TCC CRAB SUBCOMMITTEE MINUTES
San Antonio, Texas
October 17, 2022



Chairman Gandy called the meeting to order at 8:49 a.m. with the following in attendance:

Members

Jason Saucier, MDMR, Biloxi, MS
Zachary Olsen, TPWD, Rockport, TX
Ryan Gandy, FWC, St. Petersburg, FL
Harriet Perry, USM GCRL, Ocean Springs, MS

Others

Jason Rider, MDMR, Biloxi, MS
Earl Melancon, LA Sea Grant, Thibodeaux, LA
Tony Reisinger, TX Sea Grant, San Benito, TX
Erik Broussard, MDMR, Biloxi, MS
Doug Boyd, GSMFC Commissioner, Boerne, TX
Tom Wagner, TPWD, Rockport, TX
Jennifer Granneman, FWRI, St. Petersburg, FL
Rick Burris, MDMR, Biloxi, MS

Staff

Dave Donaldson, GSMFC Executive Director, Ocean Springs, MS Steve VanderKooy, GSMFC Program Coordinator, Ocean Springs, MS Debbie McIntyre, GSMFC Staff Assistant, Ocean Springs, MS

Adoption of Agenda

The agenda was reviewed by the group. **Saucier** moved to adopt the agenda, **Olsen** seconded the motion, and the agenda was unanimously adopted.

Approval of Minutes

The Subcommittee reviewed their minutes from the meeting held on March 15, 2022, in Panama City Beach, Florida. **Saucier** moved to accept the minutes as written, **Olsen** seconded, and the minutes were approved unanimously.

State Crab Monitoring through SuRF Funding

VanderKooy explained how the SuRF (State Research Funding) program is working and showed a project list for use of SuRF funds for FY2023. The state reps provided a little background wherever SuRF funds were used for crab-related data. Gandy indicated that Florida was using the program for fishery-dependent monitoring data on crabs especially along the West Coast where fish houses are more scattered. Olsen stated that TPWD had no direct application to crabs using the SuRF funds but did not know if crabs were included in the eDNA project. Saucier presented a formal presentation of the work they have been doing in Mississippi which includes enhanced fishery-independent data with additional trawls, seines, and commercial traps. With the experimental gear, data gaps are being filled in certain size classes and the information is useful for identifying changes in the basins.

Perry stated if we are going to look at the changing index of abundance (IOAs), it would be good to include the legacy data. We are likely seeing a decline in carrying capacity. **Perry** stated that the MDMR bycatch data is very similar to their historic data from the commercial catch. Looking at the number of active license holders will also be helpful.

Status of the Fishery and the Effectiveness of Current Approaches to Management

All of the states provided some rough IOA of the last several years but only Florida had the ability to regenerate the IOA which had been developed for the GDAR 01 which was completed in 2011. Olson provide an overview of the trends in Texas data since the March 2022 meeting. He indicated that while the coastwide trends have largely stabilized since the early 2010s, the adult index appears to have increased in recent year but the juvenile index continues to remain low but may be due to habitat sampled; open water vs nearshore. Olsen also looked at sex ratios after seeing Zach Darnell's presentation in the spring when he reported on sperm limitation he's seen in Louisiana. Olsen reported that they sex all crab over 50mm CW. Data runs a few years in the late 1980s and became routine in 2006 to present. There don't appear to be any trends in time but there are differences in gears, probably related to habitat and gear selectivity again. Finally, Olsen talked about the harvest trends over time. There has been a steady decline but recent years have increased a little but are still below the landings through the late 1990s however, the landings per trip have been variable but rather stable over the last decade. Saucier didn't have much to present on abundance trends other than what is in the Mississippi report.

Gandy presented his modeled annual averages of crab abundance which mirrors what their former FWC analyst Wade Cooper had done their state assessment and Gandy tweaked this to generate the continued IOAs (Eastern Gulf) from GDAR01. The YOY index has bounced around in the long term with a drop-off over time on West Coast and a huge drop off on East Coast of Florida. All bay systems along the Florida West coast are having similar trends. Overall, Florida is at a stable low and even with a wetter cycle over the last four years their IOAs are still low. Ironically, crabbers are always hoping for a good Red Tide because catches are better after because a number of predators are removed by the tide. They have had more hypoxia issues also and found stone crabs would die in traps, when not in traps, they are able to burrow down and survive just fine. Blue crabs seem to move around in those events.

Perry had prepared a chronology of blue crab research and the environmental data in the Gulf. She explained that very early on, leading crab biologists determined that climate was likely a driving factor in the region. These experts predicted that sustainability in the crab population may not be possible over the long term. Generally, wet years led to good crab abundances. Dry year, not so much. Ultimately, if the population cannot be recovered with effort management, we may need to assume the fishery exists in a new carrying capacity which is lower than the historic levels. **Gandy** noted that when we look at the assessment, effort may become a different issue now. **Perry** reminded that we need some economics and social data in evaluating this fishery. The prices of bait and fuel are making it almost uneconomical to participate in fishing so traditional management may not be effective any longer. The changing environment is harming recruitment, habitat loss is now allowing more predation, so we might need to address other forms of management since effort is irrelevant.

Gandy felt that maybe we're at the point where we look at maintaining the current fishery rather than try to restore the historic fishery, the situation is not the same and may not return. **Perry** wonders if we

might need to include someone from Louisiana who can work with us on changes to habitat and current modeling of those changes.

VanderKooy wondered if they saw the same patterns in effort with the mobile fishermen who 'hot spot' trap. With lower IOAs, are those fishermen still fishing that way? Is it still a profitable strategy? Gandy confirmed that Florida fishermen do still following the crabs. Crab traps are staged in several areas and spotters are used to report back when catches get better. The mobile fishermen wait until the crabs move into an area then travel from other regions to deploy all their traps until the crabs are fished down or move. The state of Florida has made it simple for them to wholesale their own product and they now have direct conduits to markets outside of the Gulf. There are no picking houses left in Florida and nearly all the crabs harvested are sold live and they are focusing on specialty markets rather than keep all their catch and it becomes a premium product. Crabbers are also complaining about dumping product as well. Earl Melancon noted that in Louisiana, they have crabbers who used to run 500 traps five years, now run 1,200 traps. Gandy said Florida has allowed crabbers to now pay only for the tags they were going to fish. As they reduced their costs, they paid for the tags they can fish so the numbers are coming down a little although there is still latent effort. They just can't run as many as they did before economically.

Perry suggested the development of a standardized AOIs for the Western Gulf states that we actually own and can update ourselves and evaluate annually. VanderKooy reminded that we jumped off to do the stock assessment based on what Louisiana did with Joe West. We then took the Chesapeake model and moved into that surplus production approach. The back pages of the GDAR01 assessment report is the code for the model but not the standardized format for the data. We need to be able to find the original data and figure out the standardization in order to add to it easily. Perry would like to potentially contracting someone like Ralf Riedel to work it up and update the dataset. Gandy will ask their assessment team and Claire Crowley to look for any files from Wade Cooper and ask Joe West perhaps. Tom Wagner stated that Glenn Sutton's (former Texas Blue Crab Subcommittee rep) computer in Dickinson may have this information on it. Olsen will check with the Dickinson lab to find out. Consensus of the group was to try to find this information between now and flesh out a plan prior to the next meeting. VanderKooy needs to know if we plan to pay someone to do this. We can't just hire someone any longer. The GSFMC would need to find funds, get approval to use those funds, and put out an RFP to complete the work and the product would be something we own and can add to on our own rather than continue to pay someone to update it for us. If we can't, perhaps we can get another version of something like the Traffic Light that doesn't require continuous funding. It might not be the same as the GDAR01 AOIs. We need a plan of action by next October to keep this project alive. Perry would like to develop a white paper once this is complete.

VanderKooy will send out a Doodle poll for follow-up in early January with another perhaps in March to figure out what to do from there. He reminded the group that we can have subcommittee meetings at any time. In the event that the trends are able to be explored, it may be time to revise the last Blue Crab FMP (10 years old) as a Management Profile and potentially conduct another Gulf-wide assessment through the GDAR program which is 11 years old. Gandy agreed that we likely will need some expertise on the social and economic side of the fishery. The names of socio-economists who are currently work on Gulf fisheries were discussed, i.e., Ben Posadas, Jack Isaacs, Steven Scyphers, Andrew Ropicki, and Frank Ashe. The Subcommittee will make those determinations after they have completed the update on the IOAs and include them in an action plan to take forward to the TCC potentially.

Current Crab Trap License, BRD, and TED Requirements

VanderKooy suggested that the Subcommittee should update the state-specific tables of the various requirements for licenses and bycatch reduction like we are annually updating the derelict trap removals. There have been several questions regarding what the current regs are in each state related to each and VanderKooy had no source other than to look online or contact the state reps in question. Having a single source would be helpful. Staff will provide the summary tables for each states license, BRD, and TED requirements for the members to update through 2022. We will keep these tables current moving forward.

Summary of Written State Reports

Several of the state representatives had submitted written reports prior to the meeting. Due to time limitations, the reports were accepted and, those that were provided are available upon request from the Commission.

Election of Officers

On motion by Gandy second by Olsen, Saucier (MS) was nominated as Chair. Saucier was elected unanimously.

Future agenda items

Perry suggested that she work with Earl Melancon from Louisiana, regarding habitat restoration (new freshwater diversion project) with the goal of a presentation at next meeting. Jay Sable is the modeler who developed the EIS which included blue crabs and could be invited to present in 2023.

The Subcommittee will invite the LDWF staff working on the Louisiana crab stock assessment to speak at next meeting which will be held next October in Louisiana.

With no further business, the meeting adjourned at 12:18 pm, on motion by **Saucier** and second by **Olsen**.