

61-09

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Gloucester, Mass.

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Report

Transmitted herewith is "Twenty Years of Progress In Federal Fishery Work on the Atlantic Coast" as it pertains to the Woods Hole Laboratory, Bureau of Commercial Fisheries, Woods Hole, Massachusetts.

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"Twenty Years of Progress in Federal Fishery Work on the Atlantic Coast" as it pertains to the Woods Hole Biological Laboratory, Bureau of Commercial Fisheries, Woods Hole, Massachusetts*

1. ICNAF. The ASMFC maintained very close liaison with the U. S. State Department and the Department of the Interior during the formation of the International Commission for the Northwest Atlantic Fisheries. They played an essential part in the drafting of important parts of the treaty and implementing legislation, especially that which pertained to the safeguarding of the jurisdiction of the states in territorial waters.

2. Haddock. For many years the ASMFC has supported research on the Georges Bank haddock stocks with a view to eliminating the waste of small fish and increasing the yield of the populations. Before the formation of ICNAF, the Commission supported the FWS's recommendations for a minimum mesh size regulation on haddock. After the organization of ICNAF, the ASMFC strongly supported the recommendations for regulations proposed to ICNAF by the United States.

* Prepared for Mr. Gharrett's presentation at the 20th Annual Meeting of the ASMFC.

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The haddock regulation which was promulgated in 1953 was approved by the International Commission with the promise that a research program would be set up to test the effectiveness of the regulation. The ASMFC has supported this program, has received reports on progress annually, and has kept closely in touch with the Committees concerned and the Laboratory conducting the work.

The Georges Bank haddock regulation has been a success and has laid the foundation for further regulation within the Convention Area. Cod, as well as haddock, are now under regulation as far as the Grand Bank of Newfoundland and recommendations are being implemented for mesh regulations for other species in other areas. In a sense, it may be said that ICNAF is carrying forth a program for the wise utilization of the Atlantic groundfish resource which was envisioned originally by ASMFC, but which could not be brought about by this Commission alone since the fisheries concerned were of an international nature.

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Sea Scallops. This deep sea shellfish supports one of the largest fisheries in the U.S. Problems of conservation were first brought to the attention of the Commission in 1949. At that time the biology of the species was very poorly known. Through the strong support of the Commission, the Woods Hole Laboratory obtained funds for a comprehensive study of sea scallop biology, particularly those aspects which relate to the utilization of the populations by man.

This program has moved along rapidly considering some of the problems which are faced in studying a sedentary species spread over such a wide area as this one is. We now have a good idea of the distribution of the sea scallop over the banks in general, although we have found that this can vary from year to year. A method of aging the shellfish has been worked out and a growth rate established. Good progress has been made in determining mortality rates. We now have estimates of total mortality and natural mortality. Sufficient data have been collected over the past few years to make possible calculations of the best sizes of scallops to harvest to obtain the optimum sustained yield.

Selection experiments of scallop dredges have been conducted so that information is now at hand on the ring sizes to be used for any given scallop minimum size that may be desired. It has been found that scallops are now being taken at too early an age and that long-term yield would increase if the ring size were increased. A recommendation for regulating the sea scallop fishery will be made to ICNAF at its next annual meeting.

The ASMFC for many years stressed the need for research on the effect of the industrial fishery on species taken for food. As a result of this interest, the Woods Hole Laboratory received allotments of funds to study the industrial trawl fishery in New England and to conduct research on a number of species taken by this fishery, such as red hake and silver hake. From these studies also developed research on yellowtail flounder and fluke.

The species composition of the industrial trawl fishery is now well documented, and it has been determined that this fishery is not having any serious effect on any foodfish species. Research on yellowtail flounder and whiting has progressed to the point where these may be included in international mesh regulations in the very near future.

The redfish program is an important unit of research at the Woods Hole Laboratory. This study has been of interest to ASMFC throughout its history. Progress on this species has been comparatively slow because of some difficult aspects of the fishes biology which have resulted in scientific conflicts among redfish workers. However, the growth rate is now established and sufficient information has been accumulated on other vital parameters so that an approach to regulation of the species can be made with considerable confidence. The International Commission has recommended mesh regulation in the northern parts of the Convention Area and regulation in the southern parts will be considered at the next annual meeting.

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Basic Research. No fishery research program can long endure that does not recognize the need for basic scientific studies of the fish itself and of the environment which supports it. Our research on New England groundfish is now reaching the point where we can begin to make predictions of future abundance. These predictions at present are based on composition of the commercial catch and upon surveys conducted by research vessels. In assessing possible benefits of mesh regulations on various species, the assumption is made that environmental conditions are constant which we know is not true.

In order to make reliable assessment of fishing regulations, to predict with confidence from young fish surveys, and to explain fluctuations after the fact, it is necessary to know the effect of changing environmental conditions on the important species of fish. To this end the Woods Hole Laboratory has research in progress on hydrography, planktology, and benthic studies. The ASMFC has undoubtedly supported these programs since their inception.

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Physical Facilities. A marine research program cannot be conducted without adequate physical facilities which include shoreside buildings and floating equipment. The Woods Hole Laboratory commissioned the Albatross III in 1948 and operated it for twelve years. The ASMFC annually endowed the work of this vessel and the appropriation of funds to build the new vessel which is now under construction.

The old buildings of the fishery station in Woods Hole constructed by the U. S. Fish Commission in the 1880's have been completely replaced by a modern laboratory, maintenance shops, and aquarium. The need for the replacement of the Woods Hole buildings was an item on the agenda of the ASMFC for many years. The commission constantly urged the Federal Government to appropriate the necessary funds for this construction. The money was appropriated and the buildings have been replaced and the docks reconstructed. In another year the Laboratory should have a new research vessel in operation which will then complete the renewal of all the physical facilities which had grown obsolete and inadequate.

ASMFC ANNUAL MEETINGS

4th Annual Meeting - September 1945

Requested State Department to set up agency to act as liaison between Int. Commissions which may be set up and the respective states involved in fisheries.

5th Annual Meeting - 1946

Intercoastal Conf. Committee set up to study regulation of fisheries beyond (contiguous to) territorial waters.

6th Annual Meeting - 1947

Haddock. --North Atlantic Section received recommendation from FWS for 4-5/8" mesh (between knots inside). Would pass 85% of haddock under 16". Also market size limit 16-1/2".

Int. Treaties and State Department. --Recommended Ass't. Sec. of State for Fisheries.

7th Annual Meeting - 1948

Toomer vs. Witsell - first appearance.

Albatross III has started its work.

Haddock. --Considering 4-5/8" and 16-1/2" again. Difference of reaction in industry makes it impossible to decision in Commission. Considered utilizing Amendment No. 2 for this conservation.

Int. Treaties--Confidential conferences have been held with State Department. Commission feels it should be party to treaties and administer of regulations.

Albatross III endorses its work and believe we need several more such vessels on the Atlantic Coast.

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8th Annual Meeting - 1949

Int. Treaties. --Convention signed and ratified by Senate.

Enabling legislation to come.

Albatross III. --Good word.

Haddock. --Committee set up to recommend minimum sizes for haddock and other fish taken in trash fishery. Traverse trawl experiments inconclusive. Can regulate haddock thru Amendment No. 1.

Sea Scallops. --Committee engaged in setting up research on use of other body portions and on new sources of supply.

Yellowtail. --Peak production in 1942. Unpredictable.

FWS will study when funds available.

Int. Treaties. --ICNAF organized with help of ASMFC. Believe states will have the burden of enforcing the regulations.

9th Annual Meeting - 1950

Int. Treaty. --ICNAF implemented legislation passed including protection of states' jurisdiction of their waters.

Haddock and Flounder. --Committee on minimum sizes.

Haddock. --16-1/2" - 5% by no. (2% by wt.) exception in catch. 4-5/8" mesh.

Yellowtail Flounder. --11 in. with 5% exemption by no.

Blackback Flounder. --8 in. with 5% exemption by no.

FWS says trash fishery not necessarily harmful.

Sea Scallops. --Sea and Shore Fisheries of Maine. Tagging

AND EXPLORATION.

Fluke. --New Jersey prepared to recommend 14 in. (New York has 15")

Int. Treaties. --Arguments about provisions for state representation on U.S. Commissioners.

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10th Annual Meeting, 1951

Haddock and Flounder. --Awaiting reports from FWS re: ICNAF.

Sea Scallops. --Maine report.

Fluke. --New Jersey law failed.

ICNAF. --First meeting held.

11th Annual Meeting - 1952

Haddock. --Experimental regulation.

Woods Hole Laboratory. --Aquarium, 65,000 visitors. Congress appropriates \$700,000 - \$1,000,000 for replacement.

Redfish. --Report on research and effort shift to east.

Yellowtail. --FWS asked to continue investigation.

Int. Com. --Notes with pleasure action on mesh regulations.

12th Annual Meeting - 1953

Haddock. --Efficient large mesh regulation.

Woods Hole Laboratory. --Pressing for funds.

Redfish. --Report.

Yellowtail. --FWS renews recommendations to states 11 in. limit.

Trash fishery mentioned.

Sea Scallops. --Pressing for research.

Trash Fishery. --FWS to continue study. Is regulation necessary?

Find new name.

Fluke. --

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13th Annual Meeting - 1954

Haddock. --Research report.

Woods Hole Laboratory. --Pressing for funds.

Redfish. --Report.

Yellowtail. --FWS withdrew proposal for 11" size. Study to go
on under S-K Funds.

Sea Scallops. --FWS planning study.

Industrial Fishery. --Woods Hole will study.

Whiting. --Study started.

Fluke. --States minimum sizes.

14th Annual Meeting - 1955

Haddock. --Licensing small mesh study boats.

Woods Hole Laboratory. --Pressing for funds.

Redfish. --Report.

Yellowtail. --Report.

Sea Scallops. --Report.

Industrial Fishery. --Report.

Whiting. --Report.

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