

BIBLIOGRAPHY

North Atlantic Fishery Investigations

1951 and 1952

Annotated list of United States papers dealing with the Northwest Atlantic Fisheries: 1/

Arnold, Edgar L., Jr.

1951. An Impression method for preparing fish scales for age and growth analysis. Prog. Fish. Cult., vol. 13, no. 1, pp. 11-16.

Deals with procedures in preparing fish scales for analysis and describes in detail the method used for a number of years by the North Atlantic Fishery Investigations of the Fish and Wildlife Service.

1951. Northward dispersal of warm-water marine fishes in southern New England during the summer of 1949. Copeia, 1951, no. 1, pp. 37-38.

The appearance in coastal waters of Rhode Island and southern Massachusetts of numerous forms of marine life typically of semi-tropical or tropical environment noted during summer of 1949. Record high temperatures prevailing throughout this region in 1949, especially in summer months, considered major factor in appearance of these species.

1/ List of abbreviations:

Comm. Fish. Rev. ----- Commercial Fisheries Review

ICNAF ----- International Commission for the
Northwest Atlantic Fisheries

Spec. Sci. Rpt. ----- Special Scientific Report

Prog. Fish. Cult. ----- Progressive Fish Culturist

Clark, John R.

1952. Experiments on the escape of undersized haddock through otter trawls. *Comm. Fish. Rev.*, vol. 14, no. 9, pp. 1-7.

Summaries of results of mesh experiments conducted on two of the regular trips of the Boston trawler Michigan in June 1952. Mesh selectivity data on two cod-end mesh sizes (4 - 7/8 and 5-1/2 inches between knot centers) was obtained. Shrinkage and stretching with use of these nets was also measured, and the effect of a fine mesh cover was appraised.

1952. Further experiments on the escape of undersized haddock through otter trawls. *Comm. Fish. Rev.*, vol. 14, no. 12, pp. 7-12.

Summarizes the results of further mesh selectivity experiments (with 5-7/8 and 6-3/4 inch mesh cod ends — between knot centers) aboard the Boston trawler Wisconsin in October 1952.

Clark, John R. and Howard A. Schuck

1952. Georges Bank haddock fishery - 1951. *Comm. Fish. Rev.*, vol. 14, no. 3, pp. 1-4.

Analysis of the 1951 haddock fishery is presented in Part I. During 1951, the fishery was supported by the 1943 year class. As 2-year-olds in 1950 and 3-year-olds in 1951, this brood was 2-1/2 times as abundant as the average brood. An evaluation of the 1951 haddock catch prediction is presented in Part II. Prediction proved 96.4 percent accurate. Methods employed in predicting catch are summarized.

Graham, Herbert W.

1951. Mesh regulation to increase the yield of the Georges Bank Haddock fishery. ICNAF, Part 3, Second Annual Report, pp. 23-33.

The status of the haddock fishery is discussed and background data pertinent to the mesh regulation is presented. The mesh regulation is discussed, with specific reference to its immediate and long-range effects on the fishery. A review of the methods which will be employed to test the effectiveness of the regulation is also presented.

1952. A regulation to increase the yield of the New England haddock fishery. Trans. of the Seventeenth North American Wildlife Conference, March 17-19, 1952, pp. 373-385.

Essentially the same material presented in this report as in the foregoing. This paper was prepared for delivery at the Seventeenth North American Wildlife Conference, March 17-19, 1952.

1952. A minimum net-mesh size for the New England haddock fishery. Comm. Fish. Rev., vol. 14, no. 12, pp. 1-6.

Data presented in this paper is essentially the same as that presented in the ICNAF report. This report was prepared for more general distribution than is afforded by the Commission report.

Kelly, George F.

1952. Redfish production has climbed steadily. Atlantic Fisherman, vol. 33, no. 10, pp. 13 and 32.

Summary of available data pertinent to the U.S. Rosefish fishery. The early history and development of the fishery, changes in gear and methods, varying price and demand, and available biological data are discussed.

Nather, Frank J., III and Howard A. Schuck

1952. Additional notes on the distribution of blackfin tuna (Parathunnus atlanticus). Copeia, 1952, no. 4, p. 267.

A blackfin tuna (29 cms. in length) was captured by the Woods Hole Oceanographic Institution research vessel Garyn, 75 miles south of Martha's Vineyard, in October 1943. This capture is believed to represent the most northerly record for this species.

Salves, Richard E.

1951. The trash fishery of southern New England in 1950. Conn. Fish. Rev., vol. 13, no. 7, pp. 1-4.

A review of the growth of the trash fishery in the southern New England area is presented. Landings trends during 1949 and 1950 are discussed, and species composition in samples of the 1950 trash fish catch is summarized.

Scattergood, Leslie W.

1951. The occurrence of egg capsules in the winter skate (Squala diaphanes) in Maine waters. Copeia, 1951, no. 2, p. 169.

The presence of egg capsules in two winter skates in Sept. 1949 is reported. This observation seems to substantiate the theory that the breeding season of this species is in September.

1952. The northern shrimp fishery of Maine. Conn. Fish. Rev., no. 1, vol. 14, pp. 1-16.

Observations on the rise and fall of the northern shrimp (Pandalus borealis) fishery of Maine are presented. In addition to giving production statistics for 1923-1950, various phases of the northern shrimp fishery are discussed. There is a discussion of the probable reasons for the decline of this fishery off the New England coast.

1952. Maine's herring fishery. Atlantic Fisherman, vol. 33, no. 1, pp. 18 and 29.

1952. 1. The distribution of the green crab, Carcinides maruana L. in the Northwestern Atlantic. Fisheries Circular No. 3, Maine Dept. of Sea and Shore Fisheries, Oct. 1952, pp. 2-10.

Concerned primarily with the extension of the green crab's range along the Maine Coast, and includes a review of pertinent literature. The author's observations on changes in range of this species are included.

Scattergood, Leslie W. and D. Arthur McKown (Sr. of Comm. Fish.)

1952. United States lobster and spiny lobster production (1921-1949) and imports (1920-1949), Comm. Fish. Rev., vol. 13, no. 12, pp. 1-11.

United States production and imports of lobsters and spiny lobsters for the period 1921-1949 are discussed. Since there are no great unexploited areas in which to initiate new lobster fisheries, further increase in domestic production is dependent on the biological productivity of the stocks in the North Atlantic Region. Greater imports are anticipated in the future, since expansion of the U. S. market for lobsters and spiny lobsters is indicated.

Scattergood, Leslie W. and Parker S. Trefethen and Gareth W. Coffin

1951. Notes on the size of menhaden. Copeia, 1951, no. 1, pp. 93-94.

Data on the size and maturity of menhaden taken off the Maine Coast during 1949 are presented.

1951. Notes on Gulf of Maine fishes in 1949. Copeia, 1951, no. 4, pp. 297-298.

The appearance of warm-water species in the Gulf of Maine area in 1949 is reported. Observed species are listed with pertinent data.

Warming of waters of Gulf of Maine (from records of U.S. Coast and Geodetic Survey) is considered factor in appearance of these species.

Schuck, Howard A.

1951. Northern record for the little tuna (Euthynnus alletteratus)
Copeia, 1951, no. 1, p. 98.

Report new northern record for the occurrence of little tuna with the capture of 23 fish on Sept. 11, 1949, in Cape Cod Bay, Massachusetts.

1951. New Gulf of Maine record for occurrence of dolphin (Coryphaena hippurus), and data on small specimens. Copeia, 1951, no.2, p. 171.

1951. Studies of Georges Bank haddock, Part I: Landings by pounds, numbers, and sizes of fish. Fishery Bulletin 66, vol. 52, pp. 151-176.

Presented in this first paper of a series reporting the results of the study of the Georges Bank haddock resource is information on pounds, numbers, average weights, and sizes landed for the years 1931-1948.

Information on trends and seasonal cycles is also included.

1952. Haddock prediction for 1951 proves accurate. Atlantic Fisherman, vol. 33, no. 2, p. 20.

The 1951 haddock prediction is evaluated -- proved 98.4 percent accurate. A larger than usual percentage of the 1951 catch were good-sized scrod, averaging about 2-1/4 pounds, as predicted. A review of prediction methods is also included.

1952. Predict more large haddock from Georges Bank. Atlantic Fisherman, vol. 33, no. 4, pp. 17 and 34.

The 1952 haddock catch prediction is presented. The 1951 prediction and its accuracy is discussed. The author contends that the proportion of large haddock to scrod will increase in 1952.

Schuck, Howard A. and Edgar L. Arnold, Jr.

1951. Comparison of haddock from Georges and Browns Bank. Fishery Bulletin, no. 67, vol. 52, pp. 177-185.

Haddock from Georges and Browns Bank were compared by means of data collected during a cruise of the research vessel Albatross III in June 1949. Large differences were found in the age composition of fish taken on the two banks, and significant differences in the average size of the same ages of haddock were noted. These findings strengthen the concept that the bottom-dwelling stages of haddock of these two banks are largely independent of one another, and substantiate the validity of studying separately the biological data of the two areas.

Schuck, Howard A. and John R. Clark

1951. Record of white-tipped shark (Garcharkinus leoninus) from the Northwestern Atlantic. Copeia, 1951, no. 2, p. 172.

1951. 1950—An unusual haddock year on Georges Bank. Conn. Fish. Rev., vol. 13, no. 6, pp. 27-29.

The Georges Bank haddock catch in 1950 was the most unusual in the history of the fishery, due to unusual strength of 1948 year class. Landings of scrod haddock exceeded landings of large haddock for first time in history.

Taylor, Clyde C.

1951. A survey of former shad streams in Maine. Spec. Sci. Rpt.: Fisheries No. 66, 29 pp.

This report is the first of several to consider the problem of rebuilding the almost extinct shad runs of Maine.