DEVELOPMENT OF TRASH FISHERY AT NEW BEDFORD, MASSACHUSETTS

by George W. Snow*

The port of New Bedford, Massachusetts, led all other New England ports in the production of trash fish in 1949, with landings of 44,115,000 pounds, valued at $379,624 to the fishermen. Total landings of trash fish in the New England area during that year exceeded 74.2 million pounds (Table 1).

Table 1 - Landings of Trash Fish in the New England Area by Ports, 1949

Locality	Thousands of Pounds	Percentage of Total
New Bedford, Mass...	44,115	59%
Gloucester, Mass....	14,567	20
Pt. Judith, R. I....	9,989	13
Stonington, Conn....	4,290	6
Provincetown, Mass..	1,283	2
Total.....	74,244	100%

The 1948 landings of trash fish at New Bedford were only 4,064,000 pounds and fur-farm operators purchased the entire amount in the round from a local dealer. In 1949, however, operators of reduction plants bought the entire catch for the preparation of meal.

Fish-meal producers in this city formerly relied on the byproducts of the fish filleting plants for their supply of raw material. Recently, a much stronger demand for fish meal was created by the greater utilization of the products in animal feeds. It is believed that a new feed formula for chicken diets developed by the University of Connecticut contributed a great deal to the increased use of fish meal. This new formula increased the fish-meal content of the diet by five percent and made it possible for the poultry producers to raise four sets of brooders per year, whereas only three sets had been raised using former formulas.1/ This increased the demand for fish meal during the past two years and stimulated the fish-meal producers to look for additional sources of raw material.

For some time, fish-meal operators had tried to get the smaller boats to fish for trash, but it was not until 1949 that they succeeded. Once started, several million pounds were landed per month during the remainder of the year (Table 2). These boats were induced to participate in this fishery at that time principally because of the relative scarcity of yellowtail flounder in the areas normally fished. During this period of scarcity, these boats could not fish on Georges Bank or Nantucket Shoals because most captains were not well acquainted with these areas, and also because their gear was primarily

Table 2 - The Landings of Trash Fish at New Bedford, Massachusetts, 1949

Month	Thousands of Pounds
January to March.....	0
April.....	3,536
May.....	7,363
June.....	7,936
July.....	6,905
August.....	4,945
September.....	2,737
October.....	5,491
November.....	3,336
December.....	1,866
Total.....	44,115

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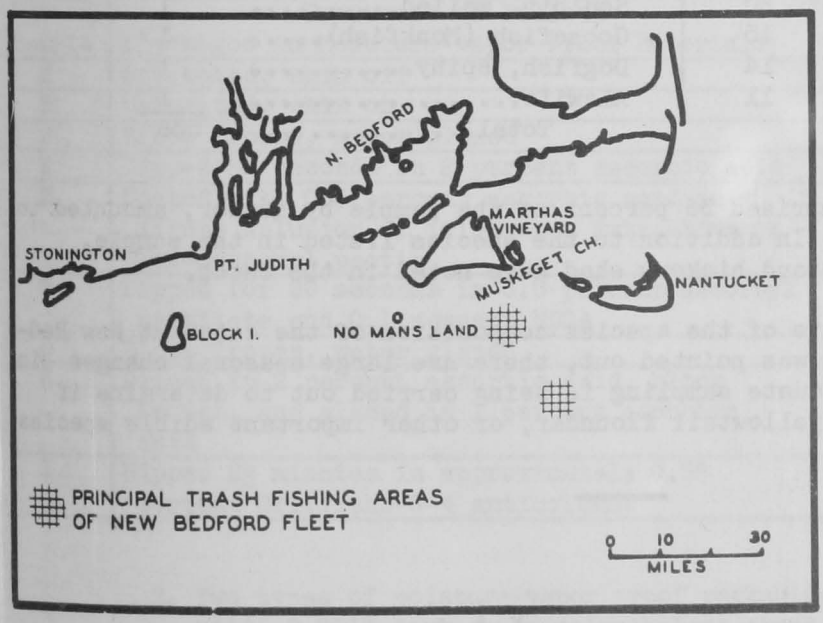
1/Boorsen, Fletcher V. The Wall Street Journal, August 27, 1949.

designed for the flounder fishery on the comparatively smooth bottom in the area between Block Island and Nantucket Lightship. The small boat owners and fishermen realized that, with large quantities of trash fish available and with an assured price for its sale, it would be possible to make a satisfactory profit during the shortage of yellowtail flounder, their usual mainstay.

The type of fishery which was established was called the "junk" or "trash fishery" because most of the fish that were caught had no marketable value for human consumption and, when caught incidental to normal trawling operations, were dumped back into the sea.

At the peak of the fishery during the summer months in 1949, and again in October 1949, 24 boats landed trash fish at New Bedford. These boats were small draggers with an average length of 51 feet and an average of 26 gross tons. Crew size varied from two to four men per boat. The same gear was used as in normal otter-trawling operations except that a liner of $1\frac{1}{2}$ or 2-inch mesh was inserted in the cod end. Boat owners and fishermen claimed that this liner was necessary to strengthen the cod end due to the heavy weight of a haul of trash fish.

The New Bedford fleet concentrated its fishing in two areas. One area was in the vicinity of Muskeget Buoy, which marks the channel between Martha's Vineyard and Nantucket Islands; the other was 20 to 30 miles south south-east of No Mans Land. Fishing was carried on in the Muskeget area usually in 12 to 15 fathoms. In the area farther offshore, fishing was carried on in 20 to 25 fathoms.



During the first few months of the fishery and again in October, the average time required to get a full load was estimated at 8 hours. As the season progressed, however, fishing time increased to 12 and often to as long as 18 hours. The average catch for most of the boats was 30,000 to 35,000 pounds or more. When red hake, which comprised the majority of the catch, migrated offshore with the onset of cold weather, most of the boats reverted to their original fishery, as yellowtail flounder were again appearing on the fishing grounds. But, once more engaged in their basic fishery, the captains of the boats no longer had the trash fish dumped back into the sea. They augmented their catches, while fishing for yellowtail flounder, with the once-despised trash fish.

Port interviewers of the U. S. Fish and Wildlife Service, through personal observations and through subsequent discussions with buyers of trash fish and with captains of trash-fish boats at New Bedford, established that the red hake comprised an estimated 75 to 80 percent of the total landings during the summer. During the fall months, whiting appeared in larger numbers in the catch. At the close of the year, when both red hake and whiting were found in negligible amounts, the catch consisted chiefly of ocean pout, conger eels, and skates.

When reports were received that large numbers of immature fish of commercially important species (such as haddock, yellowtail, and blackback flounder) were being taken as trash fish, U. S. Fish and Wildlife Service representatives sampled the catch. This initial sampling could not be extensive, and a sample of the catch was obtained from only one boat. This was obtained from the Wanderer which landed at the port of New Bedford on October 26, 1949. The catch of this vessel can probably be considered indicative of the catch of the fleet for the period October 25 to 30, since during this time the fleet fished in a small area off Muskeget Buoy and all of the vessels used virtually identical gear. The sample, which weighed 305 pounds, contained the following:

Species	Numbers
Red hake	194
Whiting	185
Sculpin, longhorn	49
Butterfish	31
Squid	20
Skate, clearnose	15
Sea robin	14
Scup	11

Species	Numbers
Flounders:	
Daylight	5
Four spot	2
Blackback	6
Sculpin, mailed	1
Goosefish (Monkfish)	1
Dogfish, spiny	1
Alewife	1
Total	536

The red hake, which comprised 36 percent of the sample by number, amounted to about 50 percent by weight. In addition to the species listed in the sample, torpedo and barn-door skates and hickory shad were noted in the catch.

This sample is indicative of the species composition of the catch at New Bedford in late October but, as was pointed out, there are large seasonal changes in the species taken. More adequate sampling is being carried out to determine if quantities of young haddock, yellowtail flounder, or other important edible species are being destroyed.