

ECONOMIC VALUES

The minimum value derived from the utilization of marine resources from Wellfleet Harbor and adjacent Billingsgate area in 1969 was \$458,316 (Table 29). Sportfishing revenues of approximately \$134,000 were derived from 1,856 trips by one party boat and eighteen charter boats fishing the Wellfleet-Billingsgate area. Other than launching fees (\$1,700) from Wellfleet Town Ramp, no economic data was available on the shore and small boat sportfisheries in the harbor. No commercial finfishing was observed.

Quahogs accounted for 90% (\$286,500) of the \$319,140 derived from shellfish resources. Oysters accounted for 7.5% (\$24,000) and soft-shell clams 2.5% (\$8,640). Revenue to the Town in 1969 for shellfish permits totaled \$3,476.

The minimum marine resource yield/surface acre (6094 acres MHW) for Wellfleet Harbor was estimated at \$75.

Table 29. *Minimum Economic Values Derived from Marine Resources of Wellfleet Harbor - Billingsgate Area, 1969*

Finfish	
Party and charter boat fees	\$134,000
Launching ramp fees	1,700
SUB-TOTAL	\$135,700
Shellfish	
Commercial	\$297,120
Recreational	22,020
License fees	3,476
SUB-TOTAL	\$322,616
GRAND TOTAL	\$458,316

SUMMARY

"A Study of the Marine Resources of Wellfleet Harbor" is the twelfth report published by the Division of Marine Fisheries relating the extent and value of marine resources in the major bays and estuaries in Massachusetts. The study was conducted in Wellfleet Harbor from September, 1968 through August, 1969.

Thirty-five finfish species were recorded from the harbor. Most abundant were the Atlantic silverside, mummichog, striped killifish, winter flounder and Atlantic menhaden. Juveniles of many economically important species were sampled including alewives, Atlantic mackerel, Atlantic menhaden, blueback herring, bluefish, northern kingfish, tautog and winter flounder. Species available to the sportfishery were Atlantic cod, Atlantic mackerel, bluefish, northern kingfish, striped bass, tautog and winter flounder. A large charter boat fishery for striped bass was carried on at the adjacent Billingsgate Shoal area.

The estimated wholesale value of the 1969 Wellfleet shellfish harvest was \$319,140. The quahog

harvest accounted for 90% of shellfish revenues. Wellfleet has one of the largest natural oyster populations in the Commonwealth and in 1969 2,400 bu were harvested. A small fishery for soft-shell clams was also carried on.

Twenty-eight species of plants were collected in conjunction with finfish sampling: five green algae, six brown algae, five red algae and twelve vascular plants. There were approximately 1,117 acres of salt marsh bordering the study area. Three hundred acres were owned by the Audubon Society, 150 were in the Cape Cod National Seashore Park, 22.4 were town owned and the remaining 443 were under private ownership.

Wellfleet Harbor was found to be generally free of pollution. Water quality was favorable to a wide variety of economically important marine species.

The minimum value derived from the utilization of marine resources from Wellfleet Harbor in 1969 was \$458,316. The minimum resource yield/surface acre for the harbor was estimated at \$75.

RECOMMENDATIONS

The following recommendations are made to aid in the management and wise utilization of the marine fisheries resources of Wellfleet Harbor. It is recommended that:

1. . . . adequate passage for alewives be provided past the Herring River Dike.
2. . . . after passage is provided through Herring River, the headwater ponds be stocked with alewives for 4 years to return the run to its potential.
3. . . . the town of Wellfleet apply under Section 94 of Chapter 130 to regulate and control alewife fisheries.
4. . . . three town quahog beds be established for recreational fishing.
5. . . . Town quahog beds be closed for at least one spawning season after stocking in an effort to establish quahog set on the beds.
6. . . . if quahog seed becomes available at an economical price, town beds should be stocked with seed and closed until quahogs become legal size.
7. . . . town quahog beds be opened and closed to harvesting on a rotational basis.
8. . . . illegal shellfish grants be eliminated. All areas suitable or potentially suitable, for grants be surveyed and grants leased only to responsible people under the provisions of Section 57 of Chapter 130 of the General Laws of the Commonwealth.
9. . . . oyster grant operators be required to replace all shell removed from grants and add additional cultch to alleviate the cultch deficiency.
10. . . . seed that grant owners are allowed to remove from non-grant areas be restricted to reduce exploitation of seed throughout the bay and increase the number of oysters available to the recreational fishery.
11. . . . the town propagation area on Mayo Beach be enlarged and more cultch provided during the spawning season.
12. . . . the area just below the Herring River Dike remain under town control.
13. . . . a town oyster propagation area be established at Duck Creek, where spat collecting potential appears to be great. Large quantities of gravel and cultch are needed to improve this area.
14. . . . the flats along the eastern shore of Great Island be considered for a town oyster propagation area.
15. . . . all oyster propagation areas be closed to all shellfishing until parent stock is built up, and then opened on a rotational basis to provide expanded recreational fishing area.
16. . . . the practice of closing areas populated with sublegal soft-shell clams, until the clams reach legal size, be continued in order to sustain harvestable concentrations.
17. . . . the Department of Public Health monitor this area for the presence of coliform bacteria, pesticides and other sources of pollution. This should be part of a continuing study along the entire Massachusetts coastline.
18. . . . the local Board of Health and State Division of Water Pollution Control rigidly enforce regulations pertaining to the discharge of domestic sewage thereby assuring continuance of high water quality.
19. . . . the discharge of sewage from boats in the harbor be prohibited to insure maximum utilization of marine resources, and to protect the public health.
20. . . . within 10 years Wellfleet Harbor be restudied and the findings compared with the findings of this study and its recommendations.