processors in 2009. The response rate

for the Gulf of Mexico was 55%. The response rate in Alabama was 55%, Florida 41%, Louisiana 87%, Mississippi 18%, and Texas: 41%. Data year 2009 was used to create a baseline where impacts from natural and manmade disasters did not influence the results. Challenges from the Deepwater Horizon oil disaster and various hurricanes significantly impacted the ability to collect data. The economic financial analysis is based off of the responses of 66 respondents from Alabama, Louisiana, Mississippi and Texas who provided usable and complete responses appropriate for the financial analysis statements. The financial statements created include a balance sheet, cash flow statement, and income statement for the Gulf of Mexico seafood processing industry. A final report is planned to be complete by the end of 2013. **R. Cody** asked why some respondents were removed when their costs were greater than revenues. **A. Miller** explained that the analysis uses a set of algorithms to identify respondents who have costs many orders of magnitude greater than revenues in an effort to present results that are realistic for typical businesses. **T. Sminkey** asked if steps were taken to understand non-response bias. **A. Miller** explained that because the processor survey was an in-person survey, the potential subjects did not have a chance to examine the survey instrument like the subjects of mail surveys can and a traditional non-response survey was not conducted. In follow-up, **A. Miller** explained that the NOAA Fisheries processor survey data will be used to determine if respondents to the economic survey were statistically different from non-respondents to the survey.

Preliminary Results of Recreational Economic Add-on Survey - The objective of this survey is to provide consistent and reliable estimates of marine recreational angler expenditures and impacts/contributions every five years throughout the United States. The first nationwide survey was conducted in 2006. Angler expenditures were collected via the Socio-Economic Add-on Survey (SEAS) for trip expenditures and a follow-up mail survey for durable expenditures for AL, FL, LA, MS, and PR. In TX, license frame information was used to conduct a mail survey for trip and durable expenditures. Results of SEAS completes (out of all MRIP interviews) was 71% for AL, FL, LA, MS, and PR. Results for the percent of contact information collected via the SEAS (which was used for the mail survey) was 35% (SEAS completes only) and the response rate to the mail survey was 30%. The response rate for the Texas mail survey was 18%. Survey data were used to estimate average and total trip expenditures by state, fishing mode and resident status; average and total annual durable expenditures by state and resident status; and economic contributions to economy of each coastal state and the US resulting from these expenditures. A final report will likely be distributed before the end of 2013 for the US and Gulf of Mexico. **D. Donaldson** asked why shore mode generated a larger economic contribution than charter mode. **A. Miller** explained that the economic contribution is greater in shore mode than charter mode because the number of trips, or the multiplier of the expenditures, is greater in shore mode than charter mode. **T. Sminkey** asked if expenditures are available by mode and **A. Miller** noted that they will be presented by mode in the final report. **T. Sminkey** also asked if everyone who agrees to participate in the follow-up mail survey, after the expenditure intercept questions, receives a mail survey and **A. Miller** explained that they do. **R. Cody** asked if the response rates in 2011 were similar to 2006. **G. Bray** explained that from what he recalls from 2006, that the 2011 rates are similar for the intercept expenditure questions and potentially higher for the mail survey for 2011.

Status of Recreational Choice Experiment Survey - The goal of the project is to value changes in recreational regulations for key federally and state managed species in the Gulf (MRIP states) for for-hire charter anglers and private anglers. NOAA Fisheries and the GSMFC have partnered with w-FL, AL, and MS to collect addresses from anglers who have gone on a for-hire charter fishing trip in the last 12-months and would like to participate in a follow-up

mail survey. Charter address collection in all three modes started in March 2013 and will continue throughout 2013. **A. Miller** presented the number of charter addresses collected to date. LA is supplying their 3-day for-hire charter license database for this effort. TX is not participating because they do not participate in MRIP. Private license addresses will come from the Gulf States via the National Saltwater Angler Registry. Survey mail outs will occur from August 2013 to January 2014. Data analysis and report generation will occur in 2014 and 2015. **B. Sauls** asked if charter addresses will be collected for the rest of the year and **A. Miller** indicated that was the plan to try to meet the targets. **B. Sauls** also asked if they were being unproductive by trying to collect addresses in all three modes and **A. Miller** explained that he would work with **G. Bray** to look at the number of addresses collected thus far from each mode and determine if it was useful to continue in all three modes.

Update of Atlantic Coastal Cooperative Statistics Program (ACCSP)

M. Cahall reported on ACCSP's budget overview, program major projects including data products, SAFIS review, HMS Species, MRIP PSE, FIS, and Program Review. **Cahall** presented ACCSP program improvements, committee activities involving surveys, workshops and outreach. Commercial technical committee activities, recreational technical committee activities, committee updates, and information systems committee activities of ACCSP were reported by **Cahall**.

FIN Data Management System (DMS) Issues

Review of list of personnel with access to confidential data - **D. Donaldson** distributed a list of personnel with access to the FIN Data Management System (DMS) and requested that members make corrections or additions. **D. Gloeckner** also distributed a list of personnel with access to confidential data with NOAA Southeast Fishery Science Center (SEFSC).

Status of the FIN DMS - **D. Bellais** reported on the status of the FIN DMS and presented public access counts by commercial and recreational business areas. **Bellais** gave an update on record counts in the FIN DMS for commercial landings. **Bellais** noted a correction: Texas and Puerto Rico end dates for the record counts should be 2012. **D. Donaldson** stressed the importance of timely delivery of the data since other programs are now using this data and not just FIN. Louisiana and Alabama's recreational fishing license data continues to be loaded by wave. Mississippi and Texas are loaded yearly. NMFS has access to the data and they continue to publish their findings. Quota Monitoring/HMS data continue to be loaded into the FIN system. FIN continues to support the Information Architecture Team (IA-Team) in the development of GulfFOSS as needed. The Oracle 11G upgrade for the FIN databases on the new server has been completed. **Bellais** gave a review on biological sampling data, marine recreational fishery catch estimates, marine recreational fishery effort estimates, and menhaden data. Noting the recreational fishery catch and effort estimates after 2010 were not loaded due to the on-going development of the new reports for the MRIP estimates. These data should be available by end of September 2013.

Development of Process for Adding Questions to MRIP Surveys

T. Sminkey discussed that the original plan was to implement the new MRIP APAIS in 2013 with no add-on questions to help reduce sampler burden while learning the new methods. NOAA Fisheries needs to be able to assess how future add-on questions would impact sampler's ability to collect interviews along with determining the difficulty in getting OMB since adding questions would potentially impact respondent burden. **Sminkey** mentioned that prior

notification of add-on question requests need to be presented to NOAA Fisheries ST1 staff prior to obtaining funding (if necessary). Minor question additions with little impact to the original survey design could potentially be handled easily with little modification to OMB documentation. Sminkey also mentioned that protected resources staff have inquired about the possibility of utilizing the APAIS for protected species interactions by anglers interviewed dockside. **N. Farmer** asked about the status of a request to utilize the effort surveys to collect protected species interaction data. **Sminkey** stated that further details on these discussions could be obtained from Dave Van Voorhees with NOAA Fisheries. **Donaldson** asked if a formal procedure needs to be set in place for approving add-on questions. **Sminkey** suggested that using the FIN process to review requests 6 months in advance of a sampling year would be preferred. **Bray** asked if state specific add-on questions would be permitted for future APAIS years. **Sminkey** said NOAA Fisheries staff are still evaluating the sampling procedures for the APAIS but would likely start considering allowing state specific add-on questions in the future. **Sminkey** also stated that work is beginning soon to evaluate the current for-hire survey which would likely lead to a discussion of effort and catch survey changes in 2014.

Discussion of Gear Codes

D. Bellais presented the below verbiage and process by which the addition and modification of FIN DMS codes should be followed.

It was decided by the TCC Data Management Subcommittee (DMS) that there was a need for a technical review of the FIN standard codes to help with the quality assurance and quality control of the commercial data. The FIN standard codes review will be conducted by DMS, in conjunction with the commercial data review at the fall GSMFC meeting. If codes need to be added or modified prior to the technical review, the ComFIN Programmer will coordinate a call with the Gulf States and other effected Programs to make sure the code is standardized across all states and programs. Once additions or modifications are made, the ComFIN programmer will distribute the updated codes to the states.

Bellais will send this to the states for review and comments and then distribute to the FIN committee and pertinent personnel.

Status of Federal Quota Monitoring/Electronic Reporting Activities

D. Gloeckner went over the requirements, data flow, strengths and weaknesses of the Commercial Landings Monitoring System (CLM). Changes within the trip ticket program caused problems within CLM and costly code re-write to handle these changes. Needs suggested by **Gloeckner** were standard translations, push updates to all users at the same time, validate data before sent to NMFS, timely updates of federal and state permits, manage the data not the files and ensure same data is sent to the feds and states. **D. Donaldson** stated Unified Trip ticket should satisfy the majority of these needs. **C. Denson** suggested having Unified Trip Tickets by Jan 1, 2014 instead of starting this in the middle of the year. **Gloeckner** and **M. Cahall** suggested GulfFIN host or mirror the Unified Trip Ticket program and data instead of Bluefin Inc.

Gloeckner presented the shrimp grids as it looks now and let the committee know the grids will be changing to 1 degree grids to fill in the unknown areas in the middle of the Gulf.

Status of HMS Electronic Reporting Activities

D. Gloeckner reported HMS mandatory electronic reporting by federally permitted dealers was implemented January 1, 2013. HMS data from the Gulf is being loaded into the FIN system and feeds the HMS program through ACCSP. The HMS program conducts weekly compliance checks on HMS dealer reporting. **Gloeckner** noted a few issues have included:

educating dealers of new requirements, especially in Gulf region; updating state trip ticket programs for federal dealer; correctly identifying dealers; reconciling state and federal trip tickets. **C. Denson** asked if the state and federal files could be merged. This was not feasible due to the absence of a primary key on each line item in the file.

Discussion of New MRIP Survey Design

Status of intercept and effort surveys – **T. Sminkey** presented an update on the MRIP program. The revised MRIP estimation design is unbiased and incorporates sample weights into CPUE estimation. NOAA produced revised estimates for 2004-2012 and MRFSS and MRIP estimate comparisons are available on the MRIP website. The catch survey design updated the sampling frame and collaborated with the states to produce updated site pressure and location data. The new catch survey was implemented in wave 2, 2013 using a stratified sampling design using time of day and geographic site location. Specific interviewing protocols were established and the design is being closely monitored throughout 2013 by NOAA Fisheries staff. The effort survey design has implemented the national saltwater angler registry. NOAA tested telephone surveys that utilized the angler license directory telephone but these surveys suffered from poor response rates and inaccurate or missing sample frame data. This prevents NOAA from using the license database as a stand-alone sample frame. A dual frame mail survey is being tested using angler license data coupled with residential address frames. Response rates have been considerably higher than recent telephone surveys. For-hire telephone surveys are currently being used coast-wide from ME-LA. MRIP has also tested logbook reporting for federally permitted for-hire vessels. In the future NOAA Fisheries will continue to monitor the catch survey, finalize the effort survey design for 2014, revise pre-2004 landings estimates, establish standards for precision of catch estimates, and work with stakeholders to evaluate tradeoffs among data precision, timeliness, and resolution. **B. Sauls** asked if 2013 effort pilot study will be evaluated and ready for implementation in 2014. **Sminkey** stated that the goal is to have a new effort design in place at some point in 2014 but not necessarily on January 1, 2014. **Cody** stated he is concerned that MRIP effort survey will not be responsive to managing many species in the Gulf of Mexico that have very short fishing seasons. **Sminkey** stated that more timely data would be essential for all the recreational surveys to better respond to management needs for species that have short fishing seasons and discussions will continue about improving the timeliness of data. **Cody** asked if there would be the potential for add-on questions for a mail survey effort design. **Sminkey** seemed to think that add-on questions would be a possibility for a mail effort design.

Draw program issues – **T. Sminkey** also provided a brief description of how the new Access Point Angler Intercept Survey (APAIS) draw process and field sampling process works. One of the early problem areas identified was the transit time between sites can result in a substantial loss of sampling time. That loss of time often resulted in a short amount of sampling time at the last site in a cluster which often corresponded to peak fishing times when angler interviews might be available. NOAA Fisheries is proposing to eliminate 3 site clusters using only 2 site or single site clusters to reduce transit time between sites and maximize on site sampling time. NOAA Fisheries is also limiting night assignments and are asking states to adjust fishing pressures to only assign night pressure if there is a unique fishery that is not captured by day time sampling. Historical peak fishing times were noon to 6:00 pm. NOAA Fisheries are drawing a larger percentage of sampling assignments in the afternoon time block and a lower percentage in the morning time block and has the ability to customize this if specific modes or areas have productive morning time blocks. NOAA Fisheries staff are able to accomplish specific allocation adjustments because each interview has a sample weight associated with it

and can be accounted for in the estimation process. NOAA Fisheries staff are trying to balance the need to sample all the modes and time cells but also collect enough angler interviews to produce accurate catch per angler trip estimates. They have also increased the site selection probability for specific sites identified as historically high productivity sites. Mississippi and Louisiana are taking advantage of this to increase productivity while Alabama and Florida continue to use the normal draw process without reweighting any of the sites.

Discussion of Trip-Level Biological Sampling Data

G. Bray mentioned this topic has been discussed by the Data Management Subcommittee. **Bray** asked if the states were unable to identify all records to the trip-level would FIN data still be utilized. **Gloeckner** stated that those data would still be used and if random age sampling was utilized the FIN data that was not identified with unique fishing trips would have to be reweighted which would likely introduce additional variance into the analysis. If age length keys were utilized the FIN data would be utilized as is for that type of analysis.

Discussion of MRIP Gulf Logbook Project

B. Sauls stated the final Gulf Logbook Project report was completed and has been posted by NOAA Fisheries on www.countmyfish.gov. Results have been presented to both the Gulf and South Atlantic Fishery Management Councils. The major findings were the pilot project did not achieve a complete census, could be improved with better enforcement authority but would still have to account for incomplete or inaccurate reporting, estimating CPUE and effort from logbook data is feasible, and implementation would require long-term investments to maintain reporting compliance and timeliness and to develop validation sampling programs. An MRIP consultant also demonstrated use of logbook data for estimating effort and catch. This report was peer reviewed and the consultant is currently responding to the review panel. More work would be needed if NOAA Fisheries selected to use logbooks as an estimation tool. MRIP has suggested that the next steps are to maintain the current for-hire survey pending the availability of certified alternatives. For a logbook program to be certified it would have to address issues with coverage, enhanced independent validation, measures to assure timely compliance, development and approval of workable reporting technologies in consultation with industry, and development of sampling survey designs that could provide means for independent validation of logbook reports and/or correction measurable self-reporting errors. Implementation would also require resource commitments for operating systems, dockside sampling for validation, at-sea sampling for validation of released catch, tracking, reporting, and issuing reminder and warning notices, compliance and enforcement actions, and conducting outreach activities. If strong interest existed in pursuing a regional logbook system Sauls suggested convening a dialogue of regional data collection and customer partners (i.e., NOAA Fisheries Office of Science and Technology, Fishery Science Centers, Regional Offices, states, GSMFC and Councils) to assess willingness and capability to proceed. Those groups would also need to develop and estimate of costs for implementing a well-designed logbook program with adequate validation methods and understanding the roles each partner would have in managing this process. **Farmer** asked if there was a possibility of using the electronic headboat program as a template for expanding to the entire for-hire fleet and be able to cut some of the costs of full implementation. **Sauls** mentioned the pilot logbook design was based on data fields using the head boat reporting forms. **Sauls** also stated a logbook design could be improved by requiring captains to report inactivity along with activity for every day of the week. **Brennan** stated that head boat operators can report weekly inactivity and if a daily fishing report is obtained the fishing report overrides the weekly inactivity report. **Farmer** suggested that since getting a complete census was extremely difficult that possibly having mandatory reporting for a randomly selected subset of vessels that

were geographically representative. **Bray** suggested that federal mandatory reporting laws need to be strengthened to avoid captains waiting to deliver delinquent data until their permits are up for renewal. In the logbook pilot some captains waited up to 11 months before submitting delinquent data records. **Brennan** stated that recent amendments in the Gulf and South Atlantic will help better enforce mandatory reporting requirements by not allowing vessels to harvest or possess species in the snapper/grouper, dolphin/wahoo, or migratory pelagic fisheries if mandatory reports have not been submitted and received in the time specified by NOAA Fisheries. **Brennan** stated the enforcement issues would still need to be determined.

Update on FOSS

D. Bellais reported Fisheries One Stop Shop (FOSS) v1.0 has gone live and is available to the public. This version contains non-confidential data only. FOSS v2.0 contains confidential data, the coastal adapter roll ups and is in the testing phase with ACCSP data. Gulf data will be next for testing.

Status of Metadata Compilation and Reporting

D. Donaldson stated that Ralf Riedel, a GSMFC contractor, continues to work on updating and compiling metadata. Ralf has been in contact with all the states regarding various issues and the hope is he will be able to continue work on this in the future.

Review and Approval of 2012 FIN Annual Report

FIN Committee members were provided with copies of the draft 2012 FIN Annual Report. **D. Donaldson** requested that members of the Committee review the Annual Report and provide comments, revisions or corrections to staff by July 31, 2013. **D. Donaldson moved to accept the FIN 2012 Annual Report with pending editorial changes. The motion was seconded by C. Murrell and was passed unanimously.**

Subcommittee and Work Group Reports

FIN members were provided with copies of all Subcommittee and Work Group Reports. The Reports are part of these minutes and are attached.

Gulf of Mexico Geographic Subcommittee – (Attachment A)

The Gulf of Mexico Geographic Subcommittee/TCC Data Management Subcommittee (DMS) met in October 2012 and March 2013. No significant motions or action items needed to be addressed at the FIN meeting. **C. Denson moved to accept these reports. R. Cody seconded and the motion passed unanimously.**

Otolith Processors Training Workshop – (Attachment B)

The Otolith Processors Training Workshop was held in May 2013 in St. Petersburg, Florida. It was a productive workshop with the normal otolith reading exercises. The group discussed the need for this meeting in 2014 with the uncertainty associated with FIN funding. Most states agreed they would still be collected some biological samples even without FIN funding. **Donaldson** stated that it may still be useful to have this meeting if states continue with biological sampling without FIN funding. **W. Devers moved to accept the report. M. Harden seconded and the motion passed unanimously.**

Commercial Technical Work Group – (Attachment C)

The Commercial Technical Work Group met via conference call in April 2013. The purpose of this conference call was to determine the need for trip-level reporting in the

USVI. This was a high priority task identified during the most recent FIN facilitated session. The work group determined that a commercial catch record system exists but **Gloeckner** stated there is a need for data validation to confirm accuracy of landings reports. Donaldson recommended that FIN has addressed this topic and if the USVI expresses interest in changing or improving their catch record system the FIN committee can get more involved at that point. **D. Donaldson moved to accept the report. M. Harden seconded and the motion passed unanimously.**

Commercial/Recreational Technical Work Group – (Attachment D)

The FIN Recreational Technical Work Group met via conference call in December 2012. The purpose of this conference call was to review the FIN Detailed Effort module. The work group recommended to FIN that the Detailed Effort Module was still viable and could be implemented. **C. Denson** stated that when the electronic unified trip ticket system is implemented detailed effort data will be collected. **C. Denson moved to accept the report. R. Cody seconded and the motion passed unanimously.**

Data Collection Plan Work Group – (Attachment E)

This Work Group is tasked with evaluating current targets for otoliths and to make any necessary changes. Most sampling targets were met for 2012 but shortfalls were observed for a few species that tend to be difficult to find during sampling. The work group recommended to FIN that biological sampling targets remain static for 2014 if funding is obtained. The work group also recommended that a meeting be convened with members of the Data Collection Plan Work Group, NOAA SEFSC, and NOAA Panama City Lab to discuss sampling targets and sampling standardization long term if funding is obtained. **C. Denson moved to accept the report. W. Devers seconded and the motion passed unanimously.**

Operations Plan

Status of 2013 Activities – The FIN Committee was provided with the status of the activities currently being conducted. The Committee reviewed the various activities and noted that all activities were either completed or being addressed as outlined in the Operations Plan.

Review and approval of 2014 Operations Plan – The FIN Committee was asked to review the 2014 Operations Plan. The Plan is in preliminary form and will be finalized later this year when the State/Federal Fisheries Management Committee (S/FFMC) decides what activities will be funded in 2014. Any edits to the 2014 Operations Plan should be sent to GSMFC by July 31, 2013. **D. Donaldson moved to approve the 2014 Operations Plan as modified. D. Gloeckner seconded and the motion passed unanimously.**

Discussion of Funding Issues

2014 FIN priorities - Committee members were provided with a list of items for funding consideration in 2014. The final prioritized list will be forwarded to the S/FFMC for their meeting in August 2013. At that time, they will decide which items will be included in the 2014 FIN Cooperative Agreement. All items listed as high priority will require budgets and statements of work by July 31, 2013. **D. Donaldson moved to list as high priority all ongoing activities and the three items under reinstating. All other activities will be listed as low priority. M. Harden seconded and motion passed unanimously. The list that will be presented to the State/Federal Fisheries Management Committee is as follows:**

Ongoing

H - Coordination and Administration of FIN Activities

H - Collecting, Managing and Disseminating Marine Recreational Fisheries Data
H – Operation of FIN Data Management System
H – Trip Ticket Program Operation in Texas, Louisiana, Mississippi and Alabama

Reinstating

H – Head Boat Port Sampling in Texas and Florida
H – Gulf Menhaden Port Sampling
H – Biological Sampling of Commercial and Recreational Catches

New

L – At-sea Sampling for Catch and Discards Data from Large-Capacity For-Hire Boats in TX, LA, MS, AL and FL
L – Collection of Catch and Effort Data via Logbooks for For-Hire Boats in TX, LA, MS, AL and FL
L – Highly Migratory Species Sampling in the Gulf of Mexico
L – Biological Sampling for FIN Secondary Priority Species

Restore Act Coordination - **R. Cody** mentioned Florida is involved in discussions regarding how Restore Act money would be spent. Florida is looking for possible coordination from GSMFC on the data collection aspects of Restore Act funding. **D. Donaldson** stated he recently attended a Gulf of Mexico Alliance meeting that focused on coordination of oil spill recovery funding. **Donaldson** stated that GSMFC is involved in that process and coordination could be provided through GSMFC or possibly other agencies when the time comes to make funds available.

Time Schedule and Location for Next Meeting

The Committee agreed to target the June 2014 for the next FIN meeting. Using the normal rotation of meeting locations the location for the next meeting would be the USVI. **D. Donaldson** suggested the GSMFC will need to do a cost analysis of meeting in the USVI before committing to that location. Possible alternate locations suggested for the next FIN meeting were New Orleans, LA, Miami, FL and Atlanta, GA. A decision as to the location and exact date for the 2014 meeting will be determined in the spring of 2014.

Election of Officers

Committee members were provided with a list of historical committee chairpersons. Currently the vice chairman is **Richard Cody**. Based on the FIN SOPs, he will become the chairman in 2014. **Michael Harden** was nominated as vice chairman by **D. Donaldson** and seconded by **W. Devers**. The nominations were closed and the chairman and vice chairman selections were approved by the Committee.

Other Business

D. Bellais stated that state representation at the most recent SEDAR reviews have been low. The SEDAR process needs states to send representatives if species of interest is being reviewed. Donaldson state funding is available for travel costs from SEDAR if state representatives are added to the SEDAR workshop pool. Donaldson also stated that GSMFC will distribute correspondence from SEDAR when they are setting up new SEDAR review meetings. That would provide the states the opportunity to get involved in the early stages.

G. Bray stated a request for raw June APAIS data for a red snapper catch rate analysis has been made. GSMFC will be making every effort to deliver raw June APAIS data on or

before July 9th. States were reminded to get their APAIS forms into GSMFC in a timely manner.

The FIN Committee was asked to review the committee listings to make sure all the information was correct. If changes need to be made, please contact the GSMFC staff.

There being no further business, the meeting was adjourned at 4:57 pm.

ATTACHMENT A

GULF OF MEXICO GEOGRAPHIC SUBCOMMITTEE REPORT

October 2012 and March 2013

**TCC DATA MANAGEMENT SUBCOMMITTEE
MINUTES**

Tuesday, October 16th, 2012

Point Clear, AL

Chairman David Gloeckner called the meeting to order at 8:35 a.m. The following members and others were present:

Members

Chris Denson, AMRD, Gulf Shores, AL
Nicole Shaffer, AMRD, Gulf Shores, AL
Page Campbell, TPWD, Rockport, TX
Vicki Swann, TPWD, Austin, TX
Kerwin Cuevas, MDMR, Biloxi, MS
Christine Murrell, MDMR, Biloxi, MS
Michael Harden, LDWF, Baton Rouge, LA
Vince Cefalu, LDWF, Baton Rouge, LA
John Froeschke GMFMC, Tampa, FL
David Gloeckner, SEFSC, Miami, FL

Staff

David Donaldson, Assistant Director, Ocean Springs, MS
Larry Simpson, Executive Director, Ocean Springs, MS
Donna Bellais, ComFIN Programmer, Ocean Springs, MS
Gregg Bray, Programmer/Analyst, Ocean Springs, MS
Ashley Lott, FIN Staff Assistant, Ocean Springs, MS,
Alex Miller, Staff Economist, Ocean Springs, MS
James Ballard, Invasive Species/Artificial Reef Coordinator, Ocean Springs, MS
Ralph Hode, Fisheries Disaster Recovery Coordinator, Ocean Springs, MS

Others

Terry Cody, Rockport, TX
Kevin Anson, AMRD, Gulf Shores, AL
Ron Lukens, Omega Protein, FL
Joseph Smith, NOAA Fisheries, Beaufort, NC
Ralf Riedel, GCRL, Biloxi, MS
Dale Diaz, MDMR, Biloxi, MS
John Guarisco, ADPH, Montgomery, AL

Adoption of Agenda

The agenda was approved and adopted as written.

Approval of Minutes

The minutes of the Data Management Subcommittee (DMS) meeting held on March 6, 2012 in Gulfport, Mississippi were approved as written.

Status of Data Management Projects D. Bellais reported on the program status report provided to the committee. The Oracle upgrade is still in progress and Gulf States Marine Fisheries Commission (GSMFC) plans to be fully migrated to Apex by the end of 2012. GSMFC continues to receive commercial federal dealer data from Bluefin which NOAA Fisheries then accesses for quota monitoring purposes. Highly Migratory Species (HMS) data flow still needs to be determined between NOAA, state agencies, and GSMFC. Work on the Fishery One-Stop Shop (FOSS) continues. The commercial vessel registry database is completed and Bellais is just waiting for the contractor to transfer the database to GSMFC servers pending the Oracle 11 upgrade. Data still continues to flow into the angler registry database from each state in the Gulf of Mexico. Bellais is working to upgrade queries to utilize the revised MRIP estimate data for 2004-2012. The biological data entry system is being modified and will be published and in the testing phases in the near future. Bellais also mentioned that the states have been doing a better job of getting monthly commercial data delivered to GSMFC in a timely fashion. Donaldson stated that the Atlantic Coast Cooperative Statistics Program (ACCSP) has historical commercial data back into the 1950's and he asked if the FIN Data Management System should be including those data too. The subcommittee agreed this would be good for GSMFC to include in the FIN Data Management System (DMS).

Status of Biological Sampling Activities

G. Bray discussed 2012 biological sampling collections. Bray presented a matrix of data deliverables for each state. All Gulf States are up to date with data entry and otolith analysis except for Florida. Florida has not provided any data since 2009. Problems with computer access to the FIN DMS along with staffing issues have prevented Florida staff from keeping up with data deadlines. Donaldson stated that with the changes to the biological data entry system, it is hoped that this will accommodate the needs of Florida staff and improve the timeliness of biological data entry. Donaldson stated that the last red snapper SEDAR process identified a need for being able to associate biological data records with unique trip identifiers. Likely too many issues exist to be able to identify fish records to unique vessel or angler trips from recreational trips. Gloeckner stated that NOAA would like to be able to link all the additional trip data with the biosampling data and attempt a trip level analysis of the age-length distribution. The committee discussed many of the problems with trying to obtain this for biological sampling data. Donaldson suggested a conference call in December 2012 to further discuss this with NOAA Fisheries personnel and the Data Management Subcommittee. Donaldson also mentioned that during the red snapper SEDAR review, the analysts had to deal with multiple file types from the Gulf States. FIN delivered data for Alabama, Louisiana, Mississippi, and Texas. Florida delivered data in a different format. For further assessments, we hope to provide Florida data with the FIN data in a standardized format. GSMFC will also coordinate with NOAA Panama City Lab staff to confirm proper file formats.

Discussion of Quality Management Concept

Donaldson stated this issue arose through the Fisheries Information System (FIS) process. This is a process that helps ensure that data collection methods are quality controlled and quality assured properly. FIS and NOAA Fisheries are both involved in this process. Donaldson believes this concept could also help with the data collection methods utilized by FIN. In the future, FIN may hear an in depth discussion and presentation on this issue. Gloeckner stated it basically requires data managers to document the process of how you quality assure and quality

control (QA/QC) data and ensure that you are following that specific process. Donaldson stated FIN and GSMFC have not decided to use this process yet, but would like to learn more about what Quality Management has to offer.

Status of Commercial Electronic Reporting D. Gloeckner briefly discussed the recent federal dealer reporting amendments going through the councils. NOAA Fisheries is working on modifying the current regulations. One change would require weekly reporting instead of bi-weekly reporting for all commercial federal finfish permit holders. Some additional data fields will also be required through a change by Bluefin data to the trip ticket system. Another change will be dealer permits will be suspended if dealers are not reporting under the weekly reporting requirement. Cefalu asked if NOAA Fisheries plans to inform dealers with suspended permits that they can no longer purchase seafood until reporting requirements have been met. Gloeckner plans to produce a list that is provided to law enforcement and allow them to notify the delinquent dealers. Donaldson asked if delinquent dealers could be locked out of the data entry system. Gloeckner stated that would be difficult if not impossible under the current Bluefin system, but would be possible with a move to web based reporting in the future. Most of the changes in regulations will be implemented in the spring of 2013. Denson asked if there would be outreach regarding the regulatory changes. Gloeckner said if money is available they will be doing outreach efforts. Gloeckner also gave a presentation of how NOAA is monitoring annual catch limits (ACL's) in the Gulf of Mexico and South Atlantic. NOAA can monitor ACL's daily by logging into a new web interface they have developed. NOAA is currently monitoring 58 ACL's with over 100 species in the Gulf and South Atlantic.

Update on Traceability Program and Presentation of Trip Ticket Inventory Module Miller presented details on the recent updates to the GSMFC's traceability program (Gulf Seafood Trace). The program was officially launched in March 2012 and currently 44 companies have signed up for the traceability program. About two-thirds of these companies are active users of the Trace system. The participating companies are located from Brownsville, TX to Marathon, FL. Miller stated that about 5 million pounds of product have been entered and uploaded via Trip tickets for Trace users and about 2 million pounds have been pulled or sent forward as Trace documents through the supply chain as a traceable product. Anson asked why 3 million pounds of product were not picked up by processors in the traceability system. Miller stated that the processors decided not to pickup or send forward that product for traceability purposes. Donaldson asked if Trace Register has researched why traceability information for some products was not picked-up and sent forward by processors. Miller said they have not, and it could be attributed to a variety of reasons. Miller stated that work is being done to make it easier for processors to work with their internal inventory software packages used to communicate with Trace Register. Bray asked if specific retailers prefer to use a product that is traceable for their consumers. Miller said absolutely and that there needs to be a business incentive or consumer demand for processors to get behind the traceability program. Hode believes that as more consumers utilize the QR code scanning process to trace products that new incoming processors will hopefully sign up for the Trace program. Miller also provided some details and a brief video on the new trip ticket inventory module. Denson stated that they tried implementing an inventory module in past years and dealers were hesitant because the inventory module would not be compatible with their pre-existing inventory systems. Miller stated Bluefin Data and Trace Register are working to provide a module that can better communicate with their internal software packages. Miller presented some improved data checks that are being implemented in the traceability system. Miller also discussed some new marketing methods that Trace users are implementing to increase awareness among consumers.

Update on MRIP Activities T. Sminkey provided an update on the implementation schedule for the 2013 dockside intercept survey. The angler questionnaire is essentially unchanged. The biggest change to sampling will force samplers to use clusters of samples instead of drawing individual sites. Sites will be clustered in similar ways as samplers currently select alternate sites. Samplers will also no longer be able to select sampling times and the draw process will predetermine sampling time intervals when samplers will be required to be sampling. All samples drawn will be required to be completed, and there will be no rescheduling of assignments. Samplers will spend time collecting angler interviews along with time spent counting anglers that have completed fishing. Night intervals are intended to be covered by 2 samplers and unsafe night sites will not be included in the draw. The sample draw program will require an input of available staffing for each monthly draw. It will constrain the draw and ensure that all samples will be completed. Shore sampling will be clustered regardless of whether they are beach/bank, man-made or both. If a beach/bank site is included, then incomplete trip interviews can be obtained during the second half of the time interval. Incomplete interviews are not limited in number or based on time the angler has already spent fishing as in past years. The site register web tool has most of the features necessary for moving forward into 2013. NOAA Fisheries hopes to have some additional functionality for end users in the first quarter of 2013. Denson asked when NOAA hoped to have the new procedures in place. Sminkey stated the Gulf is proposed to start on January 1, 2013. Anson asked if the night sites were given equal weighting as day sites. Sminkey said the two night time intervals will be grouped to essentially lower the probability of night sample selection. Anson also asked how the site pressure affects the clustering process. Sminkey stated that sites with a pressure of 4 or larger will be a single site cluster. Sites with a pressure lower than 4 in it will build clusters of 3 sites based on mode, proximity, and pressure. Denson asked if samples cannot be rescheduled are the draws going to produce additional assignments if samples need to be canceled. Sminkey said that no additional assignments will be drawn and states will need to be accurate with their input of available sampler days as an input each month. Anson asked how sampling could be impacted if a string of bad weather comes up. Sminkey stated that assignments should not be cancelled unless the bad weather is a life threatening situation and if the weather is rough and anglers are not fishing the value zero interviews or zero completed fishing trips is a valid and useful day of sampling. G. Colvin gave a brief update on the angler license database. Work is continuing to improve data quality and a meeting will likely be held to discuss where this database is going in the future. Colvin also stated that there is more money available for state license database improvement projects. Colvin stated a pilot project is underway for a dual frame pilot project in the four southeastern states. Another pilot project will begin wave 6, 2012 with an address based mail survey utilizing the angler license database. NOAA Fisheries hopes by fall of 2013 they will have a good idea of the method that will be used for effort survey data collection.

Status of Recreational Choice Experiment Survey A. Miller discussed the need for collecting data to value changes in recreational management regulations for key federal and state species. Miller is working with NOAA Fisheries Economists at the Southeast Fishery Science Center (SEFSC) and the Gulf MRIP states to conduct this survey research. The survey is a mail survey and will ask private and charter anglers to choose between different trips and assumptions to allow values to be placed on different trip types and modes for various recreational species. The mail survey is being tested through three focus groups in Florida. The mail survey will utilize the angler license database for addresses in private boat mode. For charter mode, addresses will need to be collected as a dockside survey add-on form. The goal is to collect 3,000 addresses in

charter mode. Address goals are distributed by state based on historical sampling productivity. Address collection in charter mode is proposed to begin in March 2013. Attempts will be made after every successful angler interview until the target sample size is reached for a particular time period. E-mail addresses will not be collected during this survey. Froeschke asked if the choice options in the mail survey were static or different throughout the survey. Miller stated there are several different options provided throughout the survey. Froeschke also asked how they decided which choices to offer. Miller stated he would double check with NOAA Fisheries economists at the SEFSC as to how the selected choice options were chosen, but thought it was based off of the experimental design. Froeschke also asked how the target goal of 3,000 addresses was determined. He believes that target sample size is too low. Miller stated NOAA SEFSC and GSMFC economists determined 3,000 to be sufficient using the population and standard errors, but would explore this again based on the subcommittee concerns. Donaldson asked if collecting the 3,000 addresses in two or three months of sampling could bias the results based on the fishing season which they are collected. Many of the subcommittee members agreed that the demographics of the angling population could be much different depending on the fishing season and time of the year in charter mode specifically. Miller agreed that it might be better to collect the addresses throughout the year and stated he would discuss this with NOAA SEFSC economists. After further discussion, all of the Gulf States that participate in MRIP agreed to work with GSMFC and NOAA on collecting this information. Miller will also contact Florida again as they were not present at the subcommittee meeting.

Status of Metadata Data Compilation Ralf Riedel talked briefly about his current role as metadata coordinator. The fishery dependant and independent data collection information is complete but needs to be reviewed one additional time. Riedel is currently entering data about the history of recreational fishing regulations. Determining the proper structure for housing the data in a usual fashion is taking some time. Riedel expects to have the recreational regulations finished by November of 2012. He then plans to work on the commercial regulations, licenses and fees, and possibly a table detailing weather anomalies. All of the data are being housed in InPort.

Election of Officers Christine Murrell was nominated for Chairman by Page Campbell and seconded by Dave Gloeckner. Vince Cefalu was nominated for Vice-Chairman by Chris Denson and seconded by Page Campbell. Murrell was approved as Chairman and Cefalu as Vice-Chairman.

Being no further business, the meeting was adjourned at 11:33 a.m.

Review of 2011 Commercial Data

Each state provided feedback based on a review of the spreadsheets sent out prior to the meeting by Bellais. The States mentioned that the FIN DMS numbers were very close to their state totals and the slight differences likely indicated that they collected some additional data that has yet to be delivered to GSMFC. The States also mentioned that there were a few coding errors on their part. Data will be redelivered and loaded into the FIN DMS as needed. All necessary corrections will be made at the state data level and submitted to GSMFC for loading into the FIN DMS. It was decided by the TCC Data Management Subcommittee (DMS) that there was a need for a review of the FIN standard codes to help with the quality assurance and quality control of the commercial data. The FIN standard codes review will be conducted by DMS, in conjunction with the commercial data review at the fall GSMFC meeting.

**TCC DATA MANAGEMENT SUBCOMMITTEE
MINUTES
Tuesday, March 12th, 2013
Destin, FL**

Chairman Christine Murrell called the meeting to order at 8:35 a.m. The following members and others were present:

Members

Chris Denson, AMRD, Gulf Shores, AL
Nicole Shaffer, AMRD, Gulf Shores, AL
Richard Cody, FWRI, Saint Petersburg, FL
Page Campbell, TPWD, Rockport, TX
Vicki Swann, TPWD, Austin, TX
Christine Murrell, MDMR, Biloxi, MS
Michael Harden, LDWF, Baton Rouge, LA
Vince Cefalu, LDWF, Baton Rouge, LA
John Froeschke GMFMC, Tampa, FL
David Gloeckner, SEFSC, Miami, FL

Staff

David Donaldson, Assistant Director, Ocean Springs, MS
Larry Simpson, Executive Director, Ocean Springs, MS
Donna Bellais, ComFIN Programmer, Ocean Springs, MS
Gregg Bray, Programmer/Analyst, Ocean Springs, MS
Alex Miller, Economist, Ocean Springs, MS

Others

Linda Lombardi, NOAA Fisheries, Panama City, FL
Beverly Barnett, NOAA Fisheries, Panama City, FL
Joey Shepard, LDWF, Baton Rouge, LA
Terry Cody, Rockport, TX
Frank Helies, GSAFF, Tampa, FL
Claude Petersen, Bluefin Data, Gonzalez, LA
Andrew Petersen, Bluefin Data, Gonzalez, LA
Dale Diaz, MDMR, Biloxi, MS
Troy Williamson, Corpus Christi, TX

Adoption of Agenda

The agenda was approved and adopted as written.

Approval of Minutes

The minutes of the Data Management Subcommittee (DMS) meeting held on October 12th, 2012 in Point Clear, AL were approved as written.

Status of Biological Sampling Activities

Status of collection and analysis – Bray provided a description of the biological sampling

analysis matrix provided in the meeting folder. Alabama, Louisiana, and Texas have completed sample data entry for 2012. Mississippi needs to complete November and December sample data entry. Florida has not provided any 2012 data as they are still unable to access the FIN Data Management System. Gloeckner asked what needed to be fixed to accomplish data loading. Cody described that computer problems with JavaScript have been the biggest problem. Cody stated that it might be necessary to bulk load much of the electronic data from FWRI to GSMFC and eliminate data entry in the FIN DMS. Gloeckner suggested loading FWRI data to the SEFSC database and then setting up a database link to GSMFC to load biosampling data to the GSMFC oracle database. Cody agreed that might be a viable alternative and suggested Gloeckner contact Bridget Cermak at FWRI to work out the programming details. Age sample processing is ongoing. Texas is fully completed with processing, reading and data entry. Alabama, Louisiana, and Mississippi are in the process of completing the reading and continue with data entry. All states expect to be completed by summer of 2013. Bellais reminded Alabama, Mississippi, and Texas to inform her when data are clean so she can move data to the permanent data table in the FIN DMS.

Discussing of adding trip_id variable – Bray stated this issue was discussed at the prior Data Management Subcommittee meeting and most states were concerned at the difficulty in identifying biological samples to unique fishing trips. Since that meeting, the subcommittee had a conference call and NOAA stated that depending on potential biases in the data, not having a unique trip identifier for each record might render FIN data useless. Bray mentioned that if all commercial biological samples were linked to a trip ticket number that would solve the problem for commercial samples. Texas and Alabama stated that this would be difficult as they are still collecting all commercial samples from dealers. Denson also stated that if the sampling unit is the trip then the productivity of collecting age structures is going to be impacted negatively. Lombardi stated that NOAA analysts have determined that there are some biases associated with low sample sizes at the trip level so we need to be able to weight the sample at the trip level. This issue has come up since NOAA has started using a new model for stock assessment purposes. Gloeckner stated if NOAA uses random age sampling analyses then all samples have to be linked back to the individual trip since ages need to be reweighted by the lengths. Lombardi stated the need for more specific spatial landings data is increasingly more important under these analysis methods. Bray stated that a potential fix to the recreational sampling problem would be to collect them specifically from MRIP dockside interviews that would allow for an easy way to identify angler trips. This would involve getting NOAA Statistics and Economics staff in Silver Spring, Maryland to allow for methodological changes to the Access Point Angler Intercept Survey (APAIS) and would also likely require two samplers on every field assignment. Texas does not participate in MRIP so changes in Texas procedures would still need to be modified for recreational sampling methods.

Other issues – Bray stated that some additional changes to NOAA analyses will likely require sampler average percent error's (APE's) to be used in the model. If samplers have APE's above a species specific threshold then their data would likely be excluded from the model. Lombardi shared a handout discussing some issues that NOAA would like changed for FIN data provided for future assessments. Most were all simple data coding issues that GSMFC can format before providing future datasets. There was also some discussion about having some quality control methods setup prior to delivering biological data to help address some key entry mistakes with regards to outlying lengths and weights. NOAA agreed to provide some more details with specific scatter plots or quality control methods to help with the FIN data. Bray also discussed that Alabama has some biological funds that they are unable to spend for 2013. Since biological sampling was funded using some additional stock assessment and enhancement funds these monies cannot be carried over and must be spent for 2013. After obtaining

permission from Alabama, the proposal was too redistributed the approximately \$62,000 across the five Gulf States using the current distribution of biological sampling funds. Bray asked if the money provided to each state would be sufficient to collect additional samples for the 2013 sampling year. Cody asked if there was an end date to when the money had to be used. Bray stated that he assumed the money had to be spent in 2013. Denson asked if the money could be spent on equipment instead of directly collecting additional samples. Shepard asked if the money could be spent by GSMFC to address data management issues. Bray stated he would have to get that answer from Donaldson on using the money for reasons other than sampling.

Discussion of Web-based Commercial Landing Reporting Petersen provided a presentation on the history of the commercial trip ticket system. Petersen stated that unified trip ticket does not indicate that all states have to collect the same data. From 2000-2010 the dealer reported to Bluefin data and there were 5 different versions of trip ticket reporting for each Gulf State. The program was PC based which means the program runs locally on each dealer computer and the database also resides on the dealer computer. In the present, Bluefin Data has revised the state reporting programs to provide a state and federal file. Bluefin Data is now sending data to the states along with SEFSC, GSMFC, Northeast Fishery Science Center (NEFSC), along with the state data feeding into the Trace Register system. Petersen mentioned that the PC based programs might not run correctly on Windows 8. This started the discussion of unifying the trip ticket program which would be a single code based program that would be customizable for each state. After testing, the older PC based version does work on Windows 8 and because of this the PC based programs were unified. Petersen discussed that he has been receiving calls from dealers that are asking for data entry options that PC based reporting will not support such as entering data on tablets, mobile devices, or Apple computers. This has prompted the need for creating a web-based reporting system. A web-based system would not eliminate the PC based system but just provide an additional option for data entry.

Unifying Species Codes – Petersen is asking for one unified data structure that would still allow states to collect the data they require. In four of the five Gulf States there is no control over species, condition, market and unit combinations. Petersen is asking for an all-in-one species table created with a standard data structure. Petersen provided an example of what is currently being used in the Northeast. This would allow for more cost-effective development of new generation data entry methods. Before Bluefin Data can proceed with developing a unified trip ticket program, Petersen needs agreement that all states are willing to create this all-in-one species table. Bellais plans to coordinate with the states on additional discussions to get Petersen an answer ASAP. Texas is already working towards developing this species table.

Discussion of Adding/Modifying Codes to FIN DMS

Bellais discussed needing a technical review of adding or modifying codes to the FIN DMS along with the annual data quality assurance and quality control (QA/QC) process that the committee holds during the fall subcommittee meeting. If codes need to be added to FIN DMS please contact Bellais and she will coordinate a call with the states to make sure the code is standardized across all states. Denson asked if they could also review the codes added for the Highly Migratory Species data collection program. Bellais stated she can share those codes with the subcommittee.

Discussion of Federal Trip Ticket Editing System

Gloeckner discussed that this is a new system being used to review trip ticket data. The new system is being beta tested with the federal port agents. The goal is to provide state partners assistance in error checking trip ticket data as it is received electronically. Each state partner will

be queried as to what they will like to see as useful program output. The biggest hurdle will be finding a unified output format that everyone agrees to and can be utilized. As port agents find invalid codes they could be working with the states and dealers to update data tables and save time for state staff. Currently during testing the port agents are reviewing data straight from GulfFIN prior to the states receiving it. Alabama and Louisiana both asked if the port agents are wasting their time because state personnel are cleaning up the data at the same time the port agents are reviewing the data. Gloeckner asked if there was an easy way to parse the data so the federal port agents review federal trips and the state agency's focus on reviewing state trips. Denson said it would take too much time to attempt to subsample the tickets based on state trips or specific species landed. Campbell stated she would like to see what the federal port agents are identifying as errors and then possibly determine a method for how the review process would actually work. Gloeckner asked if NOAA assistance is even useful during the early data submission process. Most of the states generally agreed that some additional review might be useful after the states complete their internal review process.

Discussion of New MRIP Intercept Survey Methods

Bray discussed that the new MRIP Access Point Angler Intercept Survey (APAIS) was implemented in March 2013. Samplers are following new site selection protocols and have additional responsibilities for counting anglers along with collecting dockside angler interviews. Samplers are now restricted to 6 hour time blocks that are predetermined and all sites for an assignment are selected through the random draw process. States are in constant contact with GSMFC and NOAA with problems or concerns and data are still being processed by GSMFC.

Status of Recreational Choice Experiment Survey

Miller updated the states on the recreational choice experiment survey that NOAA and GSMFC are implementing in 2013. Miller discussed that the states are collecting addresses from anglers that have taken a charter fishing trip over the last 12 months for use as a mail survey sampling frame. Addresses from charter mode are being collected using a dockside add-on form in West Florida, Alabama, and Mississippi. Field forms have been delivered to the states and sampling has started. The 3-day charter passenger license database is being used for charter mode in LA. Private boat mode addresses are being obtained via the national angler license database. Miller provided a frequently asked questions white paper and a question and answer sheet based on initial questions received from the states. Miller asked the states to continue to send him questions and concerns about the survey.

Discussion of Fish Tags for the Red Snapper Fishery

Bray mentioned that this issue was discussed back in the fall of 2010 for the gag grouper fishery. Fish tags are not something currently addressed by MRIP. In 2010 this committee agreed that a state implemented fish tag data collection system would be extremely difficult for multiple reasons. Froeschke stated that the Gulf Council Private Recreational Advisory Panel (GCPRAP) had a recommendation for a tag or permit system as an effort tracking system. It was not designed as an effort limiting system. The concern is that fishing effort is overestimated in the red snapper fishery which results in overestimation of total harvest. Froeschke stated that if implemented the end users would need to be integrated into this process to help determine the success or failure of the program design. Denson stated the difficulty of assigning tags to individual anglers or boats would require immense amount of state manpower for a fishery like red snapper. Froeschke stated that the Gulf Council is trying to figure out if a fish tag system would improve effort estimates which in turn would potentially provide additional fishing days in the red snapper fishery. Froeschke stated that some of the potential benefits brought up by the

GCPRAP were providing real time data, data from private access anglers, additional discard data, and implementation at electronic and internet sales points. Froeschke stated that it would be unrealistic to expect a fish tag or permit system to provide exact counts of angler trips but hopefully over 5 or 10 years it might possibly provide another index of fishing effort. If that additional index would not be useful in the stock assessment process then this tag system would not be worth attempting. Cody stated that Florida has a snook stamp and tarpon tag but that information does not seem to directly improve stock assessment process from an angling effort standpoint. Cody stated that the chances of a red snapper tag system achieving a census of angling effort is highly unlikely. Cody would prefer to obtain a sample through normal statistical procedures instead of trying to obtain a census of trips. The GSMFC plans to draft a letter to the Gulf Council providing their concerns regarding the feasibility, costs, and likelihood of success of a red snapper tag or permit program in the Gulf of Mexico.

Update on GMFMC Private Recreational AP Meeting

Due to time constraints, Froeschke consolidated these comments into the prior discussion of fish tags for the red snapper fishery.

Status of Metadata Data Compilation

Bray stated that he will email the presentation developed by Ralf Reidel on his progress on metadata compilation due to time constraints at the meeting.

Other Business

Being no further business, the meeting was adjourned at 12:17 p.m.

ATTACHMENT B

FIN Otolith Processors Training Workshop Meeting Summary May 14-15, 2013 St. Petersburg, Florida

The meeting was called to order at 9:00 a.m. and the following people were present:

Alison Amick, FWRI, St. Petersburg, FL
Jessica Carroll, FWRI, St. Petersburg, FL
Kristen Wolfgang, FWRI, St. Petersburg, FL
Kristin Cook, FWRI, St. Petersburg, FL
David Westmark, FWRI, St. Petersburg, FL
Jaime Miller, AMRD, Dauphin Island, AL
Emily Seale, AMRD, Dauphin Island, AL
Jerome Little, AMRD, Gulf Shores, AL
Darrin Stewart, MDMR, Biloxi, MS
Wes Devers, MDMR, Biloxi, MS
Andy Fischer, LDWF, Baton Rouge, LA
Isis Longo, LDWF, Baton Rouge, LA
Prince Robinson, LDWF, Baton Rouge, LA
Kym Walsh, LDWF, Baton Rouge, LA
Lacie Wilson, TPWD, Palacios, TX
Morgan Cason, TPWD, Palacios, TX
Deb Murie, University of Florida, Gainesville, FL
Gregg Bray, GSMFC, Ocean Springs, MS
Dave Donaldson, GSMFC, Ocean Springs, MS
Steve Vanderkooy, GSMFC, Ocean Springs, MS

Conducting Otolith Reading Exercises for Black Drum, Red Drum, Spotted Seatrout, Gray Triggerfish, Greater Amberjack, King Mackerel, Southern Flounder, Sheepshead, Striped Mullet, Gray Snapper, Red Snapper and Vermilion Snapper

The first day of the meeting consisted of a reading exercise where the groups read otoliths. The group split into five sections and conducted readings of various sets of otoliths for king mackerel, gray triggerfish, snappers (red, gray and vermilion), greater amberjack, sciaenids (black drum, red drum and spotted seatrout) and inshore species (flounder, sheepshead and striped mullet). Each group read the otoliths, counted annuli, and determined edge type for each fish. This information was recorded and provided to the moderator for compilation. All groups were completed by lunch on the first day which indicates the readers are getting better and reading these priority species.

Please note that this summary includes tables that outline the reference sets APEs, by year as well as the agency contacts and responsible person(s) for each of the reference sets. This information can found at the back of the document.

Discussion of Greater Amberjack Reference Set

D. Murie was gave a presentation regarding the greater amberjack training manual. The coding in the manual is based on FIN standard codes. All of the otolith extraction methods were taken from the FIN otolith processors manual. Murie went into detail describing the methods for identifying the first annulus. The manual provided a large number of reference images for greater amberjack otoliths of various ages. The reference set was read by Panama City Lab staff, Murie at University of Florida, and Louisiana. The overall APE was 2.73%. The training manual will be finalized soon and placed on a CD to distribute to the group.

Discussion of Southern Flounder Reference Set

A. Fischer distributed documentation regarding the set. There are a total of 199 otoliths in the set and the set was circulated during the winter of 2013 and spring of 2013. There was a decrease in APE from 2.59% to 1.17% for all agencies. While the APE has improved, there still appears to be some variation in age estimation and assigning the correct margin codes. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of King Mackerel Reference Set

C. Palmer was unable to attend this year's meeting. He emailed results after the meeting and all states were able to read the reference set. The APEs ranged from 3.0% to 7.5%. The overall APE was 5.0%. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Red drum/Spotted Seatrout/Striped Mullet Reference Sets

J. Carroll stated that all agencies have read the various sets and the APEs are 3.80%, 2.91% and 4.70% for red drum, spotted seatrout and striped mullet, respectively. The red drum APE was originally 10.6% but after correcting for young of year fish the APE was reduced to 3.8%. The reference sets will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Sheepshead Reference Set

W. Devers reported that the reference set was distributed and read by all agencies. The overall APE was 6.25% and as with other species, the main issue is correctly identifying the margin code. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Red Snapper Reference Set

R. Allman could not attend but did send his results to Carroll for presenting at the meeting. She stated that the reference set was distributed and read by all states. The reference set was read by all states and the overall APE was 8.99%. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Vermilion Snapper Reference Set

B. Barnett could not attend but did send her results to Carroll for presenting at the meeting. The reference set was read by all states except Mississippi and the overall APE was 13.99% for all 200 slides

in the set. There was some concern about the last 100 slides being too thin so she calculated APEs for just the first 100 slides too. For the first 100 slides the APEs ranged from 4.93% to 12.42%. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Black Drum Reference Set

G. Gray stated the reference set was not circulated prior to this meeting. He is working on creating new slides and plans to distribute it in June of 2013.

Discussion of Gray Triggerfish Reference Set

Barnett could not attend but did send her results to Carroll for presenting at the meeting. The set was read by all states and the overall APE was 22.7% for all 115 slides in the set. It was noted that since the spines are difficult to read, the target APE for this species is 10% not the 5% standard. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Red Grouper Reference Set

The red grouper reference set is currently being read by some of the Panama City Lab staff. The set consists of both whole and sectioned otoliths. The set will be sent to Carroll for ageing in the next few months. There is also a training set of 66 whole and sectioned otoliths that will be sent along with the reference set. There is also a CD that contains all the reference set otoliths (annotated and non-annotated images). Alabama agreed that if they collect any red grouper they will be sent to FWRI for ageing.

Discussion of Gag Grouper Reader Exchange Set

G. Fitzhugh travelled to FWRI and met with Carroll about ageing gag. Carroll and Fitzhugh aged a reader exchange set. The set consists of whole otoliths. There is also a gag grouper reference set that is currently located at the Panama City Lab. The APE for FWRI on the reader exchange set was 1.81%. Any gag otoliths that are collected from the other states will be sent to FWRI for ageing.

Discussion of Gray Snapper Reference Set

A. Amick reported that the reference set was distributed and read by all agencies. The overall APE 8.5% and most states were under 1.0%. The reference set will again be distributed to the various agencies and the results of the readings will be presented to the group at the May 2014 meeting. The historical APEs for this species can be found at the back of this document.

Discussion of Individual APEs in Stock Assessment Process

G. Bray stated that we need to continue circulating reference sets each year as state APEs will now be incorporated in the stock assessment process. Murie stated that due to new stock assessment methods if a consistent bias is observed for states the scientists will be able to adjust the bias observed in the APEs. For that reason it is important to have that APE data to provide to stock assessment scientists.

Discussion of Future of Biological Sampling under FIN

D. Donaldson stated that currently there is no funding to continue FIN priority species sampling in 2014. He stated that the Commission continues to work with NOAA to identify funding for 2014 and beyond. Donaldson said it would be useful to know if FIN funding was not obtained at what level if any the states would be able to continue biological sampling and for what species. Several of the states expected that they would continue sampling for a few priority species but they would have to talk to their supervisors to confirm that. Donaldson also stated that the otolith processors meeting is not reliant on biological sampling funding and might still be necessary to have in 2014 for a variety of reasons depending on state sampling programs.

Discussion of Centralization of Biological Sampling Data Entry Bray stated that due to issues with quality control over the last several years the Commission is considering proposing a standardized FIN form for field data collection. The proposal would require the states to collect data on the FIN form and send the form to GSMFC for processing. This would provide the Commission a copy of all field data sheets and would allow for greater control over the quality control process of data entry/capture. This idea will be presented at the June FIN meeting and Bray said he would share the results of that discussion with the processors once more feedback has been provided from state supervisors.

Discussion of Future Training Meeting

The group discussed the date and location for the next otolith meeting processors training workshop. It was decided that it should be held at Florida Fish and Wildlife Research Institute during the first part of May 2014. Donaldson stated that the meeting would be shortened from 2 days to 1½ days since processors are getting more efficient at the reading exercise and there appears to be a lot of down time. Donaldson also stated that if FIN funding is not obtained for 2014 a decision about the otolith processors meeting will be made based on state sampling programs and the need for a face to face meeting.

Other Business

Bray mentioned that when states send otoliths to another state for ageing they should only expect that state to process, age, and send the results back to the original state for data entry. The state that is ageing those samples are not responsible for entering the data under that scenario. The ageing state is also responsible for sending the slide and or additional otolith back to the state along with the results of the ageing process.

S. VanderKooy reported that having additional personnel with the experience to age scales will benefit the Gulf menhaden fishery and the state marine agency. Currently, a single individual at the NMFS lab in Beaufort, NC does all menhaden age determination but is past retirement age. NOAA is currently training a new staff member at Beaufort to eventually replace Ethel. At this time, all of the menhaden ages are from a fishery-dependent source which may be biased due to operational protocols within the fishery. Adding the fishery-independent ages should improve information in assessment through adding data from inshore samples and random offshore collections. To this end, scales will be obtained from fishery-independent samples in several of the states and divided up by mesh size and offshore seine samples. At this time, the goal is to process up 3,000 samples from the existing gillnets sets and any fish >100mm (up to 1,000) from seine collections. Additional samples will be aged as efficiency increases. Scales will be removed from adult and large juvenile menhaden provided by the participating state agencies following standard protocols outlined in the GSMFC's *A Practical Handbook for Determining the Ages of Gulf of Mexico Fishes: Second Edition*, Chapter 5.17 Gulf Menhaden.

Initially, scales will be read and ages determined at the AMRD Dauphin Island office however, as sampling increases, each of the states may begin working on ageing of their own samples. VanderKooy, with the assistance of the Beaufort Lab personnel, will begin developing a reference set for Gulf menhaden scale reading, training, and QA/QC purposes in the future. VanderKooy will keep the group informed as they proceed. In the event that the Commission's "Gulf of Mexico (GOM) Pelagic Bait Survey" would be funded through either NRDA or the Restore Act, there will be funding for additional training, supplies, and agency staff to conduct this project.

May 9, 2012

The meeting was reconvened at 10:00 a.m.

Review and Comparison of Reading Exercise by Groups

After each group determined the age of the various fish, the information was entered into a spreadsheet and J. Carroll, A. Amick, K. Wolfgang and K. Cook calculated APEs for all species. The following table outlines the APEs for each species and provides a historical look (where applicable) for those species (please note that APEs are recorded as a percentage).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Black drum					0.67	0.21	2.67	0.00	3.93	4.69	2.67
Red drum					0.52	4.35	1.63	2.83	1.04	1.48	4.07
Spotted seatrout					0.00	4.55	1.17	1.44	1.64	0.86	2.78
Southern flounder		10.54	9.51	4.00	2.86	8.78	3.03	6.48	6.81	1.70	9.15
Striped mullet					6.97	7.48	9.84	2.87	2.72	2.08	2.40
Sheepshead					0.42	8.72	2.96	4.12	4.36	2.07	0.00
Red snapper	16.01	4.97	5.58	3.32	1.14	6.04	3.55	1.30	4.03	2.74	3.90
Gray snapper					3.19	9.22	1.80	3.41	1.34	1.36	0.00
Vermilion snapper					6.10	16.32	8.54	7.02	12.97	9.37	9.76
King mackerel			13.60	2.88	11.51	6.48	13.12	10.26	10.12	2.86	4.43
Greater amberjack									16.43	9.07	5.00
Gray triggerfish					16.81	21.79	16.02	10.18	28.58	23.95	10.61

After the comparison exercise, otoliths, where there were differences among the groups, were identified and everyone examined these otoliths (as a group) to determine where each group had differed. The group believed this was a useful activity and it helped everyone identify where errors can (and were) made while reading the otoliths. It was noted that having the groups mark where they counted the rings on print outs was also very helpful during the discussions. Overall, the APEs for most of the species were at or below the 5% threshold. Where the APEs did exceed the 5% standard, it was due to several issues: 1) difficulty in identifying the first annulus (vermillion snapper and greater amberjack) and 2) general difficulty in identifying what is considered a ring (gray triggerfish).

Being no further business, the meeting was adjourned at 11:35 a.m.

Reference Sets APEs, by Year

<i>REFERENCE SET</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
Black drum					7.93			
Red drum				2.36	3.82		7.96	3.80
Spotted seatrout				3.15	3.73		6.78	2.91
Southern flounder	6.71	18.89*	7.35	3.22	8.32	7.24	2.59	1.17
Striped mullet				7.12	5.88		6.87	4.70
Sheepshead				3.91			5.05	6.25
Red snapper	2.74	4.90	4.34	5.01				8.99
Vermilion snapper								13.99
King mackerel (overall)			5.83	7.45	5.92			5.05
King mackerel (sectioned)			3.39	4.87	0.68			2.71
King mackerel (whole)			9.13	10.04	13.83			7.43
Greater amberjack								2.73
Gray triggerfish						20.80		22.7

*data transcription errors resulted in elevated APE

AGENCY CONTACTS FOR REFERENCE SETS

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**Commercial Technical Work Group
Conference Call Summary
April 9th, 1 p.m.**

The following workgroup members were present:

Steve Brown, FFWRI, Saint Petersburg, FL
Michael Harden, LADWF, Baton Rouge, LA
Lawrence Beerkircher, NOAA Fisheries, Miami, FL
Chris Denson, ALDCNR, Gulf Shores, AL

Staff

Gregg Bray, GSMFC, Ocean Springs, MS
Dave Donaldson, GSMFC, Ocean Springs, MS

Determine the need for trip-level commercial data in the U.S. Virgin Islands

Bray mentioned that this topic was identified at the most recent FIN facilitated session. The purpose of the call was to determine the need for trip-level commercial data in the U.S. Virgin Islands. Beerkircher stated currently commercial fishermen in the USVI self-report using a Commercial Catch Record system that is designed to represent 100% of the landings. This is similar to a logbook program and it also contains some discard information. Beerkircher also stated that there is a great deal of validation needed to confirm that the number of trips and landings reported are accurate. Beerkircher stated there is some biological sampling but no age structures or maturity samples are being collected due to a lack of consistent funding. Donaldson also mentioned that data from highly migratory species are being collected in the USVI. Unfortunately the USVI does not participate in FIN regularly so the specific data elements, sampling coverage, and funding levels are all unknown at this point. A report is included that was produced by MRAG Americas working with National Marine Fisheries Service to look at potential improvements to the Caribbean commercial data collection programs. This topic will need to be discussed further under the guidance of the full FIN committee.

There being no further business, the call was adjourned at 1:15 p.m.

**Commercial and Recreational Technical Work Group
Conference Call Summary
December 13th, 9 a.m.**

The following workgroup members were present:

Steve Brown, FFWRI, Saint Petersburg, FL
Michael Harden, LADWF, Baton Rouge, LA
Lawrence Beerkircher, NOAA Fisheries, Miami, FL

Staff

Gregg Bray, GSMFC, Ocean Springs, MS
Dave Donaldson, GSMFC, Ocean Springs, MS

Review FIN Detailed Effort Module

D. Donaldson gave a brief overview on the history of the detailed effort module. It was developed because detailed effort data were not being obtained through trip tickets. The purpose of the call was to determine if there were fishery management issues that were not being met due to a lack of commercial detailed effort data and to also determine if the FIN detailed effort module was still an acceptable method. The workgroup reviewed the white paper describing the detailed effort module and listing of the minimum data elements. S. Brown stated that Florida is already collecting detailed effort data for multiple species with the electronic trip ticket program. Changing the paper trip tickets to collect detailed effort data is more problematic and costly. L. Beerkircher stated that data we obtained from the federal logbooks are good, but we do seek to improve reporting and linkages to other data systems via ongoing reconciliation and validation projects. M. Harden confirmed that Louisiana has not implemented the detailed effort module but they do have an interest. Harden agreed that lack of space on paper tickets is a limiting factor at this point. Harden also stated that the current FIN methodology is acceptable to Louisiana. Donaldson stated that the methodology was tested on the commercial blue crab fishery in Louisiana and it worked well. The hope was to test it further on additional species but a lack of funding prevented that. The recommendation of the workgroup was the FIN Detailed Effort Module is viable and could be implemented in more states for multiple species if additional funding was made available.

There being no further business, the call was adjourned at 9:15 a.m.

**FIN Data Collection Plan Work Group
Conference Call Summary
May 30th, 2013**

The following workgroup members were present:

Britt Bumguardner, TPWD, Palacios, TX
Lawrence Beerkircher, NOAA Fisheries, Miami, FL
Wes Devers, MDMR, Biloxi, MS

Staff

Gregg Bray, GSMFC, Ocean Springs, MS

Others

Beverly Barnett, NOAA Fisheries, Panama City, FL
Chris Palmer, NOAA Fisheries, Panama City, FL
Gary Fitzhugh, NOAA Fisheries, Panama City, FL
Richard Cody, FWRI, Saint Petersburg, FL
Jaime Miller, ALDCNR, Dauphin Island, AL

Review of 2012 Otolith Collection Reports

Bray described the results presented in the spreadsheet comparing otoliths collected and total landings for 2012 for the FIN priority species. Bray mentioned that each state seemed to be doing a decent job of reaching targets. Significant shortfalls were observed for recreational gray triggerfish and commercial greater amberjack and gray triggerfish. Beerkircher mentioned that recreational gray triggerfish landings appeared to be large enough to not support the theory that samplers are not seeing fish at the docks. Cody stated he was disappointed that Florida samplers did not put enough effort in to collect gray triggerfish otoliths. Cody plans to discuss this with samplers in the near future. Cody also stated that large commercial greater amberjack landings are observed in the Florida Keys and currently there is no FIN sampler located in that region. He may be required to reallocate some sampling effort to the Florida Keys. Most states again stated that commercial samplers are not allowed to cut most species sold whole as it decreases the market value. State representatives stated these issues are the same issues samplers have been dealing with for several years now.

Fitzhugh discussed the 2012 preliminary summary of age-structures received at NOAA Fisheries Panama City Lab. He stated that they received approximately 30,000 more samples in 2012 and most were collected from red snapper, vermilion snapper, and red grouper. Due to the larger commercial collections, the otoliths for these species tend to be subsampled for processing. Fitzhugh also confirmed that none of the samples they have received from FWRI are also entered in the FIN Data Management System (DMS) and hence being double counted. Bray and Cody agreed that no double counting should be occurring.

Bray stated that currently there are no funds available for continuing FIN biological sampling after 2013. He stated that GSMFC is working to obtain funds to continue biological sampling but currently sampling for 2014 and beyond is in doubt. There was considerable discussion about the need for adjusting sampling targets in the future. Fitzhugh stated that he believes the recreational sector is underrepresented under the current sampling Gulf of Mexico sampling protocols. Bumguardner stated that with future funding in doubt it might be premature to look at changing the target allocation until the future of the sampling program is determined. After further discussion the group agreed to recommend to the FIN Committee that FIN continue to use the current targets for biological sampling in

2014 provided funding is secured. Fitzhugh also suggested that this workgroup along with members of NOAA Fisheries Southeast Fishery Science Center (SEFSC) have a meeting to discuss future sampling targets, sampling protocols, and other pertinent issues if sampling is to continue in 2014 and beyond.

There being no further business, the call adjourned at 2:30 p.m.

APPROVED BY:

COMMITTEE CHAIRMAN

MEETING Minutes
Blue Crab Technical Task Force
New Orleans, LA
July 22 - 25, 2013

Moderator, Steve **VanderKooy**, called the meeting to order at 1:00 p.m. The following were in attendance:

Jeff Marx, LDWF, New Iberia, LA
Glen Sutton, TPWD, Dickinson, TX
Ryan Gandy, FWRI, St. Petersburg, FL
Jason Herrmann, ADCNR, Dauphin Island, AL
Alex Miller, GSMFC, Ocean Springs, MS
Traci Floyd, MDMR, Biloxi, MS
Steve Jacob, York College, York, PA
Darcie Graham, USM/GCRL, Ocean Springs, MS
Harriett Perry, USM/GCRL, Ocean Springs, MS
Rob Beaton, FWC, Tallahassee, FL
Steve VanderKooy, GSMFC, Ocean Springs, MS
Debbie McIntyre, GSMFC, Ocean Springs, MS

INTRODUCTIONS

In consideration of the new member to the TTF, Dr. Steve **Jacob**, the group introduced themselves and described their roles in the revision process. **Jacob**, in turn, introduced himself and explained his part in the background work for this FMP as has been accomplished so far. **Jacob** and **VanderKooy** met earlier this year and worked on Socio-Economics and revising the Blue Crab Survey that was used to gather data for the original FMP.

APPROVAL OF MINUTES

There were no minutes to approve at this meeting.

ADOPTION OF AGENDA

The agenda has been rearranged somewhat to allow time for review of *Section 3 Biology*.

HOUSEKEEPING

VanderKooy asked those present to review the TTF roster list for accuracy.

VanderKooy explained that the group is still waiting for one GDAR reviewer to return his results from our Assessment Review Workshop held in Biloxi in mid-June. Initial feedback from the reviewers was very good and the final results are expected to be returned very soon.

This week, the group will take each section and read through it thoroughly, starting with *Habitat*.

The most current versions will be reviewed and any changes/modifications will be made as each section review is completed. When these changes are made this time, they should be final. After this meeting, conference calls will have to be set up for any future completion.

VanderKooy explained that, due to non-existent IJF funding, the program will not be able to provide any expenses for the remainder of this year, including no travel for GSMFC's annual meeting in October at South Padre Island.

SECTION REVIEWS

VanderKooy provided all of the figures and tables from the GDAR report. Any of these tables/figures from the GDAR report needed in the individual sections, can be placed in that section as the group makes its edits to these sections at this meeting.

Section 3.0 Biology - Everyone took some time to review the Biology Section as edited by **VanderKooy** and **Perry** yesterday. The two added the updated information from the sections of the GDAR report which was more current than that in the FMP. **Perry** stressed the importance of everyone checking this section for the most recent data. These sections were reviewed on the screen, allowing all to read and edit appropriately.

Genetic Characterization - This section was missing some information that was in the GDAR. Gandy and **Perry** added in McMillian Jackson's 2004 work. Also, the last two paragraphs from the GDAR were added regarding Johnson studies and Portnoy and Gold (2012) work.

Age - Crowley et al (prep) was updated to reflect Crowley (2012) throughout.

Growth - **Sutton** pointed out that a Texas blue crab tagging study will soon be completed by his grad student and can supply some very recent data. **Sutton** will provide an updated paragraph with this information included in it. This should also be included in the growth table.

Width-Weight - Legal size blue crabs in figure 3.7 was struck.

Nutrition - Some of these sections have been rearranged from the original document and the Table of Contents by Perry. Stuck et al (2009) was added as a reference. Ogberner et al (2011) was also added.

Spawning - A spawner-recruit relationships paper is supposed to be drafted by Cooper to segway from historical information to what we now know. Perry will talk to Cooper for help with this section. The relationship was unmeasured prior to the GDAR.

Settlement - **Perry** will research the term thigmokinetic and see if it belongs or can be simplified.

Juvenile Abundance - **Perry** will add Spitzer study.

Adult Distribution and Abundance - This section still needs a paragraph written. This may be

states-specific. **Perry** will write a general paragraph. It was decided to remove this altogether from the document as unnecessary.

Predation - **Sutton** will add language about trophic foraging level of blue crabs in Texas waters. He will also send the thesis done by his grad student. Guillory's discussion of red drum consumption rates needs to be added by **Floyd**.

Migration Studies - **Perry** will rework the first sentence under Abiotic Factors.

Parasites and Disease - This section may not need to be as lengthy as it is per **Perry**.

Summary of Life History - **Perry** will draft something for this section.

Abiotic Factors - **Perry** will rework from the GDAR format and be sure this is accurate and complete.

Section 4.0 Habitat - **VanderKooy** gave everyone ample time to review this entire section after which the group went through the section thoroughly.

Habitat Requirements - **Perry** will do some work here regarding predation, metamorphosis, etc. **Graham** and **Perry** added some references. Per **Marx**, nothing introductory has changed since the early 1970s. There was not much **Marx** could find in the way of updates for the introductory paragraph. Each section was reviewed and corrections/changes made as the group pointed them out. It was agreed that "GOM" would be used throughout the document for "Gulf of Mexico".

Perry and **Graham** will write a paragraph on invasive crabs and monodons. **VanderKooy** displayed the freshwater inflow chart from Section 3.7.2.4 and indicated that tables will be broken out by state.

Texas - **Sutton** will check on salinities and exceptions which include hypersaline conditions. He will also update this section with information from Cherie O'Brien's contribution to Flounder FMP.

Energy-Related Activities - **VanderKooy** will contact Jeff **Rester** to find out if there are still proposed offshore LNG import terminals to utilize seawater for open loop regasification systems. **Sutton** will check with **Rester** regarding the last two paragraphs of this section: "Offshore wind energy facilities..."

Section 5.0 Enforcement - Everyone was allowed time to review this section in depth after which corrections/changes were made as the group pointed them out. It was reiterated that 2011 is the most recent information to be included in this document.

VanderKooy will rework Tables 1 and 2 as best he can. Historical changes to regulations should be included in each section. The group reviewed and made appropriate changes to the specific regulations of each state. **Herrmann** will consult Bannon regarding Alabama gear restrictions.

Section 6.0 Fisheries - The group was allowed ample time to review this section.

Landings - Regarding Table 6.6, gears cannot be split the same by state or from the historical gears. **VanderKooy** and **Floyd** will find out where the gear data originated for Figure 6.1 since 2000-2005 has huge “combined gears”. No one was sure of the origination of the data in Figures 6.2 or 6.3 and this will be checked out. **VanderKooy** will determine if “Trap landings since 2000 have provided over 99% of the total Gulf landings for the states that identify contributions by gear” is still Figure 6.1. In Figure 6.4, does it make more sense to say “Plotting Gulf percentage that the percent of total U.S.”? **VanderKooy** will investigate “The percent contribution of each Gulf State to total Gulf landings is shown in Table 6.7 and Figure 6.5”.

Aquaculture - **Perry** will make some adjustments to this section.

Non-U.S. GOM Blue Crab Production - **VanderKooy** will double check his email regarding whether all “blue crab” landings reported are *Callinectes sapidus* or if there were other swimming crab species included. **Perry** will check with Williams regarding other species.

Production - **Perry** will do some research regarding the reasons for the decline in soft shell crab production in the 1990s.

Hard Crabs - **VanderKooy** will check the references to make sure that “Herring and Christmas 1974” is included in reference to the 1971-1972 recreational blue crab fishery survey.

Alabama - **Hermann** will update information regarding the average number of resident commercial trap fishermen in Alabama in the last decade.

7.0 Economic Characteristics of the Commercial and Recreational Fisheries - **Miller** explained that his effort has been spent updating data from the past FMP to 2011. **Miller** reviewed these tables with the group. Hard crabs and soft crabs will be included together. He is going to talk with Walter Keithly to see if there is any updated literature available. Cash flow, balance, and income will be presented. This will probably not be complete until the end of this year. **VanderKooy** stated that we will not have time to wait for this data. For formatting purposes, we will need the real tables, etc., not images.

Miller reviewed the NOAA products data (form of processed meat reported) and asked the group to decide which categories, etc. should be included to try and match what we had.

Miller explained that the NOAA report of processors is an estimate. He pointed out that there is nothing in the database for the state of MS for crab processing. **Floyd** will check on the availability of this data for 2006-2011.

The fact that “imports and processing” are not necessarily Gulf or U.S. crabs needs to be emphasized in this section. It also must be stated that these are swimming crabs. **Miller** will work on this and clarify further. The timeline for **Miller** is ASAP so he will get everyone something to review. Also, tables must be text. The deadline for **Miller** to get this section to

everyone for review will be September 1.

Gulf of Mexico Production in Relation to Chesapeake and United States - **Miller** will update this section as well as Table 7.9.

Fishing Income - Results of a Florida survey are referred to but it is unclear as to whether this is a new survey and who performed it. **Miller** would like to include other studies here if there are any more available.

Blue Crab Price Analysis - **Miller** would like to include other sources here if there are any more available.

Blue Crab Marketing - **Miller** will include what the state marketing boards are doing and regional coalition post BP and other sources, if available. MSC certification data may also be included here.

Procurement - Besides the Keithly et al. 1988 LA study, **Miller** would like to find more recent data in order to update this information.

Utilization, Outlets, and Distribution - **Miller** will update this section where needed.

Domestic Processing Sector - Per **Miller**, some data from the GSMFC processor survey can be included in this section and he will update accordingly.

Aggregate Processing Activities - **Miller** will update Gulf processors information to 2011 data and will determine if the number of processors reported previously in this section was from NMFS data. He will also bring current Table 7.10 and determine if this information is from the NMFS processor survey.

Meat Products - **Miller** is going to update the crab meat production to more current years and will determine if the crab meat production reported previously in this section was from the NMFS processor survey.

Breaded Products - **Miller** will bring this section up to date with more current information and will update Table 7.11.

The remaining subsections will also be updated with more current information by **Miller**.

Section 8 Sociology - **Jacob** distributed tables with demographics. He explained the social impact assessment framework. There is not a good profile of fishers in any fishery. Literature is simply lacking in this field. In Florida, **Gandy** completed a survey regarding a fisher profile. Along with cultural independence goes cultural identity. He is going to ask the GIS person at their agency to find the highest density of licenses and do a profile of those places. This will provide an idea of major change in the resources. **Jacob** has gotten a location quotient which identifies those areas for all of the five states.

In Table 1 Demographic Data, **Jacob** pointed out that the age structure is close to the same as it was in the 1999 survey. Marital status is the same also. Although survey response rate was only 10%, Jacob indicated that this does appear to be a representative sample. **VanderKooy** pointed out that these crabbers may not have ever been exposed to an electronic survey prior to this.

Jacob explained the participation of race and ethnicity and the years in the industry comparisons. Immediate family and friends are more likely to be involved currently than was indicated in the previous survey. Participation of friends was still high. Family involvement makes the whole family vulnerable to changes.

The survey indicated that job satisfaction has improved over the time period and is surprisingly high. "Satisfied" and "very satisfied" marks are predominant.

Table 3 indicates that fishermen believe that pollution is worse now and is a major problem. Crab disease is worse now. Vessel pollution is worse now. Table 4 indicates that economic conditions are impacting fishery

Jacob also showed tables breaking this out by state. Some of these issues are state-specific and even region-specific. He pointed out that there are some dramatic distributions.

Jacob continued by reviewing several more tables with results of various sources of conflict and various serious/major problems in many areas.

The smallest percentage of survey participants was from Texas. 75% of all respondents were from Louisiana. **Jacob** was asked what the percentage of total licenses by state responded? He will tighten up this data in response to the group's request.

Jacob indicated that he would like to have a front section of vulnerable people and places. Some of this data is collected already.

The time frame for expected for **Jacob's** draft of this section will be by the end of August as school starts for **Jacob**. **Jacob** states October is more feasible.

Section 9 Management Considerations and Recommendations - **VanderKooy** explained how this section will now be set up. Our goal as a group is to define what our management goal is – what we would like the fishery and the population to look like.

The status of stocks is simply an overview from the GDAR report.

VanderKooy asked that each representative try to identify those areas that can be shared, i.e. recruitment data, similar catch compositions, megalopae studies, and other areas which would benefit all five states. It was decided that this could best be accomplished once the group receives the GDAR reviewers' results. While these recommendations will not be used in the FMP, group members can use the reviewers' recommendations and suggestions as somewhat of a guide.

Gandy agreed to take the reins on this and completely redo this section, i.e., updates/assessments/annual runs. It was discussed that one benchmark assessment was good but there has to be a mechanism to “check” the status between assessments. VanderKooy indicated that if funding were available, GSMFC would employ an analyst to conduct these annual updates.

A conference call will be held to review the GDAR results which are expected at the end of this week, per Sean Powers.

VanderKooy showed the group table 6.6, commercial crabs by gear, 1994-2011, explaining that these are not separated out in a consistent manner. The majority is traps, but traps are not separated out as such. It was decided to leave this as is and explain that it is historical.

VanderKooy adjusted the table to reflect ALL crabs, not just hard. Everyone was encouraged to pull together their data, check it out, and get it to **VanderKooy**. The gear table will be disregarded.

References, Glossary, etc. – **VanderKooy** would like to receive any additions ASAP. He will blend the old references with the new and start the process of checking them as the sections are completed.

PROPOSED TIMELINE FOR COMPLETION/ASSIGNMENTS

ALL – We expect to receive the GDAR report on Friday, July 26. **VanderKooy** will distribute to the TTF, Subcommittee, and analysts for review. Once received, we will schedule a call to go through the report on August 2 or 5. **VanderKooy** will send a Doodle calendar for times.

ALL – The remaining tasks in Sections 3, 4, 5, and 6 will be completed and provided to **VanderKooy** for inclusion by August 15. The updated sections will be emailed and posted on the website for review by all before August 30.

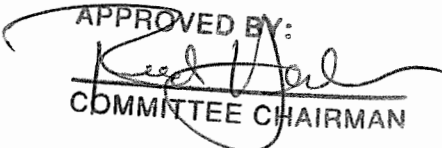
Jacob – The completed draft Sociology section will be provided to **VanderKooy** by August 30 for distribution and review by the TTF.

Miller – The completed draft Economics section will be provided to **VanderKooy** by August 30 for distribution and review by the TTF.

ALL – A conference call will be set up for the week of August 19-23 to begin discussing the new format of the recommendations section (Section 09). This will include the results of the GDAR review and the TTF’s recommendations. The entire section should be completed by September 30 in order to be included in the FMP draft.

Vanderkooy will provide a short presentation of the FMP revision to the TCC at the October meeting and explain that it should be coming to them for review before the end of the year.

TCC SEAMAP SUBCOMMITTEE
Conference Call Meeting Summary
July 25, 2013

APPROVED BY:

COMMITTEE CHAIRMAN

Attendance

Read Hendon, *Chairman*, USM/GCRL, Ocean Springs, MS
Bob McMichael, FWC/FWRI, St. Petersburg, FL
John Froeschk, GMFMC, Tampa, FL
John Mareska, ADCNR/MRD, Gulf Shores, AL
Butch Pellegrin, NOAA Fisheries, Pascagoula, MS
Terry Henwood, NOAA Fisheries, Pascagoula, MS
Jeff Rester, *SEAMAP/Habitat Program Coordinator*, GSMFC, Ocean Springs, MS
Chloé Dean, LDWF, Grand Isle, LA
Fernando Martinez, TPWD, Corpus Christi, TX
Kelly Donnelly, NOAA Fisheries, St. Petersburg, FL

Approval of Minutes

The minutes from the March 19, 2013 meeting were approved as written.

Administrative Report

J. Rester stated that he was working on the SEAMAP 2011 Biological and Environmental Atlas. He stated that it would be sent out for review in the coming weeks. He stated that since the March meeting, SEAMAP had started conducting bottom longline and vertical line sampling. The Spring Plankton Survey and the Summer Shrimp/Groundfish Survey had also been completed. He stated that real time data were sent out to approximately 100 individuals. **J. Rester** stated that he had received a complaint from a shrimper in south Texas that SEAMAP was not sampling off Texas and that therefore the shrimpers did not know where the shrimp were. **J. Rester** reported that SEAMAP funding had finally come through. He reminded everyone to get survey data in as quickly as possible as well as sending in cruise reports. **J. Rester** stated that the Plankton Work Group would soon be holding a meeting to review current data collected. He also stated that the fishery independent sampling proposal was submitted in July.

SEAMAP 2014 Budget

B. McMichael stated that Florida would continue to operate the Ichthyoplankton Archiving Center, conduct a reef fish survey, and participate in the Summer Shrimp/Groundfish Survey. He reported that Florida had some carry-over funds that would allow them to conduct ten days of sampling during the 2013 Fall Shrimp/Groundfish Survey. **B. McMichael** requested \$494,304 for Florida to continue to conduct SEAMAP activities in 2014. He stated that Florida probably spends \$550,000 on SEAMAP activities each year.

J. Mareska requested \$222,575 for Alabama's SEAMAP activities. He stated that he had to cut two bottom longline cruises this year due to funding limitations, and that Alabama does not have any funding available to replace any equipment that may be lost or damaged.

R. Hendon requested \$390,509 for Mississippi's SEAMAP activities that include the Invertebrate Archiving Center, the Spring and Fall Plankton Survey, Summer and Fall Shrimp/Groundfish Survey, and bottom longline sampling.

C. Dean requested \$447,420 for Louisiana's SEAMAP sampling that includes the Spring and Fall Plankton Survey, Summer and Fall Shrimp/Groundfish Survey, the Vertical Line Survey, and the Bottom Longline Survey. She reported that Louisiana was able to reduce costs this year by using a smaller vessel for bottom longline and vertical line sampling.

F. Martinez requested \$137,335 for Texas to increase spatial and temporal coverage in the Bottom Longline Survey. He stated that Texas would be facing increased labor charges next year.

J. Rester stated that the Commission would like \$249,348 for FY2014. He stated that the Commission has had to cut face to face meetings for the work groups and the joint annual meeting for the Subcommittee. He stated that unless additional funds become available, web meetings may be the only way for the work groups to meet in the future.

Everyone realized that the Subcommittee was asking for more money than was available in the FY2013 budget. **B. McMichael moved that the Gulf Subcommittee ask for 41.3% of whatever total funds SEAMAP receives in FY2014 realizing the need for additional funds and adjusting data collection upon the amount received. J. Mareska seconded the motion and it passed unanimously.**

The Subcommittee also passed a motion that SEAMAP send a letter to their Congressional delegation explaining the importance of fishery independent data and requesting additional funds for SEAMAP.

Louisiana Bottom Longline Sampling

C. Dean stated that Louisiana was reviewing the way that they conducted their bottom longline sampling. She stated that Louisiana wanted to switch to using NMFS's established one-degree longitudinal zones. Stations would be selected using the following depth strata: 5-30fm, 30-100fm, and 100-200fm. Station allocations would be based upon the size of the continental shelf allocated to each depth strata with 50% of the stations within the 5-30fm zone, 40% within the 30-100fm zone, and 10% within the 100-200fm zone. One station is forced in zones that do not get selected. While SEAMAP is funding bottom longline sampling between longitudes 89° and

91°, Louisiana was also sampling all the way to 94°. Louisiana would now be sampling a Spring (April/May), Summer (June/July), and Fall (August/September) season across their entire coast.

FSCS Letter

J. Rester stated that it might be appropriate for SEAMAP to send a letter to Dr. Lisa Desfosse thanking her for the help that Chuck Schroeder and Geoff Seidel provide to the states in maintaining the FSCS systems onboard the various vessels. Both Geoff and Chuck have provided training and help to the state SEAMAP partners. Everyone agreed this was a good idea.

With no other business, the call ended at 10:15 a.m.

**AQUATIC INVASIVE SPECIES IN THE SOUTHEAST MEETING
MINUTES
Wednesday, October 2, 2013 & Thursday, October 3, 2013
Raleigh, NC**

APPROVED BY:
Leslie D. Hart
COMMITTEE CHAIRMAN

On Wednesday, October 2, 2013 Chairman **Hartman** called the meeting to order at 8:30 a.m. The meeting began with introductions of the members and guests. The following were in attendance:

Members & Proxies

Lad Akins, REEF, Key Largo, FL
James Ballard, GSMFC, Ocean Springs, MS
Tim Bonvechio, GA DNR, Waycross, GA
Rick Burris, MS DMR, Biloxi, MS
Paul Carangelo, Port Authority, Corpus Christi, TX
Earl Chilton, TPWD, Austin, TX
Rob Emens, NC DENR, Raleigh, NC
Kelly Gestring, FL FWC, Tallahassee, FL
Lisa Gonzalez, HARC, The Woodlands, TX
Leslie Hartman, TPWD, Palacios, TX
Peter Kingsley-Smith, SC DNR, Charleston, NC
David Knott, At-Large Member, Charleston, SC
Roberto Mendoza, University of Nuevo Leon, Nuevo Leon, Mexico
Craig Newton, AL DCNR, Dauphin Island, AL
Chris Page, SC DNR, Columbia, SC
Don Schmitz, FWC, Tallahassee, FL
John Teem, FL DOA, Tallahassee, FL
Linda Walters, UCF, Orlando, FL

Staff

Ali Catchot, GSMFC, Ocean Springs, MS

Others

Todd Ewing, NC WRE, Valdese, NC
Stephanie Green, Oregon State University, Corvallis, OR
Rick Iverson, NCDA & CS, Raleigh, NC
Monica McGarrity, TPWD, Austin, TX
Harley Myler, Lamar University, Beaumont, TX
Brian Piper, Sam Houston State University, Huntsville, TX

Public Comment

Chairman **Hartman** provided the opportunity for public comment. No public comments were received.

Adoption of Agenda

After a minor change, a motion to adopt the amended agenda was made, and passed unanimously.

Introduction to the NC Aquatic Weed Control Program

Emens gave a PowerPoint Presentation entitled "NC Aquatic Weed Control Program". The AWC Program assists local governments burdened with aquatic weed infestations. The program's objectives are to provide financial assistance through cost-sharing arrangements, and to provide technical assistance via site assessments, offering management recommendations, and drafting management plans. The program's philosophy is that, by addressing localized outbreaks, the economic and environmental impacts these species impose can be mitigated in the long run.

The North Carolina Department of Natural Resources recognizes specific plants as "Noxious Aquatic Weeds". All species are listed on the Federal Noxious Weed list. Additional plants on the list are alligatorweed, water hyacinth, parrotfeather, brittle naiad, and phragmites. These are the plants the Aquatic weed Control Program focuses their effort on and that qualify for financial assistance.

Hydrilla is a federally listed weed. It is the state's most costly aquatic plant to control. Management costs exceed \$1,000,000 per year.

Triploid grass carp are being used as a cost-effective management tool for hydrilla. Through public funds, over 8,000 grass carp were released into Lake Gaston in 2012, and over 4,000 were released into other reservoirs.

Creeping Water Primrose is classified a "noxious" by NCDENR and NCDA. It is illegal to culture, transport, or sell.

Survey and Approach to Management of Hydrilla in Lake Waccamaw

Rob Richardson was unable to attend the meeting. Emens gave Dr. Richardson's PowerPoint Presentation entitled "An Overview of Hydrilla in Lake Waccamaw". Hydrilla is the #1 aquatic weed in the United States.

Management methods include using prevention, physical/mechanical management, and biological/chemical control. Hand removal is the most common management form, but is highly labor intensive and inefficient. Plants may reproduce as fast as they are removed. The environment can be modified to create less favorable conditions. Techniques include liming, pond dyes, benthic barriers, fertilization, and water level manipulation. Water drawdowns are effective on many species, is very inexpensive, and stimulates germination or sprouting of native plant species. However, impacts on other organisms/human uses are not known, it is not very selective, and water control structure is needed. Mechanical techniques are only short-term control, they may actually spread problems, are expensive, and may destroy fishing structure. Cutting/harvesting provides direct relief, immediate efficacy, and is moderately expensive. However, it only provides short-term control, is not selective, is slow, and may aid the spread of some species like hydrilla. Other control methods include classical biological control (insects), grass carp, diver-operated suction harvesters, rotovating, and dredging.

The advantages of classical biological control are permanence; low maintenance costs; no chemical residues; minimal environmental damage; desirable species usually unaffected; usually perceived by the public as acceptable.

The disadvantages of classical biological control are effective control may require several growing seasons; initial costs are relatively high; biological control agents are susceptible to a wide variety of human and environmental interferences.

Grass Carp is the main hydrilla control method in NC ponds. They are not desired in many lakes due to feeding on native vegetation and resulting environmental impacts.

Control of monoecious hydrilla using insects has not been successful to date.

Aquatic herbicides are applied to the water. The EPA considers this to be a "food use". Historically, Fluridone is the most-used herbicide for hydrilla management. It is a slow-acting systemic herbicide that can kill whole plants. Only ~5ppb is required for hydrilla control. However, it is difficult to use in flowing water, and resistance is now developing in Florida.

Contact herbicides burn back foliage, and has no effect on roots. It is especially useful for small areas around boat landings and docks. However, multiple treatments must be applied each year. Since copper may be toxic to mollusks, it is likely not an option for Lake Waccamaw.

In late summer 2011, hydrilla was found in Cayuga Lake, NY. The lake is a natural, glacial lake with important native submersed plants. The marina and boating access was promptly closed. In fall 2011, a contact herbicide treatment was done. In 2012, a fluoride herbicide treatment was done. The eradication program has been effective so far, with minimal impact outside of treatment area.

Overview of Other Aquatic Nuisance Species Activities in North Carolina

Ewing reported that Japanese knotweed has been a problem in western NC. Roundup is being used as a control effort.

Chinese and Japanese mystery snails have been found in reservoirs since 2006-2007. Funding has not been available to treat them.

Possession of bighead or silver carp is now prohibited.

An attempt is being made to rewrite statutes regarding the possession of certain exotic crayfish species, and they are also working on ways to reduce crayfish introductions by bait buckets.

A study is being done to see what affect non-native tilapia have on native tilapia and sportfish.

Robotics for Species Collection and Environmental Monitoring

Harley Myler gave a PowerPoint Presentation entitled "Robotics for Species Collection and Environmental Monitoring". Robotics is a potential solution to many problems in biology.

Invasive species vary widely, and eradication or mitigation efforts have focused on chemical, biological, and physical means using either traps or human hunters. Chemical and biological methods are problematic and costly. Unintended side effects can be worse than the species of concern. Traps and human methods are costly and not useable for a large group of species. Environmental monitoring is expensive, time consuming, and lacks precision. Satellite and weather station data is too coarse, and time delays may be significant. A floating robot can easily collect data on water salinity, dissolved oxygen, temperature, conductivity, depth profiles, turbidity, and other parameters. Marine robots are solar powered and hunt at night, quiescent on surface during the day, recharging batteries. They communicate at the surface and geolocate. They are propelled using jet or caudal fin. Though they are slow, they are quiet, and there is a low chance of entanglement. The robot shoots a dart at the lionfish, and records the event.

Robotics has promise for invasive species remediation, and environmental monitoring. Technological advances have made these assertions plausible. The greatest challenge is engineer-biologist interface.

The Economics of Invasive Species

Brian Piper gave a PowerPoint Presentation entitled “The Economic Impacts of Invasive Species”. It is estimated that the negative effects of non-native species are now \$120 billion. This includes direct loss, and cost of control. However, also to be considered are indirect costs, the cost of potential extinction of native species, and the important distinctions between loss and control costs.

A project is underway to estimate the potential impacts of the Red-Streaked Leafhopper on sugarcane in Louisiana and Texas. There are approximately 400,000 acres of sugarcane in Louisiana, generating a direct impact of about \$975,000,000.

Piper recommended that predictions of effects rather than estimates of actual loss should be provided; estimates of secondary and tertiary impacts should be provided; a model of a dynamic cost/benefit relationship should be created; and documentation that is trusted by funding bodies should be provided.

Future needs include data on where the invasive species is; data on how the species spreads; an estimates of the potential unit impacts; and software.

Aquarium Species Scorecard

Gonzalez gave a PowerPoint Presentation entitled “Aquarium Species Scorecard”. The project goal is to develop an invasion potential scorecard for aquarium fishes integrating social and ecological information. Goals: Availability potential – Identify social and market networks for aquarium species exchange. Release potential – Identify factors that drive aquarium species to be released by aquarium owners. Survival/reproduction potential – Determine regional potential of survival and successful reproduction. Phase I was completed in 2011.

Factors affecting release potential are purchasing fish and getting information from “big box” stores and not being connected into the aquarium community.

Factors decreasing release potential are using local fish stores for information and being a serious aquarist involved in the social network.

The objectives for Phase II are to use results from the previous study by Weeks et al. 2011 to develop scorecard questions; conduct literature search of traditional risk assessments and invasion potential criteria to review questions and weighting criteria; develop a preliminary scoring system for the scorecard and test on selected species.

The scorecard differs from other traditional risk assessments. It is species and pathway specific, and includes aquarium fishes only. It does not assess impacts. It is species and pathway specific, and includes aquarium fishes only. It incorporates the ecological and social drivers of aquarium species invasion.

Applying the scorecard is done by having a score for each section rather than overall. There are multiple combinations of “scores” for a species. Each score combination results in a different Outreach/Communication/Management target and message.

The next steps are to refine the questions and weighting using input from a September 19th stakeholder meeting, and test the scorecard on seven selected species.

Phase III will test species of concern suggested by TPWD and aquarium industry stakeholders; refine scorecard application strategy; automate scorecard; train others to use the scorecard.

Functional Eradication as a Framework for Marine Invasive Species Control

Stephanie Green gave a PowerPoint Presentation entitled “Functional Eradication as a Framework for Invasive Lionfish Control”. Lionfish abundance has increased rapidly. The abundance of relative predator fish has decreased. There has been a 65% reduction in prey biomass over two years.

Complete eradication of lionfish is unlikely. Population suppression is a way of controlling the lionfish invasion. The goal is to make the most effective use of limited resources for control. Minimizing ecological impacts in priority areas, such as juvenile fish habitats, and marine protected areas, is important in planning control.

A two-year lionfish removal experiment is being done in Eleuthera, Bahamas. Lionfish are removed monthly to maintain four treatment groups. The native fish community is surveyed every six months. A lionfish removal project is being done in the Florida Keys, and St. Croix, USVI. Between 2007 and 2010, there has been a 95% reduction in fish biomass on Bahamian reef fishes.

Tools to achieve lionfish control include diver removal, traps, and derbies. Re-colonization happens rapidly.

Population control of invasive species can best be achieved through eradication. Eradication is successful when there is a restricted geographic range, a small population size, the occupied

habitats are readily accessible, and the invader is easily removed. Two new approaches to invasive species management are numerical eradication, and 'functional' eradication.

Update on REEF'S AIS Activities

Akins gave a PowerPoint Presentation entitled "REEF Lionfish Update". Lionfish reproduce at an early age, and spawn in pairs. The lionfish releases two buoyant egg balls. There are over 30,000 eggs per spawn.

Invasion factors include faster growth, less competition, genetic vigor, fewer parasites, and prey naiveté.

Local control can be effective. Collection and handling is also being done recreationally with hook and line, and in traps as by-catch. Nets and spears are very effective in collecting lionfish. Divers can remove over 100 fish per dive.

REEF has been conducting monthly workshops to engage divers and teach them how to handle and collect lionfish. Collecting and handling workshops were held in several Southeast cities. Topics covered include current research, removal tools, impacts, background of the invasion, biology and ecology, collecting and handling, and use of fish. REEF has created a video tutorial on how to filet a lionfish.

Lionfish derbies have been held for five years. The 5th Annual lionfish Derby Series was held in Curacao, the Bahamas, Ft. Lauderdale, Palm Beach, Jacksonville, and Key Largo. Over 5,000 lionfish were removed. The derbies increase awareness and can provide outreach, training for removers, media interest, samples for research, tasting opportunities, and lionfish removals.

A derby effectiveness study was done in Green Turtle Cay, Bahamas and Key Largo, Florida. Shoreline edges, patch reefs, artificial structures, and seagrass blowouts were all studied. Lionfish Derby participants were given surveys to fill out. The derby reduced the local lionfish population by 69%.

Lionfish tagging results found that lionfish exhibit high site fidelity, and will spend up to seven months at the same site. They experience rapid growth, and the growth rate is inversely related to size. Bigger fish grow slower. Some fish do move. It is believed that the shallow-water lionfish are not reproducing as quickly as deep-water lionfish.

Lionfish are increasing in numbers as by-catch in the Florida Keys commercial spiny lobster fishery. Correlations show that when lionfish are present in traps, lobster catch rates are lower. The mean total length of lionfish increases with depth and temporally during the fishing season. Catch rates of lionfish increase with depth.

Large predator fish will not feed on lionfish, even when they are hungry. Sharks will also not eat lionfish. Tests are being done by some divers to see if some large predator fish can be "trained" to eat lionfish. This has proven not to be a good idea due to the dangers to divers, and scientists not wanting predator fish "trained" to approach divers. In an isolated incident, a Trumpet Fish was found with a lionfish in its stomach.

Management agencies are beginning to change their opinions on the lionfish problem. A guide for managers entitled “Strategies and Practices for Invasive Lionfish Control” was created.

The Gulf and Caribbean Fisheries Institute will hold its 6th Annual GCFI Lionfish Session in November in Corpus Christi, Texas. There will also be a special concurrent lionfish market session.

The 1st Florida FWC Lionfish Summit will be held in Cocoa Beach, Florida on October 22nd - 24th. The focus will be to help identify creative solutions to the management of lionfish in Florida.

REEF published “The Lionfish Cookbook”, which has many recipes and color photographs.

Ongoing Research on Sessite, Non-native Species in Coastal Waters of the Southeastern United States

Walters gave a PowerPoint Presentation entitled “Non-native, Marine Invertebrates along Coastlines of the Southeastern United States”.

Oyster reef research and restoration have been ongoing in the Indian River Lagoon from 2000 – present. From 2006 – 2011, 82 locations were monitored and checked twice per year. *Perna viridis* (Asian green mussel), *mytella charruana* (Charru mussel), and *megabalanus coccopoma* (titan barnacle) are non-natives found attached to live oysters in the Indian River Lagoon.

Maximum range consists of 82 locations from Charleston, SC to Jupiter, FL spanning 894 km that were checked twice per year from 2006-2001.

A study was done to investigate whether *perna viridis* and *mytella charruana* preferentially settle on substrates commonly used in man-made structures such as plexiglass, tile, wood and rock, or on natural substrates like the shells of oysters. Frames containing a mixture of these six substrates were deployed at two locations in Florida. After a one-month settlement, both species preferentially recruited to natural substrates. These results suggest that man-made hard substrates will likely not affect expansion of these two species by providing preferred settlement sites. However, man-made substrates could still provide better locations for survival.

Studies have found that starvation triggers sex reversal. The sex ratio of mussels collected from different locations and maintained in the laboratory with or without food changed under starvation conditions. This is the first study directly showing that food availability can trigger sex reversal in an adult bivalve. According to the data, this mussel species will likely continue to spread along the east coast of the US.

A study was done on *perna viridis* and *mytella charruana* to understand how salinity and temperature tolerances would affect their survival. The data indicated that they could invade a wide variety of saline environments with significant freshwater or saltwater input.

Studies done on the origination of *mytella charruana* showed that the invasion resulted from a combination of at least two populations, which combined to form higher levels of genetic diversity. It is suggested that one of these populations originated from the coast of South America.

The Pink barnacle (*Megabalanus coccopoma*), is a non-native species that originates from the tropical eastern Pacific coasts of Central and South America, and now occurs along the U.S. Atlantic coast and in the Gulf of Mexico.

NAISN Update and Preliminary Results of their State Funding Survey

Schmitz gave a PowerPoint Presentation on NAISN. NAISN is a consortium that uses a coordinated network to advance science-based understanding and enhance management of non-native invasive species. The overall goal of NAISN is to enhance existing invasive species management efforts in North America. There are 176 U.S. federal agencies/institutions with entities that have authority, and/or have divisions or programs pertaining to non-native and invasive species.

“Teach the Teacher” camps for science teachers have been held. The five-day camps cover aquatic, wetland, and upland invasive plants. Student lessons, teacher guides, activities, materials, and field experience are all provided. So far, 250 teachers have attended the camps. NAISN is looking to expand this effort.

NAISN’s 5-year plan is to develop a CDC-type website, regional watch lists, standardize invasive species data, develop IT tools, showcase success, and national statistics.

For NAISN’s 2013 survey, more than 100 U.S. state agencies, and 10 Canadian provincial agencies were targeted. There were 23 responses, and data was useable on 11 states and 1 province. The data revealed that the highest percentage of invasive species activity is monitoring, followed by early detection, control, and education. The largest percentage of the state/province budgets is supported by direct appropriations. The invasive species activity that needs more attention is Prevention. Invasive species expenditures were the highest in Florida (over \$40 million).

NAISN is developing an invasive species icon to be used for public awareness.

Public Comment

Hartman provided the opportunity for public comment. No comments were received.

The meeting recessed at 5:00 p.m.

Thursday, October 3, 2013

The meeting reconvened at 8:30 a.m. The Chairman again provided the opportunity for public comment. No comments were received.

Update on Invasive Plants in Texas

Chilton gave a PowerPoint Presentation entitled "Invasive Exotic Aquatic and Wetland Species Update". To help control hydrilla in Lake Austin, triploid grass carp have been stocked.

Giant salvinia has spread from 1-23 water bodies in 14 years, and covers 6,000-15,000 acres.

In Toledo Bend and Caddo Lake, there is an estimated combined acreage of 13,000-15,000 acres of giant salvinia. Currently, there is \$450,000 budgeted for FY2014. The cost to treat the current acreage (not the rest of the state) would range from \$845,000-2,175,000.

Water hyacinth is present at approximately 40 public water bodies, and covers 6,000-14,000 acres and 14 watersheds.

Chinabery, giant reed, and elephant ear are present on the banks of the Llano River. Management options for elephant ear include chemical treatments, and mechanical removal. In June, 2012, 22 sites were treated. In November, 10 sites were treated.

The Texas program budget for FY2013 is \$0.6 million. For FY2014 and FY2015, the budget will be \$1.5 million.

Zebra mussels were confirmed in five public reservoirs: Texoma, Belton, Ray Roberts, Lewisville, and Bridgeport.

HB 1241 gives the Commission additional rule-making authority. It requires people leaving or approaching public water to drain from vessels all water resulting from immersion in public water. It allows inspection authority for these actions. It does not apply to salt water. Proposed changes will require water be drained from vessels leaving and approaching public water. It will apply to areas where boats can be launched. It includes live wells, bilges, and any other receptacles that come in contact with public water. Exceptions include: travel between access sites on the same water body during the same day; governmental activities and emergencies; marine sanitary systems; and commercially-purchased live bait. It allows application to water bodies not currently infested; encompasses current infestations; and applies to all public water bodies in listed counties. Impacts to anglers and boaters include: draining must occur before travel to or from access areas; live fish cannot be transported in water from water body where they were caught; live bait caught can only be used where it was caught; no off-site tournament weigh-ins if transporting live fish.

The next steps will be to use available resources to publicize the proposed changes, and to conduct public meetings in DFW-Texoma area.

Aquatic Nuisance Species Task Force Update

Ballard reported that the spring meeting was cancelled due to budget cuts and the sequestration. Instead, a webinar was held.

The fall meeting will be held November 6-7th in Silver Spring, MD.

National Invasive Lionfish Prevention and Management Plan Update

Ballard reported that they have gone through preliminary review of the draft. Ideally, the plan will be given to the Task Force before the November meeting.

Update on Ongoing Aquatic Invasive Species Activities in Mexico

Mendoza gave a PowerPoint Presentation entitled "Mexican Invasive Species Legislation". An amendment was done to Article 85 stating that as required for the protection of species, habitats, ecosystems, the economy or public health, the Minister of Environment should promote before the Ministry of Economy the implementation of regulative or restrictive measures to the exportation and importation of native or exotic flora and fauna, and must impose the necessary restrictions for their transit in the national territory. New for Article 27 Bis., is that the release or introduction of exotic invasive species in natural ecosystems is forbidden. The Ministry of Environment should determine the official list of exotic invasive species. The list should be reviewed and updated every three years, or before if there is enough information to include a new species. A specific regulation should be issued on the prevention of introduction of these species, and the management, control, and eradication of those exotic invasives which are already established in Mexico.

Mendoza spoke on Mexico's National Strategy. Strategic actions are to review, adequate, and develop the legal framework; develop scientific, technical, and institutional capabilities; foster coordination between and within the government, institutions, and society; promote education and public awareness; and generate sound knowledge for decision making. Strategic objectives are to prevent, detect, and reduce the introduction, establishment, and dispersal of invasive species; establish control and eradication programs of exotic invasive species to minimize or eliminate their negative impacts; inform society in an efficient way to promote responsibility in the prevention, control, and eradication of invasive species.

A project with the Global Environment Facility is being done. The project's objective is to safeguard globally significant biodiversity in vulnerable ecosystems by building capacity to prevent, detect, control, and manage IAS in Mexico. With a total project budget of \$65,400,000, the project will begin in 2014, and end in late 2017/early 2018.

Incident Command System training will be held in October in Mexico City.

Overview of the "Consensus in the West" Meeting

Chilton gave a PowerPoint Presentation entitled "Consensus in the West".

The goals of the workshop were to develop consistent terminology, to exchange information, to refine programs, information exchange, refine programs, discuss commonalities, develop reciprocity, develop a legislative toolkit, discuss low risk procedures, paradigm shift if appropriate, shape new programs in the West, and boater consistency in the West/Outreach.

The workshop was divided into two groups: State AIS Coordinators, and lawyers and Attorney Generals. The AIS Coordinators developed a list of regulatory needs that consisted of Inspection Authority, Interdiction Authority, Impoundment Authority, Quarantine Authority, Ticketing

Authority, Disposal Authority, Data Collection Authority, and Decontamination Authority. The lawyers developed legislative and regulatory solutions for the needs.

Primary discussions were conducted. Reciprocity was discussed and whether boats from different waters should be handled differently; low versus high risk certifications; trust among states/jurisdictions. Classification of water-bodies were discussed: "unknown", "uninfected", "suspect", "positive", "infected", "DNA", "laboratory certification", "veligers", "adults", "combinations/multiple confirmations". Inspections were discussed: high-risk versus low-risk inspections, and classification by boat type versus water-body. Seals were discussed: locking devices, and simple paperwork.

A follow-up meeting is scheduled for spring 2014.

State Reports/Attendee Forum

Alabama

Newton reported that several invasive species have been documented in Alabama coastal waters. The Bocourt swimming crab, tessellated blenny, Australian spotted jellyfish, Asian green mussel, Asian tiger shrimp, and red lionfish have all been documented. The Asian tiger shrimp has been a species of concern since 2006 when they were first observed in Alabama's inshore waters. Captures have incrementally increased, and the tiger shrimp can now be found within all of Alabama's primary estuary basins. Unfortunately, the concern for *P. monodon* has decreased within the commercial shrimping community, which has resulted in fewer validated reports. In 2012, 16 Asian tiger shrimp were validated by AMRD. In 2013, only three shrimp were validated. AMRD continues to focus on documenting occurrence, characterizing the population structure, and processing samples for genetic investigation.

Numerous unconfirmed reports of lionfish have been made to government agencies that indicate lionfish were rather abundant on the Trysler Grounds in 2011. Unconfirmed reports being made by SCUBA divers from 2012-2013 indicate lionfish are now more abundant than previous years.

It appears that lionfish are now widespread throughout Alabama's artificial reef permit zone. After a lionfish rodeo in June and July 2012, 26 lionfish were donated to AMRD.

Given the lack of quality lionfish reporting from the public and specimen acquisition, AMRD pursued financial support to fund outreach efforts and monitoring associated with the lionfish invasion.

Florida

Schmitz reported that they are looking at herbicides specifically for hydrilla. They are also looking at grass-specific herbicides for aquatic plant control. **Schmitz** will give a full report on this subject at the spring meeting.

Several studies are near completion and **Schmitz** will be reporting on the results and future utilization.

Gestring reported that if the Water Resources Reform and Development Act gets passed, one of the elements of the bill is that activities preventing the spread and threat of aquatic invasive species will be eligible for funding under the Rivers and Harbors Act of 1958.

The Annual Standardized Electrofishing Survey for native and nonnative freshwater fish populations in southeast Florida urban canals. FWC has performed 207 surveys from 39 canals since 1997. A total of 2,963 fish were collected. Native fish comprised 65% of the total catch, and exotic fish were the remainder. Native sportfish comprised 85% of the native fish catch. Mayan cichlid, African jewelfish, spotted tilapia, and butterfly peacock comprised 83% of the non-native fish catch.

The catch rate this year of largemouth bass over 10" was 24% higher than in 2011, due primarily to exceptionally high catches of bass in the Palm Beach County canals. The 2012 composite catch rate of native bluegill and redear sunfish, and exotic Mayan cichlid and jaguar guapote bream was lower than in 2011, but within the range of values observed in these canals during the past 16 years.

As part of an ongoing study comparing selected life history attributes of bowfin and bullseye snakehead, stomach contents of these fish were analyzed. Preliminary findings of bowfish collected from several south Florida locations indicate fish, amphibians, and crayfish were the primary items found in 249 stomachs. Native fish were found in 27% of stomachs, and exotic fish were found in 15% of stomachs. Bowfin consumed a variety of prey including water snakes, sirens, and frogs. Bullseye snakehead stomach contents were similar to bowfin. Fish, crayfish, and reptiles were the primary prey found in 142 stomachs. Frogs and aquatic insects were also found. Exotic fish were more commonly found in the stomachs than natives, and comprised 40% of the identified prey volume.

Jack Dempsey and croaking gouramis were collected from interconnected sites on several dates from locations centered at the Loxahatchee National Wildlife Refuge. Croaking gouramis had not been collected in over 15 years and were thought to be eradicated from Florida.

In May 2013, the Non-Native Fish Laboratory was closed after 42 years at the same location. Additional staff for non-native terrestrial species issues were hired via grants and legislative allotments. Regional wildlife assistance biologists respond to nuisance wildlife calls, and conduct site visits and outreach activities. ESC awarded a contract to UF to continue the Everglades Invasive Reptiles and Amphibian Monitoring Program, and to fund Early Detection and Rapid Response efforts.

FWC is concerned about potential ecological, economic, and social impacts that lionfish may have in Florida. They are hosting a 3-day Lionfish Summit in October. Research and management needs, the current status of lionfish in Florida, and strategies to develop will be addressed at the summit.

FWC passed an Executive Order in 2012 that was turned into rule in 2013 governing the catch of lionfish by divers to facilitate their removal. This rule allows SCUBA divers and snorkelers

using a handheld net, pole spears, Hawaiian slings, or any spearing device specifically designed and marketed towards lionfish to harvest them without a recreational fishing license.

FWC added lionfish questions to their recreational spiny lobster fishing survey in 2010 to capture additional information on distribution, abundance, and stakeholder opinions. In 2011 and 2012, over 50% of divers that fished for lobsters during the survey period observed lionfish and reported on locations. This information is being incorporated into outreach materials developed from the surveys.

An offshore monitoring program was initiated in 2008 by FWC using trawls, video and still cameras, and traps to gather data on Gulf Coast fishes on soft bottom and reef habitats. Lionfish have been photographed and collected from trawls are being sent to the GCRL for further processing. Two lionfish grants were given to FWC researchers.

Asian tiger prawns appear to be in low abundance along the Florida coast, but FWC has a species profile posted on their website, and a reporting process is in place. A tiger prawn was discovered in 2011 near Panama City. There was a recent report of a tiger prawn in Port Charlotte Harbor, which will likely result in an updated news release to increase public awareness.

The Burmese python has an established population in south Florida, primarily in the Florida everglades. FWC sponsored the month-long Python Challenge in January-February 2013 in an effort to raise awareness of the Burmese Python in Florida, and to assess the effectiveness of an award-based competition as a management tool for problematic non-native species. There were over 1,500 registrants, and 68 Burmese pythons were captured and given to the University of Florida for data collection. This is the largest number of pythons ever actively removed within that short of a time frame. A human-dimensions study was conducted regarding the python challenge, and the data will help managers assess the status of pythons on state lands and develop options for containing and controlling them. The results on the project will be published at a later date.

This year, 264 permits were issued for the possession of Conditional, Prohibited, or non-native species.

Five Non-native Pet Amnesty Program events were held during 2012-2013. A total of 321 animals were surrendered. Thirteen outreach events were attended to solicit adopters and promote the pet amnesty program. At these events, 346 people signed up to receive more information about the pet amnesty program.

FWC staff helped organize the annual Everglades Cooperative Invasive Species Management Area summit, and participated in the 4th Annual Exotic Fish Roundup.

Teem reported on the rat lungworm. Nonindigenous apple snails are currently spreading rapidly through the southeastern U.S. The snail serves as an intermediate host of the rat lungworm parasite, which can cause eosinophilic meningitis in humans who eat the infected snails. A PCR-based detection assay was used to test nonindigenous apple snails for the rat lungworm parasite in Texas, Mississippi, Florida, and Louisiana. Only apple snails obtained from the New Orleans,

Louisiana area tested positive for the parasite. These results provide the first evidence that rat lungworm does occur in nonindigenous apple snails in the southeastern U.S.

Recently, apple snails have been observed in the canals of New Orleans where they are reportedly harvested for consumption by various ethnic groups, putting those groups at potential risk for infection with the parasite. It is unknown whether other invasive snail species in the region are presently infected with rat lungworm.

There is another invasive snail species recently detected in the Miami area that could also serve as a new reservoir for the rat lungworm. The giant African land snail is a nonindigenous terrestrial snail discovered at multiple residential locations in the Miami area in September 2011. This snail serves as a reservoir for rat lungworm in other areas of the world where it has been introduced. Samples of giant African land snail were tested from various core areas where it has been found in the Miami area. Four infected snails were detected in one of these areas. The rat lungworm is therefore also established in Florida.

Rat lungworm was also detected from apple snail populations in separate drainage basins in Gretna, Louisiana and Mandeville, Louisiana. In 2008, apple snails became established in a residential lake in Picayune, Mississippi, suggesting that it could serve as a new reservoir for the parasite at this location.

The study has shown that apple snail populations infected with rat lungworm are currently limited to Louisiana within the southeastern U.S. Detection of rat lungworm in Gretna and Mandeville confirms the establishment of the parasite in the region and indicates that apple snails have become a component of the mollusk reservoir for the parasite. There was no evidence to suggest widespread infection of apple snails in states other than Louisiana. All samples tested in Texas, Mississippi, and Florida tested negative for the parasite.

All indications are that nonindigenous mollusks are presently serving as reservoirs to allow rat lungworm to expand its range to other Gulf of Mexico states. Further research to define the human health risks associated with rat lungworm as a result of nonindigenous mollusk introductions in the region should include a regional survey of infection rates for both native and nonindigenous mollusk species in the southeastern U.S.

Georgia

Bonvechio reported on the Satillo River flathead catfish removal project. The significant increases of illegally introduced flathead catfish has caused declines in abundances of redbreast sunfish and bullhead catfish. In 1996, electrofishing was begun in an effort to negate the impacts on native fish populations. Despite these removal efforts, the number and size of flathead catfish had continued to increase. In 2006, the GA legislature appropriated funding for three new positions (reduced to two in FY2009). These personnel were assigned the task of reducing the flathead catfish population levels while searching for a long-term population control. For the 2013 sampling season, 2,600 flathead catfish have been removed. Since the implementation of the full-time flathead management program in 2007, more than 68,919 pounds of flathead catfish have been removed from the river in seven years. The size structure of the population and average length have both declined. Biomass per effort has declined from 57.1 kg/hr in 2007 to

12.1 kg/hr in 2013. The age structure was truncated by removal efforts. In 2007, 15% of the population was made up of age-1 and age-2 fish; 50% was made up of age-4 fish; 5% was made up of age-6 or older. In 2012, 70% of the fish were age-1 or 2; 24% was made up of age-3; 5% was made up of age-4 or better.

There appears to be a compensatory shift in sexual maturity due to over a decade of increased exploitation. Maintenance control and/or suppression of flathead catfish in the Satilla River is possible given the reported changes, but higher recruitment and earlier maturation was demonstrated. As a result, this will require intensive harvest to be maintained to prevent the flathead population from rebuilding within 2-5 years.

Five flathead catfish were collected in the Ochlockonee River in June 2013. Ages ranged from three to eight years of age. This is the first time flathead catfish have been documented to exist in the Ochlockonee River in Georgia. Three additional flatheads were collected on September 10th. These fish will be aged as well.

During 2011 sampling, the WRD removal crew documented the range expansion of the Blue Catfish in the Satilla River in Georgia. Seven catfish were recovered, and ages ranged from 3-5 years old. None were collected during sampling in 2012 and 2013.

Bonvechio stated that they are waiting on a report from UGA on the Kingsland/St. Mary's channeled apple snail project.

Chinese mystery snails have been found in the Chattahoochee Drainage, and are believed to occur in numerous water-bodies across the state.

Yellow Bass have been found in two reservoirs in the Coosa River drainage.

Alewife was discovered by WRD in April 2010 in Carter's Lake. Large numbers of established alewife have been collected since 2010.

Emerald Ash Borer has been confirmed by USDA-APHIS in Fulton and DeKalb Counties. Quarantine areas will be established in Georgia. A "Don't Move Firewood" marketing campaign will be promoted.

At the present time, the threat of Asian carp (bighead and silver) spreading into Georgia waters appears to be minimal. The most potential vector for the spread of Asian carp seems to be inter-basin transfer via angler bait bucket.

Louisiana

Bourgeois reported that there were no reports of tiger shrimp from November 2012 to July 2013. From August 1, 2013 to September 15, 2013, there have been approximately 50 confirmed reports of tiger shrimp. Many of these shrimp appear smaller than in previous years, and there is an early increase in the red stripe variant than in previous years. Two live tiger shrimp are currently being housed with a small white shrimp to observe if the tiger shrimp prey on the white shrimp.

Lionfish reports have stopped due to the diver program being discontinued. Dive clubs and spear fishermen have not reported any sightings. Outreach with these groups will be emphasized in the coming months to attempt increased reporting of lionfish.

As of September 2013, LDWF has treated 79,321 acres of nuisance aquatic weeds. Giant salvinia has been a major focus of aquatic plant control efforts in Louisiana since 2006. Herbicide applications, water fluctuation, and biological control are being used to keep giant salvinia coverage at a level that allows for recreational use of water-bodies. Giant salvinia coverage continues to grow at rates that are difficult to control, due to the passing of successive mild winters.

Weevil stocking efforts for giant salvinia have continued in 2013. Early spring weevil samples indicated that overwintering took place in several lakes in north Louisiana. This is encouraging because past winter survival in these water-bodies had been extremely poor, which made weevil control a non-factor. To date in 2013, 306,900 weevils have been stocked into those lakes.

Giant salvinia infestations in southern Louisiana appear to be decreasing in coverage. Three years following initial weevil releases, giant salvinia weevil stocking efforts have proven to be very successful, and their effect on the plant's reproduction and growth rate are evident.

Giant salvinia infestations have spread throughout the freshwater marsh in St. Bernard Parish. In fall 2012, weevils were stocked throughout the area, and efforts have continued in 2013.

Reports of apple snails in more of the canals in the New Orleans area and the upper Barataria Basin continue, which indicates either range expansion or improved reporting by the public. Several members of the public have begun removing eggs and killing adult apple snails when observed on their property. New reports of apple snails have occurred in City Park in New Orleans. Based on the small amount of egg masses, this appears to be a small infestation at this time.

A LDWF 2013 ANS grant to survey selected public urban ponds in Baton Rouge and Lafayette for the presence of ANS is under way.

LDWF received a USFWS grant to extend and expand the 2012 ANS grant for drift net sampling for Asian carp. The first summer of ichthyoplankton sampling is finished, and the samples are currently being analyzed to determine the presence, relative abundance, and distribution of Asian carp. The 2013-2014 grant will be used to expand sample site coverage and help further understand the species.

Increased efforts are being made for better public outreach/education of ANS. LDWF is posting brochures, links, and articles about ANS species/concerns on Facebook. The ANS Coordinator and other LDWF employees have broadened the effort to inform the public about reporting tiger shrimp. Posters asking for reports, traditional media outlets, and radio and television interviews have all been used. This has resulted in an increase in reporting, and in awareness from the public.

Revision of the state wildlife action plan is under way. The 'Introduced' and 'Exotic Species' section will be expanded in this version. Hopefully, this will result in an increase in state wildlife grants to provide needed research on ANS species.

Mississippi

Burris reported that eight confirmed sightings of Asian tiger shrimp were reported to the NAS database from specimens provided to MDMR by local fishermen. Frozen specimens are being collected for the NOAA-NMFS Tiger Shrimp Tissue Repository. An article about Asian tiger shrimp was published in MDMR's annual publication "Shrimping in the Sound" to alert citizens to the tiger shrimp infestation in coastal Mississippi waters, and to ask fishermen to report any sightings.

There were 43 field surveys done for early detection of AIS. No new aquatic plant or animal infestations were discovered during this period. Two aerial photo surveys were conducted for early detection of AIS, and to monitor ongoing control efforts.

Herbicide was applied to control giant salvinia in the Pascagoula River, common salvinia in Robinson Bayou, and a patch of phragmites on Deer Island.

Salvinia weevils were introduced into Robinson Bayou, Pascagoula River.

An "Aquatic Invasive Species Awareness Day" was held at the Audubon Pascagoula River Nature Center. Items from one of the GSARP Traveling Trunks of Invasive Species were exhibited as part of this educational outreach.

A lionfish outreach poster produced by the Mississippi Bight Lionfish Response Unit was distributed to local dive shops.

Asian tiger shrimp outreach posters in English and Vietnamese were adapted for use and placed at area shrimp boat docks to encourage reporting.

Riecke reported that hydrilla was reported in Lake Okhissa in Homochitto National Forest in September 2013.

A female capybara was killed in May 2013 by USFWS employees at St. Catherine National Wildlife Refuge.

In August 2013, Egeria was chemically treated in Ross Barnett Reservoir.

The ANS Task Force has approved the *Mississippi State Management Plan for Aquatic Invasive Species*.

A list of all Mississippi bait vendor locations is being compiled to compose a map to aid anglers and identify locations that will be sent live bait sale regulations for future promulgation.

In August and September 2013, fish kills of Asian carp were reported from several oxbow lakes in the Delta region. One silver carp from a kill in an oxbow lake in 2011 was killed by *Lactococcus lactis*.

A paper titled "*Lactococcosis* in Silver Carp *Hypophthalmichthys molitrix*" was accepted for publication in the Journal of Aquatic Animal Health. This is the first known occurrence of *Lactococcus lactis* in Silver Carp.

The North American Invasive Species Network Survey on the costs of controlling, monitoring, and managing ANS is being completed.

The "Stop Aquatic Hitchhikers" marketing campaign is ongoing.

Links to the MS River Basin Panel on Aquatic Nuisance Species, GSARP on Aquatic Invasive Species, Stop Aquatic Hitchhikers, and Habitattitude websites are on the Department website.

Activities specified in the *Mississippi State Management Plan for Aquatic Invasive Species* will be implemented.

Freshwater fishing bait regulations to specify what bait can be legally sold, possessed, transported and used in MS will be composed.

A list of approved, restricted, and prohibited species under the authority specified in MS Code 49-7-80 and as specified in the *Mississippi State Management Plan for Aquatic Invasive Species* will be adopted.

An EDRR monitoring program comprised of state and federal personnel who sample aquatic species in MS public waterways on a routine basis will be established.

North Carolina

Emens reported that 34 tiger shrimp were reported to the NC DMF in 2012. Of those, 30 were confirmed either by picture or by receiving the specimens. Several will undergo genetic work by James Norris.

In 2013, five tiger shrimp were reported. Of those, three were confirmed.

Two species of nymphoides (floating heart water lily) were added to the noxious aquatic weed list. It is now illegal to culture, sell, transport, etc.

A code has been added to commercial record keeping that will track tiger shrimp catch/take by commercial operations. Less than 10 pounds have been reported to date.

The new budget for 2013-2014 funding for the aquatic weed control program provides \$200,000 for aquatic plant control. The Division is limited to providing a maximum of 50% of total cost for aquatic weed projects, so local match is required.

Knott gave a PowerPoint Presentation entitled "Update on the Status of the Asian Tiger Shrimp". As of September 28, 2013, there have been 678 confirmed captures of *Penaeus monodon* on the Atlantic and Gulf coasts of the US. Since 2006, there have been 1,189 tiger shrimp captured from continental U.S. waters. In 2013, 196 *Penaeus monodon* have been reported. Recreational fishermen have caught 29% of the tiger shrimp using cast nets, crab pots, drop net, shrimp trap, seine net, or bait trawling; 71% were caught by commercial shrimp trawl.

The largest tiger shrimp captured in 2013 was 330 mm TL off Hunting Island, SC. Among adolescent and sub-adult shrimp, proportionately more red striped shrimp were caught in 2013 than in 2012. Some showed only a remnant of the stripe. In 2013, 43% of the tiger shrimp were caught in estuaries/sounds; 57% were caught offshore in ocean/Gulf waters.

South Carolina

Page provided the SC freshwater report. Work on invasive species sites was done on over 20 water-bodies.

Alligatorweed flea beetles and bio-control agents were released in the Little Pee Dee and Pee Dee region of the state for alligatorweed control.

The initial planning phase of a native plant transplanting effort on the Santee Cooper System has begun.

A grant with the Bunnelle Foundation for control of aquatic invasive species at Huntington Beach State Park was completed.

A meeting was held with SCDNR staff to compile information for the Rules and Regulations Committee and the new SCDNR app for smartphones and iPads.

Work is ongoing for the control of invasive plants growing in three prominent wood stork rookeries.

A meeting was held with reps from USFWS and the USACE to provide information for invasive species control of several species of concern on USACE spoil areas.

Cooperative work was continued with SCDNR Wildlife staff at Bonneau Ferry and Sandy Beach WMA for aquatic invasive species control and enhancement of waterfowl habitat. Approximately 60 acres of habitat enhancement work was accomplished at the sites.

Kingsley-Smith reported that the Marine Resources Research Institute (MRRRI) of the SCDNR acquired State and Interstate Aquatic Nuisance Species Management Plan Program funds for FY2013 that are being used to implement targeted field sampling of fouling communities within the Ashepoo-Combahee-Edisto (ACE) Basin National Estuarine Research Reserve (NERR). Predominantly intertidal scrape samples were collected from April 24-June 5, 2013 at locations throughout the ACE Basin NERRS. Additionally, cinder blocks were deployed during that period and left in the field for three months to allow for the recruitment and growth of native and non-native invertebrates. Recovery of the blocks began in September 2013. Two samples from

each block will be removed and preserved for later examination and identification. An archived collection of all non-indigenous and invasive species found in the ACE Basin NERR will be maintained and entered into the catalogued collection of the SE Regional Taxonomic Center (SERTC) at MRRI.

The total number of Asian tiger shrimp reported from South Carolina in 2012 was 64. In 2011, 144 were reported. Researchers believe the reduction in reported numbers is due to reporter apathy and consumption and/or sale of collected tiger shrimp. The SCDNR recently released an updated press release to inform the public that the SCDNR was still interested in both reports and specimens. Low numbers of tiger shrimp are again being reported in 2013. As in 2011 and 2012, smaller shrimp of less than 7" total length are being collected from upstream habitats.

Efforts are continuing to coordinate reports from across the southeast and Gulf region. The goal is to address some of the many unanswered questions about the dynamics and implications of the invasion. Tissue samples are being sent to USGS geneticists, who are conducting microsatellite and single nucleotide polymorphism analyses to determine population structure of *P. monodon* within the region, and attempting to identify the geographic source of the tiger shrimp collected in coastal states in the southeast and Gulf region.

Researchers at the SCDNR have been studying the biology of the American eel since 2011, due to their drastic decline since 1980 and a 2011 petition to list the American eel as an endangered species. A great deal of this work has focused on the prevalence, intensity, and physiological consequences of the invasive nematode parasite, *Anguillicoloides crassus*. Mississippi State Management Plan for Aquatic Invasive Species. The results of the first year of the project (2011) have been presented at previous GSARP meetings, and a manuscript is currently in review for publication. The data from the 2011 study were used in support of a current State Wildlife Grant recently awarded to the SCDNR to assess eels caught in 2012 and 2013 from both estuarine and freshwater habitats.

For 2012 and 2013 thus far, *A. Crassus* has been calculated at 88%. In 2011, the prevalence was 45%, but this difference may be attributed to the lower sample size from the 2012-2013 survey.

Glass eels have been collected on a monthly basis since March 2013 to assess their length, ages, and *A. Crassus* infection and to determine when the eels become infected. Results have shown that infection was nearly zero in spring, until June when prevalence drastically escalated to 35%.

Researchers at the College of Charleston Grice Marine Laboratory continue to study the input to consumptive and detrital food webs of the Asian red alga, which has proliferated on estuarine mudflats throughout the SE US, including South Carolina and Georgia that historically were extremely low in seaweed biomass. At a regional scale, red alga is controlled in large part by the density and above ground height of the native decorator worm which decorates its tube with flotsam. Red alga is a conspicuous component of the materials that the worm uses. The invasion pathways of red alga are being tracked using microsatellite loci by investigating the relatedness of the species from invaded regions around the world. A great deal of genetic variation within certain invasive populations has been identified. It has been determined that the ultimate source of the U.S. East Coast invasion came from the Pacific coast of Japan. Further genotyping and

analysis is ongoing. Research has shown that abundances of native decorator worms are greater when invasive red alga is present.

Beginning in 2011, the Southeast Fishery-Independent Survey (SEFIS) took responsibility for sampling stations off the coasts of Georgia and Florida, while MARMAP/SEAMAP sampled off South Carolina and North Carolina. As of 2013, MARMAP and SEFIS are no longer using digital still cameras to sample on chevron traps. All cameras on traps are now video cameras. Lionfish are being recorded along with other priority species. Data acquisition is still ongoing. It is hoped that data on relative abundance of lionfish over recent years may be available from these efforts in 2014.

In July 2013, one blue land crab was observed in a burrow adjacent to a sidewalk on a street in Charleston. This is a circumequatorial species found throughout estuarine regions of the Caribbean, Central and South America, the Bahamas, and Puerto Rico. Within the U.S., it is limited to the Gulf of Mexico and coastal Florida. A return visit approximately two months later yielded no evidence of the crab or its burrow.

Texas

Hartman reported that there have not been any recent reports of tiger shrimp.

Reports of Australian jellyfish in Matagorda Bay have been confirmed.

A Texas congressman has shown an interest in marine invasives, with a particular interest in Asian tiger shrimp and lionfish.

Public Comment

Hartman provided the opportunity for public comment. There was none.

A motion was made to adjourn the meeting, and the motion was approved. There being no further business, the meeting adjourned at 3:00 p.m.

APPROVED BY:

COMMITTEE CHAIRMAN

**TCC DATA MANAGEMENT SUBCOMMITTEE
MINUTES**

**Monday, October 14th, 2013
South Padre Island, TX**

Chairman Christine Murrell called the meeting to order at 8:35 a.m. The following members and others were present:

Members

Chris Denson, AMRD, Gulf Shores, AL
Nicole Shaffer, AMRD, Gulf Shores, AL
Richard Cody, FWRI, Saint Petersburg, FL
Justin Esslinger, TPWD, Rockport, TX
Vicki Swann, TPWD, Austin, TX
Christine Murrell, MDMR, Biloxi, MS
Vince Cefalu, LDWF, Baton Rouge, LA
Steven Atran (proxy for John Froeschke), GMFMC, Tampa, FL
Brittany Chudzik, MDMR, Biloxi, MS

Staff

David Donaldson, Assistant Director, Ocean Springs, MS
Donna Bellais, ComFIN Programmer, Ocean Springs, MS
Gregg Bray, Programmer/Analyst, Ocean Springs, MS
James Ballard, Sport Fish Restoration/Aquatic Invasive Coordinator
Jeff Rester, Habitat & SEAMAP Coordinator
Ralf Riedel, Metadata Coordinator, Ocean Springs, MS

Others

Steve Brown, FWRI, Saint Petersburg, FL
Cindy Bohannon, TPWD, Dickinson, TX
Page Campbell, Rockport, TX
Terry Cody, Rockport, TX
Thor Lassen, Ocean Trust, New Orleans, LA
Claude Peterson, Bluefin Data, Gonzalez, LA

Adoption of Agenda

The agenda was approved and adopted as written.

Approval of Minutes

The minutes of the Data Management Subcommittee (DMS) meeting held on March 19th, 2013 in Destin, FL were approved as written.

Status of Biological Sampling Activities

Bray provided a description of the biological sampling analysis matrix provided in the meeting folder. All of the states except for Florida are up to date with sampling and age data entry for 2013. Florida is working to provide data to **Bellais** at GSMFC for direct loading to the FIN Data Management System (FIN DMS). Florida hopes to provide historical sampling and age data for several FIN priority species in the coming months. **Bray** asked the states if samples collected in 2013 will be processed and aged in 2014, realizing that funding is not currently available. All states mentioned that samplers are doing a good job staying caught up with reading and ageing and a large backlog will not need to be processed during 2014. Some samples for Texas may need to be shelved for later processing. FIN contractual staff in Texas will have to be released due to funding cuts for 2014. **Bray** also stated that the data for the upcoming red snapper assessment will need to be delivered in August of 2014. All states agreed their 2013 red snapper data will be available prior to the deadline. **Donaldson** asked the states if they thought continuing to review the species specific reference sets would be useful if biological sampling is suspended for 2014. All states agreed that this would be useful. **Donaldson** stated even if biological sampling was suspended for 2014 travel funds would be available to continue to hold the sampling processors meeting. **Denson** agreed this would be useful to keep the samplers trained on processing species so that when funding is restored retraining would not be required.

Status of Metadata Compilation

Riedel provided a brief summary of his progress with metadata compilation. The original plan at GSMFC included entering information on biological sampling programs, fishing regulations, licenses and fees, weather and climate, and economic data programs. Currently **Riedel** has completed entry for fishing regulations, licenses and fees, climatic/environmental data, and entry of some economic programmatic information. **Riedel** still needs to review data for each states biological sampling programs. His future plans are to move into the maintenance phase which consists of reviewing existing data modules and determining what potential new items need to be added for each states.

Discussion of SEFSC Data Peer Review Report

Donaldson provided a summary of a peer review report of NOAA's Southeast Fishery Science Center (SEFSC). The focus of the review was on the data collection and management programs that feed into the stock assessments for stocks managed under the Magnuson-Stevens Act. **Donaldson** thought it would be useful for the DMS to review the recommendations list and provide some feedback to NOAA on what items FIN is addressing now or would like to address in the future. One of the recommendations discussed the need for a consolidated database for at-sea and discard data. **Cody** asked if FIN or GSMFC would have an interest in managing a consolidated database for at-sea collections and by-catch as opposed to NOAA taking the lead to create one. **Donaldson** stated that FIN has always worked to coordinate data collections based on state needs and this would be another area of interest if the states decided this was important. After a brief discussion, **Donaldson** suggested having GSMFC staff generate a response letter that the DMS can review in March 2014. Those recommendations can then be forwarded to the FIN Committee in June of 2014 for final action. The DMS agreed on this course of action.

Status of Commercial Electronic Reporting/Unified Trip Ticket

Peterson provided a brief review of what the unified trip ticket is designed to accomplish. Each agency would receive their own unique datasets but all lookup tables would have a single design. Currently, some progress has been made on changing some lookup and species table formats. Florida and Texas have already submitted their unified species table. Also current discussions have centered on a browser based unified trip ticket system. **Peterson** stated Bluefin Data must relinquish the role of Gulf Trip Ticket Coordinator. A coordinating body must be established to determine changes and modifications to a unified trip ticket program since one state change could potentially impact the program for other states and federal partners. Coordination will be required by the 5 Gulf States, GSMFC, SEFSC, Highly Migratory Species Office (HMS), and Atlantic Coast Cooperative Statistics Program (ACCSP). This would improve communication amongst the partnering agencies when changes are agreed upon and made. **Peterson** stated that PC trip ticket is currently unified but operating under 5 different versions. Five state data files are produced along with the required Federal data files. **Denson** asked are Federal dealer files including all state and federal species data in their file. **Peterson** said the Federal data files do not filter any species data upon transmission. Alabama and Louisiana are both concerned that their dealers are not aware that all data are being sent in the Federal data reports and that this could be a volatile issue. A server based unification program still needs to be developed. **Peterson** stated a web based system may not be the best option. That would require a solid internet connection and a handful of dealers may not have the access required for a web based system. A PC based system might be necessary for those dealers with low speed internet capabilities. **Peterson** stated that a PC based system would require decisions on operating systems, mobile capabilities, and if there will be agency-controlled license lists. Louisiana and Alabama stated the agency-controlled license lists would not be favorable for their states. Both states are worried about the problems of managing and updating these lists and Louisiana is also concerned about policing the lists. **Peterson** suggested the functionality would be available for using agency-controlled license lists along with allowing states to opt out of using those lists. **Peterson** stated it is possible to create a server-based PC system that would utilize a localized database for data entry. A PC based option would require an installation on one or multiple computers for each dealer utilizing this option. **Denson** agreed that a PC based option is going to be necessary based on Alabama dealer internet capabilities. **Peterson** stated that this will likely limit PC users to Windows based operating systems. **Peterson** asked if the goal is to produce a Gulf Trip Ticket Enhancement or a Gulf SAFIS-like system similar to what Atlantic Coast Cooperative Statistics Program (ACCSP) has produced. **Denson** stated that it needs to be designed so the states are receiving the data first for review and editing. **Peterson** reminded the group that the Federal data files are getting transmitted to the Federal review staff immediately too. **Bray** stated that a Gulf SAFIS-like program would seem unnecessary as the states are reviewing data and providing to GSMFC for loading into the FIN DMS as soon as possible. **Bellais** mentioned that NOAA has expressed a need to get clean trip ticket data in a more timely fashion for quota monitoring purposes which could potentially generate a need for a Gulf SAFIS-like system. This would allow multiple users to log in and review trip ticket data in a more timely fashion. **Peterson** stated that a server-based unified trip ticket will require a development team with additional programming skills as opposed to the one person that developed and maintained the old PC trip ticket program. **Peterson** has the resources in place to start this process but a strong plan for moving forward needs to be finalized and partners

need to realize this will take some time to create. **Peterson** believes many of these questions need to be answered first before getting started on creating this unified server-based version. **Donaldson** stated that not having NOAA staff at the meeting really prevents a productive discussion on this issue. We need to be able to discuss our current limitations and concerns with NOAA staff and come to a decision on a course of action for the future. **Donaldson** stated that a meeting with state representatives, SEFSC staff, and HMS staff would be necessary hopefully before the end of 2013. **Donaldson** suggested that New Orleans would be a good meeting location and the states agreed. **Bellais** agreed to coordinate the scheduling of this meeting.

Election of Officers

Vince Cefalu was elected as Chairman. **Nicole Shaffer** was elected as Vice-Chairman.

Other Business

Lassen discussed a program, working the GSMFC, comparing Gulf Fishery Management with FAO ecolabelling guidelines. **Lassen** has found that the FAO criterion previously developed are more suitable for large scale fisheries and are not tailored to most fisheries in the Gulf of Mexico. They hope to have a forum in 2014 to collect and provide better information for FAO certifiers on how Gulf species are managed. **Atran** asked if **Lassen** realized there is a provision being added to Magnuson-Stevens Act that if reauthorized would allow NOAA Fisheries to have its own sustainability certification program. **Lassen** stated he was aware of that and that NOAA has been participating in the Gulf project they are working on.

Miller provided an update on the FINFO website to better communicate the sustainability of Gulf Species primarily at the state level. FINFO has been working with state personnel and fishery profiles are still being produced. **Denson** asked if the site is open for viewing yet. **Miller** stated a password protected site is available for states to review. **Miller** hopes there will be approximately 20 species profiles for each state prior to the Boston Seafood Show in March of 2014. **Denson** asked if the focus of this website was strictly for sustainability. **Miller** stated the site is designed to highlight science and sustainability by showing how the management process and fish biology fit together. The site will eventually be housed at GSMFC and each state will manage their individual pages. The site will also present information on economics, landings, and a marketing component. **Atran** asked if the focus was primarily the commercial fishing industry. **Miller** stated the website is primarily designed to help seafood buyers and consumers understand the science and sustainability of Gulf seafood.

Donaldson asked the states to review the committee membership listing provided in the folder and provide any updates to GSMFC. GSMFC also needs a letter from Mississippi and Texas requesting changes to the committee membership based on members retiring from their state agency.

Being no further business, the meeting was adjourned at 11:26 a.m.

Review of 2012 Commercial Data

Each state provided feedback based on a review of the spreadsheets **Bellais** sent out prior to the meeting. The States mentioned that the FIN DMS numbers were very close to their state totals and the slight differences likely indicated that they collected some additional data that has yet to be delivered to GSMFC. The States also mentioned that there were a few coding errors on their part. Data will be redelivered and loaded into the DMS as needed. All necessary corrections will be made at the state data level and submitted to GSMFC for loading into the FIN DMS.

Review of FIN Standard Codes

D. Bellais asked if there were any market, grade, gear, disposition, or area codes that needed to be added or modified. **V. Cefalu** asked for a gear code to be added for Off Bottom Culture. **S. Brown** asked for a Tournament Caught disposition code to be added. **V. Cefalu** asked for two grade codes to be added, one for Live Bait and one for Dead Bait. After **D. Bellais** gets verification from the agencies that may be affected by the additions, the requested codes will be added.

TCC SEAMAP SUBCOMMITTEE
MINUTES
Monday, October 14, 2013
South Padre Island, Texas

APPROVED BY:

COMMITTEE CHAIRMAN

Chairman R. Hendon called the meeting to order at 1:00 p.m. The following members and others were present:

Members

Read Hendon, *Chairman*, USM/GCRL, Ocean Springs, MS
Bob McMichael, FWC/FWRI, St. Petersburg, FL
John Mareska, ADCNR/MRD, Gulf Shores, AL
Chloé Dean, LDWF, Grand Isle, LA
Fernando Martinez, TPWD, Corpus Christi, TX

Others

Ralf Riedel, USM/GCRL, Ocean Springs, MS

Staff

Jeff Rester, *SEAMAP/Habitat Program Coordinator*, GSMFC, Ocean Springs, MS

Adoption of Agenda

J. Mareska moved to adopt the agenda as submitted. **B. McMichael** seconded the motion and the motion passed.

Approval of Minutes

J. Mareska moved to approve the TCC SEAMAP minutes from the July 25, 2013 conference call as submitted. **B. McMichael** seconded and the motion passed.

Administrative Report

J. Rester reported that the Fall Plankton Survey took place in August and September. He stated that he did not have the exact dates of the survey due to the Federal government shutdown. He reported that the Fall Shrimp/Groundfish Survey was currently ongoing. He stated that he was unsure how the government shutdown would affect NMFS sampling during the Fall Shrimp/Groundfish Survey.

J. Rester reported the South Atlantic had sent back a revised Congressional funding letter. He stated that because of the current government shutdown and budget issues, he felt it would not be a good time to send the letter. **C. Dean** asked about the letter that SEAMAP sent to NMFS concerning their appreciation for the help that NMFS provides with the shipboard computer systems on the state vessels. **J. Rester** replied that he had sent the letter expressing their appreciation in early August.

SEAMAP Trawling, Plankton, and Environmental Data Collection Operations Manual Review

J. Rester stated that the Environmental Data Work Group and the Plankton Work Group both reviewed the SEAMAP Trawling and Plankton Data Collection Operations Manual (Operations Manual). **J. Rester** reported that he had a list of items that the Subcommittee needed to review and approve.

The first item was the use of a Secchi disk. **J. Rester** stated that all SEAMAP partners should be using a 0.5 m white disk for all offshore work. He next discussed using gear codes for all environmental work. He stated that there was some confusion on the use of which gear codes to use for environmental data collected with a CTD. Two options were available for oxygen, temperature, and salinity that were causing confusion. These were SI for salinity, sensor, in situ and SX for salinity, CTD. After discussion, the Subcommittee decided to use the gear codes with CTD instead of sensor, in situ for all environmental data collected with a CTD. The Subcommittee also agreed that since there were so many gear codes that were not used anymore, that current or frequently used gear codes would be highlighted in the operations manual.

The Subcommittee decided to add a scale for cloud cover with the options of 0%, 25%, 50%, 75%, and 100% for cloud cover across the entire sky. The Subcommittee decided to no longer collect cloud type. The Plankton Work Group recommended that SEAMAP start collecting *Sargassum* percent at plankton stations. This would be a text field with the option of small rafts, windrows, patches, and clumps. **R. Hendon** stated that he would send photos and definitions that could be added to describe these different categories. The Subcommittee decided to use an operations code for bongo and neuston nets = M for miscellaneous with details in the comment section if something went wrong with the tow.

The Subcommittee already decided to start recording starting and ending position for environmental, bongo, and neuston sampling. SEAMAP will also start collecting time in and out for all plankton samples (bongo and neuston).

SEAMAP Station Selection

The Subcommittee discussed station selection issues off Mississippi, Alabama, and western Florida. Historically this area has been oversampled during trawl surveys. Since SEAMAP switched to a standard 30 minute tow time in 2010, the number of stations have been reduced and SEAMAP is trying to determine the optimal way to sample these stations while still including all SEAMAP partners in trawl sampling. **R. Hendon** asked J. Mareska if Alabama would be able to send people out with Mississippi when they are collecting their SEAMAP samples. **J. Mareska** stated that he would talk to his superiors to see if that would be possible. He would let everyone know what he learns.

The Subcommittee also discussed station selection in the 2-5 fathom depth stratum. The Subcommittee felt that there were not enough stations falling within the 2-5 fathom depth stratum off Mississippi and Alabama. Since Butch Pellegrin was not able to attend the meeting, **J. Rester** stated that he would check with him once the Federal government went back to work.

J. Rester discussed the problems he found when plotting station locations for the Chairman's Report for the Joint Annual Meeting. He stated that while plotting station locations for the 2012 Fall and 2013 Spring Plankton Surveys, that several stations were sampled twice. Only one sample from a station is used for analysis or stock assessment purposes, so he was concerned about wasting SEAMAP funds to collect additional samples that would not be used. He stated that some of this double sampling was due to lack of communication while the surveys were taking place and also NMFS assigning two states the same station before the surveys started. **J. Rester** stated that he had talked to the state and NMFS plankton representatives, and he felt that he had worked things out where effort would not be duplicated. **J. Mareska made a motion that plankton station allocation be conducted like the trawl station allocation where J. Rester makes a map of the stations and each state selects stations that they will sample during the survey.** **C. Dean seconded** the motion and it passed unanimously.

Possible Fishery Independent Funding Sources

The Subcommittee discussed oil spill related funding sources for collecting additional fishery independent data using SEAMAP protocols. Several potential funding sources exist that would allow increased data collection for monitoring impacts of the Deepwater Horizon oil spill. While SEAMAP funding would not be used to collect the data, the data would build upon existing SEAMAP surveys with comparable data for stock assessments. **B. McMichael** stated that Florida recently submitted a fishery independent proposal for NFWF funding that would allow them to participate in the Fall Shrimp/Groundfish Survey and Vertical Line Survey for five years. **R. Hendon** stated that Mississippi was going to prepare a similar proposal to participate in the Vertical Line Survey. The Subcommittee suggested that everyone explore the various oil spill related funding opportunities for conducting fishery independent sampling. **C. Dean** stated that Louisiana could not submit anything to NFWF since all Louisiana NFWF funds would be dedicated to coastal restoration.

Election of Chair

C. Dean nominated **J. Mareska** as chair with **R. Hendon** seconding the nomination. **J. Mareska** was elected chair. **B. McMichael** nominated **C. Dean** as vice chair with **J. Mareska** seconding the nomination. **C. Dean** was elected vice chair.

Other Business

There being no further business to discuss, **B. McMichael moved to adjourn.** **J. Mareska seconded the motion and it passed.** The meeting adjourned at 3:47 p.m.

**FISHERIES ECONOMICS WORKSHOP
MINUTES –64th Annual Spring Meeting
Monday, October 14, 2013
South Padre Island, TX**

Facilitator **Alex Miller** called the meeting to order at 8:30 a.m. The following members, staff, and others were present:

Workshop participants:

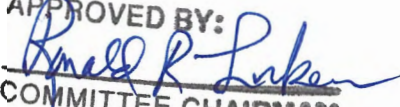
- Chuck Adams, University of Florida, Florida Sea Grant
- Assane Diagne, Gulf of Mexico Fishery Management Council
- Paul Hindsley, Eckerd College
- Walter Keithly, Louisiana State University
- Alex Miller, Gulf States Marine Fisheries Commission
- Dan Petrolia, Mississippi State University
- Michelle Savolainen, Louisiana State University
- Quinn Weninger, Iowa State University
- David Yoskowitz, Texas A&M – Harte Research Institute, TAMU – Corpus Christi

The items below were discussed as it related to current and future fisheries economic data collection throughout the U.S. Gulf of Mexico. Some scheduled participants were not able to attend the workshop given the federal government shutdown at the time of the meeting.

- 1) ***Goals of the Workshop*** (A. Miller)
 - a. Identification of Current and Ongoing Socio-economic Data Collections in the Gulf
 - b. Identification of Socio-Economic Data Needs in the Gulf: Gap Analysis
 - c. Identification of Funding Opportunities for Longitudinal Socio-Economic Data Collections in the Gulf
 - d. Development of a Proposal and Plan for Future Longitudinal Socio-Economic Data Collections in the Gulf
- 2) ***Identification of Current and Ongoing Socio-economic Data Collections in the Gulf of Mexico***
 - a. Results of the survey sent before the workshop (A. Miller)
 - b. NOAA Fisheries HQ Socio-Economic Data Collections (S. Lovell)
 - c. SEFSC Socio-Economic Data Collections (C. Liese)
 - d. GSMFC/NOAA Fisheries Cooperative Economics Program Update (A. Miller)
 - e. Other: State and University Data Collection Activities (As appropriate)
- 3) ***Identification of Socio-Economic Data Needs in the Gulf of Mexico: Gap Analysis***
 - a. Results of the survey sent before the workshop (A. Miller)
 - b. Federal Government (As appropriate)
 - c. State Government (As appropriate)

- d. Universities (As appropriate)
- 4) ***Future Funding Opportunities for Socio-economic Data Collection in the Gulf of Mexico***
- a. RESTORE: Ecosystem Restoration Science, Observation, Monitoring, and Technology Program (D. Lipton)
 - b. NOAA Fisheries / Congressional Socio/Econ Line Items (D. Lipton)
 - c. National Academy of Science Gulf of Mexico Program (D. Yoskowitz)
 - d. Other: Gulf of Mexico Research Initiative (D. Yoskowitz / M. Savolainen)
- 5) ***Development of a Proposal and Plan for Future Longitudinal Socio-Economic Data Collection in the Gulf***
- a. Steps forward (All)
 - b. Key working group (All)
 - c. Timeline (All)

Miller adjourned the meeting at 4:30 p.m.

APPROVED BY:

COMMITTEE CHAIRMAN

**S-FFMC MENHADEN ADVISORY COMMITTEE
MINUTES
October 14, 2013
South Padre Island, Texas**

VanderKooy called the meeting to order at 1:01 p.m. with the following in attendance:

Members

Matt Hill, MDMR, Biloxi, MS
Rick Schillaci, Omega Protein, Inc., Moss Point, MS
Chris Blankenship, AMRD, *GSMFC Commissioner*, Gulf Shores, AL
Jerry Mambretti, TPWD, Port Arthur, TX
Harry Blanchet, LDWF, Baton Rouge, LA
Ron Lukens, Omega Protein, Inc., Gainesville, FL
Borden Wallace, Daybrook Fisheries, Inc., Empire, LA

Others

Tommy Williams, Daybrook Fisheries, Baton Rouge, LA
Ben Landry, Omega Protein, Houston, TX
Scott Herbert, Daybrook Fisheries, New Orleans, LA
Chad Hanson, Pew Trust, Crawfordville, FL
Robert O'Boyle - MRAG Americas (for Pew Trust), Bedford, Nova Scotia
Emily Posner, Recirculating Farms Coalition, New Orleans, LA
Lee Alexander, Daybrook Fisheries, Inc., New Orleans, LA
Shane Treadaway, Daybrook Fisheries, Inc., Empire, LA
Rene LeBreton, LDWF, New Orleans, LA
Thor Lassen, Ocean Trust, Reston, VA
Kelly Lucas, MDMR, *GSMFC Commissioner*, Biloxi, MS
Dale Diaz, MDMR, *GSMFC Commissioner*, Biloxi, MS
Rusty Pittman, MDMR, Biloxi, MS
Donald Armes Jr., MDMR, Biloxi, MS
Tabitha Lindley, Omega Protein, Inc., Houston, TX
Mark Schexnayder, LDWF, New Orleans, LA
Camp Matens, *GSMFC Commissioner*, Baton Rouge, LA

Staff

Dave Donaldson, Assistant Director, Ocean Springs, MS
Steve VanderKooy, Program Coordinator, Ocean Springs, MS
Debbie McIntyre, Staff Assistant, Ocean Springs, MS
Gregg Bray, RecFIN Data Programmer/Analyst, Ocean Springs, MS
James Ballard, Program Coordinator, Ocean Springs, MS

Introductions

In the absence of **Chairman Smith**, who was unable to attend due to the federal government shutdown, **VanderKooy** opened the meeting. **VanderKooy** noted that if it was the committee's

pleasure, they could rearrange the agenda and take up the election of chair at the start of the meeting and have the new chair run the meeting. **B. Wallace moved to adjust the agenda to accommodate a new chair to preside over the meeting.** He noted that by rotation, the position of Chair fell to the industry this year. **Wallace nominated R. Lukens, Omega Protein Corp., to serve as chair for this meeting and through the term of October 2014.** **J. Mambretti seconded and Lukens was elected Chair unanimously.**

VanderKooy then took a few minutes for some housekeeping items and started the introductions.

Approval of Agenda

Lukens noted the prior adjustment to the Agenda for the election of Chair. **Lukens** asked about items 4 and 5. **VanderKooy** recommended that the Update on the 2013 Gulf Menhaden Season and Update on the Atlantic Menhaden Fishery should be tabled until such time as the NOAA employees returned to work. **VanderKooy** would set up a conference call/webinar once **Smith** became available to cover those items. **VanderKooy** advised that interested parties who are not on the MAC are also invited to attend the call. **Wallace** asked that follow-up on an item from the previous meeting regarding any research NOAA may be conducting specific to Gulf menhaden be added under other business. **Wallace moved to approve the agenda as amended, Mambretti seconded, and the agenda was approved.**

Approval of Minutes (March 19, 2013)

The Committee reviewed the draft minutes. **Wallace** moved to accept the minutes as written, **Mambretti** seconded, and the minutes were accepted.

2013 Review of the Texas 'Cap'

Mambretti, TPWD, provided an overview of the status of the 2013 Texas Cap. Since the Cap was not reached in 2012, the underage provision was triggered, thus increasing the total amount available to the fishery. As of the current status of landings, it is unlikely that the Cap will be reached in 2013. **Mambretti** indicated that communication between TPWD and Omega Protein worked smoothly. He indicated that menhaden were mostly appearing in western Louisiana, and trips into Texas waters were significantly reduced. The actual landings under the Texas Cap will not be available until February 2014. At his time, there are six vessels licensed in Texas which is down from 10 in previous years. **Wallace** wondered if the fish from Texas get sampled separately for ages. NOAA doesn't split where the samples originate but theoretically, if all the fish in a vessel were landed in Texas waters, they could be separated out. NOAA and the TPWD do not sample those vessels specifically for 'Texas fish'.

Status: Louisiana Forecast for 2014

Blanchet, LDWF, reported on the previous request for an update on the standard forecast on the Gulf menhaden harvest in Louisiana. **Blanchet** conveyed the request to the LDWF, but as yet has not received a response. One glitch is that the replacement for Guillory has since left the agency

and the situation with the NRDA process prevents the Department from providing too many extraneous data requests outside of the pending lawsuit. **Blanchet** asked the MAC for patience; it's too early to tell how quickly this would become possible and there may or may not be an exact model since the LDWF protocols have changed somewhat. **Lukens** stressed the importance of the forecast and the recruitment analysis as it is planned as a part of the overall approach to management. The March 2013 motion from the MAC to the LDWF still stands as an official request for continued consideration by the Department.

SEDAR32A Gulf Menhaden Stock Assessment

VanderKooy reported on the SEDAR 32A stock assessment and review report, recently completed. The 400+ page report is available on the SEDAR website. The reviewers were unable to make a complete stock determination since management goals, objectives, and reference points had not yet been defined by the GSMFC. While they deemed that the population is likely *not overfished and overfishing is not likely occurring*, the lack of a final status determination is troubling. **VanderKooy** noted that the reviewers were also concerned that there had been a change to the LDWF bag seine protocols. Since the bag seine index is an important data input in the stock assessment model, the reviewers were concerned that if the current assessment was based on a recruitment index using the bag seine data, changing the protocols could cause issues in future assessments. Data available from the eastern and western extremes of the Gulf menhaden population were questioned by the reviewers, since there may be some species identification uncertainties. There is an overlap in the western region with finescale menhaden (*Brevoortia gunteri*) and a known hybridization zone in the panhandle of Florida between Gulf and yellowfin menhaden (*B. smithi*). The TPWD is actively pursuing genetic analysis of these large fish. **Mambretti** reported that the larger menhaden being encountered in the TPWD fishery-independent sampling gears are currently being sent to their genetics lab to determine the identification of those fish as either species or a hybrid. **Blanchet** noted that this is a really positive approach and in short time could provide a significant amount of validated data for future assessments. **VanderKooy** reminded all that the FWC does not have independent sampling to the west of Apalachicola Bay so much of the panhandle, which is known to be a large hybridization zone, is not sampled. The agencies in Alabama and Florida have included genetic fingerprinting in the proposals submitted for NRDA Early Restoration funding. It is hoped that these activities will result in valuable additional fishery-independent data for the next stock assessment.

Some of the MAC members worked prior to and after the SEDAR to draft management goals and objectives for inclusion in the FMP revision. A proposal was distributed prior to the meeting for the MAC's consideration. **VanderKooy** reported that with the proposed language, the Commission should be able to make a stock status determination once the reference points were adopted. The suite of options provided by Dr. Schueller in the SEDAR32A report indicated that none of the conventional reference points provided as potential options indicated any level of fishing that would warrant concern. The proposed language which had been drafted and distributed noted that the recommended reference points be used as management tools, not rebuilding tools as a target and threshold for stable fishing levels that would maintain a sustainable menhaden population.

Lukens identified the specific proposal and asked for any discussion or if anyone needed further explanation. The language indicates that the MAC proposes fishing mortality (F) levels at 35% SPR and 30% SPR, respectively, as the target and threshold reference points for management. The landings associated with the F_{35%} target would be 663,583 MT, and the landings associated with the F_{30%} threshold would be 680,765 MT. As a trigger, it was recommended that if the target level were to be exceeded two years in a row, an immediate request would be made for an update to the stock assessment as soon as possible knowing the difficulty in getting something in the SEDAR schedule. In addition, if the threshold level was exceeded in a single year, a stock assessment update would be immediately requested. **Lukens** noted that these reference points were based on harvest, not biomass since no spawner-recruit relationship could be measured; these are essentially 'measuring sticks' and not intended to or be construed to indicate a cap or a quota. **Lukens** would like to modify the proposal to include language that if a stock assessment is scheduled on a five-year cycle, either through SEDAR or some other process, it should be a benchmark assessment. This would make the next benchmark assessment in 2018 in conjunction with the next update of the FMP. **Lukens** asked again if there were any questions regarding the proposal. Hearing none, **Lukens** asked if anyone would put in a motion to accept the amended proposal. **Blanchet moved and modified the proposal to add a 'benchmark' assessment every five years and modify the language to ask for an update stock assessment if a trigger is passed. Mambretti seconded, without comment or objection, the motion passed unanimously.**

VanderKooy noted that the SEDAR Steering Committee could be asked to put Gulf menhaden on the assessment schedule for 2018. There are limited funds in the SEDAR program and while the assessment was in the process, the GSMFC directly paid for the Data Workshop and Assessment Workshops of both SEDAR27 and SEDAR32A. That was the deal made to get the state fishery into the federal SEDAR process. Within that construct, SEDAR may not have or be willing to cover the costs of a benchmark assessment next time. With the budget constraints in the GSMFC and the IJF Program specifically, it may not be feasible to cover the costs of part of the SEDAR. **VanderKooy** quickly explained the GSMFC's Gulf Data Assessment and Review (GDAR) process which was recently used to complete a Gulf of Mexico Blue Crab stock assessment successfully. That kind of internal process would be ideal with funding and support to complete all of the assessments required for FMP development and, in the case of menhaden, could fill the role of the Population Dynamics staff at the Beaufort Lab within the Commission. However, this is not a funded initiative at this time but **VanderKooy** is moving in this direction for the future. It would definitely be a contingency plan in the event that SEDAR became more problematic. There was a question about the actual cost of the SEDAR. In most cases, the CIE review is most expensive since three reviewers are paid for their time (2-3 weeks) and travel (often foreign). The Commission covered a lot of the workshop costs by approaching them as expanded Technical Task Force (TTF) meetings. It would be better to do dedicated assessment meetings but with the overlap of participants, it was only a little more costly to add a few extra assessment people and an extra day or so of travel. For the menhaden FMP revision, there is not an actual TTF that meets; **Smith** and **VanderKooy** typically update the assessment on behalf of the MAC. Also, the Commission doesn't cover any federal travel which is why all of the workshops were at the Beaufort Lab in North Carolina. Using the Commission's GDAR approach rather than SEDAR would eventually require the Commission to hire a full-time population dynamic scientist to manage the process and run the model in place of Dr. Schueller or someone from Beaufort.

Actually, now that we've been through the SEDAR, we could continue the assessments using any other process. **VanderKooy** also noted that the Atlantic States Marine Fisheries Commission (ASMFC) actually has three assessment specialists on staff to assist in conducting their assessments and help with the Atlantic menhaden SEDAR as well. **Mambretti** asked if it would be appropriate to ask the SFFMC to support expansion of the GDAR program with the Commission and the FMP process. **Mambretti moved to recommend that the SFFMC seek funding to formalize the GDAR program and support a stock assessment specialist within the Commission staff to conduct assessments in support of the various Commission FMPs. Wallace seconded and the motion passed unanimously.**

Dale Diaz inquired if, in the future, we could contract an assessment person from the ASMFC to conduct assessments in between the five-year cycle. **VanderKooy** noted that on the Blue Crab assessment, Dr. **Robert Leaf** (GCRL) participated *pro bono* in the process to run the secondary ASPIC model but that the states provided the additional analysts to conduct that work to run the primary base model which took a lot of time away from their regular state activities. These participants included Dr. **Wade Cooper** (FWC), Mr. **Joe West** (LDWF), and Mr. **Glen Sutton** (TPWD) who all contributed to running and writing up that assessment. The ASMFC staff would likely not have the time to conduct assessments outside their own obligations for their own Commission. **Wallace** would like to see Gulf menhaden continue within the SEDAR process, at least on a semi-regular basis, to ensure the legitimacy of the assessment in the international arena. **Lukens** agreed but acknowledges that there are issues with continuing in a SEDAR frame and there is no obligation to use the BAM model in the future either.

Lukens raised the concern that under normal circumstances, a five-year gap between benchmark assessments doesn't help in the period between assessments. There is a critical need for some ability for the MAC to review the population trends annually using indices from fishery-independent data. **VanderKooy** noted that Doug Vaughan, retired NOAA, might be willing to run the Mississippi River Recruitment Index derived from Govoni and Vaughan but would likely need to be contracted to do so and would also require access to the fishery-independent data needed to run the model. Both Vaughan's and the LDWF's forecasts would be helpful but still need access to LDWF fishery-independent data. The Govoni and Vaughan index was run within the SEDAR27 and 32A as a sensitivity run and would be relatively easy to update with new data. However, this would have to be run every year to stay current as a forecasting tool and at this time, there is no funding available to contract anyone, including Vaughan, to do this.

Blanchet reminded everyone that within the SEDAR process, an 'update' does not require a CIE review and is much more affordable but there is no such thing as a straight update. Everyone contributing wants to tweak and make adjustments to the model and you end up with a hybrid version which can be problematic – just updating isn't as simple as it sounds.

Chad Hanson, Pew Trust, noted that the triggers which would result in an assessment request could take a couple of years to resolve based on the process. Perhaps some management measures would be appropriate to enact once the trigger is reached until the assessment (benchmark or update) could be developed. **Bob O'Boyle**, MRAGs America, had a similar concern that some sort of management actions would need to take place when a forecast indicated a concern or potential change in population trends prior to a fishing season. **Lukens** pointed out that all of this

is a brand new management approach for the fishery and those types of issues will need to be worked out after the current proposed management is in place, then additional management could be considered as options.

O'Boyle wondered what the derivation of the proposed target and threshold were. **Lukens** noted that the numbers were generated by Dr. Schueller and they are only being used as a yard stick or measuring device. Over the time period examined in the assessment, there was never a decline or response in the population. In fact, the fishery has operated at between 400,000-500,000 MT for the last two decades. This seemed like a reasonable number to apply so that, as the population increases or decreases, the stick moves with the abundance allowing for more fishing in boom years but always falling back to some conservative level minimally. In recent years, effort has been declining and real capacity is determined by capacity at the plants and it is unlikely that there would be a change in capacity in the future. Current fishing will be the norm. **O'Boyle** still wondered what the rationale was for F35% and not F40%. The difference between the target and threshold was set at 5% of F but this is based on the catch value, not the fishing mortality level. Is there going to be a biomass associated with this? **Lukens** indicated that this is what we are using which is indeed different from the Atlantic menhaden fishery.

Blanchet responded that one of the problems with biomass targets is that Louisiana doesn't have a stable habitat to establish biomass targets because it's shifting ground. Biomass targets don't gain much compared to fishing mortality rates. We can control fishing.

Lukens also explained that, while ecosystem management is a great goal for management, at least in the Gulf, we just don't have the trophic interaction data required for that approach. We are continually noting the lack of appropriate data to achieve ecosystem management and the assessment and the FMP have listed them as research recommendations and needs. **VanderKooy** noted that the state of Florida has actually started a 'diet lab' which is beginning to get at some of these missing data elements. **Hanson** still would like to have more precautionary reference points applied to ensure all ecosystem services are met for this species.

VanderKooy reported that now that the MAC has accepted these reference points, the report which will be provided to the Commission later in the week will include these measures for inclusion in the FMP. If the Commission agrees or accepts the report from the MAC, those reference points will go into the FMP for additional review through the Commission's process which would include the TCC, S-FFMC, a public comment period, and eventually the GSMFC Commissioners. Upon approval, the states will work towards inclusion of the FMP recommendations in their management. This entire review could take as much as six to nine months. **Lukens** indicated that if we accept the management recommendations approved above and they are approved by the full Commission, there should be a stock determination from the GSMFC regarding the stock status that the Gulf menhaden population is neither overfished nor undergoing overfishing.

FMP Revision Discussion

VanderKooy reported on the status of the FMP revision, indicating that the biology, habitat, and law enforcement sections are currently available for review by the MAC and that those sections

should be finalized soon. A social history of the fishery is underway. **VanderKooy** has conducted a series of informal interviews with various individuals familiar with the Gulf menhaden industry and fishery which will be combined with the results of the 2011 social survey of the industry. **Alex Miller**, GSMFC Economist, is working on the economics section, and **Smith** is updating the fisheries section (Section 6).

VanderKooy handed out a very early draft of the management recommendations section (9) for formatting only. He asked the MAC to review the Goals and Objectives included in the strawman and noted that there would be considerable revision to the 'stock status' section based on whatever the Commissioners adopt. The current subsection is just the executive summary from the SEDAR32A and won't be the actual language. **VanderKooy** would like comments on the Goals and Objectives from the MAC as soon as possible. He will also blend the previous recommendations with any new or expanded ones resulting from the SEDAR32A report.

VanderKooy hopes the entire draft will be ready by the end of 2013 or very early 2014 for full review by the MAC. It is expected that the TCC would begin reviewing prior to the March meeting but they will have three FMPs coming over the first three months of the year.

Development of On-Board, Electronic CDFRs

Dave Donaldson introduced a proposal to computerize the Captain's Daily Fishing Reports (CDFRs), which are currently filled out on paper onboard the vessels and optically scanned later at the NMFS Beaufort Lab. It would be an opportunity for the vessel captains to enter CDFR data directly into an electronic device rather than filling out a form for later scanning. The industry representatives indicated that there was no urgency on their part for faster reporting, and the current system seems to work fine. **Smith** had previously indicated that there wasn't much of a time lag in getting the CDFRs proofed and scanned. The biggest concern raised was the potential for loss of data should there be a computer crash onboard the vessels. Considering all the issues raised, the MAC elected to decline the proposal at this time.

Review of Aerial Survey Proposal

VanderKooy presented a proposal for an aerial survey of Gulf menhaden, developed by Dr. **Robert Leaf** (GCRL) and Dr. **Behzad Mahmoudi** (FWC). The survey is designed to provide fishery-independent data to develop an adult menhaden abundance index and distribution in the traditional fishing grounds and beyond. This is a project that has been discussed many times and is identified in the research section of the FMP. It is believed that the project could be submitted in the third stage of the Restoration Act funding which could be run for ten years or more. The general concept is to perform a survey using planes to zig-zag the coast out to the fishing grounds and spotting large and small schools to estimate additional fish that the reduction fishery doesn't normally focus on. There will be coordination with the industry fishing in nearby areas but **VanderKooy** couldn't provide any additional information regarding ground-truthing. There were a number of concerns raised over the proposal and the ability to visually estimate fish numbers in turbid waters typically occurring in areas where menhaden occur. This may be less of a problem on the Atlantic but definitely a concern in the Gulf. In addition, the cost for the annual survey is in excess of one million dollars, and there was concern that it would be difficult to find funding

for long-term implementation. **Leaf** and **Mahmoudi** were unable to attend the meeting, so an effective question and answer session was not possible. **The MAC moved to table this item and that VanderKooy should coordinate a conference call with the two PIs and discuss the details of the proposal at that time. In addition, a presentation should be made at the March 2014 meeting in New Orleans.**

Other Business

Wallace asked if NOAA is doing any research, including tissue contaminant analysis, on Gulf menhaden since the BP oil spill. Several state agencies are still routinely conducting work in the area of testing of seafood products but no one believes that NOAA is doing any work on menhaden in the Gulf.

With no further business, the meeting adjourned at 4:18 p.m.

APPROVED BY:

COMMITTEE CHAIRMAN

**TECHNICAL COORDINATING COMMITTEE
MINUTES**

**Tuesday, October 15, 2013
South Padre Island, TX**

Chairman Dale Diaz called the meeting to order at 1:30 p.m. The following members, staff and others were present:

Members

Harry Blanchet, LDWF, Baton Rouge, LA
Richard Cody, FWC/FWRI, St. Petersburg, FL
Chris Denson, ADCNR/MRD, Gulf Shores, AL
Dale Diaz, MDMR, Biloxi, MS
Dan Ellinor, FWC, Tallahassee, FL
John Mareska, ADCNR/MRD, Dauphin Island, AL

Staff

James Ballard, GSMFC, Sport Fish/Aquatic Invasives Coordinator, Ocean Springs, MS
Dave Donaldson, GSMFC, Assistant Director, Ocean Springs, MS
Gregg Bray, GSMFC, RecFIN Programmer/Analyst, Ocean Springs, MS
Ali Ryan, GSMFC, Sport Fish/Aquatic Invasives Staff Assistant, Ocean Springs, MS
Joe Ferrer, GSMFC, Systems Administrator, Ocean Springs, MS
Jeff Rester, GSMFC, SEAMAP/Habitat Coordinator, Ocean Springs, MS
Donna Bellais, GSMFC, ComFIN Survey Coordinator, Ocean Springs, MS
Angela Rabideau, GSMFC, Accountant, Ocean Springs, MS
Steve VanderKooy, GSMFC, IJF Coordinator, Ocean Springs, MS
Debbie McIntyre, GSMFC, IJF Staff Assistant, Ocean Springs, MS

Others

Thor Lassen, Ocean Trust, Reston, VA
Lance Robinson, TPWD, Dickinson, TX
Kelly Lucas, MDMR, Biloxi, MS
Steve Brown, FWC/FWRI, St. Petersburg, FL
Chris Blankenship, GSMFC Commissioner, ADCNR/MRD, Dauphin Island, AL
Doug Boyd, GMFMC, Boerne, TX
Chad Hanson, Pew Charitable Trust, Crawfordville, FL
Christine Murrell, MDMR, Biloxi, MS
Joe Gill, Jr., GSMFC Commissioner, Ocean Springs, MS
Terry Cody, Rockport, TX
Page Campbell, Rockport, TX
Read Hendon, USM/GCRL, Ocean Springs, MS

Adoption of Agenda

A motion to adopt the agenda as written was made by John Mareska and passed unanimously.

Approval of Minutes

A motion to approve the minutes as written for the March 20, 2013 meeting was made by Jerry Mambretti and passed with no opposition.

Sustainable Oyster Shellstock Model, a Tool for Oyster Management

Dr. Soniat gave an overview of his shell budget model for the estimation of sustainable oyster harvest. The sustainability goal the model utilizes is no net shell loss (shell loss to fishing (live and incidental cultch) + natural shell loss = shell growth + shell planting). He walked through the process of using the publicly-available demo model that can be accessed at <http://oystersentinel.org> which is a simplified version of the more complex model that was developed for LDWF. A recent publication that goes into the details of the model and a user's guide for the model can be found on the previously mentioned website. Dr. Soniat pointed out that this model applies to all northern Gulf waters and you need to enter oyster counts, cultch density, and size distribution of oysters to characterize the reef, then you can input a fishing rate, growth rate and mortality rate as variables of the simulation. From that provided information, the model will determine if reef cultch is lost or gained. If cultch is gained, the model will generate the number of sacks of seed and/or sack oysters you can harvest. Using the model to determine TAC utilizing sustainability criterion can determine if a reef is "fishable" or not. The model can also be tailored to fishing for seed or sack oysters. Following his overview of the demo model, Dr. Soniat ran through how the more robust LDWF model is used to manage the oyster harvest on 75 oyster reefs in the seven coastal study areas of Louisiana.

Mark Schexnayder stated that if any of the other states would like to have access to the LDWF model they could contact LDWF staff and they would make it available.

The Fisheries Oceanography of Coastal Alabama Program (FOCAL)

Dr. Hernandez provided a brief overview of recent findings from larval fish studies in the northern Gulf of Mexico. He stated that some of the main goals of all the early life history studies are assessment of exploitable populations (relationships between early life stages and adults), processes affecting recruitment (larval fish transport, feeding, growth, mortality), and ecosystem and population dynamics (marine connectivity, climate change, anthropogenic impacts). The impetus behind first starting these surveys off of Alabama with the Compass Port Biological Baseline Survey (2004-2006) was the proposed development of an LNG facility. However, the data collected through this and subsequent surveys is now playing a big role in establishing a baseline for all the NRDA work being conducted as a result of the Deepwater Horizon oil spill. Dr. Hernandez stated that in developing the FOCAL program (2006-2011), there were some key elements that had to be addressed in order to meet the goals of the study, including appropriate sampling resolution, a focus on physical oceanography, taxonomic expertise, and it had to be comparable with other surveys in the area, namely SEAMAP. Under the FOCAL program, they conducted nearly monthly samplings of ichthyoplankton, zooplankton, physical oceanography parameters, and water column productivity and chemistry at sites from inside Mobile Bay, out to a depth of 35 meters. For the plankton sampling component, they utilized a BIONESS, Neuston nets, and ring nets. Over the course of the program, they collected over 4,000 plankton samples. From the FOCAL program sampling, they were able to assess seasonality and assemblage structure of larva of multiple species throughout the year across the study area. They also looked into variability in the distribution of larva as a result of environmental drivers such as river discharge.

Dr. Hernandez also stated that they utilized DNA probes to look at the distribution and abundance of red snapper, red drum, and vermilion snapper eggs, collected using vertical nets off of Alabama under the MARFIN program and in samples collected by the SEAMAP CUFES during their September cruises, as they are a good indication of localized spawning.

Dale Diaz asked Dr. Hernandez if he thought red snapper reproduction was occurring on artificial reefs. He stated that his research indicates that it possibly is, which may provide some insight into fisheries management and where new reefs are sighted, noting there may be a benefit to placing more reefs in moderate to deep water to provide for better distribution of eggs and larval fish.

Overview of Louisiana's In-season Monitoring Program

Harry Blanchet pointed out that the inability to use MRIP survey data to reasonably forecast recreational red snapper harvest led the state to develop and implement their own data collection program to monitor the harvest of red snapper during their new state water season and the federal season. The new LA survey was designed to provide near real-time, reliable recreational red snapper landing estimates with increased confidence for managers and anglers. In their program, recreational landing estimates are calculated separately for the private recreational sector and for-hire sector. For the private angler survey, they are using a dockside survey to collect red snapper harvest rate, and a phone survey of anglers holding a required recreational offshore landing permit for effort. By targeting only permit holders, it allowed LDWF to narrow the sampling universe for their phone survey down to only the 14,000 recreational anglers that fish offshore, which increased their probability of getting positive interviews. For the for-hire component, they use a weekly census of for-hire/charter captains to determine the number of red snapper harvested they also intercepted some of the charter trips at the docks to get weights of the fish they were bringing in. Dockside surveys were conducted seven days a week during the federal red snapper season, and approximately 20% of all trips were intercepted with only one person from each boat being interviewed. They also estimated noncompliance weekly. Some of the results from their access point survey were 2,288 private angler trips surveyed, 3,241 length measurements taken, and 2,353 weight measurements taken. As for their effort survey, there were 10,718 private angler contacts (7,454 by phone and 3,264 by email). When you compare this program to MRIP for wave 3, 2013 a total of 83 weight measurements were taken by MRIP (6 for-hire and 77 private) and 1,770 were taken by LA (812 for-hire and 958 private), also MRIP estimated 30,264 private angler trips were taken in wave 3 were as LA estimated 21,415 with much smaller confidence intervals.

Gregg Bray asked what their turnaround time was for the data collected in their new program. Harry stated that of the estimates of catch for a given weekend during the state weekend, only red snapper season were completed in a week and a half.

Dale Diaz asked what the cost was to run this new monitoring program. Harry indicated that it cost them a significant amount of money to work through some of the nuances of starting a new program, and now that the program is up and running, it wouldn't cost as much for another state to start their own program using the LA model. Harry also stated that he wasn't comfortable with the total cost numbers he had, but he would provide Dale with some estimates.

Dale Diaz stated that the NOAA MRIP staff has agreed to fund an in-season pilot monitoring program for red snapper in 2014, and asked if LA was going to participate in the development of

that pilot program. Harry pointed out that LDWF already provided MRIP staff with all of their monitoring protocol documents.

Mississippi's Jubilee

Matt Hill provided an overview of a Jubilee that took place in Mississippi on July 1st, 2013 and a bloom of *Ceratium furca* alga that was associated with it. Matt explained that a jubilee is a natural event in which a very specific set of conditions must exist in the marine environment causing fish and other marine organisms to be forced to shore by a bottom layer of oxygen-poor waters being pushed shoreward by a rising tide. He then covered some of the environmental conditions that have to be in place for a jubilee to take place, including warm water temperatures, a rising tide, and calm conditions with a slight offshore wind. He stated that this was a very long jubilee event which lasted from early morning until finally being stopped by the change to a falling tide in early afternoon. Over the course of the day, numerous people took advantage of the easily-accessible marine species. Matt also explained that blooms of *Ceratium furca* alga like the one that was associated with this jubilee can cause damage to fish gills and could eventually lead to a fish kill; however, their analysis didn't show any evidence of this happening in this event.

IJF Programmatic Update

Steve VanderKooy provided an update on FMP development, the status of stock assessments, and the FMP compliance matrix. He stated that they have three FMPs in development now (Gulf menhaden, Gulf blue crab, and Gulf and southern flounder), all of which are in the final stages of revision. Drafting should be ready for the TCC to review by the end of 2013 or early 2014. Steve pointed out that the Gulf menhaden stock assessment has been completed, and is available on the SEDAR website. The Gulf blue crab stock assessment was completed in July utilizing the new GDAR process, and is available on the Commission's website. Steve also stated that all of the comments that were received from the compliance matrix for the different FMPs have been compiled and provided to the TCC members.

Update on Lionfish Work in the Region

James Ballard provided an overview of the Mississippi Bight Lionfish Response Unit (MBLRU) pilot project. The project is a cooperative effort between GSMFC, MS Department of Marine Resources, AL Marine Resources Division, National Park Service, and the U.S. Fish and Wildlife Service. It was established to assess the current status of the lionfish invasion in northern Gulf waters, and to conduct diver assessments of native species. James gave a brief overview of the lionfish invasion in the Atlantic Ocean, Caribbean Sea, and the Gulf of Mexico. He pointed out that lionfish are inhabiting a wide range of habitats in the invaded range, from depths of 1,000 feet to several miles up coastal rivers, and are reaching abundances of an order of magnitude higher than native top level predators. Lionfish are only limited by their gape size on the prey they can consume, and are able to reduce prey species abundance by 65%-95% within a two year period, according to some localized studies. James stated that since the MBLRU received its funding in July 2012, they have held meetings to discuss survey and lionfish collection protocols, data collection and storage procedures, required gear, sample site selection, and possible outreach. All gear required to carry out the project has been ordered and distributed, including custom-designed dive slates for conducting the diver surveys of native species richness and abundance. GSMFC staff developed a database and an internet-based entry form for all the data collected over the course of the project. To date, over 50 dives have been conducted under this project. Lionfish were

observed on some of the deeper sites (>75 feet), and higher abundances were observed on the most eastern sites in the project range. This suggests that we were able to collect native species richness and abundance data on the leading edge of the invasion, which was a primary goal of this project. James stated that he was able to extend the project for a year to allow Mississippi time to conduct dives on their sites. He also showed an example of some of the outreach materials that have been developed and distributed to dive shops and posted at boat access points within the study area.

Subcommittee Reports

Data Management

Christine Murrell stated that the subcommittee had an update from Gregg Bray on the status of biological sampling activities. All of the states except for Florida are up to date with sampling data entry through 2013. Florida is working to re-format data and provide it to GSMFC for loading to the FIN Data Management System. Florida also plans to provide historical sampling and age data for several FIN priority species in the coming months. All states mentioned that samplers are doing a good job staying caught up with reading and ageing 2013 age structures, and a large backlog will not need to be processed during 2014. Some samples for Texas may need to be shelved for later processing, as FIN contractual biological sampling staff will likely be cut at the end of 2013 due to funding shortfalls for 2014. All states also agreed that continuing to circulate the species-specific ageing reference sets would be useful during 2014 even if the biological sampling program is suspended.

Ralf Riedel provided a brief summary to the Subcommittee of his progress with metadata compilation. Historical and current information on fishing regulations, licenses and fees, climatic/environmental data, and some economic data has been completed.

Dave Donaldson provided the Subcommittee with a summary of a peer review report of NOAA's Southeast Fishery Science Center. The report provided some feedback and suggestions for improvement for data programs that feed into the NOAA Southeast Fishery Science Center. GSMFC staff plan to generate a response letter that will be reviewed by the Subcommittee at the March 2014 meeting. After review by the Subcommittee, the letter will be reviewed by the full FIN committee in June 2014. If approved by FIN, the response letter will be provided to NOAA Fisheries later that summer.

Claude Peterson with Bluefin Data led a discussion and presented his current progress towards creating a unified commercial trip ticket system. The current commercial trip ticket system is a PC-based system and 5 versions, one for each state, which are maintained by Peterson. The new unified system that is being proposed would be a server-based system and is going to require all the partners involved to agree upon table structures before development can begin. Each state screen will be customizable and flexible to meet state requirements, but will be built around a unified single database structure. Also, Peterson requested that a coordinating body of state and federal partners be established to determine changes and modifications to a unified trip ticket program. The Subcommittee agreed that scheduling another in-person meeting when NOAA staff availability is determined would be necessary to answer many of the key questions Peterson requires for development.

Thor Lassen discussed a program working the GSMFC comparing Gulf Fishery Management with FAO eco-labeling guidelines. They hope to have a forum to collect and provide better information for FAO certifiers on how Gulf species are managed.

Alex Miller provided an update on the FINFO website that is designed to better communicate the sustainability of Gulf Species at the state level. FINFO has been working with state personnel, and fishery profiles are still being produced. Miller hopes approximately 20 species profiles for each state will be on the website prior to March 2014.

Vince Cefalu from Louisiana was elected as the incoming Chairman. Nicole Shaffer from Alabama was elected as Vice-Chairperson.

SEAMAP

Read Hendon stated that the SEAMAP Subcommittee met in conjunction with the South Atlantic and Caribbean components in July via conference call to discuss the SEAMAP 2014 budget allocations. The three components are planned for level funding in 2014 with the same historic funding percentages between the components. SEAMAP funding levels were reduced 12% in FY2013 from FY2012 levels.

Details of all FY2013 SEAMAP sampling were provided to the TCC in the “2013 SEAMAP Report to the Technical Coordinating Committee”. In 2013, SEAMAP began its 32nd year of fishery independent data collection in the Gulf of Mexico.

At the Monday October 14th meeting, the Subcommittee reviewed the SEAMAP Trawl and Plankton Operations Manual. Several changes were suggested to improve the data that SEAMAP collects during its trawl and plankton surveys. The Operations Manual should soon be ready for final approval by the Subcommittee.

The Subcommittee discussed station selection issues off Mississippi, Alabama, and eastern Florida. Historically, this area has been oversampled during trawl surveys. Since SEAMAP switched to a standard 30-minute tow time in 2010, the number of stations have been reduced. SEAMAP is trying to determine the optimal way to sample these stations while still including all SEAMAP partners in trawl sampling. They also discussed station selection in the 2-5' fathom depth stratum and station selection during the plankton surveys.

The Subcommittee discussed oil spill related funding sources for collecting additional fishery-independent data using SEAMAP protocols. Several potential funding sources exist that would allow increased data collection for monitoring impacts of the Deepwater Horizon oil spill. While SEAMAP funding would not be used to collect the data, the data would build upon existing SEAMAP surveys with comparable data for stock assessments. Florida recently submitted a fishery-independent proposal for NFWF funding that would allow them to participate in the Fall Shrimp/Groundfish Survey and Vertical Line Survey for five years. Mississippi is going to prepare a similar proposal to participate in the Vertical Line Survey.

John Mareska was elected Chairman, with Chloe Dean serving as Vice-Chairperson.

Crab

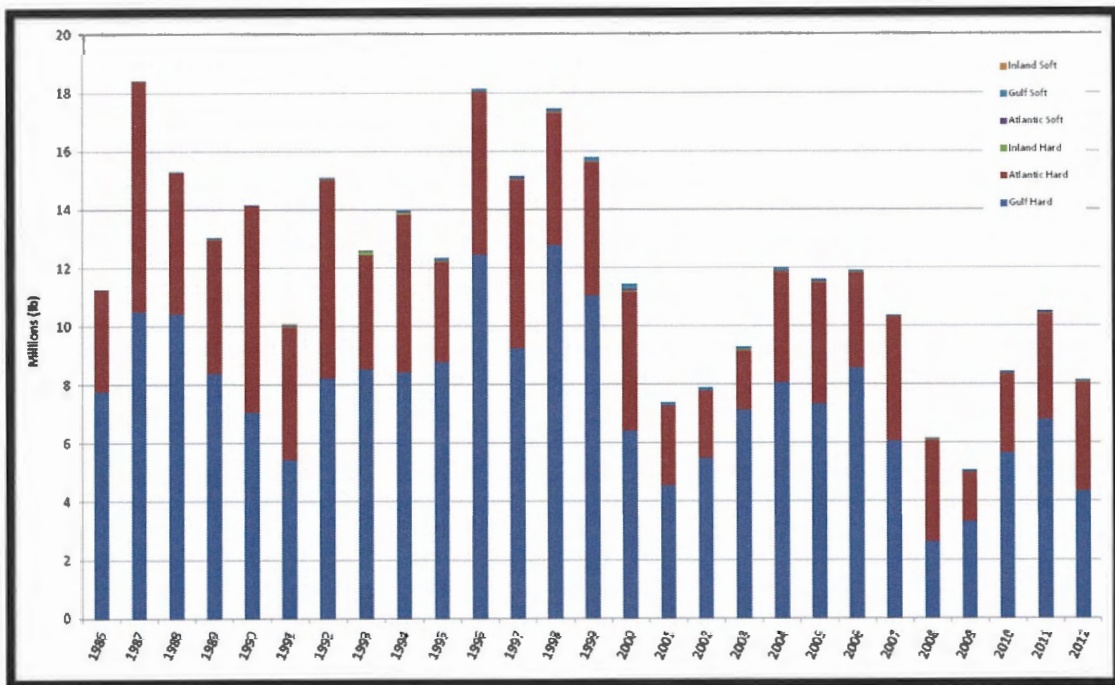
Steve VanderKooy pointed out that a summary report of all the state blue crab activities was provided to the TCC (See below). The Subcommittee is continuing to work on the Blue Crab FMP that they are hoping to have ready for the TCC to review by later this fall. They have completed the GDAR01 Gulf of Mexico Blue Crab Stock Assessment, and it is available for download on the GSMFC website.

GSMFC Crab Subcommittee TCC Report (as provided to the TCC)

Florida

Blue Crab Landings

Florida's 2012 blue crab landings suggest a continuation of landings volume below its historic average. Landings in 2009 were the lowest on record for the state and regionally the lowest on record for the Atlantic coast. Overall, the years with lowest landings appear in 6 to 10 year intervals. The trend of landings for these lowest landing years appears to declining over time.



Softshell landings include hard crabs taken as peelers

Figure 1. Florida Blue Crab Landings. Data obtained from Florida Fish and Wildlife Marine Fisheries Information System.

Blue Crab Trips

Trips for hard shell crabs did not reach 2011 levels. Trips for soft shell crabs continued to decline in 2012.

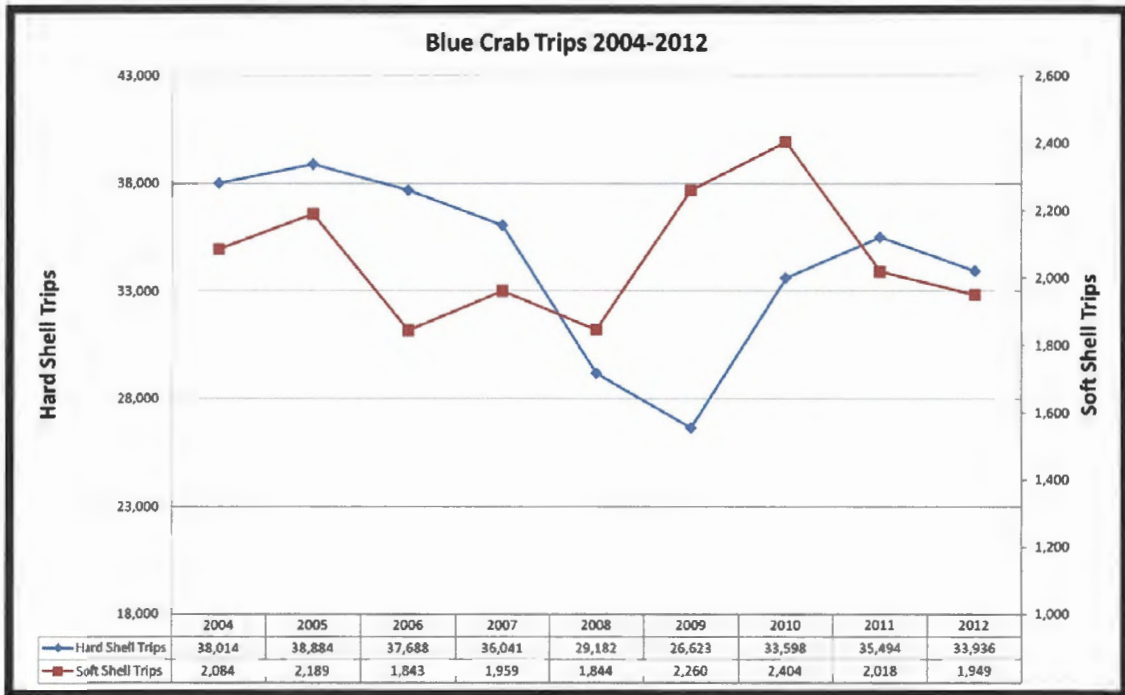


Figure 2. Florida Blue Crab Trips. Data obtained from Florida Fish and Wildlife Marine Fisheries Information System.

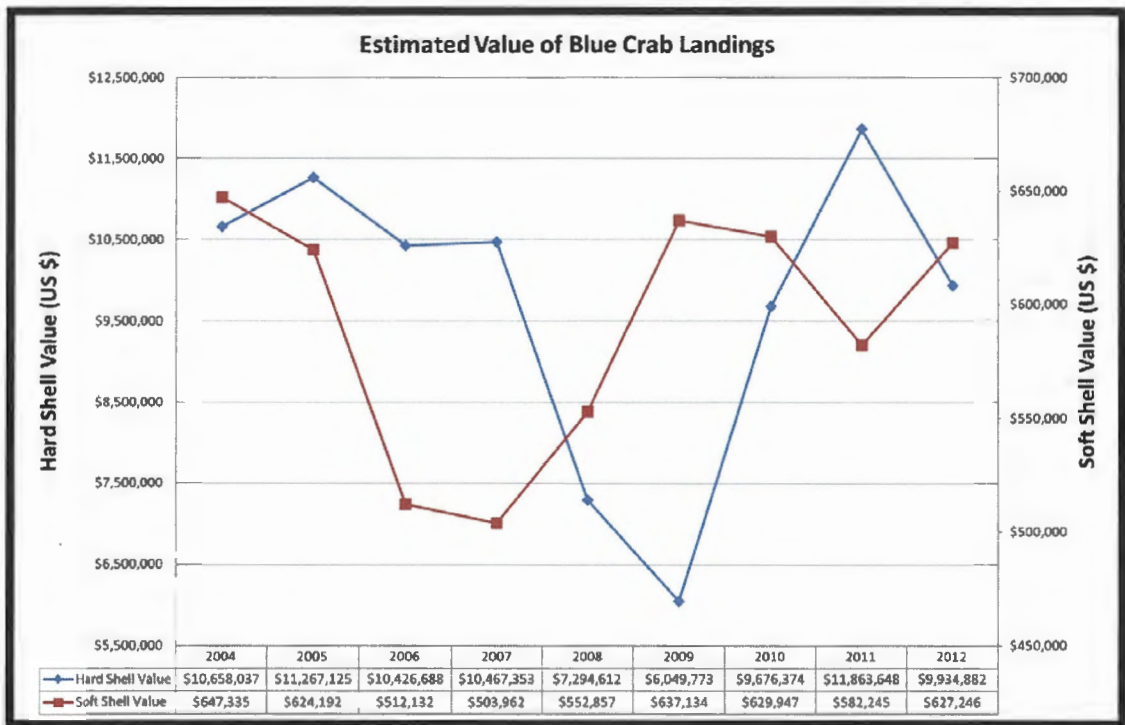


Figure 3. Estimated Value of the Florida Blue Crab Fishery. Data obtained from Florida Fish and Wildlife Marine Fisheries Information System.

Blue Crab Landings Revenue

Estimated revenue from hard shell crabs declined in 2012 from 2011. Revenue from soft shell blue crab showed an increase in 2012 from the previous year.

Blue Crab Effort Management Program

The Blue Crab Effort Management Program (BCEMP) was implemented in 2007 to address problems of seasonal crowding of traps in confined waterways, lost traps, bycatch, overcapitalization, latent endorsements that are unused and conflict between hard shell blue crab producers and soft shell blue crab producers in the fishery. On July 1, 2008 the BCEMP assessed a blue crab endorsement fee and trap tag fee for each blue crab trap fished. Non-renewals may appeal if there were extenuating circumstances that prevented them from renewing on time. Otherwise, those non-renewal endorsements were lost, permanently decreasing the number of endorsements in the fishery (Table 1).

Table 1. Blue Crab Effort Management Plan - Changes in the Blue Crab Endorsements and Traps

Year	Total Traps	Trap Endorsements
07/08	822,750	1,171
08/09	290,699	1,021
09/10	257,050	925
10/11	252,209	834
11/12	266,950	821

Alabama

2012 and 2013 Blue Crab Samples Collected for Tissue Testing

Working closely with the Alabama Department of Public Health (ADPH), biologists from Alabama Marine Resources Division (AMRD) have routinely collected specimens of finfish and shellfish from Alabama's commercial and recreational fisheries for tissue testing. AMRD sent 635 individual blue crabs in 2012 and 440 blue crabs in 2013 (through September) (Table 1) from 8 statistical zones in AL waters to ADPH to be tested. Specimens collected are tested for the presence of various chemicals including various PAHs, heavy metals, and dispersant signatures. Tissues are also tested for viral and bacterial contamination. Our current sampling protocol, adopted in the Spring of 2011, is to collect these samples on a monthly basis.

Alabama Derelict Crab Trap Recovery

Upon visual inspection of the main derelict crab trap removal sites, there are too few derelict traps to warrant organizing a volunteer removal program in the Fall of 2013. AMRD will continue to monitor these sites to determine if we will host a removal in the Spring of 2014. Our last removal occurred in March of 2010.

Table 1. Blue Crabs Collected for Tissue Testing in 2012 and 2013.

Year of Collection	Month of Collection	Blue Crabs Caught
--------------------	---------------------	-------------------

2012	January	36
2012	February	62
2012	March	39
2012	April	43
2012	May	34
2012	June	44
2012	July	75
2012	August	42
2012	September	43
2012	October	55
2012	November	70
2012	December	92
2012	Total	635
2013	January	83
2013	February	37
2013	March	46
2013	April	43
2013	May	40
2013	June	45
2013	July	66
2013	August	44
2013	September	36
2013	Total	440

Alabama Blue Crab Landings and Values

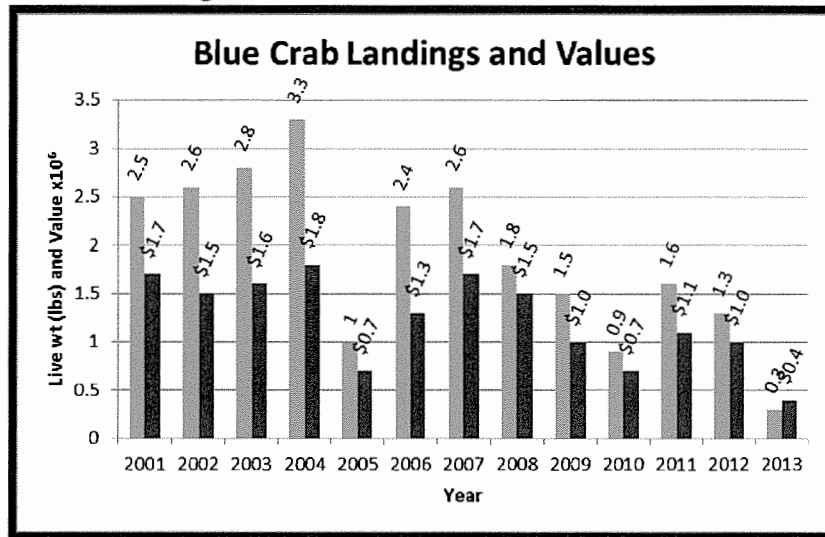


Figure 1. Alabama Commercial Blue Crab Landings from 2001-2013 for all Gear Types Reported via the Alabama Trip Ticket Program *2012 and 2013 Data is Preliminary & Subject to Change.*

Table 2. Number of Commercial Crabbing Trips made 2001 – 2013 Reported via the Alabama Trip Ticket Program *2012 and 2013 Data is Preliminary & Subject to Change.*

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of Trips	764	695	672	574	290	304	645	603	441	226	378	303	135

Mississippi

Licenses

Total resident commercial license sales are down from 175 in 12-13 season to 143 so far for 13-14* season (* = preliminary data through September). All other crab licenses were down as well.

Trip tickets

MDMR is in the second season with a trip ticket program. In 2012 there was a monthly average of 32 fishermen reporting using an average of 218 traps and a total of 2,868 trips reported. In 2013 there was a monthly average of 23 fishermen reporting using an average of 181 traps and a total of 1102 trips reported.

Landings

Landings for 2013 through August are 179,725 lbs with a value of \$203,096. While this is substantially down from the same 2012 period (435,642 lbs and \$423,592) the price of crabs is up. The 10 year average for January to August is 449,146 lbs.

Derelict Crab Traps

No new work has been necessary since the February 2013 cleanup, however the MDMR is planning to address submerged deep-water derelict trap situation with the use of side-scan sonar in the near future. Over 18,000 traps have been recovered and recycled since 1999.

Louisiana

Derelict Crab Trap Removal Program

In February, 2014, LDWF with assistance from LA SeaGrant (LSG) is planning to conduct a derelict crab trap cleanup in a portion of western Terrebonne Parish. The targeted area will be temporarily closed to the use of crab traps over a 10-day period beginning at 6 a.m., February 15 through 6 a.m. and ending February 24, 2014. LDWF and LSG will host volunteer clean-up days on Saturday, February 15 and Saturday February 22. Both volunteer days will operate out of LDWF owned waterfront property located at the end of LA Hwy 315 in Dularge, LA.

The 2014 trap closure and cleanup area is described as follows:

From a point originating at the intersection of the eastern shoreline of Bayou Dularge and the southern shoreline of Falgout Canal; thence westward along the southern shoreline of Falgout Canal to Lake Decade; thence westward and then southward along the southern and western shoreline of Lake Decade to the mouth of Bayou Decade; thence southwesterly along the southern shoreline of Bayou Decade to Lost Lake; thence westward and then southward along the northern shoreline of Lost Lake to the mouth of Rice Bayou; thence southward along the western shoreline of Rice Bayou to Blue Hammock Bayou; thence westward along the northern shore of Blue Hammock Bayou to Four League Bay; thence southward along the eastern shoreline of Four League Bay to the mouth of Oyster Bayou; thence southward along the eastern shoreline of Oyster Bayou to a point along the inside-outside shrimp line as defined in R.S. 56:495(A); thence eastward along the inside-outside shrimp line to the eastern shoreline of Bayou Grand Caillou; thence northward along the eastern shoreline of Bayou Grand Caillou to 29 degrees 15 minutes 00 seconds north latitude; thence westward across Bayou Grand Caillou to the northern shoreline of the Tennessee Gas Pipeline canal; thence westward along the northern shoreline of the Tennessee Gas Pipeline canal to the eastern shore of Bayou Dularge; thence northward along the eastern shoreline of Bayou Dularge and terminating at the intersection of the eastern shoreline of Bayou Dularge and the southern shoreline of Falgout Canal.

All crab traps remaining in the closed area during the specified period will be considered abandoned and may be removed by anyone. Crab traps may be removed only between one-half hour before sunrise to one-half hour after sunset. Anyone may remove these abandoned crab traps from within the closed area. Abandoned traps must be brought to LDWF designated disposal sites and may not be taken from the closed area. In the weeks leading up to the closure, LDWF will mail notices to all licensed recreational and commercial crab trap license holders and crab buyers within Terrebonne and adjacent parishes. LDWF and LSG will also develop news releases and public service announcements advertising the temporary crab trap closure and cleanup and the need for volunteers.

Results from the 2013 derelict crab trap removal program were largely impacted by extreme weather conditions experienced on February 16 and 23 which limited boating operations as well as volunteer participation. Table 1 below, lists 2013 dates, locations, boats, and volunteer and trap totals. Last year, LDWF and Louisiana Sea Grant staff, volunteer organizations and individual volunteers including members of the Coastal Conservation Association and Louisiana Crab Task Force as well as volunteer students and faculty from LSU and Purdue University, NOAA Fisheries Service, and commercial crab and shrimp fishermen contributed to the removal of nearly 1,000 crab traps from coastal waters.



Figure 1. Map of 2014 Derelict Crab Trap Closure/Cleanup Area.

Table 1. 2013 Derelict Crab Trap Cleanup Results

2013 Derelict Crab Trap Cleanups					
Date	Event	Closure	Boats	Volunteers	Traps
2/16/2013	Rodeo	Pt. a La Hache	6 (5 LDWF)	50	243
2/17-22/2013	Week	Pt. a La Hache	4 (4 LDWF)	12	102
2/23/2013	Rodeo	Pt. a La Hache	5 (5 LDWF)	37	147
3/09/2013	Rodeo	Hopedale	15 (6 LDWF)	89	411
			30*	188*	903

Table 2. Annual derelict crab trap closure areas, dates, and trap totals.

YEAR	AREA	DATES	TRAPS
2004	Upper Terrebonne Bay Estuary	2/28-3/14	6,676
	W. Vermilion Bay	5/14-5/22	218
	2004 TOTAL		6,894
2005	Sabine Lake	2/18-2/27	4
	Breton Sound Estuary	2/26-3/13	1,941
	Middle Terrebonne Bay Estuary	3/5-3/20	2,437
	E. Vermilion Bay / West Cote Blanche Bay	5/16-5/22	241
	2005 TOTAL		4,623
2006	SW Terrebonne Bay Estuary	3/4-3/13	2,935
2007	E. Lake Pontchartrain	2/24-3/5	774
	Upper Barataria Bay Estuary	3/3-3/12	724
	2007 TOTAL		1,498
2008	Upper Terrebonne Bay Estuary	2/23-3/2	1,234
2009	Terrebonne Bay Estuary	N/A	788
2010	Upper Barataria Bay Estuary	2/27-3/7	477
2011	Western Plaquemines Parish	2/26-3/5	1,100
2012	St. Bernard/Plaquemines Parish	2/25-3/5	1,961
	Terrebonne Parish	3/17-3/26	747
	2012 Total		2,708
2013	Plaquemines Parish	2/16-2/25	492
	St. Bernard Parish	3/9-3/18	411
	2013 Total		903
2004-2013	OVERALL		23,160



Figure 2. Map of Crab Trap Cleanup Areas (2004-2013)

Louisiana Crab Task Force

The Louisiana Crab Task Force (LCTF) met on May 7 (no quorum present), July 11 and August 29, 2012. Discussions continued on potential changes to the serviceable crab trap law promoted by members of the Louisiana Shrimp Task Force (LSTF). Shrimpers complain that it is too difficult to comply with existing regulations that require serviceable crab traps without a float and caught incidentally during shrimping operations to be immediately returned to the water with a common float. Shrimpers contend that immediate return of traps back in to the water often results in repeated trap captures, net fouling and lost time and catch... The LSTF management subcommittee has endorsed changes to existing legislation that would allow shrimp fishermen to retain up to 5 serviceable crab traps onboard their vessels with the ability to return these traps to the water following the end of shrimping operations. LCTF members contend that such changes would result in little opportunity to recover their traps as they would be displaced great distances from their trap lines/strings. CTF members agree that present regulations have gone a long way in deterring trap theft and are strongly opposed to any proposed changes to current provisions in the serviceable crab trap law. As of June, 2013, the remaining balance in the Crab Promotion and Marketing Fund overseen by the LCTF totaled \$104,304.

The LCTF has endorsed a pilot program for both crabbers and shrimpers for the proper disposal of traps that are no longer deemed serviceable by crabbers and those caught incidentally by shrimpers. A Dulac-based crab buyer has volunteered use of a portion of their waterfront property where traps can be collected for later transport to an approved landfill. The LCTF has also raised concern over low crab catches, particularly in Lake Pontchartrain and the Pontchartrain basin, and discussed how closure of the Mississippi River Gulf Outlet (MRGO) may have influenced crab production. Upon their request, members were provided with tabulated monthly landings data by basin for hard crabs, peeler and soft crabs from 2010-May, 2013. Following discussions concerning the harvest and shipment of immature female blue crabs, members endorsed future legislation that would prohibit the harvest of immature female blue crabs, regardless of size, except for shedding purposes.

Legislation

Legislation enacted during the 2013 Regular Session of the Louisiana State Legislature affecting the blue crab fishery and industry consisted of changes to crab trap mesh size regulations and membership and administration of the Louisiana Seafood Promotion and Marketing Board (LSPMB).

Act 16 exempts escape ring requirements for traps constricted of 2 5/16" inch square mesh or greater.

Act 228 transfers the LSPMB from the Department of Wildlife and Fisheries to the Department of Culture, Recreation and Tourism and allows the LCTF to solely administer the allocation and expenditure of monies in the Crab Promotion and Marketing Fund

Marine Stewardship Certification (MSC)

The LDWF is currently developing a Louisiana Blue Crab Fisheries Management Plan, and preparing for the second MSC surveillance audit scheduled for March, 2014.

Research

LSG has developed an application and is seeking funding of a study to look at prevalence and cause of disease in wild populations of blue crabs and in shedding systems. There is an emphasis on looking at disease transmission between the shedders and wild crabs, as well as trying to find a common cause of death in shedding systems due to disease.

LDWF Crab Trap Bycatch Survey

In December, 2012, LDWF initiated a coastwide crab trap bycatch survey to collect and analyze data on incidental bycatch in the Louisiana crab trap fishery with special emphasis on diamondback terrapins; and, to collect and analyze blue crab sex, stage and size frequency distribution. This work is continuing.

Texas

Landings

Commercial landings 2012 Blue crab landings for 2012 totaled 2,849,735 pounds, virtually unchanged (down 1%) from the previous year.

License Sales

Commercial fishermen license buybacks continued with 8 licenses being bought back during 2012. This leaves 178 active licenses up for renewal going into the 2013/2014 registration year.

Derelict Traps

Derelict Trap pickups will proceed next year (2014) during the last 10 days of February

Artificial Reef

James Ballard stated that the subcommittee is continuing to work on the development of a standardized monitoring protocol for artificial reef habitats across the Gulf of Mexico. At their

meeting in March they discussed which gear types to incorporate into the standardized protocol. They ultimately decided to incorporate vertical longline, side-scan/multibeam sonar, Chevron traps with GoPro cameras, camera array, and bottom longline (where permissible). James pointed out that he has acquired examples of sampling protocols utilizing the different gear types listed above that are currently being used in the Gulf, and will use these examples to draft the standardized sampling protocol. Once it is drafted, it will be provided to the Subcommittee for their review.

The Artificial Reef Subcommittees of the ASMFC and GSMFC drafted a letter to the U.S. Maritime Administration (MARAD) to address the arbitrary restriction of reefing ships that were constructed prior to 1985 in their "MARAD Artificial Reefing Program, Frequently Asked Questions, June 2012" document that was published in February of this 2013. Once the final draft of the letter was completed, it was given to both the Commissions for their review, and after some minor editing, both Commissions sent copies of the letter to MARAD. At the time of this report, no response has been received.

At the joint ASMFC and GSMFC artificial reef meeting in March, the Subcommittees decided that it is time to revise the "Guidelines for Marine Artificial Reef Materials" document that was last updated in 2004. Members of both Subcommittees are working on revising the different sections of the document, and hope to have a new edition completed sometime next year.

James pointed out that he is working with the Gulf of Mexico Alliance to set up a meeting between the five Gulf states, Industry, and pertinent federal agencies to share information about the Rigs-to-Reefs program and ways to make it run more efficiently. This meeting is tentatively scheduled for January 2014 in New Orleans.

Jerry Mambretti made a motion to accept the Subcommittee reports as presented, and it passed unanimously

State/Federal Reports


Written reports were provided to the TCC members the week prior to the meeting. During the meeting, **Dale Diaz** made a motion to dispense with the reports in the interest of time, which passed without opposition. To see the full reports that were provided to the TCC, please see the minutes from the Commission Business meeting held on Wednesday, October 16, 2013.

Election of Officers

Dan Ellinor nominated Chris Denson for Chairman, and with no other nominations, Chris was elected. Dan Ellinor was nominated for Vice Chairman by **Harry Blanchet** and was elected unanimously

With no further business to discuss, Dale Diaz adjourned the meeting at 5:00 p.m.

**OIL DISASTER RECOVERY PROGRAM (ODRP)
MINUTES
Tuesday, October 15, 2013
South Padre Island, Texas**

APPROVED BY:

COMMITTEE CHAIRMAN

A meeting of the Ad Hoc Committee for the Oil Disaster Recovery Program was convened on October 15, 2013 in South Padre Island, Texas for the purpose of receiving reports from contractors and GSMFC staff regarding progress being made towards fishery disaster recovery from the impacts of BP Oil disaster of 2010. Ralph Hode, Fisheries Disaster Program Coordinator for the GSMFC, facilitated the meeting.

The following state, staff and other attendees were present:

States

Dale Diaz, *GSMFC Commissioner*, MDMR, Biloxi, MS
Chris Blankenship, *GSMFC Commissioner*, ADCNR Director, Gulf Shores, AL
Mark Schexnayder, *LDWF* Baton Rouge, LA
Dan Ellinor, *FWC*, Tallahassee, FL
Lance Robinson, *TPWD*, Dickinson, TX

Others

Joanne McNeely, *GSAFF, Inc.*, Tampa, FL
Thor Lassen, *Ocean Trust Texas*, Brownsville, TX
Rene LeBreton, *LDWF*, Baton Rouge, LA
Chuck Adams, *University of Florida*, Gainesville, FL
Kelly Lucas, *MDMR*, Biloxi, MS
Dave Burrage, *MS State Extension Service*, Biloxi, MS
Julianna Mullen, *Audubon Nature Institute*, New Orleans, LA
John Hewitt, *Audubon Nature Institute*, New Orleans, LA
John Fallon, *Audubon Nature Institute*, New Orleans, LA
John P. O'Connell, *Texas Sea Grant*, Angleton, TX
Steve Brown, *FWC/FWCRI*, St Petersburg, FL
Richard Cody, *FWC/FWCRI*, St Petersburg, FL
Jason Recher, *Audubon Nature Institute*, New Orleans, LA
Robert Champion, Jr., *Texas Department of Agriculture*, Austin, TX
Judy Jamison, *GSAFF*, Tampa, FL
Bryan Fluech, *Florida Sea Grant*, Naples FL
Dave Gerforth, *Global Trust*, Dundalk, Ireland
Andrea Hance, *Texas Shrimp Assoc.*, Brownsville, TX

Staff

Angela Rabideau, *GSMFC Financial Officer*, Ocean Springs, MS
Ralph Hode, *GSMFC EDRP Coordinator*, Ocean Springs, MS

Alex Miller, GSMFC Economist, Ocean Springs
Greg Bray, GSMFC RecFIN Programmer/Analyst, Ocean Springs, MS
James Ballard, GSMFC, Ocean Springs, MS
Dave Donaldson, Acting Director GSMFC, Ocean Springs, MS
Joe Ferrier, GSMFC, Ocean Springs, MS

Agenda

R. Hode called for approval and/or amendments to the agenda. There being none the agenda was approved as presented.

Approval of the Minutes

EDRP Workshop of March 20, 2013 –minutes were included for the record;

Minutes of ODRP Ad Hoc Committee conference calls of March, 28, 2013 and June 11, 2013 - were referenced for the record.

March 20, 2013 minutes of the ODRP Ad Hoc Committee meeting – On a motion for approval by Lance Robinson, and a second by Dale Diaz., the minutes of the March 20, 2013 meeting of the ODRP Ad Hoc Committee were approved as submitted.

Overview of Projects

R. Hode provided a financial overview of the overall ODRP recovery initiative noting that through the program a total of 21 contracts were currently in place in multiple areas including marketing, seafood trace and sustainability, and seafood testing; that the total value of these contracts amounted to \$12.8 M; and, that reimbursements to date amounted to \$7.3 M or about 57% of budgeted expenditures. Hode reported that all contracts appeared to be on schedule and within budget.

Gulf of Mexico Seafood Marketing Coalition

Joanne McNeely from the Gulf and South Atlantic Fisheries Foundation provided an update and PowerPoint presentation on the Gulf Seafood Marketing Coalition activities over the past six months. The report addressed internet activities, Crisis Management/Brand Recovery, development of marketing materials, participation in national seafood shows (the most recent being the Boston Seafood Show in early March 2013), media relations, partnerships with retail sectors and partnerships with the food service sectors. **McNeely** also briefed the workgroup on recent activities involving retail partnerships with the HEB, Rouses and Belles. Note was made that the partnerships invariably included a collaborated effort with the Gulf Trace program in that products featured in the promotional events were required to be source verified through the trace element.

The Coalition continues to look at other retail groups for similar partnerships that promote wild caught Gulf products. .

McNeely also briefed the Ad Hoc Committee and workgroup participants on a media familiarization (FAM) tour held in Louisiana during May . She also noted that because of budget limitations plans to conduct additional FAM tours were being re-evaluated for year three initiatives.

Emphasis was placed on activities which involved a re-design and update of the Coalition web page, www.eatgulfseafood.com, including the incorporation of six video vignettes featuring short comments from recognized Gulf proponents who provide their own unique stories about the Gulf and its seafood culture.

Market Maker Program

Hode provided a brief on reports recently released by Dr. Ben Posadas, Mississippi State University Extension Service, regarding slow but continual increases in the number of participants in the market maker element and the increase in the number of seafood related participants. Plans are to have a formal report from Posadas at the March 2014 meeting and to have principals provide an overview of activities taking place within the Market Maker element at a number of the individual states.

Kemp's Ridley Stock Assessment

Hode provide a brief update on the Kemp's Ridley assessment. It was noted that the initial study was completed in March, 2013 and is available on line at [Kemps Ridley Assessment](#) with population estimates through 2011. Hode reported on recent AD HOC actions which approved an expanded contract with LGL for re-running the estimate models to include 2012 shrimp landings data which were not available at time of the initial model. The Ad HOC also approved funding for a spring 2014 tagging and ageing project to be conducted by the Gladys Porter Zoo. The combined projects are expected to enhance the current estimate, characterize age distributions and provide a better insight into shrimping interaction and increased mortalities.

GAP Analysis

Thor Lassen, Ocean Trust, Inc. provided a report on the ongoing activities regarding the Comparative Framework study (GAP Analysis) as a mechanism for addressing sustainability certifications in the Gulf. He noted that acquisition of management data for all five states has now been completed and that he is in the process of evaluating the data against FAO criteria for responsible fisheries management. Following State review of his findings, Lassen expects to complete the GAP portion of this contract by the end of this year in time to support activities currently under way by the Audubon Institute.

It was pointed out by **Lassen** that there appears to be a growing interest in re-evaluating the criteria by which sustainability can be evaluated in the Gulf – including interest on behalf of the Marine Stewardship Council (MSC) to address the uniqueness of coastal fisheries.

An inquiry was made as to "...how short is the Gulf in meeting FAO guidelines and who will play the role of certifying Gulf stocks?" In response **Lassen** indicated that many of the FAO criteria do not apply to coastal areas on a species basis because many of the species coming from coastal waters are environmentally driven and appear annually as crops rather than stocks. It was indicated that management activities are such that, for most species, it could be concluded that they are generally in compliance with applicable FAO guidelines; however, the documentation of actions and programs that lead to compliance is not well established.

With reference to provision of "Stamps of Certification" **Lassen** indicated that the likely guide should be FAO; but actual stamps of approval would be driven by users (distributors, retail chains, restaurants chains, etc.) of specific products and that individual requirements for certification stamps may range from MSC to FDA or others as determined appropriate.

Hode commented that part of the most recent initiative with the Audubon Institute is geared to addressing that need.

Finally, questions were raised regarding the role of inshore fishery compliance with the Magnuson Act and whether that compliance would be acceptable for sustainability certification needs. **Lassen** reported that NOAA is currently conducting a parallel study (gap type analysis) for compliance with MS requirements; and that even though NOAA has not yet gone on record with an MS compliance position, or a formal 'stamps of approval', it is generally concluded that if a fishery is compliant with MS it is considered sustainable.

Seafood Certification Initiative – Request for Proposals (RFP)

Julianna Mullen, Sustainability Program Coordinator for the Audubon G.U.L.F. initiative, provided a brief power point presentation of the Audubon action plan to address issues relative to the sustainability of Gulf seafood. It was pointed out that the goal of this initiatives was to position Gulf marine fishers and related industries to better compete in the marketplace – and to do so using sustainably and responsibly managed processes that are recognized and acceptable at regional, national and even global levels. **Mullen** pointed out that one of the objectives of this initiative is to achieve both fisher and user buy-in to processes that define sustainability and those processes that will improve sustainability measures in the Gulf going forward.

Another objective is the development of Fishery Advance Plans (FAPs) that readily define the status of select Gulf stocks, the shortfalls within the industry that would impede recognition and/or acceptance of those fisheries in the marketplace; and promulgation of activities that over time that would position the fishery for full third party responsibly managed fishery certifications. **Mullen** pointed out that through the ODRP support would focus primarily on positioning of the fishery for full certification through the development of up to ten FAPs. Certification needs beyond those programmed for FAP development and related outreach would be the responsibility of those individual fisheries where higher levels of certification were desirable.

It was reported that in order to instill a sense of ownership and involvement in the planning process, FAP proposals would be submitted to the AD HOC for concurrence prior to start up.

Sustainability and Traceability - Alex Miller provided a status report regarding the ongoing Traceability Program and related Trace outreach activities through GCR. Miller noted that a total of 64 Gulf industries and/or businesses are currently participating in the trace program. He indicated that through February, approximately 26 million pounds of seafood has now passed through the trace system; with at least one processor having indicated increased sales amounting to approximately 18 percent since beginning with the trace component. Miller reported also on how trace is being enhanced to improve the interface with other individual processor inventory software - resulting in elimination of the need for processors who have independent landings records software to enter their respective landings data multiple times.

Miller reported on a Mississippi Hospitality and Restaurant Association initiative, funded through BP, which draws on the Gulf Seafood Traceability program as a means of bringing attention to Mississippi restaurants through a two month campaign focusing on Gulf shrimp. Approximately 60 MS restaurants participated in the campaign from September through November. Miller also reported on three retail chains in which collaboration between the Gulf Seafood Marketing Coalition and Trace program is ongoing.

Questions were raised regarding the number of processors currently participating in the Trace program and the possibility of reprogramming funds that are not producing as well as expected or will not be used. Specifically addressed were tentative plans to re-allocate trace participant marketing module funds amounting to approximately \$200 K that Trace Register indicated were not going to be utilized. Staff proposed to use part of the unused funds (approximately \$100 K) to focus on more comprehensive reporting from existing participants; and, to utilize the balance (approximately 112 K) for the installation of improved technology at the processor level that would enable receivers and processors to more readily identify packaged product sources utilizing QR reader capability on I phones.

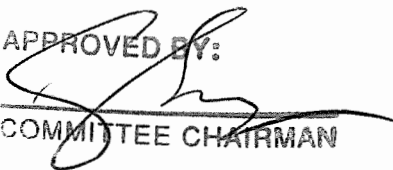
The general consensus of the Committee was that they preferred to have a voice in decisions regarding re-alignment of potentially unused funds of that nature and suggested a meeting to review existing funding on all programs/contracts and to discuss the re-alignment of the funds in question. .

It was agreed that the budget statement would be forward to the Committee and that a poll would be taken as to when a conference call could be scheduled.

Gulf Fish Watch

Miller also provided a report on the Gulf Finfo (formally called Gulf Fish Watch) - a web based information portal pertaining to Gulf Seafood that mirrors the NOAA Fish Watch web site. It was noted that web site platform has been completed and the consultant, GCR Inc., was now in the process of receiving individual State fisheries profiles and related information. A power point presentation of the web site home page was presented along with an explanation of the various search options that would be made available once the state data and related information had been incorporated. The Web site is scheduled for roll out at the Boston Seafood Show in March 2014.

There being no further business the meeting was adjourned.

APPROVED BY:

COMMITTEE CHAIRMAN

LEC/LEAP Joint Meeting Summary
Tuesday, October 15, 2013
South Padre Island, Texas

The Gulf Council Law Enforcement Advisory Panel (LEAP) Chairman, Brandi Reeder, called the joint meeting to order at 8:30 a.m. The following members and others were in attendance:

LEAP Members:

Brandi Reeder, TPWD, Chair
Cliff Comeaux, LDWF (for Jeff Mayne)
Scott Bannon, ADMR
Rusty Pittman, MDMR
Antonio Kilpatrick, FWC (for Rama Shuster)

LEC Members:

Scott Bannon, ADMR, Chair
Rusty Pittman, MDMR, Vice-chair
Cliff Comeaux, LDWF (for Jeff Mayne)
Brandi Reeder, TPWD
Antonio Kilpatrick, FWC (for Rama Shuster)

Others:

Doug Boyd, GMFMC Chair
Donald Armes, MDMR
Leslie Casterline, TPWD
Emily Posner, Recirculating Farms Coalition
Troy Williamson, GSMFC Commissioner, Texas

Staff:

Steven Atran, GMFMC
Emily Muehlstein, GMFMC
Steve VanderKooy, GSMFC
Debbie McIntyre, GSMFC

Due to the federal government shutdown, no members from federal agencies were in attendance. Consequently, the LEAP had a quorum (5 of 8 members present), but the LEC did not (5 of 11 members present)

Adoption of Agenda

The agenda was adopted unanimously. An item was later added under other business to discuss IFQ/VMS.

Approval of Minutes

The minutes of the October 17, 2012 LEC/LEAP meeting was approved as written.

GMFMC LAW ENFORCEMENT AP SESSION

Review of the Council's Action Schedule

Mr. Atran reviewed the action schedule for the Council for 2013 and 2014. He noted the upcoming actions were at various stages of development, and many of them would still be in

progress next March. He asked the members to note any of the actions that they felt would have would have enforcement issues that should be brought up at the next LEAP/LEC meeting. Five of the actions were well into development and were to be reviewed at today's meeting.

Generic Abbreviated Framework Action to Define For-Hire Fishing in the Gulf of Mexico Exclusive Economic Zone

Mr. Atran stated that he was not asking the committee to recommend specific alternatives, but rather to comment on any enforcement implications of the alternatives in the documents. He noted that the Framework Action to Define Charter Fishing was being prepared as an abbreviated framework action. This was a new method to more quickly implement regulatory actions. There is currently a definition of charter fishing, but it applies only to vessels that are dual-permitted with both a commercial and charter/headboat permit, and is intended to differentiate between when a vessel is commercially fishing or fishing as a charter/headboat. There is no definition to identify when a vessel without a permit is effectively functioning as a charter/headboat. Mr. Atran read the proposed new definition of what constitutes charter fishing, and asked for comments regarding its enforceability. He stated that one known situation where an individual took paying clients out on consulting trips that also fished. Major Bannon noted that there was a commercial operator in Alabama who also took clients out to act as deckhands, so he felt that the issue was more widespread. Committee members felt that the statement in the definition allowing voluntary sharing of expenses created exceptions that would make the definition difficult to enforce. In addition, proving that there was an exchange of money or goods would require either an undercover operation or communication with a fisherman who had observed the infraction. Another suggestion was to require fishermen to sign paperwork stating that this was not a commercial operation, but such as requirement would be difficult to implement.

Draft Coastal Migratory Pelagics Amendment 20A – Coastal Migratory Pelagics Sale and Permit Provisions

This amendment contains actions relating to the sale of recreationally caught king and Spanish mackerel, inactive permits, and permit income requirements.

Action 1 – Sale of King and Spanish Mackerel

The committee had no enforcement concerns with the alternatives in this action. It was noted that Florida is working on language to define a charity and to develop a state permit. Only a few tournaments in Florida would qualify under this provision.

Action 2 – Elimination of Inactive Commercial King Mackerel Permits

The committee had no enforcement concerns with the alternatives in this action. The only enforceability issue is whether a vessel has a permit, not whether that permit is transferable. However, committee members asked, under Alternatives 2 and 3, how landings would be validated in states that have only recently established trip tickets. (The amendment discussion suggests that SEFSC logbooks would be used.) Committee members also asked if the active/inactive status would need to be re-established in subsequent years or if this was a one-

time action. Since the amendment refers to a fixed time period in which to qualify, it appears that it is a one-time action. A question was asked if, under Alternative 3, a permit owned by a corporation could be transferred. The wording did not appear to allow transfer by a corporation, but ownership of the corporation could be transferred. If the corporation was owned by a single person, this might allow transfer. Since NOAA General Counsel was not present, this question could not be answered.

Action 3 – Modify or Eliminate Income Requirements for Gulf and South Atlantic Commercial Coastal Migratory Pelagic Permits

This action was considered to be administrative.

Draft Coastal Migratory Pelagics Amendment 20B – Modifications to the Coastal Migratory Pelagics Zone Management

Action 1 – Modify the Commercial Hook-and-Line Trip Limits for Gulf Group King Mackerel

The committee had no enforcement concerns with the alternatives in this action. Trip limits already exist and need to be enforced. The alternatives in this action only change the amounts.

Action 2 - Change the Fishing Year for Gulf Migratory Group King Mackerel for the Eastern and Western Zone

It was noted that there are always enforcement difficulties near the boundaries of adjacent zones that have different regulations. A question came up whether the zones were fishing areas or landing areas. Mr. Atran responded that these were area restrictions. Whether they were also landing restrictions depended on the alternative adopted in the next section dealing with transit provisions.

Action 3 – Establish a Transit Provision for Travel through Areas that are Closed to King Mackerel Fishing

Several committee members stated that they don't like transit provisions, but could see why they are needed. It was felt that this is primarily a Florida issue, but the preferred alternative, which applied to all zones, would provide the greatest flexibility in the event that the fishing areas changed. Enforcement would be a matter of proper documentation.

Action 4.1 – Establish Regional Annual Catch Limits (ACLs) for Atlantic Migratory Group King Mackerel

Action 4.2 – Establish Regional Annual Catch Limits (ACLs) for Atlantic Migratory Group Spanish Mackerel

Actions 4.1 and 4.2 apply to Atlantic group king and Spanish mackerel and are not a Gulf issue.

Action 5 - Modify the Framework Procedure

Committee members suggested that when trip limits are a low number of pounds, that trip limit changes be expressed as a number of fish (count) rather than pounds. With small amounts, numbers of fish are easier to enforce, particularly at sea when the fish cannot be weighted. The committee had no further enforcement concerns with the alternatives in this action. This action was considered to be administrative.

Action 6. Modify the Gulf and Atlantic Migratory Group Cobia Annual Catch Limits (ACLs) and Annual Catch Targets (ACTs)

This action was considered to be administrative.

Draft Reef Fish Amendment 39 – Regional Management of Recreational Red Snapper

Action 1 –Regional Management

This action was considered to be administrative. However, enforceability issues could arise depending on how the regions are set up.

Action 2 – Establish Regions for Management

A question was asked whether fish harvested from one region had to be landed in that region. Nobody present at the meeting was able to answer that question. However, it was noted that differences in regulations such as bag limits could be difficult to enforce, particularly near boarder areas. (Note: Fish can be harvested by any recreational vessel anywhere in the EEZ. At-sea enforcement is expected to enforce the most liberal limits. State-specific limits will be enforced upon landing – personal communication Ava Lasseter.)

Action 3 – Apportioning the Recreational Red Snapper Quota among Regions

This action was considered to be administrative.

Action 4 – Regional Management Measures

Committee members reiterated that different regional regulations would create enforcement difficulties near the region boundaries. Under Preferred Alternative 6, it was noted that closed areas would not be enforceable unless they applied to all fishermen, not just those from the state establishing the closed area. Under Preferred Alternative 7, committee members questioned how sector allocations would be enforced, particularly if individual quota was allocated to a for-hire group as with the headboat pilot project. For the for-hire allocation, programs such as iSnapper or logbooks depend on self-reporting, which is not considered reliable. Ms. Muehlstein noted that the headboat pilot project would include a hail-in/hail-out system, but only one hour advance notice would be needed to hail in. Mr. Atran suggested that sector allocation without individual

quotas would be implemented by NMFS through different seasons for each sector. On the water enforcement would be based on whether the sector's season was open.

Action 5 – For-Hire Vessels Federal Permit Restrictions

Committee members felt that repeal of the Amendment 30B permit conditions for only one species, red snapper, would complicate enforcement. Mr. Atran noted that the Council was working on a separate framework action that would contain an alternative to repeal the permit conditions for all reef fish species. Under regional management, committee members felt that this would be moot since there would be no federal management, only state management for the items in Action 4.

Action 6 – Post-Season Accountability Measures (AMs) Adjusting for Regional Overages

This action was considered to be administrative.

Action 7 – Establishing Default Regulations

From an enforcement perspective, this would still be a regional implementation of regulations. Comments would be the same as for Action 2.

Draft Framework Action – Modifications to the Annual Catch Limits using the Marine Recreational Information Program

This action was considered to be administrative.

Other Business

Scott Bannon noted that, at a LEC/LEAP workshop held in Grand Isle in July 2012, the Committee had discussed changes that it would like to see in the VMS/IFQ system. He asked for an update on what happened with those recommendations. Mr. VanderKooy responded that Council staff Carrie Simmons was present at that meeting, but the Committee's concerns were presented as comments rather than as motions. A detailed report was prepared and sent to Rick Leard, but nobody at this meeting was aware of what happened to those comments in the Council process. It was suggested that the report be included in the upcoming Ad Hoc Red Snapper IFQ Advisory Panel meeting scheduled by the Council in a few weeks.

Doug Boyd added that some Council members would like to see a provision that would allow permits to be revoked for flagrant violations of the law.

Some Committee members reported that, under the IFQ hail-in requirements, they had reports that fishermen were under-reporting their catches. The reason was because it was easier for the dealer to correct an underestimate than to go through the paperwork needed to correct an overestimate. When officers were present to observe the vessel being offloaded, any corrections needed were made, but there was some question whether those corrections to the under-reporting were being made when officers were not present. It was suggested that NMFS have an auditor investigate this.

GSMFC LAW ENFORCEMENT COMMITTEE SESSION

Joint Fisheries Program Activity

Mr. VanderKooy gave a review of the Interjurisdictional Fisheries Program (IJF) activities which included the three FMPs currently under revision. The LEC provides representation on the Technical Task Forces which develop or revise the plans.

Blue Crab

Rob Beaton (FL) and Mr. VanderKooy serve on the blue crab and flounder TTFs respectively. Mr. Beaton is no longer on the LEC, but he wanted to see the blue crab FMP through to completion. Some portions of the FMP may come back to the LEC members for review, in which case comments will need to be provided to Mr. Beaton in a timely manner. The blue crab FMP is nearing completion and is expected to go into the review process by the end of the year.

Gulf Menhaden

For the Gulf menhaden FMP, a stock assessment has been completed. Recommendations from the assessment and from the economists will be incorporated into the FMP. Mr. VanderKooy is doing most of the revisions along with Joe Smith from the NMFS Beaufort laboratory. The recommendations are not expected to be problematic from an enforcement perspective. A draft will be sent to the LEC members within the next month or two before the draft FMP is distributed to the Menhaden Advisory Committee.

Gulf and Southern Flounder

Scott Bannon is the LEC representative on the Gulf and Southern Flounder TTF. Major Bannon reported that he has received comments from most of the LEC members and that the Gulf and Southern Flounder FMP expected to be completed by the spring. Mr. VanderKooy added that originally, in the 1990s, the Commission had planned to do a separate southern flounder FMP, but the data collection was so poor that the two species could not be separated. Most of the recommendations in this revision of the FMP will be oriented toward research or better data collection.

All three of these FMPs will be in review next year. At that stage, they will not come back to the task force unless the Commission sends them back for modifications.

GSMFC Enforcement Publications

Mr. VanderKooy noted that the Commission used to produce an annual law summary called the red book to let officers know what the regulations were in each area. Over time, it expanded into a 430 page collection of the fishing magazines printed by each state, and it was not very useful other than as a historical archive. This publication is still available online, but the Commission has developed a new publication printed on waterproof paper, spiral-bound, and sized to fit in

officers' ticket books. Unfortunately, because of the sequester, these booklets were not printed this year, although it is available as a download. Without funding for the IJF program, they will also not be printed next year by the Commission. The cost to print them is about four dollars per copy, depending on the number printed. If the states want to print them out, the Commission can set up the files for the printer on a state-by-state basis.

Mr. VanderKooy also gave a brief review of the annual summary of licenses and fees. These pamphlets have been printed and are available, and are on the Commission's website as publication number 219.

JEA Slide Presentation Review

Mr. VanderKooy presented a short overview of the slide presentation on the Joint Enforcement Agreements or JEAs between the state agencies and our federal partners at NOAA OLE and the US Coast Guard. This presentation is given to the Commission and Council every couple of years to highlight the benefit of the JEA, and is updated nearly every year. It is scheduled to be presented to the Commission tomorrow by Major Bannon and to the Gulf Council in two weeks by Jeff Mayne or Cliff Comeaux. Mr. VanderKooy suggested that the LEC state members review the first few slides leading to the summary and provide comments to Major Bannon as to what each state has accomplished relative to the items discussed on each slide.

State Reports

The state representatives highlighted a number of enforcement related items in their state reports which were submitted electronically.

Florida

Antonio Kilpatrick reported that FWC had acquired an additional 12 meter vessel that was assigned to the Florida Keys.

Alabama

Scott Bannon reported that ADMR was able to hire three additional officers. Alabama has a coastal monitoring camera system which has been used by enforcement. In addition, a researcher from the Dauphin Sea Lab took one of the cameras to a public boat ramp and was able to use it to determine how many people went snapper fishing from that ramp. Changes were made to the state shark fishing regulations to match changes made at the federal level.

Mississippi

Rusty Pittman reported that MDMR has been teaching boating safety courses, but has not been getting any federal funding for the program. He was hopeful that eventually federal funding could be made available. Colonel "Tiny" Chataginer retired on May 31 after 25 years of service. The dive team has been increased back to nine certified divers. Two 18 foot tunnel-drive boats

are being obtained to use for search and rescue in coastal wetlands. One officer was lost this year; Master Sergeant John Grimsley died while working in his yard.

Louisiana

Cliff Comeaux reported that the LWDF Law Enforcement Division is building a new training academy that will utilize some of the existing facility, but will have larger classrooms. A shooting range for the academy has been constructed that complies with a Baton Rouge city ordinance that prohibits putting lead in the ground. Jeff Mayne has been promoted to a full colonel. He is taking over as chief of the Enforcement Division, replacing Colonel Winton Vidrine who has retired. Captain Rachel Zechenelly has replaced Colonel Mayne as the boating law administrator, and Cliff Comeaux will be replacing Colonel Mayne as the LEC/LEAP representative. The Law Enforcement Division is currently short 40 enforcement agents, but has just received permission to hire 30 new officers. They will be starting the hiring process on December 9. This is the first time in four years that they have been able to hire new officers. Finally, a new statue has been erected outside LDWF headquarters to honor those enforcement agents that have died in the line of duty.

Texas

Brandi Reeder reported that TPWD just graduated 28 cadets which brings enforcement up to full staff. The state legislature also approved a raise. TPWD Law Enforcement is completing its accreditation for its Boat Operations and Training Program with the National Association of State Boating Law Administrators (NASBLA). Special teams have been created for K-9, Search and Rescue, SMART team (state marine accident reconstruction team), and Scout team (tactical response team). Within the past year, TPWD has been able to enact a provision whereby, if a person ventures into federal waters, violates any federal law, and returns to state waters, it is now also a state violation. Another law passed by the state legislature authorizes the use of revenue generated by the sale of confiscated illegally taken fish and wildlife by TPWD Law Enforcement in the instance of a failure to appear. Previously, these funds had to be held in a suspense account for an indefinite period of time.

**Sea Grant Fisheries Extension Advisory Committee
Minutes
Tuesday, October 15, 2013
South Padre Island, TX**

APPROVED BY:

COMMITTEE CHAIRMAN

Members present: Bryan Fluech, Betty Staugler, Chuck Adams, Julie Anderson, Dave Burrage, Peter Nguyen,

Guests: Emily Muehlstein, Joanne McNeely, Alex Miller, Thor Lassen, John O'Connell.

Opening of Meeting

Julie Anderson called the meeting to order at 2:30 PM, and she welcomed the committee. The primary theme of the meeting was sustainability. Several persons on the agenda were not present so we modified the agenda to allow guest speakers to go first. This was unanimously approved and passed.

Approval of Minutes

David Burrage noted there was an error in the 2012 spring meeting minutes. On page three, it lists number of acres of oyster leases in Mississippi, but it should be Alabama. Dave Burgess motioned to accept the corrected minutes and Chuck Adams approved. The group approved them unanimously.

Welcome New Members

Betty Staugler with Florida Sea Grant was welcomed to the group. She is officially replacing Chuck Adams although he will remain on the committee ad hoc. Rhonda Cummins with TX Sea Grant and Bill Walton with Auburn, who are also new members were unable to make it.

Officer Rotation Discussion

There was discussion about when to rotate officers and how much longer Tony would remain as committee chair. The group thought Tony still had one more meeting in this role. Bryan Fluech is still the secretary. Since Tony was not there, the group decided to table this discussion until the spring meeting.

REPORTS

Joanne McNeely: Gulf Seafood Marketing Coalition

Joanne provided the group with an update on marketing efforts. It was an abridged version of the same presentation she gave earlier in the morning at the Disaster Response Meeting. Highlights of her talk: The Coalition is funded through 2015. They want to be the go to source for Gulf seafood. Over the past year, they have participated in a number of media events to promote Gulf seafood; they organized a media tour with journalists in Louisiana to see local waters and processing plants. Unfortunately, they don't have funding to do a similar tour next year. They also created mat releases which are meant for smaller media outlets. To date, 637 placements, 46 million impressions from these outlets. They have also created a series of "how to" videos cooking seafood with celebrity chefs. They continue to do media monitoring and crisis communication.

Recently there has been a lot of negative press on Vibrio. They are creating a fact sheet to provide media outlets reliable information on the subject. The Coalition now has a mobile app that works both for iPhone and Droid. It provides a variety of recipes, locations of retailers/restaurants who sell Gulf seafood, upcoming events etc. The coalition has also updated their website (www.eatgulfseafood.com). It has new videos, along with email blasts options (If you are interested in receiving these email blasts email Joanne). The Coalition is also using lots of social media to raise the profiles of Gulf seafood; they've even done seafood giveaways via Facebook too. They are also creating more partnerships with top bloggers to attract "foodies" to write about Gulf seafood. Ads are also being placed in Seafood Business magazine. Joanne has met with several large retailers at Boston Seafood Show to push doing in-store demos at stores. Depending on the region, they have seen increases in sales of Gulf seafood (Rouse stores who already sell a lot of Gulf seafood-didn't see much of a change). The Coalition is also working more with Gulf Seafood Trace Program more with their QR Codes to trace seafood back to source. In Mississippi, they partnered their restaurant association to do the "Every Shrimp has a Tale" program; (Gulfshrimptale.com). They also worked with Monterey Bay Aquarium to do cooking events, which involved a number of celebrity chefs. Finally, they participated in Niketown, which includes VIP restaurant programs to highlight Gulf seafood. Dave Burgess suggested creating more simple and easy to use recipes for working folks.

Emily Muehlstein: GOM Fishery Management Council Outreach Coordinator

Emily discussed with the group about communicating sustainability in the context of fisheries management and how it can be difficult to get buy-in because of the different definitions of "sustainability." There are many misperceptions about sustainability from fishers; sustainability can be a scary term for some. Emily suggested the group check out the UNEP's publication on communicating sustainability. <http://www.unep.fr/shared/publications/pdf/DTIx0679xPA-CommunicatingEN.pdf>. She found it to be very useful. The Council faces a number of challenges when communicating fisheries management issues; underutilized network with states, complexity of fisheries management, lack of trust, weak community presence, bureaucracy of resource management. The goal of the Gulf Council's communication program includes: increasing awareness of and improving attitudes towards the Gulf Council and improve participation in the decision-making process. Some key points Emily made included: knowledge doesn't equal attitude or behavior change. It is important to link subject content to natural motivations of your audience to help get buy-in. Some of the main reasons the Council has an outreach program include fisheries management is a complex topic. If they don't do outreach to stakeholders, then other groups will that might not have accurate/objective information. Also, the very nature of fisheries management is to encourage local level participation and representative democracy. It is estimated there are about 4.5 million stakeholders to reach out too, and who should know how the council works. The Council uses a lot of social media to announce meetings, scoping documents, current issues. Emily does a blog in addition to Facebook and Youtube. She also participates in a number of Fishing forums to get information out. She finds these outlets help with frequently asked questions. She also does a number of field visits, and will be a guest speaker at fishing clubs, trade shows and other meetings. They produce shorted amendment documents that are easier to follow as well videos describing the amendments. They also have a regulations App that can be used on iPhone and Droid. They recently completed a stakeholder survey to gather feedback about how they want the Council to reach out to them; and adjust their communications practices. Links to these resources can be found at the Gulf Council Website: www.gulfcouncil.org

They are expecting to have results from their survey this winter. Chuck suggested Emily come back at the spring GSFMC meeting in New Orleans to share the results of the survey.

Alex Miller: GSMFC

Alex provided an abridged version of the sustainability presentation he gave earlier in the day during the Disaster Recovery Meeting. The GSMFC is working on their new sustainability website: "FINFO" (Gulf of Mexico Fisheries Information) . It will be similar to NOAA's Fishwatch but will focus on state/regional fisheries in the Gulf. The plan is to launch the site at the Boston Seafood Show. The sites will include information fisheries profiles, fisheries management information, economic value of Gulf fisheries, recipes/cooking Gulf seafood. They hope to utilize Sea Grant to help advertise/distribute the site once it is out.

Thor Lassen-Ocean Trust

Thor provided a general overview of the Gulf-wide assessment of fisheries management his firm is doing based on the UN's FAO sustainability criteria. They are in the middle of the assessment; they have visited each state to meet with representative agencies, but they haven't visited the Council yet. There's a parallel study going on by NMFS, but it is being done on a national basis. They have created a matrix using the FAO criteria and matched it to different Gulf fisheries to see how they comply to these criteria. This has helped them identify gaps/shortfalls. Some fisheries in the Gulf managed differently from national and international fisheries and they are trying to apply these international standards to regional/local fisheries. It is hoped they will incorporate these findings into the GSMFC's plans to address sustainability as well as Audubon's new efforts to assess various Gulf fisheries for sustainability standards. Thor is meeting with each Gulf State to determine which fisheries should be addressed priorities will shift from state to state.

Break: The group took a break for ice cream. *(It was requested to note that unlike last meeting, this time participants were served real ice cream instead of an "ice cream-like product.")*

State Sea Grant Reports

Florida: Chuck Adams, Bryan Fluech & Betty Staugler.

Bryan handed out two new FSG seafood fact sheets on Gulf seafood safety and mercury done by Dr. Steve Otwell. They are applicable to the whole Gulf. If interested in receiving more, contact Dorothy Zimmerman, FSG Communications Director in Gainesville. He also gave an update on Florida's efforts to work with fishermen on barotrauma, fish descending gear and venting. Effective Sept 3rd, venting tools are no longer required in the Gulf, but Bryan pointed out that there is a real need to conduct outreach on options fishermen have when addressing barotrauma. Venting still has a role, but might not be the best option. Recently they did a webinar on the new rule changes and descending gear options. Close to 100 signed up, and most were from Florida. He noted that many of the participants, who identified themselves as anglers, incorrectly answered that it was the swim bladder that sticks out of the fish's mouth when brought up from depth instead of the stomach. Many participants were not aware of the venting rule change, and many indicated via a post-webinar survey they were unaware of descending gear. It was suggested that more effort be put into working with charter captains on the use of this gear. Florida Sea Grant is working on a survey that will be sent out to recreational anglers around the Gulf of the use of venting tools/fish descending gear and perceived barriers/attitudes about their use. Chuck has existing database of anglers that they will use to distribute the survey. Betty discussed FSG's interest in developing

workshops for charter captain/guides that would address topics such as business planning, legal issues, fisheries management, marketing etc. Several other Sea Grant programs in the U.S. offer similar workshops. Right now a needs assessment is being developed to gather feedback from captains on topics they would like to see addressed and their level of interest. It was discussed that Twyla Harrington with LA Sea Grant has been trying to organize similar workshops with charter captains and ecotour operators. Florida Sea Grant will be organizing the next Florida Artificial Reef Summit in either Oct/Nov of 2014 in the St. Pete area. Several of the states have participated in past Summits and it was asked that the other Sea Grant programs and the GSMFC help spread the word once more details are known. Chuck reported that as of Aug 31 the TAA program came to a halt and all reports were submitted. Market Maker is dragging along in the state. Another wave of announcements were recently sent out to seafood dealers. Chuck and Dr. Steve Otwell are organizing a meeting on Oct 29 with the Food Marketing Institute discuss sustainability concepts and 3rd part certification schemes.

Louisiana: Julie Anderson

Julie invited John Stevely with FSG to attend their quarterly Sea Grant meeting to discuss barotrauma and venting/descending gear. This issue was new to many of their agents and director. They are trying to get out on the boat to test the gear, but weather has been a factor. Julie said Twyla Herrington is looking for some help from someone with MS/AL Sea Grant to help do more work with the charter captains. She recognize they need to address more recreational needs in the state, which hasn't been done in many years. Most of their sustainability efforts include trying to keep their industry alive. She is working to get some gear tech/ product quality specialist to come in and assist in their state. Hopefully this will happen next spring. Julie and area agents are also trying to put together a crab workshop for anyone in the industry; at the moment, she is working on a needs assessment to gather feedback. They are thinking of doing the program as a multi-part workshop series that could address topics such as ecotourism, product marketing, biology, enforcement; diesel engine repair, fiber hull repair basics etc. It could also be an opportunity to work with some of the ethnic fishing groups where they are finding some of the newer fishermen don't necessary know some of the basic skills needed to fish (ie net repair; gear set up etc). Julie mentioned they are getting reports from offshore shrimpers that sharks are tearing up nets. They're working on a survey to get more feedback on the impacts from these incidents. They're trying to figure out how much money they are wasting in time, fuel to make repairs to nets. This too might be an opportunity to teach some new skills such as net tying to newer crew members when these nets get ripped so that repairs can be made in a quicker amount of time. Julie also mentioned blue crab trap thefts up in LA. Crabs are down across state. Enforcement is also down in the state, but they have found private money to do another law enforcement academy to get more officers. There also appears to be more controversy between shrimpers and crabbers over traps. There are reports of shrimpers holding on to traps when they encounter them and selling them. There are also reports of "rogue" crabbers doing their own thing without any regard to regulations and others property.

MS/AL: Dave Burrage

Dave mentioned MS has a new Director of Marine Resources (Jamie Miller) and that it was important for Sea Grant to Dave was asked to host a group from the American Society of Travel Writers out on the water so they could learn more about the local oyster industry. With Dave's input, they are trying to set up a more meaningful experience. Instead of trying to tong oysters, they will be going out on a dredge to make it more practical. Dave is working with the state to

make sure the event is done correctly. Offshore shrimpers had a good year in MS with record high prices. It's thought this is due to the shortage of farm raised shrimp globally. Inshore shrimpers haven't had much of a white shrimp season. Oysters are severely down too (thought to harvest only 60 thousand sacks, when normally they get around 300,000 sacks). Blue crabs are down 25%, and whether this is a result of the BP spill is still a prevalent question. Freshwater diversions also thought to be causing declines. MS/AL Sea Grant is still the lead for Market Maker: They are getting some buy in from charter vessels, but not so much for commercial seafood. Dave mentioned that Market Maker is being bought by a private research group.

Texas: John O'Connell (*John filled in for Tony Reisinger and Gary Graham*)

John mentioned Gary Graham got a small grant to purchase and hand out Seaqualizers to charter captains to address the barotrauma. They are trying to target charter captains and get feedback from them on use of gear. They are also trying to get some GoPros to shoot some underwater footage. They are still trying to identify captains who are willing to work with them. Emily mentioned she knew several guides who would be willing to help. Bryan also suggested they contact Greg Stuntz with Texas A&M's Harte Institute who has been doing research on barotrauma. Gary and Tony were not able to make the meeting because they were offshore working on BRDs trials. John mentioned that much of Texas was still in a severe drought and that lack of water in many areas was a major issue. Managers are cutting flow of the Colorado River for urban use. Education on water conservation is a big issue, and what impact the cutting water from the Colorado will have on estuary. Like in other parts of the Gulf, the blue crab fishery has been down in TX. There have also been reports of zebra mussels in the state (Brazos River Basin.) Texas Sea Grant has a new director and new extension program leader. They also have a new outreach specialist Brazos Valley on main campus. She put in a 600 gallon aquarium in student center to raise awareness about the marine world.

Other business

There was a brief discussion about invasive species such as lionfish and tiger shrimp in the region. There was also a brief discussion of whether it was thought these meetings are still useful to the group, especially in light of budget restrictions. The group did think they were important to address regional topics of interest, network and share what each state is doing.

Topic(s) for next meeting:

One topic of discussion for next meeting could possibly be economic activities being down by Sea Grant programs in the Gulf, but there wasn't much in-depth discussion on this. Other ideas might be addressing the changing capacity of Sea Grant across the region. It seems fewer programs are hiring traditional fisheries agents, and instead recruiting more generalized agents.

Dave Burgess motioned to adjourn the meeting, which was unanimously passed. The meeting ended at 5:05 PM CT.

Minutes prepared by Bryan Fluech, Florida Sea Grant.

**COMMISSION BUSINESS MEETING
MINUTES - 64th Annual Meeting
Wednesday, October 16, 2013
South Padre Island, Texas**

APPROVED BY:

COMMITTEE CHAIRMAN

Chairman J. Gill called the meeting to order at 8:31 a.m.

D. Donaldson stated this has not been a good year for fisheries due to the passing away of Larry Simpson, Mike Voisin, Rick Leard and Russ Nelson. He asked for a moment of silence.

The following Commissioners and/or Proxies were present.

Commissioners

Dan Ellinor, FWC, Tallahassee, FL (*Proxy for Nick Wiley*)
Chris Blankenship, ADCNR/MRD, Gulf Shores, AL
Bret Allain, Jeanerette, LA
Camp Matens, Baton Rouge, LA
Mark Schexnayder, LDWF, New Orleans, LA (*Proxy for Robert Barham*)
Joe Gill, Jr., Joe Gill Consulting, LLC, Ocean Springs, MS
Dale Diaz, MDMR, Biloxi, MS (*Proxy for Jamie Miller*)
Kelly Lucas, MDMR, Biloxi, MS (*Proxy for Jamie Miller*)
Troy Williamson, Corpus Christi, TX
Robin Riechers, TPWD, Austin, TX (*Proxy for Carter Smith*)

Staff

Dave Donaldson, Acting Executive Director, Ocean Springs, MS
Nancy Marcellus, Administrative Assistant, Ocean Springs, MS
Steve VanderKooy, IJF Program Coordinator, Ocean Springs, MS
Jeff Rester, SEAMAP/Habitat Program Coordinator, Ocean Springs, MS
Joe Ferrer, System Administrator, Ocean Springs, MS
Ralph Hode, EDRP Program Coordinator, Ocean Springs, MS
Alex Miller, Staff Economist, Ocean Springs, MS
James Ballard, SFP/ANS Program Coordinator, Ocean Springs, MS
Donna Bellais, ComFIN Programmer, Ocean Springs, MS
Gregg Bray, RecFIN (SCS) Programmer/Analyst, Ocean Springs, MS
Angela Rabideau, Staff Accountant, Ocean Springs, MS
Cheryl Noble, SEAMAP/Habitat Staff Assistant, Ocean Springs, MS

Others

Emily Posner, Recirculating Farms Coalition, New Orleans, LA
Chad Hanson, The Pew Charitable Trusts, Crawfordville, FL
Rene LeBreton, LDWF, New Orleans, LA
Chuck Adams, FL Sea Grant, Gainesville, FL
Lance Robinson, TPWD, Dickinson, TX
Doug Boyd, GMFMD, Tampa, FL
Jeff Barger, Ocean Conservancy, Austin, TX

Richard Cody, FWC, St. Petersburg, FL
Page Campbell, Dickinson, TX

Adoption of Agenda

D. Diaz asked to discuss a congressional briefing trip under other business. **D. Donaldson** asked to move the Sea Grant report after approval of minutes due to travel. **D. Diaz moved to adopt the agenda with changes. C. Blankenship seconded. The agenda was adopted as amended.**

Approval of Minutes

D. Diaz moved to approve the minutes of the Commission Business Meeting held on March 21, 2013. C. Matens seconded and the minutes were approved with no opposition.

D. Diaz moved to approve the minutes of the State/Federal Fisheries Management Committee held on August 20, 2013. C. Matens seconded and the minutes were approved with no opposition.

Sea Grant Fisheries Extension Meeting Report

C. Adams reported the committee met on Tuesday, October 15, 2013. T. Reisinger, Chair, was not in attendance so J. Anderson, Vice Chair, ran the meeting. He stated J. McNeeley reported on the Coalition's efforts and E. Muehlstein, the outreach specialist for the GMFMC, reported on the projects she is involved with dealing with the concept of sustainability. He said they discussed ways for Sea Grant and the GMFMC to work together on delivering that message and others to the public. T. Lassen gave a report on gap analysis. There was a group discussion on the projects each state is currently working on. He said the key topic being discussed among the states is the use of barotrauma mitigation devices and how that may factor into future stock assessments by demonstrating some sort of reduction in release mortality through the use of these devices. **C. Adams** thanked the Commission for the opportunity for Sea Grant to meet twice a year with the Commission to discuss regional issues and share ideas.

GSMFC Standing Committee Reports

Law Enforcement Committee (LEC)

S. Bannon reported the LEC/LEAP met October 15, 2013 without a quorum because the federal partners from the USFWS, NOAA and USCG were not in attendance due to the government furlough. He said they did discuss a number of council items under the LEAP regarding the upcoming FMP amendments and proposed regulatory actions. Most of the input was to the council relating to the enforceability issues of those various actions. Dr. Atran will take those back to the council where appropriate.

S. Bannon said the Commission related business was minor. He said S. VanderKooy gave a brief review of the IJF programs which included the three current FMPs. Presentations were also given

from the Flounder and Blue Crab Technical Task Forces and S. VanderKooy will report on those under another agenda item. He said they also discussed a number of enforcement related items in the state reports which are in the briefing books.

S. Bannon then gave a brief presentation on the Joint Enforcement Agreements (JEAs) used between the states and federal partners. He said these agreements are between 27 states and territories, and NOAA. He said approximately \$16 million has been made available for this program but has been level funded for the entire 12 years the program has been in existence. He said the funds provide about 130,000 man-hours of marine conservation each year and stated that is a tremendous amount of patrol time that would not exist without the JEAs. He said the JEAs have led to significant progress in creating uniform enforcement databases, identifying regional and local fishery enforcement priorities, and extending coordination to other areas, such as investigations. **C. Blankenship** stated that as a follow up to the presentation he wishes to express how important the JEA programs are to all of the states and how valuable they have been in increasing compliance with the myriad of federal regulations and other things that have changed over time. He said that because of level funding through the years, the man-hours have decreased considerably. It is very important to try to secure more funding for this program in the future.

D. Diaz moved to accept the LEC report. T. Williamson seconded and the motion passed with no opposition.

Technical Coordinating Committee (TCC) – **D. Diaz** reported the TCC met on Tuesday, October 15, 2013. He stated Dr. Soniat gave an overview of the shell budget model for the estimation of sustainable oyster harvest. The sustainability goal the model utilizes is no net shell loss. He walked through the process of using the publicly-available demo model that can be accessed at oystersentinel.org. Dr. Soniat pointed out that this model applies to all northern Gulf waters and allows oyster counts and cultch density to be entered to characterize the reef, then a fishing rate, growth rate and mortality rate can be entered as variables of the simulation. From that provided information, the model will determine if reef cultch is lost or gained. Using the model to determine TAC utilizing sustainability criterion can determine if a reef is “fishable” or not. The model can also be tailored to fishing for seed or sack oysters.

D. Diaz said Dr. Hernandez provided a brief overview of recent findings from larval fish studies in the northern Gulf of Mexico. He stated that the main goals of all the early life history programs were assessments of exploitable populations, processes affecting recruitment, and ecosystem and population dynamics. The impetus behind first starting these surveys off of Alabama was the proposed development of an LNG facility. They conducted nearly monthly samplings of ichthyoplankton from inside Mobile, out to a depth of 35 meters utilizing BIONESS, neuston nets, and ring nets. From this sampling they were able to assess seasonality and assemblage structure of larva of multiple species throughout the year. They also looked into variability in the distribution of larva because of environmental drivers such as river discharge. Dr. Hernandez also stated that DNA probes are starting to be used to look at the distribution and abundance of red snapper, red drum, and vermilion snapper eggs, collected using vertical nets off of Alabama and in samples collected by the SEAMAP CPUES during their September cruises, as they are a good indication of localized spawning.

D. Diaz reported Harry Blanchet provided an overview of Louisiana's in-season monitoring program. He pointed out that the inability to use MRIP survey data to reasonably forecast recreational red snapper harvest led the state to develop and implement their own data collection program. The new LA survey was designed to provide real-time, reliable recreational red snapper landing estimates with increased confidence for managers and anglers. In their program, recreational landing estimates are calculated separately for the private recreational sector and for-hire sector. For the private angler survey, they are using a dockside survey to collect red snapper harvest rate and a phone survey of anglers holding a required offshore landing permit for effort. For the for-hire component, they use a weekly census of for-hire/charter captains to determine the number of red snapper harvested. Dockside surveys were conducted seven days a week during the federal red snapper season and approximately 20% of all trips were intercepted. They also estimated noncompliance weekly. Some of the results from their access point survey were 2,288 private angler trips surveyed, 3,241 length measurements taken, and 2,353 weight measurements taken. As for their effort survey, there were 10,718 private angler contacts (7,454 by phone and 3,264 by email). When this program is compared to MRIP for wave 3, 2013, a total of 83 weight measurements were taken by MRIP (6 for-hire and 77 private) and 1,770 were taken by LA (812 for-hire and 958 private).

D. Diaz reported Matt Hill provided an overview of a Jubilee that took place in Mississippi on July 1, 2013 and a bloom of *Ceratium furca* alga that was associated with it. M. Hill explained that all of the environmental conditions were in place for a jubilee to take place, including high water temperatures, a rising tide, and calm conditions with a slight offshore wind. He stated that the jubilee lasted from early morning to early afternoon, with several people taking advantage of the easily-accessible species. He explained that this species of alga could cause damage to fish gills and eventually a fish kill; however, their analysis did not show any evidence of this happening in this event.

D. Diaz said Steve VanderKooy provided an IJF programmatic update covering FMP development, stock assessments, and the FMP compliance matrix. The details of these different components will be covered later in the agenda.

D. Diaz said James Ballard provided an overview of the Mississippi Bight Lionfish Response Unit pilot project. The project is a cooperative effort between GSMFC, MS Department of Marine Resources, AL Marine Resources Division, National Park Service, and the U.S. Fish and Wildlife Service. It was established to assess the current status of the lionfish invasion in northern Gulf waters and to conduct diver assessments of native species. The details of this project will be covered later in the agenda under programmatic updates.

Subcommittee Reports– **D. Diaz** reported the following reports were given from the Subcommittees:

Data Management – C. Murrell stated that the subcommittee had an update on the status of biological sampling activities. All of the states except for Florida are up to date with sampling data entry through 2013. Florida is working to reformat data and provide it to GSMFC for loading into the FIN Data Management System.

D. Donaldson provided a summary of a peer review report of NOAA's Southeast Fishery Science Center. The report provided some feedback and suggestions for improvement for data programs that feed into the NOAA Southeast Fishery Science Center. GSMFC staff plan to generate a response letter that will be reviewed by the Data Management Subcommittee at the March 2014 meeting.

C. Peterson with Bluefin Data led a discussion and presented current progress towards creating a unified commercial trip ticket system. The current commercial trip ticket system is a PC based system with 5 versions, one for each state, which are maintained by C. Peterson. The new unified system that is being proposed would be a server-based system and is going to require all the partners involved to agree upon table structures before development can begin.

V. Cefalu from Louisiana was elected incoming Chair. Nicole Shaffer from Alabama was elected Vice-Chair.

SEAMAP – R. Hendon stated that the SEAMAP Subcommittee met in conjunction with the South Atlantic and Caribbean components in July via conference call to discuss the SEAMAP 2014 budget allocations. The three components planned for level funding in 2014 with the same historic funding percentages between the components. SEAMAP funding levels were reduced 12% in FY2013 from FY2012 levels.

At the meeting Monday, the Subcommittee reviewed the SEAMAP Trawl and Plankton Operations Manual. Several changes were suggested to improve the data that SEAMAP collects during its trawl and plankton surveys. The Operations Manual should soon be ready for final approval by the Subcommittee.

The Subcommittee discussed station selection issues off Mississippi, Alabama, and eastern Florida. Historically, this area has been oversampled during trawl surveys. Since SEAMAP switched to a standard 30 minute tow time in 2010, the number of stations have been reduced and SEAMAP is trying to determine the optimal way to sample these stations while still including all SEAMAP partners in trawl sampling. They also discussed station selection in the 2-5 fathom depth stratum and station selection during the plankton surveys.

John Mareska was elected Chair with C. Dean serving as vice chair.

Crab – S. VanderKooy pointed out that a summary report of all the state blue crab activities was provided in the TCC meeting folders. The Subcommittee is continuing to work on the FMP and hopefully, will have ready for the TCC to review by later this fall. They have completed the GDAR01 Gulf of Mexico Blue Crab Stock Assessment and it is available for download on the GSMFC website.

Artificial Reef – J. Ballard stated that the subcommittee is continuing to work on the development of a standardized monitoring protocol for artificial reef habitats across the Gulf of Mexico. During the March meeting, they decided to select the different gear types they would like included in the protocol and are now working on draft protocols.

At the joint ASMFC and GSMFC artificial reef meeting in March, the Subcommittees decided it was time to revise the “Guidelines for Marine Artificial Reef Materials” document that was last updated in 2004. Members of both Subcommittees are working on revising the different sections of the document and hope to have a new edition completed sometime next year.

C. Denson was elected Chair of TCC and D. Ellinor was elected Vice Chair.

C. Blankenship moved to accept the TCC report. B. Allain seconded and the report was accepted with no opposition.

State-Federal Fisheries Management Committee – **D. Diaz** stated R. Lukens will give the report on the Menhaden Advisory Committee. **R. Lukens** reported the Menhaden Advisory Committee (MAC) convened its meeting at 1:00 pm on Monday, October 14, 2013. Joe Smith, NOAA Fisheries Beaufort Laboratory, was the Chair, but due to the federal government furloughs, he was unable to attend. Since a new Chair was scheduled to be elected at the end of this meeting, the MAC decided to move the election to the beginning of the meeting, so the new Chair could preside. ***By rotation, the position of Chair fell to the industry, and Ron Lukens, Omega Protein Corp., was elected Chair by unanimous vote.***

Following introductions, the MAC amended the agenda. Agenda items 4 and 5 (Update on the 2013 Gulf Menhaden Season and Update on the Atlantic Menhaden Fishery) were to be presented by Joe Smith. Since he was unable to attend, ***the MAC recommended that those two items should be tabled until such a time a conference call/webinar could be arranged to address those issues after the federal government returns to work.*** S. VanderKooy asked that interested parties not on the MAC contact him if they wish to participate on the call/webinar.

Jerry Mambretti, TPWD, provided an overview of the status of the 2013 Texas Cap status. Since the Cap was not reached in 2012, the underage provision was triggered, thus increasing the total amount available to the fishery. As of the current status of landings, it is unlikely that the Cap will be reached in 2013. J. Mambretti indicated that communication between TPWD and Omega Protein worked smoothly. He indicated that menhaden were mostly appearing in western Louisiana, and trips into Texas waters were significantly reduced. The actual landings under the Texas Cap will not be available until February 2014.

Harry Blanchet, LDWF, reported that the standard forecast on the Gulf menhaden harvest was in limbo. The MAC has already requested that Louisiana continue to provide the recruitment analysis historically provided by Vince Guillory, now retired. H. Blanchet conveyed the request to the LDWF, but as yet have not received a response. **R. Lukens** stressed the importance of the forecast and the recruitment analysis as it is planned as a part of the overall approach to management. ***The March 2013 motion from the MAC to the LDWF still stands as an official request for continued consideration by the Department.***

S. VanderKooy reported on the SEDAR 32A stock assessment and review report, recently completed. The 400+ page report is available on the SEDAR website. The reviewers were unable to make a complete stock determination since management goals, objectives, and reference points had not yet been defined by the GSMFC. While they deemed that the population is likely not

overfished and overfishing is not likely occurring, the lack of a final status determination is troubling. The reviewers were also concerned that there had been a change to the LDWF bag seine protocols. Since the bag seine index is an important data input in the stock assessment model, the reviewers are concerned that if the current assessment was based on a recruitment index using the bag seine data, changing the protocols could cause issues in future assessments. Data available from the eastern and western outskirts of the population were questioned by the reviewers, since there may be some species identification uncertainties. There is an overlap in the western region with finescale menhaden and a known hybridization zone in the panhandle of Florida between Gulf and yellowfin menhaden. TPWD is actively pursuing genetic analysis of these large fish. Alabama and Florida have included genetic fingerprinting in the proposal submitted in their proposals for NRDA Early Restoration funding. It is hoped that these activities will result in valuable additional fishery independent data for the next stock assessment.

Some of the MAC members worked prior to and after the SEDAR to draft management goals and objectives for inclusion in the FMP revision. A proposal was distributed prior to the meeting for the MAC's consideration. The MAC recommended Spawning Potential Ratios (SPR) be used as management tools, not rebuilding tools as a target and threshold for stable fishing levels that would maintain a sustainable menhaden population. The MAC proposed fishing mortality (F) levels at SPRs of 35% and 30%, respectively, as the target and threshold reference points for management, and not to be intended or construed to be a cap or a quota. Calculated from the data from the stock assessment, the target harvest level would be 663,583 MT and the threshold harvest level would be 680,765 MT. If the target level is exceeded two years in a row, an immediate request would be made for an update to the stock assessment. In addition, if the threshold level is exceeded in one year, a stock assessment update would be immediately requested. Finally, a benchmark stock assessment would be scheduled, either through SEDAR or some other process, every five years, making the next benchmark assessment scheduled for 2018, in conjunction with the next update of the FMP. ***The MAC moved to approve the proposed reference points for inclusion as management recommendations in the FMP revision currently underway. The motion was approved unanimously. R. Lukens requested that if the management recommendations made above are approved by the full Commission that there be a news release indicating that the status determination for Gulf menhaden is currently "not overfished and not undergoing overfishing."***

There are questions regarding the possibility of the SEDAR accepting the suggested schedule for assessments, associated with funding and demands for assessments continuing to increase. A potential alternative to SEDAR would be to use the Commission's assessment process, assuming funds are made available to fully implement the GDAR program. The blue crab stock assessment was conducted using this framework and was successfully completed resulting in first ever reference points for blue crab in the Gulf of Mexico. S. VanderKooy noted that this approach would eventually require the Commission to hire a full-time population dynamisist to manage the process. ***The MAC moved that the SFFMC encourage the GSMFC to seek funding to hire a stock assessment analyst to conduct assessments in support of the Commission's FMPs.***

R. Lukens stated S. VanderKooy provided the status of the FMP revision, indicating that the biology, habitat, and law enforcement sections are currently available for review by the MAC. Those sections should be completed soon. A history of the fishery section is underway, the result of a number of informal interviews conducted between S. VanderKooy and various individuals

familiar with the Gulf menhaden industry and fishery, and a 2011 social survey. A. Miller, GSMFC staff, is working on the economics section, and J. Smith is updating the fisheries section. S. VanderKooy hopes the entire draft is ready by the end of 2013 for full review.

R. Lukens reported D. Donaldson, GSMFC staff, introduced a proposal to computerize the Captain's Daily Fishing Reports (CDFRs), which are currently filled out on paper onboard the vessels and optically scanned later at the NMFS Beaufort Lab. It would be an opportunity for the vessel captains to enter CDFR data directly into an electronic device rather than filling out a form for later scanning. The industry representatives indicated that there was no urgency on their part for faster reporting, and the current system seems to work fine. *The MAC elected to decline the proposal.*

R. Lukens reported S. VanderKooy presented a proposal to implement an aerial survey of Gulf menhaden, developed by Dr. Robert Leaf, GCRL, and Dr. Behzad Mahmoudi, FWI. The survey is designed to provide fishery independent data to develop an index of adult menhaden abundance and distribution. This is a project that has been discussed many times and is identified in the research section of the FMP. There were a number of concerns over the proposal and the ability to visually estimate fish numbers in turbid waters typically occurring in areas where menhaden occur. In addition, the cost for the annual survey is in excess of one million dollars, and there was concern that it would be difficult to find such funds for long term implementation. Neither Dr. Leaf nor Dr. Mahmoudi were able to attend the meeting, so an effective question and answer session was not possible. *The MAC moved that S. VanderKooy would coordinate a conference call with the two PIs and discuss the details at that time. A presentation could be made at the March 2014 meeting in New Orleans.*

R. Lukens said that under Other Business, Borden Wallace, Daybrook Fisheries, asked if NOAA is doing any tissue contaminant analysis of menhaden since the BP oil spill. Several states are still doing some work in this area; however, most members thought that the federal government has stopped those analyses.

This concludes the report of the MAC.

D. Diaz moved to accept the MAC report. R. Riechers asked if accepting the report meant accepting all motions. He said he has a problem accepting the report if it means the GSMFC would hire a Stock Assessment Analyst because he feels this would be a tremendous amount of redundancy and he does not feel hiring the Analyst would help move the process forward. C. Blankenship stated while he agrees with the concept of hiring an analyst he does not feel this would get to the management actions that are needed for the assessments. C. Blankenship seconded the motion to accept the report but to vote on each motion separately. J. Gill asked R. Lukens to read each motion.

Motion #1 - The MAC moved to approve the proposed reference points for inclusion as management recommendations in the FMP revision currently underway. R. Lukens requested that if the management recommendations made above are approved by the full Commission that there be a news release indicating that the status determination for Gulf menhaden is currently "not overfished and not undergoing overfishing." This motion passed with one opposition.

Motion #2 - The S/FFMC moved to request that the Commission seek funding to hire a stock assessment analyst for the staff. This motion did not pass for lack of a second.

Joint Commercial/Recreational Fisheries Advisory Panel

S. VanderKooy reported the Panel has been in place since 1988 but has not met during the last four annual meetings due to lack of funding, participation or agenda items. The agenda items submitted for this meeting were Council related so the Commission decided not to have them meet. **S. VanderKooy** stated he received an email from Owen Dray asking exactly what the role of the C/RFAP is and why their agenda items were rejected. **S. VanderKooy** said he explained to him the items were not appropriate for the Commission. **S. VanderKooy** asked if the Commission would like to keep this Panel or disband it. *After discussion, R. Riechers moved to keep the C/RFAP but only call them together to focus on certain issues and not have them meet on a standard, routine basis, just have them meet as needed. C. Matens seconded the motion and it passed with no opposition.* **C. Blankenship** stated he will contact Owen Dray to explain the Commission's decision on why the panel did not meet at this meeting.

NOAA Fisheries Southeast Regional Office Comments

D. Donaldson stated R. Crabtree did submit a report under Tab B of the briefing book. He said if anyone has questions of R. Crabtree to contact him via email when the federal government returns to work.

NOAA Fisheries Budget Update

D. Donaldson noted that in the briefing book there are several items regarding the NMFS budget trends. He stated there is quite a difference between the House and the Senate marks for FY2014. He stated that since 2010 there has been a decrease in funding which is not positive news. He pointed out that the budget item for expanding annual stock assessments and improving data collection has a significant decrease in the House while there is an increase in the Senate. He is hoping the conference mark will be somewhere in between, hopefully on the positive side. He pointed out that the regional councils and commissions' line items are proposed to be increased. He said the fisheries statistics item, where the bulk of recreational funding comes, is again decreased in the House but increased in the Senate. He said another positive note is the IJF funds are proposed to increase but the regional studies are decreased in the House but increased in the Senate.

D. Diaz commented that the House Natural Resource Committee recommended that NOAA fund some recycling programs for oyster shells and this may be an opportunity for the states to receive funding for a program. **D. Donaldson** said he would research this and inform the states.

Discussion of Legislative Issues and Actions –

D. Donaldson noted Tab D in the briefing book. He stated the Magnuson-Stevens Fishery Conservation and Management Act is due for reauthorization which should be done by late 2014

or early 2105. He noted a bill for third party certification of seafood was rescinded and stated if any changes come about on that issue, he will inform the Commission. **C. Matens** noted that this is an issue the Commission needs to stay on top of and thanked D. Donaldson for keeping track of it.

Discussion of Commission's Role in Red Snapper Management –

D. Donaldson stated there are a variety of Bills and a summary of the proposed red snapper legislation is in Tab E of the briefing book. The summary provides a quick snapshot of the various bills that have been proposed, then more detail. It was suggested that since the Commission has not met since these bills have been proposed that it would probably be a good ideal for the Commission to discuss this issue. This is provided as background information but it is just an open discussion to talk about some of the provisions that are in these propose bills. After extensive discussion, the Commission agreed that if Congress asks the Commission to manage red snapper they will accept the responsibility. Staff will begin working on different scenarios on how Red Snapper Management will be handled, with the states' input, and this will be an agenda item at the March meeting. Items that should be included would be a budget, additional staff requirements, more and larger meetings, and possibly more space to house the Commission. **R. Riechers** said two scenarios should be considered. One being including all aspects of managing red snapper and the other being most of the work is handled elsewhere but the governing body would be the Commission.

Briefing on RESTORE Act Science Program

D. Donaldson reported that in the briefing book under Tab F2 there is a request from the Science Advisory Board to nominate someone from the Commission to serve on the Gulf Coast Ecosystem Restoration Science Program Advisory Working Group. This Group will allow the Commission to provide its views and provide input to the science program created under the Restore Act Section 1604. **D. Donaldson** recommended J. Rester to serve as the Commission representative because he has a good working relationship with R. Beard, who is the Acting Director of the Science Program, and he is knowledgeable about the various issues and can provide guidance to the Commission for this particular working group. **M. Schexnayder** moved to appoint J. Rester to serve as the Commission representative to the Gulf Coast Ecosystem Restoration Science Program Advisory Working Group. **D. Diaz** seconded and the motion passed with no opposition.

Overview of Kemp's Ridley Recovery Program

Pat Burchfield was not in attendance so this item will be reported on at a later meeting.

Interjurisdictional Fisheries Program Report –

S. VanderKooy reported there is a brief overview of the IJF program activities in the briefing book under Tab G1. He stated three FMPs are being revised and nearing completion. He said they hope to complete these by the end of this year/beginning of next year and they will then be reviewed by the TCC. He stated they completed a benchmark stock assessment for menhaden. They completed a benchmark assessment for Blue Crabs. They asked the stock assessment team

if there was adequate data for the Gulf and Southern Flounder TTF to conduct another stock assessment and the response was they do not have good speciated data, in fact NOAA landings are frequently listed as flatfish, so there will be no updated stock assessment at this time.

S. VanderKoooy said they continue to produce the documents for supporting enforcement which are available in PDF format or on the GSMFC website. He said they continue at the state/federal level to review the compliance ability to enact the recommendations put forward in the various management plans. There is a brief summary of the changes that have occurred since the last time they reviewed the management recommendations.

SEAMAP Program Report –

J. Rester reported so far this year, SEAMAP has conducted the Winter, Spring, and Fall Plankton Survey; the Summer Shrimp/Groundfish Survey; and the Reef Fish Survey. SEAMAP is currently conducting the Bottom Longline Survey, the Vertical Line Survey, and just starting the Fall Shrimp/Groundfish Survey. He state he is not sure how the government shutdown is going to affect the Fall Shrimp/Groundfish survey. NMFS does a lot of sampling and he stated he assumed once they do go back to work they would start the survey a couple weeks late. Hopefully they will be able to sample the usual number of stations but contingencies have been made off of Louisiana and Florida to try to pick up some of the stations they may miss.

SEAMAP funding levels were reduced 12% in FY2013 from FY2012 levels. Due to a prioritization process that SEAMAP underwent in late 2012, SEAMAP sampling in 2013 was not drastically impacted, but survey days and data collections were reduced. At this time, SEAMAP is unsure how much funding SEAMAP will receive in 2014.

In order to study the impacts of the Deepwater Horizon oil spill, the Commission along with all five Gulf States and NMFS submitted a comprehensive, ecosystem-level proposal to monitor the Gulf of Mexico for the next ten years. This fishery independent monitoring program would not target the monitoring of specific restoration actions, but would encompass the entire U.S. Gulf of Mexico in order to monitor the ecosystem for any long-lasting deleterious effects. The fishery independent monitoring program would build upon and expand current SEAMAP sampling in the Gulf of Mexico. Due to the uncertainty of any project proposal, Florida recently submitted a fishery independent proposal for NFWF funding that would allow them to participate in the Fall Shrimp/Groundfish Survey and Vertical Line Survey along with some reef fish work for five years.

SEAMAP continued to distribute real time data plots of shrimp and fish abundances from the Summer Shrimp/Groundfish Survey. The real time data were distributed to over 125 individuals this summer and were also posted on the Commission's web site. The data plots show catch rates of brown, pink, and white shrimp along with total catch for SEAMAP sampling stations throughout the Gulf. J. Rester said he was contacted by a very irate fishermen from this area complaining there were no plots available for July before the opening. He said he check the data and it was very similar to what was done in years past, maybe he just noticed it this year.

The Commission continues to manage SEAMAP data and distribute the data to interested parties. The Commission has fulfilled ten SEAMAP data requests since March.

Sportfish Restoration Program Report

J. Ballard reported as was pointed out in the TCC Report, the Artificial Reef Subcommittee is continuing to work on the standardized monitoring protocol for artificial reef habitat across the Gulf of Mexico. At the March 2013 meeting in Tampa, Florida, the Artificial Reef Subcommittee discussed which gear types to incorporate into the standardized protocol. They ultimately decided to incorporate vertical longline, side-scan/multibeam sonar, Chevron traps with GoPro cameras, camera arrays, and bottom longline where permissible. **J. Ballard** said he has put together sampling protocols utilizing the different gear types listed above that are currently being used in the Gulf, and will use these examples to draft the standardized sampling protocol including the vertical line protocols that SEAMAP uses. Once it is drafted, it will be provided to the Subcommittee for their review. The Artificial Reef Subcommittees of the ASMFC and GSMFC drafted a letter to the U.S. Maritime Administration (MARAD) to address the arbitrary restriction of reefing ships that were constructed prior to 1985 in their "*MARAD Artificial Reefing Program, Frequently Asked Questions*" that was published in February of this year. Once the letter was finalized, both Commissions sent copies of the letter to MARAD but at this point neither Commission has received a response. The Joint Subcommittee also decided to update the 2004 publication of "*Guidelines for Marine Artificial Reef Materials: Second Edition*". To start this process, the document was split into 25 chapters, all dealing with a different material type, and members from both Subcommittees selected the chapters they wanted to update. Once all chapters have been updated, he will reconstruct the document and perform the final review to get it ready for publication.

The Mississippi Bight Lionfish Response Unit (MBLRU) pilot project, which is a cooperative effort between the GSMFC, Mississippi DMR, Alabama DNR, the National Park Service and the U.S. Fish and Wildlife Service (USFWS), is progressing well. He will give more detail of this project under the Agenda item ANS Report.

At the October 2012 meeting of the Commission there was a request to hold a meeting of the states and BSEE and industry addressing the issues with new amendments of the *Rigs-to-Reef* program that was putting restrictions between reefs and where they could be reefed had to be within existing reef sites. Following that request the GMFMC held a very similar meeting trying to address those same issues and subsequent to that BSEE came back with a revised protocol where they removed a lot of the restrictions that were of concern. Just recently the GMA contacted him and said the states are still interested because they have funds to hold a similar meeting. The states are interested in having the meeting for informational sharing on the Rigs to Reef program so he has been working with the GMA to set up a meeting with the states, the regulatory agencies and industry to share information on the program and how to make the program move smoother, get the communication opened up to everyone involved and hopefully get more of the decommissioned rigs turned into artificial reefs.

Fisheries Information Network Program Report

D. Donaldson reported there is a brief overview under Tab J of the briefing book. He said the FIN met in June to discuss priorities for 2014 then the S/FMC met in August to determine the activities

based on the recommendations from FIN. There were five activities included in the 2014 Cooperative Agreement. They are Coordination and Administration of FIN Activities; Collecting, Managing and Disseminating Marine Recreational Fisheries Data; Operations of FIN Data Management System; and Trip Ticket Program Development and Operation for a total budget of \$4.5 million. Unfortunately, because of level funding and increased costs, menhaden and biological sampling had to be removed from the proposed activities for 2014. That was approximately \$1 million of activities that will not be conducted. The statement of work and budget has been submitted to NMFS and are hoping to have the sub-awards to the states by spring/summer 2014 depending on when they get a budget. As stated in the past, FIN has been level funded since 2014 and have had to continually reduce or completely eliminate activities and unless additional funding is received, that trend will be continued and will not do biological sampling which will have a huge impact on future stock assessments. They are working with all partners to secure additional funding to not only continue but enhance and restore some of the FIN activities. Based on the budget information presented earlier, the outlook is not looking positive.

Habitat Program Report

J. Rester reported that he has finished the habitat section of the Blue Crab Fishery Management Plan. There was a general discussion of the habitat throughout the Gulf of Mexico and also a threat section. He stated he has also been monitoring public notices of projects that can affect habitat. He has been working with Russ Beard on the science program and will officially be the Commission representative. He asked if the states would want to funnel information to him for that program and suggested using the Habitat Subcommittee, which has not been active lately due to funding limitations. **M. Schexnayder** stated the Habitat Subcommittee is a good mechanism but he will also get direct input from the states. **C. Blankenship** stated not only will they provide input but expects to receive information from him on what the group is doing so they can provide input.

Aquatic Nuisance Species Program Report

J. Ballard reported the ANS started with federal legislation of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 which was reauthorized by the National Invasive Species Act of 1996 which established the ANS Task Force and established and provided funding for the six regional panels. Through this program, the Commission coordinates one of these six panels which is actually a Federal Advisory Panel to the Task Force. It also established state ANS plans and set up funding to supply two states that have approved plans by the task force to go after some of the objectives in their plan. The Panel was established 1999 under the Gulf of Mexico Program (EPA) and the Commission assumed responsibility. The membership includes twelve federal, thirteen state, eleven NGO and one International agency. Recently the program has been dealing with a lot of variability when the funds are made available. The funding is currently coming from the Headquarters Office in Arlington, FWS. They have been informed that until funding is available they can not operate the program. Due to budget cuts and sequestration this program lost 20% because the headquarters office had fixed costs they could not cut so it was passed down. **J. Ballard** said he has been working with the Region 4 FWS coordinator to address these issues and trying to develop a mechanism to get funding for the panel to be switched from the federal office and put under the Region 4 Office so that a more reliable funding source would

be possible. On the state plans, Georgia, Louisiana, Mississippi, South Carolina and Texas have completed plans that are approved by the ANSTF. Alabama's plan has been conditionally approved, Florida has a completed plan but it has not been approved, and North Carolina is in the preliminary stages of formulating their plan. **J. Ballard** said that three Traveling Trunks have been completed and so far over 20 organizations have used them and presented the material to thousands of people across the U.S. **J. Ballard** reported on two other projects that should be completed by the end of the year, the Trojan Y Chromosome Eradication of Invasive Fish – Development of Sex-specific DNA Markers, and Reproductive Sterility as a tool for Prevention and Control of Invasive Aquatics. The details of the programs are in the briefing book under Tab L. He reported on other invasive species, and the captures and impacts to native species that are also covered in the briefing book.

J. Ballard then reported he is coordinating the drafting of the National Invasive Lionfish Prevention and Management Plan which is a product of the national task force. He said it is being drafted by the Invasive Lionfish Control Ad Hoc Committee and they envision this plan to serve as a guide to the ANSTF and other interested parties involved in managing lionfish and natural resources in U.S. waters. The main control they are addressing is localized control in sensitive areas. He stated at this point eradication is not possible but it has been shown if there is local control and removal of lionfish, the prey fish do rebound and the native species seem to do quite well. There are models out now trying to figure out the level of lionfish that a system can support before it starts to do damage to the native species population. There are two species that make up this invasive population but the majority of the lionfish species can be bought in the pet trade on a daily basis in the U.S. The Committee will recommend doing full risk assessments on all the lionfish in trade.

J. Ballard referred to the Mississippi Bight Lionfish Response Unit (MBLRU) project that was mentioned in the TCC report, that it is a cooperative effort with Mississippi, Alabama and the National Park Service. The USFWS provided the funding and the Commission was administering the program, handling the financial and the data collection storage. The objectives of the MBLRU are to:

Conduct monitoring dives at established sites in the near coastal waters between Pensacola, FL and the Mississippi River Delta to monitor and track the lionfish invasion.

Perform diver surveys of associated species' density and richness at all sites to aid in future assessment of impacts of the invasion.

Remove lionfish encountered during normal monitoring operations.

Coordinate reporting activities with the established USFWS hotline and the USGS online reporting system.

Establish a "Strike Team" to harvest lionfish at locations beyond regular sampling sites reported to the MBLRU.

Engage in outreach activities in the region to help inform the public about the seriousness of the lionfish invasion.

J. Ballard said they received funding for the project in July 2012. They have held several meetings to discuss the survey and lionfish collection protocols, data collection and storage procedures, required gear, sample site selection, and possible outreach. They have ordered and distributed all necessary gear and developed a database and an internet-based entry form for all the data collected during the course of the project. He then showed different areas where lionfish were encountered and stated most were found in 75' or deeper water.

C. Blankenship commented that they are having a workshop on the 24th and a chef will be cooking lionfish which is part of the seafood marketing program and to help encourage people that attend the work shop to cook the fish, kill more of them. As part of the program in Alabama, in order to complete the dives they combined their dive team with the law enforcement section and the fishery section and that has proven to be a very positive thing for the state of Alabama. This gets both groups working together and it also helps keep the certification up for the forensic divers. He noted they had a very motivated staff to go out and shoot lionfish.

Emergency Disaster Recovery Program Report

R. Hode reported that he is proud to say that all of the five Gulf States that have been involved in both the EDRP I and II project has done an excellent job. He stated both of the programs have been completed. He said for those not familiar with the program, there were two grants under the post Katrina Disaster Recovery program totaling \$212 million. The first was a resource recovery grant which was tagged EDRP I in the amount of \$128 million for restoration of oysters, damaged fishery habitat and for cooperative research, and this component ended August 31, 2013. The final invoices were received from the states on September 15, 2013.

R. Hode reported the second grant was an Economic Assistance grant that was tagged EDRP II amounting to \$85 million that provided both direct and indirect economic assistance to businesses and industries, as well as independent fishermen who were impacted by the disaster, including additional assistance for those compliant with TEDs and BRDs regulations across the Gulf. Under the economic assistance component, additional funding was provided for domestic product marketing which a couple of the states took advantage of, and for assistance with seafood testing. This component ended September 30, 2013 and the Commission is currently receiving invoices from the states for work performed under that program.

He stated as indicated in the briefing book under Tab M, combined spending for the EDRP I component amounted to \$127.7 million or 99.94% of the budgeted amount. Unfortunately approximately \$68,000 was not spent. Under the EDRP II component, through September 24, 2013 when the briefing book was made available, \$82.9 million or 97.7% of the programmed budget amount was expended but as indicated, there are still outstanding invoices. The briefing book has a detailed categorical breakdown of budgeted expenditure reimbursements. He stated that with minimal exceptions, all work scheduled under these grants have been completed and are found to be in keeping with approved statements of work. Final reports reflecting the overall sub-award objectives, activities, accomplishments and benefits are currently being prepared. The final

report to NOAA Fisheries is scheduled for the end of this year, December 29, 2013. The Commission has asked the states to provide their final reports by November 15, 2013. **R. Hode** thanked the marine directors and all involved in the program for their excellent job. He stated the funds came at a time when it was well needed and it gave all across the Gulf an opportunity to do things that may not have been done otherwise, in addition to restoring a significant portion of the Gulf fisheries.

D. Diaz thanked the entire Commission staff for this huge undertaking and stated they have been very helpful to the state of Mississippi. He said he feels this is the most important grant the MSDMR has handled to date and it helped a lot of people and did a tremendous amount of good for the resources of the state.

Economic Data Program Report

A. Miller gave an update and presentation on the economics program stating as part of an effort to improve economic data collection and management of the recreational and commercial fisheries throughout the Southeast Region, an Economics Program was formed in July of 2008 and will end June 2014. The economics program is a cooperative partnership among Texas, Louisiana, Mississippi, Alabama, Florida, the Gulf States Marine Fisheries Commission, and NOAA Fisheries. The program monitors the economic performance of the fisheries of the Gulf of Mexico and assesses the economic impacts of these fisheries on the local and regional economy. In general, the activities of the economics program are divided into three main components. These components include economic data collection, economic research and analysis, and economic outreach and dissemination. These initiatives were further developed and implemented throughout late 2013. All reports are or will be made available on the GSMFC website. **A. Miller** stated a summary of the information on the program is under Tab N of the Briefing Book.

Oil Disaster Recovery

R. Hode reported The Oil Disaster Recovery Program was authorized in October 2010 in response to the oil disaster in the Gulf of Mexico. This was a \$15 million grant. Currently, there are twenty-one contracts in place addressing various components designed to project a positive image of the Gulf of Mexico Fisheries following the oil disaster. Those twenty-one contracts includes public relations and marketing, both traditional and nontraditional, sustainability and traceability; and seafood testing. He stated a stock assessment element was added during the year to address the impact of the oil disaster on the Kemp's Ridley turtle population in the Gulf. Information and accomplishments of the Oil Disaster Recovery Program is under Tab O of the Briefing Book. **R. Hode** stated to date, approximately 57% of the funds have been expended for this program and the program will end August 2015.

A. Miller gave a power point presentation on the Gulf Seafood Trace and Gulf Fisheries Information (FINFO) programs. To date, there are 63 enrollees in the Gulf Seafood Trace program and over 26 million pounds of seafood has been traced through the program. The FINFO website (www.gulffishinfo.org) will be unveiled during the Seafood Marketplace for North America in March of 2014. Since March of 2013, progress has been made on the site in planning requirements,

content collection, software development, design and graphics, and the site name. Information on these components is under Tab O of the briefing book.

Daniel Purrell, a member of the audience, asked to address the Commission to state his opinion on global warming. **J. Gill** informed him he had five minutes to address the Commission.

Discussion of Hiring New Executive Director –

C. Matens moved to have Executive session for the purpose of discussing personnel matters. R. Riechers seconded and the motion passed without opposition. J. Gill asked all attendees to leave except for Commissioners and Proxies.

C. Blankenship moved that the Executive Director Position description be distributed to all Commissioners for review with revisions to be sent to the Chairman no later than October 31, 2013. Then a RFP will be distributed to find an executive recruiter and that the executive committee review the RFP's responses and select a firm to assist with obtaining candidates for the Executive Director Position. The application process will be reopened after the firm is in place, and that all applications be sent to all of the commissioners for review and ranking, and that interviews be conducted by the full commission. Letters will be sent to the current applicants stating that they are still being considered and that they are encouraged to send any supplemental information to be added to their application on file. The motion was seconded by B. Allain. M. Schexnayder stated he wished to change the motion to state "interviews be conducted by the Executive Committee and then go back to the Commission to make the choice." C. Blankenship stated he does not wish to change his motion. The motion passed with no opposition.

D. Diaz asked the Commission to discuss developing a Five Year Strategic Plan. *D. Diaz moved to direct the Commission staff to move forward with the development of a Five Year Strategic Plan. The Commission will hire a firm with experience in strategic plan development to develop the plan and to facilitate a meeting(s) to get input from at least two commissioners from each state and key members of the Commission staff. The Commissioners from each state that represent the marine fisheries agency in each state will participate. If a state chooses, they may designate a proxy to represent the commissioner. The goal would be to have a Five Year Strategic Plan ready for consideration for approval by the entire Commission by the March 2014 meeting. M. Schexnayder seconded the motion.*

After discussion, **D. Diaz withdrew the motion**, but the Commission agreed there needs to be a Five Year Strategic Plan but feels it would be best to wait to have this as an agenda item at the March meeting or after an Executive Director is hired so their input could be considered. It was suggested to include this in the position description for the Executive Director, to participate in writing a Five Year Strategic Plan. It was also suggested to have break-out sessions at the March meeting to discuss planning for the future direction of the commission. **D. Diaz** will forward an email from ASMFC with their 5 year strategic plan through 2013, action plan that goes with the current year they are working in, and a draft plan they are working on for 2014-2019 to use as guidance in developing the GSMFC document.

Executive Committee Report

The following Executive Committee Report was submitted to all Commissioners:

The meeting was called to order at 7:10 a.m. with the following members and others present:

Members

Chris Blankenship, (*Immediate Past Chairman*), AMRD, Gulf Shores, AL
Joe Gill (*Chairman*), MDMR, Biloxi, MS
Dan Ellinor (*2nd Vice Chairman*), FFWC, Tallahassee, FL
Robin Riechers (*Chairman's Appointee*), TPWD, Austin, TX
Mark Schexnayder (*1st Vice Chairman proxy*), LDWF, Baton Rouge, LA

Staff

David Donaldson, GSMFC Assistant Director, Ocean Springs, MS
Nancy Marcellus, Administrative Assistant, Ocean Springs, MS
Angie Rabideau, Senior Accountant, Ocean Springs, MS

Discussion of 12/31/12 Audit

A. Rabideau reviewed the 12/31/12 Audit with the Committee. The audit was completed in early August. **A. Rabideau** mentioned that an unqualified opinion was received. There were no findings or deficiencies in the financial data. It was determined that the financial statements had been fairly presented. **A motion was made by C. Blankenship to accept the 2012 Financial Audit. It was seconded by M. Schexnayder and passed unanimously.**

Financial Status Report as of 09/30/13

A. Rabideau briefly reviewed the 9/30/13 Financial Statements with the Committee. **A. Rabideau** mentioned that the Financial Statements are electronically distributed once a month. She pointed out that the cash account was elevated due to the ASAP shutdown the last two weeks of September, 2013 and the balance of EDRP II funds. EDRP II funds were drawn down due to NOAA's fiscal year end close. **A motion was made by M. Schexnayder to accept the September 2013 Financial Statement. It was seconded by D. Ellinor and passed unanimously.**

Presentation of 2014 Budget

A. Rabideau reviewed the 2014 budget. The budgeted amount for 2014 is \$5,949,717 which is less than the previous year's budget. **A. Rabideau** mentioned that EDRP I & II grants have ended. She also mentioned that the Economic Program will be ending June 30, 2014. Also, ODRP contractual funds are obligated and remaining funds are allocated to administrative costs. **C. Blankenship** asked how the health insurance rates will be impacted by the affordable health care act. **D. Donaldson** explained that our group will enlarge to include the whole state of Mississippi in increase averages. The commission's health care insurance advisor has assured the commission

that the costs will not be drastically impacted. **A motion was made by C. Blankenship to adopt the 2014 GSMFC budget for the amount of \$5,949,717. It was seconded by M. Schexnayder and passed unanimously.**

Proposed Changes to the GSMFC Administrative Manual

N. Marcellus discussed strengthening the wording about the health care insurance plans and the post-employment health benefits. The health care insurance advisor will be securing some strengthened language that will be approved by their legal department. When those statements are secured, they will be sent to the commissioners for approval.

Discussion of Hiring GSMFC Lawyer

J. Gill proposed that the commission send out requests for proposals to retain an attorney on an hourly basis for situations that require legal advice. **A motion was made by M. Schexnayder. It was seconded by D. Ellinor and passed unanimously.**

Staff Compensation

The Committee recommended the following regarding staff compensation:

- 4% raise or at least \$1,000 – whichever is higher – for all employees contingent on their job performance
- Additional increases:
 - A. Rabideau – \$4,000
 - N. Marcellus – \$4,000
 - C. Noble - \$2,000
These changes effective immediately
 - Ali Catchot – \$1,500

A motion was made by C. Blankenship to accept these recommendations. It was seconded and passed unanimously.

Being no further business, the meeting was adjourned at 8:10 a.m.

M. Schexnayder moved to accept the Executive Committee report. D. Diaz seconded and the motion passed with no opposition.

State Directors' Reports

All states submitted written reports with the exception of Louisiana.

Florida – **D. Ellinor** reported on behalf of the Florida Fish & Wildlife Conservation Commission, Division of Marine Fisheries (FWC).

The major responsibilities of the Division of Marine Fisheries Management include: (1) development and implementation of marine fisheries management and policies; (2) angler outreach and marine aquatic resource education; (3) commercial fisheries assistance; (4) the state artificial reef program; (5) monitoring compliance with the marine fisheries trip ticket reporting requirements through audits of applicable fish house records; (6) administrative penalty assessments for violations of specified fisheries regulations, and retrieval of lost and abandoned spiny lobster, stone crab and blue crab traps; and (7) issuance of Special Activity Permits. Highlights of staff efforts in 2012 [i.e., state fiscal year 2012/2013] are summarized below.

ANALYSIS AND RULEMAKING SECTION

The Marine Fisheries Management and Policy Development program develops regulatory and management recommendations for consideration by FWC Commissioners designed to ensure the long-term conservation of Florida's valuable marine fisheries resources.

The 2013 Florida Legislature passed one bill that allowed for four additional recreational license-free fishing days.

During the state fiscal year 2012/2013, the Florida Fish and Wildlife Conservation Commission (FWC) approved a number of amendments to marine fisheries rules contained in Chapter 68B of the Florida Administrative Code.

A Restricted Species Endorsement Exemption was created for Florida's veterans wishing to enter the commercial fishing industry. The endorsement waived the income requirements for a restricted species endorsement for Florida veterans wishing to enter into commercial fishing for one year for veterans meeting certain requirements.

Amendments were made to make black sea bass in the Atlantic consistent with the South Atlantic Fishery Management Council's new regulations. The bag limit was reduced from 15 fish to five fish per person per day for the Atlantic. Size limits were increased for both commercial and recreational fisheries to 13 inches total length. Anyone fishing with black sea bass traps in Atlantic state waters is now required to have a federal south Atlantic black sea bass pot endorsement and a commercial snapper grouper unlimited permit. Trap requirements were also amended to match federal trap specifications.

The Gulf coast snook fishery was kept closed for another year and the blue crab trap fishery was opened early by executive orders.

The recreational and commercial harvest of giant anemones (*Condylactis gigantea*) was closed off of Florida state and federal waters. Sand perch, dwarf sand perch and unicorn filefish were removed from the Marine Life rule. The size limits for angelfish and butterfly fish species were applied to the recreational sector and also applied to angelfish hybrids.

A recreational harvest season for gag grouper was established for Franklin, Wakulla, Jefferson and Taylor counties, Indian Pass Apalachicola Bay and the Steinhatchee River to be April 1 through June 30. For the rest of the Gulf of Mexico excluding Monroe County a July 1 through December

3 season was established to be consistent with the federal Gulf of Mexico Fisheries Management Council (GMFMC) season.

Consistency with the GMFMC was established for gray triggerfish. A recreational and commercial closure of June 1 through July 31 was established and a recreational two-fish daily bag limit and a commercial trip limit of 12-fish were established.

A rule was created that waived the recreational fishing license requirements for divers harvesting lionfish using specific gears and excluded lionfish from recreational and commercial bag limit requirements.

The bluefish rule was amended to clarify the size limit, landing in whole condition requirement and recreational bag limit extend into federal waters. Outdated gear specifications and a static quota were also removed from the rule.

A rule cleanup process has begun that will simplify rule language and improve enforceability. Nineteen chapters were amended in the first phase of this process and a general chapter has been created comprised of definitions and provisions that apply to all saltwater fishing.

The recreational red snapper season was extended in July 2012 by executive order. The recreational red snapper season in the Gulf of Mexico state waters was set from June 1 through July 14, 2013.

The recreational harvest for bay scallops was opened early by executive order.

Tarpon and bonefish rules were amended to make them a catch-and-release-only species. However, anyone in pursuit of a tarpon IGFA record may possess a tarpon with a tarpon tag. The vessel limit was reduced to one tagged tarpon per day and a limit of one tarpon tag per person per year was established.

OUTREACH AND EDUCATION SUBSECTION

The Outreach and Education subsection objective is to inform the public and increase public participation in the management and preservation of Florida's marine resources by heightening their awareness of and personal responsibility toward these resources.

Overall there were: (1) 60,356 outreach fishing event contacts; (2) 1,169 presentation and seminar contacts; (3) 13,726 email, telephone, mail outs and in-person contacts; and (4) 221,799 website contacts during fiscal year 2012-2013.

Nine Kids' Fishing Clinics (KFC) were conducted in coastal cities throughout Florida. A total of 2,470 children, 637 volunteers and an estimated 1,498 parents attended the KFC's. All participating children received a rod and reel combo provided by Fish Florida! or purchased with donations from individuals and businesses from the hosting community. Fishing vessel partners took 382 participants on fishing excursions to reinforce the Kids' Fishing Clinics curriculum.

Five *Ladies, Let's Go Fishing!* (LLGF) seminars were conducted in five locations. A total of 198 women participated. In addition to learning what FWC does to conserve fisheries resources in Florida, the participants at these events learned about how they can have a positive impact on Florida's marine resources and what they can do to promote fish conservation while fishing.

Four one-day events targeting 86 current and future female recreational anglers were conducted. These shore-based clinics focus on the Sport Fish Restoration Program, basic saltwater fishing skills (casting, knot tying, rods and reels, conservation equipment, terminal tackle, and lures/bait), how FWC functions to conserve marine fisheries resources (research, outreach, and management), catch-and-release techniques, and ways participants can support and be actively involved in the conservation of Florida's marine resources.

Twelve events were attended by 260 youth in the Cedar Key region. At these events the participants were provided with information about importance of marine habitats to coastal fisheries, how they as anglers can conserve fish resources and ways they can contribute to the overall enrichment of marine resources. The participants also conducted field sampling activities similar to what state biologists do to gather resource data for management.

A partnership with the International Game Fish Association (IGFA) and their community marine education and outreach efforts was continued by providing various FWC marine resource publications (*e.g. Fishing Lines* magazine) for participants in their education activities and Junior Angler tournaments. IGFA continues to incorporate specific aspects of FWC curricula (*e.g. Kids' Fishing Clinic* stations) into their educational activities.

Partnered with several other agencies and organizations to conduct environmental education projects aimed at marine resource conservation including: Mote Marine Laboratory, Florida Sea Grant and Florida Fish and Wildlife Research Institute.

Distributing FWC/SFR educational literature aimed at heightening citizen awareness of and personal responsibility for protecting Florida's marine resources. Educational information was distributed by fishing clubs, tackle shops, Florida state parks, Florida state aquatic preserves, fishing organizations (such as IGFA), National Estuarine Research Reserves, Florida Keys National Marine Sanctuary, Florida Sea Grant, International Game Fish Association and FWC field offices.

The following educational publications were made available to the public through numerous events. Most of these publications are also available online and, if so, the links to each publication are provided below.

- *Fishing Lines: An Angler's Guide to Florida's Marine Resources*
<http://www.myfwc.com/fishing/saltwater/publications/fishing-lines-magazine/>
- *Florida Recreational Saltwater Fishing Regulations (English and Spanish editions)*
<http://www.myfwc.com/fishing/saltwater/recreational/>
- *Fish ID Poster series by artist Diane Rome Peebles*

- *Sea Stats*
<http://research.myfwc.com/products/products.asp>
- *Catch and Release Techniques*
http://catchandrelease.org/Catch_and_Release_web.pdf
- *Florida Boater's Guides*
<http://research.myfwc.com/products/products.asp>
- *Kids Fishing Activity Book (Freshwater and Saltwater)*
http://myfwc.com/media/1316038/Fishing_Florida.pdf
- *Monofilament Recycling and Recovery Program*
<http://mrrp.myfwc.com/educational-materials.aspx>

In the Apalachee Bay/Apalachicola Bay region of the Florida Panhandle, staff interacted with anglers at boat ramps, tackle shops and other fishing related events to promote fisheries conservation, resource stewardship and the Sport Fish Restoration Program. This work included giving presentations at various fishing club meetings in the region. In the Cedar Key region (Big Bend area of Florida), Outreach and Education staff performed similar activities targeting anglers, which resulted in 1,537 anglers and other resource users on the coast of the Gulf of Mexico receiving information about marine fisheries conservation, SFR and habitat conservation. Staff responsible for this program conducted similar activities at other locations (and with other organizations) around the state, interacting with 77 current and future anglers. FWC staff also interacted with 2,330 stakeholders to promote Florida Fishing at the I-75 and I-95 Florida visitor centers.

Modified versions of Kids' Fishing Clinics called *Nature Coast Fishing for Youth* (formerly known as *1-2-3 FISH*) were conducted in Cedar Key during the summer months. Eight youth events were conducted with participation from 192 youth. The participants in these programs learned about the importance of marine habitats to coastal fisheries, how they as anglers can conserve fish resources, the basics of saltwater fishing, and ways they could reduce pollution while fishing. These events were partially supported by Fish Florida!, which provided rods, reels and tackle boxes to the participants.

Forty-three educational tours and 11 fishing events were conducted at the Florida Fish and Wildlife Conservation Commission's Stock Enhancement Research Facility. Five hundred and thirty-eight children and adults participated in these hands-on activities designed to increase their knowledge of marine fisheries conservation, ethical angling, and habitat preservation. Partnering organizations included The Florida Aquarium, Tampa Bay Watch, Anclote Key Anglers Club, Tampa Bay Fly Fishing Club, Manatee County Sheriff's Youth Ranch, the Florida Sheriff's Youth Ranch and the Make a Difference Fishing Tournament Foundation.

FWC staff worked with organizations and schools to showcase Florida's SFR programs through the established fish loan program. FWC loaned hatchery-raised red drum to Mote Marine Aquarium, Mote Aquaculture Park Environmental Learning Center, Houston Downtown Aquarium and Environmental Learning Center, Florida Oceanographic Society, Loggerhead Marine Life Center, The Pier Aquarium and FWC Tallahassee and Cedar Key labs. Staff also provided educational publications for public distribution at these locations. FWC loaned hatchery-raised juvenile fish to eight schools through the *Aquaculture in the Classroom* program. Educational materials on the fundamentals of marine aquaculture and fisheries enhancement were also provided to the schools. A total of 661 hatchery-bred fish were provided to these facilities.

COMMERCIAL AND RECREATIONAL REGULATORY OUTREACH

Through the efforts of this group, FWC will develop and distribute new informational tools, conduct presentations, and provide other services that are designed to improve the understanding of state and federal marine fisheries regulations and how they are changing over time.

The subsection, a team of three including a public information specialist, is currently developing new tools to make our management efforts easier to understand. One example is a new web-based and printable "Recreational Seasons Chart" that will allow the viewer to quickly determine which species are open or closed on any given day of the year. The team is also reaching out to recreational and commercial fishing organizations and charter boat captains, offering direct assistance with saltwater fishing regulations.

This subsection has taken the lead on the agency lionfish efforts. On Aug, 8 and 9, 2012, several members of the agency gathered to discuss future plans for controlling lionfish populations. Staff left this meeting with a focused agency message and plan. In April 2013, a photo contest via Twitter and Instagram was conducted where anyone who submitted a photo of their lionfish catch would receive a Lionfish Control Team t-shirt, created and designed by agency community relations staff. The contest was revealed via a live Twitter chat on March 28, the first of this kind of social media effort conducted by the agency. More than 30,000 Twitter accounts were reached during the chat. Participants used the #FWCLionfish to chat and to send photos to the FWC. During the chat, FWC posted facts, asked questions, answered questions and asked trivia for the chance to win a t-shirt. The photo contest officially started March 28 and ended April 30. During that time frame, 65 t-shirts were mailed out to participants. Staff is currently planning a lionfish symposium for October 2013. Staff also responded to at least 5 media calls a month in regards to the lionfish issue.

The 2012 Florida Legislature restored a reduction that was previously made in an attempt to lower FWC's operating costs and achieve a balanced budget state-wide. The restored funds allowed FWC to print and distribute copies of the recreational and commercial saltwater regulation magazines. The recreational publication was printed and shipped to license sales agents by Griffin Publishing and the commercial regulations were designed in-house and sent to all saltwater products license holders.

During state fiscal year 2012/2013, the FWC continued ongoing commercial and started recreational saltwater fisheries regulatory assistance activities.

Three commercial fisheries newsletters were prepared and a total of 45,000 newsletters were distributed by mail (also available on agency website). As many as 325,000 emails were prepared and sent, informing commercial license holders, law enforcement and commercial industry representatives of 35 agency press releases (also available on agency website). As many as 5,400 telephone calls related to commercial fisheries were received and answered and 7,200 emails related to commercial fisheries were received and answered. As many as 11,245 saltwater products license holders received the printed copy of the commercial regulations publication (also available on the agency website) thanks to Cummins.

Two editions (January and July) of the recreational regulation publication (550,000 each edition) were distributed to 2,000 license sales agents and FWC regional offices around Florida. The recreational regulatory position has given twelve presentations to fishing clubs, solved 1339 knowledgebase questions, and answered 1400 telephone and 1300 e-mail request.

Our public information specialist sends out, on average, 65 press releases each year on subjects including season openings and closures; Commission meeting updates; regulation changes; and events such as Kids' Fishing Clinics, Women's Fishing Clinics and Ladies, Let's Go Fishing! More than 150 media calls were responded to including calls from newspapers, local television stations, magazines, national television production companies, radio stations and more. Responses varied from supplying basic information to conducting live and recorded television and radio interviews.

Marine Fisheries is always involved in the agencies social media efforts, including helping craft posts and responses for Facebook and Twitter, providing photos for Flickr and video for YouTube. Three promotional videos were created with the assistance of the video editing team and FWRI staff on Ladies, Let's Go Fishing! (347 views since published Sept. 27, 2012); Kids' Fishing Clinics (84 views since published July 18, 2013); and how to remove a stone crab claw (13,120 views since published Oct. 9, 2012). These were featured on YouTube and on the MyFWC.com website.

ARTIFICIAL REEF PROGRAM

The primary program objectives are to provide financial and technical assistance to coastal local governments, nonprofit corporations and state universities to develop artificial reefs and to monitor and evaluate these reefs.

Over the spring and summer of 2013, nine artificial reef construction projects were completed in Florida utilizing funds from the U.S. Fish and Wildlife Service's Federal Sport Fish Restoration Program and managed by the FWC Artificial Reef Program with the Division of Marine Fisheries Management.

Five of the nine new artificial reef construction activities took place off the Atlantic Coast and four of the nine were off the Gulf Coast. Within the Atlantic Coast activities, two construction activities were off south central Florida (Martin and St. Lucie Counties), two construction activities occurred off northeast Florida (Flagler County and City of Jacksonville), and one construction activity took

place off southeast Florida (Palm Beach County). Within the Gulf Coast activities, one artificial reef construction activity took place in the Florida 'Panhandle' area (the City of Mexico Beach), two off the Florida Big Bend located off the mouth of the Suwannee River (Taylor and Dixie Counties), and one off of southwest Florida (Pinellas County). There were also five artificial reef monitoring projects under way in 2013. These various projects are summarized below.

Dixie County (Florida Big Bend, Gulf Coast)

Dixie County deployed 270 tons of limestone boulder and concrete culverts as nine patch reefs (approximately 30 tons each patch reef) within the Horseshoe Beach Artificial Reef permitted area. The deployments are located approximately 10 nautical miles on a west of Horseshoe Beach, Florida, at a depth of 22 feet.

The City of Jacksonville (Northeast Florida)

The City of Jacksonville deployed 800 tons of concrete bridge pieces and pilings at a depth of 75 feet within the Floyds Folly (FF) Artificial Reef Site. The materials were deployed as single cluster in a concentrated location with an estimated 644 square feet of bottom footprint and providing a relief of less than 20 feet. The deployment location is approximately 18.5 nautical miles southeast of the St. Johns River jetties at a depth of 75 feet.

The City of Mexico Beach (Northwest Florida)

The City of Mexico Beach deployed 52 concrete modular units distributed as 12 patch reefs across three permitted sites, with two to nine modules placed at each patch reef for an average of four modules per patch reef. Two of the 12 patch reefs accounting for 18 of the reef modules were placed within the Bell Shoals artificial reef site located 2.3 nautical miles on a bearing of 244 degrees from the Mexico Beach canal entrance. Five of the 12 patch reefs, consisting of 16 modules, were placed within the North Reef Site located 16.8 nautical miles on a bearing of 235° from the Mexico Beach Channel. And the final five of the 12 patch reefs, consisting of 18 modules, were placed within the Bridge Rubble Reef Site located 13.6 nautical miles on a bearing of 220° from the Mexico Beach Channel.

Palm Beach County (Southeast Florida)

Palm Beach County deployed 850 tons of limestone boulders at a depth of 35 feet within the Boynton Reef Inlet Artificial Reef Site. The 3 - 4 foot diameter limestone boulders were stacked at least two high for approximately 8 feet vertical profile. The patch reef is a single pile within the southern quadrant of the permitted area located approximately .5 nautical miles at a bearing of 36 degrees from the Boynton Inlet, at a depth of 35 feet.

Pinellas County (Southwest Florida Gulf Coast)

Pinellas County deployed a total of 100 concrete modules, with 50 modules placed in the Treasure Island II permitted area located 26.6 nautical miles west of John's Pass at a depth of 100 feet, and

50 modules placed in the Indian Shores Reef permitted area located 11.6 nautical miles southwest of Clearwater Pass at a depth of 42 feet.

St. Lucie County (South Central Florida East Coast)

St. Lucie County deployed 2,000 tons of concrete culverts, clean concrete railroad ties, concrete light poles, and concrete storm water basins and other concrete construction materials in two patch reefs, one within the St. Lucie County Site 3 at a depth of 100 feet located 11 nautical miles east of Fort Pierce Inlet, and the other within the St. Lucie County Site 4 at a depth 50 feet located 5.6 nautical miles east of Ft. Pierce Inlet.

Martin County (South Central Florida East Coast)

Martin County deployed about 2,000 tons of concrete culverts, clean concrete riprap and/or other concrete modular construction materials divided among four patch reefs. Each of the four patch reefs consists of concrete materials placed as a single pile (500 tons each) about 50 feet (15.2 m) apart from each other on the Donaldson Reef permitted area. The permitted site center is located approximately 4.4 nautical miles on a bearing of 50 degrees from St. Lucie Inlet. The total footprint from the southern edge of the south patch to the northern edge of the north patch, including the adjacent open sand bottom, is approximately 315 feet (96 m) wide by 318 feet (97 m) in length and encompassing approximately 2.3 acres.

Flagler County (Northeast Florida Coast)

Flagler County deployed 750 tons of concrete slabs, concrete pilings and concrete bridge materials at one location at a depth of 68 feet within the Flagler County Permit Site #3 Artificial Reef Site located 13.8 nautical miles to the southeast on a bearing of 103° from the center of the Matanzas Inlet Bridge, at a depth of 68 feet.

Taylor County (Florida Big Bend, Gulf Coast)

Taylor County deployed 120 prefabricated concrete cube modular artificial reef modules placed at 30 patch reefs of 4 cubes each about 200 feet apart in the NW corner of the Buckeye Reef. This reef site is located about 20.5 nautical miles on a bearing of 235 degrees from Marker #1 at the Keaton Beach navigational channel, at a depth of 48 feet.

Artificial Reef Monitoring Projects

The FWC Artificial Reef program is also funding the University of West Florida to conduct acoustic tracking of selected reef fishes associated with modular concrete and concrete and steel units located in 110-130 feet of water in federal waters within the Escambia East Large Area Artificial Reef Site, 15 nautical miles south of Pensacola Pass. Work began during winter 2012. The project is conducting a multidisciplinary, process-oriented study using an acoustic array of 16 Vemco VR2 receivers deployed in a defined pattern over a 22 kilometer squared area to continue work on the ecological function of small artificial reef patch reefs deployed by the FWC in 2003. Twenty-five reef fish will be tagged and tracked over a three-month period to produce three-

dimensional tracks of fish and estimate home ranges and factors effecting tagged fish. Results of this study will add to our knowledge of reef fish ecology on small-scale artificial reefs off the Florida Panhandle. The final report from this one-year monitoring effort is expected by November 2013.

The FWC Artificial Reef program is also funding the University of South Florida to conduct acoustic tracking to quantify the use of artificial reefs off of Pinellas County, Florida, across multiple spatial and temporal scales using acoustic remote sensing techniques. The research project will compare whether and how participant use of artificial reefs differs with nearby, paired natural reefs. Using visual fish census techniques, the University of South Florida will quantify the seasonal dynamics of fish communities on artificial and natural reefs and examine relationships with participant use. The final report for this two-year research project is expected by March 2015.

Funding is also being provided to Florida State University to conduct a study of the functional role of artificial reefs supporting the offshore migration of reef fishes off of Franklin County, Florida, in the Gulf of Mexico. Using side scan mapping and underwater video and video census techniques, Florida State University is identifying the faunal communities (i.e., fishes and macro-invertebrates), including their abundances and size distributions with particular attention on gag grouper, associated with artificial reefs compared to those on nearby, natural hardbottom habitats. Seasonal comparisons between the artificial and natural habitats are being conducted, and potential biotic (e.g., abundances of prey, competitors, and predators) and abiotic factors (e.g., structure type, relief, surrounding seascape) driving patterns identified are being examined. The final report for this two-year project is expected by June 2014.

The FWC Artificial Reef program is also providing funding to Nova Southeastern University to examine and monitor the effects of a system of artificial reefs (FDOT Reef) in Broward County, Florida, on the trophic interrelationships between artificial reef-associated fish assemblages and the surrounding soft-bottom infauna relative to a nearby natural reef. Although previous studies have examined macroinfauna in local waters (Dodge et al. 1989, 1995), this project is the first to investigate relationships between sediment assemblages and adjacent reefs and associated fish faunas anywhere in southeastern Florida. The grantee is employing multiple methods, including field and laboratory identification, stomach content identification and stable isotope analysis, to a range of faunal size classes to help assess the trophic contribution to the overall reef fishery productivity and enhancement. This monitoring project follows the evolution of an artificial reef and the associated infauna to help assess the changing trophic contribution of these organisms to the fish community. This is a two-year project, with the final report expected by February 2015.

The FWC and Escambia County continue annual sampling of legal-size recreationally targeted reef fish (red snapper, gray triggerfish, red and whitebone porgy, vermilion snapper, grouper) for PCB analysis (using skin-on lateral muscle tissue fillets) in compliance with requirements of the EPA risk-based PCB disposal permit for the ex-U.S.S. Oriskany (CVA-34), sunk as an artificial reef in 212 feet of water 22.5 nautical miles off Pensacola Pass on May 17, 2006. Between Dec. 14, 2006, and April 24, 2013, 11 reef fish sample collection events were completed. The 388 retained reef fish from the Oriskany Reef through sampling round 11 included eight reef fish species: 235 red snapper, 87 vermilion snapper, 28 red porgy, 15 whitebone porgy, 10 scamp grouper, five slipper lobster, three gray triggerfish, three gag grouper, one red grouper and one

bank sea bass. Some individual specimens of six of seven species during one or more of the first 10 sampling rounds (sample round 11 has not yet been analyzed) had one or more specimens whose total PCB concentrations exceeded the Florida Department of Health (FDOH) PCB screening level of 50 parts per billion and the EPA Tier 1 monitoring screening threshold of 20 parts per billion total PCBs.

Red snapper and vermilion snapper were the only two reef fish species providing enough information to evaluate mean total PCB concentration trends over the first 10 sampling rounds analyzed. During the first four sampling rounds, red snapper total PCB concentration means remained above both FDOH and EPA screening thresholds, spiking during sampling round two. By sampling round five, red snapper mean total PCB levels had declined below the FDOH threshold but remained above the EPA Tier 1 screening threshold. During sampling rounds six through 10, mean red snapper PCB concentration levels fell below both EPA and FDOH total PCB screening thresholds. Mean vermilion snapper levels remained consistently below FDOH and EPA screening levels from the time they became available for capture through round nine. The benthic invertivores red porgy and whitebone porgy continued through sampling round nine to have individual specimens with elevated PCB levels above EPA screening levels, or in some cases exceeding FDOH screening levels through sampling round eight. However, sample sizes were small for red and whitebone porgy and there was considerable variability in PCB concentrations among individual porgy specimens and in sampling round nine red and whitebone porgy sample results were below the FDOH but slightly above the EPA screening level. The highest recorded total PCB concentrations for any of the individual 254 Oriskany Reef PCB sampled fish were from red porgy (1,654.7 parts per billion (ppb) during sampling round four and 1,222.7 ppb in sampling round eight). These individual Oriskany Reef fish had total PCB levels 24 to 33 times higher than the FDOH screening level. Five legal size piscivorous grouper (scamp) from the Oriskany Reef have been analyzed to date with two of three captured in sampling round eight exceeding the FDOH screening threshold (highest concentrations 208.7 ppb and 94.1 ppb respectively), and one captured in sampling round eight exceeding the FDOH screening threshold (292 ppb). Additional scamp are pending analysis in sample round 11.

The downward trends of mean red snapper total PCB concentrations to below EPA and FDOH screening levels at the Oriskany Reef and the consistently low vermilion snapper mean PCB levels presently do not require any fish consumption advisory action to be taken. The remaining species (triggerfish, groupers, porgy) represent too few specimens sampled at the Oriskany Reef with too great a PCB variability among individuals of the same species to take any species.

Oriskany Reef sampling and monitoring will continue. Fifty-three reef fish specimens from sample round 10 were collected from the Oriskany Reef on April 24, 2013, (6.9 years post-deployment) are presently undergoing analysis with results expected by the end of 2013.

Additionally, 11 underwater visual assessments were conducted on the Oriskany Reef over the past few years by FWC divers, confirming that the observed recreationally targeted species found on the Oriskany are well represented among the fish retained for PCB analysis. Visual observations by FWC divers also documented that the Oriskany Reef had settled into the sediments about 10 feet at 2.5 years post-deployment and sustained minor structural change to the exterior covering

of the smoke stack at 3.5 years post-deployment following the tropical storm events of 2007 and 2008, respectively.

MONITORING COMPLIANCE WITH THE MARINE FISHERIES TRIP TICKET REPORTING REQUIREMENTS THROUGH AUDITS OF APPLICABLE FISH HOUSE RECORDS

Nine wholesale dealer audits have been conducted. Two additional audits were carried over from the prior year.

Research was conducted on reported landings from 30 wholesale dealers and 50 commercial saltwater harvesting licenses. Fifty percent of the research was related to requests from FWC staff. Twelve of those cases were FWC investigations of BP Gulf Coast and East Coast claims. The other fifty percent of research was requested by federal agencies (NOAA, US Fish & Wildlife and one case for Homeland Security).

One hundred ninety-three wholesale dealers received delinquent notices for failing to submit any trip tickets during a 90-day period.

Landings information submitted by two individuals for blue crab license requalification was found to be fraudulent.

The FWC auditor assisted in a NOAA case in which three individuals were sentenced for illegally harvesting lobster having a retail value of approximately \$660,000 dollars. The NOAA case resulted in the individuals being sentenced to a cumulative 25 months in jail and two years probation. One individual faces additional fines of up to \$250,000 dollars while another has been ordered to forfeit a vessel valued at \$40,000 dollars, along with a trailer and equipment.

ADMINISTRATIVE PENALTY ASSESSMENTS FOR VIOLATIONS OF SPECIFIED FISHERIES REGULATIONS

Florida Statutes specify administrative penalties and license suspensions for violations of specific fishery regulations.

Twenty-three administrative penalties were assessed in FY 2012-2013 for a total of \$96,000. Penalties paid totaled \$11,100. Sixteen of the administrative penalties (70%) were for net violations; two (9%) were for unlawful harvest, purchase, or sale of saltwater products; one (4%) penalty was for major blue crab violations; one (4%) penalty was for major stone crab violations; and three (13%) were for other major violations.

During the 2013-2013 fiscal year, the FWC received eight petitions requesting informal administrative proceedings, and two petitions requesting formal administrative hearings. Two petitions for informal administrative proceedings and one petition for a formal administrative hearing were dismissed. Four informal administrative hearings were conducted, and three informal administrative proceedings were conducted, where the petitioner elected the option to submit additional evidence for consideration in lieu of proceeding with an informal administrative

hearing. There were no formal administrative hearings conducted during the 2012-2013 fiscal year. One petition for an informal administrative hearing and one petition for a formal administrative hearing were resolved by settlement agreement.

RETRIEVAL OF LOST AND ABANDONED SPINY LOBSTER, STONE CRAB, AND BLUE CRAB TRAPS

The FWC has two programs dedicated to removing lost and abandoned traps from state waters. **The Spiny Lobster, Stone Crab and Blue Crab Trap Retrieval Program** contracts with commercial fishermen to remove lost and abandoned traps from state waters during closed seasons.

The **Derelict Trap and Trap Debris Removal Program** provides a mechanism to authorize volunteer groups to collect derelict traps and trap debris during open or closed seasons.

Blue crab, stone crab and spiny lobster have a number of trap restrictions and/or tagging requirements. Trap retrieval programs were conducted with revenues paid from fees received by these fisheries. During the 2012-2013 fiscal year, 45 trap retrieval trips were conducted (32 trips for stone crab and lobster; 13 trips for blue crab) where a total of 4,872 traps (4,425 stone crab and lobster traps; 447 blue crab traps) were retrieved for a total expenditure of \$119,989. Additionally, 11 authorizations were issued for volunteer derelict trap cleanup events, resulting in the removal of 268 traps (one cleanup event was canceled, and one event did not provide a report).

ISSUANCE OF SPECIAL ACTIVITY LICENSES

The marine fisheries special activity license program issues licenses for activities that require a waiver of marine fisheries regulations.

Two hundred forty-four Special Activity Licenses were issued, 79 license amendments were issued, seven applications were denied, and four applications were withdrawn. Forty-six percent (152) of the licenses issued or amended were for scientific research, 35 percent (116) were for education and or exhibition, and 12 percent (39) were for redfish catch, hold and release tournament exemption permits (the remainder were for stock collection and release (10), aquaculture brood stock collection (9), bonefish catch hold and release tournament exemption permits (4), gear innovation (3), and non-profit corporations (1)).

DIVISION OF HABITAT AND SPECIES CONSERVATION

Director: Thomas Eason

IMPERILED SPECIES MANAGEMENT

The Imperiled Species Management Section (ISM) in this Division is responsible for the planning and implementation of management activities directed toward the protection and recovery of manatees, right whales and five species of marine turtles. Marine turtle activities are funded from the Marine Resources Conservation Trust Fund. Manatee and right whale protection efforts are funded from the Save the Manatee Trust Fund.

Marine Turtles

The Imperiled Species Management Section (ISM) implements tasks from recovery plans for five species of marine turtles and provides recommendations to ensure compliance with the Florida Marine Turtle Protection Act (F.S. 379.2431 (1)) for state-authorized activities. The activities are focused in the following program areas.

1. Commenting on state- and federal-permitted activities to minimize negative impacts to marine turtles and their nesting habitat, including the development of innovative strategies such as regional, littoral cell-wide agreement for all beach management activities.
2. Provide permits to individuals, organizations and facilities that conduct research or conservation activities with marine turtles or keep captive marine turtles.
3. Assist local governments and the private sector in efforts to reduce impacts of lights and other disturbances on marine turtle nesting.
4. Conduct outreach activities to provide current information to the public and promote conservation stewardship.
5. Respond to unusual or catastrophic events that impact marine turtles or their habitats.
6. Participation in intra- and interagency teams to provide expertise on marine turtles, their nests and habitats.
7. Pursue funding opportunities such as development of decals, promote sales of the sea turtle license plate, or obtain grant funds to achieve program goals.

Accomplishments

- Development and implementation of an ~\$3,000,000 Early Restoration Project proposal focused on marine turtles and their nesting habitat for injuries due to activities during response efforts for the 2010 catastrophic Deepwater Horizon event. Staff also continued participation in Technical Working Groups (TWGs) for Natural Resource Damage Assessment (NRDA) planning. Staff is currently working with Franklin, Gulf and Escambia Counties and the City of Destin to provide approximately \$115,825 in funding to enhance local efforts to reduce the impact of lights on marine turtle nesting beaches.
- Participation in the development of the Department of Environmental Protection (DEP) inaugural Beach Management Agreement for beach restoration activities on the Island of Palm Beach.
- Participated in the coordination and streamlining of permit commenting, including revising existing commenting logs and developing standard conditions and best management practices to streamline the review process and ensure protection of marine turtles, their nests, hatchlings and nesting habitat as required under the Marine Turtle Protection Act (F.S. 379.2431 (1)).
- Provided input to the U.S. Fish and Wildlife Service and National Marine Fisheries Service designation of critical habitat for loggerhead sea turtles.

- Educational presentations at schools and meetings of local conservation groups, home owners associations, and other interested groups concerning marine turtles, lights and other impacts and display of the Sea Turtle Lighting Trailer educational display by request.
- Administered the Marine Turtle Permit Program and participated in a Rapid Process Improvement for the Marine Turtle Permit Program to better serve researchers working with marine turtles in Florida.
- Coordinated transfer and release of marine turtles during rehabilitation and supervised public sea turtle releases; identified and transferred non-releasable marine turtles to other countries and states for captive display to reduce pressure on Florida facilities with limited space to maintain these animals.
- Staff reviewed more than 350 applications or plans, including revisions, submitted to the Florida Department of Environmental Protection's (DEP) District Offices, DEP's Division of Water Resource Management, the Water Management (WMD) Districts and the State Clearing House. Projects reviewed included Coastal Construction Control Line applications, Environmental Resource Permit applications, and Joint Coastal Permit applications as well as DEP Clearing House reviews for federal projects to ensure authorized activities comply with Florida Statute 379.2431 (1).
- Participated in review of Department of Environmental Protection proposed rule revisions for Florida Statute 161 and 373 that could impact marine turtles, their nests, hatchlings and nesting habitat.
- Participated in more than 90 site inspections, including lighting inspections, as part of our environmental commenting responsibilities or at the invitation of local governments and property owners.
- Conducted public workshops at the request of local government commissions or staff.
- Participated in the following intra- and interagency teams, working groups, and committees: Archie Carr Sea Turtle Refuge Working Group, FWC's Coastal Wildlife Conservation Initiative, the FWC Permitting Team, and the Marine Turtle Grants Committee.
- Management of the marine turtle disorientation database.
- ISM co-hosted the 2013 Marine Turtle Permit Holder Workshop with the Sea Turtle Conservancy in Orlando for over 400 Marine Turtle Permit Holders, volunteers, local government, state and federal agency staff. This three-day event included presentations by agency management and research staff, conservation organizations and local governments, as well as summaries of Marine Turtle Grant projects and workshops focused on key issues.

- Provided educational materials concerning marine turtles including educational brochures, posters, rack cards and other information, including the creation and production of a colorful decal featuring a loggerhead sea turtle hatchling. This decal, number 22 of a series, was distributed to local tax collectors' offices across Florida.
- Oversight of the Wildlife Friendly Lighting Certification program for lighting companies to encourage development of products that meet the requirements to keep light low, long (wavelength) and shielded. Lights that meet certain specifications are featured on the FWC website as options for reducing impacts from artificial lights on marine turtles and other wildlife.

Manatees:

The Imperiled Species Management Section (ISM) implements the tasks of the Florida Manatee Recovery Plan and the newly approved state Manatee Management Plan (2007). The activities are focused in six program areas.

1. Development and implementation of county-based manatee protection plans (MPPs).
2. Promulgation of boat speed regulations to protect manatees.
3. Review of permitted activities to minimize negative impacts to manatees.
4. Various directed efforts to protect and enhance manatee habitat, particularly warm water refuges and sea grasses.
5. Outreach activities to provide current information to the public and promote conservation stewardship.
6. Stakeholder engagement to encourage participation and partnerships.

More details on the manatee program are available in the Save the Manatee Trust Fund Annual Report to the Legislature, which can be found at:

<http://www.myfwc.com/research/manatee/trust-fund/annual-reports/>

Highlights

- Duval County: Staff continues to work with the county and U.S. Fish and Wildlife Service staff to complete a final revised draft of the MPP. A complete draft is expected in fall of 2013 when it will be available for public review.
- Charlotte County: FWC continues its work with the County to draft an MPP. An initial draft is expected by late fall of 2013.
- Staff produced 340 comment letters for development projects reviewed during the year and offered recommendations to reduce or eliminate potential adverse impacts to manatee from the proposed activities. Several of the permit review efforts focused on maintenance and expansions of Florida ports. Implementation of the boat facility-siting portion of FWC approved MPPs is accomplished during the permit review process. Distribution of public

information about manatees is also accomplished through these comments, as facilities are required to post informational signs on manatees and distribute written materials to boat users. A brochure specifically designed for boaters was developed and is available for marina educational plans, called *A Boater's Guide to Living with Florida Manatees*.

- Flagler County (68C-22.028, FAC) – The proposed rule for coastal Flagler County was finalized last fiscal year, and was posted by March 2013.
- In advance of considering a potential rule for western Pinellas County staff completed data review and met with County staff to discuss the data analysis. Staff also met with boating and environmental stakeholders to discuss the data analysis and to learn about local concerns. Staff plans to meet with additional groups to share our data evaluation and collect local input.
- Structure Related Manatee Deaths have totaled 210 (since 1974) as a result of interactions with the numerous water control structures located on the state's waterways. The annual average structure related deaths pre-retrofitting has decreased from an average of 6.2 manatees/year (1974-2000) to a post-retrofitting average of 3.7 manatees/year (2001-2012). A milestone was reached this year when the Moore Haven Lock was retrofitted with a manatee protection device, completing the retrofitting of all known state or federal water control structures that have caused a manatee mortality. Overall, coordinated efforts are having a significant influence on reducing structure-caused mortality at retrofitted structures.

FWC is working with state's Water Management Districts in development of Minimum Flows and Levels (MFLs) for spring systems that provide warm-water habitat for manatees. MFLs for the following Gulf Coast springs, Manatee Springs, Fanning Springs and the Weeki Wachee Springs system have all been developed using criteria to protect winter warm-water manatee use. FWC is working with The Nature Conservancy and the U.S. Fish and Wildlife Service to identify and complete restoration and enhancement projects for Florida Gulf Coast springs systems that will improve manatee access to natural warm-water habitat at Salt Creek (Sarasota County) and Three Sisters Springs (Citrus County). FWC also worked with Mote Marine Lab to conduct an assessment of manatee warm-water habitat at Lithia Spring (Hillsborough County) and a final report on that investigation was completed in 2012.

- FWC worked with Florida Power and Light (FPL) to ensure that the interim warm-water refuges that are being used during the conversions of the Cape Canaveral and Riviera Beach power plants provided the necessary refuge to manatees. This was the last winter of a three winter conversion process at the FPL Cape Canaveral Energy Center. The conversion of the Cape Canaveral plant is complete and it is now generating electricity. This winter manatee use of the plant's thermal discharge and water temperatures in the warm-water refuge will be monitored to document any changes in the warm-water refuge or in manatee behavior. At the FPL Riviera Beach Energy Center the conversion is entering its last winter, and at the Port Everglades plant this will be the first full winter with an interim heating system. At each of these plants, manatee distribution data will be collected via aerial surveys and manatee movement data will be collected from satellite tagged

manatees at Port Everglades. These data will provide information regarding how manatees responded to the changes in warm water availability in southeast Florida during the winter cold season. In addition, daily health assessments at the interim warm-water refuges will be conducted to monitor manatees for cold-stress symptoms.

- Educational activities for manatee conservation included the distribution of brochures and other informational materials to local governments, stakeholders, conservation groups, marinas, schools, libraries, and the general public. Staff responded to 143 requests for printed materials. The “Ask FWC” service on the agency’s website generated 6,500 hits for manatee related questions. FWC responded directly to 71 online requests. In keeping up with today’s social networks, staff worked with the agency’s Community Relations Office to conduct a month-long social media manatee awareness campaign during Manatee Awareness Month (November). The campaign included a photo share promotion that encouraged the public to submit personal manatee images to the agency along with permission to use the images for educational purposes as needed.

Aquatic Habitat Conservation and Restoration

The Marine and Estuarine Subsection (MES) of the Aquatic Habitat Conservation and Restoration Section is responsible for the FWC’s coordinated management of marine and estuarine habitat in Florida waters. This subsection is staffed by regional biologists that work around the state with partners to develop and implement conservation projects, such as marine habitat restoration efforts, which support healthy marine fisheries. MES activities are supported by the state Marine Resources Conservation Trust Fund, and through various federal grant programs for specific habitat restoration efforts.

Marine and Estuarine Conservation through MES

The strategic actions of the marine and estuarine habitat program revolve around collaboration with other agencies, partners, and stakeholders to support marine habitat conservation activities. These actions revolve around five central goals:

1. Restoration and enhancement of the quality and quantity of marine and estuarine habitats.
2. Conservation and maintenance of intact native estuarine and marine habitats and their ecological functions.
3. Protection of Florida’s native estuarine and marine habitats and their functions within respective ecosystems from degradation.
4. Influence marine and estuarine habitat management through proactive coordination and participation with partners.
5. Support marine and estuarine habitat restoration, conservation, and protection activities.

Accomplishments

- FWC northwest regional biologists refined and developed phase I planning for an oyster and seagrass restoration project in West Bay (St. Andrews Bay-Panama City) to restore a seagrass community lost to the combined effects of shrimp farming and municipal waste

disposal. The project will use a series of oyster reefs of about 10 acres in area located on the historic deep seagrass bed edges to anchor sediments that currently suspend during periods of wave activity and cause light limitations in the water column. Combined with appropriate seagrass transplantation, this project will restore as much as 2,000 acres of seagrass historically found in West Bay. The resulting oyster reefs will enhance habitat for important fish species such as red drum, spotted seatrout, and gray snapper, and will support endangered species such as Kemp's ridley sea turtles.

- FWC had initiated a 3 acre living shoreline oyster and saltmarsh enhancement project in coordination with the Florida State University Marine Laboratory (FSUML) at Turkey Point. This project will enhance existing oyster reefs, augment saltmarsh habitat and improve shorebird nesting habitat on FSUML lands, and will be used by research and outreach coordinators well into the future.
- FWC worked with TNC, USFWS, NOAA and regional and local governments to develop coordinated and prioritized watershed-level conservation projects related to RESTORE Act activities in waters from Franklin to Escambia Counties. This effort will result in a comprehensive priority list of aquatic habitat conservation efforts supported by regional partners and directed toward a significant funding source for the conservation and restoration of estuarine marine habitats in coastal northwest Florida.
- FWC staff conducted an eighth season of integrated seagrass monitoring in the Big Bend region of Florida as part of a long-term seagrass health assessment effort. This monitoring effort has continued for a number of years, and has been incorporated into an comprehensive "Seagrass Integrated Monitoring and Mapping (SIMM)" report available at: <http://myfwc.com/research/habitat/seagrasses/publications/simm-report-1/>
- This monitoring effort is designed to assess changes in seagrass system health over a broad area of highly productive habitat in the northeastern Gulf of Mexico, and report the findings to managers and the public.

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
Adam H. Putnam, Commissioner

DIVISION OF AQUACULTURE
Director: Kal Knickerbocker

The Division of Aquaculture conducts numerous activities to promote the development of aquaculture and ensure the quality of aquaculture and shellfish products in Florida. These activities include regulatory, administrative, advisory, and technical functions directed toward ensuring that aquaculture operations are compatible with the Florida Aquaculture Plan, Aquaculture Certification Program, best management practices, resource management goals, and public health protection. The Division provides several primary service programs to support aquaculture and shellfish resource development:

- 1) Aquaculture Certification Program;

- 2) Sovereignty Submerged Lands Aquaculture Leasing Program;
- 3) Oyster Culture and Shellfish Resource Development Program;
- 4) Shellfish Sanitation;
- 5) Shellfish Environmental Assessment; and
- 6) Technical Support Program (Ombudsman, training, technical outreach, grants).

The Division has been very progressive in its support of aquacultural development as a practical alternative to commercial fishing and conventional agriculture to foster economic development in rural and coastal communities. The Division's programs offer unique and essential services to this emerging sector of Florida's agriculture community. These programs provide the regulatory framework for aquacultural operations and public health protection, provide specific farming areas on state-owned submerged lands, and provide responsible stewardship for Florida's natural aquatic resources.

During FY 2012/2013, the Division continued its commitment to encourage the development of the aquaculture and shellfish industries in Florida. This commitment is based on the belief that aquaculture will become an integral segment of Florida's agricultural and economic future by providing high quality aquacultural products to worldwide markets while advancing resource management.

The following is a summary of the activities related to aquaculture and shellfish industry regulation and development carried out during fiscal year 2012/2013.

Aquaculture Certification Program

Chapter 597, Florida Statutes (F.S.) established the Aquaculture Certificate of Registration to recognize aquafarming businesses. Aquacultural businesses in Florida are required to be certified annually and to attest that they will comply with the Best Management Practices provided in Chapter 5L-3, Florida Administrative Code (F.A.C.). The aquaculture certificate is used to identify aquaculture producers as members of Florida's agricultural community and to identify aquacultural products produced in the state.

The Aquaculture Certificate of Registration is linked to the Best Management Practices Program. Best Management Practices have been established by and for the aquaculture industry and represent the most appropriate and practical framework for Florida's diverse aquaculture businesses. More than 1,100 site inspections are conducted at aquaculture facilities to ensure compliance with Aquaculture Best Management Practices and state and local regulations. Staff is trained to provide a standardized evaluation, provide the aquaculturist with applicable industry updates and act as a resource for the aquaculture industry.

The Division certified 962 aquaculture facilities during FY 2012/2013. Shellfish producers (354 farmers) make up 37% of the certified farms, 273 food fish producers make up 28% of the certified farms, 189 ornamental producers make up 20% of the certified farms, with the remaining producing live rock, alligators, and bait. Certified farms are found in 61 of the state's 67 counties: with the highest number of certified farms occurring in Levy County (17%) and Hillsborough County (8%).

Sovereignty Submerged Lands Aquaculture Leasing Program

The Division is responsible for the Aquaculture Lease Program under the provisions in Chapter 253, F.S. During FY 2012/2013, the Division administered 475 aquaculture leases containing about 1,106 acres and 56 shellfish leases containing about 999 acres. Aquaculture and shellfish leases are located in 16 counties, including: Bay, Brevard, Charlotte, Collier, Dixie, Franklin, Indian River, Lee, Levy, Manatee, Monroe, Palm Beach, Pinellas, Santa Rosa, St. Johns and Volusia Counties. In response to its statutory mandate, the Division identifies tracts of submerged lands throughout the state that are suitable for aquacultural development. Twenty special aquaculture use areas have been identified by the Division and authorized by the Board of Trustees in nine coastal counties.

Unlike many upland agricultural ventures that are conducted on privately-held lands, marine aquaculture must be conducted on or over submerged lands that are largely held in the public domain. Since only an insignificant amount of suitable submerged acreage is privately owned, marine aquafarmers are uniquely dependent upon the use of public lands to grow their crops. Accordingly, the Department must act on behalf of the Governor and Cabinet to administer and manage these public lands in the best interest of the people of Florida, including protecting valuable natural resources.

Late in 2013, the Board of Trustees approved two modified lease agreements for floating oyster cages in Alligator Harbor. Utilization of the full water column allows aquaculturists to place oysters in the nutrient dense upper layer of the water column and offers protection from common predators.

The Aquaculture Lease Program supports marine aquaculture in a very unique way, and producing hard clams on sovereignty submerged lands is the largest marine aquaculture business in Florida. The most recent sales and value survey of hard clam farmers reported that 136.3 million clams were sold during 2012.

Shellfish Sanitation and Environmental Assessment Programs

A total of 39 shellfish harvesting areas totaling 1,445,833 acres are currently classified and managed statewide. During FY 2012/2013, 481 sampling excursions were conducted to collect and analyze 10,588 water samples for fecal coliform bacteria. There were 358 management actions to close or re-open shellfish harvesting areas in accordance with the management plans for individual shellfish harvesting areas. During FY 2012/2013, a total of 87 Shellfish Processing Plant Certification Licenses were issued and 313 regulatory processing plant inspections were conducted. Based on inspection results, 31 warning letters and two settlement agreements were issued.

Oyster Culture and Shellfish Resource Development Program

Under the mandate to improve, enlarge and protect the oyster and clam resources of the state, the Division is actively engaged in enhancing shellfish resources and restoring oyster reefs on public submerged lands. During FY 2012/2013, the Division collected 120,744 bushels of processed oyster shell from processors located primarily in Franklin County and collected 24,624 bushels of clam shell from processors in Cedar Key. Shell planting operations accounted for the deposition of 8,292 cubic yards of processed and fossil shell on public oyster reefs in Bay, Franklin, Levy and Santa Rosa

Counties. Oyster resource development projects involving the relaying and transplanting of live oysters were conducted in cooperation with local oystermen's associations in three coastal counties. A total of 92,796 bushels of live oysters were re-planted on public reefs in Dixie, Levy and Wakulla Counties.

In 2006, the Department entered into a subcontract agreement with the Gulf States Marine Fisheries Commission (through NOAA) to restore oyster reefs adversely affected by hurricanes under the Emergency Disaster Recovery Program (EDRP). The grant subcontract agreements were extended several times with a firm ending date of Sept. 30, 2013. The \$4.2 million contract provides for three project components: 1) restoring public oyster reefs, 2) providing economic assistance to oyster farmers, and 3) developing a scientific model to assess the success of oyster reef restoration efforts in the Pensacola Bay system. In 2012/2013, the Division began winding down the restoration activities to coincide with the remaining funds and grant deadline. Oyster reef restoration operations accounted for the deposition of 8,292 cubic yards of substrate materials on public oyster reefs in some of Florida's most productive estuaries.

Technical Support Programs

Providing technical assistance to the aquaculture and shellfish industries is an important role of the Division. Staff provides substantial technical and administrative support for aquacultural and shellfish operations through site visits, compliance inspections, technical meetings, conferences, workshops and outreach projects. Staff provides guidance to aquaculture businesses to ensure compliance with Aquaculture Best Management Practices and other state and local regulations.

Apalachicola Bay Oyster Harvesting License

An oyster harvesting license is required to harvest oysters from Apalachicola Bay. In FY 2012/2013, 1,790 oyster harvesting licenses were sold, representing a 12 percent decline in the number of licenses sold in the preceding year. License sales continue to demonstrate a large number of fishers remaining in the fishery, although the number of license holders has declined from a high 1,909 in 2010.

Alabama – **C. Blankenship** presented a report on behalf of the Alabama Department of Conservation and Natural Resources, Marine Resource Division (AMRD).

Fisheries Section

The Alabama Marine Resources Division (AMRD) finalized plans for renovations to the boat basin and recently acquired property at the Claude Petet Mariculture Center (CPMC) in Gulf Shores. The bidding process has been initiated and is expected to be completed during the Fall of 2013. Renovation plans include the installation of 4 boat slips with lifts, a boat ramp, new docks, and seawalls; the recently acquired property will be used as a staging area for reef material.

Construction of a new laboratory and office facility located at CPMC has been completed. The laboratory encompasses approximately 23,000 square feet and houses hatchery rearing tanks and equipment; AMRD staff is currently installing the hatchery equipment. Funding for construction activities are derived from the Coastal Impact Assistance Program (CIAP) and the Gulf of Mexico

Energy Security Act of 2006 (GOMESA). Hatchery equipment for the lab was acquired using Emergency Disaster Recovery Program (EDRP) funds.

Shell planting was conducted in July in Portersville Bay. Approximately 4,700 cubic yards of cultch material was placed on 50 acres utilizing funds from a court settlement concerning the wastewater overflows from the City of Bayou LA Batre. Funds for this project were also obtained from the National Fish and Wildlife Foundation. The success of this plant has not been evaluated. AMRD is tentatively set to receive \$3.2 million for oyster restoration from the NRDA process.

SEAMAP operations continued with trawl, vertical and bottom long line work during 2013. Two summer SEAMAP Shrimp/Groundfish cruises were conducted. A fall cruise is scheduled for late October or November. Vertical line surveys were conducted in May and September, with all stations being completed. Only six bottom longline cruises were conducted this year; sampling trips during April and October were omitted due to funding decreases.

AMRD participated in the Mississippi Bight Lionfish Response Unit (MBLRU) along with the Mississippi Department of Marine Resources, Gulf States Marine Fisheries Commission, National Parks Service, and U.S. Fish and Wildlife Service. During MBLRU operations, AMRD conducted 18 SCUBA surveys totaling 138 minutes of bottom time at depths ranging from 37' to 129'. A total of 34 lionfish were collected while conducting MBLRU SCUBA surveys on a variety of hard-bottom habitats (natural limestone rock outcroppings, barges/steel ships, reef pyramids, army tanks, and 1 bridge span).

AMRD's turtle excluder device (TED) study for skimmer trawls is still awaiting changes in the TED design from NMFS. Potentially the study may resume in the spring of 2014

AMRD continued the State's Fishery-independent Assessment and Monitoring Program (FAMP) by collecting up to 44 samples each month using a 16' shrimp trawl, beam plankton trawl, 50' seine, and water quality meter. The gillnet sampling target remains at 240 sets per year.

The Biological Sampling program was continued during 2013. A total of 607 recreational samples and 173 commercial samples were collected from January 1, 2013 through August 31, 2013. Targets for 6 species (black drum, Gulf flounder, commercial king mackerel, sheepshead, spotted seatrout, and vermillion snapper) have been met or exceeded. Samplers collected additional weights and measurements from recreationally caught fish where target numbers had been exceeded. Samples from 2013 are being processed.

From March 1, 2013 through August 31, 2013, MRIP interviewers collected a total of 1,368 interviews: 492 in SH mode, 227 in CH mode, and 649 in PR mode. In March 2013, samplers were tested in fish identification skills. Throughout this time period, samplers received ongoing training and malfunctioning/missing field equipment was replaced.

AMRD continues to register anglers in the Angler Registry Program. AMRD continues to publicize the Registry through posters and business cards displayed and handed out at public fishing access sites. Exempted individuals such as lifetime license holders and residents over the age of 64 are required to register annually at no cost to them.

AMRD continues to diversify and improve its artificial reef program off shore of Alabama. Two hundred and twenty (220) pyramid reefs and 34 low-relief anchored reefs were deployed in the newly established R. Vernon Minton nearshore reef zones off of Baldwin County during April and May 2013. Thirty (30) large pyramid reefs were deployed in the offshore general reef permit areas in July 2013. These unique pyramid reefs with 25' of vertical relief were deployed in pairs and in multiple single-file lines to create several "ship-effect" reef complexes. A 70' steel supply vessel was deployed in one of the general offshore reef permit areas in March 2013. AMRD successfully coordinated with the Alabama Gulf Coast Reef and Restoration Foundation for the reefing of a 270' coastal freighter with 55' of vertical relief.

AMRD continues to expand its inshore reef program by acquiring U.S. Army Corps of Engineers (USACE) permits to construct and enhance numerous inshore reefs. AMRD has been issued USACE permits to construct 3 new reefs in the Mississippi Sound (construction completed in July 2013), 1 new reef in Weeks Bay, and deploy additional reefing materials at 27 previously constructed reefs.

Renovations to AMRD's Cotton Bayou boat ramp have been completed. Renovations included the replacement of existing launching and docking facilities.

Enforcement Section

From March 1, 2013 to August 30, 2013, AMRD enforcement officers conducted 1,694 commercial fishermen intercepts, 8,361 recreational fishermen intercepts, 6,773 patrol hours, and 3,289 vessel boardings.

AMRD officers participated in joint dive operations with division biologist to assist with lionfish research and eradication.

AMRD officers have been conducting joint investigations with NOAA/OLE regarding Gulf Reef fish resulting in an arrest and seizure of approximately 1,000 lbs of unreported red snapper. Officers are continuing to work with other states and NOAA/OLE on multi-jurisdictional cases.

Enforcement hired an additional 3 officers bringing the total to 15 for the Division.

AMRD received a Port Security Grant to expand the Alabama's Coastal Remote Monitoring program comprised of a series of closed-circuit cameras used for SAR, Port Security and fisheries enforcement. The work is complete on the installation of 5 new camera locations bringing the total to 19. Two cameras utilize solar and wind power.

AMRD instituted changes to state fishing regulations to maintain consistency with federal regulations. Greater hammerhead, Scalloped hammerhead, and Smooth hammerhead sharks now have a 78" fork length and Silky shark is a prohibited species without the fisherman possessing a federal Atlantic commercial shark permit. Alabama state waters will also open and close to the taking and possession of shark by individual species congruent to the federal openings and closings. Gray triggerfish were changed to a possession limit of 2 per person recreationally and 12 per vessel commercially.

AMRD Oil Spill Response and Activities

AMRD, in conjunction with the Alabama Department of Public Health (ADPH) and the Alabama Department of Agriculture and Industries (ADAI), continued the 3-year seafood tissue testing program. The testing program is broken down into 2 projects: (1) Direct Sampling Effort Project and (2) Dealer/Processor Sampling Project. Both programs are testing polycyclic aromatic hydrocarbons (PAH) levels using the LC-Florescence method, dispersants and key heavy metals. The Direct Sampling Effort Project, operated by AMRD and ADPH, is testing seafoods collected directly from Alabama waters or reef zones. The Dealer/Processor Sampling Project, operated by ADAI, is testing seafoods obtained from processors and dealers regardless of harvest location. The results of this program will be distributed to the public. AMRD has submitted a total of 982 composite samples for testing; all results have been returned as being below the FDA's level of concern. This multi-agency program is administered by AMRD.

Alabama continued a seafood promotional campaign under the direction of the Alabama Seafood Marketing Commission. The Alabama Seafood Marketing Program consists of public relations, television commercials, print ads and articles, radio ads, billboards, speaking appearances, distribution of marketing materials, sponsorships of events and participation at community festivals and chef events. The website eatalabamaseafood.com has been developed and has received rave reviews from the public. The program to date has been very successful. The Seafood Marketing Program is managed by AMRD.

AMRD continues to participate in the Natural Resources Damage Assessment program.

Mississippi – **D. Diaz** presented the report on behalf of the Mississippi Department of Marine Resources (DMR).

Shrimp and Crab Bureau

Mississippi territorial waters opened to shrimping at 6:00 a.m. on June 11, 2013. An aerial survey counted 250 boats trawling in the Mississippi Sound on opening day. Preliminary reports for the 2013-2014 season show decreased landings from 2012, most likely due to springtime conditions being less than favorable for shrimp growth caused in part by above average rainfall. Since the season opened, there have been a total of 8 confirmed tiger shrimp (*Penaeus monodon*) caught in the Mississippi Sound. Live bait shrimp inspections for the 2013-2014 license season included the licensing of 15 live bait dealers, 12 live bait vessels and 7 live bait transport vehicles.

The 2013 Mississippi Shrimp Newsletter was compiled and mailed to resident commercial shrimpers. The newsletter included information on: grant and marketing opportunities, training opportunities, USCG vessel safety requirements, NOAA fishery bulletins, submerged pipeline exposures, seafood safety testing, Mississippi trip ticket program updates, as well as environmental conditions influencing shrimp abundance. The newsletter is available on the MDMR website at www.dmr.ms.gov.

The Mississippi Seafood Safety Newsletter continues to be updated online at MDMR's website. This report contains a summary of the on-going efforts and results of the data that the Office of Marine Fisheries has been gathering in cooperation with the Mississippi Department of Environmental Quality (MDEQ) to ensure that Mississippi seafood is free of polycyclic aromatic hydrocarbons (PAHs) and safe for consumption. To date, none of the 605 samples analyzed have been found to contain PAH concentrations above the FDA levels of concern.

The Office of Marine Fisheries and partners held a free public science seminar on March 12, 2013 titled "Mississippi Artificial Reefs". The seminar was the tenth part of an ongoing series aimed at enhancing familiarity between interested groups and increasing awareness of the programs and opportunities that are relevant to marine research in Mississippi waters. Prior seminars in the series included: Oyster Resource Management and Associated Environmental Monitoring, Hypoxia, Harmful Algal Blooms, MS Coastal Invasive Species, Mississippi Living Shorelines, Gentle Giants of Mississippi and the Northern Gulf, Spotted Seatrout in Mississippi and Marsh Dwellers.

Since March 21st, there have been a total of 424 documented Mississippi sea turtle strandings. Shrimp and Crab Bureau Staff have conducted twice-monthly aerial surveys of vessel activity in Mississippi waters. There have been 55 surveys to date. This monitoring is being implemented as a precaution to help correlate any type vessel interactions that may possibly be occurring, as mass spring strandings were evident from 2010 to 2012.

Artificial Reef Bureau

The Artificial Reef Bureau (AR) monitored fish assemblages on selected inshore reef sites. Staff continued to stockpile reef material at the Gulfport staging site for future offshore and inshore reef developments. AR Staff finished the second phase of the National Resources Damage Assessment (NRDA) Program: Mississippi Artificial Reef Habitat Restoration Project. This project consists of deploying limestone on 47 of Mississippi's inshore reefs. Staff also began the second phase of the NRDA Program: Mississippi Oyster Cultch Early Restoration Project. This project consists of post deployment side scanning of oyster reefs.

AR staff teamed up with Gulf Islands National Seashore on two dives associated with the Mississippi Bight Lionfish Response Unit (MBLRU). AR staff along with members from AquaGreen, Inc., released approximately 2,700 juvenile Florida Pompano on East Ship Island.

Finfish Bureau

The Finfish Bureau continued to oversee the Marine Recreational Information Program (MRIP) during this time period. All assignments were completed and surveys obtained were reviewed and processed. Site effort estimates continue to be refined in an effort to improve the accuracy of the survey. Otoliths were collected and processed for species selected for the biological sampling program. The ages collected through this process will aid in upcoming stock assessments and management decisions for our state.

In late 2011, the Mississippi Commission of Marine Resources (MCMR) approved a motion to implement a trip ticket program for commercial fisheries in Mississippi. Seafood dealers,

processors and commercial fishermen were sent a letter describing the program and requesting that they come to the MDMR office to receive the Trip Ticket Program manual and trip tickets. We have received excellent cooperation from our dealers, processors, and fishermen through this process and are working closely with them to improve this program. Trip tickets may be reported electronically by computer or manually by filling out a paper trip ticket.

Twelve recreational fishing records were accepted for conventional tackle and fly fishing tackle from April 1, 2013 to September 30, 2013. These included:

- Atlantic Spadefish (*Chaetodipterus faber*) 9 lbs. 8.0 oz.
- Spotted Seatrout (*Cynoscion nebulosus*) 10 lbs. 10 oz.
- Atlantic Sharpnose Shark (*Rhizoprionodon terranova*) 15 lbs. 4.6 oz.
- Lookdown (*Selene vomer*) 3 lbs. 0 oz.
- Gray Snapper (*Lutjanus griseus*) 14 lbs. 7 oz.
- Skipjack Tuna (*Euthynnus pelamis*) 29 lbs. 11 oz.
- Gafftopsail Catfish (*Bagre marinus*) 4 lbs. 10 oz.
- Bearded Brotula (*Brotula barbata*) 17 lbs. 8 oz.
- Horse-Eye Jack (*Caranx latus*) 25 lbs. 5 oz.
- Gulf Toadfish (*Opsanus beta*) 2 lbs. 3.2 oz.
- Atlantic Bumper (*Chloroscombrus chrysurus*) 0 lbs. 3.45 oz.
- Bull Shark (*Carcharhinus leucas*) 164 lbs. 6oz.

Shellfish Bureau

On September 17th, the MCMR granted the MDMR Executive Director the authority to open oyster season for tonging on September 30th and for dredging on October 14th, 2013. Daily sack limits will be set at 12 sacks for tonging and 20 sacks for dredging. With limited oyster resources available, the dredging season will most likely be abbreviated.

Due to the potential ephemeral nature of oyster populations from natural and anthropogenic influences, the Shellfish Bureau is dedicated to the assessment and evaluation of the Mississippi oyster reefs in a spatial and temporal concept. This program utilizes quantitative measurements of stocks using one-minute oyster dredge tows, twice monthly phytoplankton tows and quarterly Dermo samples along with other techniques. As part of the continuing routine oyster reef monitoring protocol, numerous oyster reef sites were sampled and evaluated to determine the condition of the oyster reefs. The oyster tonging grounds were open for harvest in April and May on a limited basis due to rainfall events exceeding management plan criteria. A total of 3,585 sacks were harvested over 336 boat trips during this time.

Shellfish Bureau personnel along with the MDEQ have completed the early Oyster Reef Restoration Project. This project was funded through the Natural Resource Damage Assessment Program. A total of 1,230 acres of oyster reefs located in the western Mississippi Sound have been planted with 140,807 cubic yards of limestone and oyster shells. Additional cultch plantings were deployed in St. Louis Bay and Biloxi Bay with 3,584 cubic yards of oyster shell. These shell deployments were funded by a grant from the Fish America Foundation. The timing for these deployments coincides with prime historical oyster spawning peak for optimal oyster larvae

recruitment. This project is designed to mitigate potential damage of the oyster reefs due to the *Deepwater Horizon Oil Spill* of April, 2010, and to enhance existing reefs. Evaluation of the reefs has commenced using sidescan sonar and one-minute dredge tows.

Shellfish Bureau Staff have been diligently working on a book titled “The Oystermen’s Guide to Mississippi Gulf Coast Oyster Reefs”. The book consists of several helpful topics including: oyster reef locations, rules and regulations for harvesting oysters in MS waters, enhancing and protecting oyster reefs, predators and threats, etc. This publication is part of the Oyster Stewardship Program which is funded by the Emergency Disaster Recovery Program. It will be distributed to Mississippi oyster license holders beginning October 1st and is available for view on the MDMR website.

Staff utilized the R/V Conservationist to cultivate oyster reefs in the Pass Christian, Henderson Point and Biloxi Bay areas during the spring months. During cultivation, 3 commercial size bagless oyster dredges are towed across the oyster reefs exposing oyster shells that have been silted over, and reducing hooked mussels. The purpose of this program is to provide clean oyster shell substrate for optimal oyster larvae recruitment during the spring spawning events in late April through June. The Deer Island Restoration Project has continued construction to secure the east island shoreline with over 3,000 oyster shell bags being deployed during June. During the month of July, 60 rolls of poultry netting were ordered to create 3,000 bags and several volunteers were recruited for cutting the wire and sewing the bags together. These bags will be loaded with oyster shell and deployed to the east end of Deer Island for shoreline restoration.

Seafood Technology Bureau

The Seafood Technology Bureau certified 5 new seafood dealers and conducted recertification for 53 current seafood dealers during the months of April through September. Staff continued to conduct bi-annual water sampling of water source for Mississippi certified seafood processing plants.

Staff training included: Plant Standardization and “Train-the-Trainer” Basic Seafood Hazard Analysis and Critical Control Points. Staff also conducted free training courses for the members of the Mississippi Seafood Industry including: four sessions of ‘ServSafe’ managerial training for a total of 100 participants and one session of Basic Seafood HACCP training for 42 participants. These trainings were funded by the Emergency Disaster Recovery Program.

Marine Patrol

Marine Patrol Officers spent a total of 1,443 hours employed during the months of April – August, 2013. Of these hours, 435 hours were spent at sea. Officers made 97 patrols on the water and there were 1,359 contacts made during these patrols. Of these contacts, officers issued 56 citations for various offenses.

C. Blankenship commented that the Oyster Guide was very interesting with very good information. **D. Diaz** stated the staff worked very hard to put this together in a couple months and the users really like it too. This was a team effort using EDRP funding. **K. Lucas** stated **D. Diaz**

is retiring on October 31, 2013 and she congratulated him on retiring and thanked him for his service to DMR and GSMFC. All of the Commissioners thanked him for his time served on the Commission.

Louisiana

M Schexnayder reported they are still awaiting legal guidance and the Commission should receive a written report soon. He said it will state they continue to seek flexibility in management of Louisiana's federally shared resources. **B. Allain** stated in the legislature this year, they were successful in passing an amendment to be put on the ballot to put the Artificial Reef Program, the Rigs to Reef Program, actually into Louisiana's constitution to protect its funding, and to protect it's mission. That will be in front of Louisiana voters in November 2014. The state feels it is that important to put it into their constitution.

Texas

R. Riechers presented a report on behalf of the Texas Parks and Wildlife Department (TPWD).

REGULATORY ISSUES

Texas 83rd Legislature's Regular Session

HB3279, relating to uprooting of seagrass, passed. Under this bill's provisions, an individual may not uproot or dig out any rooted seagrass through the use of a propeller unless the individual has been issued a commercial license or permit issued by the Texas Parks and Wildlife Department (TPWD). Violation of bill provisions would be a Class C Parks and Wildlife misdemeanor, punishable by a \$500 fine. Electric trolling motors are exempt from this regulation. The bill took effect on 1 September 2013.

House Bill 1903, regarding a cap on oyster sack fees, passed. This bill re-allocates a portion of the \$0.33 per sack fee paid by oyster dealers to help cover water sampling costs by the Department of State Health Services to fund laboratory testing by Texas A&M University-Galveston of post-harvest processed oysters. Signed by the governor on 6/14/13, this law went into effect on 1 September 2013 and provides \$100K to TAMUG for conducting laboratory testing.

Kemp's Ridley sea turtle became the official state sea turtle of Texas when Governor James Richard "Rick" Perry signed House Concurrent Resolution No. 31 on 10 May 2013.

Regulatory Changes and Proposals

An amendment was approved to create a new definition for "residence." The intent of the previous definition of "permanent residence" was to prevent the use of temporary accommodations as final destinations for purposes of avoiding compliance with possession limits and documentation requirements. TPWD recognizes a person may maintain more than one residence and should not be required to return to his or her domicile with a daily bag or possession limit. Therefore, TPWD determined the previous rule was unintentionally restrictive and modified the definition of a "residence" as "a permanent structure where a person regularly sleeps and keeps personal belongings such as furniture and clothes," while retaining the current prohibition on temporary abodes or dwellings such as a hunting or fishing club, club house, cabin, tent, or trailer house or mobile home used as a hunting or fishing camp, or any hotel, motel, or rooming house. The new

definition eliminated the past reference to “hunting, fishing, pleasure, or business trip” and replaced it with “temporary basis.”

In the past, it was unlawful for any person to use any vessel to harass fish. An approved amendment altered this definition by eliminating the word “harass” and replacing it with the specific action words like “harry, herd, or drive,” including a proscription on the operation of any vessel in a repeated circular course,” and making it clear that the actions described in the paragraph must be “for the purpose of or result in the concentration of fish for the purpose of taking or attempting to take fish.” This amendment was necessary because TPWD has determined that it is necessary to provide a clearer articulation of the acts or actions TPWD considers to constitute the use of boats to move fish for the purposes of take.

Under past rules, a person could catch and retain only one red drum of greater than 28 inches in length, which must be tagged with the red drum tag from the person’s fishing license. A person may exchange a used red drum tag for a bonus red drum tag and then retain another oversize red drum. However, no person could simultaneously be in possession of a red drum tag and a bonus red drum tag, or the exempt equivalents. These rules were made at a time when the department was concerned about red drum populations and needed to get firm numbers concerning their harvest. TPWD’s long-term trend data indicate oversize red drum constitute less than 3% of the total red drum harvest; therefore, there is no longer a need to obtain highly detailed harvest information or to prohibit the simultaneous possession of a red drum tag and a bonus red drum tag. The current harvest of these bigger fish is about 3 percent of our total harvest. TPWD sells approximately 7,000 bonus red drum tags annually.

COASTAL FISHERIES PROGRAMS & PROJECTS

Current 2013 Fish Stocking Total

Red Drum	10,562,699
Spotted Seatrout	6,082,158
Flounder	103,982
Total Stocked	16,748,839

Staff members continue refining southern flounder broodfish spawning techniques, larviculture, and fingerling grow-out methods. Coastal Fisheries is planning to expand our space for culturing flounder by constructing a greenhouse-like structure at its Sea Center Texas facility.

Perry R. Bass Marine Fisheries Research Station

Life History Research

Gray Snapper samples continue to be processed for a life history study.

Collections of red drum and black drum otoliths from routine gill net monitoring samples continued as was processing and aging of otoliths collected in previous years.

The GSFC funded FIN-Biological Sampling project for otolith collection and processing for various marine species was continued, collection of samples from 2012 was completed, and all samples and data were successfully processed and entered in the FIN database.

Juvenile red drum temperature and salinity tolerance trials for a SWG grant project were conducted and a report was written.

Temperature and salinity tolerance trials for larval flounder were conducted, and results were summarized.

A study on potential sex determination of alligator gar based on snout length comparison to body measurements was initiated.

Genetics Research

Sample collection and processing for alligator gar genetic variation studies is continuing.

Samples were collected, processed and analyzed for a SWG grant on mid-coast oyster genetics, and a final report was drafted.

A genetic survey of gulf menhaden along the Texas coast was continued, sample collection and processing is ongoing.

A manuscript on the genetics of Green sea turtles continues to be in press for a peer-reviewed journal.

Artificial Reef Program

During March 2013 through August 2013, 2 petroleum platforms were reefed, generating \$430,000 in donations. There are currently 6 active projects and another 12 projects in various stages of discussion.

The Bureau of Safety and Environmental Enforcement released a new Interim Policy document for Rigs-to-Reefs that eliminates the 5-mile distance between reef sites and allows the creation of new reef sites on a case-by-case basis instead of only within a planning zone.

New emphasis is being placed on archeological impacts at newly permitted reef sites now by the Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), and the US Corps of Engineers. TPWD ARP has worked with the petroleum companies in several up-coming donations (EB-110, PN-A-42, MU-870) to ensure that the archeology survey is completed.

The discussion of HI-A-389 (large 8-pile) and how and where the reefing might happen still continues. TPWD has a draft agreement with W&T Offshore to tow it to HI-A-349 but that agreement has not been finalized. Ultimately the discussion continues to rest with W&T Offshore. Previous discussions with the FGBNMS and TPWD ARP have resulted in a possible compromise on the degree of monitoring required to a level that may be feasible to carry out.

The TPWD began to work on preparing documents for the Deepwater Horizon Restoration Projects. There are four sites for consideration: the Corpus Christi Nearshore Reef Site, the Matagorda Nearshore Reef Site, the George Vancouver Reef Site, and a new site located in the High Island General Permit zone for a possible ship reefing. TPWD ARP is required to conduct archeology surveys on the proposed ship site, but also on the previously permitted reef sites as mandated by federal reviewers of the Deepwater Horizon funds.

Coastal Fisheries staff member Brooke Shipley-Lozano was appointed to the Gulf of Mexico Fishery Management Council's Reef Fish Scientific Committee in April 2013.

In July 2012, the TPWD ARP created an Artificial Reef Program Facebook page: <https://www.facebook.com/TexasParksAndWildlifeArtificialReefProgram>. TPWD ARP has used the Facebook page to update its constituents about nearshore reefings, rigs-to-reefs deployments, biological monitoring trips, etc. It has also been a tool for people to reach out to us with questions and comments. As of August 31, 2013, the Facebook page had 652 'likes'.

The ARP team attended the 2013 DECOM World in Houston, Texas for the third year in a row thanks again to the support from the Saltwater-Fisheries Enhancement Association. This is an annual event sponsored by petroleum companies that focuses on decommissioning issues, how to remove platforms, and what to do with them once they are removed. Rigs-to-Reefs continues to be big business in the Gulf of Mexico.

In July, staff attended the Industry-Agency cruise in the GOM. Dr. Quenton Dokken has scheduled another dive cruise to promote the importance of artificial reefs and the Flower Gardens Banks. A total of 28 divers from various organizations are scheduled to attend the 3-day trip (TPWD, BSEE, FGBNMS, BP Oil, Shell Oil, Anadarko Oil, and many more).

Lionfish continue to be found on TPWD reef sites. In July 2013, 16 lionfish were removed from ARP structures.

Staff completed the 2013 monitoring season with 3 offshore sampling trips that enacted SEAMAP's vertical longline sampling protocols. TPWD ARP is compiling a database of water quality, categorical abundance of fish species through roving divers' surveys, estimates of fish lengths through video surveys, and now biological sampling through the vertical longlines.

Buyback Programs

Currently, TPWD has a buyback round open for commercial shrimp, crab, and finfish licenses with a deadline of 25 October 2013 to submit buyback applications. Buyback funds that were frozen during the 82nd Legislative session were unfrozen during the 83rd Legislative session.

SPECIAL EFFORTS, STUDIES, AND TOPICS

In August, Mike Ray retired after 25 years with Texas Parks & Wildlife. While sad to see such a fine colleague go, we him well. We will miss his leadership and support.

This summer, TPWD kept tabs on the brown tide (*Aureoumbra lagunensis*) bloom that affected the upper Laguna Madre and North Padre Island areas. In mid-June, fish kills have occurred in some homeowners canals along North Padre Island; water samples confirmed a mixed algal bloom (including *A. lagunensis*) that depleted the waters of available oxygen.

In late August, TPWD investigated reports of aerosols at select sites along the upper Texas coast. Water sampled from Surfside Beach was found to contain the highest concentrations of *Karenia brevis* cells, also known as red tide. After some sample sites within Galveston Bay were found to have elevated cell counts, the Department of State Health Services closing the Galveston Bay oyster leases. Conditionally Approved Area 1 of Galveston Bay, Central Approved Area of Galveston Bay, East Approved Area of Galveston Bay, and Smith Point Approved Area of Galveston Bay will close to the harvesting of shellfish. Very low (less than 1/ml) concentrations were also seen in Port Aransas. By mid-September, TPWD didn't have any reports of discolored water or red tide-related impacts anywhere along the coast.

'OTHERS'

In March, a major federal court decision was made to protect the last naturally migrating flock of endangered whooping cranes as a vindication of the need for an effective water management plan, especially during times of drought, for the Guadalupe River and San Antonio River basins. In an exhaustive and detailed 124-page opinion, Judge Jack ruled that the water management practices of the Texas Commission on Environmental Quality (TCEQ) for the Guadalupe and San Antonio River basins violated the Endangered Species Act. The Court issued an order preventing the TCEQ from approving or granting new water permits affecting the Guadalupe or San Antonio Rivers "until the State of Texas provides reasonable assurances to the Court" that new permits would not result in harm to the whooping cranes. Importantly, the Court ordered the agency seek what is known as an Incidental Take Permit and develop a Habitat Conservation Plan. An Incidental Take Permit is a permit issued by the United States Fish and Wildlife Service (USFWS) that allows the holder to proceed with an otherwise lawful activity that results in "incidental" harm to an endangered species, but requires the permit holder to design, implement and fund a plan that minimizes and mitigates harm to the species while carefully balancing competing interests of various stakeholders in the basin." The ruling was appealed and the United States Fifth Circuit Court of Appeals upheld the appeal, as well as placed a stay on the lower court order to cease issuing new surface water permits.

In May, 8 Fishery Management Councils and NOAA Fisheries sponsored the Managing Our Nation's Fisheries 3: Advancing Sustainability conference next week in Washington, D.C. Three themes will be discussed by approximately 500 participants: 1) Improving fishery management essentials; 2) Advancing ecosystem-based decision making; and, 3) Providing for fishing community sustainability.

On 31 May 2013, federal judge Andrew Hanen in Brownsville ruled in favor of the TPWD and the Louisiana Department of Wildlife and Fisheries in a joint lawsuit brought by both agencies challenging an emergency regulation enacted by the federal National Marine Fisheries Service. The ruling meant the 2013 recreational red snapper fishing season in federal waters off the Texas coast would be longer than it would have been under the emergency rule.

Coastal Fisheries staff attended a special Lower Colorado River Authority board meeting in mid-September to address the board on behalf of TPWD. After hearing from stakeholders including the Coastal Conservation Association, National Wildlife Federation, and Sierra Club, the Lower Colorado River Authority Board of Directors voted 13-1 to follow the requirements in the state-approved Water Management Plan and release 8,684 acre-feet of water from lakes Travis and Buchanan this month for Matagorda Bay. As of mid-September, the lakes were 32% full. The LCRA plans to seek approval from TCEQ to stop the release of freshwater environmental inflows destined for Matagorda Bay from the Highland Lakes system.

R. Riechers stated Page Campbell and Mike Ray have retired and thanked them for their service and wished them well.

Future Meetings

N. Marcellus stated the next annual meeting will be in Louisiana. She said she has four hotel proposals but will contact the Commissioners from Louisiana to confirm the location they would like to have the meeting. The October 2014 meeting will be in Mississippi.

Publications List

A new listing of publications was provided for informational purposes.

Election of Officers

M. Schexnayder moved to nominate R. Pausina for chairman of the S/FFMC. B. Allain seconded the motion. The nominations were closed. R. Pausina was named chairman for the 2013-2014 S/FFMC by acclamation.

D. Diaz moved to nominate C. Blankenship for vice chairman of the S/FFMC. C. Matens seconded the motion. The nominations were closed. C. Blankenship was named vice chairman for the 2013-2014 S/FFMC by acclamation.

C. Matens moved to nominate R. Pausina for chairman of the GSMFC. R. Riechers seconded the motion. The nominations were closed. R. Pausina was named chairman for the 2013-2014 GSMFC by acclamation.

C. Blankenship moved to nominate D. Ellinor for 1st vice chairman of the GSMFC. M. Schexnayder seconded the motion. The nominations were closed. D. Ellinor was named 1st vice chairman for the 2013-2014 GSMFC by acclamation.

T. Williamson moved to nominate R. Riechers for 2nd vice chairman of the GSMFC. C. Matens seconded the motion. The nominations were closed. R. Riechers was named 2nd vice chairman for the 2013-2014 GSMFC by acclamation.

Other Business

After discussion on meeting with the congressional delegation to inform them of the important issues for the Commission, *D. Diaz moved that GSMFC develop a legislative plan to engage congress and to plan a trip to Washington, DC with a select group of commissioners to discuss priorities set forth by the commission for educational purposes. C. Blankenship seconded and the motion passed without opposition.*

J. Gill thanked N. Marcellus and D. Donaldson and the rest of the staff for their assistance during his term as chairman.

D. Donaldson presented J. Gill with an outgoing Chairman's gift and thanked him for his service.

There being no further business, the meeting adjourned at 3:46 pm.

APPROVED BY:

COMMITTEE CHAIRMAN

**S-FFMC MENCHADEN ADVISORY COMMITTEE
CONFERENCE CALL MINUTES
November 12, 2013
GoToMeeting Webinar**

Chairman Lukens called the meeting to order at 2:02 p.m. CTZ with the following in attendance:

Members

Joe Smith, NOAA Fisheries, Beaufort, NC
Matt Hill, MDMR, Biloxi, MS
Rick Schillaci, Omega Protein, Inc., Moss Point, MS
John Mareska, AMRD, Gulf Shores, AL
Jerry Mambretti, TPWD, Port Arthur, TX
Ron Lukens, Omega Protein, Inc., Gainesville, FL

Others

Scott Herbert, Daybrook Fisheries, New Orleans, LA
Chad Hanson, Pew Trust, Crawfordville, FL
Robert O'Boyle - MRAG Americas (for Pew Trust), Bedford, Nova Scotia
Amy Schueller, NOAA Fisheries, Beaufort, NC

Staff

Steve VanderKooy, Program Coordinator, Ocean Springs, MS
Debbie McIntyre, Staff Assistant, Ocean Springs, MS

Update on 2013 Gulf Menhaden Season

Smith provided an overview of the complete 2013 season. As of November 1, Smith estimates the total landings for 2013 will be about 497,503 mt which is down 14% from last year, but up 1% over the 5-yr average (which includes the 2010 BP year). **Smith** noted that prices for oil were good early in the year and stayed high. In addition, the industry reported good fish oil yields which was a relief compared to the last two weak years when oil yields were low. There were no major tropical weather systems in the Gulf during 2013, but there were periods of windy conditions that hamper fishing. A large number of fish were present west of the Mississippi, and Moss Point and Empire spent time in central Louisiana as a result.

The season started slowly with the companies having trouble crewing some vessels due in part to the short supply of non-citizen workers (H2B visas). The weather moderated in May and June. Fishing was generally good to the west of the Miss. River. Good weather during July and August resulted in peak landings during the latter half of the month. September saw more windy conditions as Hurricane Ingrid passed in the southern Gulf and made landfall in Mexico. October was good fishing with mostly fair weather as well; the fishery "cut out" on October 31st. In 2013, nominal fishing effort was down from the previous five-year average at 311,200 vessel-ton-weeks with 35 regular steamers, one run boat at Moss Point, and two bait boats making infrequent landings.

Smith reported on the age composition of the catch from the samples processed to date. The catch was once again dominated by age-2 fish at 82% overall. Again, Cameron was dominated by age-2s, which historically has been weighted more toward age-1s. There are still some more port samples from Empire and Moss Point to be processed, so the final age compositions may tilt a bit more toward the age-1 fish.

Based on the expected effort for next year and this year's effort and landings, **Smith** forecasts landings in 2014 to be around 481,000 mt. The 2013 landings exceeded his March 2013 forecast by 5%.

Lukens asked about the size of the fish this year compared to the previous few when year classes in the fishery were strong, but fish oil and meal yields were low. **Smith** reported that the plant managers had conveyed to him that the fish were indeed larger this year. **Lukens** thought this might confirm the idea that there was a density-dependent response to the extremely high recruitment success in 2009 and 2010.

A question was raised about the bait companies that made landings. **Smith** reported that one of the two start-up companies has gone out of business already and there is one company that is still viable. The extant company is expected to land fish for bait during Louisiana's extended bait season (November) and also next year using the *M/V Lewis Boys*, which was Jack Simpson's old boat, the *M/V Surprise*.

Update on the Atlantic Menhaden Fishery

Smith provided an overview of management actions from 2012 and 2013 on the Atlantic and the effects these decisions have had on the menhaden fishery along the East coast. Omega, operating out of Reedville, VA, is the only company fishing for reduction on the Atlantic coast. Landings for reduction in 2013 (114,000 t) are down 28% from 2012. Omega fished seven vessels this year, down from nine in 2012. Four Virginia "snapper boats" fished for bait in 2013; five or six vessels landed for bait in New Jersey. Most of the sets by the Virginia fleet in 2013 were at the mouth of the Chesapeake Bay or in the ocean; menhaden have not been abundant in Chesapeake Bay this year.

The reduced landings in 2013 were primarily due to the management actions in the Atlantic. The 2012 assessment update had flaws, and so the Technical Committee (TC) requested an expedited benchmark which NOAA is in the process of doing now. The TC recommended some *ad hoc* options to reduce landings until the benchmark could be completed.

Action on the draft Amendment 2 of the FMP was taken last December and resulted in a 170,800 mt coast-wide TAC for bait and reduction combined. This TAC is in place 2013-14 and until the benchmark is finished. The States were allocated the TAC based on the recent historical landings by state. Virginia got the lion's share of the TAC at 85%, New Jersey received about 11%, and the remainder was divided among the other state at <= about 1%. States could transfer their allocation to other states and there was a bycatch allowance for some states and gears once the TACs had been reached. The States were required to report in a timely fashion on their quotas, including additional biological sampling of the bait fisheries.

The fallout of Amendment 2 has been that Omega reduced their fleet to seven vessels and fished sparingly early in the fishing season in an attempt to extend the fishing season later in fall when the larger and more valuable fish migrate down the coast. Through October, the reduction fishery had landed about 88% of their quota. The bait fishery was severely impacted, in some instances getting considerably less allocated than was landed in 2012. **Smith** believes that with bait being scarce and expensive this year, the situation may be worse into early 2014. Late season bait landings on the East coast might normally supply the crab and crawfish fisheries on the Gulf coast in the early part of the year. Bait availability will be difficult in 2014. **Smith** has heard bait has gone from \$0.08-0.10/lb up to as much as \$0.20-0.25/lb recently.

In 2014, the Beaufort Team will be focused on the Atlantic menhaden benchmark assessment primarily.

Smith will provide his presentations to the group.

SEDAR32A Gulf Menhaden Stock Assessment

VanderKooy offered some follow-up to the discussion from the October meeting related to the stock assessment. **VanderKooy** noted that the SEDAR site has been down for the last week or so and wasn't sure when the SEFSC would be able to get the site online again.

Smith reported on a couple of the reviewers' comments related to data needs. **Schueller** and **Smith** were working with the industry on a Cooperative Research Program (CRP) proposal to investigate the "last set of the trip" issue. The industry has agreed to help sample some of the individual sets to address the concern of the reviewers. In addition, **Schueller** reported that a bait boat may go out and capture smaller schools to determine where those older, larger fish (not targeted by the reduction fishery) may be nearby, just not harvested.

VanderKooy asked about the genetics work going on by TPWD. **Mambretti** confirmed that the agency was collecting and examining the genetics of all size classes of menhaden to identify both species and any genetic introgression that may be occurring. Anderson is doing this work for TPWD.

VanderKooy reported that the Commission had accepted the motion from the MAC to adopt the target and threshold for inclusion as a recommendation in the FMP. Unfortunately, the MAC did not have all the components of the benchmarks for the discussion in October related to biomass. Since the meeting, **VanderKooy** had formally requested that the SEFSC provide the additional necessary information to generate the associated SSBs and a phase plot for the time series. **Schueller** had worked with **VanderKooy** on the request and provided it to the MAC late last week. The follow-up report included the estimates of uncertainty as well. **VanderKooy** would redistribute the report to the call participants as soon as the call was complete. **Schueller** reviewed the figures in the report for the members and answered questions. In a nutshell, the fishery has been below all the thresholds for F and SSB since the mid-1990s and the SSB target was approached and passed in a couple recent years, but not in the F target. The Monte Carlo bootstraps indicate that around 80-85% of the runs were less than 1.0 for $F(2011)/F_{30\%}$ and $F_{35\%}$ which

suggest the majority of the simulations were below target fishing mortality rate. In addition, about 75-80% of the runs for $SSB(2011)/SSB_{30\%}$ and $SSB(2011)/SSB_{35\%}$ were within the target and threshold spawning stock biomass. Finally, comparing fecundity to mortality for both the target and threshold, the uncertainty is again relatively low or about 75-80% of the runs are below 1.0.

O'Boyle was wondering if another analysis could be done related to F_{MSY} similar to what's been done on the Atlantic. The problem is that the BAM model did not generate the MSY estimates for comparison.

Lukens wondered how the Press Release for the stock status would be handled. **VanderKooy** plans to draft the Press Release tomorrow and will make the announcement that the SEDAR is now available and based on the adopted reference points, the status of the stock is not overfished and overfishing is not occurring. Upon the MAC's review of the draft, the Press Release will be distributed ASAP. **VanderKooy** will work on it and send it around for comment before it goes out.

Hanson was concerned about the general process of how the GSMFC was adopting the reference points. This is confusing for many outside the Gulf Commission because it's being handled very differently from the Atlantic Commission. The normal process elsewhere includes public comment and many iterations. **Hanson** wondered if this is only being included in the FMP as a recommendation, how the public comment is going to be heard and considered. **VanderKooy** explained that the reference points are now recommended in the management plan but that the public will have the chance to comment on all aspects of the plan sometime next year. The issue is that the Atlantic Commission has regulatory authority and, therefore, has a much more extensive process. The Gulf Commission does not have any regulatory authority and the Gulf States are under no requirement to comply with the recommendations; there is no real compliance requirement. Therefore, these benchmarks are only recommendations, not requirements.

Hanson asked how the Press Release could provide the stock status based on preliminary reference points; if they haven't been included in the stock assessment, they are not final. **VanderKooy** reminded all that the $F_{30\%}$ was included in the assessment as was the $SSB_{30\%}$ values for and $SSB_{35\%}$. Based on those reference points, the reviewers indicated that the status was clear but not knowing what level of risk the MAC was willing to take, didn't want to make any specific designation. This is only following through with the complete compliment of the $F\%$ s and associated $SSB\%$ s. No matter what the States may ultimately enact for management, the fishery status at $F_{30\%}$ and $F_{35\%}$ won't change, but if a less conservative reference point is chosen, it might.

Hanson wondered if the SSB values are triggers as well now that they've been calculated as well. **Lukens** noted that the triggers are based on harvest level. The SPRs have nothing to do with increasing biomass or rebuilding a stock, they are only for setting a fishing level and keep perspective on the historical effort only. **VanderKooy** reminded them that the real issue in Louisiana is that the habitat and carrying capacity is constantly shifting. There are very few age-1s available to the fishery likely due to habitat loss and the movement of fish more inshore. Louisiana can't predict what the long-term impacts will be on recruitment in the future and the only thing they could actually control is fishing effort.

FMP Revision Discussion

VanderKooy reported on the status of the FMP revision since **Smith** was unable to attend the meeting in October. A number of sections are pretty much done which include biology, habitat, and law enforcement. **VanderKooy** continues to draft the social history of the fishery and **Alex Miller** is nearing completion of the economics section. **Smith** is updating the fisheries section (Section 6) but has been tied up with Atlantic menhaden issues as they are preparing for the expedited benchmark assessment.

VanderKooy had distributed a very early draft of the management recommendations section (9) and had not yet received any comments on the Goals and Objectives. **VanderKooy** would like some editing and comments by November 22 for discussion. **Schueller** reviewed what constitutes a goal versus an objective. Most of what we've put down so far in Section 9 are vague goals. Objectives must be more measurable and specific. **Schueller** recommended the S.M.A.R.T. approach. Objectives need to be:

S	Specific
M	Measurable
A	Achievable
R	Related to the goals
T	Time constrained

The first thing the MAC needs to do is figure out what the lofty ultimate pie-in-the-sky goal would be and then start narrowing down what needs to be done to accomplish that goal. The MAC needs to determine what specific, measurable, time restrictive things can be done to meet each goal. **O'Boyle** noted that the goals in these sort of forums should be related to things like 1) the status of the fishery, 2) the status and protection of the ecosystem, 3) the status of the habitat, and 4) maybe something on the economics of the fishery.

VanderKooy wondered if a facilitator was needed to accomplish this. Would it be useful to get someone to help the MAC walk through this process? **VanderKooy** would like any thoughts or suggestions on the best way to generate the Goals and Objectives appropriately and in a timely fashion so the MAC can complete the FMP revision and move forward.

VanderKooy still hopes the entire draft will ready by the end of 2013 or very early 2014 for full review by the MAC; hopefully TCC review would be prior to the March GSMFC meeting. If a call is needed specific to the Goals and Objectives before the FMP is completed, **VanderKooy** will make the necessary arrangements.

Review of Aerial Survey Proposal

Leaf suggested that sometime after the first of the year, a conference call could be set up to talk about the aerial survey, but he needed a chance to discuss changes with **Mahmoudi** before this is scheduled. **VanderKooy** will coordinate with them on the timing in January.

Other Business

VanderKooy will write up these minutes and amend them to the October MAC meeting. With no further business, **Lukens** adjourned the meeting at 3:58 p.m.

APPROVED BY:

COMMITTEE CHAIRMAN

BLUE CRAB TTF CONFERENCE CALL SUMMARY

November 20, 2013

Participants:

Ryan Gandy – FFWCC, St. Petersburg, FL
Glen Sutton – TPWD, Rockport, TX
Traci Floyd – ~~DMR, Ocean Springs, MS~~ Biloxi
Alex Miller - GSMFC, Ocean Springs, MS
Jason Herrmann – ADMR, Dauphin Island, AL
Jeff Marx – LDWF, New Iberia, LA
Darcie Graham – GCRL, Ocean Springs, MS
Harriet Perry – GCRL, Ocean Springs, MS
Steve VanderKooy – GSMFC, Ocean Springs, MS
Debbie McIntyre – GSMFC, Ocean Springs, MS

The Blue Crab TTF held a conference call/webinar to review and update individual sections of the FMP revision. The meeting began at 2:00 p.m. **VanderKooy** noted that he had distributed a number of sections for review prior to the call and would post the most current versions on the website in a new folder.

Table of Contents

VanderKooy will rebuild the *Table of Contents* once all of the draft sections are complete.

Biology Section

Perry reported that this section is almost complete with the exception of *Invasive Species* and *Summary of Life History Characteristics Relevant to Management*. The references for this section are about 80% complete.

The group indicated that they had not actually had time to review this section thoroughly. **VanderKooy** encouraged all to do so and then to forward all comments to him and to **Perry**. The timeframe for completion of this section is the end of November at which time **Perry** will provide her updated work to **VanderKooy** who will cut and paste it together accordingly and distribute after Thanksgiving.

Habitat Section

Marx and **Rester** have this section ready for the group to review. **VanderKooy** will post completed sections to the website so everyone should start reviewing these sections now and forward to him any changes or comments.

Enforcement Section

VanderKooy stated that he had not sent this section out in advance to the group but he will do so following this call. The section will also be available on the website. He asked everyone to double check that their state information is correct, remembering that this data only goes through 2011 so do not worry if the license fees are not current. They should be for 2011.

Fisheries Section

Floyd has removed the breakdown of landings by gear type which will change the numbers and the tables. **Perry** is making adjustments to the *Aquaculture* section. **Floyd** has received most of the information she needs from the states at this point. She is expecting to receive Alabama information soon from **Herrmann**. **Perry** has not yet checked with **Williams** as to whether there were other swimming crab species included in the “blue crab” (non-U.S. GOM production) landings.

User Group Conflicts does not fit in the *Fisheries Section* anymore and is better captured in the *Sociology Section*. **VanderKooy** has pretty much moved it already.

VanderKooy reminded all that they should be reviewing their state updates. **VanderKooy** will work with **Floyd** on the section reformatted and will send out the complete draft in mid-December.

Sociology Section

VanderKooy explained that he and **Jacob** have been working together on this section and it is much more extensive than it was previously. They tried to put this in the context of the results of the current social survey.

Some anecdotal information supported by the survey results was added to the section. For instance, fishermen are getting older and are acquiring a higher degree of education. At the same time, there are also a good number of new fishermen, suggesting older entries to the fishery – maybe as a result of retirement or to provide a second income.

VanderKooy pointed out that he needs some help with *Industry Related Stressors* – particularly those areas that he has highlighted. There are acute and chronic stressors which he has identified in this section that could use some fleshing out.

Regarding *Foreign Crab Products*, there is a lot here that needs to be tied together. **VanderKooy** asked that everyone please review and offer input. **Marx** stated that he would try to locate a report that is currently being written (by Jack Isaacs?) regarding consumer demands for sustainable product. The imported product of less quality is being compared to the domestic product of high quality.

VanderKooy stated that there is potential for concern of the perception of *Sustainable, Green Products*. **VanderKooy** stated that this section is very rough yet, and needs work and it may actually go against what many are trying to do with certification. He is not sure if this should be here.

Economics Section

Miller stated that this section is basically complete. There has been some reorganization, but the figures reflect the trends and numbers better than the way that he has presented the data in tables. He will work on combining tables. The state biologists might be able to provide additional narrative to this section.

VanderKooy pointed out that some the Social Survey participants completely skipped the Economics section of the survey, perhaps because the questions were too invasive or appeared too personal. **Miller** was able to glean some additional information regarding harvesting.

Miller explained the *Processing Activities by State* sections and how each state's information is presented.

It was discussed that the *Structure and Conduct* section is rather unclear in its meaning in this document and may not be included. It was carried over from the last FMP.

The general sources and volumes of crabs coming into the U.S. is addressed in *Crab Imports*. It was pointed out that the retail price comparing imported versus domestic crabs is missing from this section. **Miller** will take a look at this and advise the group of his findings.

Regarding *Restitution Values*, **VanderKooy** will paste this final section in once he receives the states' data. Please forward this data to **VanderKooy** and he will post to the website as well. These would represent commercial landing values as reported for each state.

Management Goals, Considerations, and Recommendations

Gandy reported that the *Status of the Stocks* was derived from the Executive Summary of the GDAR. He was not sure of the structure of this section but, basically, constructed it with considerations followed by recommendations. The concept is there but it is rough.

Under *Recommendations*, **Gandy** combined the applicable information from the old FMP with the like GDAR information. Under *Commercial*, he added bio-statistical sampling. Under *Recreational*, he added participation rates and effort.

Fishery-Independent Data was basically good with some being taken from the old FMP and some from the GDAR. It captures the objective of fishery-independent monitoring. It was decided that we need some very specific individual recommendations here.

VanderKooy stated that the *Goals and Objectives* are still very vague. He suggested using the SMART process in an attempt to be more specific, prioritize, and clarify these goals and objectives:

- S Specific
- M Measurable
- A Achievable
- R Related to the goals
- T Time constrained

Gandy asked everyone to focus, clean up the narrative, and work on the *Goals and Objectives*.

Timelines for Completion

VanderKooy asked that all comments on the completed sections be sent to the authors and to him by year-end. **Floyd** will complete the *Fisheries Section* by early December. **VanderKooy** intends to post the draft *Sociology* and *Economics Sections* to the website by December 20th. He, **Jacob**, and **Miller** will get together on completion of these sections and hope to finalize by mid-January.

Other Business

VanderKooy shared the contents of a letter he had received regarding blue crab fishing in Steinhatchee. **Gandy** was aware of this issue. **VanderKooy** will forward the letter to **Gandy** and Ellinor.

The webinar ended at 4:20 p.m.

APPROVED BY: 
COMMITTEE CHAIRMAN

BLUE CRAB TTF CONFERENCE CALL SUMMARY

December 16, 2013

Participants:

Ryan Gandy – FFWCC, St. Petersburg, FL
Glen Sutton – TPWD, Rockport, TX
Traci Floyd – DMR, ~~Ocean Springs~~, MS *Biloxi*
Jason Herrmann – ADMR, Dauphin Island, AL
Jeff Marx – LDWF, New Iberia, LA
Darcie Graham – GCRL, Ocean Springs, MS
Harriet Perry – GCRL, Ocean Springs, MS
Steve VanderKooy – GSMFC, Ocean Springs, MS
Debbie McIntyre – GSMFC, Ocean Springs, MS

The Blue Crab TTF held a conference call/webinar to review and update the draft of the Goals and Objectives section of the FMP revision. The meeting began at 9:00 a.m. Before beginning this discussion, **VanderKooy** briefly updated everyone on the progress of the other remaining sections. He pointed out that Dr. **Jacob** should have the Social Section ready for review around January 5, 2014. **Perry** and **VanderKooy** will work together this week to finish the Biology Section. **Miller** is continuing work on the Economics section. **Floyd** is very close to finishing the Fisheries Section. The plan is to have every section ready for review by the TCC prior to the GSMFC Annual Meeting in March of 2014. Best case, the TCC would take action on the document at that time.

Gandy led the discussion about use of the phrase “regional management” and the possibility that this reference may be confused by the reader with other species and federal management of those species. **VanderKooy** stated that what we are working on is a “Regional Management Plan.” It was emphasized that it is the job of the TTF to make recommendations for the best management practices from the biologists’ points of view. We are making recommendations only and not setting policy. It is the job of management to determine if these recommendations are feasible politically, financially, and within a reasonable time frame.

Sutton suggested that an explanation within the first paragraph of section 9.0 could remove the ambiguity and the possible negative connotation of the term “Regional Management.” It was agreed that **Gandy** would compose a few sentences explaining the traditional, correct definition of “regional management.” It was the consensus of the group that the terminology used by the TTF is correct and responsible. **Gandy** will forward his suggested verbiage to the group for their input.

The group reviewed the Goals and Objectives section as written by **Gandy** who used the SMART technique for guidance. It was agreed that an “Action Items” paragraph, with bulleted and very specific items, would be added to further tie objectives to recommendations. **Gandy** stated that he will be back to work on this section the first week of January.

VanderKooy would like to see a paragraph added to explain that the assessment was exploratory with no actual management scenarios, other than how to improve getting data for management-type reference points. This assessment does not bring us to management goals.

Perry stated that she still could accept any state-specific data for the Biology section and asked that everyone independently review this section. **VanderKooy** pointed out that **Miller** may have some information that Gandy would be able to use. **Gandy** will forward to the group any changes that he makes.

VanderKooy reminded everyone that funding continues to be an issue. The TTF and the Blue Crab Subcommittee will meet at the March Meeting in New Orleans but IJF will not have funding to cover travel or expenses for members to attend.

The webinar ended at 10:40 a.m.