

An annual summary useful to industrial and scientific groups.

THE 1967 ATLANTIC COAST SURF CLAM FISHERY

By Robert M. Yancey*

The 1967 landings of the surf clam (*Spisula solidissima*) fishery equaled the record of 45 million pounds of meats set in 1966. About 92 percent of the total landings were made in New Jersey, 5 percent in New York, and 3 percent in Maryland. Point Pleasant landings contributed about 55 percent and Cape May-Wildwood 44 percent to the New Jersey total. Daily catches averaged 220 bushels at Point Pleasant and 233 bushels at Cape May-Wildwood. This catch is about 30 percent less than in 1966. Hours fished per day increased and catch per hour decreased at both New Jersey ports. Clams landed had a mean shell length of 149 mm. (6 in.) at Point Pleasant and 141 mm. (5½ in.) at Cape May-Wildwood.

The surf clam fishery contributed about 35 percent to total U. S. molluscan shellfish landings in 1967.

This report is the third of a series to document yearly activities of the fishery and to summarize statistics. Data for the two previous years were reported by Groutage and Barker (1967a, 1967b).

FISHING AREAS

The New Jersey fishery has two centers--one off Point Pleasant and the other off Cape May (fig. 1). In the past few years, 76-80 percent of the New Jersey catch came from the Point Pleasant fishing grounds and 20-24 percent from off Cape May. New Jersey production was more evenly divided between the two areas in 1967, when the landings were about 55 percent at Point Pleasant and 44 percent at Cape May-Wildwood. As catch per hour dropped slightly at Point Pleasant, more boats moved to Cape May-Wildwood where the catch per hour was better (fig. 2).

Also, the Cape May-Wildwood fishing area changed in size and location in 1967 as the result of more exploratory trips by the enlarged fleet.

Surf clams landed in New York were taken off the southern coast of Long Island, and those in Maryland from off Ocean City.

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FLEETS AND METHODS

A dredge fleet of 34 vessels, 11 fewer than in 1966, fished the Point Pleasant area. The fishing ground was between Barnegat Lightship and Point Pleasant. Clam beds in this area were 15 to 33 meters (50 to 108 feet) deep; average depth fished was 22 meters (73 feet). Most vessels made 1-day trips during daylight, as did surf clam vessels in all areas, but some fished overnight. Hours fished per trip varied from 1 to 15. Monthly averages of hours fished per day per boat are shown in figure 3. The average for the year was 8.8 hours. This time was 1.5 hours less than the yearly average in 1966. Dredge hauls continued at 4 per hour.

The Cape May-Wildwood fleet consisted of 26 vessels, an increase of 16 since 1966. Part of the increase resulted from a shift of boats from Point Pleasant; 5 vessels were new to the fishery. The depths of clam beds in the Cape May fishing area ranged from

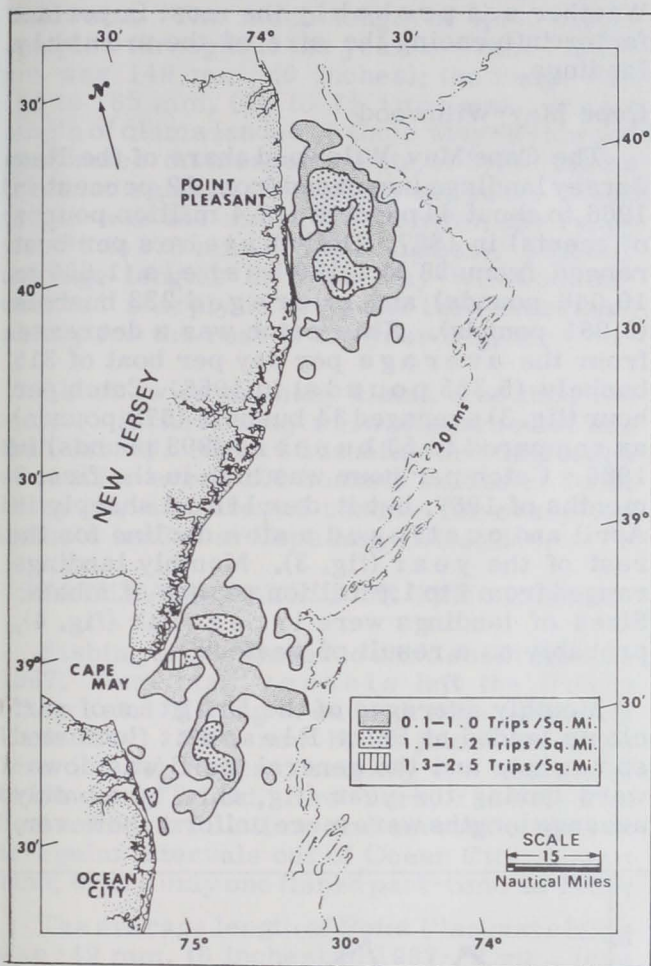


Fig. 1 - Area and intensity of surf clam fishing by New Jersey fleet, 1967 (based on 744 interviews).

5.5 to 24.4 meters (18 to 80 feet). Average depth was 12 meters (39.5 feet). A few boats occasionally fished at night, but most fished during daylight. Hours fished per trip varied from 1 to 20 and the average fishing time per trip was 7 hours, an increase of 1 hour from 1966. Monthly averages of hours fished per day per boat are shown in figure 3. Three dredge hauls per hour were made in 1967, and 4 per hour in 1966.

The New York fleet consisted of at least 5 boats. One of these entered the fishery in spring 1967.

Two vessels fished all year out of Ocean City, Maryland, and other vessels fished there at irregular intervals. In 1966, only one boat fished the area, and only part of the year.

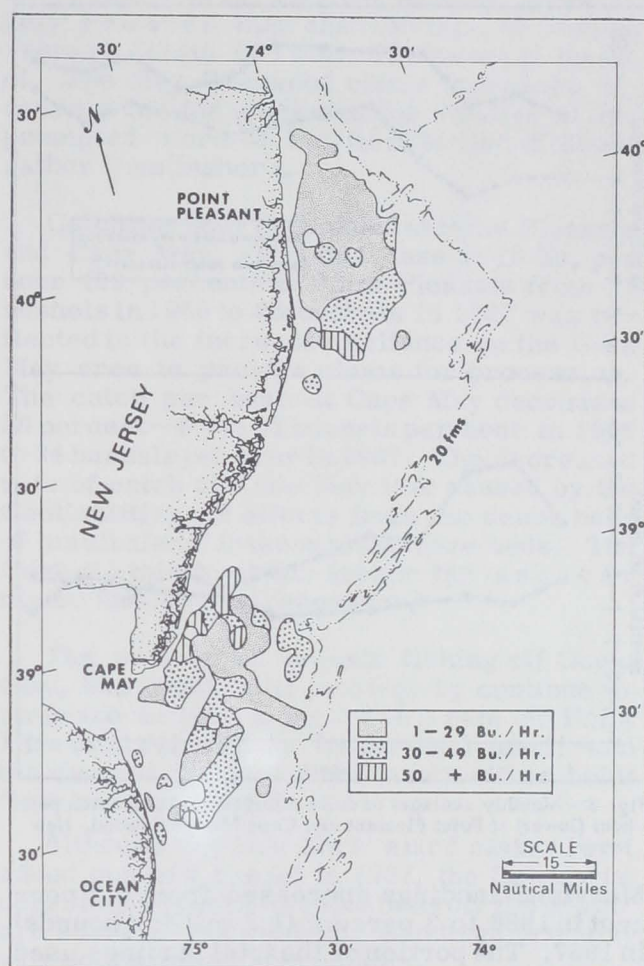


Fig. 2 - Catch per hour within the area fished by the New Jersey surf clam fleet in 1967 (based on 744 interviews).

LANDING STATISTICS

Information on fishing areas and effort was obtained from interviews with vessel captains. Data on the amounts of surf clams landed along the Atlantic coast were taken from Current Fishery Statistics--or from data provided by personal communication from Fishery Reporting Specialists, BCF, Office of Statistical Services, in the respective states.

Total landings of 45 million pounds of meats equaled the record set in 1966 (Groutage and Barker, 1967b). The percentage contributed to the total by New Jersey was less in 1967--92 percent, 41.6 million pounds--than the 96 percent (43.2 million pounds) in 1966. New York landings rose from 4 percent in 1966 to 5 percent (2.3 million pounds) in 1967;

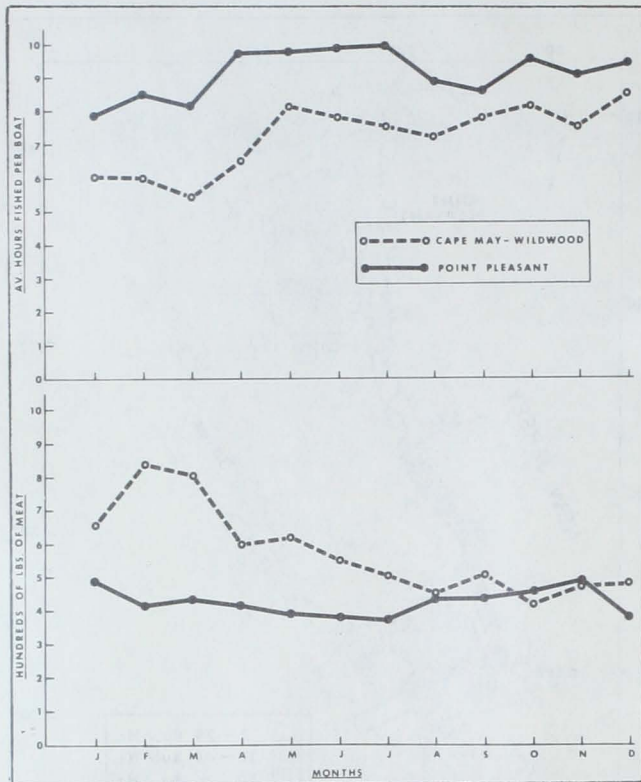


Fig. 3 - Monthly averages of daily effort (upper) and catch per hour (lower) at Point Pleasant and Cape May-Wildwood, New Jersey, 1967.

Maryland landings increased from 0.2 percent in 1966 to 3 percent (1.2 million pounds) in 1967. The portion of the total landings used for fish bait (sport and commercial fishing) continued to be small. About 1.8 percent (700,000 pounds) of the New Jersey landings were used as bait.

Landings in Rhode Island and Massachusetts remained insignificant and were used entirely for fish bait.

The shift in effort from Point Pleasant to Cape May was reflected in the proportion each area contributed to the New Jersey landings. Point Pleasant contributed 76 percent in 1966 but only 55 percent (22.9 million pounds) in 1967. Daily landings per boat ranged from 75 to 535 bushels (1,275 to 9,095 pounds of meats) and averaged 220 bushels (3,740 pounds). The average in 1966 was 332 bushels (5,644 pounds). The catch per hour (fig. 3) in 1967 averaged 25 bushels (425 pounds of meats); it was 35 bushels (593 pounds of meats) in 1966. Catch per hour remained generally steady during the year. Monthly landings fluctuated widely from 2.5 million to 1 million pounds of meats (fig. 4).

Weather was probably the most important factor influencing the size of the monthly landings.

Cape May-Wildwood

The Cape May-Wildwood share of the New Jersey landings increased from 22 percent in 1966 to about 44 percent (18.4 million pounds of meats) in 1967. Daily catches per boat ranged from 98 to 1,120 bushels (1,666 to 19,040 pounds) and averaged 233 bushels (3,961 pounds). This catch was a decrease from the average per day per boat of 315 bushels (5,355 pounds) in 1966. Catch per hour (fig. 3) averaged 34 bushels (578 pounds) as compared to 53 bushels (893 pounds) in 1966. Catch per hour was high in the first 2 months of 1967, but it declined sharply in April and continued a slow decline for the rest of the year (fig. 3). Monthly landings ranged from 1 to 1.9 million pounds of meats. Sizes of landings were irregular (fig. 4), probably as a result of weather.

Monthly averages of the lengths of surf clams landed at Point Pleasant fluctuated somewhat, and the general trend was downward during the year (fig. 4). The monthly average lengths were more uniform, however,

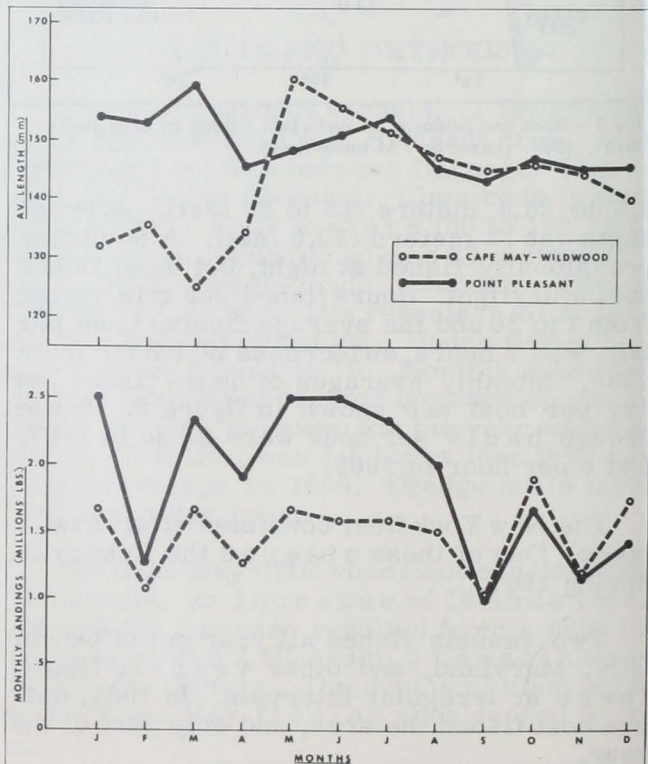


Fig. 4 - Monthly mean lengths of clams (upper) and landings of surf clam meats (lower) in New Jersey, 1967.

than those of clams landed at Cape May-Wildwood. The mean length of 4,440 clams sampled throughout the year at Point Pleasant was 149 mm. (6 inches); the range was 110 to 185 mm. ($4\frac{1}{3}$ to $7\frac{1}{4}$ inches). Mean length of clams landed at Cape May-Wildwood was based on measurements of 3,760 clams taken at random throughout the year. Mean length was 141 mm. ($5\frac{1}{2}$ inches); the range was 95 to 178 mm. ($3\frac{3}{4}$ to 7 inches). Monthly average lengths at Cape May-Wildwood increased sharply in May, and then decreased slowly for the rest of the year (fig. 4).

About twice as many clams less than 130 mm. (5 inches) long were discarded at sea than in 1966. About 3 bushels were discarded at sea for every 100 bushels landed at Point Pleasant, and about 6 bushels for every 100 bushels landed at Cape May-Wildwood.

STATUS AND TRENDS OF THE FISHERY

Fishing effort tended to shift southward in 1967. Some clam vessels left the Point Pleasant fishing area to dredge clams off Cape May. Five new boats joined the Cape May (N. J.) fishery, but only one was added to the Long Island, New York, fleet. Two boats fished full time and several others at irregular intervals out of Ocean City, Maryland, where only one fished part-time in 1966.

The average length of Point Pleasant clams was 149 mm. (6 inches) in 1967--2 mm. less than in 1966. The 1967 average length of Cape

May clams was 141 mm. ($5\frac{1}{2}$ inches), appreciably greater than the 130 mm. (5 inches) average length in 1966. The average length of Cape May-Wildwood clams increased because a decline in demand for smaller clams prompted more of the fleet to fish offshore rather than inshore.

Catch per hour decreased at Point Pleasant and Cape May. The decrease of 10 bu. per hour (29 percent) at Point Pleasant from 35 bushels in 1966 to 25 bushels in 1967 was reflected in the increased reliance on the Cape May area to provide clams for processing. The catch per hour at Cape May decreased 36 percent--from 53 bushels per hour in 1966 to 34 bushels per hour in 1967. The decreased rate of catch at Cape May was caused by the fleet shifting its efforts from the dense beds of small clams inshore to offshore beds. The fleet did this to obtain larger but scarcer clams needed by processors.

The number of vessels fishing off Ocean City, Maryland, will probably continue to increase in 1968 if the catch rate off Point Pleasant remains at its present level--and the demand for surf clam meats either holds firm or increases.

Although the New York surf clam fleet added one new vessel in 1967, the fishery is operating on rather limited beds off the southern shore of Long Island. Landings probably will not increase appreciably.

REFERENCES

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 1967a. The surf clam fishery. U. S. Fish and Wildlife Service, Coml. Fish. Rev., vol. 29, no. 2, pp. 55-58. (Also Sep. No. 780.)
- 1967b. The Atlantic surf clam fishery in 1966. U. S. Fish and Wildlife Service, Coml. Fish. Rev., vol. 29, nos. 8-9, pp. 64-67. (Also Sep. No. 797.)

