

SAN ANTONIO - GUNTER HOTEL

OCTOBER 21-22, 1954 - MEETING M-19

GULF STATES MARINE FISHERIES COMMISSION

Fifth Annual Meeting
San Antonio, Texas
Gunter Hotel
Oriental Room

October 21 (Thursday) & October 22 (Friday) 1954

P R O G R A M

(Mr. Hermes Gautier, Commission Chairman Presiding.)

9:30 AM CALL TO ORDER
ROLL CALL OF COMMISSIONERS
INTRODUCTIONS
WELCOME: Mr. Howard D. Dodgen, Texas Game & Fish Commission
SECRETARY'S REPORT

RESUMES OF STATE MARINE FISHERY ADMINISTRATION ACTIVITIES IN
FIELDS OF MARINE SCIENCES, TECHNOLOGY, EDUCATION, LAW AND OTHERS
FOR THE PAST YEAR AND PLANS: (Each presentation followed by
discussion.)

ALABAMA	Messrs. H. C. Loesch & John Rockwell Alabama Dept. of Conservation
FLORIDA	Mr. Charlie Bevis Florida Board of Conservation
LOUISIANA	Mr. Lee Eddy Louisiana Wild Life & Fisheries Commission
MISSISSIPPI	Messrs. Reece Bickerstaff & A. E. Hopkins Mississippi Seafood Commission
TEXAS	Mr. Cecil Reid Texas Game & Fish Commission

MOVIE, Shrimp Please

LUNCH

1:30 PM MOVIE, The Story of Menhaden

DISCUSSION: COMMISSION WORK PLAN (Item 1 b)

ARE THE PRESENT HARVEST METHODS OF ANY SPECIES DETRIMENTAL TO THAT, OR ANY OTHER SPECIES, TO THE EXTENT THAT METHODS SHOULD BE CHANGED OR MODIFIED?:

1. The Purse Seine in the Menhaden Fishery
2. The Otter Trawl in the Trash Fish Fishery

RESUME OF GULF STATES' UNIVERSITIES' ACTIVITIES IN FIELDS OF MARINE SCIENCES AND TECHNOLOGY OTHER THAN RESEARCH ACCOMPLISHED UNDER STATE MARINE FISHERIES ADMINISTRATION CONTRACTS FOR PAST YEAR AND PLANS: (Followed by discussion) Dr. Dale F. Leipper, Committee on Marine Sciences, Southern Regional Education Board.

DEMONSTRATION: THE ROLE OF CHEMISTRY IN FISHERY BIOLOGY, Miss Zoula Pyle and Mr. Kenneth Marvin, Fish and Wildlife Service.

ADJOURNMENT

RESERVED FOR COMMITTEE MEETINGS

OCTOBER 22 (FRIDAY)

FISH & WILDLIFE SERVICE RESUMES OF ACTIVITIES FOR THE PAST YEAR: (Each presentation followed by discussion.)

Gulf Exploratory Fishing: Mr. Stewart Springer

Gulf Fishery Investigations

Gulf Survey:

Mr. Albert Collier

Red Tide:

Mr. William Wilson

PROJECTS UNDER PUBLIC LAW 466 (SALTONSTALL BILL) FOR THE GULF AREA: Messrs. A. W. Anderson and L. A. Walford, Fish and Wildlife Service.

11:30 AM

ADJOURNMENT

EXECUTIVE SESSION

GULF STATES MARINE FISHERIES COMMISSION
312 Audubon Building
New Orleans 16, Louisiana

M I N U T E S
(Extract of Transcript)

FIFTH ANNUAL MEETING, OCTOBER 21-22, 1954
GUNTER HOTEL, SAN ANTONIO, TEXAS

OFFICIAL ATTENDANCE OF COMMISSIONERS:

	<u>PRESENT</u>	<u>ABSENT</u>
<u>ALABAMA:</u>	W. C. Holmes	Earl M. McGowin Thomas A. Johnston, III
<u>FLORIDA:</u>	Charlie Bevis D. C. Jones, Jr. William J. Hendry	
<u>LOUISIANA:</u>	Donald G. Bollinger	L. D. Young, Jr. C. C. Burleigh
<u>MISSISSIPPI:</u>	Hermes Gautier	Walter J. Gex, Jr. Louis Simmons
<u>TEXAS:</u>	Howard D. Dodgen Travis Bailey	Jimmy Phillips
<u>PROXIES:</u>	John Rockwell John Rockwell W. S. Werlla J. N. McConnell R. O. Bickerstaff (10/21) C. W. Reid	(For Earl M. McGowin) (For Thos. A. Johnston, III) (For L. D. Young, Jr.) (For C. C. Burleigh) (For Walter J. Gex, Jr.) (For H. D. Dodgen 10/22/54)
<u>STAFF:</u>	W. Dudley Gunn, Secty-Treas.	

COMMISSION STANDING COMMITTEE MEMBERS PRESENT

Legal: R. O. Bickerstaff, Mary Schulman
Scientific: H. C. Loesch, Cecil Reid, Percy Viosca, Jr.

STATE MARINE FISHERIES REPRESENTATIVES PRESENT

J. P. Breuer, R. L. Eddy, W. C. Guest, R. P. Hofstetter, T. R. Leary, H.T. Lee,
Patricia Pew, P. Marek, Jr., James N. McConnell, J. L. McGee, Chas. Murphy,
John Rockwell, Ernest Simmons, W. S. Werlla.

FEDERAL GOVERNMENT REPRESENTATIVES PRESENT

Albert Collier, H. H. Eckles, K. T. Marvin, C. E. Peterson, Miss Z. Pyle,
Stewart Springer, P. E. Thompson, William B. Wilson.

FORMER COMMISSIONERS, REPRESENTATIVES OF INDUSTRY, STATE UNIVERSITY
AND OTHERS PRESENT

Bert Thomas; J. E. Barr, M. K. Lawrenz, W. D. McMillan, John Santos, G. E.
Steele, Jr., A. J. Wegmann; Fred Cagle, C. E. Dawson, E. A. Fieger, Gordon
Gunter, C. P. Idyll, D. F. Leipper; Bill Sarratt.

GENERAL SESSION, OCTOBER 21, 1954

Mr. Gautier, Commission Chairman, called the meeting to order at 10:00 AM and after brief introductory remarks requested the Secretary to call the roll of Commissioners. Introductions followed.

A cordial welcome to Texas was extended by Mr. Dodgen.

The Secretary's report scheduled for this time was deferred so that activity resumes in the fields of marine sciences, technology, education, law and others could be heard from representatives of the fishery administrations of the several states.

Mr. Rockwell of Alabama stated shrimp production was up for the fiscal year ended September 30, the reason being longer open season for inside trawling and increased outside production. He reported a near record low oyster production due to too much fresh water during the period. A survey to determine the effects of dead shell dredging was reported to be progressing. A project involving the taking of fish by small mesh nets in the rivers emptying into Mobile Bay to determine the advisability of permitting use of same will be carried through 1954. He explained that the 1953 Legislature passed a bill lowering the oyster size minimum from 3 inches to 2 5/8 inches and allowing the Director to set intermediate measurements, the current measurement being 2 3/4 inches. Another law change mentioned involved shrimp for non-commercial use, the legal possession limit being lowered to 25 pounds from 50 pounds, no license requirement but adherence to commercial shrimping laws being included. Exhibits of live seafoods at the Alabama State Fair were reported as a continuing educational project.

Mr. Loesch of Alabama stated that the shrimp program started in July 1953 is still in progress and that findings made during the year had resulted in the lengthening of open season and an increase in production. He said twelve each bay and shore stations are visited monthly in order to determine growth rates and abundance of the several species found in Mobile Bay.

Mr. Bevis of Florida reported that at the beginning of closed season December 15 all mullet in storage were declared, there being 1,410,000 pounds, and that shipment of such fish was made only under permit from the Board. He said license collections had increased approximately \$30,000 during the past year, that boat licenses for 1952-53 numbered 8,091 and for 1953-54 the total was 13,399, that during the past year retail seafood dealers had increased about 300 in number and wholesalers by 100. Red Tide studies are continuing, it was reported, and \$42,000 has been allocated for this work. The oyster rehabilitation program continues as dead shell and seed oysters are deposited on non-commercial reefs. Rate of production, growth, cost, and other data are being gathered from a six acre experimental plot operated by the Oyster Division, according to the speaker. Board personnel schools; a marketing survey; an educational program through radio, television, press, publications, civic and industrial organizations, as well as schools, have been projects of the past year. It was said the Florida research program continues on the mullet, snook, shrimp, scallop, sailfish and blue crab, and in gear development. Broader laws for purse seining will be requested of the 1955 session of the legislature.

In discussion Mr. McConnell inquired if Florida limited the number of acres which could be leased. Mr. Bevis said no but added that lessee was required to work one-fourth of the leased bottoms annually.

Speaking for Louisiana Mr. Eddy said the Seafoods Division was working on a 20-year program which would incorporate various projects over the period designed for the betterment of the State's marine fisheries and interests dependent on the fisheries, one of which projects would be an economic survey of the fishery and this is expected to require six to seven years to complete. Copies of the program when completed will be made available. He said that the industrial services which the State will offer the fisherman will make it unnecessary for him to seek such services from other sources. Pointing to a large chart, the speaker mentioned such work of the Division as a recently published dealers' directory of fishery products, sea-scanner work to locate bottom debris and a contemplated reproduction and distribution of 73 charts of coastal waters which charts will result from an LSU project sponsored by the office of Naval Research. In conclusion mention was made of the recreational encroachment on commercial fishing.

Mr. Murphy of Louisiana said the recently published fish dealers' directory had been so well accepted and results reported by industry to have been so good, a second edition was to be prepared and this edition would include oyster dealers. He also spoke of the wide spread support which is being given the proposition of a weather ship being placed on duty in the Gulf, and mentioned that the recently closed weather station at Berwick, near *Bumwood* the mouth of the Mississippi River, leaves the Louisiana coastline without protection. It was said a survey which might result in an industry council being formed was underway.

Mr. Viosca, also speaking for Louisiana, told of their recent find of a nursery grounds in which the three best known commercial species of shrimp were found. He expressed interest in the Alabama shrimp study, stating it was much the same work as was being carried on in Louisiana. Reference was made to graphs which have been produced from data resulting from the shrimp study. It was said that a careful search of research information made available by state and federal agencies, universities and foundations had resulted in avoidance of unnecessary duplication of effort. Mention was made of the current cooperative work with the Scripps Institute and the contract research of the Department with Tulane and LSU Universities.

Mr. Bickerstaff traced the progress in resume of the Mississippi Seafood Commission from the formation of the parent organization, the Mississippi Oyster Commission, fifty-two years ago. The dedication of revenues derived from the sale of dead shells to research and reef propagation and the results of such recurring allocations was briefly treated as well as were some of the laws resulting from the 1954 legislative session, one of particular interest being cited which extends to non-residents the same fishing privileges as are enjoyed by residents and for the same licenses. In conclusion, Mr. Bickerstaff said he was very sorry it was not possible for Dr. Hopkins to be in attendance and present a paper covering activities and plans in the biological field.

Mr. Reid of Texas stated the coastal area has been divided into districts and a biologist assigned to each of the districts, the thinking behind this arrangement being that more progress can be made since each biologist will become more familiar with his area, knowing more of populations, production, changes that occur and harvests. Projects in progress and planned for the lower Laguna Madre include fish tagging, salt water pond experiments with fish and shrimp, oyster cultivation in fresh waters of the Arroyo Colorado, a survey of the live shell populations of the district and a survey of the effects of a proposed causeway and channel. A list of the flora and fauna of the district is being prepared. A total of 3,750 fish were reported to have been tagged in the upper Laguna Madre, 855 being small black drum. Salinities in this area were low during 1954 and the bivalves are again building up, vegetation is more abundant and a return to normalcy in this known nursery ground was said to be taking place. An east Galveston Bay ecological survey has been completed. The examination of factors influencing productivity of the natural oyster reefs of Galveston Bay is a continuing project as is industrial waste studies. Experimental transplants of crabs and fish also continue in effort to determine ages the various species can safely be transplanted from marine to fresh waters and the poundage a given area can produce and at what cost. The shrimp program to determine possible waste in shrimp and fish life also continues. A survey of the State's dead shell deposits by use of hydrosonic instruments is expected to start in November, 1954. Planned, according to the speaker, is a fish cultural station of 40 acres minimum to study life histories, food habits, reproduction, pollution and other phases which have to do with production.

The Chairman next announced that the new sound and color movie Shrimp Please would be shown.

Following the movie, Mr. Gautier invited all guests to join the Commissioners for lunch. The luncheon included Campbell's Cream of Shrimp Soup, a new frozen product not yet in general distribution, and canned Gulf tuna, the tuna having been caught by the Oregon on its most recent trip. No business was conducted during lunch which was served in the North Terrace Room.

The Story of Menhaden was shown at the opening of the afternoon session as an introduction to a discussion of Item 1b of the Commission's Work Plan, which item poses the question:

"Are the present harvest methods of any species detrimental to that, or any other species, to the extent that methods should be changed or modified?"

Coming up first for discussion was the purse seine in the menhaden fishery. The Chairman recognized Mr. Werlla of Louisiana who gave a resume of the growth in production and value of the Menhaden fishery on the Gulf to its present position of first in pounds harvested and second in dollar value to the fishermen.

The consensus of opinion as expressed by those who participated in the discussion concerning the use of purse seines in the Menhaden fishery was that the taking of these fish by such gear was not to the detriment of other fishes or the bottoms over which the net is set.

With regard to the use of the Otter trawl in the trash fish fishery, which subject was presented secondly, it was brought out that the gear had apparently done no injury to other fisheries.

The Chairman next called upon Dr. Leipper to present a resume of Gulf States' universities' activities in the fields of marine sciences and technology, other than research accomplished under state marine fisheries administration contracts, for the past year and plans.

Dr. Leipper stated that rather than treat of the mentioned subject he would like to present a report which was gotten together by members of the Committee on Marine Sciences of the Southern Regional Educational Board at the request of the presidents of the universities of Texas, Texas A&M and Louisiana State, and the Mississippi Board of Higher Education. He said the report had been submitted to the several presidents for their consideration. A brief account of the activities of the Committee on Marine Sciences since its formation in 1952 was presented. It was stated that the mentioned report made suggestions relative to the expanding of facilities at the Texas Institute of Marine Sciences, Aransas Pass; Marine Laboratory Texas A&M College, Galveston; Louisiana State University Marine Laboratory, Grand Isle; and Gulf Coast Research Laboratory, Ocean Springs. According to the speaker it was also suggested that a corporate body or Commission be set up to coordinate research activities of the laboratories.

Dr. Leipper before leaving the speakers' table was asked his opinion regarding a weather ship for the Gulf. He said that while a ship station would be costly to maintain, about \$90,000 per month being estimated for three ships, it would be helpful to the Weather Bureau in picking up hurricanes which develop in the Gulf, adding that the Bureau prepares a weather map every six hours of the western hemisphere and that the Gulf has always been a great blank. Weather ship recordings such as seasonal changes, current patterns and others would be useful information for fishery studies. Mr. McConnell mentioned the value of proper forecasting of weather conditions to various industries and to human beings both at sea and on shore.

Miss Zoula Pyle and Mr. Kenneth Marvin, Fish and Wildlife Service, Galveston, were introduced by the Chairman. Miss Pyle explained the material gathered for the demonstration which pertained to organic chemistry while Mr. Marvin covered the exhibit related to inorganic chemistry, both presentations illustrating visually the role of chemistry in fishery biology. Of particular interest was an exhibit of various elements in glass containers which showed the exact quantities available in five gallons of Gulf water, and the analytical instruments used in the Galveston laboratory for the detection of elements.

A meeting of scientists was asked by Mr. Thompson, Fish and Wildlife Service, Washington, for a discussion on the implementation of shrimp studies to be undertaken with P. L. 466 funds. Mr. Gautier scheduled the meeting for 8:00 PM in the Oriental Room.

The October 21 session was adjourned at 3:45 PM.

FRIDAY, OCTOBER 22, 1954

Mr. Gautier, presiding, called the meeting to order at 9:15 AM and introduced Mr. Springer, Chief of the Oregon's operations, to review activities in exploratory fishing.

Mr. Springer said that all objectives of the past year had been completed which included explorations for shrimp on the west coast of Florida; a summary of all past explorations for shrimp in the Gulf of Mexico; explorations for red shrimp off the Tortugas and in the lower Gulf of Campeche; and determination of the feasibility of long-line fishing for tuna.

A colored motion picture of the taking of tuna by long lines was shown, this film having been made during the successful July cruise of the Oregon in the north Gulf.

The proposed program for the coming year was said to include further work on long-line tuna fishing in the Gulf proper, the Yucatan Straits and the northwestern Caribbean, such coverage being aimed at determining the availability of tuna for long-line fishermen. A second objective will be that of deep water trawling for shrimp.

Mr. Eckles of the FWS Branch of Fishery Biology was introduced. He announced that the Lindner shrimp report had been turned over to the printers and that the publication would probably be ready for distribution in six to seven months. Fishery Bulletin 89, "Gulf of Mexico, Its Origin, Waters and Marine Life", has just been released. Mr. Eckles requested those wishing a copy to leave their names with the Commission's Secretary. State of knowledge charts of various Gulf fishes were brought up-to-date recently by the FWS in cooperation with Gulf States scientists and were distributed at this time.

Mr. Collier, FWS, Galveston, was called upon for a resume of activities for the past year relative to the Gulf survey. He stated that the preliminary treatment of all the Alaska data was completed and preparation of final reports started. Summarizing in a general way some of the results, he said that planktonic animals found over the continental shelf are about three times those caught over the deeper waters of the Gulf; that the ratio was four to one for fish larvae and fifty to one for fish eggs; that the northwest, northeast and southwest sections of the Gulf were most productive of plankton and the areas receiving drainage from the Mississippi River the most productive. Plant nutrients were said to be low at the surface and reach a maximum at about 2,000 feet, decreasing slightly below this depth.

The speaker referred to the possibility of fisheries being developed in the Gulf of Mexico which we do not now know about due to the depths to which photosynthesis takes place, depths greater than average because of the clear waters necessary to support plankton. Rapid progress was reported on the keeping alive of microscopic plants and animals under controlled conditions at the Galveston laboratory. According to the speaker, this will provide a solid foundation for inquiries into the early life processes of the commercial shrimp.

Mr. Wilson, who is in charge of Red Tide studies for FWS, Fort Myers, presented a resume of activities for the past year and plans for the immediate future. He said stations from Indian Rocks, near Clearwater to the Ten Thousand Islands were established to determine the concentration of Gymnodinium brevis, water temperatures and salinities. It was stated the organism was constantly present at one or another location in the area and the concentrations sufficient to kill fish, however, that most of fish kills had affected small areas and had been of short duration. Copper sulfate was said to have been used on two concentrations during the year but additional experiments were necessary before the chemical could be

recommended. Hydrographic and climatological data are being collected with objective in mind of being able to forecast outbreaks of the Red Tide. The speaker said cultures of the organism had been developed in the laboratory and experiments were progressing to find an algicide which would kill G.B. but not seriously affect other marine life, also, effort was being made to establish the range of tolerance and optimum conditions relating to growth of the organism as an aid to forecasting occurrences.

In discussion, Mr. Jones of Florida said a recent outbreak south of Fort Myers resulted in a meeting at which several older fishermen said the Tide had been present off and on for years but seemed to be in larger amounts since Lake Okeechobee waters had been drained in large volume to the southwest Florida coast. Mr. Wilson said there was a possibility the increased flow could have a bearing on the Red Tide. Dr. Idyll stated a survey for the Corps of Engineers had been made which showed the fresh lake waters when passed in large volume eastward to the Atlantic did not kill fish but did cause them to leave their normal habitat which displeased both commercial and sports fishing interests.

Mr. Gautier called upon the Secretary who gave a brief resume of activities of the Commission for the past year and with particular reference to those activities related to Public Law 466, the subject next scheduled for presentation. Copies of an outline of principal decisions reached and subjects discussed at Commission meetings from the beginning of the compact, July 16, 1949, through the March 18-19, 1954 meeting were distributed.

Referring to the program, the Secretary stated the agenda had been so drafted in order that a complete picture of marine fisheries activities and plans of the several states, universities and the federal government would be developed for its worth not only to those present but also to the Industry Advisory Committee authorized in P. L. 466. He said apparently the Committee had not yet been announced and this was confirmed by Mr. Whiteleather. It was the consensus of opinion expressed in a brief discussion which followed that the states should make recommendations as to membership on mentioned Committee to the Secretary of Interior.

For a partial presentation of projects provided for in an initial allocation of P. L. 466 funds, Mr. Gautier called upon Mr. Whiteleather. A sheet outlining all P. L. 466 projects approved as of September 10, 1954 was passed out.

After expressing Mr. Anderson's regrets in not being able to attend the meeting, Mr. Whiteleather explained that a representative of the FWS Technological Section was in the Gulf area contacting industry and universities in interest of the project designed to develop most suitable methods of freezing and packaging Southern oysters, a project calling for a \$40,000 expenditure on the Gulf and Atlantic during the current fiscal year.

That funds had already been set aside for an economic survey of the shrimp industry and that the survey could be made if wanted, was announced by the speaker. Reference was also made to an expansion of fishery education and market development on the Gulf, project headquarters to be at New Orleans.

Mr. Peterson of FWS covered that part of the Branch of Commercial Fisheries projects involving the collection of shrimp statistics incidental to the initial shrimp investigations program. To handle this \$60,000 project, he said statistical representatives would be placed at Key West, Coral Gables, Fort Myers, Tampa, Pascagoula, Biloxi, New Orleans, Houma, Morgan City, Galveston, Aransas Pass and Brownsville, with New Orleans being the headquarters and with Mr. Charles Lyles serving as director of the project. It was said such data as catch and value of catch by individual trips of each vessel, by species, port of landing, and area of capture, as well as the amount of fishing effort expended, were included in the work plan.

Representing Dr. Walford, Mr. Thompson of the FWS Branch of Fishery Biology, was next introduced. It was explained that the \$80,000 set aside for the shrimp investigations was in addition to funds allocated for the operation of the Galveston laboratory during the current year. He said the shrimp populations of the Gulf will be studied to determine the effects of environmental changes on shrimp production, in order to provide information necessary to maintain the production of these shellfish. It was also stated that it was the belief of the FWS that the initial program as outlined was necessary prior to assuming a more enlarged program as had been previously suggested. Mr. Thompson explained that the additional \$20,000 allocated for Red Tide studies would go to the study of environmental factors which set up a medium compatible to development and growth of the R. T. organism.

The Chairman held the general session open to allow for comments on these subjects, a shrimp industry economic survey, Gulf weather ship station, certification of imported shellfish, and chartering of fishing vessels to aliens, following which the session was adjourned.

Prepared by: W. Dudley Gunn
Secretary-Treasurer

EXECUTIVE SESSION, GULF STATES MARINE FISHERIES COMMISSION MEETING,
SAN ANTONIO, TEXAS, OCTOBER 22, 1954

The following are some decisions of general interest resulting from the captioned session:

Resolutions Adopted:

Economic Survey of shrimp industry recommended.

Weathership station in Gulf of Mexico recommended.

Extension of shellfish certification program recommended.

Names of Messrs. James McPhillips, Francis W. Taylor and A. J. Wegmann recommended for industry advisory committee of Fish and Wildlife Service in connection with P. L. 466 projects to be undertaken.

No action reference proposed change Maritime Administration General Order 59 to permit chartering of fishing vessels to aliens before receiving Administration approval.

Present Commission officers, Mr. Hermes Gautier, Chairman and Mr. William J. Hendry, Vice-Chairman, elected to serve second term office, 1954-55.

Plan of rotating offices of Chairman and Vice-Chairman between the states and serving one year terms was adopted.

Montgomery, Alabama, chosen for the March 17-18, 1955 regular meeting.

Prepared by: W. Dudley Gunn
Secretary-Treasurer

M I N U T E S

EXECUTIVE SESSION, SAN ANTONIO, TEXAS (OCTOBER 22, 1954)

Mr. Gautier called the session to order at 11:45 AM.

A quorum of Commissioners or their proxies was present from each state except Mississippi.

The Secretary read a letter from FWS which requested the Commission to canvass the shrimp industry to determine if it wanted an economic survey made of the industry. The Secretary advised that the following associations had been circularized: Louisiana-Mississippi Shrimp Association, National Shrimp Cannery and Packers Association, Southeastern Fisheries Association and the Texas Shrimp Association, with replies having been received to-date from all except the National Shrimp Cannery and Packers Association. Those replies received were reported to have been in the affirmative. Mr. Jones moved that a resolution be prepared and sent to FWS recommending such a survey, Mr. Hendry seconded. A rough draft of resolution was read. Upon vote the motion passed with all states voting favorably. The resolution is first attached to these minutes.

A resolution favoring the stationing of a weather ship on permanent assignment in the Gulf of Mexico was presented by the Louisiana Delegation. The subject was discussed and resolution read. Mr. McConnell moved for adoption. Dr. Holmes seconded the motion. Upon vote the resolution was adopted with all states voting favorably. The resolution is second attached to these minutes.

A letter from Mr. Dave Wallace, Director of the Oyster Institute of North America, concerning states permitting only certified fresh or frozen oysters or clams to be sold in each state, was read. Mr. McConnell stated he had discussed the matter with Louisiana oyster people and they were very much in favor of regulation of the flow of uncertified shellfish. Following discussion, Mr. McConnell moved that the Commission go on record as favoring the certification of these seafoods. Mr. Hendry seconded. Upon vote the motion passed with all states voting favorably. The Chairman instructed the Secretary to prepare a resolution containing points mentioned by Mr. McConnell and effect appropriate distribution. The resolution is third attached to these minutes.

A letter from the FWS was read which requested the views of the Commission relative to a proposed change in Maritime Administration General Order 59 to permit chartering of fishing craft to aliens for periods of not more than six months without obtaining prior approval. Following a discussion of the subject Mr. Bollinger moved that no action be taken.

Mr. Rockwell seconded. Upon vote the motion passed with all states voting favorably. The Secretary was directed to advise FWS of the Commission's decision in this matter.

The Chairman entertained a motion that the reading of the minutes of the Commission's two previous meetings be dispensed with and accepted as prepared, (consideration of the two sets being necessary because of the lack of a quorum at the last meeting). Mr. McConnell moved for adoption of minutes as rendered. Mr. Rockwell seconded. Upon vote the motion passed with all states voting favorably.

The Secretary was asked to check the record to determine in which state the next regular meeting would be held. It was reported to be Alabama's turn. Dr. Holmes moved that the meeting of March 17-18, 1955 be held in Montgomery. Mr. Rockwell seconded the motion. Upon vote the motion passed with all states voting favorably.

A statement of the Commission's financial status as of October 15 and a comparative exhibit of last year's budget of operating expenses with budget approved by the Chairman and Vice-Chairman were distributed. Following discussion Dr. Holmes moved, and Mr. McConnell seconded the motion that the 1954-55 budget as decided upon in discussion be approved. Upon vote the motion passed with all states voting favorably. The budget as approved and financial statement are fourth and fifth attached to these minutes.

Resolution was proposed by Mr. McConnell and seconded by Mr. Bevis that the Secretary of the Interior be requested to place certain persons on the Industry Advisory Committee in connection with P. L. 466 projects as would be recommended by the Gulf States in letters to the Commission Secretary. Rough draft of resolution was read. The Chairman instructed the Secretary to prepare the resolution upon receipt of names from the member states and forward same to the Interior Department Secretary. Resolution is last attached.

Mr. Jones moved, Mr. Rockwell seconding, that the Chairman and Vice-Chairman be retained in office for the next year, 1954-55. A discussion followed in which it was brought out by Mr. McConnell that it was the feeling of Louisiana that the apparent precedent which had been set of officers serving two terms of office should be abandoned, this he explained was not to be considered a reflection on the service which had been rendered by the present officers but a matter of principle. Voting on the motion, Alabama, Florida and Texas voted for retention of present officers and Louisiana voted negatively. (Accordingly, Mr. Gautier as Chairman and Mr. Hendry as Vice-Chairman, were elected to a second term of office.)

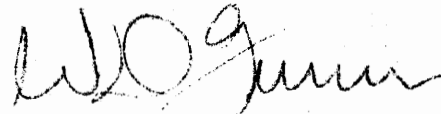
Following, Mr. Bevis proposed that after the year 1954-55, the Chairman and Vice-Chairman be elected to serve a one year term of office and that the offices be rotated from state to state, for example; 1955-56 a Florida

Commissioner would be Chairman and a Louisiana Commissioner Vice-Chairman, 1956-57 a Louisiana Commissioner would be Chairman and an Alabama Commissioner would be Vice-Chairman, 1957-58 an Alabama Commissioner would be Chairman and a Texas Commissioner would be Vice-Chairman, and so on. Mr. McConnell seconded the motion. Upon vote the motion passed with all states voting favorably.

Mr. Gautier stated that as usual the Commission standing committees would be appointed following advice of the several states as to people each state wishes appointed on the committees.

The Secretary passed out a consolidated report of the dead shell dredging operations showing by states, cubic yards, revenues per cubic yard and total revenues, for the past year.

With no further business to come before the session, the Chairman adjourned the meeting at 12:50 PM.



Prepared by: W. Dudley Gunn
Secretary-Treasurer

WDG:h

State Delegation's selection, as mailed to Commission Secretary, of persons to be listed in resolution to the Interior Secretary recommending appointment on The Industry Advisory Committee of Fish and Wildlife Service

Alabama:	Mr. James McPhillips
Florida:	Mr. Francis W. Taylor
Louisiana:	Mr. A. J. Wegmann
Mississippi:	Mr. A. J. Wegmann
Texas:	Mr. A. J. Wegmann

A RESOLUTION

WHEREAS, the United States Fish and Wildlife Service has requested the Gulf States Marine Fisheries Commission to inquire of industry on the Gulf if an economic survey of the shrimp industry is desired and to communicate this Commission's recommendations in the matter; and


WHEREAS, the Louisiana-Mississippi Shrimp Association, the Southeastern Fisheries Association, and the Texas Shrimp Association have expressed a desire that such a survey be undertaken; now therefore be it

RESOLVED that this Commission recommends that the Fish and Wildlife Service give favorable consideration to initiating such a project; and

BE IT FURTHER RESOLVED that the shrimp industry of the Gulf States be informed of this request and that its cooperation in the supplying of data essential to the suggested survey be respectfully solicited.

* * * * *

The foregoing Resolution was adopted by the Gulf States Marine Fisheries Commission, October 22, 1954, at a regular Commission meeting held at the Gunter Hotel in the City of San Antonio, Texas.


W. Dudley Gunn
Secretary-Treasurer

A RESOLUTION

WHEREAS, the Gulf States Marine Fisheries Commission being aware that accurate and immediate weather information is of the utmost importance to the States bordering on the Gulf of Mexico; and

WHEREAS, the Gulf Coast is the only coast without a weather station offshore; and

WHEREAS, there exists an urgent, definite, and proven need for more adequate weather information in this highly productive section of the United States; and

WHEREAS, Congressman T. Ashton Thompson, of Louisiana, introduced in the 83rd. Congress, 2nd Session, HR 9251 on May 24, 1954, "To provide that a floating weather station shall be maintained at all times in the Gulf of Mexico to provide storm warnings for States bordering on the Gulf of Mexico"; and

WHEREAS, this Bill - HR 9251 - received full support from the industries located on the Gulf of Mexico, particularly the Fisheries, Air Lines, Oil Operators, Steamship Operators, and Civil Defense Directors; and

WHEREAS, the above named Bill was found to be not necessary in order to establish such Weather Station, because such authority has been provided the Secretary of Commerce of the United States under Section 147: Title 14 USC; and Section 90: Title 14 USC; and

WHEREAS, the Office of the Secretary of Commerce, the Office of the Chief of the Weather Bureau, and the Commandant of the United States Coast Guard have been made aware of the need for this weather protection service for the Gulf States through briefs, letters, resolutions, telegrams, and telephone advices; and

WHEREAS, lives and property amounting to over two billion dollars are in jeopardy due to lack of information from the Central and Western Gulf of Mexico where destructive storms form very suddenly; therefore be it

RESOLVED that the Gulf States Marine Fisheries Commission urges immediate consideration by the Secretary of Commerce of the United States to establish a Weather Station in the Gulf of Mexico, because existing land-based facilities have proven inadequate for the needs of our fishing fleets, which now range far beyond the scope of radar stations, and that the economy of the Gulf States marine fisheries is seriously threatened because of the lack of weather protection which would be provided by a Weather Station in the Gulf of Mexico; and

BE IT FURTHER RESOLVED that copies of this Resolution be forwarded to the President of the United States, the President of the Senate and the Speaker of the House in the Congress, the Congressional Delegations of the States of Alabama, Florida, Louisiana, Mississippi and Texas; the Chairman and members of the Senate Interior & Insular Affairs Committee; the Chairman and members of the House Merchant Marine & Fisheries Committee; the Chairman and members of the Senate and House Joint Committee on Appropriations.

* * * * *

The foregoing Resolution was adopted by the Gulf States Marine Fisheries Commission, October 22, 1954, at a regular Commission meeting held at the Gunter Hotel in the City of San Antonio, Texas.


W. Dudley Gunn
Secretary-Treasurer

A RESOLUTION

WHEREAS, the shellfish certification program which is based on a joint state, federal and industry cooperative plan has proven so highly successful in the maintenance of sanitary controls, particularly at the source of supply of the raw product; therefore be it

RESOLVED by the Gulf States Marine Fisheries Commission that shellfish which do not conform with standards as outlined in such program should not be offered for sale in the several states; and

BE IT FURTHER RESOLVED that a copy of this resolution be transmitted to the President of the United States, the Senate and the House of Representatives, the Secretary of State, the U. S. Food and Drug Administration and the U. S. Public Health Service through the Secretary of Health, Education and Welfare.

* * * * *

The foregoing Resolution was adopted by the Gulf States Marine Fisheries Commission, October 22, 1954, at a regular Commission meeting held at the Gunter Hotel in the City of San Antonio, Texas.



W. Dudley Gunn
Secretary-Treasurer

COMPARATIVE ANALYSIS OF EXPENSES

	<u>Budget 1953-54</u>	<u>Actual Expenses 1953-54</u>	<u>Forecast of Expenses-1954-55</u>
Salaries	\$ 10,000.	\$ 10,045.65	\$ 10,200.
Travel	1,350.	1,719.98	1,525.
Rent	1,080.	1,080.00	1,080.
Stationery, Office Supplies and Printing	430.	469.75	522.
Telephone & Telegraph	450.	505.93	458.
Postage	90.	96.64	110.
Electricity	60.	75.89	80.
Accounting	175.	175.00	225.
Insurance	236.	240.38	250.
Depreciation	497.	496.96	500.
Miscellaneous (Sundry)	25.	70.68	125
Furniture, Fixtures & Repair	50.	-	25.
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TOTAL	\$ 14,443.	\$ 14,976.86	\$ 15,100.

1954-55 Budget approved by the Commission.

GULF STATES MARINE FISHERIES COMMISSION

FINANCIAL POSITION
CLOSE OF BUSINESS, OCTOBER 18, 1954

Cash in Bank 9/30/54	\$14,943.65	
Deposits since 9/30/54	5,000.00	
Petty cash & stamps 10/18/54	<u>18.86</u>	\$19,962.51
Checks outstanding 9/30/54	\$ 204.61	
Checks issued since 9/30/54	<u>540.86</u>	<u>745.47</u>
Balance		\$19,217.04

The balance shown includes salaries through 10/15 but does not include proration of accounts to 10/18 as are settled monthly, such as rent, services, etc.

All membership dues have been paid for the current state fiscal years.

Proceeding through the remainder of the fiscal year at the present level of monthly operating expense, approximately \$1200.00, the Commission should have about \$9,000.00 on hand at the close of business June 30, 1955.

A RESOLUTION

WHEREAS, the Gulf States Marine Fisheries Commission is concerned with the welfare of the fisheries of the Gulf of Mexico; and

WHEREAS, Public Law 466 authorizes the Secretary of the Interior to appoint an advisory committee of the American fisheries industry to advise him in the formulation of policy, rules and regulations pertaining to requests for assistance, and other matters; and

WHEREAS, this Commission feels that representatives of industry located on the Gulf of Mexico could because of their intimate knowledge of the fisheries problems of the area be of considerable assistance in serving on such a committee; now therefore be it

RESOLVED that the Gulf States Marine Fisheries Commission recommends to the Secretary of the Interior the names of Mr. James McPhillips, President, McPhillips Packing Company, Bayou La Batre, Alabama; Mr. Francis W. Taylor, President, Warren Fish Company, Pensacola, Florida; and Mr. A. J. Wegmann, President, Bagille's Seafood Company, New Orleans, Louisiana, for consideration in the selection of members to serve on the industry advisory committee.

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The foregoing Resolution was adopted by the Gulf States Marine Fisheries Commission, October 22, 1954, at a regular Commission meeting held at the Gunter Hotel in the City of San Antonio, Texas.



W. Dudley Gunn
Secretary-Treasurer

NEW ORLEANS, LA. JUNG HOTEL

MARCH 18-19, 195⁴ MEETING M-18

GULF STATES MARINE FISHERIES COMMISSION

New Orleans, Louisiana
Jung Hotel - Map Room
March 18 (Thursday) & March 19 (Friday) 1954

P R O G R A M

(Mr. Hermes Gautier, Commission Chairman, Presiding)

- 9:30 AM CALL TO ORDER.
ROLL CALL AND INTRODUCTIONS.
WELCOME: Mr. L. D. Young, Jr., Director, Louisiana
Wildlife and Fisheries Commission.
- 10:00 AM REVIEW OF SHRIMP RESEARCH APPROVED BY THE G.S.M.F.C.:
Dr. Gordon Gunter, Director, U. of Texas, Inst. of Marine
Science.

WAYS OF FINANCING THE COMMISSION APPROVED SHRIMP RESEARCH
PROGRAM: Mr. Gautier.
- 11:00 AM RESERVED FOR COMMISSION STATE DELEGATION SESSIONS.
- 11:30 AM RESERVED FOR WAYS AND MEANS COMMITTEE SESSION.
- 12:30 PM LUNCH.
- 2:00 PM REPORT OF WAYS AND MEANS COMMITTEE.
- 2:45 PM EXPLORATORY FISHING FOR SHRIMP: Mr. Stewart Springer, FWS,
Gulf Fishery Explorations.
- 3:15 PM STATE OF KNOWLEDGE OF GULF FISHES, A GRAPHICAL PRESENTATION:
Dr. L. A. Walford, FWS, Branch of Fishery Biology.
- 3:45 PM HYDROSONIC SURVEYING OF SHELL DEPOSITS: Mr. Howard D. Dodgen,
Executive Secretary, Texas Game & Fish Commission.
- 4:00 PM ADJOURNMENT

FRIDAY, MARCH 19, 1954

9:30 AM EDUCATIONAL FILM PRODUCED FOR TELEVISION.

10:00 AM THE LOUISIANA FISHERIES, Presented by Division Chiefs,
Louisiana Wildlife and Fisheries Commission.

Oyster Division - Mr. James N. McConnell
Commercial Seafood Division - Mr. Lee Eddy, Jr.

10:30 AM CURRENT STATUS OF THE RED TIDE PROBLEM: Mr. Charlie Bevis,
Supervisor, Florida Board of Conservation, introducing:

Dr. F. G. W. Smith, ^{Director} ~~Research Associate~~, The Marine
Laboratory, University of Miami.

Mr. Wm. B. Wilson, Fishery Research Biologist,
FWS, Gulf Fishery Investigations.

11:00 AM ADJOURNMENT.

* * * * *

11:10 AM EXECUTIVE SESSION.

GULF STATES MARINE FISHERIES COMMISSION
312 Audubon Building
New Orleans 16, Louisiana

M I N U T E S
(Extract of Transcript)

REGULAR MEETING, MARCH 18-19, 1954
JUNG HOTEL, NEW ORLEANS, LOUISIANA

OFFICIAL ATTENDANCE OF COMMISSIONERS:

	<u>PRESENT</u>	<u>ABSENT</u>
<u>ALABAMA:</u>	W. C. Holmes	Earl M. McGowin Thomas A. Johnston, III
<u>FLORIDA:</u>	D. C. Jones, Jr. William J. Hendry	Charlie Bevis
<u>LOUISIANA:</u>	L. D. Young, Jr. (3/18) Donald G. Bollinger	C. C. Burleigh
<u>MISSISSIPPI:</u>	Hermes Gautier	Walter J. Gex, Jr. Louis Simmons
<u>TEXAS:</u>	Howard D. Dodgen	Jimmy Phillips Lawrence A. Kurtz
<u>PROXIES:</u>	A. J. Harris, Jr. Mary Schulman	(For Thomas A. Johnston, III) (For Charlie Bevis)
<u>STAFF:</u>	W. Dudley Gunn, Secty-Treas. E. S. Hoover, Office Secty.	

COMMISSION STANDING COMMITTEE MEMBERS PRESENT

Legal: A. J. Harris, Jr., Mary Schulman (Previously listed)
Scientific: A. E. Hopkins, H. C. Loesch, Cecil Reid, F. G. Walton Smith,
Percy Viosca, Jr.

STATE MARINE FISHERIES REPRESENTATIVES PRESENT

R. L. Eddy, C. H. Gresham, Sidney Landry, J. N. McConnell, G. C. Moore,
Charles Murphy, John Rockwell, L. S. St. Amant, W. S. Werlla.

FEDERAL GOVERNMENT REPRESENTATIVES PRESENT

A. W. Anderson, E. L. Arnold, Albert Collier, S. C. Denham, W. C. Herrington, D. L. Hoy, Stewart Springer, A. J. Suomela, William Terry, L. A. Walford, W. B. Wilson.

STATE UNIVERSITY REPRESENTATIVES PRESENT

Fred Cagle, E. A. Fieger, Gordon Gunter, C. P. Idyll, J. G. Mackin, R. J. Russell, Royal Suttkus.

FORMER COMMISSIONERS, REPRESENTATIVES OF INDUSTRY AND OTHERS PRESENT

E. J. Grizzaffi, B. E. Thomas, J. E. Barr, C. R. Carry, A. B. Chauvin, W. J. Chauvin, Lenora Decuers, T. B. Holcombe, E. M. Lapeyre, Jr., F. S. Lapeyre, Max Lorenz, John Real, Earl Rodriguez, G. E. Steele, Jr., L. W. Strasburger, Mrs. A. J. Wegmann, A. J. Wegmann, and others.

GENERAL SESSION, MARCH 18, 1954

Mr. Hermes Gautier, Commission Chairman, who called the meeting to order at 9:45 AM requested the Secretary to call the roll of Commissioners and following, proceeded with introductions.

The Chairman next called upon Mr. L. D. Young, Jr. who extended a warm welcome to the State of Louisiana and presented a capitulation of the poundage production and value of the Louisiana salt water fisheries.

Dr. Gordon Gunter presented a review of the shrimp research approved by the Commission. The paper is first attached to these minutes.

Mr. Gautier opened the meeting for a discussion of ways and means for the financing of the proposed shrimp research program. He pointed out that Fish and Wildlife Service had approved the program but had advised that the 1954-55 budget was not sufficient to undertake such a program during the next fiscal year. It appeared from the discussion that the Saltonstall Bill (S-2802), which was said to be scheduled for hearings starting April 1, would be the most promising source for funds for handling of the program by the Service.

It was decided to proceed with the program set for the afternoon session after it developed that State Delegations, and Ways & Means Committee separate sessions were not necessary.

The Chairman stated that the Fish & Wildlife Service had approved the Commission's request (resolution adopted at Edgewater Park, January 21-22, 1954) that the exploratory section place primary emphasis on shrimp during

the current calendar year and then called upon Mr. Stewart Springer to review plans. Mr. Springer reported the vessel had already undertaken the new program and was currently operating between Cape San Blas and Tampa Bay. He reported no valuable concentrations yet found in the area. The program calls for counterclockwise explorations around the Gulf. A summary report of exploratory fishing for shrimp during 1952-53 was passed out. This report is second attached to these minutes.

The meeting was adjourned for lunch at 11:45 AM.

AFTERNOON SESSION, MARCH 18, 1954

Dr. Walford was introduced to present the results of a recent survey into the state of knowledge of the Gulf fishes conducted by the Service upon request of the Commission. He spoke from a large graph, the blocks of which were of varying colors of green to indicate the extent of available information. A sheet containing information identical with the large graph was distributed. It was explained that all inquiries sent to Gulf scientists had not been returned, therefore the graph could only be considered as preliminary. The preliminary graph is third attached to these minutes. Information developed in discussion will be included in revised graph which will be available in the near future, according to Dr. Walford. Mr. Arnold, FWS, treated of Gulf larval fish findings.

Mr. Howard Dodgen was introduced to advise the Commission of the latest developments in the proposed survey of Texas dead shell deposits through the use of a hydro-sonic device. He said that while early tests had not been under most favorable conditions, the Texas Commission was satisfied with the merits of the device to extent that contract had been made with Magnolia Petroleum Company to supply same. The device was said to cost \$15,000, \$30,000 for other equipment and \$400,000 for operation, engineering and personnel over a five year period, the length of time estimated to survey the Texas deposits. Mr. Dodgen said he would be glad to have representatives from other of the States profit from their experiences after the device is perfected and put into operation.

FRIDAY, MARCH 19, 1954

A 16 mm. sound film prepared for television audiences by the Texas Game and Fish Commission was shown by Mr. James E. Morgan of the Louisiana Wildlife and Fisheries Commission. Mr. Dodgen stated that while the film was one of wildlife they expected to make films of the fresh and salt water fisheries, each costing from \$2,000 to \$2,500. Surveys which have been completed, according to Mr. Dodgen, indicate the television stations are anxious to show this type of film to their audiences because of the popular appeal and it is his belief that such films are the least expensive and most practical media for educating the people in conservation of the resources.

In speaking on the subject, The Louisiana Fisheries, the Chairman called upon Mr. James N. McConnell, Chief, Louisiana Division of Oysters and Water Bottoms, who informed the group of a meeting which had been called by the Louisiana Wildlife and Fisheries Commission in New Orleans for April 5, inviting representatives of the Louisiana Department of Conservation, the U. S. Geological Survey, the U.S. Engineers and all companies interested in offshore geophysical work to participate in discussions relative to the adoption of rules and regulations relative to such operations. Mr. McConnell illustrated on the blackboard how an oyster reef near a point on the land becomes silted through water forming a cut landward from extremity of a point, and how eventually a new reef is formed when the water covers the parcel of land which is pinched off.

Mr. Lee Eddy, Jr., Chief of the Louisiana Commission's Commercial Seafood Division, was next introduced. Mr. Eddy spoke of the crop production limitations which are at present being imposed upon the farmer by the federal government, such limitations being unthought of by the farmer of fifty years ago; of it being conceivable that some day the government would tell the fisherman how, when and in what amount he could utilize the aquatic resources. He affirmed the rights of the states to regulate their own resources and suggested that the states be mindful of such action as might eventually lead to government regulation over the states' aquatic resources.

The current status of the Red Tide problem was next on the agenda, and the Chairman opened the subject by calling upon Miss Mary Schulman, Asst. Attorney General, State of Florida.

Miss Schulman stated that the Florida Board of Conservation had in recent weeks appropriated \$17,000 to the University of Florida for a Red Tide research program and \$25,000 for continuance of the program which has been carried on by the Marine Laboratory, University of Miami.

Miss Schulman introduced Dr. F. G. Walton Smith, Director of the Marine Laboratory to tell of the work Florida is doing in an effort to determine the cause of the Red Tide.

Dr. Smith, referring to the outbreak in 1946-47 and later, informed the conferees of the vast amount of damage which is done with each occurrence and of the early and later observations in relation to the phenomena which has placed the scientists in better position to cope with the problem. Occurrences of the tide were said to have been observed to follow heavy summer rainfall and the resulting run-off. On-shore winds was cited as another obvious factor. Dr. Smith said it is important to control of the tide to be able to predict occurrences and that present investigations were designed to develop data which will aid in such forecasting.

Mr. Albert Collier, FWS, Gulf Fishery Investigations, said that Florida had both peat and marl in that portion of the state over which waters passed into the Gulf, the quantities being dependent upon the amount of rain, where the Red Tide generally appears. That the mixture of the various inorganics from the peat and marl soils flowed from the mainland into

waters which tend to bank up along the coast due to prevailing low velocity winds, and that such action produced a likely medium for development of the Red Tide bloom. The discharge of copper sulphate in a mass of the organisms located by the Alaska off the S.W. Florida Coast was encouraging enough, according to Mr. Collier, to warrant the continuing of such experiments as a means of control.

Mr. William B. Wilson of FWS, who has been carrying on laboratory experiments with live cultures of the Red Tide organism, was introduced. Mr. Wilson told of the laboratory's success in isolating Gymnodinium brevis in September, 1953 and having maintained a number of cultures since that time. Standard seawater taken 200 miles south of New Orleans, which has been aged for a year to allow depletion of organic materials, is used for each medium, he said. Work continues on the cultures in the laboratory, growth and reproduction studies being included. Various chemical compounds are being used to gain information on all phases of the life of the organism. Mr. Wilson's exhibit of cultures under the microscopes was an interesting addition to the general subject of the Red Tide.

In discussion Dr. Walford suggested that all research agencies engaged in Red Tide studies work closely together so that each would understand the other's line of investigations. He said it would be useful if a committee of biologists representing each of the agencies could be formed under the auspices of the Commission to meet periodically between Commission meetings. Dr. Smith agreed with Dr. Walford's suggestion. (Secretary's note) At the executive session which followed Mr. Gautier appointed on the Red Tide Committee:

Dr. F.G. Walton Smith, Chairman,
The Marine Laboratory, University of Miami

Dr. James B. Lackey
University of Florida

Mr. Albert Collier
Fish & Wildlife Service, Galveston.

Having no response to an invitation for the presentation of other subjects, Mr. Gautier adjourned the meeting at 12:10 PM but before doing so reminded the conferees that the exhibit of larval and juvenile fishes, including the sailfish which Mr. Arnold mentioned at the Thursday afternoon session, were still on exhibit and that Mr. Arnold would be glad to explain and answer any further questions in connection with his exhibit.

Prepared by: W. Dudley Gunn
Secty-Treas.

GULF STATES MARINE FISHERIES COMMISSION
312 Audubon Building
New Orleans 16, Louisiana

M I N U T E S

EXECUTIVE SESSION, NEW ORLEANS, LA. (MARCH 19, 1954.)

Mr. Gautier called the session to order at 12:30 PM.

Upon request, several representatives of industry were invited to the first part of the session. The subject treated and names of those in attendance at the early part of the session are on record at the Commission's headquarters office.

Guests having left the session, Mr. Gautier called on the Secretary for scheduled reports:

Since only Alabama and Florida were qualified to vote, no action was taken on approving of the minutes of the last meeting.

The Secretary reported a bank balance, less outstanding checks, of \$11,476.16 as of March 1, 1954.

A report on the effects of a reduced 1954-55 budget of the U. S. Coast and Geodetic Survey was given and a summary of last surveys by areas was presented. The Secretary was instructed to gather information on possible losses to industry resulting from bottom areas possibly needing to be better charted, and to report on subject at the annual meeting.

The Secretary was instructed to request Messrs. Young and Gex to poll their respective State Delegation on the Commission for a State vote on a matter originally presented at the October Tampa meeting.

Those present approved San Antonio, Texas, as the meeting place for the fifth annual meeting to fall on the dates, October 21-22.

The Chairman was instructed to proceed with the matter of securing a federal appropriation for the inauguration of the Commission approved shrimp program for the 1954-55 fiscal year beginning July 1, presenting necessary statements at hearings to be held on the Saltonstall Bill (S-2802.)

Mr. Gautier requested the Secretary to express to Mr. Young the deep appreciation of the Commission for the genuine hospitality extended by Louisiana during the course of the meeting and for the very fine dinner at Arnaud's.

With no further matters to be considered the meeting was adjourned at 2:00 P. M.

Prepared by: W. Dudley Gunn
Secty-Treas

REVIEW OF SHRIMP RESEARCH APPROVED BY THE
GULF STATES MARINE FISHERIES COMMISSION

Dr. Gordon Gunter 3/18/54

Mr. Chairman, ladies and gentlemen:

Whether or not I fulfill your expectations I feel particularly honored in coming to New Orleans especially to talk about shrimp, for in a way it completes a full circle for me. My first job was with the Shrimp Investigations for the old Bureau of Fisheries here on the Louisiana coast almost 25 years ago.

Our shrimp belong to the family Penaeidae, which is a warm temperate and tropical family having its center of distribution, so far as numbers of species are concerned, in the Indo-Pacific area. They seem always to be most abundant around estuarine areas and large river mouths. There are four species of commercial importance in the Gulf of Mexico. These are the white shrimp, pink shrimp, brown shrimp and the seabob, which is used for drying. There are some six other species in this area but they are not of commercial importance.

The industry first changed from its purely local scope to one of national and world-wide interest, when the canneries got started about the turn of the century. They had lots of trouble in the beginning. The cans were first lined with paper. Shrimp often spoiled and turned black in the can, but finally the problems were licked. Shrimp were originally seined and I have seen seines in operation which were 1,000 fathoms long, that being a little more than a mile. The last seines were used a few years ago and the fishery now uses the otter trawl exclusively. This gear came into use about the time of the first World War.

Formerly we were concerned only with white shrimp and to a lesser extent with the seabob.

The first worthwhile work on the biology of the white shrimp was carried on by Mr. Percy Viosca 35 years ago. He found that shrimp spawn at sea, that they make their way into inside waters, may grow up in as brief time as 6 months and return to the sea. That is a brief summary of the life history of the shrimp and Viosca deserves full credit, which incidentally he never obtained, because his results were not published in a national journal and not all of them under his own name.

Weymouth, Lindner and Anderson, 1933, rounded out this picture in detail with presentation of total length-frequency curves of the population, as these were shown in the commercial gear. Theirs was the first fully presented picture and to-date is the most important publication from the Federal Shrimp Investigations. Pearson worked on larval stages and outlined the general picture although the precise number of stages still is unknown. Various short papers were written on the development of eggs in the ovaries.

A few years ago I stumbled into data indicating that young white shrimp come into low salinity waters in two groups during the spawning season and grow

at the rate of about 1/25 of an inch a day. This explains the last general gap in the life history of post-larval white shrimp. I did not know that the idea of fast growth was advanced long ago by Viosca.

Mr. Burkenroad's chief contribution was to differentiate the old species, Penaeus brasiliensis, so-called, into two - the pink and brown shrimp. There is a true P. brasiliensis, but it has not been reported from our area.

A Dane named Heegaard worked on larval shrimp at our laboratory. His chief contribution was to show that the number of larval stages are in doubt.

There have been other works, some unpublished. I am happy to say that Dr. Walford has informed me that the Fish & Wildlife Service shrimp report, which we have been expecting for some time, is almost ready for press, and should be out in a short while.

The Miami group has done some work on the pink shrimp in Florida and I understand that this work is continuing. Mr. Harold C. Loesch is carrying on a study in Mobile Bay.

That brings us roughly to the present on shrimp research. In the past 5 years the whole fishery has changed. The pink and brown shrimp have been heavily exploited. We have not learned enough about white shrimp to exploit or control the fishery properly and suddenly the problem has grown three times as large.

The need for a Gulf-wide program has been felt for a long time. Several people have worked on the outline and probable costs of this program, which has already been presented to you. I am supposed to explain that program. That is something of a problem for, in the first place, I never saw a research program find precisely what it set out to get and similarly a research program always runs into other things and makes discoveries which were undreamed of. The reason being, of course, that we are always groping in the dark, otherwise there would be no need for a research program.

In general terms, this research program and most others can be defended by some simple considerations. Ignorance of any situation will lead always to error sooner or later and often to catastrophe. We feel the need to know, to push back the barriers of ignorance. Learning is both an individual and a racial process. Racially we learn by observing new facts and putting them in print. Research is purely a device for increasing the incidence and rate of discovery of new facts. We want them particularly on shrimp.

That brings us to the specific problems. These can best be discussed under the Description of Problems as listed in the various mimeographed reports of this Commission. I shall take them up one by one.

1. WHY MUST WE KNOW THE LIFE HISTORY OF ALL IMPORTANT SPECIES?

The answer to that is almost self-evident. The general life history is the starting point or base towards understanding the production and standing of populations, which is the real point we are after, from the practical standpoint.

As I have indicated, we know it in the broad aspects for white shrimp. But we don't know precisely where in relation to the passes nor under what conditions the shrimp spawn. We don't know how long the young float in the water nor what the chief food is at any stage.

The 200,000,000 pounds of shrimp caught per year probably consume a billion pounds of food. Possibly a variation in food supply may largely explain variations in the shrimp supply. We might end up studying the variation in supply of some little worm, as a key to the whole thing.

Concerning pink and brown shrimp we know very little. I am told that fishable concentrations of pink shrimp are found only on shell and coral sands and that the Florida pinks raise in Florida Bay.

We know that the browns do not school as the whites do and are distributed at a rate of about 5 to 7 pounds per acre, on the grounds. They do not go into quite so low salinities as white shrimp and go farther out to sea. They are caught on four more or less discrete grounds between S.W. Pass of the Mississippi and Obregon, Mexico, which is in the lower part of the Gulf of Campeche. Weymouth, Lindner and Anderson stated that brown shrimp out-numbered whites in Barataria Bay in early summer in 1931 and 32. I observed the same thing in Texas bays in 1941 and 42. Apparently, they have always been with us. We don't know why white shrimp are caught in the day and browns mostly at night. It is a change of shifts for reasons unknown.

2. WHY MUST WE SAMPLE THE CATCH?

Today on the Texas coast we don't know how many shrimp are taken in Mexico and how many in Texas waters. We know the landings fairly well, but not the production of Texas waters. That is an impossible situation. No matter how much else you know, you could never do anything by way of controlling laws, if you did not know who produced what and where.

But in sampling the catch we want to know considerably more than that. We want to know what sizes and species are caught where and when throughout the year and how much effort it takes and how these matters change seasonally from year to year.

Such sampling is a primary requisite to the general knowledge of the populations and scarcely needs further emphasis. If such sampling goes hand in hand with sampling of the undersized, non-commercial part of the population, on an adequate scale, we shall finally be able to see an orderly picture in the change of shrimp populations - and there is an orderly picture there if we can discern it. If this can be done thoroughly then possibly some of the sampling can be stopped later and only key areas and times sampled.

3. WHY IS IT NECESSARY TO DETERMINE THE MECHANISMS BY WHICH THE YOUNG ENTER INSIDE WATERS?

The entrances to the bays, low salinity waters, are fairly restricted on most of our coasts. Yet shrimp spawn at sea and the young are relatively weak swimming parts of the floating life for 2 or 3 weeks. A Dane working on our coast said he found a cloud of shrimp larvae about 5 miles offshore which slowly drifted towards our pass, Aransas Pass, as they grew. There is a possibility that he switched species somewhere in dozen or so stages and further there is a strong westward or southward current along these shores. How, then, could a cloud of several million shrimp larvae move directly across that current and hit a pass 1/4 of a mile wide - or a point less than .003 percent of the Texas coast - where passes are 33 miles apart on an average. And south of this point there is no place where white shrimp can raise for 1,000 miles. There is something very strange about it all. Is there a great waste or loss of shrimp larvae? Do the numbers entering the passes determine next year's crop or is there always an oversupply? By a study of the incoming supply can we predict next year's supply? How do these small atoms of life breast the forces of the ever-changing sea? If you compare relative sizes to distances, the homing of the salmon is not a bit more marvelous. Here may be a main key to shrimp production.

4. WHY IS IT NECESSARY TO LEARN HOW VARIATIONS IN THE ENVIRONMENT RELATE TO SIZE OF THE BROOD?

We know from other fisheries that the size of the annual crop is not usually related so much to the number of eggs laid, for there is nearly always a surplus, but to what happens in the environment immediately after spawning. After hatching the young are in the most helpless, vulnerable stage of their whole life. Unusual changes in temperature may kill them or strong currents may sweep them away. They are highly restricted in the kind of food they can eat and if the proper food is not present in ample quantity they may starve. We know nothing of these things and when you consider all the factors which must be just right for the microscopic young, the wonder is that you ever have a good crop.

5. WHY IS IT NECESSARY TO TAG SHRIMP?

Some tagging of shrimp has been done and the Fish and Wildlife Service has shown that shrimp migrate southward up to 300 miles in winter, along the South Atlantic Coast, and return northward in the spring. But there is strong suspicion that these were very tough shrimp, like the centenarians in the human race who attribute their longevity to extensive use of whiskey or tobacco. We need better tagging procedures.

We need to know not only where shrimp go but how fast they grow and how fast they die. That is the key to the whole proposition of protection. If you have a hundred pounds of shrimp that are going to be 125 pounds of shrimp a month hence, or even only 100 pounds of larger, better grade shrimp, they should

be protected and not fished. On the other hand, if there are going to be only 75 or 50 pounds left from this original 100 pounds, then they should be taken while taking is good. Both the mortality and the growth rate can be determined by tagging, with adequate sampling.

6. WHAT CAN BE LEARNED BY STUDYING SHRIMP IN THE LABORATORY?

If we knew enough about the individual shrimp we could predict what shrimp would do in nature. We could study the influences of temperature, salinity, oxygen tension, turbidity, light, darkness, mud, food, other shrimp and several other factors upon shrimp. We might be able, if good methods were developed, rear the various stages and learn them completely and even learn something that way about the rate of growth. I am curious to know why brown shrimp are caught best at night and the white shrimp by day. Why does one species school heavily while the other does not. There are dozens of questions which can be worked out and answered in the laboratory.

The determination of proper tagging techniques will be essentially a laboratory job.

7. WHY STUDY THE ECOLOGY OF AN INSIDE AREA WITH PARTICULAR ATTENTION TO SHRIMP?

The inside grounds are the nursery grounds. Their study is particularly important for various reasons. In the first place these areas are subject to modification by man, and in ways which might be harmful to shrimp. We don't know what little shrimp eat (or the large ones either) and we don't know what their chief enemies are. Is there an over supply of young so that there is always heavy competition with one another - with shrimp eating shrimp- for space and food? In any case, if the nursery grounds change through natural or man-made changes in harmful ways, there will be no more shrimp.

We have become cognizant in recent years of the effects of influences from land on bay animals. Dr. Huntsman of Canada says the herring population in the Bay of Fundy changed with currents and salinity. Dr. Malcolm Owen, formerly of the State of Louisiana Oyster Division, has stated that good oyster years follow years of heavy rainfall. Two of us from Port Aransas have recently submitted a paper showing that white shrimp production on the Texas Coast has been strongly correlated with rainfall ever since 1927, when the fishery first got started. There are certain indications that the real correlation is with salinity of the water, and we have predicted a resurgence of the white shrimp population when we get some rain, but there seems to be no hope of a test soon. After about eight years of drouth we are almost 3 inches short so far this year.

8. WHY IS IT NECESSARY TO ESTABLISH AND MAINTAIN A HISTORY OF CHANGES IN THE AREA?

Vast changes are taking place on this coast all the time. Recently a group of geologists from the Scripps Institution of Oceanography published a paper purporting to show that Texas bays, at the present rate of deposition will

be filled up in 100 years. I'll bet they won't be - but this highlights the situation.

The Atchafalaya is trying to become the main outlet of the Mississippi. I have talked personally to people who forded it on horseback and crossed it on a little wooden footbridge about 90 years ago. Dr. Russell has stated that one of the largest deltas in the world is in the process of formation at the mouth of the Atchafalaya. These things have had vast effects on oyster reefs, some of which are known, and by and large the reefs seem to have moved landward during the past 60 years. But shrimp leave no tracks and we do not know what the effect on them has been.

Every levee, drainage ditch, canal and spoil-bank changes the bay environment in some manner - and if we are ever to find out which way we are going, not only with respect to shrimp, but oysters and fish as well, we must study these changes and record their history.

9. WHY IS IT NECESSARY TO GATHER ADEQUATE STATISTICS?

It seems to me to be useless and unnecessary to enlarge upon this. Without it you could not tell if the fishery were increasing or failing. You would not know where your most productive areas were, or in turn when one declined and another increased. In fact, adequate statistics fit so closely into the biological program that it is a hand in glove proposition and the biologist cannot get very far in portraying the whole picture without adequate production statistics. That matter is self-evident and needs no further comment.

10. WHY IS IT NECESSARY TO DIFFERENTIATE THE STOCKS?

Are the stocks one or many? Do little shrimp entering Barataria Bay return home to where mama and papa came from, or is mama a Floridian and papa a Texan? Are the stocks so different that what happens in Mississippi has no influence on Texas or is it all one big shrimp population, intermingling and comingling everywhere? You can never work out satisfactory conservation measures until the situation is known.

* * * * *

Now each state has its own particular problems but the whole problem transcends all state lines and only if it is attacked as a whole will it be solved efficiently and in the foreseeable future. That fundamentally is the reason it is under consideration by this Commission.

In my estimation the value of this study will be of two kinds: First it will yield information of immediate practical value to an important industry, and second, it will add generally to the sum total of human knowledge. We are probably no more intelligent than the Greeks, Romans and Egyptians, but we know a great deal more. That vast increase in knowledge has come about because

people observed new facts and recorded them on paper for later generations. Please note that word recorded. It does no good to learn things and not record them in the public record. Any scientist or member of a laboratory group or organization, such as this proposed shrimp research group purports to be, who discovers new facts and does not record them properly in print, is essentially practicing a fraud, not only upon society as a whole, but upon the group and himself. For that reason the budget allows adequate funds for publication and those publications should start coming out within a few years after the work begins.

(The foregoing was presented by Dr. Gordon Gunter at a regular meeting of the Gulf States Marine Fisheries Commission, Jung Hotel, New Orleans, Louisiana, March 18-19, 1954.)

EXPLORATORY FISHING FOR SHRIMP IN THE GULF OF MEXICO,
SUMMARY REPORT FOR 1952-53*

by

Stewart Springer and Harvey R. Bullis
Branch of Commercial Fisheries
U. S. Fish and Wildlife Service
Pascagoula, Mississippi

Prepared for

GULF STATES MARINE FISHERIES COMMISSION
New Orleans, March 18-19, 1954

Introduction

Production in the shrimp fishery of the Gulf of Mexico reached nearly 152,000,000 pounds (heads-on shrimp) in 1950. From 1950 through 1953 the over-all situation has been that of steady or slightly higher total landings but with some substantial declines as well as sharp increases of landings in certain parts of the Gulf. In 1950 the Tortugas fishery was being intensively worked for the first time, and the newly-discovered fishing grounds of the Gulf of Campeche were beginning to contribute heavily to the landings at Gulf fishing ports. Also, the brown-grooved shrimp was becoming an increasingly important component of the total catch. These conditions emphasized the importance of new fishing grounds to expansion of the fishery.

The interdependence of exploratory fishing information, marketing conditions, and the availability of fishermen, vessels, and gear, is clearly illustrated in the expansion of the shrimp fishery. Exploratory information

* A more comprehensive report, complete with charts of the fishing grounds, fishing log and other illustrations, will be issued as a fishery leaflet in the near future.

roughly outlining the fishing grounds for pink shrimp in the Gulf of Campeche was obtained by Japanese exploratory fishing vessels, working under the auspices of the Mexican government in 1936 and 1937. However, at that time the market for pink shrimp did not exist and there were no fishing fleets suitable to work the grounds. On the other hand, the conveniently accessible Tortugas grounds, found by fishermen at a time when a strong market was ready for pink shrimp, was heavily fished at once.

In April, 1950, under a recommendation by the Gulf States Marine Fisheries Commission to the Service's Branch of Commercial Fisheries, the exploratory fishing vessel Oregon began explorations in the Gulf of Mexico. It was requested that emphasis be placed on shrimp, with tuna and red snapper explorations as secondary objectives. Preliminary discussions of the exploratory methods to be followed brought out the point that priority should be given to the location of accessible unused fishing areas offering good catches to shrimp fishing vessels with standard equipment. This approach required a relatively great amount of travel time for the vessel in order to get some drags made in all sections of the Gulf in search of highly productive fishing areas.

A description of exploratory shrimp fishing methods and types of gear used was given in Fishery Leaflet 406 (published in September 1952), and construction details on the three basic trawl designs employed are described in Fishery Leaflet 394 (September 1951).

Changes in Catch Composition

It is common knowledge that changes occur in the fishing grounds from year to year and that these changes may bring either more valuable

or less valuable catches. The changes are not only quantitative, but the kinds of shrimp and fish caught on some Gulf grounds appear to change from time to time. There are many examples in the records of Oregon catches indicating that change in catch composition is a normal condition.

We have previously reported (Fishery Leaflet 406) the presence of pink-grooved shrimp off the Alabama and Mississippi coasts making up as much as 30 percent of the grooved shrimp catch of some vessels in the late spring and summer of 1950. Very few pinks, not more than one percent of the catch of grooved shrimp, were noted in the following three spring and summer seasons. Furthermore, there was substantial agreement among commercial fishermen that few pink-grooved shrimp had been present in catches prior to 1950. In January, 1951, the Oregon made a series of 5 exploratory drags between Fort Myers and Tampa Bay in depths of 6 to 18 fathoms. Three of these drags (of 15 to 30 minutes duration) resulted in such heavy catches of loggerhead sponges that the nets were badly ripped while hoisting them aboard and most of the catch was lost. Although pink-grooved shrimp were taken, there was no indication of commercial concentration from any of these catches. However, in the summer of 1953 commercial fishing by a few vessels was carried on near Fort Myers with moderate success.

In August, 1953, a few landings of shrimp in Louisiana for canning received special attention because, although the shrimp were quite fresh, they were reddish. A sample of the catches was examined and found to be made up of Trachypenaeus constrictus, about 30 count, heads-on. This kind of shrimp is not ordinarily taken in sufficient quantity to be of any commercial importance and those taken would normally pass unnoticed or be culled out of shrimp catches as too small.

Many of the changes are relatively obscure and affect shrimp or fishes of little commercial importance. Some of the changes occur over such a long period of time that they pass unnoticed. For example, there are two species of white trout found along the north Gulf coast, Cynoscion arenarius, and Cynoscion nothus, so similar in appearance that fishermen do not recognize them as different kinds. The two can be very easily distinguished once the differences are known. Cynoscion nothus was so rare in Oregon catches from 1950 through 1952 that only three fish were recorded, but in 1953 this white trout was present in substantial numbers in all Oregon drags inshore in the north-central Gulf.

It is necessary to take the probability of some change in the fishing situation into consideration in the evaluation of exploratory data.

The Western Gulf; Brown-Grooved Shrimp

The continental shelf area of the Gulf of Mexico is divided into two major bottom type zones, each remarkably uniform throughout its range.

The western Gulf continental shelf zone extends from Pensacola westward and down the Mexican coast to Carmen, Mexico. Beyond the 10-fathom curve the bottom is primarily terrigenous mud or silt, but with mixtures of sand extending out to 30 or more fathoms in some areas. Mud lumps and large coral-rock structures are common beyond the 50-fathom curve out to the edge of the shelf. Zone boundaries are somewhat arbitrary since there is a narrow transition area at each end.

The brown-grooved shrimp (Penaeus aztecus) is the principal species found in catches from the extensive mud bottoms of the continental shelf of Alabama, Mississippi, Louisiana, and Texas. White shrimp (Penaeus setiferus) are also present in the same region but fishable concentrations

of them are generally restricted to the shallower water inside of the 20-fathom curve. The brown-grooved shrimp (white shrimp are not grooved) have a wider range in depth. Although there are many instances, particularly at dawn and at dusk, or in muddy water, when both species may be taken from a single drag, brown-grooved shrimp are usually caught in night drags while white shrimp are taken in the daytime. A few pink-grooved shrimp are found in the western Gulf of Mexico and the range of the brown-grooved shrimp may extend into the eastern Gulf, but the commercial importance of these out-of-range shrimp is not known, perhaps because of the short time of observations of fluctuating availability.

Brown-grooved shrimp have been taken in 85 percent of all exploratory drags made by the Oregon in depths of 10 to 70 fathoms between Cape San Blas, Florida, westward and southward on the continental shelf to Carmen, Mexico. During 1950-51, the Oregon trawled all major unfished areas of potential brown-grooved shrimp production in the Gulf. In 1952-53, repeat coverage was carried out in the same areas at different seasons. Coverage of many areas during the December to February period is incomplete due to severely curtailed fishing operations caused by unfavorable weather, although most of the good trawling bottom has been worked in several seasons.

The area that has repeatedly yielded the highest catch rate of brown-grooved shrimp lies in the 30- to 45-fathom depth range between 88 and 90 degrees west longitude, on both sides of the Mississippi Delta. These grounds were reported in Commercial Fisheries Review after initial explorations in the fall of 1950 produced heavy catches at rates up to 315 pounds per hour. These high catch rates were obtained on grounds not

previously fished and radiotelephone reports to the nearby shrimp fleet on September 15th that the Oregon had taken 2,700 pounds of 12- to 16-count shrimp the preceding night resulted in immediate utilization of the grounds. By the end of 1951, the commercial fleets were making regular use of portions of the grounds in 30 to 45 fathoms on both sides of the Mississippi Delta, although some sections were only partly in use through 1951 due to the soft mud bottom that bogged trawling gear. In 1952, after the introduction of the "mud rope", the entire area was being fished.

Eastward from 88 degrees west longitude (east of Mobile) catch rates diminish rapidly. No catches of brown-grooved shrimp were made east of Cape San Blas, Florida. One area, in 45 to 65 fathoms off Pensacola, produced very large shrimp (3 to 6 per pound) but exploratory drags did not indicate high commercial concentrations. In the winter of 1952-53, a small fleet worked in this area but moved back to more productive grounds in the spring.

Westward from the Delta all grounds that seasonally have commercially valuable stocks are being worked by the Texas and Louisiana fleets. Beyond the present depth range of this fishery, in 35 to 50 fathoms, there are extensive areas of good trawling bottom. Catches of 20 to 50 pounds per hour were made by the Oregon throughout this range, an average that is below the present minimum catch rate for offshore shrimpers. The highest exploratory catch in this range off the Texas coast was 150 pounds per hour. This area, due south of Galveston in 35 fathoms, is now included seasonally in the fishery.

Off the Alabama, Mississippi, Louisiana, and Texas coasts, the steep slope of the continental shelf between 70 and 100 fathoms makes trawling difficult and impractical. The few drags successfully completed by the Oregon from this range brought up no brown-grooved shrimp.

Beyond 50 fathoms out to the edge of the continental shelf poor trawling bottom was characteristic. Of 29 exploratory drags made in the 50- to 60-fathom depth range along the Texas to Alabama coasts, 11 resulted in complete loss of trawling gear. Fifteen of the remaining 18 drags caught brown-grooved shrimp at rates of 1 to 60 pounds per hour. Of 50 drags made inside of 10 fathoms for comparative purposes, only 14 caught brown-grooved shrimp.

Most exploratory dragging was carried out using 40-foot flat shrimp trawls. The reasons for using this gear are discussed in Fishery Leaflet 406 (p. 4), and complete construction details are given in Fishery Leaflet 394.

When good fishing grounds were indicated by the 40-foot trawl catches, larger commercial-type gear was used. These included 55-, 65-, and 100-foot flat trawls, and 74- and 125-foot balloon trawls. Most production type trawling was carried out with either the 74-foot balloon trawl or the 100-foot flat trawl, depending upon bottom conditions.

Despite efforts to select good trawling bottom for exploratory work, gear loss was severe. Twenty trawls were lost, including one or both trawl doors on 9 occasions. Twenty-nine other trawls were so severely damaged that they required almost complete refabrication. The reason for many of these losses could not be determined, however, the

following breakdown based on estimated causes indicates the types of hazards encountered.

Total loss of trawling gear, reason unknown.....	5
Hit obstruction (i.e., wreck, lump, etc.).....	6
Bogging in soft mud.....	6
Torn up on coral bottom.....	5
Overload of bottom trash (i.e., sponge, urchins, etc.)...	3
Netting badly ripped or lost, lines cut, reason unknown..	24
	<hr/>
TOTAL	49

Gear damage occurred in spite of the fact that exploratory trawls have generally been of heavier twine than normal and that depth recorder tracings have been closely watched during the course of trawling.

At irregular intervals the fleets working on brown-grooved shrimp lose contact with the concentrations, forcing a temporary suspension of fishing operations. On three occasions along the Texas and Louisiana coasts, the Oregon has covered areas under these conditions with a series of trawling transects from shallow water out to the edge of the continental shelf, attempting to determine if this resulted from a mass movement or a dispersal of the shrimp concentrations. Each time a similar pattern of bottom temperatures was noted. This was characterized by little variation over wide depth ranges, usually less than 2 degrees F., between 10 fathoms and the edge of the shelf. The nature of the catches on the shelf indicated a general dispersal of the stock rather than any mass movement. Thinly scattered brown shrimp of mixed sizes were found to be more or less evenly distributed over a wide depth range, making commercial trawling unprofitable.

The Eastern Gulf; Pink-grooved Shrimp

The eastern Gulf continental shelf zone extends from Pensacola south along the Florida coast and includes the Campeche Bank down to Carmen. These two sections are characterized by sand, shell, and coral gravel; and by live coral overlying white, gritty, calcareous mud.

Extensive areas along the west coast of Florida and on the Campeche Bank with the depth range of pink-grooved shrimp (Penaeus duorarum) have received scanty exploratory trawling to date. Occasional good catches by shrimp boats in small isolated gulleys of clear, mud bottom; the presence of young pink-grooved shrimp in Boca Grande Harbor, Tampa Bay, Cedar Keys, and off Apalachicola, and scattered pink-grooved shrimp caught in exploratory drags throughout the 10- to 25-fathom depth range on bad bottom, indicate the possibilities of eventually developing confined, limited production areas if either clear bottom can be located or gear is developed to overcome the natural trawling hazards.

Commercial concentrations of pink-grooved shrimp were found to extend beyond the heavily worked areas on both the Dry Tortugas and Gulf of Campeche grounds. In August, 1951, the Oregon ran a series of drags away from the relatively confined 14-fathom fishing area off Campeche and demonstrated that equally high catches could be maintained out to 25 fathoms at distances of 20 to 25 miles away from the area of intensive fishing.

In June, 1950; January and February, 1951; July and December, 1952; and in June 1953, exploratory soundings were made in 10 to 25 fathoms between Apalachee Bay and the Dry Tortugas grounds in search of even bottom sufficiently clear of coral and loggerhead sponge to permit trawling with conventional-type trawling gear. The few drags made in less hazardous

appearing areas off Cedar Keys, Tampa, and Boca Grande generally resulted in severe gear damage.

Owing to the time-consuming nature of development of trawling gear suited to this type of bottom, experimentation was limited in favor of explorations in areas suitable to existing gear. However, some progress has been made in combating certain trawling hazards. Early in 1951, several types of bottomless trawls were used successfully in loggerhead sponge areas. They were designed to break the sponge away from the bottom and permit it to pass between stringers running from the tickler chain back to the unweighted lead line. Subsequent comparison drags with standard commercial trawls showed an average reduction of 75 percent of trash and scrap fish and a reduction of the shrimp catch by about 30 percent. Work is scheduled to be resumed on improving this rig during 1954 and will be reported on when complete.

An effort was made to overcome coral obstacles using New England-type roller lines. This work is still very limited and is also scheduled to be continued during 1954.

Deep Water of the Gulf (1,000 feet or more); Red Shrimp

Beyond the edges of the continental shelf there has been no commercial fishing in the Gulf of Mexico. Snapper fishermen have extended the range of their fishing from about 80 fathoms to about 150 fathoms within the past few years. This has been possible because of new developments in fishing gear such as power reels, stainless steel wire lines, and electronic aids for finding position, depth, and good fishing places. Deep water fishing for snappers has not been better than fishing in

shallower water but it has made it possible for snapper fishermen to move offshore during periods of temporary poor fishing on the shallow banks. The net result has not been bigger landings per day but better trips and larger seasonal earnings for well equipped and well managed vessels.

The discovery, through explorations by the Oregon, of red shrimp (Hymenopenaeus robustus) concentrations appears now to be significant as a possible supplement to inshore fishing.

In 1951, drags by the Oregon in depths between 190 and 240 fathoms brought to light the existence of a stock of red shrimp differing from the other common large shrimp in being confined to relatively deep water. These shrimp, although apparently marketable, have not yet been fished by the shrimp fleets.

Subsequent exploratory drags by the Oregon have produced red shrimp from depths of 150 fathoms to 375 fathoms, but the best catches have been made eastward from the Mississippi River Delta to the Pensacola meridian in 185 to 275 fathoms. One of the major trawling hazards in these depths is bogging in the soft mud bottom. However, after the development of the Weems trawl door (a door combining certain features of the standard Gulf trawl door and rocking chair doors often employed in the mud lump area off the Mississippi Delta) and using mud ropes, this hazard was greatly reduced. The drags made by the Oregon in deep water have been essentially exploratory and have shown that the red shrimp is present at appropriate depths from Port Aransas to Tampa. Only one drag in the depth range of red shrimp was made by the Oregon in the southern

Gulf. It was made off the eastern edge of the Campeche Bank and caught no red shrimp.

In September, 1952, the M. V. Antillas, owned by the Gibbs Corporation of Jacksonville, Florida, working under cooperative agreement with the Fish and Wildlife Service, made a series of drags for red shrimp in the north Gulf. Some difficulty was encountered at first due to bogging, but after a mud rope was put on, drags produced an average 70 pounds per hour in the area of best fishing. The best fishing was found from the Mississippi Delta eastward along the 200-fathom curve for about 100 miles.

Red shrimp reach about the same size as the common commercial shrimp and in Oregon catches the larger ones were taken in 190 or more fathoms. A number of other kinds of shrimp were taken by the Oregon in deep water. Most of these appear to be too small to be of commercial interest. However; one, Plesiopeneaus edwardsianus, a wine-red shrimp taken in from 300 to 400 fathoms, reaches the size of the commercial species. It is not believed to be a bottom dwelling shrimp and a few of these have been taken by the Oregon. Another kind of shrimp, similar in appearance to the red-shrimp but smaller, was taken in considerable quantity mixed with the larger red shrimp from Oregon catches made between 150 and 200 fathoms. This form, Penaeopsis megalops, tastes very good but Oregon catches did not produce them larger than 40 count, heads-on.

Red shrimp handled on the Oregon were headed and washed thoroughly as soon as they were brought on deck. Heads are large and heading made a weight loss of 50 percent. They were then packed in 5-pound cartons and frozen. Under these conditions they were found to

make an attractive appearance and had fine flavor and texture. No red shrimp have been handled on ice, but trial of icing methods on the Oregon is planned for the summer of 1954.

Summary

Explorations in the Gulf of Mexico for commercially useful shrimp, made by the Exploratory Fishing Section of the Fish and Wildlife Service, resulted in discoveries of one extensive new fishing area for brown-grooved shrimp which was immediately utilized in the fishery; and one extensive fishing area for the red shrimp, a kind that has not yet been fished commercially.

1. Explorations by the M. V. Oregon through 1953 for brown-grooved shrimp have been sufficiently comprehensive to define all of the major areas of possible production along the Gulf coast of the United States and to point out that the only presently unworked area of importance is the 35- to 50-fathom depth range on the coast of Louisiana and Texas between the 91st and 95th meridians.

2. Explorations for pink-grooved shrimp have produced good catches on, or quite near, the major pink shrimp fishing grounds off Tortugas, Florida, and Campeche, Mexico, but in no other areas. The eastern Campeche Bank and the Florida west coast, believed to offer possibilities for good production of pink-grooved shrimp, are bad trawling bottom areas and profitable trawling operations in them require development of new gear or methods.

3. Red shrimp, a kind of shrimp not yet entering the commercial fishery, was found in 150 to 375 fathoms between Tampa and Aransas Pass. Catches show production possibilities if improvements in the methods of handling shrimp trawls in deep water can be worked out.

4. No evidence of stocks of white shrimp other than those now known to the shrimp fishery were found by the Oregon.

STATE OF KNOWLEDGE - GULF OF MEXICO FISHES

SPECIES	IDENTIFICATION STATUS	GROWTH RATE	MORTALITY		REPRODUCTION		OTHER CAUSES OF ABUNDANCE CHANGE				STATE OF STATISTICS
			natural	fishing	spawning habits	no. of eggs deposited	variations in survival	environmental changes	predators competitors	artificial changes	
MENHADEN	XX	X	X	X	X						XX
MULLET	X	XX	X	XX	XY	X	X		X		XX
RED SNAPPER											XX
SPOTTED SEA TROUT	X	XX	X	X	XX	XX		X			XX
SPANISH MACKEREL		X		X	X	X					XX
GROUPERS		X			X	X					XX
RED DRUM OR RED FISH		XX			XX	X		X	X		XX
POMPADOUR		X			X	X					XX
SPINY LOBSTER		XX	X	X	XXXX	XXXX	X	X	X	X	XX
SHRIMP	X	XX	X	X	XY	XY	X	X	X	X	XX
CYPRINIDS	XX	XXXX	XXX	XX	XXXX	XX	XX	XX	XXX	X	XX
BLUES CRAB		XX	X	X	XY	XY	X	X	X	X	XX

STATE OF KNOWLEDGE

None
 Fragmentary
 Little
 Moderate
 Much

EDGEWATER PARK, MISS. EDGEWATER BEACH HOTEL

JANUARY 21-22, 1954 - MEETING M-17

GULF STATES MARINE FISHERIES COMMISSION

Edgewater Park, Miss.
Edgewater Gulf Hotel
January 21 (Thursday) & January 22 (Friday) 1954

P R O G R A M

(Mr. Hermes Gautier, Commission Chairman, Presiding)

9:30 AM

CALL TO ORDER.

ROLL CALL OF COMMISSIONERS AND INTRODUCTIONS.

WELCOME: Mr. Walter J. Gex, Jr., President, Mississippi
Seafood Commission.

PROPOSED GULF OF MEXICO SHRIMP STUDIES:

Dr. L. A. Walford, Chairman, Special Research Committee on Shrimp.

- (1) Introduction.
- (2) Description of Problem.
- (3) Research Facilities and Organization.
- (4) Personnel, Equipment and Costs.

PANEL (Other Members of Committee:)

Messrs:

Philip Butler	Dale Leipper
Albert Collier	Harold Loesch
Howard Eckles	J. G. Mackin
Gordon Gunter	Nelson Marshall
A. E. Hopkins	Cecil Reid
Harold Humm	Stewart Springer
Clarence Idyll	Percy Viosca

(Dr. Walford will cover the four (4) parts of the program before the meeting is opened for discussion.)

DISCUSSION PERIOD:

Members of Committee will be glad to answer questions which may be directed to them. The committee secretary will record all suggestions which may be offered. Order of discussion as above, 1-2-3-4.

LUNCH.

AFTERNOON SESSION

- 2:00 PM SHRIMP RESEARCH COMMITTEE SESSION. (Open Session)
Preparation final draft of program.
- 2:00 PM COMMISSIONERS' SESSION. (Executive)
- 3:00 PM JOINT SESSION.
Review of final draft of program.
- 3:30 PM ADJOURNMENT.
- 3:45 PM RESOLUTIONS COMMITTEE SESSION.

JANUARY 22, FRIDAY

- 10:00 AM REPORT OF RESOLUTIONS COMMITTEE.
- DISCUSSION.
- ADJOURNMENT.

GULF STATES MARINE FISHERIES COMMISSION
312 Audubon Building
New Orleans 16, Louisiana

MINUTES
(Extract of Transcript)

SPECIAL MEETING JANUARY 21-22, 1954
EDGEWATER GULF HOTEL, EDGEWATER PARK, MISS.

OFFICIAL ATTENDANCE OF COMMISSIONERS:

	<u>PRESENT</u>	<u>ABSENT</u>
<u>ALABAMA:</u>	Thomas A. Johnston, III W. C. Holmes	Earl M. McGowin
<u>FLORIDA:</u>	Charlie Bevis William J. Hendry D. C. Jones, Jr.	
<u>LOUISIANA:</u>	Donald G. Bollinger	L. D. Young, Jr. C. C. Burleigh
<u>MISSISSIPPI:</u>	Walter J. Gex, Jr. Hermes Gautier	Louis Simmons
<u>TEXAS:</u>	Lawrence A. Kurtz	Howard D. Dodgen Jimmy Phillips
<u>PROXIES:</u>	John Rockwell Hermes Gautier William S. Werlla Howard T. Lee	(For E. M. McGowin) (For W. J. Gex, Jr. 1/22) (For L. D. Young, Jr.) (For H. D. Dodgen)
<u>STAFF:</u>	W. Dudley Gunn, Secty-Treas.	

COMMISSION STANDING COMMITTEE MEMBERS PRESENT

Legal: Reece O. Bickerstaff, Mary Schulman.
Scientific: C. P. Idyll (for F.G.W. Smith) A.E. Hopkins, H. C. Loesch,
Percy Viosca, Jr.

SPECIAL SHRIMP COMMITTEE MEMBERS PRESENT

State: Scientific Committee Members listed above.
Federal: Philip A. Butler, Albert Collier, Howard H. Eckles, Stewart
Springer, Lionel A. Walford.
Universities: Harold J. Humm, Gordon Gunter, Dale F. Leipper, J. G. Mackin.

STATE, FEDERAL, UNIVERSITY, INDUSTRY AND OTHER REPRESENTATIVES PRESENT

E. L. Arnold, H. R. Bullis, J. A. DeMetz, W. J. Demoran, S. C. Denham, R. L. Eddy, E. A. Fieger, Billy Greer, J. B. Higman, D. L. Hoy, Alver Hudson, Fred F. Johnson, G. C. Lewis, J. N. McConnell, Charles Murphy, C. E. Peterson, Earl Rodriguez, R. J. Russell, L. W. Strasburger, Royal Suttkus, B. E. Thomas, R. S. Wheeler, H. L. Wiltsee and others.

GENERAL SESSION, JANUARY 21, 1954

The special meeting to consider only the shrimp fishery resources was called to order at 9:45 AM with Mr. Hermes Gautier, Commission Chairman, presiding.

Following introductory remarks which outlined the objective of the special session, Mr. Gautier requested a roll call of Commissioners and acknowledgment of proxies.

Introductions preceded an official welcoming to the State of Mississippi by Mr. Walter Gex.

Mr. Gautier called upon Mr. Herb Wiltsee, Southern Regional Representative of the Council of State Governments who responded with an interesting impromptu summary of the progress which has been made in the creation of interstate compacts and the resulting cooperative interstate work being accomplished. The Chairman thanked Mr. Wiltsee for his remarks and expressed the appreciation of the Commission for his efforts in the formation of the Gulf marine fisheries compact.

Following a review of progress in the shrimp study directed toward determining what is and what is not known about the several species of Gulf shrimp and the devising of a program suggested to develop unknown but needed data, Mr. Gautier called upon Dr. Walford, Fish and Wildlife Service, for a report as chairman of a special shrimp committee of state, federal and university scientists appointed at the October 1953 Tampa meeting to further study tentative conclusions presented at the mentioned meeting.

Dr. Walford acknowledged with thanks the assistance rendered by the members of the special shrimp committee at the meeting of scientists at Tampa, October 14 and during the regular meeting of the Commission October 15-16, also for the helpful suggestions offered through the mails in his effort to develop a detailed program from the general outline of investigations approved at Tampa in preparation for the special shrimp session called for this date and January 22.

The committee chairman next spoke of the apparent decline in shrimp production per unit of fishing effort. He said that it was not known if the decline in production per unit of effort was due to a change in abundance

or not since proper statistical information had not been maintained on the catch, that is, the poundage caught, and when and where caught. Reference was also made to the lack of knowledge as to the intermingling of the several species, the relationship one species bears to its own and to other species, environmental alterations both natural and man-made, mortality and other unknown quantities which add to the complexity of the problem. Dr. Walford also said that if a decline in abundance was occurring or did occur information now available would not suffice for the recommending of a rational conservation program.

Dr. Walford first presented for consideration a program which would be divided into two parts, the first phase would be directed toward developing techniques of gathering statistical data for fishing effort versus production determinations and tagging, and a limited study of environmental changes and mortality. Such a program was estimated to cost about \$215,000 per year for several years and would be preliminary to a full scale investigation.

A general discussion followed and consumed about forty-five minutes. During the discussion period the above preliminary program, another program which was prepared by FWS and circulated among the scientists following the Tampa meeting, and the general program developed at Tampa were discussed. The consensus was that the mentioned preliminary program would delay by a number of years the securing of needed information. The program passed to the scientists for comment following the Tampa meeting, involving an initial year's expenditure of approximately \$750,000 and about \$500,000 for several years following, was considered by the majority as containing some items of investigation which could be scaled down in cost. The general program coming out of the Tampa meeting which provided for about \$550,000 to be expended in the first year and less in succeeding years was thought to be in line with the amount of funds the government should provide to supplement that which the several states should contribute to the program.

Having had the advantage of thinking brought out during the discussion, Mr. Gautier suggested that the morning session be adjourned and that the scientists meet to prepare a draft of program for presentation at 3:00 PM to the Commission. The morning session adjourned at 11:00 AM.

The scheduled afternoon Commission executive session was called to order by Mr. Gautier at 2:30 PM.

Mr. Springer of the FWS Gulf exploratory fishing activity reported on most recent work of the Oregon. Among other things, he said that one half of the vessel's live bait tank had been removed but that the remaining part was ample to take care of bait, the supply being so abundant in the Gulf. Other forms of fishing for tuna having been comparatively unsuccessful to date, Mr. Springer said that Japanese long lines had been added to the Oregon's equipment and that this method used so successfully

by the Japanese would be given a trial. He told of the results of electronic device experiments in locating large fish in 50 fathoms off the Louisiana-Mississippi-Alabama coast but due to the fish not surfacing it was impossible to tell the species.

A discussion of future exploratory work followed. There was a feeling in evidence that primary exploratory and gear development emphasis should be placed on shrimp during the calendar year 1954 and that other explorations be made only at such times as the Oregon could not be pursuing shrimp explorations. In this connection a resolution was proposed by Mr. Bevis, seconded by Mr. Rockwell, and on vote was unanimously adopted. The resolution, which requests FWS consideration of same, is first attached to these minutes.

Mr. Peterson of FWS presented a plan for the collection of shrimp statistics worked out by the Branch of Commercial Fisheries for study in connection with consideration of a full scale shrimp investigation. The plan, based on the one which has been used in the New England trawl fishery, would provide the scientists with by-area catch records necessary to their calculations and would require some assistance from boat captains to supplement work of people directly assigned to the investigation. According to Mr. Peterson such statistics would be prepared as would make possible a by-area determination of production per certain dimension of netting for a specified unit of trawling time. It was estimated that eleven fishery marketing specialists would be required for such a program and one stenographer, these in addition to the two specialists now assigned to the Gulf. The specialists would work assigned areas from base points: Key West, Coral Gables, Fort Myers, Tampa, Pascagoula, Biloxi, New Orleans 2, Houma, Morgan City, Galveston, Aransas Pass and Brownsville. An estimate of \$80,000 annually would be required for the program.

The Secretary reported that the Tampa October 15-16 Minutes were distributed to Commissioners per directives. Mr. Hendry moved that the Tampa Minutes be accepted without reading, Mr. Bollinger seconded, and on vote motion passed.

Commission statement of Cash Receipts and Disbursements prepared in accordance with the Texas statutes for the twelve months preceding January 1 was read. It was pointed out that Texas had increased its annual membership dues from \$2,500 to \$4,000 as requested by the Commission. Mr. Gautier said that Mr. Bickerstaff was going to present a bill to the current Mississippi legislative session providing for payment of 1952-53 and 1953-54 annual dues.

The Secretary also reported that the Commission Fourth Annual Reports were printed and mailed ahead of schedule this year so as not to conflict with work preparatory to the special shrimp meeting.

Miss Schulman who was appointed by the Chairman as Commission representative to an October conference in Washington sponsored by the State Department to consider international fisheries laws as developed by a special committee appointed by the United Nations, reported that a number of nations were now claiming territorial rights at varying distances beyond the generally accepted three mile limit and that the matter should be resolved. Quite a list of such nations and their claims was read. It was said that the United Nations General Assembly had requested the mentioned legal committee to further study the situation and to report back at a later time. Miss Schulman also reported on the progress being made on a subject discussed by Mr. Herrington at Tampa.

Mr. Bevis told of the present recurrence of Red Tide off the southwest Florida coast, of the resolution adopted by the Joint Chamber of Commerce Council of the area requesting federal aid and of Mr. Douglas McKay's muchly appreciated trip to Florida to gain first-hand information concerning the problem. Mr. Bevis also told of action by the Florida Board of Conservation in the appropriation of emergency funds to aid in Red Tide research. Mr. Johnston proposed a resolution requesting state representatives on the Commission to contact their respective Congressional Delegations in interest of legislation which would provide federal assistance not now available for Red Tide investigations. The resolution is second attached to these minutes.

Dr. Walford came to the Commissioners' session to say that the scientists had completed the final draft of a suggested shrimp program but due to the lateness of the hour it was decided that the joint session to hear the scientists' report be postponed until Friday morning.

The executive session adjourned at 5:00 PM.

GENERAL SESSION, JANUARY 22, 1954

The morning session was called to order at 10:00 AM and Mr. Gautier immediately asked Dr. Walford to present the final draft of program prepared by the scientists at their special session the day previous.

By way of introductory remarks Dr. Walford stated that the Committee fully appreciated that a program of the magnitude to be suggested would require a number of men with special qualifications and that it would be necessary that there be a pooling of talent by the state and federal agencies and universities. He said the success of such a program depends in large measure upon cooperation among participating groups and that groups represented would have to meet every two to three months to go over their part of the program, each group being represented by a committee. The

review of manuscripts prior to publication by members of committees was cited as very important. Dr. Walford then proceeded with the reading of the recommended program. The details of program, the class of research, estimate of time required to complete same, and cost, is incorporated in the resolution last attached to these minutes. Dr. Walford replied in the affirmative when asked by Mr. Gautier if the program as read was agreed upon by all of the scientists on the special shrimp committee.

A discussion period of approximately one half hour followed. Principal points discussed during the period were as follows: Some part of any funds made available for shrimp investigations should be allotted to scholarships for educating young men who are directly engaged in shrimp fishing; that participating state agencies should receive full recognition for their work in the furtherance of such a program; that states should expand shrimp research now underway; that a detailed work plan of the program be made as soon as practical so that each participating agency would know exactly what was to be expected of it in order that plans could be made, including expense considerations; that a committee of at least one biologist from each state serve on a Commission committee to correlate activities; that the Gulf States Marine Fisheries Commission serve as a coordinating agency for the development of a major shrimp research program for the Gulf.

Mr. Johnston made a motion to the effect that the Commission embark upon a shrimp research program and endorse such a program, and that it act as the coordinating agency between the various states and the federal government in carrying out such a program. Col. Kurtz seconded, and upon vote the motion passed.

A resolutions committee was appointed by the Chairman upon request of the Commission. The committee composed of Miss Schulman and Messrs. Bevis, Bollinger, Gautier, Johnston and Kurtz went into session and reported back with a resolution which was read and explained by Mr. Johnston. After all features of the resolution were explained by Mr. Johnston he moved for adoption, Mr. Bevis seconded and upon vote the resolution was unanimously adopted. The shrimp resolution is last attached to these minutes.

The Secretary was requested to write a letter in behalf of the Commissioners to Mr. and Mrs. Walter Gex, Jr. expressing their deep appreciation for the fine hospitality extended to all conferees and their wives during the course of the Edgewater meeting.

With no further business to come before the meeting the special shrimp session was adjourned at 1:15 PM.

Prepared by:




W. Dudley Gunn
Secretary-Treasurer

A RESOLUTION

BE IT RESOLVED by the Commission that its primary research agency, the U. S. Fish and Wildlife Service, be requested to place primary exploratory commercial fishing and gear development emphasis on shrimp during the current calendar year's operation of the M/V Oregon, and to engage in other explorations and gear development only when such work does not delay the primary objective.

* * * * *

The foregoing is a copy of a resolution adopted by the Gulf States Marine Fisheries Commission at a special Commission meeting held January 21-22, 1954, at the Edgewater Gulf Hotel in the City of Edgewater Park, Mississippi.


W. Dudley Gurn
Secretary-Treasurer

A RESOLUTION

BE IT RESOLVED by the Commission that it endorses the efforts of the West Coast Florida fishermen and the State of Florida officials in attempting to secure emergency aid from the Federal Government in regard to meeting the disaster created by the so-called Red Tide in the Gulf of Mexico through gathering additional information and study of the problem and that the Commissioners from the member states be requested to contact their senators and representatives in Congress to attempt to secure their favorable consideration of legislation to be introduced in Congress to secure such aid.

* * * * *

The foregoing is a copy of a resolution adopted by the Gulf States Marine Fisheries Commission at a special Commission meeting held January 21-22, 1954, at the Edgewater Gulf Hotel in the City of Edgewater Park, Mississippi.



W. Dudley Gunn
Secretary-Treasurer

A RESOLUTION

WHEREAS the Gulf States Marine Fisheries Commission is deeply concerned about the future of the shrimp resources in the Gulf of Mexico and recognizes the need for a major shrimp research program; and

WHEREAS the shrimp of the Gulf of Mexico is one of the most valuable fishery resources in America; and

WHEREAS the number of vessels and men engaged in shrimp fisheries has vastly increased in recent years, and the area of fishing has spread to far distant grounds, and although the catch has grown to an all-time high, the catch per unit of fishing effort has become reduced; and

WHEREAS the distribution of the various kinds of shrimp in the Gulf of Mexico and the species composition of the catch have changed strikingly in recent years; and

WHEREAS the member states are carrying out individual research programs which are inadequate; and

WHEREAS the Commission will serve as a coordinating agency for development of a major shrimp research program in the Gulf of Mexico; and

WHEREAS assistance of the U. S. Fish & Wildlife Service is desirable and necessary in the development of such a program; and

WHEREAS the Gulf States Marine Fisheries Commission named a committee of scientists representing State and Federal conservation agencies and universities, and requested them to draw up a plan of biological research on the shrimp resources of the Gulf of Mexico; and

WHEREAS according to such committee and in the opinion of the Commission there is needed over and above the sums available for such research in the member states, \$554,000.00 based on an estimate as follows:

1. Establish useful and adequate statistics.

Cost	\$80,000.00 annually
Length of time	Permanent

2. Sampling the catch for size and species composition.

Cost	\$59,000.00 annually
Length of time	Permanent

3. Development of marking techniques.

Cost	\$50,000.00 annually
Estimated length of time	3 years

4. Differentiation of species and stocks at all ages.

Cost	\$50,000.00 annually
Estimated length of time	3 years

5. An ecological study including the following:

- a. Mechanisms which transport larvae into inside waters.
- b. General ecology of nursery grounds.

Cost \$190,000.00 1st year; \$90,000.00 after 1st year.
Estimated length of time 5 years.

6. Maintain a record of man-made and natural changes in the physical environment.

Cost \$35,000.00 annually
Length of time Permanent

7. Purchase and maintain laboratory equipment.

Cost \$40,000.00 annually

8. Administration and publication of results.

Cost \$50,000.00 annually
Length of time Permanent

Now therefore be it


RESOLVED by the Commission that the U. S. Fish and Wildlife Service be requested to join in such a program and make funds in the amount of \$554,000.00 available as above set out; and be it

RESOLVED that the chairman of the Commission appoint a committee composed of at least one marine biologist from each member state to coordinate this program and report to the Commission the findings resulting therefrom in order that they might be published by it; and be it further

RESOLVED that the Commission hereby pledges its help and support to the U. S. Fish and Wildlife Service in whatever action may be necessary in Congress or otherwise to make these funds available.

* * * * *

The foregoing is a copy of a resolution adopted by the Gulf States Marine Fisheries Commission at a special Commission meeting held January 21-22, 1954, at the Edgewater Gulf Hotel in the City of Edgewater Park, Mississippi.


W. Dudley Gunn
Secretary-Treasurer

THE GULF STATES MARINE FISHERIES COMMISSION

Statement of Cash Receipts and Disbursements

For the year ended December 31, 1953

(Prepared from the books without
complete audit or examination)

Receipts:

Member state contribution:

Alabama	\$ 1,000.00
Florida	3,500.00
Louisiana	5,000.00
Texas	4,000.00
	<u>13,500.00</u>
Sale of used tires	8.00
Total receipts	<u>13,508.00</u>

Disbursements:

Salaries	\$ 9,895.65
Less federal income tax withheld	<u>1,629.00</u>
	8,266.65
Traveling	1,532.35
Office rent	1,080.00
Stationery, printing and office supplies	471.65
Telephone and telegraph	518.86
Postage	116.56
Electricity	70.22
Accounting	175.00
Insurance	247.04
Dues and subscriptions	11.66
Sundry	59.53
Employees' federal income tax remitted	<u>1,629.00</u>

Total disbursements 14,178.52
Excess of (disbursements) over receipts (670.52)

Cash balance, December 31, 1952 14,568.32
Cash balance, December 31, 1953 \$ 13,897.80

Comprised as follows:

National American Bank	\$ 13,889.89
of New Orleans - checking account	7.91
Petty cash fund	<u>\$ 13,897.80</u>