THE ATLANTIC SURF CLAM FISHERY - 1969

Allan M. Barker and John W. Ropes

The 1969 surf-clam fishery produced record landings of 49.6 million pounds of meats--9.7 million pounds more than in 1968. The New Jersey catch of 38.8 million pounds, an increase of 7.0 million pounds, almost equaled the total landings for 1968. Maryland and New York landings increased by 7.1 and 3.7 million pounds, respectively. The fleet size expanded and the southward shift continued. 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

FLEETS AND METHODS

Cape May-Wildwood, N.J., and Point Pleasant, N.J., were the major surf-clam fishing areas in the middle Atlantic bight in 1969; Ocean City, Md., and Long Island, N.Y., provided the remainder of the catch. The New Jersey fishery continued to contribute most of the total landings, although the 38.8 million pounds landed were a smaller percentage (78%) than in 1968 (Table). Landings from the Cape May-Wildwood area were almost twice those from Point Pleasant.

SURF CLAM LAND	INGS BY	AREAS	(1969)	
Area	Number of Vessels		Landings (Millions of lbs.)	
	1968	1969	1968	1969
Cape May-Wildwood, N.J.	42	43	18.0	24.8
Point Pleasant, N. J.	30	28	13.8	14.0
Ocean City, Md.	7	14	5.2	7.1
Long Island, N.Y.	7	7	2.9	3.7
Total	86	92	39.9	49.6

The areas fished by New Jersey boats in 1969 (Fig. 1) were similar to 1968 (Yancey, 1970) but more trips were made to the southern areas. The Ocean City, Md., vessels worked mostly inshore and north of the Ocean City inlet, as in 1968. The Long Island, N.Y., surf-clam landings were taken off Long Beach and Fire Island.

The New York fleet remained at 7 vessels (as in 1968) until late in the year, when one moved to New Jersey. The fleet, based at Freeport, L.I., consisted of 5 full-time and 2 part-time vessels; the latter landed clams for fish bait. Average catch per trip for the full-time vessels was 182 bushels (3,000 pounds of meats). Total landings of 3.5 million pounds of meats for food and 0.2 million pounds for bait resulted from average monthly landings of 180,000 to 575,000 pounds of meats.

The Point Pleasant fleet decreased for the third consecutive year--the 28 vessels were 2 less than 1968. Boats operating out of Atlantic City were included in the 1969 total because they fished the same beds as the Point Pleasant fleet. Depths fished ranged from 12 to 37 meters (40 to 120 feet); average depth was 23 meters (76 feet). Most vessels made 1-day trips, but some overnight trips were made to more distant grounds. Hours fished per boat-day ranged from 3 to 22. Monthly averages are shown in Figure 3. The average for 1969 was 9.5 hours, a decrease of 0.3 hour from 1968.

The Cape May-Wildwood fleet increased to 43, one more than 1968. Two large sterndredgers started operating in 1969. Depths fished ranged from 7 to 35 meters (22 to 114 feet); average depth was 14 meters (46 feet).

The authors are Fishery Biologists, NMFS Biological Laboratory, Oxford, Md. 21654.

COMMERCIAL FISHERIES REVIEW
Reprint No. 912

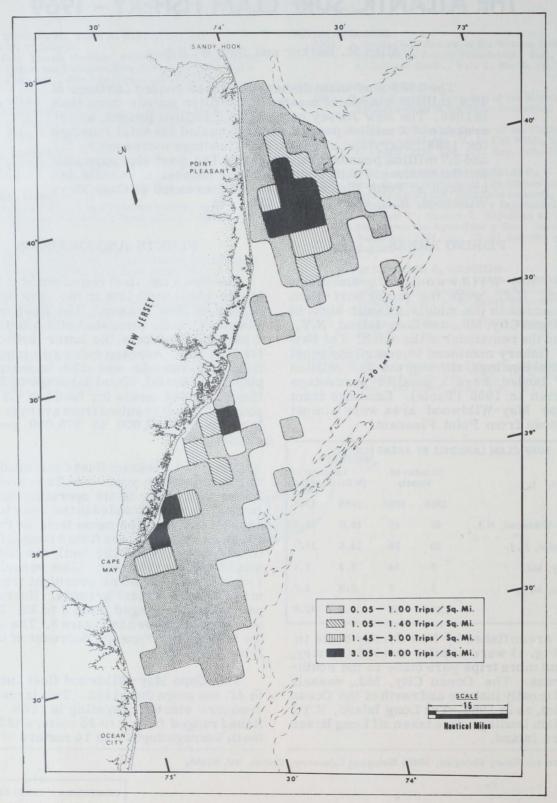


Fig. 1 - Area and intensity of surf-clam fishing by New Jersey fleet, 1969 (based on 1,955 interviews).

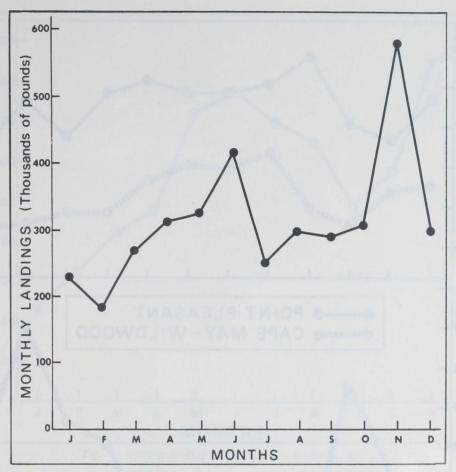


Fig. 2 - Monthly landings of surf clams in New York, 1969.

Most vessels made 1-day trips and worked during daylight hours. Monthly averages of hours fished per boat-day are shown in Figure 3. Daily effort ranged from 2 to 20 hours. The average for 1969 was 7.2 hours, a decrease of 0.7 hour from 1968. During the last half of 1969, 2 to 4 boats landed clams at Lewes, Del., the first landings there since 1962. These values were included with those for Cape May-Wildwood because 2 of the vessels were based at Wildwood and all of the clams came from the areas fished by the Cape May-Wildwood fleet.

The Ocean City fleet expanded to 14 vessels, an increase of 7 from 1968. Landings of 7.1 million pounds of meats in 1969 were the direct result of additional vessels using the port (Fig. 4). No interview data were available to determine catch and effort by boat.

NEW JERSEY LANDING STATISTICS

Interviews by a port sampler provided information on fishing areas and effort in New Jersey. Landings in the middle Atlantic bight were supplied by the NMFS Division of Statistics and Market News.

Record landings of 49.6 million pounds of meats were 9.7 million pounds higher than in 1968 (Table). Most of the increase was due to the greater poundage (6.8 million pounds) landed by the Cape May-Wildwood fleet. New Jersey produced 38.8 million pounds--7.0 million pounds more than in 1968. Maryland and New York landings also increased (1.9 and 0.8 million pounds). New Jersey landings were 78% of the 1969 total; Maryland, 14%; and New York, 8%. Contributions by the respective states in 1968 were 80%, 13%, and 7%. Less than 2% of the total catch was used for bait.

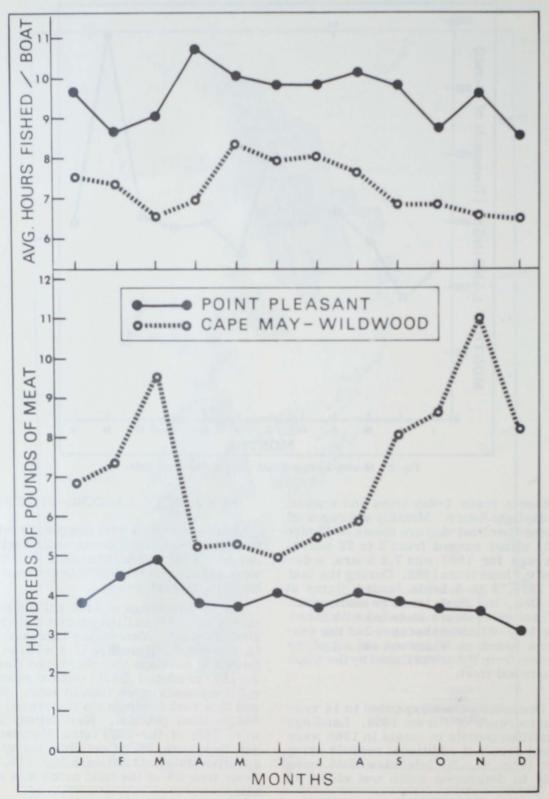


Fig. 3 - Monthly averages of daily effort (upper) and catch per hour (lower) at Point Pleasant and Cape May - Wildwood, N. J., 1969.

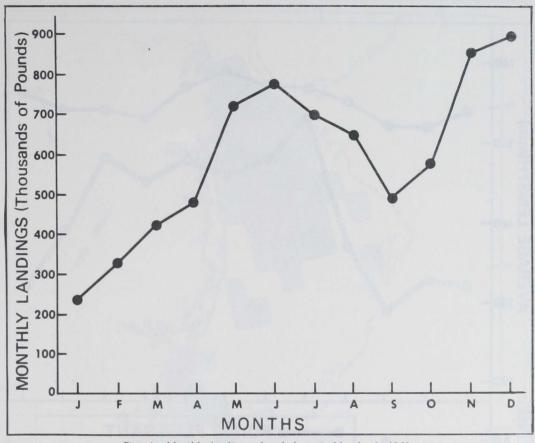


Fig. 4 - Monthly landings of surf clams in Maryland, 1969.

Cape May-Wildwood Fleet

Contributions to the total New Jersey landings by the Cape May-Wildwood fleet have increased markedly during the past 5 years. The number of vessels at Cape May-Wildwood and Point Pleasant was about the same as in 1968, but Cape May-Wildwood provided 62% (24.8 million pounds) in 1969 -- up from 57% in 1968. Much of the increase was due to the operation of 2 large stern-dredge vessels based at Wildwood.

At Cape May-Wildwood, landings per boatday ranged from 43 to 1,400 bushels (731 to 23,800 pounds of meats) and averaged 289 bushels (4,913 pounds). The average in 1968 was 225 bushels (3,825 pounds). Monthly landings varied little except in March, when a dense bed of small inshore clams off Atlantic City was heavily fished (Fig. 5). Catch per hour increased from 28 bushels (476 pounds) in 1968 to 43 (731 pounds) in 1969. Figure 6 shows the catch per hour in the areas fished. The catch rate dropped sharply in May when the fleet moved offshore to fish for large (150

mm) clams (Fig. 5). About two-thirds of all trips made in 1969 were to inshore areas. The average catch rate for inshore and offshore clams was 48 bushels (876 pounds) and 26 bushels (442 pounds) respectively. Monthly average lengths reflected the seasonal shift in effort from inshore to offshore beds (Fig. 5). Lengths of clams landed ranged from 109 to 187 mm (4.3 to 7.4 inches). The average length of inshore clams was 131 mm (5.3 inches); offshore clams average 155 mm (6.2 inches) long; and the average for all clams measured was 137 mm (5.4 inches) or 10 mm (0.4 inch) less than 1968.

Point Pleasant

The Point Pleasant share of the New Jersey landings decreased from 43% in 1968 to 36% in 1969. Most of the decrease was due to the higher landings at Cape May-Wildwood (36% larger than 1968). Landings at Point Pleasant per day-trip ranged from 32 to 600 bushels (544 to 10,200 pounds of meats) and averaged 221 bushels (3,757 pounds). The average in 1968 was 233 bushels (3,961 pounds). Catch

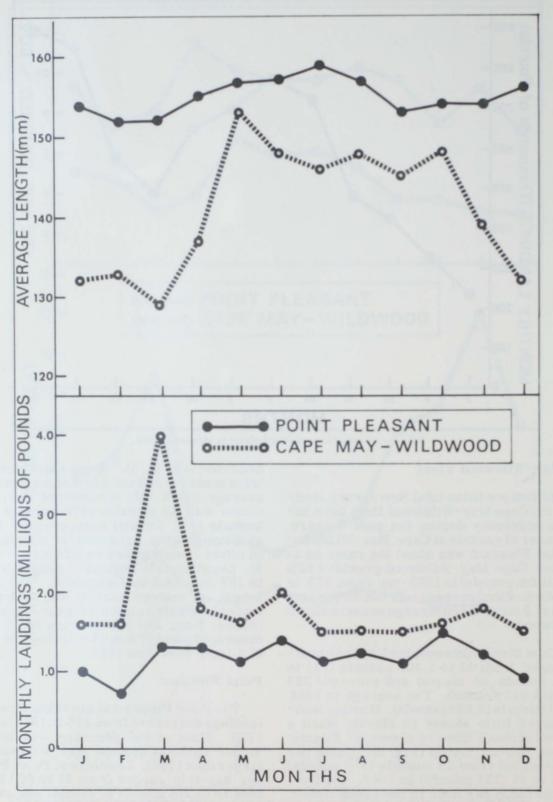


Fig. 5 - Monthly mean lengths of surf clams (upper) and landings (lower) in New Jersey, 1969.

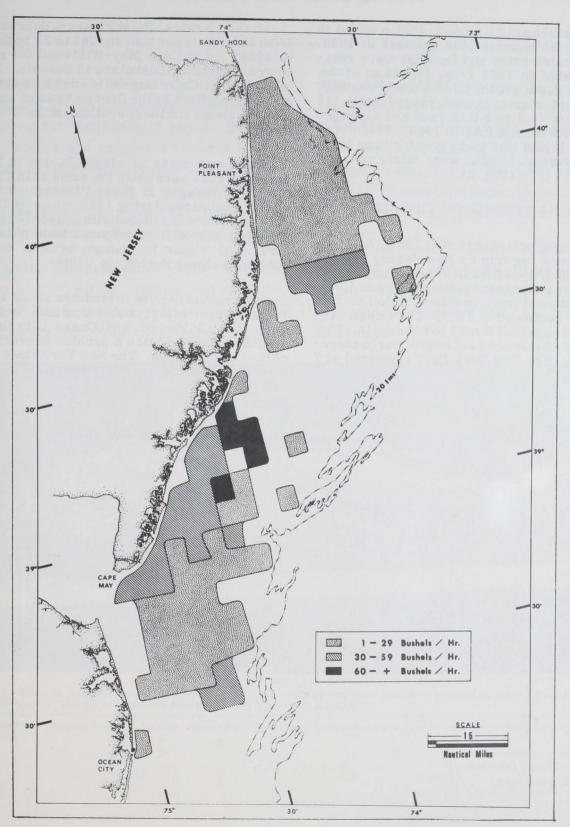


Fig. 6 - Catch per hour within the area fished by the New Jersey surf-clam fleet in 1969 (based on 1,955 interviews).

per hour averaged 23 bushels (391 pounds) in 1969 and 24 bushels (408 pounds) in 1968. Monthly catch rates and landings were relatively stable in 1969 (Fig. 5). Most of the variation was due to the effects of bad weather. Lengths of clams landed ranged from 116 to 203 mm (4.6 to 8.0 inches) and averaged 155 mm (6.2 inches) long in 1969. This average was 2 mm (0.1 inch) greater than 1968. Monthly average lengths were fairly constant throughout 1969 (Fig. 5).

STATUS & TRENDS OF THE FISHERY

Fishing effort increased in 1969. Although hours fished per trip by New Jersey vessels were slightly less than in 1968, about 6 more boats were added to the entire surf-clam fleet. The southward shift in effort, which started in 1967, continued in 1969. The Ocean City, Md., fleet expanded from 7 to 14 vessels. The Cape May-Wildwood fleet added 2 large sterndredgers. The New York fleet remained at 7 vessels.

The catch rate at Point Pleasant decreased from 24 bushels per hour in 1968 to 23 bushels in 1969, but at Cape May-Wildwood the rate increased from 28 bushels to 43 bushels. The high rate at Cape May-Wildwood was due to an intense effort by the fleet on beds of small inshore clams and the operations of the stern-dredgers.

Average lengths of clams landed in New Jersey in 1969 were about the same as in 1968. Monthly averages at Point Pleasant showed minor variations during 1969; those at Cape May-Wildwood fluctuated with season because the fleet moved from offshore beds of large (150 mm) clams to inshore beds of small (120 mm) clams during the winter.

The gradual decline in landings at the Point Pleasant port will probably continue, but the Cape May-Wildwood and Ocean City fleets should expand and catch a greater percentage of the total landings. The New York fleet will probably stabilize at its present size.

LITERATURE CITED

YANCEY, R. M.
1970. The Atlantic Surf Clam Fishery (1968). Commercial Fisheries Review 32 (8-9):40-46. (Also Reprint No. 883)

