

ANNUAL MEETING

GULF STATES MARINE FISHERIES COMMISSION

Jung Hotel
New Orleans, Louisiana
October 19 (Thursday) and 20 (Friday) 1950

P R O G R A M

Thursday, October 19, 1950

- 9:00 AM Registration.
- 9:30 AM Call to order, Commission Chairman, Mr. Bert E. Thomas,
Tax Assessor, Mobile County, Mobile, Alabama.
- Roll Call of Commissioners.
- Introduction of Guests.
- WELCOME, Mr. Ernest S. Clements, Commissioner, Louisiana
Department of Wildlife and Fisheries, New Orleans,
Louisiana.
- Annual Report, Commission Secretary-Treasurer, Dudley Gunn,
New Orleans, Louisiana.
- 10:30 AM GULF EXPLORATORY FISHING ACTIVITIES REPORT and Discussion,
Mr. Stewart Springer, Fishery Engineer in Charge,
Exploratory Fishing and Gear Development Section, U. S.
Fish and Wildlife Service, Pascagoula, Mississippi.
- 11:00 AM GULF BIOLOGICAL RESEARCH ACTIVITIES REPORT and Discussion,
Mr. W. W. Anderson, Chief, Gulf Fisheries Investigations,
U. S. Fish and Wildlife Service, Galveston, Texas.
- 11:30 AM Reading by Secretary-Treasurer of recommendations for the
regulation of the shrimp fisheries of the Gulf of Mexico
as developed by the Committee to Correlate Research and
Exploratory Data, in cooperation with U. S. Fish and Wild-
life Service Representatives, and submitted by the former
for consideration of the Commission. (Discussion period
will be carried forward to afternoon session.)
- 12:00 Noon Lunch

ANNUAL MEETING

GULF STATES MARINE FISHERIES COMMISSION

2:00 PM Discussion period, Dr. J. Nelson Gowanloch, Chief Biologist,
Louisiana Department of Wildlife and Fisheries,
New Orleans, Louisiana.

Adjournment.

* * * * *

Friday, October 20, 1950

9:30 AM Call to order by Chairman.

CURRENT INTERSTATE DEVELOPMENTS IN THE FIELD OF NATURAL
RESOURCES, Mr. Herbert L. Wiltsee, Regional Representative,
The Council of State Governments, Chicago, Illinois.

Reading by Secretary-Treasurer, for consideration of the
Commission, resolution concerning reciprocal agreements
developed and submitted by the Committee to Correlate
Fisheries Laws.

Discussion period, Mr. A. J. Harris, Jr., Attorney, Alabama
Department of Conservation, Montgomery, Alabama.

Other Business.

Adjournment.

11:00 AM Commission Executive Session.
(Press conference following adjournment)

GULF STATES MARINE FISHERIES COMMISSION

SPECIAL JOINT MEETING
COMMITTEE TO CORRELATE FISHERIES LAWS AND
COMMITTEE TO CORRELATE RESEARCH AND EXPLORATORY DATA
Monteleone Hotel, New Orleans, Louisiana
August 17 (Thursday) and 18 (Friday), 1950

(At the Mobile, Alabama, meeting of July 20-21, 1950, it was decided that the above Commission Committees meet in New Orleans, August 17-18, 1950 for the purpose of drafting a program of joint interstate shrimp laws to present to the Commission for its consideration at the annual meeting to be held in New Orleans October 19-20, 1950. The Committee to Correlate Research and Exploratory Data, together with Mr. W. W. Anderson, will serve in an advisory capacity during the meeting.)

A G E N D A

Thursday, August 17, 1950

9:30 AM Preliminary Remarks, Mr. Bert E. Thomas.

(Mr. Thomas will turn the meeting over to Mr. Sidney Cain, Chairman of the Committee to Correlate Fisheries Laws.)

Series of five (5) minute talks designed to bring out thoughts of attorneys in connection with developing uniform shrimp laws:

- | | | |
|----|--------------------------|-------------|
| 1. | Mr. A. J. Harris | Alabama |
| 2. | Miss Mary Schulman | Florida |
| 3. | Mr. Reece O. Bickerstaff | Mississippi |
| 4. | Miss Erma Baker | Texas |
| 5. | Mr. Sidney Cain | Louisiana |

The five attorneys will set up further agenda by agreeing upon laws to be considered and order of procedure.

Friday, August 18, 1950

9:30 AM Further discussions and final draft of suggested program.

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

MINUTES
(Extract of Transcript)

FIRST ANNUAL MEETING, OCTOBER 19-20, 1950
JUNG HOTEL, NEW ORLEANS, LOUISIANA

OFFICIAL ATTENDANCE OF COMMISSIONERS:

	<u>PRESENT</u>	<u>ABSENT</u>
<u>ALABAMA</u>	Bert E. Thomas (Chairman) Thomas A. Johnston III	Phillip J. Hamm
<u>FLORIDA:</u>	George Vathis William J. Hendry	Bryant Patton
<u>LOUISIANA:</u>	Ernest S. Clements	E. J. Grizzaffi Leander H. Perez
<u>MISSISSIPPI:</u>	Walter J. Gex Hermes Gautier Louis Simmons	
<u>TEXAS:</u>	Howard D. Dodgen (Vice-Chairman) Lawrence A. Kurtz A. J. Harris, Jr. (proxy for Phillip J. Hamm)	Jimmy Phillips
<u>STAFF:</u>	W. Dudley Gunn, Secretary-Treasurer Beulah G. Mikesell, Office Secretary	

COMMISSION COMMITTEE MEMBERS PRESENT

Herbert L. Wiltsee, J. Nelson Gowanloch, Francis X. Lueth, A. E. Hopkins,
A. J. Harris, Jr., Reece O. Bickerstaff, A. Sidney Cain, Jr., Mary Schulman.

REPRESENTATIVES OF GOVERNMENT PRESENT

Wilbert M. Chapman, Fred F. Johnson, Joseph G. Ellson, E. H. Dahlgren,
W. W. Anderson, Albert Collier, Charles H. Lyles, Stacey C. Denham, Stewart
Springer, Philip A. Butler.

REPRESENTATIVES OF INDUSTRY PRESENT

Wallace Quinn, Charles R. Carry, A. B. Chauvin, Sydney W. Buck, Leopold Blum, Robert J. Boudreaux, C. R. Patterson, Sr., Carroll J. Boudreaux, Sr., L. Philip Caillouet, E. M. Lapeyre, Sr., E. M. Lapeyre, Jr., Nelson Cheramie, Elmer Williams, Nick Mavar, Steve Sekus, Roderick D. Seal, E. J. Vinet, Julian McPhillips, Henry Champagne, Thos. B. Holcombe, B. S. Morahan, Ted Shepard, A. J. Wegmann, F. S. Lapeyre, L. W. Strasburger, A. M. Angelette, John Santos, Lenora Decuers.

OTHER GUESTS PRESENT

James N. McConnell, Clarence P. Idyll, John L. Madden, Harry Shafer, Sidney Landry, John Elion, Alfred Lawson, Raymond Parker, Victor S. Michel, George Jackson, Walter Hoover, Thomas A. Ford, S. W. Corbino.

The meeting was called to order at 10 AM, Thursday, October 19, 1950, with the Commission Chairman, Mr. Bert E. Thomas, presiding.

The Secretary-Treasurer called the roll of Commissioners by states, following which all conferees were introduced.

The Chairman presented Mr. Ernest S. Clements, Commissioner from Louisiana, who extended an official welcome to the Commissioners and their guests to the State of Louisiana and to the Commission headquarters city of New Orleans.

Mr. Thomas next called upon the Secretary-Treasurer for a recounting of the activities of the Commission during its initial year of operation and for a summation of the pre-compact activities of the continuing conference committee.

The program Chairman called upon Mr. Stewart Springer for a report on the activities of the Exploratory Fishing and Gear Development Section. Mr. Springer gave a very comprehensive accounting of the activities of the exploratory vessel Oregon in exploratory shrimp fishing off the Alabama, Mississippi and Louisiana coasts, stating that the trawler had been successful in locating new concentrations of grooved shrimp, *Penaeus aztecus*, in a mean depth of 42 fathoms east of the Mississippi River and in 32 to 35 fathoms west and southwest of the Mississippi delta. According to the speaker, only a few of the shrimp fleet are presently equipped with sufficient cable to operate in the mentioned greater depths. He stated that the larger components of the shrimping fleet had operated with considerable success during the summer months in the mentioned Gulf area in from 15 to 17 fathoms in the taking of another species of grooved shrimp, *Penaeus duorarum*. The U. S. Fish and Wildlife representative explained in detail the trawling procedure employed on the Oregon and the extent to which, and means whereby, such determinations are made as to depths, water temperatures and directions of currents, all of which calculations were said to be of paramount scientific importance to the building of background

knowledge essential to present and future explorations in the valuable shrimp fisheries of the Gulf.

Mr. Thomas requested Mr. Springer to remain at the speaker's table to answer such questions as might be propounded by the gentlemen of the industry and other conferees present.

Mr. John Santos made inquiry of Mr. Springer as to the finding of porgies in Gulf waters and, in asking the question, distinguished between porgies (a food fish) and poggies (which is the name sometimes ascribed to the menhaden).

The exchange of questions and answers brought out the following points:

Porgies were found in substantial quantities in the 30 to 50 fathom range off the coast of Mississippi, Alabama and that portion of Louisiana east of the Mississippi River.

The maximum poundage taken in a one-hour drag with a flat shrimp trawl was estimated by Mr. Springer to have been 1000 pounds, with the fish ranging from one-quarter to one-half pound each.

A few white trout were taken along with the porgies and some scrap fish were also taken during the trawling operation.

Mr. Springer continued in conversation with Mr. Santos and, changing from porgies to shrimp, stated that the best night's shrimping produced an average of 260 pounds per one-hour drag, this with a 100-foot trawl in 32 fathoms of water. The shrimp were *P. aztecus*, ranging from 12 to 16 count, heads on. The *P. aztecus*, grooved brown, or Brazilian shrimp, were found not to be mixed with other species of shrimp in the 30 to 50 fathom range. Trawling was accomplished at a speed of 1-1/2 knots per hour, a satisfactory trawling speed but an exceedingly hard speed for the Oregon to maintain due to its tremendous power. With regard to the production differential between night and day shrimping for the mentioned *P. aztecus* species, Mr. Springer estimated that production in the daytime was only fifty per cent of the night take, with production increasing with the approach of the hours of darkness. In the 30 to 50 fathom range, trawling operations were said to have been performed with a 5/8 inch cable, with length of tow line being five foot to every one foot of depth. Mr. Springer stated also that great quantities of croakers were taken in the shrimping operations off the southwest mouth of the Mississippi River and at times in such quantities as to bog down the net. Mr. Santos spoke of the pink shrimp fishery of the lower Gulf, stating that it took approximately 130 hours to make the round trip, that the presence of large conks and other shells necessitated limiting a single drag to a one-hour duration and that the best shrimping was accomplished in 15 to 16 fathoms. He advised that the take ran from 100 to 180 barrels per trip, with actual on-the-ground shrimping running anywhere from five to nine days. His estimate was that approximately 100 vessels of U. S. registry were operating in the lower Gulf. Mr. Springer injected that the Oregon had taken a red species of shrimp, *Hymenopeneus robustus*, in 200-250 fathoms but added that observations have not progressed to a point where he could definitely

attest to the commercial possibilities of such a fishery.

Answering several questions regarding bottom obstructions and loss of nets, asked by Mr. McConnell, the discussion leader stated the bottom was fairly clear west of the Mississippi River, that east of the River in 30 to 50 fathoms of water some difficulty was experienced with coral and that in over 50 fathoms of water little trawlable bottoms were available due to the great abundance of invertebrate marine animals. The fact that the Oregon had lost only two 40-foot trawls in all of its operations was pointed out by Mr. Springer to be largely attributable to the expert navigation of Captain Davis and use of the installed depth recording instruments.

In response to several questions by Mr. Wegmann, Mr. Springer stated that the Oregon had not fished among the mud lumps off the Mississippi River. He also stated that the best shrimping had been accomplished in trawling through soft mud, that fishing in general appeared better east and northeast of Pass A Loutre than east and southeast. In connection with the bottoms of other areas, Mr. Springer informed Mr. Wegmann observations off the South Florida coast indicated the presence of ridges on the bottom. In the deep water off Pensacola the Oregon was said to have encountered peculiar currents which many times lifted the net clear of the bottom for long intervals.

With no further questions to be asked in connection with the exploratory program, Mr. Thomas called on Mr. W. W. Anderson for a report of the activities involving the Gulf biological research program.

Mr. Anderson told of the repair and modification work now being accomplished at Galveston on the research vessel Alaska. He stated that considerable of the delicate appurtenances essential to the recording of observations to be made in the waters of the Gulf had been slow in coming through, which had necessitated the post-dating of the initial cruise of the vessel. Mr. Anderson displayed a map of the Gulf onto which had been superimposed routes of the first three cruises to be undertaken by the Alaska. He stated that results of the three cruises, which will consume from three to four months, would determine the extent of future initial scientific fact-finding marine expeditions.

No questions were asked of Mr. Anderson regarding the Gulf biological program, following his visual aid presentation of initial investigations.

The Chairman next called upon Mr. Gunn to distribute copies of the suggested shrimp recommendations which were drafted at a New Orleans August 17-18, 1950 meeting of the biologists of the Gulf states, at which meeting U. S. Fish and Wildlife Service biologists served in an advisory capacity.

Following the distribution, the Secretary-Treasurer read the recommendations, after which Mr. Thomas stated that a full discussion of the suggested regulations was on the agenda for the afternoon session and thereupon adjourned the meeting until 2 PM.

Mr. Thomas called the afternoon session to order at 2 PM and introduced Mr. Howard D. Dodgen of Texas, Commission Vice-Chairman, to serve as Chairman of the session.

Mr. Dodgen introduced Dr. Nelson Gowanloch, Chairman of the Commission's Committee to Correlate Research and Exploratory Data, and requested that he convey to the conferees the background of the scientific thinking in connection with the shrimp fishery recommendations. Dr. Gowanloch first gave a complete history of the development of the shrimp industry of the Gulf, tracing the development of more efficient gear, the building of larger vessels following discovery of concentrations in outside waters and the development of the several processing and merchandising segments of the industry. He next gave a comprehensive explanation of the scientific thinking embodied in the recommendations.

The Chairman, Mr. Dodgen, then called upon representatives of the industry to express their views in connection with the suggested regulations for the shrimp fishery or to contribute thoughts which they might have in connection with regulations for the betterment of the shrimp fishery on the Gulf not contained within the recommendations.

The discussion period which followed and which consumed the remainder of the afternoon of the first day's session was enthusiastically entered into by members of the shrimp industry. The concensus of opinion of industry was that clarification was desirable with regard to "inside and outside waters". It was brought out in the discussions that investigations, through tagging, indicated that shrimp do not migrate to any great east or west distances in the waters of the open Gulf, that their main migration is simply that of the growing shrimp proceeding from the inshore nursery grounds to the habitat of the adult shrimp in the outside waters, which depths are instinctively sought out by the adult of the species.

Representatives of the industry from Louisiana and Mississippi were generally favorable to the recommendations. Those gentlemen of the industry who were present from Terrebonne Parish of Louisiana were of the opinion that the winter closed season should not go into effect as of December 15th each year but at a later date, up to and including February 15th. Representatives from Terrebonne Parish, including Messrs. Blum, Chauvin and others, spoke of a species of small shrimp (*Xyphopenaeus kroyeri*), commonly referred to as the seabob, appearing in abundance during the early part of the winter period which was suggested in the recommendations to be closed season. Also, that the sun-drying platforms depended to a large measure upon the seabob for their continued operation in the preparation for market of the small shrimp. Those representatives not associated with the sun-drying processing of shrimp appeared to generally favor closed seasons as suggested in the recommendations of the biologists.

The first day's session, at the direction of the Chairman, stood adjourned at 5 PM.

Friday, October 20, 1950

The Commission Chairman, Mr. Bert E. Thomas, acted as Chairman for the morning session, Friday, October 20, 1950.

Mr. Thomas called upon Mr. James N. McConnell, who served as Chairman of the Continuing Conference Committee, which Committee served until the compact was signed in July of 1949.

Mr. McConnell introduced Mr. Herbert L. Wiltsee, Regional Representative of the Council of State Governments, who was active through his organization in the development of the compact and who made a formal presentation covering current interstate developments in the field of natural resources. In his talk, Mr. Wiltsee reviewed the efforts which are being made at the interstate level to conserve and develop resources of economic significance, particularly, marine life.

The Chairman then called upon Mr. A. J. Harris, of the Committee to Correlate Fisheries Laws, to read a suggested resolution proposed by the mentioned committee, and to lead a discussion concerning reciprocal agreements among the several states. Mr. Harris, prior to opening the meeting for general discussion, reviewed some of the subjects which might be considered as worthy of reciprocal agreements between the states, principal among which was that of allowing vessels of the compacted states to enter any of the ports of the compacted states to discharge fish and seafood taken from Gulf waters following the paying of a nominal landing fee.

Colonel Kurtz stated that he considered it the right of all American citizens to enter ports within their country for the discharge of such perishable cargo as was under consideration and that he did not believe it necessary that the several states enter into reciprocal agreements because it came within the constitutional right of a citizen to use the facilities of any United States port after paying a fee which would normally be charged residents of the state in which the vessel might wish to off-load.

Mr. Gautier injected that he agreed with Colonel Kurtz and thought the paying of a nominal license fee should allow the citizens of this country to use any U. S. ports for landing of perishable products.

Mr. Wegmann, representing the National Fisheries Institute at the meeting, stated that he believed he was speaking for industry as a whole in stating that vessels of any of the states should be allowed to enter into all ports for unloading of catches with the paying of a nominal landing charge and to this Messrs. Elmer Williams and B. S. Morahan, also of the industry, agreed.

Presented under the heading of other business, Mr. Gautier read a letter by Dr. R. L. Caylor, Director of the Gulf Coast Research Laboratory, Ocean Springs, Mississippi, which offered to the Technological Section of the U. S. Fish and Wildlife Service, free of rental, a laboratory building and living accommodations for personnel.....all in interest of inauguration of a technological program on the Gulf.

Having no further business to come before the open session of the second day of the annual meeting, Mr. Thomas adjourned the meeting at 11:20 AM, Friday, October 20, 1950.

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

FIRST ANNUAL MEETING

M I N U T E S ✓

EXECUTIVE SESSION, NEW ORLEANS, LOUISIANA (OCTOBER 20, 1950). ✓

The executive session of the Commission's first annual meeting was called to order by the Commission Chairman, Mr. Bert E. Thomas, at 11:30 AM, October 20, 1950.

First consideration in the executive session was directed to a further discussion of the recommended shrimp regulations proposed by the scientists. Particular attention was directed in discussion to the possible economic effect of the suggested winter closed season on that segment of the Louisiana shrimp industry which harvests the so-called seabob. In connection with the proposed shrimp regulations, the question of a proposed line of demarcation between inside and outside waters was discussed at length.

Coming up next for discussion in the caucus was the matter of reciprocal agreements, this subject having received prominent attention in the open session of the meeting during the morning of October 20th.

The concensus of opinion among the Commissioners was that insufficient economic information had been obtained with regard to both the proposed shrimp regulations and the suggested resolution on reciprocal agreements, and that it would be advisable to continue the study. On motion of Mr. Clements, which was seconded by Mr. Dodgen, the Commissioners voted that the two mentioned subjects should be the principal matters for consideration at the next regular session of the Commission. The motion also contained the provision that the several state delegations would endeavor, in the interim, to obtain a composite opinion of the industry in their respective states and that the Secretary-Treasurer would furnish sufficient copies of the suggested legislation for study by the industry.

Dr. Wilbert M. Chapman, Special Assistant to the Under Secretary of State, Department of State, discussed with the Commissioners matters of international concern and of a confidential nature.

Before calling upon the Secretary-Treasurer for a report, the Chairman entertained a motion to dispense with the reading of the minutes of the July 20-21 Mobile meeting and to approve the minutes as had been previously printed by the headquarters office. The above was put in the form of a motion by Mr. Johnston, seconded by Mr. Vathis, and upon vote was passed by the Commissioners.

A financial statement, drawn as of September 30, 1950, was submitted by the Secretary-Treasurer. The statement was accepted upon vote of the Commission, following motion by Mr. Gautier and second by Mr. Clements, and is first attached to these minutes.

The budget for the fiscal year 1950-51, approved by the Commission officers and which is second attached, was accepted by the Commission upon vote following motion by Mr. Hendry and second by Mr. Gex.

Certain revisions in the Rules and Regulations concerning meetings and committees were discussed and it was the decision of the Commission that the subject revisions be further studied and presented at the next Commission meeting, the above decision resulting from Commission vote, following motion by Mr. Harris which was seconded by Mr. Gex.

The Secretary-Treasurer read a letter from the Pacific Marine Fisheries Commission asking for cooperation with regard to Acts which drew resolutions from that Commission at its July conference. The Acts included the Fisheries Stabilization Act of 1950, Conservation Authority Act of 1945 and Columbia Valley Authority Act. As insufficient time had elapsed for a complete study of the three mentioned Acts, it was the consensus of opinion of the Commissioners that the matter receive attention at the next regular Commission meeting.

The Chairman, acting upon authority vested in him by the Commission Rules and Regulations, re-appointed members of the Committee to Correlate Fisheries Laws and the Committee to Correlate Research and Exploratory Data for a second one-year term and highly praised their accomplishments during the past year. Upon motion of Mr. Vathis and second by Mr. Johnston, the Commission affirmed confidence in the Chairman's decision to re-appoint the aforesaid committees.

It was the decision of the individual states that the Chairmen of the State Delegations serve a second term. (This decision automatically extended the term of members on the Executive Committee for the ensuing year since the Chairmen of the State Delegations, together with the Chairman and Vice-Chairman, compose the Executive Committee of the Commission.

Mr. Thomas turned the meeting over to Mr. Clements to handle the matter of electing a Chairman and a Vice-Chairman for the ensuing year. Colonel Kurtz stated that while he normally would be opposed to the Commission Chairman and Vice-Chairman succeeding themselves, he thought, due to the very fine work accomplished under the officers' direction during the initial year of operation, that they should be elected for another term of office, and made a motion to that effect. The motion was seconded by Mr. Vathis and, upon vote, was passed by the Commissioners.

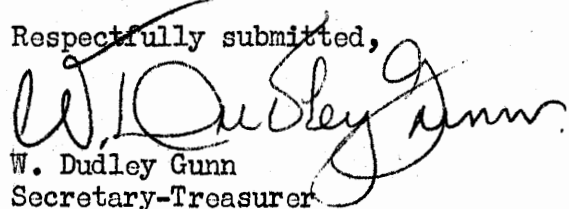
Following the precedented plan of rotating meetings from state to state, and on a quarterly basis, Mr. Thomas stated the next meeting should be held in the state of Texas and in January 1951. Colonel Kurtz said that he and Mr. Dodgen, the latter having left the meeting at 12:30 in order to make a plane

connection, were desirous of having the meeting held in Brownsville, Texas. Following a discussion as to acceptable dates, Mr. Vathis made a motion that the next meeting be held at Brownsville, Texas on January 11-12, 1951. Motion was seconded by Mr. Harris, holding proxy for Mr. Hamm, and, upon vote of the Commissioners, the motion passed.

Mr. Thomas received no reply to an invitation to the Commissioners for the presentation of further business and, in concluding the session, expressed his sincere thanks to the Commissioners for their vote of confidence in electing him for a second term of office as the Commission's Chairman and lauded the Commissioners for their excellent meetings attendance record and their diligent and cooperative efforts evidenced by the progress of the Commission in its initial year of operation.

The Chairman adjourned the executive session of the first annual meeting of the Commission at 1:15 PM (Friday, October 20, 1950).

Respectfully submitted,


W. Dudley Gunn
Secretary-Treasurer

WDG/bm

BALANCE SHEET

GULF STATES MARINE FISHERIES COMMISSION

(As of September 30, 1950)

ASSETS

Current Assets:

Cash in Bank and on Hand:

National American Bank

\$ 10,142.76

Cash on Hand

8.74

\$ 10,151.50

Member States Contributions Receivable

10,000.00

Total Current Assets

20,151.50

Other Assets:

Revolving Travel Fund - W. Dudley Gunn

250.00

Meter Deposit

10.00

260.00

Fixed Assets:

Furniture and Fixtures

452.94

Prepaid Expense:

Bond Premium

12.50

Total

\$ 20,876.94

LIABILITIES

Current Liabilities:

Federal Income Tax Withheld

\$ 231.60

Net Worth

20,645.34

Total

\$ 20,876.94

GULF STATES MARINE FISHERIES COMMISSION

BUDGET AND FORECAST
OPERATING EXPENSES, FISCAL
YEAR 1950-51.

SALARIES, Secretary-Treasurer	\$ 6,000.00
Office Secretary	2,100.00
RENT, Office	1,140.00
BOND PREMIUMS	130.00
INSURANCE PREMIUM	1.50
ACCOUNTING FEES	125.00
TELEPHONE AND TELEGRAPH	360.00
ELECTRIC LIGHTS	60.00
TRAVEL, Personal and Auto	3,000.00
POSTAGE	250.00
STATIONERY, PRINTING AND OFFICE SUPPLIES	500.00
SUBSCRIPTIONS	99.60
MISCELLANEOUS	75.00
MEETING EXPENSE, Court Reporter fee, Mobile, Alabama, Meeting, July 20-21, 1950	237.38
FURNITURE AND FIXTURES	<u>500.00</u>
	\$ <u><u>14,578.48</u></u>

GULF STATES MARINE FISHERIES COMMISSION
New Orleans, Louisiana
Jung Hotel

COMMISSION EXECUTIVE SESSION

Friday, October 20, 1950

11:00 AM

Discussion: Shrimp Regulations

Discussion: Reciprocal Agreements

Report: Secretary-Treasurer

Financial Statement (as of 9/30/50)

Budget Forecast (Fiscal year 1950-51)

Suggestions:

Rules and Regulations

Miscellaneous

Other Business

Appointing by the Chairman of Scientific and Legal
Committees for the year 1950-51

Announcing by the States of Chairmen of State
Delegations for the year 1950-51

Election of Officers for the year 1950-51:

Chairman

Vice-Chairman

Adjournment.

(M-9 101150)

BALANCE SHEET

GULF STATES MARINE FISHERIES COMMISSION

(As of September 30, 1950)

ASSETS

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\$ 20,876.94

GULF STATES MARINE FISHERIES COMMISSION

BUDGET AND FORECAST
OPERATING EXPENSES, FISCAL
YEAR 1950-51.

SALARIES, Secretary-Treasurer	\$ 6,000.00
Office Secretary	2,100.00
RENT, Office	1,140.00
BOND PREMIUMS	130.00
INSURANCE PREMIUM	1.50
ACCOUNTING FEES	125.00
TELEPHONE AND TELEGRAPH	360.00
ELECTRIC LIGHTS	60.00
TRAVEL, Personal and Auto	3,000.00
POSTAGE	250.00
STATIONERY, PRINTING AND OFFICE SUPPLIES	500.00
SUBSCRIPTIONS	99.60
MISCELLANEOUS	75.00
MEETING EXPENSE, Court Reporter fee, Mobile, Alabama, Meeting, July 20-21, 1950	237.38
FURNITURE AND FIXTURES	<u>500.00</u>
	\$ <u>14,578.48</u>

(As submitted to the Commission Officers by the Secretary-Treasurer)

(M-9 101250)

SUGGESTED MATTERS FOR CONSIDERATION REFERENCE COMMISSION RULES AND REGULATIONS:

Foreword

Change last sentence to read:

"at its Houston, Texas meeting",

instead of:

"at its first annual meeting".

Explanation: The Commission had only been in operation three months when the Houston meeting was held and for all practical purposes the New Orleans meeting October 19-20, 1950 should be considered the first annual meeting.

Article I Name and Powers

No changes suggested.

Article II Meetings

Change is suggested to cause Section 1 to read as follows:

"The Commission shall have two regular meetings each year, one designated as the "Annual Meeting" shall occur on the third Thursday and Friday in the month of October and one designated as the "Spring Meeting" shall occur on the third Thursday and Friday in the month of April. Meetings other than regular meetings shall be designated as Special Meetings. Upon the written request of a majority of the Commissioners of each state from three or more states, the Chairman shall call a Special Meeting of the Commission."

Explanation: Two regular meetings annually are suggested as that number may be sufficient to carry on the work of the Commission, now that the organization has completed essential foundation building. Since meetings in the same field of endeavor seem to be on the increase, fewer Commission meetings should improve attendance, as time goes on, and not work undue hardship on those who must attend Commission meetings. Meetings are suggested for October and April so as not to conflict with sessions of the legislatures and, too, to allow a desired interim between the meetings and the January (Mississippi and Texas) and May (Alabama, Florida and Louisiana) regular sessions of the legislatures.

The third Thursdays and Fridays in October and April are suggested as it seems desirable because of the multiplicity of meetings being held that, sooner or later, all meetings will have to be scheduled in advance if conflicting dates are to be avoided. The Commission just as well be the first to start this definite date setting for meetings, thus selecting the dates best suited to it.

Fewer meetings will also effect a savings in travel expenses for the several states, which is important.

No changes suggested Sections 2 and 3.

Article III Quorum and Voting

No changes suggested.

Article IV Officers and Committees

No changes suggested Sections 1, 2, 3 and 4.

Suggest last sentence Section 8 be added to Section 5, as that sentence reads:

"Neither the Chairman nor Vice-Chairman of the Commission shall be designated by a state as Chairman of the State Delegation".

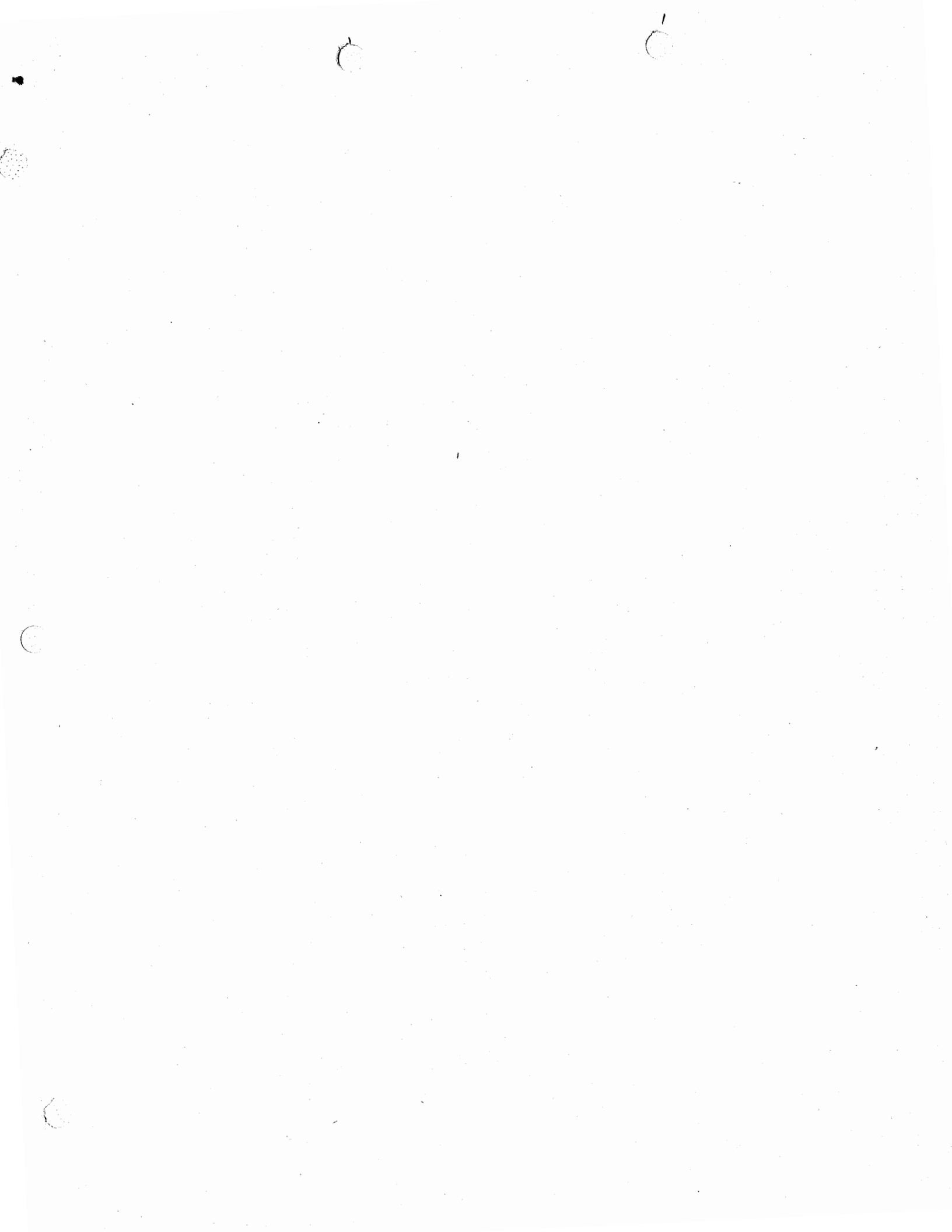
Explanation: Section 8 concerns the Executive Committee, while Section 5 concerns the State Delegations.

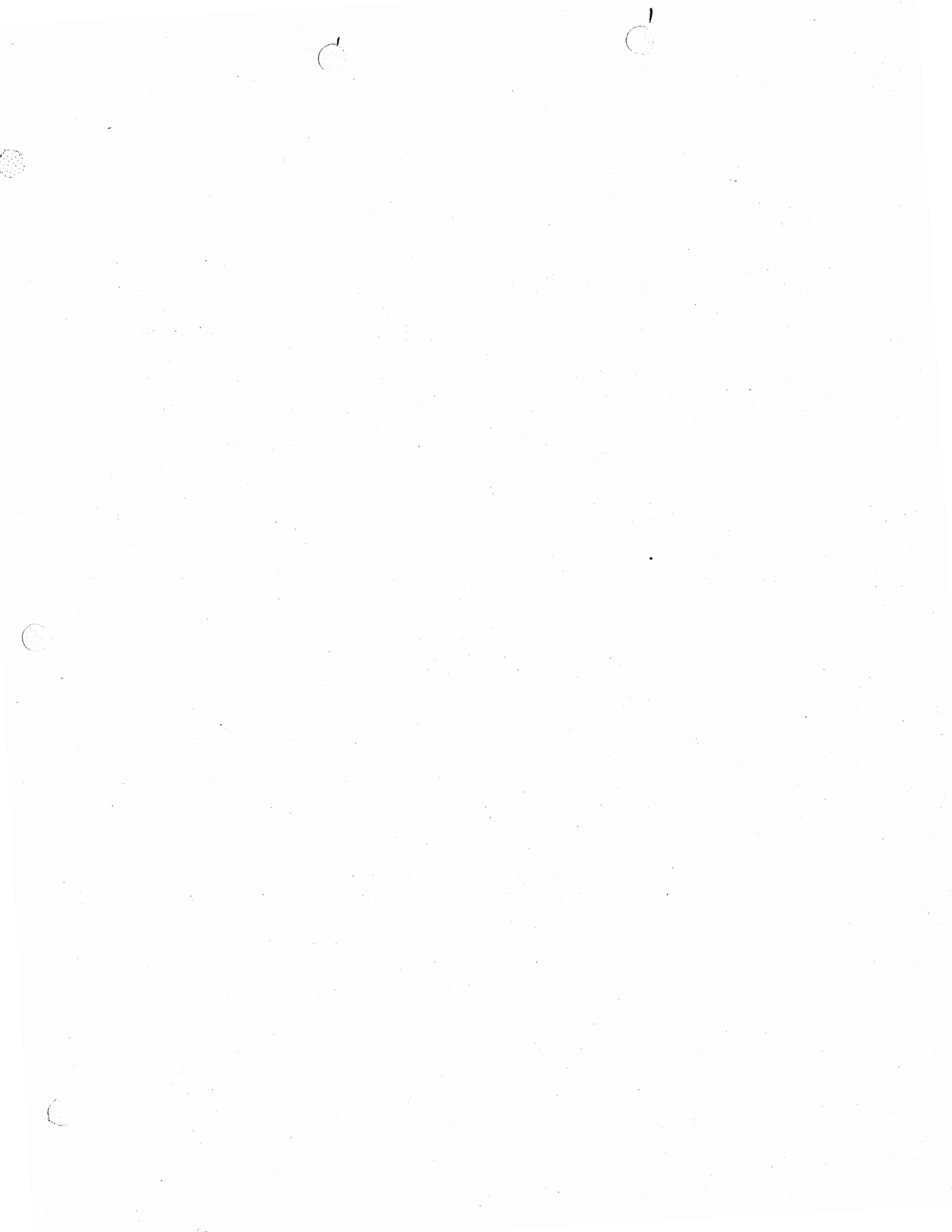
No changes suggested for Section 6.

Section 7 concerns an Advisory Committee. The following re-write is suggested:

"There shall be an Advisory Committee to be appointed by the Commissioners from each state for the purpose of advising those Commissioners upon such recommendations as it may desire to make. The Advisory Committee of each state shall be composed of five members, one each of whom shall have an intimate knowledge of, and interest in, the commercial salt water fin fish industry, the commercial salt water shrimp industry, the commercial salt water oyster industry, the commercial salt water crab industry, and the fifth member shall be representative of the salt water anglers and have an overall intimate knowledge of, and interest in, all forms of marine life of concern to the sportsman.

"Advisory Committee members shall be appointed for a one-year term and members for an ensuing year shall be announced at the final executive session of each annual meeting.





GULF STATES MARINE FISHERIES COMMISSION 39

Mobile, Alabama¹⁴
Battle House
July 20 (Thursday) and 21 (Friday), 1950.

P R O G R A M

Thursday, July 20, 1950.

- 9:00 AM Registration.
- 9:30 AM Call to order by the Chairman.
Roll Call of Commissioners.
"WELCOME", Mr. Philip J. Hamm, Director, Alabama Department of Conservation.
- 10:00 AM "GULF BIOLOGICAL RESEARCH INVESTIGATIONS", progress report by Mr. W. W. Anderson, Chief, Gulf Investigations, Sarasota, Florida.
General Discussion, led by Mr. E. H. Dahlgren, Assistant Chief, Branch of Fishery Biology, U. S. Fish and Wildlife Service, Washington, D. C.
- "GULF COMMERCIAL FISHING EXPLORATIONS", progress report by Mr. Stewart Springer, Fishery Engineer in Charge, U. S. Fish and Wildlife Service, Exploratory Fishing and Gear Development Section, Pascagoula, Mississippi.
General Discussion, led by Mr. H. E. Crowther, Chief, Section of Exploratory Fishing, U. S. Fish and Wildlife Service, Washington, D. C.
- Papers from the commercial fishing industry on the following off-shore fisheries:
- "RED SNAPPER", Mr. Victor A. Gonzalez, Star Fish and Oyster Company, Mobile, Alabama.
General Discussion, led by Mr. William J. Hendry, Commissioner Okeechobee, Florida.

"MENHADEN", Mr. Harvey Smith, Gulf Menhaden Company, Cameron, Louisiana. (Tentative)

General Discussion, led by Mr. Hermes Gautier, Commissioner, Pascagoula, Mississippi.

"TUNA", Mr. Hervey M. Petrich, Western Boat Building Company, Tacoma, Washington and Pascagoula, Mississippi.

General Discussion, led by Col. Lawrence A. Kurtz, Commissioner, Seadrift, Texas.

"SHRIMP (Brazilian)", Mr. James McPhillips, Southern Industries, Mobile, Alabama.

General Discussion, led by Mr. E. J. Grizzaffi, Commissioner, Morgan City, Louisiana.

"SHRIMP REGULATIONS", progress report and discussion, Mr. Sidney Cain, Attorney, Louisiana Department of Wildlife and Fisheries, New Orleans, Louisiana.

Adjournment.

* * * * *

Friday, July 21, 1950.

9:00 AM "PROSPECTS FOR TECHNOLOGICAL WORK ON THE GULF", Mr. A. W. Anderson, Chief, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington, D. C.

General Discussion, led by Mr. Francis Taylor, Warren Fish Company, Pensacola, Florida.

10:00 AM "INCREASING CONSUMER DEMAND FOR FISH AND SEAFOOD" (visual presentation), Mr. Charles E. Jackson, General Manager, National Fisheries Institute, Washington, D. C.

"ACTIVITIES IN THE CANNING INDUSTRY", Mr. Charles R. Carry, Director, Fishery Products Division, National Cannery Association, Washington, D. C.

"BETTER COMMERCIAL AND SPORTS FISHING THROUGH THE APPLICATION OF OCEANOGRAPHY", Dr. Dale F. Leipper, Department of Oceanography, A&M College of Texas, College Station, Texas.

11:00 AM Adjournment, followed immediately by Press Conference.

11:30 AM Commission Executive Session.

GULF STATES MARINE FISHERIES COMMISSION
Biloxi, Mississippi
The Buena Vista
April 14 (Friday) and 15 (Saturday), 1950

*Program
Biloxi
1950*

P R O G R A M

Friday, April 14, 1950

- 9:00 A. M. Registration.
- 9:30 A. M. Call to order by the Chairman.
Roll Call of Commissioners by States.
Introduction of Guests.
Welcome, Mr. Naif Jordan, President, Mississippi Seafood Commission, Biloxi, Mississippi.
Minutes of Last Meeting.
- 10:00 A. M. "RESEARCH INVESTIGATIONS":
- "The Outlook for Gulf Marine Biological Research",
Dr. Lionel Walford, Chief, Branch of Fishery
Biology, U. S. Fish and Wildlife Service, Washing-
ton, D. C.
- "Relation of Oceanography to Biological Research",
Mr. Ed. Dahlgren, Assistant Chief, Branch of
Fishery Biology, U. S. Fish and Wildlife Service,
Washington, D. C.
- "Application of Biology to Fishery Problems in the
Gulf of Mexico", Mr. William W. Anderson, Chief,
Gulf Investigations, U. S. Fish and Wildlife Serv-
ice, Sarasota, Florida.
- "The Role of Fundamental Research in Fishery Biology",
Mr. Albert Collier, Biologist, Gulf Refining Company,
Pensacola, Florida.
- Report of Committee to Correlate Biological Research,
Dr. J. Nelson Gowanloch, Chief Biologist, State of
Louisiana, Department of Wildlife and Fisheries, New
Orleans, Louisiana.
- General Discussion.

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

M I N U T E S

REGULAR MEETING, JULY 20-21, 1950
THE BATTLE HOUSE, MOBILE, ALABAMA.

OFFICIAL ATTENDANCE OF COMMISSIONERS:

	<u>PRESENT</u>	<u>ABSENT</u>
<u>ALABAMA:</u>	Bert E. Thomas (Chairman) Philip J. Hamm Thomas A. Johnston III	
<u>FLORIDA:</u>	George Vathis William J. Hendry	Bryant Patton
<u>LOUISIANA:</u>		Ernest S. Clements E. J. Grazzaffi Leander H. Perez
<u>MISSISSIPPI:</u>	Walter Gex Hermes Gautier Louis Simmons	
<u>TEXAS</u>	Howard D. Dodgen (Vice-Chairman) Lawrence A. Kurtz	Jimmy Phillips
<u>STAFF:</u>	W. Dudley Gunn, Secretary-Treasurer	

COMMISSION COMMITTEE MEMBERS PRESENT

A. J. Harris, Jr., Francis Lueth, Mary Schulman, F. G. Walton Smith, J. Nelson Gowanloch, Jack Baughman.

U. S. FISH AND WILDLIFE SERVICE REPRESENTATIVES PRESENT

A. W. Anderson, H. E. Crowther, Stewart Springer, Norman J. Haugland, Charles H. Lyles, E. H. Dahlgren, W. W. Anderson, Herbert W. Graham, John M. Amison.

OTHERS PRESENT

Charles E. Jackson, Warren F. Looney, Urban C. Bosarge, Thomas A. Ford, Ben Fulton, L. W. Graham, E. W. Jemison, Sidney Landry, Perry Prescott, Frank Sprinkle, Wm. Broadhead, John Elion, John O. Jackson, Clarence P. Idyll, Robert Ingle, J. Robert McClure, Harold C. Stokes, Francis Taylor, Kenneth J. Meyers, A. J. Wegmann, Claude A. Blanchard, R. L. Caylor, Hurst H. Shoemaker, F. P. Stubbs, Dale F. Leipper, Julian McPhillips.

The meeting was called to order at 9:30 AM, Thursday, July 20, 1950, as scheduled, with the Commission Chairman, Mr. Bert E. Thomas, presiding.

The Secretary-Treasurer called the roll of Commissioners by states, following which all Commission guests present were introduced.

The Chairman presented Commissioner Philip J. Hamm, who succeeded him as Director of Conservation for the state of Alabama. Mr. Hamm welcomed the Commissioners and their guests on behalf of the Governor of the state of Alabama, explaining that Governor Folsom being out of the state on business precluded his attending the meeting.

Mr. Thomas presented Mr. Naif Jordan and complimented Mr. Jordan on the fine work he had done for the Commission. Mr. Jordan then introduced Mr. Walter Gex, who, since the last meeting, had succeeded Mr. Jordan as President of the Mississippi Seafood Commission, thus becoming a Commissioner representing the state of Mississippi.

The Chairman next called upon Mr. W. W. Anderson, Chief, Gulf Fisheries Investigations, U. S. Fish and Wildlife Service, for a progress report in connection with the initiation of the Gulf marine biological program, which program was developed at the April meeting in Biloxi, Mississippi. Mr. Anderson stated that the research vessel Alaska had just the day before departed Pensacola for Galveston for entry at the Todd Shipbuilding Company for repairs and conversion. He added that, due to the extensive repairs and conversion necessary, it would doubtless be October before the vessel could be placed in active service. He mentioned that the scientific staff for the shore laboratory to be set up in Galveston was being acquired. He also told of the anticipated cooperation of the Texas A&M Department of Oceanography in the research program.

For a general discussion on the subject of biological research in the Gulf, Mr. Thomas called upon another of the U. S. Fish and Wildlife Service biologists, Mr. Ed Dahlgren of the Washington Office.

Mr. Dahlgren gave a brief resume of the fundamental subjects to be considered in the initial phases of the Gulf biological research program, placing particular stress upon the relationship of the velocity and direction of the currents influencing the populations of fishes and shellfishes. He mentioned the use of drift envelopes in connection with the study of surface currents and spoke of some initial work along this line which had been accomplished by Mr. Jack Baughman, Chief Biologist, Texas Game, Fish and Oyster Commission.

Mr. Baughman, in informing the conferees of his endeavors in this field of scientific research, told of having put over a thousand of the envelopes at points along the Texas coast, with distribution being at the mouths of rivers and passes leading into the Gulf, and of others placed opposite rivers and passes some twenty-five miles offshore. Some were distributed by the exploratory vessel Oregon in making four drops one hundred miles offshore. He spoke of the high percentage of drift envelope returns over that of drift bottles. According to the speaker, these initial experiments point to a very strong and rapid counter-current along the Texas coast, generally running to the southward and southwestward. He mentioned that further experiments along the Gulf coast, to be conducted with the assistance of U. S. Fish and Wildlife personnel, will in time develop a complete picture of the surface currents peculiar to the coast lines of the compacted states.

Dr. Walton Smith stated that he thought it should be recognized that only a very superficial drift is determined by the use of drift cards, that they have no relationship to the mass transport of water.

Mr. Dahlgren referred to Dr. Leipper, Oceanography Department of Texas A&M, as the party under whose supervision problems of oceanography would fall and asked him for his thoughts in connection with the topic under consideration.

Dr. Leipper stated he believed the drift card program to be a very good one and is proving a valuable supplement to the more old-fashioned dependable methods of determining ocean currents. Speaking of charting the currents of the Gulf, the speaker referred to the magnitude of the problem and to the need for a full cooperative effort in determining their pattern.

As a final contribution to this discussion period, Dr. Smith stated that a good deal could be accomplished in the matter of shrimp movements by studying the vertical distribution of the currents.

Turning from research investigations to that of commercial fishing explorations, Mr. Thomas called upon Mr. Stewart Springer, Fishery Engineer in Charge, Exploratory Fishing and Gear Development Section of the U. S. Fish and Wildlife Service at Pascagoula.

Mr. Springer gave a resume of the activities of the Oregon since it went into service April 17th. He spoke of the background information obtained in following the one hundred fathom curve from Port Aransas to Dry Tortugas. He stated that during the late spring and early summer seasons large numbers of schools of little tuna were found in widely scattered areas along the continental shelf. According to the speaker, the tuna were hard to approach. The Oregon had little success with trolling or bait fishing. Mr. Springer pointed out that the stomachs of those tuna taken were well filled with small fish, squid, and weed. He added that results might prove better during another season since the water temperatures ran consistently in the mid to high eighties. The speaker stated it was the intention of his section to try purse seining for tuna in the near future. Speaking of red snapper, Mr. Springer mentioned that, while these fishes had been found around a number of sea mounts along the coast, no commercially important concentrations had yet been located. Mr. Springer stated that, while sharks had been found in very good numbers, the commercial value of the sharks which had been taken was very low. The speaker said they had found a number of fishes on the bottom well off shore that may be of commercial interest, however he added that the work had not been comprehensive enough to reach any definite conclusions. In summary, Mr. Springer

pointed out that most of the time the vessel had been in operation activities had been directed to the securing of general information which will prove of paramount importance to the plan of operation to be instituted in the immediate future.

To lead the general discussion period involving Gulf explorations, the Chairman called upon Mr. H. E. Crowther, U. S. Fish and Wildlife Chief of the Section of Exploratory Fishing, Washington, and urged all conferees to participate in this important discussion.

Mr. Crowther, by way of introductory remarks, graphically pictured the magnitude of the commercial exploratory fishing assignment which has been undertaken through use of the vessel Oregon. He called upon Messrs. Baughman, Gowanloch and Gunn, each of whom had made a trip on the Oregon and each of whom attested to the business-like manner in which the crew conducted the explorations and also as to the enormity of the task at hand.

Mr. Wegmann, of the industry, spoke of the value of the explorations and told of the great interest of the fishing industry in the work which has, and will be, accomplished through the compact in the matter of developing joint programs for the betterment of commercial fishing on the Gulf.

Messrs. Prescott, Gautier and A. W. Anderson entered into the discussions concerning fishes in general and particularly tuna. In answer to a number of questions presented, Mr. Crowther explained that while tuna had not been located in commercial quantities thus far in the program, it was possibly due to the season, as stated by Mr. Springer, and added that the explorations would, of necessity, have to be carried on throughout the year before very definite conclusions could be reached.

Mr. Thomas, on behalf of the Commission, thanked the conferees for the interesting points brought out during the discussion period and, turning to the next topic for consideration on the agenda, explained that Mr. Victor Gonzalez, of the fishing industry, Mobile, would be unable to present a scheduled paper on the subject "Red Snapper".

Mr. Thomas introduced Mr. William J. Hendry, Commissioner from Florida, who gave a brief resume of the history of this very valuable Gulf fishery.

Mr. Francis Taylor, of Warren Fish Company, Pensacola, was presented by Mr. Hendry to preside over a discussion period dealing with the snapper fishery. The speaker told of the early days of the industry, which started at Pensacola. He related, in a most interesting fashion the problems which confronted the industry in the past and those which are of current concern to the industry. Considerable interest surrounded his explanation of a new type of wire line electric reel with which he has been experimenting as both a labor-saving device and a more efficient means of taking snapper from deeper waters.

Participating in the discussion period were Messrs. Gowanloch, Baughman, Gautier, Jackson and Wegmann. The discussion period brought out many interesting facts relative to present overall operations in this fishery

and of its value to the Gulf coast.

In passing to the scheduled topic "Menhaden", the Chairman informed the conferees that Mr. Harvey Smith of Gulf Menhaden Company, Cameron, Louisiana, was prevented, due to reasons of business beyond his control, from being in attendance and presenting a paper on the subject.

The Chairman then called upon Commissioner Hermes Gautier to lead a general discussion period on Menhaden.

Mr. Gautier, who has closely followed the development of the coastal Menhaden industry, presented a very comprehensive picture of the industry's operation at Pascagoula, giving figures to support his assertions, and pointed to the tremendous value of this rapidly growing industry.

Mr. Charles H. Lyles, U. S. Fish and Wildlife Service statistician, was called upon to illustrate by graphs which he had prepared the development of the Menhaden industry on the Gulf. The conferees were interested to learn that ten years ago - 1940 - the Gulf produced approximately 26,000,000 pounds of Menhaden; by 1945 the production had jumped to around 75,000,000 pounds. Mr. Lyles pointed out the urgencies of war probably attributed to the slow development between 1940 and 1945. By 1949, the production figures totalled an approximate 274,000,000 pounds. It was this speaker's conclusion that the production of fish scrap and meal is progressing at a much more rapid rate on the Gulf than on the Pacific or on the Atlantic.

Dr. Gowanloch spoke of the value of the products of this industry not only to the Gulf coast but to the nation as a whole and stressed the need for better public relations among certain segments of the sports fishing industry who erroneously maintain the Menhaden is essential to the subsistence of fishes of interest to the sportsmen.

Mr. Gautier inquired into the probability of the fishery becoming extinct due to the greatly increased landings, to which Dr. Gowanloch responded that he had watched the development of the industry since 1923 on both the Atlantic and Gulf coasts and that there is no evidence to indicate that Menhaden have been reduced in numbers during that period of time.

Mr. Baughman was called upon and told of a survey made by some twelve biologists in the state of Texas to determine if Menhaden were essentially a part of the sport fishes' diet and that their findings were to the contrary. He also presented figures to substantiate that this industry adds tremendously to the economy of any state in which Menhaden plants operate.

Both Mr. Gautier and Mr. Baughman discussed the matter of scrap fish, which subject has been discussed before at Commission meetings, and both commented upon the need for salvage of this important source of meal, scrap and oil.

Mr. Vathis stated that the state of Florida has welcomed the industry to that state and has placed no regulations upon the fishery, as has been done by some of the other Gulf states. Mr. Vathis stated that commercial and sports fishermen of Florida have never complained about the operation of the Menhaden

industry in that state.

Mr. Dodgen commented upon recent scientific investigations related to the Menhaden industry and stated that the matter of legalizing the purse sein for Menhaden fishing would be presented to the Texas legislature during the session commencing in January of this year.

Mr. Gautier then asked members of the industry for their comments, to which Mr. Urban C. Bosarge, Bayou LaBatre union executive, stated that the commercial fishermen of South Alabama were sympathetic toward the Menhaden industry and that a plant would be welcomed in Alabama.

Mr. A. W. Anderson, Chief of U. S. Fish and Wildlife Service's Branch of Commercial Fisheries, Washington, stated the Menhaden industry had sufficient faith in the legitimacy of its operation that they taxed themselves for a substantial sum to have a factual motion picture made of the industry, under the supervision of the U. S. Fish and Wildlife Service.

Mr. Gautier turned the meeting back to the Chairman at 1:00 PM and Mr. Thomas adjourned the meeting until 2:30 PM.

Upon calling the afternoon session to order, Mr. Thomas stated that Mr. Hervey M. Petrick of Western Boat Building Company, Tacoma, Washington, was prevented from attending the meeting and presenting a paper on the subject "Tuna".

Mr. Dave Bratcher of Hutchings Brokerage Company, Mobile, Alabama, which firm distributes products of the Van Camp Sea Food Company, showed the sound and colored tuna film "Chicken of the Sea".

Immediately following the showing of the film, Colonel Lawrence A. Kurtz, Commissioner from Texas, was introduced to lead a discussion period on the general subject "Tuna".

Colonel Kurtz related some interesting observations he had made while living in San Diego. He spoke of this comparatively new industry in terms of its importance, giving figures on the number of cases produced at various intervals in the approximately forty years of the industry's existence and, in addition, presented interesting data on the overall operation of the industry, including areas of catch. He also spoke of the proximity of the present Tuna fishing grounds to Gulf ports, which has given rise to speculation on the possibility of establishing canneries locally.

Mr. Hermes Gautier gave an account of a trip to the west coast, in which he and others of his party endeavored to interest west coast canneries in establishing plants on the Mississippi coast. He told of west coast interests establishing a plant at Moss Point, Mississippi, this firm to be operated as "Tuna Incorporated". Mr. Gautier informed the conferees that tuna canned at Moss Point is being marketed today under the brand name "Gulf Star".

Mr. A. W. Anderson, speaking from a national and international point of view, stressed the importance of the industry to the whole world and mentioned the

enthusiasm now apparent in the expansion of the industry, not only along the Pacific coast but also in the Gulf area and, in addition, the interest of the Maine sardine packers in catching blue fin tuna for freezing and holding for canning when sardines are not available. According to Mr. Anderson, the entire fish canning world has turned prospecting eyes to this highly profitable industry and the result appears to be an ever increasing production. However, he added that there is no apparent indication of supply even approaching public demand, which economic condition has caused the industry to be a most profitable one for those engaged in all departments of its operation.

Mr. Baughman told of evidences of tuna in the Gulf and in certain areas of the Caribbean.

Dr. Walton Smith commented upon an annual May run of blue fin tuna through the Florida Straits. According to Dr. Smith, the blue fin tuna, weighing around five hundred pounds each, complete their run northward through the Florida Straits in about two weeks time. He asked for information as to the possibility of finding large schools of young blue fin tuna in the West Indies and the Caribbean Sea, which, he added, would be doubtless more acceptable for food than the mentioned five hundred pound tuna of the same classification.

Mr. Crowther stated that he could not answer Dr. Smith's question, however he did say that determinations as to the migrations of tuna had been accomplished on the west coast to a very marked degree through obtaining knowledge concerning the effect of currents and temperatures on the fish. It was his stated belief that the Gulf biological research program will be productive of sufficient data relative to currents and temperatures to eventually develop a pattern of migrations and predict the location of concentrations.

The Chairman stated that Mr. James McPhillips of Southern Industries, Mobile, Alabama, who was scheduled to present a paper on Brazilian Shrimp, was called out of the city but would be present to fill his part on the program Friday morning.

Mr. Thomas then announced that a subject originally intended for treatment at the Friday morning session would be given and he introduced Mr. A. W. Anderson to present "Prospects for Technological Work on the Gulf".

Mr. Anderson stated that while the Service did not have any established technological laboratories on the Gulf, there was considerable experimentation going on in laboratories located elsewhere which was of significance to the Gulf industry. He mentioned particularly technological research covering freezing of fish at sea, defrosting, filleting and re-freezing fish, freezing of oysters and the freezing and storing of shrimp. Mr. Anderson also mentioned the experiments being conducted with the canning of little tuna taken off New Jersey. He believes that the information obtained will be of great value to the industry here on the Gulf and he stated the canning of little tuna might prove a profitable by-product for the shrimp and oyster canneries. It is Mr. Anderson's belief investigations in the field of sanitation and bacteriology now being conducted on canned shellfish will be of considerable value to the Gulf industry. The speaker also mentioned investigations in

progress to determine if certain pharmaceutical products not now known might be obtained from Menhaden in order to bolster the declining revenues accruing to the industry. In concluding, the speaker told of the mobile laboratories which the Service owns and stated that he was of the opinion one of these laboratories, properly staffed, would be the best medium through which to tackle the technological problems here on the Gulf and went further to state that he was hopeful that funds and personnel might be available to undertake a program on the Gulf in the next federal fiscal year.

Mr. Francis Taylor was presented by the Chairman to lead a discussion covering technological work on the Gulf.

Mr. Julian McPhillips, in answer to a question by Mr. Taylor, stated that his New Orleans firm, the Southern Shell Fish Company, along with other shrimp canners, was confronted with a problem of slow deterioration of the product after holding same for some ten months. Limited experiments, he said, which have been conducted by their firm, had proven inconclusive although he believed that the application of calcium chloride had indicated its use tended to preserve the firmness of shrimp for a period of time - - - application of this chemical not yet tried on a commercial scale. He requested assistance in solving this problem. Mr. McPhillips also requested any information which could be furnished that might help his firm, and other canners, find a broader market use for shrimp meal. Turning to another matter of interest to the canning industry, the speaker requested information regarding the freezing of shrimp and handling the product later for canning purposes.

Mr. Anderson, in reply to Mr. McPhillips, stated that he had made a note of each of the three problems mentioned, that he would carry them back with him to Washington and that he would review his files in Washington for a possible answer to some of the problems.

Addressing his remarks to Mr. McPhillips, Mr. Wegmann stated experience had taught him if shrimp were brought in in a fresh state, due to having been properly refrigerated from the time taken from the water, their taste was strictly a fresh one even after storage up to four months in a freezer. He did state, however, that he had not attempted to can shrimp following such treatment.

The first day's session, at the direction of the Chairman, stood adjourned at 5:00 PM.

Friday, July 21, 1950

The meeting was called to order at 9:30 AM, with Mr. Howard Dodgen, Commission Vice-Chairman, presiding.

The Chairman introduced Mr. James McPhillips.

Mr. McPhillips, proceeding with his presentation of the subject "Brazilian Shrimp", stated that this type shrimp was fast becoming a prime factor in the shrimp industry. According to Mr. McPhillips, up to a few years ago Brazilian shrimp were little known except to the Louisiana sun-drying segment of the industry but, he added, the total Alabama catch for the current year would be made up half Brazilians. With regard to the acceptability of this type shrimp when canned, the speaker stated it more acceptable than white shrimp because, when canned, the texture is better and it produces a brighter pink color. Still drawing from his own experiences, the speaker said the Brazilian shrimp, when frozen, is not quite as acceptable to the trade as the white shrimp but it is his belief the trade acceptance of the former can be enhanced if the buying public is brought to realize that the brown color of the Brazilian is not an indication of lack of freshness or good taste. As a concluding thought, the speaker stated that to have the Oregon concentrate on and find new fields of Brazilian shrimp in the nearby Gulf waters would help everybody - - - dealers, labor and fishermen.

In the absence of Mr. E. J. Grizzaffi, Commissioner from Morgan City, Louisiana, the Chairman requested Mr. McPhillips to lead a discussion period on the subject which he had just covered.

The discussion, participated in by Messrs. Gautier, Wegmann, Prescott, Dodgen, Johnston, Harris and W. W. Anderson and by Drs. Gowanloch and Idyll, was of considerable length and covered, generally, the need for uniform shrimp regulations for the several states, including night shrimping, count per pound and seasons. The need for the establishing of reciprocal agreements was also discussed at considerable length. Mr. Thomas told the conferees that it was his intention to designate a place and date for a meeting of Commission biologists and attorneys for the purpose of drafting recommendations as to joint interstate regulations, supported by scientific facts, for the consideration of the Commission at its annual October meeting.

The Chairman, Mr. Howard Dodgen, next introduced Mr. Charles E. Jackson, General Manager, National Fisheries Institute, Washington, D. C., to present the subject "Increasing Consumer Demand for Fish and Seafood". Mr. Jackson gave a most interesting talk on the public relations activities of N.F.I. and concluded with a visual presentation which gave examples of the various forms of media being employed by the Institute in line with sales promotion. Mr. Jackson's paper is first attached.

The Chairman expressed the regrets of the Commission that Mr. Charles R. Carry, Director of Fishery Products Division, National Canners Association, Washington, was called to the west coast on urgent business and was unable to be in attendance and present a paper covering the activities of the canning industry.

Mr. Dodgen next called upon Dr. Dale F. Leipper, Department of Oceanography, A&M College of Texas, College Station, Texas.

Dr. Leipper's very interesting treatment of the subject "Better Commercial and Sports Fishing Through the Application of Oceanography" is second attached.

Mr. Dodgen asked the conferees if there were other matters to be presented at the meeting and following Dr. Walton Smith's issuing of an invitation to the conferees to attend the third annual meeting of the Gulf and Caribbean Institute at Miami Beach, in November, the speaker expressed the thanks of the Commissioners to the conferees for their active participation in the meeting and for the very valuable information conveyed to the Commissioners through the formal presentations and general discussions.

The meeting was then turned back to the Commission Chairman, Mr. Bert E. Thomas. Mr. Thomas also expressed the gratitude of the Commissioners for the splendid contributions made by those in attendance at the meeting and, with no further comment forthcoming from the conferees, declared the open session of the meeting adjourned at 12 noon (Friday, July 21, 1950).

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

MINUTES 13

EXECUTIVE SESSION, MOBILE, ALABAMA (JULY 21, 1950). 20/13

Commission Chairman, Mr. Bert E. Thomas, called the Executive Session of the Mobile, Alabama meeting to order at 12:00 noon.

The Chairman introduced Mr. Warren F. Looney, Foreign Affairs Officer, Fisheries and Wildlife, Office of the Under Secretary, Department of State, Washington, D. C., and expressed the appreciation of the Commissioners for his attendance at the Mobile and other meetings of the Commission. Mr. Looney's talk was of a classified nature and for that reason will not be spread across these minutes.

The Secretary-Treasurer, Mr. Dudley Gunn, was called upon for a report on the financial condition of the Commission at the close of the fiscal year June 30, 1950. The Secretary-Treasurer reported that the certified public accountants firm of Moses, Rittler and Dienes, New Orleans, had completed the annual audit and original copies of the audit were passed among the Commissioners. Mr. Wm. J. Hendry moved that the financial report be adopted as presented, which motion was seconded by Mr. Dodgen and passed by vote of the Commissioners.

The Secretary-Treasurer read a letter from Mr. Bill Lyerly, executive secretary to Governor Folsom, expressing to Mr. Thomas, the Governor's and Mrs. Folsom's appreciation for the invitation to attend the Mobile meeting and expressing regret that a previous commitment precluded their attendance. Letters of good wishes for the meeting from others who were unable to attend included Mr. Herbert L. Wiltsee of the Council of State Governments, Mr. Victor Gonzalez of Star Fish and Oyster Company, Mr. Hervey Petrich of Western Boat Building Company, Mr. Charles R. Carry of National Cannery Association and Mr. Price French of Shark Industries. Also read were telegrams from Messrs. Grizzaffi and Cain, advising of their inability to attend the meeting and expressing their good wishes for the success of the conference.

U. S. Fish and Wildlife Service representatives were asked by the Commission Chairman to be present at the executive session. Discussing with Service representatives the availability of funds for the operation of the motor vessels Oregon and Alaska, it was learned that the latter may not be in full time operation during the last of the current federal fiscal year due to the lack of funds, a condition brought about by the increasing costs of repairs and conversion. In connection with the making available of the necessary funds for the uninterrupted operation of the Alaska during the fiscal year 1951-52, Mr. Dodgen proposed a resolution to be directed to the

U. S. Fish and Wildlife Service. The proposed resolution was seconded by Colonel Kurtz and adopted by the Commission. This resolution is third attached.

Following a short discussion period with regard to instituting technological work on the Gulf, a resolution was proposed by Mr. Gautier to be directed to the U. S. Fish and Wildlife Service and was seconded by Mr. Hendry. Upon vote of the Commissioners, the resolution was adopted. This resolution is fourth attached.

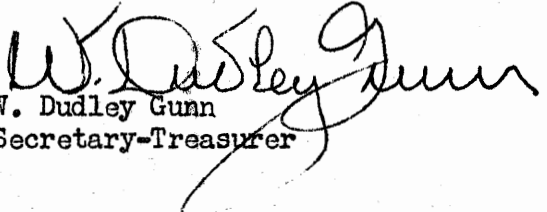
The decrease in demand for oil and other products of the shark, coupled with the increasing demand for shrimp, prompted a resolution by Mr. Johnston to substitute shrimp for shark, as outlined in the initial program of Gulf exploratory commercial fishing. The proposed resolution was seconded by Mr. Hamm and adopted by the Commission. This resolution is fifth attached.

Following a motion made by Mr. Dodgen and seconded by Mr. Gautier, the Commission voted unanimously to hold the annual meeting in New Orleans on October 19-20, 1950.

It was brought out in discussion that it would be desirable to have U. S. Fish and Wildlife Service representatives familiar with the shrimp fisheries of the Gulf of Mexico serve in an advisory capacity at a meeting of Commission Committeemen composed of biologists and attorneys. Accordingly, the Chairman issued this invitation to representatives of the Service and it was accepted. The meeting was called for August 17-18, 1950 at New Orleans.

With no further business to come before the executive session, the Chairman declared the meeting to be adjourned at 1:30 PM (Friday, July 21, 1950).

Respectfully submitted,


W. Dudley Gunn
Secretary-Treasurer

WDG/bm

PUBLIC RELATIONS OF N.F.I.

Address by Chas. E. Jackson, General Manager
National Fisheries Institute, Inc., before the
Gulf States Marine Fisheries Commission
Mobile, Alabama, July 20-21, 1950

Public Relations for the fishing industry of the United States is more or less a new experience. Until the advent of the N.F.I. five years ago, there had never been even a truly national fisheries organization. The old U. S. Fisheries Association that was organized about thirty years ago came nearest to an over-all national fisheries association, but only a few members were included from the West Coast and it was preponderantly an Eastern organization. The U.S. Fisheries Association included Public Relations, or advertising, in its program, along with traffic work and other work similar to the program of N.F.I. today, but it wasn't truly national. When we organized N.F.I. we made sure that it would be national in character and the industry of the East even went so far as to virtually guarantee the financing until the West, Gulf, South and Lake areas could join up. Today N.F.I. is a truly national organization and we represent every segment of the fishing industry of the nation, including Alaska, Hawaii and many of the interior states far removed from production areas. N.F.I. includes all units of the U. S. fishing industry in its membership with the one exception of the fishermen. Many fishermen were already united with the national labor organizations, the A.F. of L. and C.I.O., before N.F.I. was established.

Today N.F.I. represents producers, processors, boat owners, distributors (including wholesalers), and brokers. We also include in our membership a few progressive retailers and a number of the better seafood restaurants.

Public Relations, or advertising, programs have been and are being sponsored by local associations in some cases and by individual firms having private trademarks in numerous cases. Until N.F.I. came into the picture there was no means by which we could undertake a national Public Relations program. We have been very successful in our program, but like other organizations, we learned the hard way. At first we had ambitions for an annual \$3,000,000 dollar advertising program, including the purchase of space. However, we soon learned that this was too ambitious and too expensive. To purchase space in the leading consumer magazines would involve millions annually and no matter how good it would be or how much needed, we simply have not reached the point in the fishing industry where we can collect sufficient funds to buy space regularly. When I tell you that a single full-page color ad in LIFE Magazine costs nearly \$40,000, including the preliminary art work, you can begin to appreciate the cost of a national advertising program. Up until now we have thought in millions but produced cash only in thousands. Furthermore, we found that only a small part of our membership were willing to finance even a modest program and after two years they naturally grew tired of paying for the free riders.

Meanwhile, we learned we could accomplish a real job for less than millions, in cost, yet obtain millions of dollars of value for thousands of dollars. We faced the fact that our industry was not yet ready to raise millions, although every segment of the industry recognizes the need. And so we have arrived at a modest but very effective Public Relations program and it is paying dividends far beyond the greatest expectations of our industry. So successful, in fact, has it been that the N.F.I. Board of Directors voted unanimously in Chicago last April to include Public Relations as a permanent part of our N.F.I. program. A minimum annual budget of \$50,000.00 has been established as our goal. For this, we employ the services of an advertising expert in our N.F.I. office and the services of the J. Walter Thompson Agency, the largest advertising agency in the world.

Through these media, for instance, we publicized the products of our industry through twenty-four national consumer magazines during the months of last March and April. In addition, we keep fish and shellfish before the public through thousands of newspapers, hundreds of radio stations, and all other public media. We could not possibly buy this magazine and newspaper space and the hours of radio time that are being made available to us. We are getting editorial and news space because we have a story to tell; because we have the best talent that can be procured; and because our industry is so romantic that home economists, editors and radio script writers are hungry for the material we can supply them. And so, while we are building our industry to become Public Relations conscious, we are doing a

tremendous job for a few thousand dollars, a job that is worth millions of dollars. Our great problem is to make our industry realize that for every Public Relations dollar they provide us, we are securing 1000-fold benefits.

The results: more fish and shellfish used daily by the housewife, more fish and shellfish on hotel, restaurant and dining car menus, a greater per capita consumption of our products, a better understanding of conservation through a more widespread use of less known species that are in abundance, and last but not least, the placing of our industry on a par with other important food industries. No longer does the fishing industry have an inferiority complex. Our industry representatives are as important in the community as the banker, the newspaper editor, the minister or the lawyer. We have lifted our industry to the position in which it rightfully belongs. There is no limit to the future if we all pull together and that includes the industry, the Federal and State agencies, the biologists, the technologists and every phase of the fisheries. Public Relations is absolutely essential if we are to maintain the progress made to date.

There is a need for men engaged in the industry to have a better working knowledge of the activities of scientific personnel. Much progress has been made, but there is ample room for more. Public Relations can do this job too.

I used to grow discouraged over the lack of interest of the fishing industry in conservation problems, but after I traveled in Europe I came to realize that the American and Canadian fishing industries were far more understanding and sympathetic to these problems than other parts of the world. I found that many European countries have efficient scientific staffs but too often regulatory authority rests solely in the hands of administrators who have neither concern nor patience with the bug hunters and don't even pretend to use scientific findings to protect the fishery resources. Often the scientists go about their work alone, print solutions in the scientific journals which are stored away among the dust of little-used libraries, while the fishery resources reduce in supply, the size limits reach fingerling lengths, economics force construction of larger craft to sail to more distant waters and bring in higher priced fish. Coordination of all of us engaged in the various phases of the North American fisheries, plus nationwide knowledge gained through Public Relations, has placed the United States and Canada in the forefront of nations steadfastly trying to apply conservation principles to the end that we may maintain and increase fisheries production in perpetuity.

So I hope you will not make the mistake of thinking that the N.F.I. Public Relations program is designed to merely increase consumption, for it accomplishes an understanding between the scientist, the fisherman and the public and tends to bring about the goals all of us are seeking. The National Fisheries Institute renders a public service. Unless we do, neither the N.F.I. nor the fishing industry can survive.

You people engaged in scientific research, in administration of State and Federal laws, can help industry by selling them on a Public Relations job. A small portion of the industry is paying for Public Relations through N.F.I., but we need more industry members to maintain and enlarge the program. We have far too few N.F.I. members in the Gulf area, and it is only through N.F.I. that a fisheries Public Relations program is being financed and carried on from month to month and from year to year. We have proven that our program is completely unselfish - it is a public service but we need help if the program is to be maintained.

In conclusion, let me show you some examples of our Public Relations program.

BETTER COMMERCIAL AND SPORTS FISHING
THROUGH THE APPLICATION OF OCEANOGRAPHY

Talk given by Dale F. Leipper, Head of the Department of Oceanography at the Agricultural and Mechanical College of Texas, to the Gulf States Marine Fisheries Commission meeting in Mobile, Alabama, July 21, 1951

Gentlemen:

I should like to express my appreciation for this opportunity to attend your meeting and to take part in the discussion of problems related to marine fisheries in the Gulf of Mexico. We at Texas A. and M. are closely associated with the Fisheries Biology Division of the U. S. Fish and Wildlife Service in developing the research program for their vessel, the ALASKA. Our relations with Dr. Lionel Walford, Mr. E. H. Dahlgren and other members of that service have been both pleasant and profitable. We are acquainted with a number of scientists doing fisheries work in this area and have learned much from men like Dr. Gordon Gunter, Dr. F. G. Walton Smith, Mr. Jack Baughman, and others. These contacts have all increased our interest in the application of oceanographic knowledge to marine fisheries problems.

Oceanography is defined as the study of the oceans in all their aspects, the investigation of what goes on in the sea, around it, under it and over it. At A. and M. five major aspects are emphasized - the physical, the chemical, the biological, the geological, and the meteorological. This discussion today is limited to the physical and meteorological aspects since those are the two whose application to fisheries work has great potentialities, but is least developed. Physical oceanography is the physics of the sea and includes the study of ocean waves and water movements, of transformations of energy, and of the physical characteristics of sea water. Meteorological oceanography deals with the winds and weather over the sea, with the manner in which winds set up ocean waves and currents and with the climate as determined by evaporation and conduction from the sea surface.

It has often been necessary for fisheries biologists to investigate these phases of oceanography as well as to do their biological work. For example, when the Fisheries Division of the United Nations Food and Agricultural Organization was established, the work of the fisheries biology branch of that division was described as "marine biology -- which will ultimately cover fish culture methods, hydrography, oceanography, and meteorology." As biologists will recognize, this is a large assignment. It would simplify matters if the last mentioned phases could be handled by persons having background in physics and mathematics and specific training in oceanography. Few biologists have such background or the inclination to attain it.

Although there have been a number of instances when physical oceanography has contributed significantly to fisheries studies, its application is not at all methodical and straightforward, but is different for each particular instance. Extensive additional research is needed before the full possibilities of this combination of sciences can be realized. Several programs are under way. One is the Marine Life Program, a cooperative effort on the West Coast to study factors affecting the California pilchard fishery. Another is a program on the Atlantic coast in which the Fish and Wildlife Service is working with oceanographers of the Woods Hole Oceanographic Institution. Also, a series of articles have appeared in Fisheries Newsletter telling of oceanographic and fisheries work being conducted jointly in the ocean region surrounding Australia. In the Gulf of Mexico, plans for applying oceanography to fisheries are just being developed. An indication of the lack of such plans in the past is the fact that the Proceedings of the Gulf and Caribbean Fisheries Institute for November 1949 contain only a few paragraphs about oceanography. Special sessions are planned for this subject next year, but, since these sessions are scheduled at the same time as the commercial fisheries session, they are not intended to acquaint fishermen with oceanography.

In order to understand how oceanography is useful as an aid to fisheries it is necessary to keep in mind the nature of the life cycle in the sea. This begins with the nutrient materials found in sea water, the nitrates, phosphates and other constituents which are used by plants. These, together with dissolved carbon dioxide in the presence of sunlight, are necessary for photosynthesis to occur. The plants then, of which some 99% are microscopic in size, and which drift with ocean currents, furnish food for the small drifting animals, the zooplankton. These and the plants are eaten by the larger animals of which the pelagic fishes are part. When the animals and plants die and decay the cycle starts over again. The total weight of the various forms decreases as later stages in the cycle are reached. It is estimated that the weight of fishes in the sea is only about 0.1% of the weight of the plants.

The most logical way to learn how to best utilize the marine fisheries is to study the life cycle and all of the factors which affect it. Then, at steps in the cycle which turn out to be critical to certain species, measures may be taken to aid their natural development.

Oceanographic information is of particular value to fisheries biologists in determining the time and place of spawning, the rate of growth, and the time and place where fish may be caught when they are mature. It has been found in the California study that the sardine spawns when the water temperature reaches a favorable range and that the spawning follows the movements of water masses having temperatures within this range.

Growth of animals depends upon availability of plant foods which can maintain themselves only in the lighted zone where the sea temperature is

favorable and nutrient materials are present. Oceanography enters here because of the importance of wave action and turbulence in determining the turbidity of the water and therefore the depth to which sunlight can penetrate; it enters because the sea temperature is the result of a balance in the heat budget between the atmosphere and the oceans and because the distribution of heat in the sea is affected by evaporation, wind stirring, and conduction; and it enters because the only processes by which a supply of nutrients may be kept in the relatively shallow lighted zone are physical processes - ocean currents (particularly that type related to the winds and known as upwelling), wave action, convection resulting from evaporation, and diffusion.

Growth of animals also depends upon their freedom from disease. The degree to which different diseases are effective is related to the conditions of the physical environment. The importance of disease is a phase of biological oceanography which we intend to emphasize in the Department of Oceanography at A. and M.

Two examples may be given to illustrate how conclusions drawn from a study of oceanographic processes provided information about the fisheries. In the British herring industry it has been discovered that there is a close correlation between the phosphate concentration of the sea water in one year and the number of herring available to the fishery three years later. This indicates a close dependence of the fishery upon the processes bringing about changes in phosphate concentration.

Dr. Walford found a high degree of correlation between the values of salinity as observed at Scripps pier in Southern California and the subsequent year classes of the California pilchard. The explanation was that the salinity in this location could in general be taken as an index of the amount of upwelling which had occurred along the coast and that the upwelling determined the success of the year class since the nutrient materials were provided in this manner.

In mid-latitude and northern waters it appears that upwelling which occurs under certain particular weather conditions a few times each year provides the chief supply of nutrient material. In lower latitudes upwelling is uncommon but nevertheless there is a continual resupply of nutrients to the lighted zone. The process by which this takes place has not been fully investigated. It may well be that productivity in lower latitudes will compare favorably with that in higher latitudes when more is known about it. The difference may be that slow but continuous growth of the former is actually more effective than the at times spectacular but sporadic blooms of higher latitudes.

If fish did not school, it would be difficult to catch them in large quantities, yet little is known about the causes of schooling. One example

of the use of oceanography in catching fish is that taken from the cod fishery. Here it was learned that the fish could be found wherever sea temperatures within a certain range existed at a certain depth. From this time on it was only necessary to follow the temperature changes in waters of the appropriate depth and when they reached the appropriate temperature fishing could begin.

There is a great weakness in the application of the results of statistical studies where the processes taking place are not fully understood. This weakness lies in the fact that correlations can be made only between various indices and not between processes. If the index fails to describe the true status of the process, then any forecast based upon the correlation will fail to be verified. For instance, it may be true that the salinity at Scripps pier usually changes when a large amount of upwelling occurs in the region. However, if the upwelling should occur in some region slightly further removed from the pier there might be no indication of this at the pier and yet it would be found that the growth of the pilchard had been encouraged.

In the Gulf of Mexico we are dealing with an unknown quantity. Before we can plan to improve the fisheries we must learn what conditions exist. We must measure and describe the distribution in time and space of every factor which experienced fisheries biologists suspect of being important to the life cycle in the sea. As far as oceanography goes some of these factors are temperature, salinity, light intensity, pressure, and current direction and speed.

The next step is to analyze the data which have been collected in order to discover what processes are important in bringing about significant changes. After these significant processes are selected, they must be carefully investigated so that the manner in which they operate may be thoroughly understood.

The final phase and ultimate goal of fisheries research is to predict. Once the significant processes are isolated and their operation understood it becomes possible to extrapolate observed conditions with some hope of success. It is not to be assumed that a final answer may be obtained in any given short period of time. Actually, the development of fisheries through application of oceanography will continue to grow in importance through the years as more and more is learned about how the various kinds of organisms are associated with the changing physical environment.

There are various kinds of forecasting, two of which we may classify as biological and physical. A biological forecast might be based on the following reasoning: This year there were twice as many eggs laid by this given species as there were last year. Therefore, at the time this year class matures there will be twice as many individuals of this species as there were the previous year. A physical forecast might be based upon the

idea that a larger region of favorable temperature would result in more fish. I believe that it is obvious that neither of these forecasts could be considered trustworthy. However, a forecast based upon both kinds of information would have a better chance of verification. In some cases, knowledge of certain biological conditions and other knowledge of physical conditions may be of equivalent value in providing information about the status of the fishery. However, the physical information may be much simpler to observe or to predict and should thus be used in preference to the biological information. At other times the biological approach might be more logical. The advantages of each must be considered.

The goal of oceanographic research in its relation to fisheries is to first develop an understanding of all of the physical processes in the sea which affect the life cycle, then to select reliable indices of these processes which may be easily measured and used in predicting conditions in the future. Such a program for the entire Gulf of Mexico must include the cooperation of the federal government, the state governments, and industry. It requires an academic association for both research and teaching purposes.

Fortunately, there are many activities in addition to the fisheries which are also associated with the development of oceanography and will contribute effectively to this development. These include weather forecasting, prevention of beach erosion, navigation, national defense, construction offshore as for the oil industry, recovery of raw material from the sea, and the prevention of pollution and beach contamination. By proper organization and cooperation, productive studies, the cost of which would be prohibitive to any one industry or organization, can be carried out. Texas A. and M. College with the help of the Fish and Wildlife Service the Office of Naval Research, and local industry has taken large steps in getting an oceanographic program under way. There is no reason why we in the south cannot take a prominent place among those regions which have successfully applied oceanography to practical fishing problems.

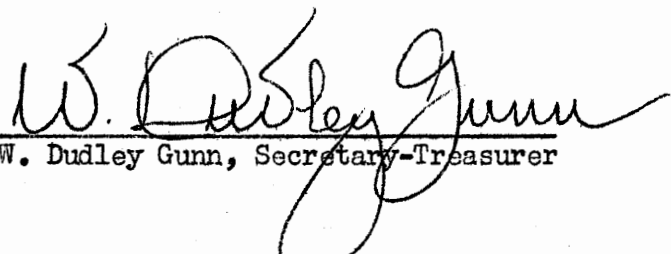
July 17, 1950

RESOLVED, that the Gulf States Marine Fisheries Commission fully appreciates the necessity of a continuous month-to-month operation of the marine biological research vessel Alaska, properly staffed, in order that investigations in waters of the Gulf of Mexico may proceed without interruption, and thus, develop data not only essential to the biological research program but also to the program of exploratory commercial fishing, and,

BE IT FURTHER RESOLVED, that this Commission recommends that the U. S. Fish and Wildlife Service make strenuous effort to arrange for the allocation of sufficient funds to insure that the vessel Alaska will carry on an uninterrupted schedule of investigations during the fiscal year 1951-52.

* * * * *

The foregoing is a true and exact copy of an original resolution introduced by Mr. Howard D. Dodgen of Texas and seconded by Mr. Lawrence A. Kurtz of Texas, and adopted by the Gulf States Marine Fisheries Commission at its meeting held July 20 and 21, 1950, at the Battle House Hotel, in the city of Mobile, Alabama.


W. Dudley Gunn, Secretary-Treasurer

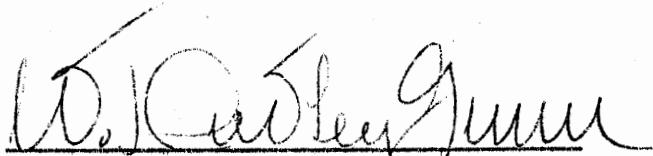
(Original resolution to Honorable Albert M. Day, Director, U. S. Fish and Wildlife Service, Washington, D. C., July 27, 1950.)

RESOLVED, that the Gulf States Marine Fisheries Commission recognizes the commercial fishing industry of the Gulf states to be badly in need of on-the-ground technological assistance to carry on full time investigations of problems common to its semi-tropical location, and,

BE IT FURTHER RESOLVED, that this Commission recommends to the U. S. Fish and Wildlife Service that they relieve this present and growing urgency for technological investigations on the Gulf by assigning a full time technologist to work exclusively in this area, and on problems peculiar to this area, and that the technologist be furnished with an adequately equipped mobile laboratory.

* * * * *

The foregoing is a true and exact copy of an original resolution introduced by Mr. Hermes Gautier of Mississippi and seconded by Mr. William J. Hendry of Florida, and adopted by the Gulf States Marine Fisheries Commission at its meeting held July 20 and 21, 1950, at the Battle House Hotel, in the city of Mobile, Alabama.


W. Dudley Gunn, Secretary-Treasurer

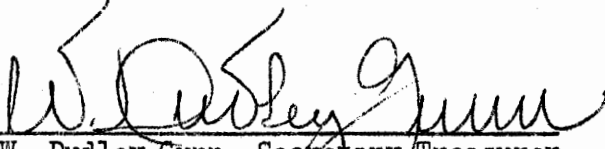
(Original resolution to Honorable Albert M. Day, Director, U. S. Fish and Wildlife Service, Washington, D. C. July 27, 1950.)

RESOLVED, that the Gulf States Marine Fisheries Commission endorses the substituting of shrimp for shark in the initial program of exploratory commercial fishing in the Gulf of Mexico, such program having been developed at a regular Commission meeting held January 19 and 20, 1950, at the Tampa Terrace Hotel, in the city of Tampa, Florida, and,

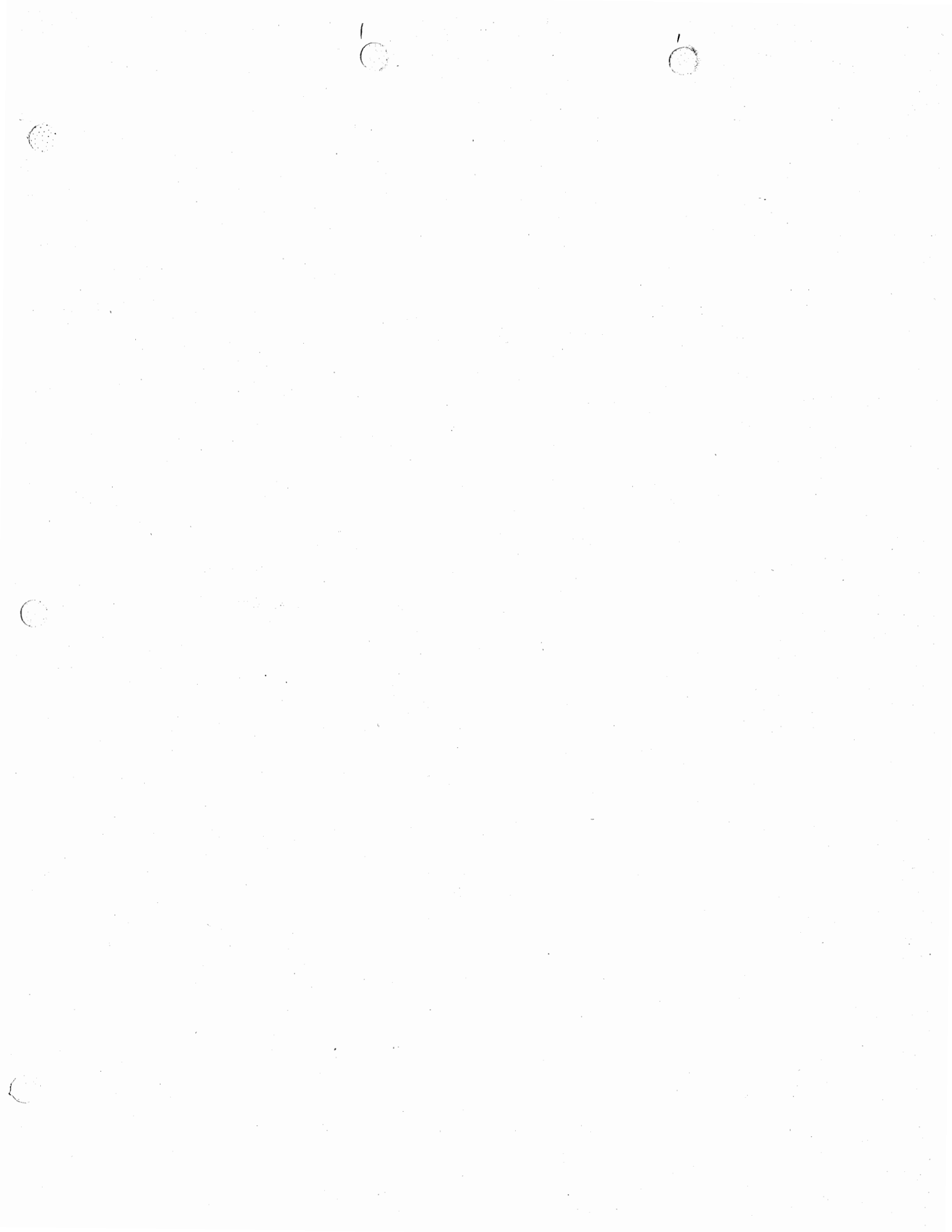
BE IT FURTHER RESOLVED, that this Commission recommends to the U. S. Fish and Wildlife Service that strenuous efforts be made to locate off-shore concentrations of shrimp in the waters of the Gulf of Mexico contiguous to the coast lines of the compacted states of Florida, Alabama, Mississippi, Louisiana and Texas.

* * * * *

The foregoing is a true and exact copy of an original resolution introduced by Mr. Thomas A. Johnston of Alabama and seconded by Mr. Philip J. Hamm of Alabama, and adopted by the Gulf States Marine Fisheries Commission at its meeting held July 20 and 21, 1950, at the Battle House Hotel, in the city of Mobile, Alabama.


W. Dudley Gunn, Secretary-Treasurer

(Original resolution to Honorable Albert M. Day, Director, U. S. Fish and Wildlife Service, Washington, D. C., July 27, 1950.)



GULF STATES MARINE FISHERIES COMMISSION

312 Audubon Building
New Orleans 16, Louisiana

MINUTES - SECTIONS I & II

REGULAR MEETING, APRIL 14-15, 1950

THE BUENA VISTA, BILOXI, MISSISSIPPI

GULF STATES MARINE FISHERIES COMMISSION
Biloxi, Mississippi
The Buena Vista
April 14 (Friday) and 15 (Saturday), 1950

P R O G R A M

Friday, April 14, 1950

- 9:00 A. M. Registration.
- 9:30 A. M. Call to order by the Chairman.
- Roll Call of Commissioners by States.
- Introduction of Guests.
- Welcome, Mr. Naif Jordan, President, Mississippi Seafood Commission, Biloxi, Mississippi.
- Minutes of Last Meeting.
- 10:00 A. M. "RESEARCH INVESTIGATIONS":
- "The Outlook for Gulf Marine Biological Research",
 Dr. Lionel Walford, Chief, Branch of Fishery
 Biology, U. S. Fish and Wildlife Service, Washing-
 ton, D. C.
- "Relation of Oceanography to Biological Research",
 Mr. Ed. Dahlgren, Assistant Chief, Branch of
 Fishery Biology, U. S. Fish and Wildlife Service,
 Washington, D. C.
- "Application of Biology to Fishery Problems in the
 Gulf of Mexico", Mr. William W. Anderson, Chief,
 Gulf Investigations, U. S. Fish and Wildlife Serv-
 ice, Sarasota, Florida.
- "The Role of Fundamental Research in Fishery Biology",
 Mr. Albert Collier, Biologist, Gulf Refining Company,
 Pensacola, Florida.
- Report of Committee to Correlate Biological Research,
 Dr. J. Nelson Gowanloch, Chief Biologist, State of
 Louisiana, Department of Wildlife and Fisheries, New
 Orleans, Louisiana.
- General Discussion.

12:00 Noon "EXPLORATORY FISHING":

"The Outlook for Gulf Commercial Fishing Explorations",
Mr. A. W. Anderson, Chief, Branch of Commercial Fish-
eries, U. S. Fish and Wildlife Service, Washington,
D. C.

"All in a Day's Fishing on the Oregon", Mr. Stewart
Springer, Fishery Engineer in Charge, Exploratory
Fishing and Gear Development Section, U. S. Fish
and Wildlife Service, Washington, D. C.

12:30 P. M. Lunch.

2:00 P. M. "The Brazilian Shrimp Fishery off Key West", Dr. Clar-
ence P. Idyll, Research Associate, Marine Laboratory,
University of Miami, Coral Gables, Florida.

General Discussion.

2:30 P. M. "CATCH STATISTICS":

"Catch Statistics and their Relationship to the Gulf
Commercial Fisheries Explorations", Mr. Charles H.
Lyles, Statistical Section, U. S. Fish and Wildlife
Service, New Orleans, Louisiana.

General Discussion.

3:00 P. M. "FISHERIES LAWS":

Report of Committee to Correlate Fisheries Laws,
Mr. A. Sidney Cain, Jr., Attorney, State of
Louisiana, Department of Wildlife and Fisheries,
New Orleans, Louisiana.

General Discussion.

3:30 P. M. Adjournment.

3:40 P. M. Commissioners' Caucus.

Saturday, April 15, 1950

9:30 A. M. Resume of Discussions at Commissioners' Caucus:

(a) Gulf Biological Research Program, Dr. J. Nelson
Gowanloch.

- (b) Gulf Exploratory Fishing Program, Mr. Jack Baughman, Chief Biologist, Texas Game, Fish and Oyster Commission, Rockport, Texas.
- (c) Catch Statistics, Dr. F. G. Walton Smith, Director, Marine Laboratory, University of Miami, Coral Gables, Florida.
- (d) Correlation of Fisheries Laws, Miss Mary Schulman, Assistant Attorney-General, State of Florida, Tallahassee, Florida.

11:30 A. M. Adjournment.

1:00 P. M. Leave for Pascagoula to inspect vessel OREGON.

GULF BIOLOGICAL RESEARCH PROGRAM
ADOPTED BY
GULF STATES MARINE FISHERIES COMMISSION
MEETING
AT
BUENA VISTA HOTEL
BILOXI, MISS.
APRIL 14-15, 1950.

Suggested research program to have three categories.

1. Long range continuous program of fundamental nature.
2. Short range studies of specific problems.
3. Emergency.

The two latter categories must fit within the framework of the long range program, and must not be permitted to impair efficiency or integrity of that program.

A. It is recommended that, in the long range program, research shall be directed so as to:

1. Ascertain the normal oceanographic pattern of the Gulf throughout the year. This will include studies of currents, salinities, temperatures, nutrients and their biological significance.
2. Ascertain the distribution and relative abundance of fish eggs and larvae, and associated organisms through the year. This is to be directed toward an understanding of the adult stages of the fishes.
3. Ascertain the nature of the Gulf bottom as related to fisheries.

B. Short range.

It is recommended that under the short range program the following species be given first consideration.

1. Menhaden.
2. Tuna.
3. Shark.
4. Grooved shrimp.
5. Snapper.

C. The emergency program cannot be anticipated.

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

MINUTES

REGULAR MEETING, APRIL 14-15, 1950
THE BUENA VISTA, BILOXI, MISSISSIPPI

OFFICIAL ATTENDANCE OF COMMISSIONERS:

	<u>PRESENT</u>	<u>ABSENT</u>
<u>ALABAMA:</u>	Bert E. Thomas, (Chairman) Thomas A. Johnston, III	James H. Faulkner
<u>FLORIDA:</u>	George Vathis William J. Hendry	Bryant G. Patton
<u>MISSISSIPPI:</u>	Naif Jordan Hermes Gautier Louis Simmons	
<u>LOUISIANA:</u>	Ernest S. Clements E. J. Grizzaffi	Leander H. Perez
<u>TEXAS:</u>	Howard D. Dodgen (Vice-Chairman) L. A. Kurtz	Jimmy Phillips
<u>STAFF:</u>	W. Dudley Gunn, Secretary-Treasurer	

COMMISSION COMMITTEE MEMBERS PRESENT

A. J. Harris, Jr., Francis Lueth, A. Sidney Cain, Jr., J. Nelson Gowanloch,
Reece O. Bickerstaff, A. E. Hopkins.

U. S. FISH AND WILDLIFE SERVICE REPRESENTATIVES PRESENT

Milton C. James, Lionel A. Walford, E. H. Dahlgren, W. W. Anderson, A. W.
Anderson, Richard T. Whiteleather, H. E. Crowther, Stewart Springer, Charles
H. Lyles.

OTHERS PRESENT

James N. McConnell, Clarence P. Idyll, Luis R. Rivas, Perry Prescott, Sidney
Landry, H. Malcolm Owen, Warren Gleason, Paul Tullier, S. W. Corbino, Thomas
A. Ford, Easton King, C. E. Mathews, W. F. Miner, Jack Nelson, Harold C.
Stokes, R. L. Caylor, W. M. Dutton, H. J. Bankston, John Elion, Holt Ross,
Hervey M. Petrich, Urban C. Bosarge, Frank Sprinkle, Harvey F. Suggs, **Albert
Collier.**

The meeting was called to order at 9:30 A. M., Friday, April 14, 1950, as scheduled, with Commission Chairman, Mr. Bert E. Thomas, presiding.

The Secretary-Treasurer called the roll of Commissioners by States, after which the Chairman introduced all guests present.

Mr. Thomas introduced Mr. Naif Jordan, Host Commissioner, who extended a very cordial welcome to the Commissioners and their guests on the occasion of the Commission's first regular meeting in the State of Mississippi.

The Chairman referred to the minutes of the last meeting, Tampa, Florida, January 19-20, 1950, invited a motion to effect that, if the Commissioners did not want any changes made, the minutes be approved per official set in Commissioners' place envelopes, being the same as copies mailed from the New Orleans office, March 6, 1950. Mr. Dodgen moved for approval with Mr. Vathis seconding the motion. On vote of Commissioners, the motion passed.

Upon completion of the opening preliminaries of the meeting, the Chairman remarked as follows:

"The four subjects scheduled for consideration today: Research Investigations, Exploratory Fishing, Catch Statistics and Fisheries Laws, are all basic in character and fundamental to the initiation and maintenance of the over all program being designed to perpetuate the presently known and latent fisheries of the Gulf of Mexico.

"The subjects are very closely related, the true extent of which will unfold as we proceed through today's agenda. Actually, the success of our program depends upon the successful administration of each of these foundation components.

"The subjects are not new to the Commissioners, the Commission Committee Members, or to the U. S. Fish and Wildlife Officials. Many hours of study have been devoted to the subjects at hand, in fact, the record shows that, since the inception of the Commission, no program formulating has proceeded without a full accounting to determine the relative merits involved.

"The thinking of the Commission, as will be evidenced here today, is of the future as well as of the present. The Commission thinks not of the benefits which may accrue to any one state, but to the group of compacted states - Alabama, Florida, Louisiana, Mississippi and Texas.

"The Gulf States Marine Fisheries Commission is a deliberative body and, as such, always welcomes constructive suggestions as to how it can better attain its mission..... such suggestions are welcomed from the individual, groups of individuals and agencies particularly from the Department of Interior, Fish and Wildlife Service, which Agency has been designated by the Congress as the

"Commission's primary research agency. All regular meetings of the Commission are open to the public..... there being only a short time allotted for a Commissioner's caucus to transact matters pertinent to the inner-workings of the Commission.

"Programs are arranged well in advance of regular meetings and a period for general discussion follows the presentation of each topic appearing on the agenda. New subjects for consideration are generally presented near the close of the program, for example, there will be about an hour and a half available tomorrow, Saturday, for the presenting of new topics by the conferees.

"The Commission will never cease to need the help of the entire citizenry of the Gulf Coast, and will certainly endeavor to so conduct it's affairs as to merit, at all times, the confidence and support of our people".

In presenting the first guest speaker, Mr. Milton C. James, Assistant Director, U. S. Fish and Wildlife Service, Mr. Thomas asked Mr. James if he could tell the Commission if the laboratory at Pensacola was to continue its good work, the continuance of which was the subject of a resolution adopted at the Tampa Florida meeting.

Mr. James responded that the budget for the fiscal year 1951 contains an item of \$20,000.00 for the Pensacola laboratory and that, while this amount would not allow any expansion of the work, it would provide maintenance of the station and development of the research program already started. The speaker urged the Commission not to underestimate its importance, to establish a good foundation, and not to expect too much at the outset in the developing and initiating of programs.

The Chairman expressed the Commission's thanks to the speaker for his attendance and encouraging and timely remarks, adding that he wished it could be possible for Mr. James to attend all of the Commission meetings.

Immediately preceding the topical phase of the program, Mr. Thomas remarked:

"In considering a program of Gulf Biological Research, short titled, Research Investigations, presentations have been arranged to provide the essential foundation of scientific thought for the general discussion to follow. The same scheme of arrangement follows in other topics, whether they be of a scientific, mathematical or legal character."

Treating of the topic "Research Investigations", the Chairman introduced the following guest speakers and their presentations:

"The Outlook for Gulf Marine Biological Research",
Dr. Lionel Walford, Chief, Branch of Fishery
Biology, U. S. Fish and Wildlife Service, Washing-
ton, D. C.

"Relation of Oceanography to Biological Research",
Mr. Ed. Dahlgren, Assistant Chief, Branch of
Fishery Biology, U. S. Fish and Wildlife Service,
Washington, D. C.

"Application of Biology to Fishery Problems in the
Gulf of Mexico", Mr. William W. Anderson, Chief,
Gulf Investigations, U. S. Fish and Wildlife Serv-
ice, Sarasota, Florida.

"The Role of Fundamental Research in Fishery Biology",
Mr. Albert Collier, Biologist, Gulf Refining Company,
Pensacola, Florida.

Report of Committee to Correlate Biological Research,
Dr. J. Nelson Gowanloch, Chief Biologist, State of
Louisiana, Department of Wildlife and Fisheries, New
Orleans, Louisiana.

(Papers covering the above subjects and all other
scheduled subjects are a part of these minutes
and appear as Section III).

Leading the Research Investigations General Discussion period, Mr. Howard Dodgen, the Commission Vice-Chairman, pointed out that the success of this program entailed a lot of hard work on the part of everyone and urged all to feel that the development of the program was a matter of individual responsibility.

Continuing the discussion period, Mr. Hervey M. Petrich, Western Boat Building Company, Tacoma, Washington, said that he is very much interested in finding out if a commercial operation is possible in Gulf tuna and spanish mackerel. The speaker stated that he now has one of his vessels, with crew, docked at Pascagoula, Mississippi, for operation in Gulf Waters. The speaker stated he would be glad to exchange information with the U. S. Fish and Wildlife Service. He mentioned also the fine radio reception prevalent in the Gulf, adding that it was much better than on the West Coast.

The discussion period was of rather short duration due, no doubt, to the splendid coverage of the topic under consideration by the scheduled speakers. In concluding the discussion period, Mr. Dodgen complimented the speakers on the fine papers presented and suggested to the Commissioners that such papers, and all other papers presented at Commission meetings, should be printed and bound and be made part of the Commission's permanent library.

Speaking of "Exploratory Fishing", the Chairman briefly reviewed the program which was decided upon at the Tampa, Florida, meeting, and of the far reaching importance of the scientific operations connected with the approaching active service of the Oregon in Gulf waters.

In further study of Gulf Commercial Fishing Explorations, the conferees heard from the following speakers with subjects as indicated.

"The Outlook for Gulf Commercial Fishing Explorations",
Mr. A. W. Anderson, Chief, Branch of Commercial Fisheries,
U. S. Fish and Wildlife Service, Washington,
D. C.

"All in a Day's Fishing on the Oregon", Mr. Stewart
Springer, Fishery Engineer in Charge, Exploratory
Fishing and Gear Development Section, U. S. Fish and
Wildlife Service, Washington, D. C.

"The Brazilian Shrimp Fishery off Key West", Dr. Clarence
P. Idyll, Research Associate, Marine Laboratory,
University of Miami, Coral Gables, Florida.

"The Gulf Red Snapper and Mullet", Dr. Luis R. Rivas,
Research Associate, Marine Laboratory, University of
Miami, Coral Gables, Florida.

Mr. Thomas expressed the Commission's thanks for the fine presentations and stated the coverage of the topic exploratory fishing had contributed much to the Commissioners knowledge as to what may be expected in the weeks immediately ahead.

Mr. James N. McConnell was introduced to lead discussions on exploratory fishing.

Chief consideration in this discussion period revolved around shrimp, the possibilities for new off-shore grooved shrimp fisheries, laws governing night shrimping, suggestion that the several states might experiment with night shrimping, whether or not the returning of shrimp heads to shrimping grounds was good practice, etc.

Mr. Sprinkle stated experience had taught him that the blue shrimp flip and turn their backs to the nets, while Brazilian shrimp do not stop their progressive motion or flip when confronted with nets. He was of the opinion it was harmful to a shrimping ground to throw heads back into the water.

Regarding the throwing-out of shrimp heads, Mr. W. W. Anderson and Dr. Clarence P. Idyll stated they knew of no instance where a scientific study had been made of the matter.

Dr. Luis R. Rivas stated he was of the opinion some shrimp possessed an attraction for light, while light had a repelling effect upon others. He suggested laboratory examination and research to study the susceptibility of shrimp to light and their reactions. Dr. Rivas requested mullet samples from the several states for laboratory examination at the Miami University Marine Laboratory.

It was brought out in discussions that only one species of red snapper is known to Gulf waters, that to date the hand line is the accepted best method for catch and that nothing is known of this fish's breeding habits.

By way of introductory remarks to the topic "Catch Statistics", the Chairman pointed out the very close relationship to Exploratory Fishing, stating the two are so closely allied that the U. S. Fish and Wildlife Service has grouped the two under one branch of the service, namely, Commercial Fishing.

Following is the scheduled presentation on catch statistics:

"Catch Statistics and their Relationship to the Gulf Commercial Fisheries Explorations", Mr. Charles H. Lyles, Statistical Section, U. S. Fish and Wildlife Service, New Orleans, Louisiana.

In leading the discussion period, Mr. A. J. Harris stated that the state of Alabama has no law at present covering catch records but that they are making a study of methods employed by various states preparatory to making recommendations to the Alabama Legislature. He read a letter from David H. Wallace, Chairman, State of Maryland, Board of Natural Resources, which explained in detail the method employed in that state in gathering and maintaining catch records.

Mr. Lyles, whose paper appears in Section III of these minutes, told Mr. Harris that he did not think the system of compiling catch records now employed by Texas could be improved upon. He also pointed out that any system selected should be as simple as it is thorough.

Passing to the fourth scheduled topic for the day, the Chairman had the following to say concerning "Fisheries Laws",:

"Fisheries laws are designed to conserve the resources of a fishery, to the extent that the fishery will add to its population and be a continuous source of revenue, or sport, as the case might be. Hence, such laws are of great concern to the state. In thinking in terms of five states, the problem reaches even greater proportions".

Mr. Thomas called upon Mr. Sidney Cain for a report from the Committee to Correlate Fisheries Laws. Mr. Cain reported that the study was continuing, but that so many changes are being made at present, and so many anticipated in the immediate future, it was not practical or possible to do anything at the moment in coordinating the fisheries laws of the several states.

Mr. Reece O. Bickerstaff and Mr. A. J. Harris also spoke for the Committee, stating, as did Mr. Cain, the impossibility of effecting changes at the interstate level at this time.

The Chairman requested the Committee to Correlate Research and Exploratory Data and officials of the U. S. Fish and Wildlife Service, Branch of Fishery Biology, to meet immediately following adjournment to further consider a program for Gulf Biological Research. He requested Commissioners to remain following adjournment for a Commissioners' Caucus. (The Commissioners' Caucus appears in these minutes as Section II).

The conferees stood adjourned at 4:15 P. M.

SATURDAY, (APRIL 15, 1950)

Further consideration to the Gulf Biological Research Program was given by the Commission Committee and U. S. Fish and Wildlife Service officials in session Saturday morning.

While awaiting report from the above meeting, the Commission Chairman called upon Mr. A. W. Anderson, when the meeting was called to order at 10:00 A. M. Mr. Anderson stated his branch of the service would gladly assist in catch tabulations and to such extent as funds are available.

Following is the suggested program for Gulf Biological Research as prepared through the coordinated effort of the Commission Committee to Correlate Research and Exploratory Data and the Branch of Fishery Biology, U. S. Fish and Wildlife Service:

"Suggested research program to have three categories.

- "1. Long range continuous program of fundamental nature.
- "2. Short range studies of specific problems.
- "3. Emergency.

"The two latter categories must fit within the framework of the long range program, and must not be permitted to impair efficiency or integrity of that program.

"A. It is recommended that, in the long range program, research shall be directed so as to:

- "1. Ascertain the normal oceanographic pattern of the Gulf throughout the year. This will include studies of currents, salinities, temperatures, nutrients and their biological significance.
- "2. Ascertain the distribution and relative abundance of fish eggs and larvae, and associated organisms through the year. This is to be directed toward an understanding of the adult stages of the fishes.
- "3. Ascertain the nature of the Gulf bottom as related to fisheries.

"B. Short Range.

"It is recommended that under short range program the following species be given first consideration.

- "1. Menhaden.
- "2. Tuna.
- "3. Shark.
- "4. Grooved Shrimp.
- "5. Snapper.

"C. The emergency program cannot be anticipated."

(Note: The above program was adopted by the Commission in caucus immediately following the open session of this date).

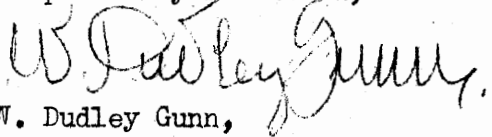
The Chairman reminded the conferees of the trip to Pascagoula to inspect the Oregon and requested all to be ready to leave at 1:00 P. M. Mr. Thomas also confirmed to the gentlemen of the Press present that a press conference would be held immediately following a short Commissioners' Caucus and that U. S. Fish and Wildlife officials and biologists of the several states would be present at the meeting.

With no further business to come before the meeting, it was officially closed at 11:20 A. M.

The Commissioners' Caucus was of short duration, terminating at 11:40 A. M. (The Commissioners' Caucus appears in these minutes as Section II).

Those who were able to participate in the Oregon inspection were high in their praise of the vessel, her gear, and the experienced crew who will man the Oregon in her Gulf explorations.

Respectfully submitted,


W. Dudley Gunn,
Secretary-Treasurer

WDG:tmh

A R E S O L U T I O N

WHEREAS, there is now before the Subcommittee on Merchant Marine and Maritime Matters of the Senate Committee on Interstate and Foreign Commerce a bill which would give effect to the International Convention of the Northwest Atlantic Fisheries, which was signed at Washington, D. C. on 8 February 1949, which said bill is known as Senate Bill 2801, and

WHEREAS, the Gulf States Marine Fisheries Commission, now meeting in regular session, is interested in the passage of this bill because enabling legislation of the Atlantic treaties may establish precedence of vital importance to the Gulf States with respect to any treaties which may be adopted concerning the Gulf of Mexico, and

WHEREAS, the said Commission is particularly interested in the preservation of the principle of state representation on the International Commission and it feels that Section 8 of the bill is exceedingly important and should be retained in substantially its present form so that there shall be no doubt that neither the Convention nor the Implementing Act in any way affects the current jurisdiction of the states with respect to their fisheries.

NOW, THEREFORE, BE IT RESOLVED, that the Gulf States Marine Fisheries Commission go on record as favoring the passage of Senate Bill 2801 in substantially the form as presented to the Senate Committee on Interstate and Foreign Commerce, and that a copy of said resolution be spread upon the minutes of the Commission and a copy of same be forwarded by its secretary to Senator Warren G. Magnuson, Chairman of the Subcommittee on Merchant Marine and Maritime Matters; to Senator Owen Brewster, Acting Chairman of said Committee and to Honorable Wayne Heydecker, Secretary of the Atlantic States Marine Fisheries Commission.

Unanimously adopted by the Commission on the 15th day of April, 1950 and respectfully submitted,

W. Dudley Gunn
W. Dudley Gunn, Secretary
Gulf States Marine Fisheries Commission

W E S T E R N U N I O N

15 April, 1950

Honorable Owen Brewster
United States Senator
Acting Chairman
SubCommittee on Merchant Marine and Maritime Matters
of the Senate Committee on Interstate and Foreign Commerce
Washington, D. C.

The Gulf States Marine Fisheries Commission has this day adopted a resolution which recommends passage of Senate Bill 2801 which would give effect to the International Convention for the Northwest Atlantic Fisheries signed at Washington on 8 February 1949. This resolution is being mailed to you today. Your consideration of this matter will be deeply appreciated by our Commission.

/S/ Bert E. Thomas, Chairman

A R E S O L U T I O N

WHEREAS, the Gulf States Marine Fisheries Commission met in Biloxi, Mississippi, at The Buena Vista on the 14th and 15th days of April, 1950, on the occasion of its first regular meeting in that state, and

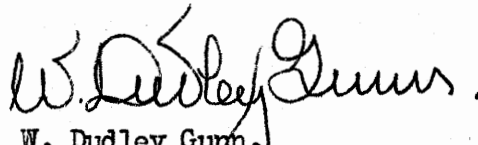
WHEREAS, at such meeting, said Commission is indebted to the directorate of the Mississippi Seafood Commission, the representatives of the several newspapers and magazines and the management and staff of The Buena Vista for their splendid cooperation toward the success of said meeting, now therefore,

BE IT RESOLVED by the Gulf States Marine Fisheries Commission that a resolution be prepared by its Secretary-Treasurer and directed to the directorate of the Mississippi Seafood Commission, the representatives of the several newspapers and magazines and the management and staff of The Buena Vista, in which there be expressed the gratitude and deep appreciation of said entire Commission for the many acts which contributed so richly to the accomplishments of the meeting.

BE IT FURTHER RESOLVED, that this resolution be signed by the Secretary-Treasurer and such complete distribution be effected that all concerned, including the staff where applicable, be informed of this act of appreciation on the part of the Commission.

* * * * *

The foregoing is a true and exact copy of an original resolution unanimously adopted by the Gulf States Marine Fisheries Commission at its meeting held April 14-15, 1950, at The Buena Vista, in the city of Biloxi, Mississippi.


W. Dudley Gurn,
Secretary-Treasurer

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

MINUTES - SECTION II

COMMISSIONERS' CAUCAS, BILOXI, MISSISSIPPI, (APRIL 14, 1950)

The Secretary-Treasurer read list of those invited to the meeting but who were unable to attend. The list included officials of the Department of State, Council of State Governments, Chairmen of Commissions on Interstate Cooperation of the several states, officials of National Fisheries Institute, Oyster Institute of North America, National Sponge Institute, Atlantic States Marine Fisheries Commission, gentlemen of the industry, press and others. A considerable number of responses to invitations, having been read at the Caucus, will not be repeated in this recording.

The Commissioners were furnished with a mimeographed financial exhibit containing statement of Cash Receipts and Disbursements for period November 1, 1949 to March 31, 1950, inclusive, together with forecast of receipts from membership dues and estimate of expenditures to the end of fiscal year 1951. The purpose of the forecast of receipts and expenses was to give a proper financial background for study in connection with the Secretary-Treasurer's suggestion that \$8,000.00 be withdrawn from the Commission's checking account and placed in savings in the official depository, National American Bank of New Orleans. Copy of subject exhibit is hereto attached.

The Commission voted unanimously to accept the financial report as presented and to deposit \$8,000.00 of the Commission's funds in savings.

Mr. A. J. Harris presented a resolution regarding S-2801, International Convention of the Northwest Atlantic. Mr. Dodgen spoke of the importance of having a court reporter present at meetings of the Commission to record, particularly, the discussion periods. Mr. Johnston impressed upon the Commissioners the importance of gathering papers presented at Commission meetings and the maintenance of a complete library of such papers and other factual data procured from various sources. The possibility of obtaining a uniform count of shrimp in the five states was discussed. Time and place for a summer and fall meeting was also discussed. Mr. Clements had to leave Biloxi on an emergency prior to the arrival of Mr. Grizzaffi, and Louisiana was without representation at the Caucus, hence, the Commissioners decided to continue the Caucus on Saturday, (April 15th) with the latter present.

4/15 Mr. A. J. Harris explained in detail S-2801 and read a proposed resolution designed to urge adoption of the bill in substantially its present form. Motion for adoption was made by Mr. Vathis, seconded by Colonel Kurtz and upon vote of Commissioners was adopted in the form prepared by Mr. Harris.

It was moved by Mr. Vathis, seconded by Mr. Grizzaffi and passed by the Commission that a telegram be sent to Senator Owen Brewster, over the signature of the Commission Chairman, advising him of the Commission's action and requesting his consideration. The resolution and copy of telegrams are first attached to Section 1 of these minutes.

Motion was made by Mr. Johnston, and seconded by Mr. Vathis to effect the Commission should have a meeting in July of 1950 and that said meeting be held at The Battle House, Mobile, Alabama, July 20th and 21st. Upon a vote of Commissioners assembled, the motion passed.

A motion made by Mr. Dodgen to have a court reporter present at all meetings to record proceedings, for inclusion in the minutes, was seconded by Mr. Johnston and passed by vote of the Commissioners.

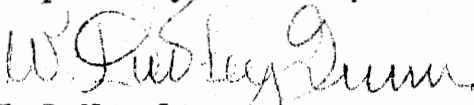
It was moved by Mr. Johnston and seconded by Mr. Vathis that the Gulf Biological Research Program as presented by Dr. J. Nelson Gowanloch at the morning's open session be adopted. Upon a vote of the Commissioners, the motion passed. (This program is contained in Section I of these minutes).

A possible resolution relating to the uniform count of shrimp in the five states was prepared and read by Mr. Cain. A general discussion of the subject was invited by the Chairman. That shrimp regulations be made the principle topic for study and discussion at the Mobile, Alabama, Meeting was moved by Mr. Johnston, and seconded by Mr. Hendry. Upon a vote of the Commissioners, the motion passed.

A resolution was proposed by Mr. Dodgen to express the gratitude of the Commission to the Mississippi Seafood Commission, gentlemen of the Press and The Buena Vista, for their splendid cooperation in connection with the Biloxi meeting. A second was given by Mr. Johnston and the Commissioners voted that such a resolution should be prepared and distributed. Mr. Thomas, Chairman, appointed Mr. Harris to draft the subject resolution. This resolution is second attached to Section I of these minutes.

With no further business to come before the Caucus, the Commissioners stood adjourned at 11:40 A. M. (April 15, 1950).

Respectfully submitted,


W. Dudley Gunn,
Secretary-Treasurer

WDG:tmh

GULF STATES MARINE FISHERIES COMMISSION

312 Audubon Building

New Orleans 16, Louisiana

MINUTES - SECTION III

PAPERS PRESENTED AT MEETING, APRIL 14-15, 1950

THE BUENA VISTA, BILOXI, MISSISSIPPI

ABSTRACT OF SPEECH BY L. A. WALFORD AT THE
GULF STATES MARINE FISHERIES COMMISSION
MEETING AT BILOXI, MISSISSIPPI, APRIL 14, 1950.

THE OUTLOOK FOR GULF MARINE BIOLOGICAL RESEARCH

The outlook for any research program depends upon two things: on the quality and adequacy of men and facilities, and on the character of the questions asked.

The Fish and Wildlife Service is striving to select for its research projects only men of excellent training and experience. The new fishery research project here in the Gulf will be under the direction of William Anderson, a biologist of long experience in Gulf of Mexico studies. Federal studies in the Gulf of Mexico will be carried on from Sarasota, Florida ("red tide" investigations); at Pensacola, Florida (oyster investigations); and probably from Galveston, Texas (fishery investigations). The character of the research and the results to be achieved will depend on the problems which the research sets out to solve, i. e., the questions which are to be asked.

We could ask no questions at all: Simply hire some men who could qualify and send them to sea to study it as they saw fit. Such undirected research is not unusual. Much scientific work is carried on throughout the world without first asking definite questions. Nor is it unproductive, for it often leads to unexpected discovers. However, it tends to be inefficient and wasteful and to turn the scientists into data collectors.

We could ask: What should we do to regulate the various fisheries? A good many fishery studies in the past have centered around this question. It presupposes that excessive fishing is the most important cause of changes in abundance. However, it tends to lead marine students to a preoccupation with catch statistics and to studying only what fishermen bring to market. Years of marine studies have shown that many things besides the catch affect abundance; for example, currents, rate of turnover of the water, fluctuations in number of competitors and predators, etc.

We could ask questions only about emergency situations; for example: What causes "red tide"? What causes oyster mortality? Where do menhaden go when they become scarce? Such questions are usually asked after the emergency has passed and it is too late to find the cause. They also presuppose that the emergency is purely a local problem that can be isolated for study. This is rarely true. During recent years fishery research has been rapidly evolving away from special studies on particular species, toward studies of whole ecological systems. Thus, for the new Gulf of Mexico research program we are asking first:

What are the biological, oceanographic, and geological characteristics of the areas which are of interest? What kind and what quantity of living things are there? On what do the abundance, availability, movements, and reproductive capacity depend? How can we predict accurately what to expect under given conditions of wind and temperature, and under given fishing effort?

Answering these questions entails a very large and expensive undertaking which is far beyond the capacity of any single agency, Federal or State. It requires more than ship and laboratory space. It requires, most of all, a variety of talents. The only way to assemble such talent to carry out the ambitious undertaking which I have outlined, is to organize a team on which all agencies interested -- conservation agencies of State and Federal governments, biology departments of universities, etc., -- will work together. The response to the invitation of the Fish and Wildlife Service to such a cooperative program has been excellent.

The research vessel Alaska is now being reconverted for her new duties in the Gulf. While awaiting this reversion the Fish and Wildlife Service is organizing a survey of all existing knowledge about the Gulf. Work on this has already started. About 20 scientists have volunteered to contribute chapters to a book which will be issued, chapter by chapter, and eventually bound into a single volume which we hope will be completed in about a year. Completion of this work will help formulate the questions which will be most stimulating to producing useful knowledge about the marine biological resources of the Gulf of Mexico.

TEXT OF ADDRESS BY E. H. DAHLGREN AT BILOXI MEETING - APRIL 14, 1950

Man has, from the first, taken his crops from the sea with little thought, either to the source of his harvests, or the effects of his harvesting. From earliest times until quite recently he has taken that which he could most easily find - provided it suited his needs or his fancies - meanwhile discarding all else that failed to suit these needs. In general, he has behaved like the nursery character who "...stuck in his thumb, pulled out a plum, and said what a good boy am I".

The analogy here is not too abstract. The pudding being crust-covered, he could not see what he searched for, nor what effect its removal had, nor is there any assurance that the plum he removed was the most desirable thing available. The end result of this policy has been a far - from - perfect utilization of the resources which have been available to him. To correct this wasteful and ineffective "laisse faire" policy requires information on the habits, the migration patterns, the ranges, and the abundances within those ranges of the species which frequent the waters of the world - including the waters of the Gulf of Mexico - and of applying this information in the full utilization of these resources.

This need for information has been evident for a very long time, but, because these marine animals are obscured from our sight so that we can neither observe their movements nor take a census of their numbers, the problem of obtaining this information has proved a difficult one. It is because of this difficulty that progress has been so slow in the field of fishery biology.

Only recently have methods been developed which make possible a better understanding of the fundamentals which govern the growth and distribution of our valuable stocks of fishes. As these methods are further developed and improved, there will follow more and more answers to the now obscure problems connected with the marine fisheries here and everywhere.

One of the important tools now in use to reveal the secrets of the sea is the use of oceanography. Studies of surface currents - the first of the three phases of oceanography - have long been made. The ocean's surface, especially in areas of heavy traffic, and except for the Gulf, has been well charted. Ponce de Leon, nearly 450 years ago, described and took advantage of the Florida current. Strangely enough, however, the full pattern of the currents of the Gulf of Mexico are even today imperfectly understood. This is a deficiency which must be corrected, if we are to achieve our goal of an understanding of the fisheries of the region.

Recent developments in the field of physical oceanography have made possible the plotting, not only of surface currents, but also of the rivers of water which flow beneath the surface. The establishing of these currents involves a series of determinations of temperatures and salinities at the surface and at intervals into the depths. The obtaining of these data - and the computations necessary to interpret these in terms of mass water movements - are laborious and costly. Despite this, the effort must be expended if the results are to be obtained.

An understanding of this phenomena of rivers of water flowing at the surface and beneath the surface is fundamental to our understanding of the fisheries. This follows, not only because the eggs and young of many of the fishes drift at the mercy of these currents, so that tracing their movements will solve at least a part of the complex of problems, but also because, associated with the productivity of the seas are nutrients which, dissolved or in suspension, are carried by these same currents. It is the abundance of these nutrients which governs the potential production of the region. Without these, there can be no microscopic life on which the macroscopic forms depend, and which, in turn, provide food for larger forms until, at the end of the cycle, are the fishes used by man.

In effect, this is the study of the fertility of the ocean, and may be compared to the studies of soil fertility which have made possible the rapid strides of modern agriculture.

First, then, must come a plotting of the currents and of the temperature gradients of the Gulf, not only to establish the drift of the eggs and fry, and of the nutrient salts, but also because these limit the ranges and the distribution of the fishes. A barrier of temperature, or of salinity, or of oxygen content, may as effectively limit the range of fishes as does a fence the range of land-bound animals. Here is a fundamental problem in the distribution of fishes which can be solved by oceanography - and by no other means.

In a body of water as extensive - and as little known - as is the Gulf, we cannot hope to define the boundaries of fish populations solely by a trial and error method. We must first establish the factors which govern the distribution of fishes, then define the waters on the basis of these factors so as to direct our energies and so limit fruitless search.

The third, and the most complex, of the three phases of oceanography - physical, chemical and biological - is the study of the microscopic and macroscopic life which is omnipresent in the surface layers of the oceans. In the study of these forms lies a clue, not only to the probable yield of the fisheries, but also to the kinds of fishes present and and to their distribution over the Gulf. This follows because, first, we can measure the abundance of the organisms which constitute the pasture grasses of the sea. From this we can estimate the quantity of fish life which can be supported. Then, too, we can define the kinds and numbers of fishes - and their distribution - because the eggs and young of many of the fishes are to be found concentrated in the surface waters. Thus, by indirection, we can obtain information on the presence of, the habits of, and even the abundance of, fishes - facts which might otherwise remain obscure to us. Oceanography is a tool which can reveal many of nature's secrets. Let us take advantage of it.

Application of Biology to Fishery Problems
in the Gulf of Mexico.

By

William W. Anderson
U. S. Fish and Wildlife Service

The subject assigned to me is so broad and has so many ramifications that it would be impossible to cover all phases even if I were qualified to do so. I will, then, attempt to present only a few general points.

The application of biology to a fishery problem becomes applied biology which is difficult to distinguish from what has been termed "fishery management". This suggests an effort to regulate commercial activities in a particular fishery in a manner that will result in a maximum quantity being removed from year to year without endangering future production, or, an objective of a maximum sustained yield.

One might reasonably ask by what method it is decided that a fishery needs management. The most frequent answer would no doubt be, pressure from a group or groups of individuals who feel that that particular fishery is undergoing "depletion" or "overfishing".

Dr. Archibald G. Huntsman of the Fisheries Research Board of Canada in his paper, "Fishing and Assessing Populations", has this to say on these two terms:

"Depletion" and "overfishing" are cries of alarm that cannot properly be restricted by the scientist to precise meanings. By origin, "depletion" means a condition less than full, which, applied to a fishery in ignorance of what fish there are in the water, seemingly signifies a decrease in the fish population that is presumed from a decrease in catch. This has indefinite gradations as well as an indefinitely large number of possible explanations, which make it a comparatively meaningless condition. "Overfishing" clearly means too much fishing for some purpose not defined. If that purpose be to have a big take rather than to reduce a population, this also seemingly signifies a decrease in fish population that is presumed from a decrease in take, but with a difference. While it has infinite gradations, it assumes that fishing is responsible for the decrease, which may not be correct. The scientist may be well advised not to make unwarranted assumptions."

He also gives a number of conditions that could possibly be the cause of such alarm and I would like to repeat several since they represent conditions with which many of us will be concerned:

1. The condition, of which complaint is made, may be a decrease in the take-per-unit-of-effort without any decrease in the total take or in the fish population, which may well be termed over-effort. This may mean that there has been an increase in fishermen rather than a decrease in fish - - - -

2. The condition may be a decrease in total take as well as in take-per-unit-of-effort without decrease in fish population. This will result from prevalent unavailability of fish - - - and may be termed underavailability.

3. The condition may be not only a decrease in take but also a decrease in the fish population from a natural cause. The cause may or may not be recognized, and it has proved to be extremely difficult to determine the causes even of marked regular natural fluctuations in animal populations.

4. The condition may be a decrease in the fish population as a result of human action other than fishing. This is elimination by man.

5. The condition may be a temporary decrease in the fish population as a result of fishing. Fishing clearly decreases the population by the amount removed, and, so long as this is made good by natural increase by the beginning of the next year's fishing, nothing is usually thought of it. It means that the more fishing there is in the year, the less is apt to be the take-per-unit-of-effort. Such a condition, when extreme, is properly called overeffort.

6. The condition may be a decrease as a result of fishing, in only part of the fish population, that is a partial decrease in stock. This is a usual thing and apt to be recognized, as when the fishing is selective as to size of fish and when the fish are taken at only one stage or in only one part of the area of their distribution. This decrease also may be automatically made good within the year.

7. The condition may be a decrease in the fish population as a result of fishing that is not made good within the year because it represented stock that had taken years to accumulate, that is, old, large fish. If fishing is profitable only with a large accumulation, the only thing to do when fishing becomes unprofitable is to wait a number of years. This is exhaustion of accumulation.

8. The condition may be a decrease in total take as well as in the take of large fish, to be remedied by restricting the fishing to let the fish get larger, that is, there is undergrowth of the fish.

9. The condition may be a decrease in fish population from overfishing that leaves too few spawners, that is, there is a lack of spawners. The very high reproductive power of most fishes makes it improbable that many spawners are actually required to produce all the young that will find conditions for survival.

10. The condition may be a decrease in fish population from the operations of other fishermen than those who complain of the condition.

It would follow then that "fisheries management", in general, should be attempted only where adequate information is available and this probably exists in but few instances at the present time.

It is all too true that much biological work has by necessity been concentrated on the study of individual species. While the knowledge thus gained has been very valuable I believe we must eventually begin a study of our fishery resources as a unit in a given area or environment in order that we can better understand the relationships of

of one species to all the others occurring together with it.

This is of course a tremendous undertaking, the accomplishment of which will involve a great deal of effort and time.

By no means is all biological work on fishery problems directly concerned with collection of information useful in regulating a fishery. I would like to cite several particular instances in the Gulf of Mexico to illustrate.

Seismographic operations by the oil companies off the Louisiana coast involved the use of explosives in the coastal waters. The Louisiana Department of Wildlife and Fisheries was confronted by reports that these operations were resulting in the death of tremendous quantities of fish, crabs and shrimp and the question of what are you going to do about it. I believe you are all familiar with Dr. Gowanloch's interesting and fruitful experiments on this problem which resulted in the securing of information by which the Louisiana Department of Wildlife and Fisheries could guide itself in handling this problem.

Another instance is the work done by Mr. Baughman of the Texas Game, Fish & Oyster Commission on the species of fish taken incidental to menhaden fishing and on menhaden as food for other fish. These studies were done to answer the contention made by groups of individuals that menhaden fishing destroys great quantities of sport fish; that menhaden are the chief source of food for many species of sport fish and therefore commercial fishing should not be permitted.

The last example I will give (and there are many more) is the work done by the Marine Laboratory of the University of Miami, The

Florida Department of Conservation and the U. S. Fish and Wildlife Service in studying the cause of "red tide" off the west coast of Florida.

In conclusion I would like to express my feeling that we are entering a new era of investigation in the Gulf of Mexico and by pooling efforts we may soon begin to find the answers we have so long needed on many problems.

THE ROLE OF PURE SCIENCE IN FISHERIES RESEARCH

A talk prepared for the April 14-15 meeting of the Gulf Marine Fisheries Commission, Biloxi, Mississippi, by Albert Collier.

Stanislaus I, who twice gained and twice lost the Polish throne, retired to science. He wrote this: "Science when well digested is nothing but good sense and reason." This was written in the eighteenth century, but it is just as true today as it was then.

The terms "pure science," "theoretical science," and "fundamental science" all broadly refer to the same thing. Equally broadly these terms serve to discourage and confound many people who might otherwise be benefited by and enjoy the discussion of so-called scientific matters.

For the next few minutes I would like to review specific points of a fundamentally scientific nature and demonstrate that when they are "well digested" they are both simple and extremely useful in the development of fisheries biology.

Let us illustrate. Everyone here is familiar with the modern camera, and the great variety that can be found from the simple box camera to the most elaborate show piece. The purpose of a camera is to make likenesses of objects on film through a set of photo-chemical processes. This is done by transmitting the light reflected from a selected object through a set of lenses to the light sensitive film.

But why does it work? Now we are getting down to the fundamentals. It works because light is a form of energy which can be controlled by passing it through a glass body called a lens. The shape of the lens can be varied to bend the light rays and concentrate them in such a way that images of big objects can be reduced to a size to fit on a piece of film. The chemicals in the film are transformed by the light in such a way that the image of the selected object results from subsequent processing.

When it was learned that light is a form of energy which can be controlled by lenses and that there are various chemical reactions which could be stimulated by light, we evolved a whole series of useful instruments. A short list would include, besides the camera and related instruments, the microscope, the spectroscope, the telescope, and television. The fundamental principles of controlling light have been applied to learning new principles of science through the means of the spectroscope. Much has been learned about the properties of the chemical elements through the use of this instrument. Among the things that are studied in this manner are the vitamins, certain blood components, and some of the properties of sea water.

A knowledge of the properties of sea water is certainly fundamental to the full understanding of the animals that live in it. When it becomes unsuitable in one way or another they must either leave their immediate position for a more suitable area or die. For animals to live successfully in a given region of the ocean they must be able to 1) Find the proper food, 2) Be able to convert the food to living tissue and energy, and 3) Successfully reproduce their kind. There are other things that they may do beyond these, but if they cannot satisfy these fundamental requirements they will not survive, either as individuals or as a race. There is no one here who can deny that the quest for the proper food is the most basic activity of any animal, marine or otherwise.

During the remainder of our discussion we shall confine ourselves to the fundamental aspects of the problem of food for marine animals.

It will be noticed that a moment ago we spoke of proper food, with the emphasis on proper. From the fundamental point of view the bulk of

all food is made up of Carbon, Oxygen, Hydrogen, and Nitrogen, and to a lesser extent Phosphorous and some of the minerals in comparatively small quantities. We hasten to add that the importance of some of these latter is all out of proportion to the quantities required, but to simplify the discussion we shall omit these now. Our point is that an animal cannot simply go out and absorb Carbon, Oxygen, Nitrogen and Hydrogen from the water or air. They must be combined in certain ways to form what we know as organic compounds. These fall into classes: proteins, fats, and carbohydrates. Even then the fats, proteins, and carbohydrates must be found in certain of their many forms for a given kind of animal. Some animals require certain of the several kinds of amino acids, and others may not need these particular amino acids at all.

Amino acids are very important for a fish to find either by eating other animals or by eating plants. The reason is that the fish cannot make its own amino acids, but must get them already made. No animal can make its own amino acids, but must get them from plants, either by eating plants themselves or by eating the flesh of other animals that do eat plants.

What we have just said is the reason that you find every marine biologist turning sooner or later to the study of phytoplankton, and what we call the inorganic nutrients. The marine plants are the only living things in the sea which can take the elements named above in the form of their simplest inorganic combinations (Nitrogen as nitrate, Phosphorous as phosphate, etc.) and with the aid of sunlight make amino acids out of them. This over all process is known as photosynthesis. Here we must observe that the plants have found a way to gather and control the energy of light by making it do chemical work. For the sake of logical completeness we must make the now trite observation that all

life is dependent, ultimately, on the energy which comes from the sun as light.

The most important plants for the animals of the sea are the microscopic algae which we designate for convenience the phytoplanton. They are the most important because they float at the surface within the range of sunlight. By far the greater part of the ocean is too deep for light to penetrate to the bottom. These small plants are eaten by the small animals which are found in the plankton, and which for convenience we designate as zooplankton. From here on we have the old "saw" about the big fish eating the little fish.

All living things could on this general basis be considered as food for animals, but actually they are not. Each animal has particular requirements as well as certain likes and dislikes which may have nothing to do with its requirements for survival. For marine animals we do not know how far we can separate preference from requirement, and we do not know nearly enough about the requirements for a given species. There is no doubt that in an environment where the competition is so keen, and the struggle for survival so near the threshold of disaster, that the food preference probably parallels very closely its requirements.

If we know what the food requirements of a fish are, we will know what to look for in the sea to help us determine what factors are active in the success or failure of that fish as an inhabitant in a given area. There are a number of approaches to this problem. A common one is to study the relationship between stomach content and the flora and fauna of the region. This is a good approach, but it is not sufficiently fundamental to give the complete picture. Sometimes a great variety of organisms can be found in the stomach of a fish. How many of these supply the basic requirements? How many are there because of a lack of

something better?

There is no doubt that different fishes have different requirements calling for certain types of amino acids, certain vitamins, and certain trace elements for their normal growth and survival. If these were known then the sea water could be studied as a medium bearing these substances for the fish, very much as the blood transports them to the tissues of our own bodies. If you please, the sea water might be studied as an external blood for the animals that live in it. To what extent these substances might be dissolved in minute quantities in the sea water is not known, but we submit that from the point of view of fundamental biology, the question will profitably bear examination.

An animal which grazes for, or stalks its food is dependent a great deal upon the sharpness of its senses, particularly the gustatory sense. The ability of a fish to capture given types of foods is dependent upon the sensitivity of its gustatory receptors to particular types of chemical compounds. The same set of sense organs might also detect substances which are repulsive to the fish and cause it to move away from an area, even though there might be an abundance of food in that area.

Let us cite a piece of work which has lately appeared in the scientific literature and which illustrates our point. This work is on the biology of the mackerel by G. A. Steven¹, zoologist at the Plymouth Laboratory in England. There are many interesting details in this paper, but we only have time here for a statement of the findings which raise questions subject to the analysis of fundamental science.

This particular species of Mackerel (Scomber scombrus) is capable of feeding by both filtering plankton from the water and by the capture of small fish and other animals. In speaking of a period of fasting Steven says: "This fasting period appears to be imposed upon the fish solely by the absence of suitable food in the upper waters at this time.

On or near the sea floor where food is present they do not fast." He found that the diet near the sea floor included a variety of organisms, such as small fish, worms, and crustaceans.

Again in another case it was found that under some conditions of this forced fasting, that the stomachs contained traces of phytoplankton. This fasting period occurs from December to March and coincides with the period of sparse plankton. To quote again: "By the end of the month (March, that is) and all through April and May, the fish feed predominantly on copepods: (which is a water flea of sorts), their stomachs being packed to bursting with these crustacea known to fishermen as 'red feed'." Later on, in June, the mackerel turns to a diet composed of young fish, such as herring. How helpful it would be to know what each of these dietary components contributes to the well being of the mackerel, and what part they play in his response to changes in other environmental factors.

Steven gives some interesting information on 'fishermen's signs'. Bird's, especially diving gannets, are given, but most emphasis is placed upon water color. It is found that "turbid water of a distinctly yellow tint" is definitely associated with high concentrations of Mackerel. From this the concentration grades on down through green water, blue water, grey water, and finally "stinking water" where it is said that mackerel never occur. The one extreme, "stinking water", seems to be the result of large concentrations of certain diatoms (Rhizosolenia and Thalassiosira), and the other extreme, the "yellow water" was composed altogether of zooplankton of which two copepods (Calanus finmarchicus and Pseudocalanus elongatus) were the most abundant. It is quite significant to note that phytoplankton is entirely absent in the "yellow water". Steven gives us the general observation with the supporting

evidence of other workers that "shoaling fish such as Mackerel and Herring avoid water heavily populated with phytoplankton, such as the diatom Rhizosolenia or the flagellate Phaeocystis."

It is up to pure science to find out the "why" of the above phenomena, and thus apply the results of work in England to the work in the Gulf of Mexico or any other area. The application of the known principles of pure science applied here will help to discover new principles, so that we can "digest" and extract "the good sense and reason" of what appears on the surface to be a complex situation.

1. Steven, G. A. Contributions to the biology of the mackerel Scomber scombrus L. II. A study of the fishery in the Southwest of England, with special reference to spawning, feeding, and "fishermen's signs".

Jour. Mar. Biol. Ass'n U. K. 28, 555-581, incl. appendix by Cooper.

PAPER PRESENTED BY DR. JAMES NELSON GOWANLOCH, CHIEF BIOLOGIST, STATE OF LOUISIANA, DEPARTMENT OF WILDLIFE AND FISHERIES, AT THE MEETING OF THE GULF STATES MARINE FISHERIES COMMISSION, APRIL 14-15, 1950, AT THE BUENA VISTA, BILOXI, MISSISSIPPI.

It is obvious that the long awaited exploratory program concerning the Gulf of Mexico must proceed from stage to stage as gained knowledge serves to indicate.

It is quite clear that the superb direction and personnel provided by the Fish and Wildlife Service of the United States Department of the Interior will efficiently govern the directions of these researches and, therefore, the present report can only indicate what in the opinion of the five Gulf States should be some of the targets of these researches.

No priority is implied since any long range program of this character must of necessity be flexible.

It is the consensus that the following marine resources should form primary targets in the contemplated investigations. The order of their economic importance will probably bear no relation to the order of the researches undertaken to explore them. It is clear that the accumulated information although of disvalue cannot be gathered in single directed lines.

The following are the fisheries toward which, it is the opinion of the Committee, initial exploratory study should be directed.

Tuna and related species may become a matter of primary economic importance in the whole Gulf of Mexico because of the possible transfer of Tuna fishing industry operations to the Gulf states. Any discovery of Tuna and related species in the Gulf of Mexico in economically valuable quantities would contribute greatly to the success of these contemplated operations.

Menhaden represent a present enormous Gulf of Mexico resource since this species constitutes the largest fishery in the Western Hemisphere and is presumably capable of vast exploitation.

Sharks remain a still highly valuable but still unknown part of this entire economic pattern.

The various Mackerel species are also still unascertained in quantity available for development.

Other species that most certainly deserve study are the Red Snappers, the Groupers and the Bluefish. Flounders, Snook and Kingfish should be included in the broad research program.

Mullet resources remain still largely unknown.

The possibilities of new Sponge resources should also be included in this program.

The recent spectacular discovery of Penaeus duorarum in the Dry Tortugas area clearly indicates the primary necessity for a continued investigation of the possibilities of new Shrimp concentrations in the Gulf, which, in spite of long extended previous studies, may well exist.

THE OUTLOOK FOR GULF COMMERCIAL FISHING EXPLORATIONS

A talk presented at the Gulf States Marine Fisheries Commission meeting at The Buena Vista, Biloxi, Mississippi, April 14-15, 1950, by Mr. A. W. Anderson, Chief, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington, D. C.

To those of us in the FWS charged with carrying out fishery exploratory work in the Gulf the outlook appears very favorable. We have a good vessel. We have a fine staff. And we have the benefit of the backing and knowledge of the Gulf States Marine Fisheries Commission.

No one can predict at this time with any accuracy what the Gulf may hold in the way of new or expanded fishery resources. However, what possibilities it does hold may be judged from the fact that since the Commission held its last meeting in Tampa there has been discovered a substantial shrimp fishery off Key West.

At the Tampa Meeting you may recall that the research program approved for the Oregon included, for its preliminary program, exploratory work on tuna, red snapper, and shark. This type of activity was chosen primarily because of the presence of a bait tank on the vessel especially suited for tuna. Installation or removal of the bait tank is a time consuming and expensive process so it was decided to leave it in place for the first trips to have it available for tuna work. The Oregon has now been repaired after her trip from Seattle and has been altered to suit better our needs in the Gulf. We were very much pleased with the shipyard work and its relatively low cost. She is now ready to go to sea and will depart on a four day shakedown cruise on Monday, April 17.

We have a full crew for the vessel who include in their experience a knowledge, not only of Gulf, but also of Pacific and Atlantic Coast fishing techniques. Our office has been established in Pascagoula and also is adequately staffed and in full operation. We have had the finest of cooperation from everyone in Pascagoula.

So far as funds are concerned we have sufficient to operate the vessel on the proposed schedule of cruises up to the end of the fiscal year on June 30, 1950. Funds for the next fiscal year, beginning July 1, 1950, are now under consideration in the Congress. If the appropriation bill carrying funds for the Department of the Interior is approved by the Congress as it has been recommended by the House Appropriations Committee there will be an adequate amount for practically full time operation in the next fiscal year.

The Oregon is now berthed at Pascagoula and is loading stores for her scheduled trip on Monday. I hope that all of you will participate in the visit to her planned for tomorrow by the Commission after conclusion of its meeting here.

The Daily Work of the Exploratory Fishing Vessel OREGON

The exploratory fishing vessel OREGON is ready to sail and is taking on supplies at Pascagoula now. It will be open for inspection tomorrow at the City Dock at the foot of Convent Street, in Pascagoula. The OREGON will go out on a shake-down cruise Monday, the 17th, for a period of not more than a week. Following that it will return to the dock for preparation for its first long trip of several weeks. This first trip will cover the west Gulf.

Not all of the equipment is on board now but it is expected that such instruments as the depth sounders will be installed immediately on the return of the vessel from the shake-down cruise. At present the OREGON is equipped with live bait tanks bolted to the after deck and has racks and sprays for pole fishing tuna. Outriggers and gurdies make it possible to troll with six lines and a deck winch makes it possible to do light dragging, and long line fishing.

The initial endeavors, as recommended by the Gulf States Marine Fisheries Commission, will be on tuna and snapper. However, this will not exclude work relating to other forms but is only an indication of emphasis.

The boat will carry a crew of eight men at the start and the work will be primarily offshore work, roughly more than 20 miles from land. Trips will be made to cover the entire Gulf from Brownsville to Key West.

Some description of the kind of daily work to be carried on by the vessel may be in order to give you a better idea of the operation. Each cruise is carefully planned ahead of time to cover specific objectives but routine observations will be made regularly to help toward the overall problems and to help correlate the exploratory fishing with other research in the Gulf. In addition to the regular crew, one or two fishery engineers will be aboard at all times to make and record observations, to assist in fishing, and in some instances to direct fishing operations. Qualified navigators will make observations to keep the location of the vessel accurately known. Weather conditions will, of course, be noted in the log and determinations of water temperatures at the surface and below the surface will be made at regular intervals. Air temperature, barometric pressures and wind speeds and directions will be recorded at regular intervals. Depth echo soundings will be made to depths of 2,000 fathoms, and in water of less than 250 fathoms a depth recorder will be operated. A lookout will be maintained to record surface signs of fish, porpoises, birds, slicks, rips and miscellaneous clues. Occasionally bottom samples will be taken or dredges, water sampling equipment or plankton nets will be used where special conditions appear to make it desirable. The catches from each kind of gear will be recorded in considerable detail with the essentials of weights, sizes, varieties, etc., of the catch included.

The Daily Work of the Exploratory Fishing Vessel OREGON - contd

Since our work will be exploratory, we expect to use all sorts of conventional gear and make any modifications that appear to us to hold promise. On our first trips we will carry miscellaneous equipment for trial of long lines to be set at various depths from the surface to the bottom in over 100 fathoms. As time goes on, we hope to check the possibilities for catches in all depths of water.

The area we have to cover is enormous and it will be necessary for us to schedule trips into different areas. We expect to work some in each section of the Gulf during any given three months period so that cumulative results will give a picture of the seasonal variations in stocks of fish.

A program of exploratory fishing requires seasonal or even daily information on conditions in the various areas worked. Consequently we will have to make survey visits to all parts of our territory at regular intervals and then fill in details by repeated work until a comprehensive picture of the situation is obtained.

An important part of our work will be to follow up clues suggested by fishermen, the fishing industry and biologists, and to attempt to verify the presence of kinds of fishes and to estimate the extent of the stocks. In general, our operations will be on a commercial scale since we want to be able to give the fishing industry recommendations on the kinds of gear that seem to be satisfactory for commercial operation. We need to have data that will permit us to estimate the quantity of stocks available.

The crew of the OREGON has been selected to give a variety of fishing skills. Thus, in the initial operation, we will have aboard men experienced in shrimp fishing, snapper fishing, menhaden purse seining, tuna fishing with live bait and purse seines, long line fishing; men with experience in fisheries of the Gulf, the Caribbean, the Pacific Coast, and elsewhere.

The work of the OREGON can be conveniently divided into two categories. The less interesting but possibly the more important part will be the day to day accumulation of data that can eventually be fitted into the overall program. We will also attempt to locate, assess, and report on findings of special immediate interest to fishermen in the area where work is going on. This will probably be done as a radio broadcast by the OREGON. A schedule for this kind of broadcast has not yet been set up. The OREGON will be in close touch with headquarters at Pascagoula via radio and can be diverted from any routine work to investigate special conditions as they arise.

Catches made by the OREGON will be frozen for the most part and will be subject to distribution to various cooperating institutions and agencies for analysis and special work where it seems to be required. Commercial fishing companies having laboratory facilities or having facilities for experimental processing operations may handle some sample catches provided the results are immediately available to the Fish and Wildlife Service for publication at its discretion.

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The above paper was presented by Mr. Stewart Springer at the meeting of the Gulf States Marine Fisheries Commission, April 14-15, 1950, The Buena Vista, Biloxi, Mississippi.

RELATIONSHIP OF FISHERY STATISTICS TO THE FISHERY EXPLORATORY PROGRAM

The recent acquisition of the trawler "Oregon" by the United States Fish and Wildlife Service for the purpose of exploring the Gulf of Mexico and the present meeting on formation of a biological research program raises the important question of the part statistics is to play in the program. Interest in fishery statistical data has been slight in the Gulf thus leaving many gaps in this important area. A brief glance at the available data reveals that two of the first seven states in volume catch border on the Gulf of Mexico, namely Florida and Louisiana. Here is housed the worlds largest shrimp fishery annually yielding approximately 160,000,000 pounds of high protein food. The area also produces 25% of the total menhaden volume taken in the United States. The 1949 figure just compiled reveals about 260,000,000 pounds of this fish yielding many thousands of gallons of oil and tons of meal. The majority of the red snappers taken in the U. S. come from the Gulf and the bay and estuary waters yield better than 20% of the crabs and oysters used annually. The fisheries of the Gulf merit attention.

Fishery statistics is the bookkeeping of the biologist and the tool of the fishery engineer engaged in exploratory. The need for accurate statistics is recognized by scientific groups throughout the world and it is surprising that so little attention has been given to this area. The North American Council of Fishery investigations, an organization composed of biologist from the United States, Canada, Newfoundland and France, has recognized the value of comprehensive fishery statistics and has stated as one of its principal objectives the improvement of fishery statistics within the several countries and the better coordinating of data presently collected. Realizing that fishery statistics are the most practical method of measuring the population of the sea, the organization has recommended that statistics be improved to the extent of designating the origin of the catch, provision of a measurement of catch per unit of effort and designations of the various terms used in published statistics. The results of the efforts of this group and the individual efforts of Herrington and Rounsefe

has led to greatly improved data from the Western North Atlantic. Transposing the situation to the Gulf, with the various states in the same role as the participating countries of the Western North Atlantic we have the nucleus in the Gulf States Marine Fisheries Compact for improvement of data in this area.

At its most recent meeting for which I have notes the International Council for the Exploration of the Sea had this to say about fishery statistics. Quote "It is easily realized that statistics on the yield of various fishing grounds form an integral part of long term biological research. Attempts should therefore be made to develop such statistics in areas of the world where they are non-existent and to improve their quality where they are already being used" end quote. This organization, recognizing the value of printed data, maintains an office, and has from time to time published data covering the Western North Atlantic. The International Statistical Institute has several times urged the better collection of statistical data pertaining to the fisheries and has, I believe recommended a basic plan covering such needs. The Food and Agricultural Organization of the United Nations has urged the better collection of fishery statistics and has published notes on the improvement of this data. Mills and Long in the publication entitled "Task Force Report on Statistical Agencies" make the following statement "The collection and dissemination of information concerning the structure and processes of national life are among the basic functions of Government. Under contemporary conditions the provision of prompt, accurate, comprehensive intelligence concerning the economic resources and major economic and social processes is an activity of high priority among governmental undertakings". George A. Rounsefel in Special Scientific Report No. 47 makes the following statement. "The major problem of marine fishery biologist is to determine the proper level at which to maintain the fish populations in order to obtain the maximum sustained yield. Continuous observation of these fluctuations and trends in abundance is essential. To follow changes in abundance not only must the total fish catch in number of pounds be recorded, but also the catch from year to year as a result of standardized units of fishing effort". That fishery statistics are essential to any well run program involving the study of the sea can be seen from this long list of organizations and individuals testifying to

the need for such data.

The collection of this data is a means to an end and not an end in itself for the success of such a cooperative effort depends entirely on the use to which the material is put once it is collected. One of the best methods to insure proper development and usage is to publish as currently as possible the data collected. It cannot be made use of in the files. Some of the uses to which this sort of data can be used is best exemplified in the work of the Pacific Halibut Commission. This organization under the guidance of capable biologist have restored a fishery to the point where fishermen now take as many fish in less than two months than they formerly took in twelve months. The Sockeye Commission has used statistics greatly in its efforts to determine a method of restoring the salmon runs of the Pacific Northwest. Once the data is made public it will be found useful by bankers, boat builders, net makers and producers of other consumer goods. In short it will have economic value.

Shortly after the close of this meeting the exploratory program will begin actual operation followed by the biological program in a few months. As it requires a little time for planning steps should be taken now to put the collection of statistical data into operation. Without such data the success of the program will be more difficult to evaluate.

While the needs of each state will perhaps vary somewhat certain basic data are necessary. The most important single requirement to begin collection of data is briefness for it is my belief that more legislatures have defeated statistical plans for reasons of cost than any other single cause. The system should be designed in such a manner that opportunity for expansion is amply provided for in the basic plan. As the value of the data is made known, through publication, it is possible to get better cooperation from the industry and additional funds to collect the material in more detail.

The basic minimum requirements are listed in order as follows:

- (1) Total Volume of Catch and Value of Same. This should be shown by species with

and in comparable names between the various states. For instance a shoemaker in Texas is a ground mullet in Louisiana and a whiting in Florida. The various cubicle contents should be reduced to a common factor such as pounds with the conversion factors shown in footnotes. As an example the Mississippi Barrel is 31% larger than the Louisiana Barrel and barrels of oysters shown thusly are not comparable between the states. A more simple method is to show the pounds of meat and in the footnotes give the size of the barrel and the amount of oyster meats a barrel yields.

- (2) Locality of Capture must be shown. The outline of the North American Fishery investigations lists the Gulf of Mexico as area XXV. Obviously it will be necessary to break the information down further into catch by lagoons, bays and sounds.
- (3) The Quantity and Kind of Gear used to capture each specie must be shown. While this will not give details on catch per unit of effort it will provide a basis from which expansion can be made to a catch per trip, per haul or per hour as the case may be
- (4) The number of fishing craft must be shown. This should be arranged to give some idea of the size or carrying capacity of the vessel, method of propulsion, that is by steam, motor, sail or row boats in the case of small craft.
- (5) The number of fishermen using each type of gear as in the case of Oyster Tongers, Trammel net fishermen or shrimp trawl operators and crewmen. It would be desirable to show this by casual or regular fishermen to give some idea of the amount of fishing engaged in by each gear category.
- (6) The amount of manufactured products and the number of persons employed in the manufacturing establishments is a figure of major importance. The products should be listed as cases of canned shrimp or tons of fish meal or other products by their commercial classification. This figure serves to show the importance of a fishery to the economic well being of the community and will serve to show the growth of a fishery as a result of the exploratory and biological work.

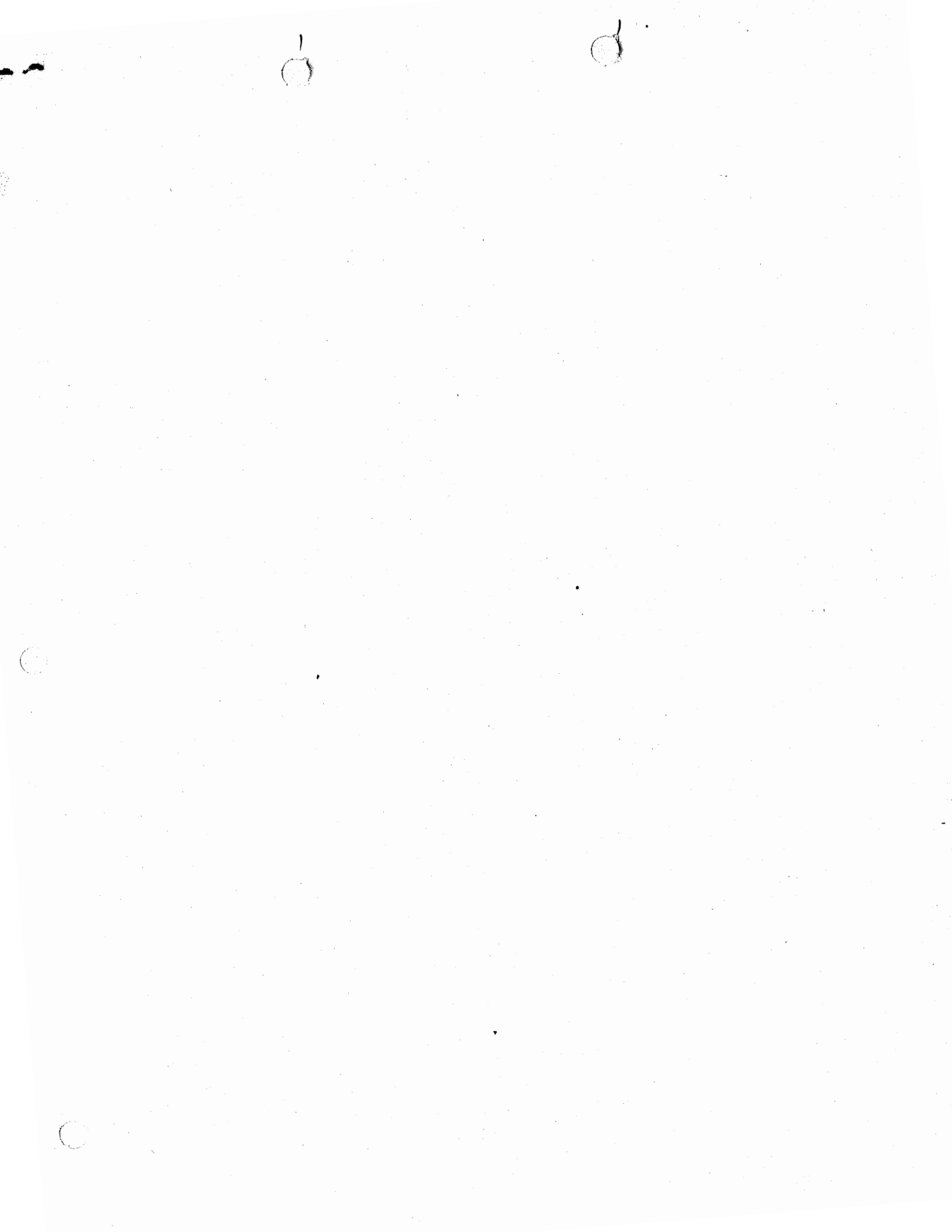
Such are the basic requirements for a beginning in the collection of statistical data. It has been the policy of the Fish and Wildlife Service to leave the collection of statistical data to the various states with this agency acting in the role of

coordinator of the state figures. We also assist state organizations in setting up systems which will serve the needs of the state and federal government. The statistical section has worked in those states giving the greatest cooperation for reasons of economy and greater coverage of the more important fisheries.

In closing I would like to extend to the various states my appreciation for their cooperation in the past and a hope for future cooperation to better coverage in this important fishery area.

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A paper prepared by Mr. Charles H. Lyles to be delivered at the meeting of the Gulf States Marine Fisheries Commission, April 14-15, 1950, The Buena Vista, Biloxi, Mississippi.



GULF STATES MARINE FISHERIES COMMISSION
Tampa Terrace Hotel, Tampa, Florida
19-20 January 1950

P R O G R A M

Wednesday, January 18th

Registration Tampa Terrace Hotel, Rooms 212-14, Upon Arrival.

Thursday, January 19th

8:00 A. M. Registration, Continued.

9:30 A. M. Call to Order by Chairman, Mr. Bert E. Thomas, Director,
Department of Conservation of Alabama.

Roll Call of Commissioners by States.

Introduction of Guests.

Welcome by Mr. George Vathis, Supervisor,
State Board of Conservation of Florida.

Minutes of Last Meeting.

Presentation of Rules and Regulations as Adopted at
Last Meeting.

- 10:00 A. M.
1. "Exploratory Investigations",
 - (a) Mr. A. W. Anderson, Chief, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service.
 - (b) Mr. H. E. Crowther, Chief, Section of Exploratory Fishing, U. S. Fish and Wildlife Service.
 2. "Research Investigations",

Mr. E. H. Dahlgren, Chief, Section of Marine Fisheries, U. S. Fish and Wildlife Service.
 3. "Gulf Investigations",

Mr. W. W. Anderson, Chief, Gulf Fisheries Investigations, U. S. Fish and Wildlife Service, Sarasota, Florida.

(Above discussions include reports on the repair and conversion of Vessels Oregon and Alaska)

10:45 A. M. General Discussion with Questions and Answers, led by
Mr. Howard D. Dodgen, Vice Chairman, and Executive Secretary, Texas Game, Fish and Oyster Commission.

11:00 A. M. "Importance of Exploratory and Biological Research Programs to the Gulf States Fisheries on the Following Species":

(Ten Minute Presentations)

Fish in General	-	Mr. J. L. Baughman
Menhaden	-	Dr. Harvey Smith
Sponges	-	Dr. F. G. Walton Smith
Crabs	-	Dr. J. Nelson Gowanloch
Shrimp	-	Mr. W. W. Anderson
Oysters	-	Dr. Malcolm Owen

12:00 Noon General Discussion with Questions and Answers, led by Mr. George Vathis.

12:30 P. M. Lunch.

2:00 P. M. "The Need for Explorations and Biological Research in the Gulf of Mexico from the Standpoint of the Commercial Fisheries Industry",
(Representatives of the commercial fisheries industry of the five Gulf States to be called upon by Chairman for five minute discussions).

3:30 P. M. General Discussion with Questions and Answers, led by Mr. Ernest S. Clements, Commissioner, Louisiana Department of Wild Life and Fisheries.

4:00 P. M. Adjournment.

4:10 P. M. Commissioners Caucus.

Financial Report by Secretary.

Selection of Chairmen of the State Delegations by the Commissioners.

6:30 P. M. "Gathering", Caribbean Room, Tampa Terrace Hotel.

7:30 P. M. Banquet, Palm Room, Tampa Terrace Hotel.

Friday, January 20th

9:00 A. M. Suggestions of New Names for the Vessels Oregon and Alaska.

Discussion of the Initial Exploratory Program in the Gulf of Mexico.

Recommendations submitted and discussed by Dr. J. Nelson Gowanloch, Chief Biologist, Louisiana Department of Wild Life and Fisheries.

- 9:30 A. M. "Reviews of International Fisheries Developments in the Gulf Region",
Dr. W. M. Chapman, Special Assistant to the Undersecretary of State, State Department, Washington, D. C.
- 9:45 A. M. "Report of Committee to Correlate Fisheries Laws",
Hon. Sidney Cain, Attorney, Louisiana Department of Wild Life and Fisheries.
- 10:15 A. M. Entertainment of Recommendations by Assembly for Further Study of Fisheries Laws.
- 11:00 A. M. "A Plan for Accumulation and Dissemination of Information by the Commission to all Parties Interested in Achievements of the Gulf States Marine Fisheries Commission and Its Associated Agencies",
Mr. James H. Faulkner, Commissioner from State of Alabama.
- 11:30 A. M. General Discussion with Questions and Answers, led by Mr. Naif Jordan, Chairman, Mississippi Seafood Commission.
- 12:00 Noon Adjournment.
- 12:10 P. M. Meeting main lobby Tampa Terrace Hotel for trip to Tarpon Springs....cars to leave from front entrance of the hotel at 12:15 P. M.
- Luncheon at Tarpon Springs.

FOR THE LADIES:

A trip has been arranged for your pleasure. Transportation will leave Tampa Terrace Hotel at 10:00 A. M., Thursday, 19 January, for sightseeing trip to Bok Tower. The Bok Tower Carillon will be played 12:00 Noon until 12:45 P. M. You will then be taken to Cypress Gardens where luncheon will be served. A trip through the gardens and attending the water skiing contest have been arranged. You will return to the Tampa Terrace Hotel via Winter Haven and Lakeland, arriving about 5:00 P. M.

Report on Meeting
of
GULF STATES MARINE FISHERIES COMMISSION

at

Tampa Terrace Hotel, Tampa, Florida
19 and 20 January, 1950

The first meeting in the New Year of the Gulf States Marine Fisheries Commission was held at Tampa, Florida on the 19th and 20th of January, 1950. Headquarters for the conference was designated as the Tampa Terrace Hotel of that city.

The meeting was called to order by the Commission's Chairman, Bert E. Thomas of Alabama, at 9:30 A. M. on 19 January, 1950. A roll call of the states disclosed the following Commissioners present:

For Alabama: Bert E. Thomas, Director, State Department of Conservation, Montgomery, Alabama (Chairman); Thomas A. Johnston, III, State Representative, Mobile, Alabama; James H. Faulkner, Publisher, Baldwin County Times, Bay Minette, Alabama.

For Florida: George Vathis, Supervisor, State Board of Conservation, Tallahassee, Florida.

For Louisiana: E. J. Grizzaffi, State Representative, Morgan City, Louisiana.

For Mississippi: Reece O. Bickerstaff, State Representative, Gulfport, Mississippi; Louis Simmons, President, Gulf Coast Shrimpers' and Oystermen's Association, Biloxi, Mississippi.

For Texas: L. A. Kurtz, Colonel, U. S. Army (Retired), Seadrift, Texas.

W. Dudley Gunn, Commission Secretary-Treasurer, New Orleans, Louisiana.

Those Commissioners unable to attend the Tampa conference, due to causes beyond their control, were:

William J. Hendry, State Representative, Okeechobee, Florida.

Bryant Patton, State Senator, Apalachicola, Florida.

Ernest S. Clements, Commissioner, Department of Wildlife and Fisheries, New Orleans, Louisiana.

Naif Jordan, President, Mississippi Seafood Commission, Biloxi, Mississippi.

Leander H. Perez, District Attorney, Plaquemines Parish, New Orleans, Louisiana.

Howard D. Dodgen, Executive Secretary, Game, Fish and Oyster Commission, Austin, Texas (Vice-Chairman).

James Phillips, State Senator, Angleton, Texas.

The following guests were introduced:

Warren F. Looney, Foreign Affairs Specialist, U. S. Fish and Wildlife, Office of the Undersecretary, Department of State, Washington, D. C.; A. W. Anderson, Chief, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington, D. C.; H. W. Crowther, Chief, Exploratory Fishing Section, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington, D. C.; E. H. Dahlgren, Chief, Section of Fisheries Biology, U. S. Fish and Wildlife Service, Washington, D. C.; William W. Anderson, Chief, Gulf Fisheries Investigations, U. S. Fish and Wildlife Service, Sarasota, Florida; Stewart Springer, Chief, Gulf Fisheries Explorations, Pascagoula, Mississippi; Wayne C. Heydecker, Secretary-Treasurer, Atlantic States Marine Fisheries Commission, Mount Vernon, New York; A. J. Harris, Jr., Attorney, State Department of Conservation, Montgomery, Alabama; Perry Prescott, Chief Oyster Inspector, Department of Conservation, Bayou La Batre, Alabama; Mary Schulman, Assistant Attorney-General of Florida, Tallahassee, Florida; F. G. Walton Smith, Director, The Marine Laboratory, University of Miami, Coral Gables, Florida; C. P. Idyll, Research Department, The Marine Laboratory, University of Miami, Coral Gables, Florida; J. Nelson Gowanloch, Chief Biologist, Department of Wildlife and Fisheries, New Orleans, Louisiana; A. Sidney Cain, Jr., Attorney, Department of Wildlife and Fisheries, New Orleans, Louisiana; James N. McConnell, Director, Division of Oysters and Water Bottoms, Department of Wildlife and Fisheries, New Orleans, Louisiana;

Jack L. Baughman, Director, The Marine Laboratory, Texas Department of Fish and Game, Rockport, Texas; Hermes Gautier, State Representative, Pascagoula, Mississippi; R. B. Meadows, Jr., State Senator, Gulfport, Mississippi; R. M. French, Jr., Shark Industries, Stuart, Florida; James McPhillips, Southern Industries, Mobile, Alabama; and others.

Immediately following the introduction of guests, the Chairman welcomed the Mississippi delegation and announced that the current session of the Mississippi Legislature had passed Enabling Legislation to permit Mississippi to enter into the Compact. The Act was approved by Governor Fielding L. Wright, on January 17th, 1950. Commissioner Reece O. Bickerstaff, State Representative of the State of Mississippi, responded to the Chairman's official welcome.

The host, George Vathis, Florida Commissioner, welcomed the Commissioners and their guests to the State of Florida and spoke of the trip to Cypress Gardens and Bok Tower, which had been arranged for the ladyfolk on the 19th and of the trip on the afternoon of the 20th, following the close of the meeting, to Tarpon Springs for a review of that city's sponge industry.

The Commission Chairman, Bert E. Thomas, called to the attention of all Commissioners that they had before them minutes of the last meeting and also rules and regulations which were adopted at the last meeting. The Chairman stated that he would entertain a motion to dispense with the time consuming procedure of having the minutes read by the Secretary-Treasurer. Such a motion was made by Commissioner Bickerstaff and seconded by Commissioner Grizzaffi. Upon a vote of the Commission, the motion passed. The Chairman next offered to entertain a motion to the effect that the rules and regulations receive like

treatment. Such a motion was made by Commissioner Johnston and seconded by Commissioner Simmons. Upon a vote of the Commission, the motion passed.

Chairman Thomas explained, at this time, that the program had been so arranged as to give the Commissioners as comprehensive a picture as possible of the matter of investigations, Gulf investigations in particular, with presentations from representatives of the U. S. Fish and Wildlife Service, the biologists of the Gulf States and representatives of the commercial fisheries industry.

Mr. A. W. Anderson, who was the first of the Fish and Wildlife representatives to be introduced by the Chairman, spoke in general terms concerning "Exploratory Investigations". His presentation was designed to establish a foundation of thought for related subjects which were to follow on the agenda.

The next speaker, Mr. H. W. Crowther, also of the U. S. Fish and Wildlife Service, stated that Pascagoula, Mississippi, had been selected as a base of operations for the exploratory vessel Oregon. He added that an office location had been procured adjacent to the mooring dock and that, in the immediate future, construction would begin on a net shed. Mr. Crowther also stated that it was the aim of the Service to complete repair and conversion work and install, or have available, necessary gear to have the vessel in service in early March. At this point, the speaker impressed upon the Commissioners that the decision as to first objects of exploration would determine whether or not the vessel would be ready for operation in early March and maintained in

operation with funds available until the end of the fiscal year, June 30th. To amplify on this statement, Mr. Crowther went into considerable detail relative to the cost of repair work which must be done and to the cost of conversion and gear purchases which would depend entirely upon the initial exploratory program. In this connection, it was pointed out that the Oregon is presently equipped with a live bait well and trawling equipment for tuna. He stated also that the available funds were insufficient for the purchase of purse seines this fiscal year. For the further information of the Commissioners, the speaker mentioned a number of approaches to the subject of explorations and, in a more specific light, the actual picking of the program. In summary, Mr. Crowther said that he hoped the Commissioners would be able to arrive at a definite decision for the Gulf exploratory operations before the close of the Tampa conference and promised that, as soon as the program was selected, he would do all in his power to expedite all preliminaries requisite to operation.

"Research Investigations" was the next subject on the program. Mr. E. H. Dahlgren treated of this subject in its general aspect, as did Mr. A. W. Anderson in presenting the overall picture of "Exploratory Investigations". The speaker pointed out that, due to the nature of the work to which the Alaska will be detailed, it would, in all probability, be around July 1st before necessary repair and conversion work could be completed and the vessel placed in operation.

The Chairman, in introducing Mr. William W. Anderson, made mention of his contributions to Gulf fisheries investigations through

his intimate association with research in waters of the Gulf for the past nineteen years. In speaking of the equipping of the Alaska for service, Mr. Anderson stated that the laboratory essentials and other appurtenances will run into considerable expense. He further stated that many of the essential items were scarce, some of which would doubtless require from six to eight months to procure. The speaker urged the Commissioners to devote first attention, at the Meeting, toward developing a definite program for exploratory fishing, since the biological research operations would be subjected to delay. Mr. Anderson further stated that the U. S. Fish and Wildlife Service had found that investigations of the nature which will be pursued could be administered in a more efficient manner with attention being directed to a wide range of species. In conclusion, the speaker made reference to the extensive shrimp investigations which were conducted in the Gulf of Mexico over a period of years and stated that the results of the investigations were, at this time, being assimilated and would be available in digested form in ample time for study, prior to the time the Alaska undertakes her initial mission.

Chairman Thomas asked Commissioner Kurtz to lead a general discussion covering Gulf Explorations and Research and, prior to turning the meeting over to the latter, read a telegram from Commissioner Dodgen (Vice-Chairman), who was scheduled to handle this discussion, stating that bad flying weather experienced en route Tampa precluded his attendance at the conference. Before opening the meeting for discussion, Commissioner Kurtz expressed the thanks of the Commission for the most information presentations made by the representatives of the U. S. Fish and Wildlife Service and gave a brief resume of some of the perplexing problems

concerning the Texas shrimp fisheries, which problems, he added, would undoubtedly be solved in the normal progress of Gulf investigations.

"Fish in General" was the subject covered by the first of the Gulf states biologist speakers, Mr. Jack Baughman. In line with suggested investigations, Mr. Baughman mentioned snappers. The speaker is of the opinion that valuable snapper fisheries can be located at some point or points along the one hundred fathom curve and, in this connection, he added, that very little is known about the general habitat and characteristics of the large size snapper, other than in the extreme south Gulf, the area commonly referred to in snapper fisheries circles as the Campeche Banks. Mr. Baughman also discussed the possibility of trawlers operating for so-called "flat-fish". He pointed out the possibility of extending the shark fisheries, making mention of the valuable oils derived from this species. Mr. Baughman is of the considered opinion that fish of the mackerel category (Kingfish, so forth) can be caught in greatly increased numbers through the development of gear designed for work among schools. In this connection, Mr. Baughman further stated that the kingfish appeared to be more inclined to form in schools in the west Gulf than in the east Gulf. Turning to the species tuna, the speaker mentioned that he believed several varieties of tuna inhabited the Gulf. In concluding, Mr. Baughman said that he thought snapper and tuna should be included in the initial exploratory endeavors.

Dr. Harvey Smith, who is prominently identified with the commercial menhaden industry and who was scheduled to address the conference on that subject, was unable to attend the Tampa conference due to prior commitments.

Dr. J. Nelson Gowanloch was asked by the Chairman to discuss the subject "Menhaden". Dr. Gowanloch informed the assembly that an astounding aggregate of 1,000,000,000 pounds of menhaden were taken from the waters of the western hemisphere last year. The speaker cited the great amount of interest which has developed among the members of the Southern Association of Science and Industry regarding menhaden because of the many uses which have been found for the by-products derived from the processing of this abundant species of fish. He also pointed out, in his discourse on this subject, that the development of the industry was being held back by the apparent misinformation of certain groups to the injury of the general public. He suggested that the Commission take action to promote a better understanding of menhaden and the menhaden industry. He emphasized that these tiny fish contribute little, if anything, toward the subsistence of other fish, particularly those which are classified as "game" and that the purse seine functions in such a manner that no damage is done to the bottom. A minority belief that fish of the game category are ready prey for the purse seine was said by Dr. Gowanloch to be entirely foreign to determinations based on scientific experimentation, that the purse seine frightens rather than attracts game fish and, even when such fish are encircled, they plunge and escape while the seine gradually settles to lower depths.

Dr. Gowanloch remained at the speakers' table to present a scheduled paper concerning "Crabs". In his introductory remarks on this subject, he stated that the crab industry on the Gulf Coast was suffering due to a non-scientific approach to the business of catching

crabs. He pointed out that the crab industry could be developed to tremendous proportions through the employment of more modern gear and through the use of more attractive and appetizing bait. The speaker explained in detail a crab trap which is known as the "Maryland trap" and, also, a "crab scrape", both of which have been used most effectively in Chesapeake Bay. Dr. Gowanlock explained that these two pieces of gear require no special skill for construction, that they can be put together at a very low cost (not over \$5.00 for both pieces of gear, trap cost \$3.00 and lasts six months and scrape costs \$12.50 and lasts indefinitely), that these instruments are capable of adding considerable to the crabber's daily volume and at no added labor cost, and further, the use of both of these devices adds immensely to the conservation of the crab industry.

The next speaker on the program was Dr. F. G. Walton Smith, who spoke on the subject "Sponges". Dr. Smith who has, for some time, been making a study of sponges in both the Miami Marine Laboratory and fields off the central Florida westcoast, said he believed that the Florida sponge grounds should be allowed to recuperate from their apparent over-worked condition. The speaker stated a search should be made for new sponge grounds but it is his belief that, due to the lack of diving gear, the U. S. Fish and Wildlife Service could not fit into such a program. In this connection, he believes that the Service can help to some extent by mapping the Gulf bottom. Continuing his thoughts relative to the finding of new sponge beds, Dr. Smith stated that he believed Texas and on around the Mexican curve would be a logical place for the existence of such beds. With regard to

procurement of sponges from their beds, the speaker stated that diving is unquestionably the best method and added that twenty fathoms is about the depth limit for such sponge fishing. Before concluding, Dr. Smith spoke of the possibility of re-seeding present known beds and of protecting such beds until the baby sponges could grow to commercial size. However, he stated that a knowledge of water currents at the bottom is essential information which would have to be procured before such an expensive venture as re-seeding should be undertaken.

Mr. William W. Anderson was asked to join with the biologists of the Gulf states in the painting of a complete picture of the fisheries common to our waters, through a discussion of the topic "Shrimp". The speaker said that he believed there was such a large number of shrimp trawlers in operation that the average volume take per trawler had shrunk to a much lower figure than was formerly enjoyed by a fewer number of operators. The inference was that new producing areas must be located and worked if the average trawler operator's take is to increase to any appreciable degree. Mr. Anderson stated that investigations had definitely established that shrimp spawning occurs in the open Gulf. When hatched, the small shrimp proceed to the nursery grounds, which is the rich marsh area bordering many sections of the Gulf coastline, and when older, they begin to move to the outside. The average span of life of a shrimp, according to the speaker, is one year, with eighteen (18) months a maximum longevity.

Mr. James N. McConnell was introduced by Chairman Thomas to address the conference on the subject "Oysters", taking the place

of Dr. Malcolm Owen. Mr. McConnell spoke of the work being done by Dr. Owen at this time with regard to oyster mortality and stated that a complete report would be rendered in the very near future as to both findings and suggested remedies, adding that the report would be made available for study by the Commission. In discussing the harvesting of oysters, the speaker explained in detail a type of "drag" which is now being developed by the Louisiana Division of Oysters and Water Bottoms, which "drag" operates without injury to the reef. The harvester, according to Mr. McConnell, is still in the experimental stage of development, but it is anticipated it will be perfected in the near future, at which time, its specifications will be furnished the Commission.

Mr. Thomas thanked the biologists for the very valuable information brought out in their presentations.

The Chairman next introduced Commissioner Vathis who opened the Meeting for discussion.

Mr. Jack Baughman stated that menhaden are eaten by mackerel only when squid is not available, that this game fish does eat a small fish similar to menhaden.

Commissioner Thomas told the Assembly of the depleted oyster beds of Mobile Bay as they existed some three years ago and of how the Alabama Department of Conservation went about re-seeding the reefs, protecting the oysters and of the most satisfying results which are being obtained in this year's harvest.

Mr. Thomas called upon Mr. Wayne C. Heydecker, Secretary-Treasurer of the Atlantic States Marine Fisheries Commission, asking

him to give the conference the benefit of his experience in line with research along the Atlantic seaboard. Mr. Heydecker, after extending greetings from the Atlantic States Marine Fisheries Commission and commenting upon the degree of enthusiasm prevailing at the Meeting, said in summary that their experience, in line of investigations, had proven that vastly better dividends are obtained through studying the habitat and inter-relationship of the species than in any other approach.

Messrs. Baughman and McConnell both spoke of maintaining the oyster laboratory at Pensacola. It was brought out in discussion that there was a possibility that the U. S. Fish and Wildlife Service may cease to carry on oyster investigations at the Pensacola laboratory.

Commissioner Bickerstaff moved that a resolution be prepared and forwarded to the U. S. Fish and Wildlife Service, Washington, D. C., requesting the continuance of the operation of the oyster laboratory at Pensacola. The motion was seconded by Mr. Jack Baughman. Upon a vote of the Commission the motion passed. The Chairman requested Mr. Sidney Cain to draft the resolution and present same for reading at the session on Friday, the 20th.

Immediately following the lunch period, Commissioner Faulkner, who was scheduled to deliver a paper at 11:00 A. M. on the 20th, was introduced by Mr. Thomas, who explained that Mr. Faulkner could not be present for the Friday morning session. Commissioner Faulkner, who is editor and publisher of the Baldwin County Times, Bay Minette, Alabama, addressed the conference on the matter of accumulating and disseminating information to all parties concerned in the achievements of the Gulf States Marine Fisheries Commission and its associate agencies. Mr.

Faulkner stated that the gathering, organizing and disseminating of information to promote the marine fisheries of the Gulf Coast is one phase of the overall mission of the Gulf States Marine Fisheries Commission which must not be neglected. He stated that explorations and research would be of little value if the results obtained in this work were not furnished to the commercial fishing industry. He further stated that such information should be disseminated as rapidly as possible following receipt, screening and preparation, that is, on a current release basis. With regard to methods of disseminating information, the speaker said there was such channels available as use of mailing lists and newspaper releases. He added that some of the states have their own advertising agencies which might prove a likely medium for coverage.

Presiding over the discussion period in place of Commissioner Jordan, who was unable to attend the conference due to unanticipated urgencies of business, Commissioner Faulkner asked the conference if they had any suggestions to offer on the subject under consideration. Mr. Baughman said that he thought that the weekly newspapers was one channel for the disseminating of information which should not be overlooked. The remarks of Commissioner Grizzaffi and Mr. McConnell appeared to coincide in that they both favored the medium, newspapers. Mr. Heydecker stated that the addressograph files of the Atlantic States Marine Fisheries Commission contained over six hundred newspaper addresses. Mr. Heydecker, continuing, said it might not be amiss to mention "basic statistics". The Atlantic States Marine Fisheries Commission's Secretary and Treasurer further stated that their Commission had, for some years, been very much interested in the procuring of catch statistics

as such data is essential in determining the progress or decline of the various fisheries. The Atlantic States Marine Fisheries Commission, according to Mr. Heydecker, asked the U. S. Fish and Wildlife Service to work with each state to develop this vitally important matter. Commissioner Johnston suggested that the Commission's headquarters office in New Orleans set up a library to contain all papers presented at Commission Meetings. Continuing with the discussion period lead by Commissioner Faulkner, the matter of taking minutes of the meetings was discussed and it was suggested that it might be well for the Commission to purchase a wire recording machine for this purpose. However, this thought was dismissed when Mr. Heydecker explained that the Atlantic States Marine Fisheries Commission had not been pleased with the results obtained from one which they had purchased. It was then suggested that the Commission's office secretary attend meetings when practical to assist the Secretary-Treasurer in the recording of minutes.

The Chairman next introduced a guest from the commercial fishing industry, Mr. James McPhillips. The guest speaker stated that the thing that worries the shrimp industry is why does the shrimp catch decrease each year, adding that the catch in Alabama and Mississippi this year is the poorest it has been in several years. It is hoped, stated Mr. McPhillips, that new shrimping grounds can be found in outside waters so that the large boats can work those areas, leaving the inside waters to the smaller boats. He spoke of the exceptionally good oyster production in Mobile Bay this year and of how the reefs had been brought from a state of near depletion to present levels in a comparatively short time through the work of the Alabama Department of Conservation, under direction of Mr. Bert E. Thomas.

Dr. Gowanloch, in answer to Mr. McPhillips question concerning the year to year decrease in shrimp production, said that the main reason for the decreased shrimp take was because the legislatures had never acted upon the recommendations of the scientists as to dates of closing season, which he and other observers in his field think should be from December 15th to March 15th and from June 15th to August 15th.

The Chairman recognized Commissioner Vathis who introduced another member of the commercial fishing industry, Mr. R. M. French, Jr., of Shark Industries, Stuart, Florida. In his opening remarks, Mr. French stated that his firm regretted very much losing the services of Mr. Stewart Springer because of his intimate knowledge of Gulf fisheries. He added that he was glad, however, that Mr. Springer would not be removed from an area of which he was so well informed, as he had been placed in charge of exploratory operations by the U. S. Fish and Wildlife Service with headquarters at Pascagoula, Mississippi. A few of the highlights of Mr. French's talk concerning sharks are as follows:

Shark industries have been catching from 12,000 to 13,000 pounds of shark per year. The catch is better in the summer than any other season of the year. White-tipped sharks have been found to be the best commercial member of the shark family, with its habitat the south Gulf in some six hundred fathoms of water. The potency of shark livers are relatively low in the upper Gulf as compared with the livers of sharks caught in the lower Gulf. He thinks there should be some middle ground in the Gulf where sharks are available in large numbers.

The shark industries' boats use cables in shark fishing. Liver extract is the chief source of revenue. Shark fins are sold to orientals who consider them quite a food delicacy. Leather goods are made from shark skins. Meal is made from the shark carcass. Dr. Smith asked Mr. French if there was any change in the vitamin potency in the shark livers due to change in season. Mr. French replied that he could not answer that question now as they were still doing research on the subject.

Dr. Reed, Chief Biologist of the University of Tampa, was introduced by Dr. Smith and, in responding, suggested that it might be well for the Commission to consider the mass analyzing of species.

Chairman Thomas stated that he would be glad if any of the conferees had anything else in mind to contribute as information to those assembled. Commissioner Kurtz spoke of the tightening of Texas conservation laws as the only salvation for survival and production of various fisheries, particularly shrimp. Miss Mary Schulman promised her cooperation in the matter of coordinating fisheries laws. Mr. Heydecker volunteered a definition of the word "conservation": "Conservation is the restraining of fishing only to the extent that guarantees maximum production over a period of time". Commissioner Johnston spoke briefly on the need of continued cooperative action between the states, particularly in the establishing of sound and flexible fishing laws. Commissioner Bickerstaff stated that the Mississippi Legislature is now in session and that it will be two years before they meet again. Mr. McConnell added that the Louisiana Legislature meets in May of this year.

With no further comments forthcoming, Chairman Thomas adjourned the day's open session.

Opening the Commissioners' caucus, the Chairman read proxies; Commissioner Dodgen to Mr. Jack Baughman and Commissioner Perez to Commissioner Grizzaffi. Mr. Thomas also read telegrams from Commissioners Dodgen, Clements and Hendry expressing regret of their inability to attend the Meeting.

The Chairman next called on the Secretary-Treasurer for a brief resume of the Commission's financial status. Following the report, Commissioner Bickerstaff moved that the Commission approve the statement as read. The motion was seconded by Commissioner Grizzaffi. Upon a vote of the Commission, the motion was passed. Mr. Thomas advised the Commissioners that the Commission's accounts would be subject to an annual audit by a fully accredited firm of certified public accountants.

A discussion followed concerning Senate Bill 801, which bill is now before Congress and it is scheduled to come up for hearing in the near future. Mr. Sidney Cain was requested by the Chairman to consult with the several Commission attorneys present and to report back concerning same Friday morning, January 20th.

There being no further business to come before the caucus, Chairman Thomas adjourned the meeting.

The Meeting for the second day, Friday, January 20th, was called to order by the Chairman at 9:00 A. M. In calling the meeting

to order, the Chairman asked for suggestions as to new names for the vessels Oregon and Alaska. The following names were suggested:

DOLPHIN (DORADO)	BAUGHMAN
GULF TUNA	GRIZZAFFI
CARETTA (SEA TURTLE)	SMITH
CRUSTACEA	KURTZ
SCOMBER	IDYLL
THE FLYING FISH	GOWANLOCH

The Chairman called on Dr. Gowanloch to present the Commission's recommendations to the Fish and Wildlife Service for the initial exploratory program. The speaker began by stating that the Committee to Correlate Research and Exploratory Data had fully coordinated their suggestions with the Commissioners at a special meeting following the session of the 19th, at which time, it was decided that the recommendations of the Commission to the U. S. Fish and Wildlife Service would be that the initial exploratory program include the following species: Snapper, Tuna and Shark.

Dr. Gowanloch stated the search for the named species need not be on a priority basis. The duration of time to be consumed by the initial phase of explorations was said by the speaker to be a matter which could only be decided through results to be obtained. Concerning the marine biological investigations, he stated, it was decided by the Commission, and coordinated with Messrs. Dahlgren and W. W. Anderson that this phase of investigations should be given further study. Dr. Gowanloch further stated that he would, in the immediate future start receiving suggestions as to a research program from

the Gulf States biologists. In conclusion, the speaker added that it was decided sponge investigations should be carried on by other vessels and that shrimp exploratory investigations be deferred.

The Chairman introduced Mr. Warren F. Looney, stating that the Commission was very happy to have him in attendance at the Tampa Meeting, was glad to have had him as a guest speaker at the last meeting, which was held at Houston, Texas, and sincerely hoped it would be possible for him to attend future meetings. Mr. Looney stated that he was very pleased to attend the meetings of the Gulf States Marine Fisheries Commission and to present matters concerning international relations, thus keeping the Commissioners informed of current and anticipated problems which may call for action by the Commission, since it was possible that some future landings of fish in Gulf ports may be those of species taken from waters non-contiguous to the Gulf Zone of the Interior.

A part of Mr. Looney's talk dealt with matters which were of a classified nature and for that reason are not incorporated in the minutes. However, it can be said here that the confidential information contained in the speaker's presentation related to the same subject he mentioned at the Houston, Texas, Meeting and, it may be added, that no problems have arisen since the last meeting which require the special attention of the Commission. In discussing International Commissions, Mr. Looney stated that the official membership generally was composed of three members from each of the signatory countries. That International Commission members, representing the United States, are appointed by the President, but the appointees must be selected as follows: One from the U. S. Fish and Wildlife Service, the second

from the Department of State and the third member from the public at large. Such Commissions have an Advisory Committee, which Committee is composed of twenty persons representing interested industries. The Advisory Committee, according to the speaker, is invited to participate in all non-executive meetings and to make suggestions and recommendations. Relative to the enforcement of laws as enumerated in such agreements, Mr. Looney was understood to say that such laws are enforced by state officers, where the fisheries are landed, acting in the capacity of federal enforcement officers.

Mr. Sidney Cain reporting for the Committee to Correlate Fisheries Laws, stated that before the Committee could make recommendations as to changes to the Commission, it would be necessary to exchange much information between the several states, but added that a great deal of essential preliminary work could, and would be, accomplished through the mails. The speaker added that the first step in making a study of the fisheries laws would be to chart all existing laws in order to determine agreements and differences. The chart will indicate such pertinent data as: Open and closed seasons, tackle and gear used, size and quantity limitations, licenses, etc. He pointed out that the program for correlation will be temporarily retarded due to the fact that some of the Gulf States are presently revising their laws. However, the revisions, when available, will facilitate the Committee's work and accelerate the completion of its report. In conclusion, Mr. Cain told the assembly of the fine spirit of cooperation now prevailing and suggested that the respective state legislators be kept fully informed of the Commission's efforts

to correlate the laws of the Gulf States and thereby afford the legislatures of these five states, as well as the Commission itself, a comparative study of State laws affecting the Gulf fisheries.

Next in the order of business came a series of discussions, some of which resulted in resolutions. The following resolutions were adopted by the Commission and each will be found attached to these minutes in the order hereinafter set forth:

The first resolution had to do with endorsing the continuation of research work by the Fish and Wildlife Service at its laboratory, situated in Pensacola, Florida.

The second resolution refers to the collecting of marine catch statistics by the several states.

The third resolution is an expression of gratitude to Mr. Wayne D. Heydecker for assistance which he has, and is, rendering the Gulf States Marine Fisheries Commission.

The fourth resolution supports a bill introduced by Senator McCarran on behalf of himself and thirty other Senators, confirming title of the states to their respective submerged marine lands.

Following a brief discussion as to the date and place of next meeting, Commissioner Kurtz moved that the conference be held in New Orleans and on dates to be determined by the Commission Chairman. This motion was seconded by Commissioner Grizzaffi. Upon a vote of the Commission, the motion passed.

The following Commission Committees were selected at the Tampa Meeting:

<u>STATE</u>	<u>CHAIRMAN OF STATE DELEGATIONS</u> <u>(SEC. 5 and 8 of R & R.)</u>
ALABAMA	Commissioner Thos. A. Johnston, III
FLORIDA	Commissioner George Vathis
LOUISIANA	Commissioner Ernest S. Clements
MISSISSIPPI	Commissioner Naif Jordan
TEXAS	Commissioner L. A. Kurtz

<u>STATE</u>	<u>EXECUTIVE COMMITTEE</u> <u>(SEC. 8 of R & R)</u>
ALABAMA	Commissioner Thos. A. Johnston, III
FLORIDA	Commissioner George Vathis
LOUISIANA	Commissioner Ernest S. Clements
MISSISSIPPI	Commissioner Naif Jordan
TEXAS	Commissioner L. A. Kurtz

(The Commission Chairman, Commissioner Bert E. Thomas and the Commission Vice-Chairman, Commissioner Howard D. Dodgen, were elected to the Executive Committee when elected to their respective Commission offices).

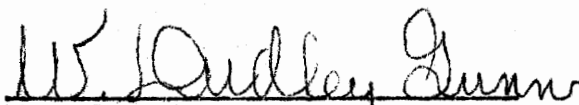
The Chairman recognized Mr. H. W. Crowther, U. S. Fish and Wildlife Service, who expressed the thanks of the Service to the Commissioners for their determination as to the initial exploratory program.

With no further business to come before the conference, Commission Chairman Thomas thanked all conferees for their attendance and accomplishments, and the Tampa Meeting stood adjourned at 12:25 P. M., January 20, 1950.

Immediately following the Meeting, Commissioners and guests motored to Tarpon Springs, Florida, where host Commissioner Vathis had arranged with a sponge boat captain for an actual ship-side

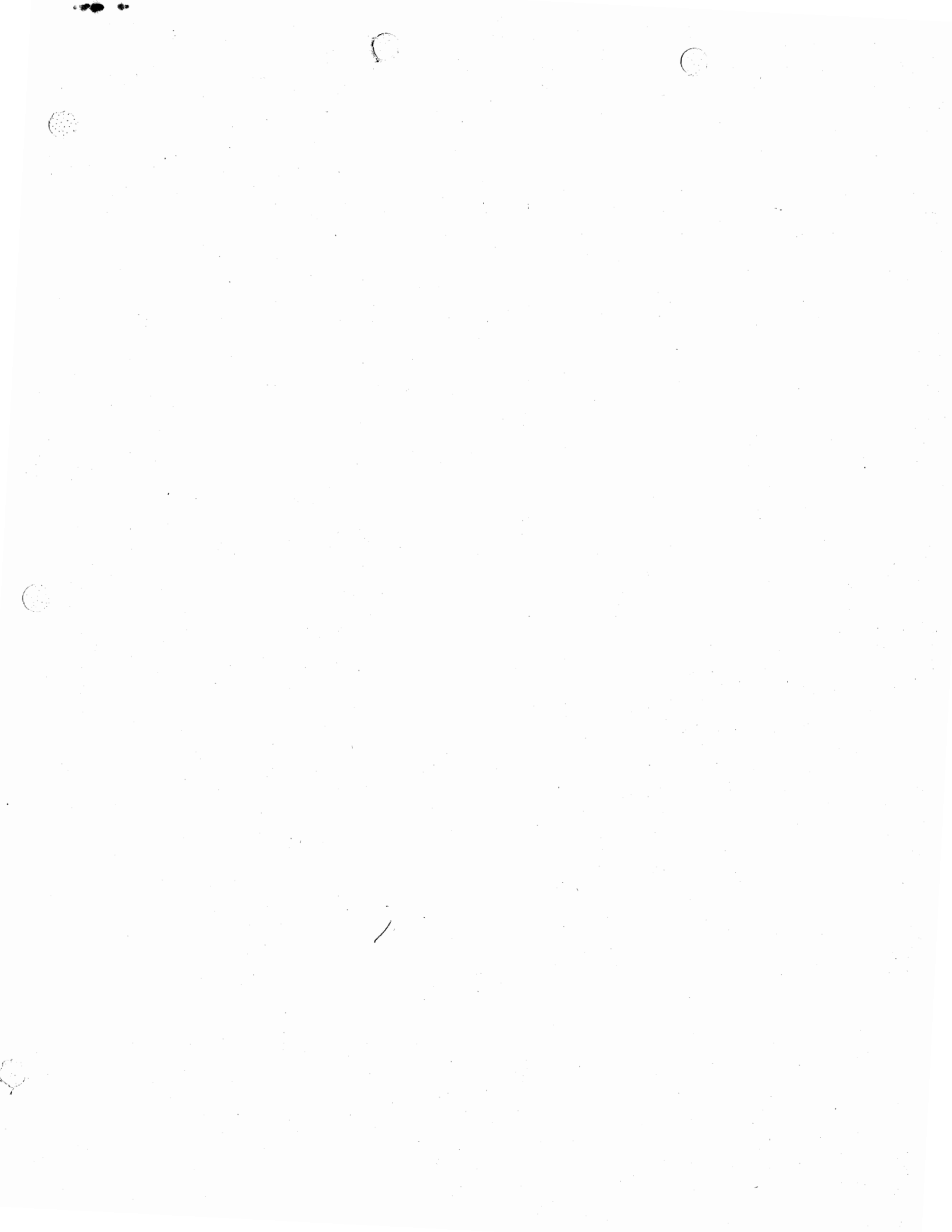
demonstration of sponge fishing with use of regulation deep sea diving equipment. This was followed by a very instructive tour of the sponge auction market and one of the sponge processing and packing plants.

Respectfully submitted,


W. Dudley Gunn,
Secretary-Treasurer

WDG:tmh

Attachments



GULF STATES MARINE FISHERIES COMMISSION

"SPECIAL COMMITTEE MEETING"

ST. CHARLES HOTEL

NEW ORLEANS, LOUISIANA

JANUARY 6, 1950

The purpose of the Special Meeting was to discuss and develop the agenda for the approaching Commission meeting at Tampa, particularly, those phases of the order of business to deal with explorations, biological research and fisheries laws.

Those in attendance included:

Messrs. Bert E. Thomas, A. J. Harris and Francis Lueth of Alabama.

Messrs. Ernest S. Clements, Sidney Cain, J. Nelson Gowanloch and James N. McConnell of Louisiana.

Messrs. Naif Jordan and Reece O. Bickerstaff of Mississippi.

Mr. H. A. Faubion of Texas.

Mr. Dudley Gunn and Miss Thelma Hinterlang, New Orleans office.

In his introductory remarks, the Chairman pointed out the urgency of developing a program for explorations and biological research in order that the Fish and Wildlife Service would be in a position to proceed with vessels Oregon and Alaska conversion, including gear purchases, immediately following the Tampa, Florida meeting, January 19-20, 1950. Mr. Thomas stated he thought it desirable to open the Special Meeting for a general discussion of the above matters, as well as the fisheries laws, prior to the separate afternoon meetings of the Committee

to Correlate Research and Exploratory Data and the Committee to Correlate the Fisheries Laws, but, before opening the meeting for discussions, he called upon Messrs. Jordan and Bickerstaff for a word concerning the possibility of the current Mississippi Legislative Assembly passing necessary legislation to allow that State to enter the compact. These gentlemen reported they thought Mississippi would become a member of the compact prior to the Tampa meeting. In connection with Mississippi's possible entry into the compact, Messrs. Bickerstaff, Cain and Harris were appointed to draft a resolution. The resolution delivered to the Chairman and adopted by the Commission, together with certification, follows:

"R E S O L U T I O N"

"WHEREAS, by Public Law No. 66, Eighty-first Congress, May 19, 1949, the consent of Congress is given to any two or more of the States of Alabama, Florida, Louisiana, Mississippi and Texas to enter into a compact and agreement relating to the better utilization of the fisheries (marine, shell and anadromous) of the Gulf of Mexico, and creating the Gulf States Marine Fisheries Commission; and

"WHEREAS, the States of Alabama, Florida, Louisiana and Texas have heretofore passed appropriate legislation and have entered and signed a compact between them, and have thereby created the Gulf States Marine Fisheries Commission; and

"WHEREAS, there is now pending before the Judiciary En Banc Committee of the House of Representatives of the Legislature of the State of Mississippi a bill authorizing Mississippi to become a party to the Gulf States Marine Fisheries Compact; and the members of

"this Commission, feeling that it will be beneficial to the purposes of the compact and this Commission for all Gulf States to be a party to the aforesaid compact:

"THEREFORE,

"BE IT RESOLVED, by the Gulf States Marine Fisheries Commission that the House of Representatives and the Senate of the State of Mississippi be, and they are hereby, memorialized to enact the pending legislation, by which the State of Mississippi may become a party to the Gulf States Marine Fisheries Compact, and assume its full membership on the Gulf States Marine Fisheries Commission.

"BE IT FURTHER RESOLVED, that a copy of this Resolution be furnished to the Chairmen of the respective Committees of the House of Representatives and the Senate of the State of Mississippi, presently having this Compact legislation under consideration.

"I hereby certify that the above and foregoing is a true and exact copy of a resolution adopted by the Gulf States Marine Fisheries Commission, at a Special Meeting held in the City of New Orleans, Louisiana, on the 6th day of January, A.D., 1950.

"/s/ W. DUDLEY GUNN
" SECRETARY"

At the afternoon session of the Committee to Correlate Research and Exploratory Data, which was attended by Messrs. Faubion, Gowanloch, Jordan and Lueth, it was decided that, because of the absence of some of the Committeemen, it would be desirable to obtain the latest views of absent Committee members, prior to offering a program to the Commission at time of

the Tampa meeting. However, Dr. Gowanloch did state it to be the considered opinion of those in attendance at the meeting that off-shore explorations should be the primary objective as it is least known of areas and because it will insure facilities for research. Also, that species deserving of investigation include menhaden, tuna, mackerel (the various species, Spanish, etc.), sharks, snappers (red), and shrimp.

Dr. Gowanloch was appointed by the Chairman to communicate with absent Committee members and requested to coordinate the views of all Committeemen and present a suggested program for explorations and research at the Tampa meeting.

(Dr. Gowanloch passed the following memorandum to your secretary this date, January 11th, which memorandum is being included in this report in order to inform the Commissioners as to trends in exploratory and research thinking.):

"Following the instructions of the Chairman, the writer communicated with Mr. George Vathis and Mr. Jack Baughman to coordinate the opinions already expressing their beliefs of what the objectives should be. Their opinions are briefly now stated and will later be included in the integrated report to be submitted at the meeting at Tampa. It must be realized that this report is not a resolution in any sense whatever, but is merely an expression of possible and, in present opinion, primary objectives for such a program. As such, they are valuable only if they are subjected to complete discussion by the Biological Advisory Committee in person.

"Mr. George Vathis expressed his opinion that his two primary needs involved, first, shrimp, including shrimp inside the thirty mile limit, and, second, the resources of the sponge fishery. Much

"work had been done along the entire coast concerning the shrimp fishery, but the results of these investigations were not available. He also pointed out that the sponge fishery was, although of necessarily regional interest, nevertheless the second fishery (shrimp being the first) in the entire Gulf area in point of value.

"With reference to the other fisheries, he emphasized the mullet fishery which is likewise a relatively inshore fishery of regional interest. Regarding the then suggested other objectives for off-shore investigation, he agreed in their choice.

"Mr. Jack Baughman agreed that the primary targets for the exploratory work should probably be off-shore. Among the littoral fisheries, concerning which the exploratory boat might engage in some initial work, he cited as most promising those for mullet, Blue Crab, the Sciaenides, Spanish mackerel, King mackerel, pompano, flounder, white trout, clams, spiny lobster, menhaden and sea catfish.

"Mr. Baughman believed that the off-shore investigations should extend the studies of the above enumerated fisheries wherever they naturally occur, also in small or major part in off-shore waters, but he more explicitly indicated the following. The "Brazilian" or "Red" shrimp will stand further expansion and exploration for new grounds, possibilities of the expansion of red snapper and grouper exist, two or three species of tuna may present commercial possibilities. Tile fish, whose presence has been reported in the Gulf, should be investigated. Briefly stated, Mr. Baughman's program coincides with the program presented at New Orleans meeting and involves the exploration of the continental shelf for new shrimp grounds with, to here re-state, some of these objectives, the search for new red snapper grounds, new grouper grounds, new shrimp grounds, new sponge grounds, flat fish resources, possibilities of a shark fishery along the 100 fathom line, possibilities of deep sea scallop beds, search for tuna concentrations, study of hydrostatic conditions (deep "scattering" layer) and possible effects on fish and beyond these possibilities of processing by-products and utilization of other sea food resources."

"utilization of processing by-products and evaluation of possible sea weed resources."

With regard to the Fisheries Laws, Mr. Cain reported that, because of the detailed nature involved in such correlation work, it was found desirable to lay out a skeleton of topics that are contained in all of our statutes and arrange them in a form of chart. Mr. Cain further stated such a chart would quickly indicate how close together or how far apart we are in our laws. Since some of the States are revising their fisheries laws at this time, it will not be possible to present final draft recommendations to the Commission for some sixty days. Mr. Cain will present a progress report at the Tampa meeting.

TAMPA MEETING PROGRAM:

Since Gulf investigations, as a whole, will be the chief topic of interest in the forthcoming meeting, it was brought out that the program should cover all possible avenues of approach to the problem. In the developing of the exploratory and research programs, it was agreed by all present that great care should be exercised in the selection of objects for study to the end that no duplication of effort results.

Commissioner Clements signified that he would propose a resolution at the coming Tampa meeting whereby the Commission will call upon the U. S. Fish and Wildlife Service to complete

and to publish, in report form the findings and other data affecting the shrimp fisheries in the Gulf of Mexico, per investigations by its biologists working in corroboration with the biologists of the several Gulf States, and of which research was started some eighteen years ago, and which was financed through contributions by the Federal and State Governments.

It was the concensus of opinion of those in attendance that the uninterrupted operation of the Oregon and Alaska in the Gulf waters is of paramount importance to the success of programs which may be adopted now, and in the future, and in insuring continuous operation, funds must be made available in sufficient amounts and in advance of actual needs. In this connection, the Chairman instructed the Secretary to contact both interested branches of the Fish and Wildlife Service and request that the Commission be furnished with operational budget and forecast figures, if possible, at the Tampa meeting. Other phases of the developing of the Tampa meeting program, such as selection of subjects, speakers, etc., will not be included in this report as the completed programs will reach the Commissioners, and others, prior to the end of current week, January 14th.

News release concerning the Tampa meeting will reach the several news services through the Chairman's office.

Before adjournment, Chairman Thomas thanked everyone for their efforts toward making the coming quarterly meeting a success.

W. Dudley Gunn,
Secretary-Treasurer