Woods Hole Laboratory
Manuscript Report Number
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ESTIMATED CATCH OF FISH IN 1949 1/ BY PARTY AND CHARTER BOATS IN NEW YORK, NEW JERSEY BIGHT 2/

CATCH IN NUMBERS OF FISH

SPECIES	PARTY BOATS	CHARTER BOATS	TOTAL 3/	ESTIMATED WEIGHT 4/ Average	Total
Porgy (Scup)	5,853,582	187,658	6,041,240	1.2	7,249,488
Mackerel	3,675,119	1,562,621	5,237,740	1.1	5,761,514
Sea Bass	1,911,141	109,486	2,020,627	.9	1,818,564
Ling (Red Hake)	385,477	6,347	391,824	1.3	509,371
Fluke	344,656	35,957	380,613	2.2	837,349
Tautog (Blackfish)	270,069	9,685	279,754	1.5	419,631
Bluefish	7,099	203,412	210,511	2.0	421,022
Weakfish	145,263	21,787	167,050	.8	133,640
Cod	121,832	17,502	139,334	7.0	975,338
False Albacore	930	68,381	69,311	11.0	762,421
Bluefin Tuna (School & Giant)	6099	36,007	36,616	30.0	1,098,480
Dolphin	2,808	17,196	20,004	14.0	280,056
Oceanic Bonito		8,873	8,873	10.0	88,730
Common Bonito	128	4,162	4,290	9.0	38,610
Striped Bass		936	936	14.0	13,104
White Marlin		160	160	56.0	8,960
Miscellaneous 5/	136,269	40,382	176,651	1.4	247,311
	12,854,982	2,330,552	15,185,534		20,663,589

1/ Season covered was April 20 to December 31. Fishing prior to April 20 included only a little for mackerel, cod, tautog and ling.

2/ This estimate includes the total landings at all ports between Freeport, Long Island, N.Y & Cape May, N.J.

3/ Estimates of numbers are based on a carefully designed sampling of the landings at the ports stratified according to size of fishing fleets and accurate counts of total vessels out every day from most ports.

4/ Our data on average weight are very scant. These figures (which we believe are conservative) may serve only as a guide to the approximate poundage of each species.

5/ Includes winter flounder, sea robin, swellfish, whiting, conger eel, kingfish, American eel, Amberjack pollock, frigate mackerel, cunner, sharks (blue, parbeagle, sand and spiny dogfish) skates, rudderfish, croaker, white hake, white perch, sand flounder, haddock, goosefish, and sheepshead.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

THE WINTER SPORT FISHERY IN THE NEW YORK BIGHT, 1949-1950

The deep-sea sport fishing activity in the "New York Bight" area has continued a steady decline since the middle of November, 1949. The weather has been a more important factor in this decline than has the distribution of fish.

Previous reports have covered the trends in the fishery through the first days of December, 1949. Two trips made to the fishing area since that time have yielded additional interviews with returning fishing parties during the second week of January and the last week of February, 1950, and information on the intervening periods from authoritative sources.

Mackerel chumming was given up by the party fishermen early in December, although commercial pound and gill-net fishermen along the northern New Jersey coast made good mackerel catches from that time until late February, when the weather brought their opperations to a temporary halt.

The following table shows the approximate average number of trips per week made by sport fishing vessels from the four most active ports in the Long Island- New Jersey Bight during the months of December, 1949 through February, 1950 :

Port:	Average Number of Trips Made Weekly		
	December:	January:	February:
Freeport, N.Y.	46	16	6
Sheepshead Bay, N.Y.	75	32	22
Belmar, N.J.	4	1.5	1
Manasquan Inlet (Pt. Pleasant and Brielle, N.J.)	24	12	7

Over sixty per cent of the fishing by Freeport boats after December 1 was done in the Cholera Banks area, the remainder being limited by rough seas to wrecks and grounds closer inshore. The fishing was for cod, with conger eels, tautog and cunners forming an incidental part of the catch.

The larger boats from Sheepshead Bay ranged as far as the Cholera Banks and the "Farms" (off Long Branch, N.J.). Their main catch was also cod, supplemented after the first week of February by a good number of pollock. Cod fishing at the Shrewsbury Rocks near Seabright, N.J. declined during the month of January. The smaller Sheepshead Bay boats did most of their late winter fishing around the "Subway Rocks" and "Seventeen Fathom Grounds" just south of Ambrose Lightship. There they caught cod, small haddock, tautog and pollock.

Belmar boats had very good cod fishing on the "England Banks" and the "Farms", the latter being the most productive after mid-January.

The boats from Manasquan Inlet had good cod fishing around wrecks near the inlet until the latter part of December, then had to go farther offshore to fish the Seaside wrecks and"Klondike Banks". The cod fishing there tapered off through January and was given up entirely by

the middle of February, when ling (red hake) fishing on the nearby "Ling Grounds" just south of the inlet proved more attractive.

Three party boats docking near the Atlantic Beach Bridge (East Rockaway Inlet, Long Island) each average about eight trips per month during the winter, fishing both the Cholera Banks area and the grounds south of Ambrose Lightship. It can be assumed that other scattered boats in the area cary on a comparable amount of activity during the cold months.

The accompanying chart (X) shows the locations of the chief winter fishing areas, and Table X shows a comparison of the fishing activity on these grounds by months.

The average catch per man for sixty-five fishermen, comprising four Sheepshead Bay parties on February 26, 1950, is shown in the following table:

Species:	Average Catch per Man:
Cod	1.8
Pollock	1
Cunner	2.4
Haddock	Less than one
Ling	" " "
Tautog	" " "
Conger Eel	" " "
White Hake	" " "

S. E. Angstman
March 8, 1950

Raymond J. Buller, Fish and Wildlife Service, November 13, 1950
844 Northampton Drive, Silver Spring, Maryland.
Chief, North Atlantic Fishery Investigation,
Woods Hole, Massachusetts
Manuscript on the Sport Fishery.

Your letter which told us about your "schooling" was very interesting. Everyone here read it with pleasure. I had intended to get around to answer it sooner but I wanted to include some comments on your manuscript and I've only recently got around to going over it. It has had a very thorough going-over as you will see from the rough which you left with me and the retyped version which is also enclosed. I have made some rather drastic changes and it is my purpose here to try to describe them.

The change in the title arises from Dr. Redfield's suggestion that New York Bight describes the area fairly well and I concur with this. It seems better than Middle Atlantic Bight which includes a much larger area.

I have expanded considerably of what was covered and was not covered in this survey. It has seemed important to emphasize this since we have grown rather careless in talking of these sport fisheries when we really covered only a part of it even in the area between Freeport and Cape May. I have attempted to bring this out in the discussion and compared it with what was found on Long Island in 1938.

The section on the Sampling Technique has been rewritten in order to clarify it. I have not attempted to change your basic ideas.

In determining the number of boats you state that the investigator filed a list of all the boats which made trips during the 1949 season. This was not possible until he was in the field and I wonder if you mean 1948 season here.

Starting with table 1 and continuing on through most of the rest of the manuscript are changes which were made to show the total amount of fishing by both kinds of vessels. The division between charter and party boat seems incidental, due to the particular practice of the fishery, and what the people are interested in who have requested this report is the total amount of fishing and the total amount of fish caught. Consequently, in several places in tables and text, I have made revisions to emphasize the total rather than the separate figures for charter boats and party boats.

The item in the appendix on the gross income of the vessels has been changed and inserted in the statistical section because it seems to me to be a definite item to consider, in estimating the size and importance of this fishery. However, I have changed it to indicate expenditures by fishermen and perhaps thus avoid critism for revealing income of the fishing boat operators.

In the table on total catch statistics I have changed footnotes and title and omitted the extra name for the species of fish. If we have the appendix showing the list of names it seems unnecessary to use more than one name in the tables and figures. Then it seems to me that some people will be interested in a breakdown by sections of our rather arbitrarily selected area. For example, the state of New Jersey probably wants to know how many fish are cuaght by vessels fishing out of New Jersey ports. This I have done in a separate table showing the catch in New Jersey and Southwestern Long Island areas. It also seems desirable to separate the area which may conflict with the waste disposal operations from the southern New Jersey area and this has been done for the total catch and amount of fishing in another table.

In the discussion of abundance, which I prefer to call it rather than catch-per-unit-of-effort because that is what we are using the catch-per-unit-of-effort for, I have tried to explain at greater lengths the reasons for the arbitrary selection of the index and why we presented both catch-per-man-per-day and catch-per-trip-per-day.

The sections on seasonal trends and amount of fishing in the waste disposal areas have been changed but little.

I have brought some notes together under industrial cooperation to contrast with industrial interference. In this I have brought out the rather small amount of fishing during the night and how the disposal barges use this period to avoid interference.

In the summary and conclusions I have rearranged things to conform exactly to answer to the questions asked at the beginning on how much the fishery was worth, where and when the fishery occurred, and what changes had appeared in the abundance of the predominant species.

Your section on the data collected from the Army Engineers needs inclusion of the answers to some of these questions: 1. What is the relation between Coast Guard data and that available from the Army Engineers? 2. Why are no data available after 1947 (table 5) and yet you use 1949 data to check the results? 3. Why did you not use Coast Guard data in your daily estimates of the number of fishing vessels out? 4. Just why should we present these data?

I can guess that the answer to the latter question is that it shows the increasing importance of the sport fishery over the pre-war period and that these data offer a most convenient source of information for future workers. If we include it, it seems more reasonable to me to put it in under the section on number of vessels and number of trips rather than stick it in the appendix. The data can contribute to the conclusions drawn.

I wish I could see you to talk this over, as trying to get all the ideas into a letter is very difficult and I can't immediately answer the questions which you will bring up. Neither can I retract the foolish changes which I have made on the basis of information from you.

But please go over this manuscript as carefully as you can, and if you can talk it over with Ed Dahlgren it might save some further revision and typing here. If you can visit Dahlgren you can also see a copy of the completed report on waste disposal at sea off New York by the Oceanographic Institution and the Fish and Wildlife Service.

Everyone here is settling down to a little serious research work. Clyde Taylor is getting all of the Census data organized and at the moment is getting out the averages of the fish caught per-standard-tow, per-area, per-depth-zone, per-hour-of-the-day, etc. He will shortly get into the matter of the reliability of the figure George Kelly is digging into the Rosefish investigations and we are planning an interviewing program at Rockland, Maine. Ernie Premetz is working over here 1 or 2 days a week and we're really getting down to the matter of writing a yellowtail manuscript. At the moment it looks as though we're going to combine everything into one large manuscript. If so, I'm hoping that in another month or two we'll have a manuscript for you to review on yellowtail.

So don't let these administrators occupy all your time. There are still scientific problems to be solved. Give my very best regards to Elsie and to the youngsters.

William F. Royce.

P. S. We've bought a house and expect to move in a couple of weeks.

WFR

Encl: (20)

WFR:erg
cc: File

STATE OF NEW YORK

CONSERVATION DEPARTMENT

BUREAU OF MARINE FISHERIES

Location of Bottom Fishing Grounds known as The "McAllister Grounds"

These grounds consist of small pieces of broken concrete, bricks, and rubble.