

The types of fishing boats in use vary from small craft to 60-foot tugs, and types of gear vary from the most common gillnets, pound-nets and trap-nets, seines and baited hooks to small hand-operated seines and dip-nets. Fishing methods and equipment have been modernized rapidly during the past few years. Diesel-driven steel-hull tugs have replaced steam-driven wooden tugs. Such aids as depth-sounding devices, radar, ship-to-shore and ship-to-ship communications have been developed and a better knowledge of the fish and their movements has been established from biological research findings. Modern icing facilities and transportation methods are in use as well as new types of fishing gear.

Most Ontario fishermen are organized into various local associations. These associations are, in turn, represented by the Ontario Council of Commercial Fisheries and by the Lake Erie Fisheries Council, which perform important services to the industry. The Ontario Fishermen's Co-operative and its member groups are of interest also in the organization of the fishery in the province.

Angling.—The sports fishery in Ontario is rapidly becoming one of the major industries of the province. With an estimated freshwater area of some 68,490 sq. miles, the province is one of the most attractive fishing areas on the Continent. Excellent angling opportunities are available for such prized fish as lake, speckled, rainbow and brown trout, yellow pickerel, black bass, pike and maskinonge. It is difficult to measure the total value of the sports fishing industry to the province but the annual revenue from the sale of angling licences alone (mainly to non-residents, as residents require a licence for provincial parks only) is in the neighbourhood of \$2,500,000. The management of this valuable resource is administered by a well-trained field staff of conservation officers and biologists located in the 22 forestry districts of the province.

Provincial Hatcheries.—Ontario operates 20 hatcheries and rearing stations and excellent results have been produced in the culture and distribution of various species of game and commercial fish. The primary species reared in these operations include trout (lake, speckled, brown and rainbow), maskinonge, bass, whitefish and yellow pickerel. Four of the finest trout-rearing stations on the Continent are located in this province—at Dorion near Port Arthur, Sault Ste. Marie, Hills Lake near Englehart, and Chatsworth.

Fisheries Research.—Research in Ontario is carried on in the Great Lakes and in inland waters. At the South Bay Mouth Station on Manitoulin Island in Lake Huron, Wheatley on Lake Erie, and Glenora on the Bay of Quinte on Lake Ontario, fishery biological stations are operated for the investigation and study of the commercial and sports fisheries on the respective lakes. In Algonquin Park detailed studies concerning lake trout and smallmouth bass are in progress and management techniques are being tested against a background of creel census which has been continuous since 1936. Studies of speckled trout have recently been re-instituted after a five-year break in continuity.

A selective breeding experiment concerning the hybrid between lake trout and speckled trout is progressing favourably. The deep-swimming character of the lake trout and the character of maturity at early age of the speckled trout are those being selected for combination in the hybrid.

Co-operation by Ontario in the field of gear development is being extended through the Federal-Provincial Committee for Ontario Fisheries and in the field of sea lamprey control through the Great Lakes Fishery Commission.

Manitoba.—The freshwater fishery in Manitoba is assuming an increasingly important position in the economy of the province. Although, at the dictates of nature, the industry experiences periods of boom and recession, it is nevertheless constantly expanding. Production in 1959 of 31,931,600 lb. valued at \$6,253,524 provided full-time or part-time employment for 5,682 fishermen. In addition, at least 6,000 persons were engaged in subsidiary industries such as fish-processing, transportation, boat-building and other related industries.