THE ATLANTIC SURF CLAM FISHERY (1968)

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The 1968 surf clam fishery provided 40.4 million pounds of meats--4.4 million pounds less than in 1967. A 9.1-million-pound decrease in New Jersey landings was offset partially by increased landings in New York and Maryland--3 and 5.2 million pounds. The southward shift in effort, which began in 1967, continued this year. The number of vessels decreased at Point Pleasant, N. J., but increased at Cape May-Wildwood, N. J., and at Ocean City, Md.

FISHING AREAS

There are four main surf clam fishing areas in the middle Atlantic bight: Long Island, N. Y., Point Pleasant, N. J., Cape May, N. J., and Ocean City, Md. As in the past few years, the New Jersey fishery contributed most to 1968 landings, although the 32.1 million pounds landed were a smaller share (80%) than in previous years (table). The importance of the Cape May-Wildwood area increased in 1968: landings exceeded Point Pleasant's for the first time in our observations.

Surf Clam Land	dings by	Area (1	968)	
Area	Number of Vessels		Landings (Millions of lbs.)	
	1967	1968	1967	1968
Long Island, N.Y.	5	7	2.3	3.0
Point Pleasant, N.J.	34	30	22.9	14.0
Cape May-Wildwood, N.J.	26	42	18.4	18.2
Ocean City, Md.	2	_7	1.2	5.2
Total	67	86	44.8	40.4

The areas fished by the New Jersey fleets in 1968 (fig. 1) were similar to 1967, but the irregular patterns of 1967 (Yancey, 1968) were filled by exploratory trips seeking dense beds of larger clams. Surf clams landed in New York were taken from the same areas off the southern coast of Long Island as reported for 1967. At Ocean City, Md., most vessels continued to fish inshore and north of the Ocean City inlet. In this area, little use was made of known offshore clam stocks.

FLEETS AND METHODS

The Point Pleasant fleet was reduced to 30 vessels, including one new boat; this was four fewer than in 1967 (table). Depths fished ranged from 12 to 37 meters (40 to 120 feet); average depth fished was 22 meters (73.2 feet). As usual, most vessels made 1-day trips during daylight hours, although a few overnight trips were completed when conditions were particularly favorable. An average of 2.5 days was fished each week, and up to 21 hours were fished each day. Monthly averages of hours fished per boat-day are shown in Figure 2. The average for the year was 9.8 hours, or 1 hour less than in 1967. Dredge hauls continued at an average rate of four per hour, as in the past.

The expanded fleet at Cape May-Wildwood consisted of 42 boats, or 16 boats more than the previous year (table). Four of these were new boats, while the balance of the increase came from Point Pleasant. The depths of clam beds fished off Cape May were 8 to 35 meters (25 to 116 feet), with an average depth of 15 meters (47.4 feet). Most boats made 1-day trips and fished up to 21 hours. Monthly averages are shown in Figure 2. The average for the year was 7.9 hours of fishing time per trip. Three dredge tows per hour were made in 1968, as in 1967.

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Fig. 1 - Area and intensity of surf clam fishing by New Jersey fleet, 1968 (based on 1,224 interviews).

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Fig. 2 - Monthly averages of daily effort (upper) and catch per hour (lower) at Point Pleasant and Cape May-Wildwood, N. J., 1968.



Fig. 3 - Catch per hour within the area fished by the New Jersey surf clam fleet in 1968 (based on 1, 224 interviews).



Fig. 4 - Monthly mean lengths of clams (upper) and landings of surf clams (lower) in New Jersey, 1968.

The New York fleet consisted of five (one new) full-time and two part-time vessels. The part-time vessels landed clams for fish bait.

Seven clam boats worked out of Ocean City during the year (five more than in 1967).

LANDINGS STATISTICS

Interviews by a port sampler provided information on fishing areas and effort in New Jersey. Landings in the middle Atlantic bight were provided by the BCF Office of Statistical Services.

Total landings of 40.4 million pounds of meats were 4.4 million pounds less than in 1967, despite an increase of 0.7 million pound in New York and 4 million pounds in Maryland (table). The deficit was caused by a 9.1 million pound decrease in New Jersey landings. New Jersey landings were 80% of the 1968 total; New York, 7%; and Maryland, 13%. The percentages contributed by the same States in 1967 were 92%, 5%, and 3%. The portion of the total landings used as fish bait (sport and commercial fishing) was about the same at last year (700,000 pounds).

The continuing shift in effort (Yancey, 1968) from Point Pleasant to Cape May-Wildwood was reflected again in the contributions to total New Jersey landings. Point Pleasant provided 43% (14 million pounds) in 1968-down from 55% in 1967. The Point Pleasant fleet, for the first time, landed fewer clams than the Cape May-Wildwood fleet.

At Point Pleasant

At Point Pleasant, landings per boat-day ranged from 10 to 768 bushels (170 to 13,056 pounds of meats) and averaged 233 bushels (3,961 pounds). The average in 1967 was 220 bushels (3,740 pounds). Catch per hour averaged 24 bushels (408 pounds) in both years. Figure 3 shows the catch per hour in the areas fished. The catch rate remained fairly uniform throughout 1968, although the rate dropped below average in the winter and rose again in the summer (fig. 2). Monthly landings varied more than the catch rate (fig. 4) and were generally lowest in the winter when storms limit the effort. The lengths of clams landed varied from 109 to 184 mm. (4.25 to 7.25 inches). The average length was 153 mm. (6 inches). This range and average length were essentially the same as the previous year. The monthly average lengths fluctuated very little during the year (fig. 4).

At Cape May-Wildwood

The Cape May-Wildwood share of the New Jersey landings increased from 44% in 1967 to 56% in 1968. The increase was due to a 60% increase in number of boats. Vessels landed from 15 to 1,177 bushels (255 to 20,009 pounds of meats) per day trip, and the average was 225 bushels (3,825 pounds). Monthly landings varied in a pattern similar to that for Point Pleasant (fig. 4). Catch per hour averaged 34 bushels (578 pounds) in 1967, and 28 bushels (476 pounds) in 1968. Catch per hour varied widely as effort switched from dense inshore beds of small (130 to 140 mm.) clamstothe less productive offshore beds of larger (150 to 155 mm.) clams (fig. 2). The monthly average length varied inversely with the catch rate; when catch per hour was up, the average length of the clams was less. The lengths of clams landed ranged from 111 to 195 mm. (4.37 to 7.68 inches). The average length was 147 mm. (5.75 inches) or 6 mm. (0.25 inch) more than in 1967.

STATUS AND TRENDS OF THE FISHERY

Fishing effort continued to increase in 1968: about 18 vessels were added to the surf clam fleet, and hours fished per trip increased by about 1 hour in New Jersey. The southward shift in effort reported for 1967 was maintained in 1968. At the end of the year, the Cape May fleet was larger than that at Point Pleasant for the first time in our observations. The Ocean City, Md., fleet increased from two to seven boats.

Average lengths of the clams landed in New Jersey were not appreciably different in 1967. As usual, the average lengths of clams landed at Point Pleasant varied very little from month to month, while the average lengths of clams landed at Cape May varied as the fleet fished the inshore beds of small (120 mm.) clams or the offshore beds of larger (150 mm.) clams.

The catch rate stabilized at the 1967 level of 24 bushels per hour at Point Pleasant, but it decreased from 34 bushels to 28 bushels at Cape May. The catch rate at Cape May, like the average length, varied with the source of the clams.

The Ocean City, Md., fishery shows promise of further expansion and will probably contribute an ever-increasing portion to total landings.

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The New York fishery will probably continue its slow increase, but its expansion is limited by the extent of the beds off Long Island.

LITERATURE CITED

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