

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 Great Lakes. In Algonquin Park a careful record of angling quality is kept for a number of test lakes to allow evaluation of management techniques. Certain of the more barren lakes are being treated with fertilizer to determine the effects of microscopic organisms and fish.

The habits of lake trout and eastern brook or speckled trout are being studied to provide additional information on the proper management of these species. Many authorities believe the increase in the sea lamprey and the drastic drop in production of lake trout in recent years in Lake Huron (including Georgian Bay, North Channel and Lake Superior) to be directly related and this has led to an International Agreement between Canada and the United States and the establishment of the Great Lakes Fisheries Research Commission for the co-ordination and direction of the fisheries research program, particularly as it is applied to the control of the sea lamprey menace. Co-operation is maintained by the exchange of biological findings and, where practicable and feasible, the results are applied in an attempt to control this menace. (See also p. 586.)

Established fish-management principles are applied by biologists in the various forestry districts. The program includes such projects as biological surveys and investigations, bass harvesting, coarse fish removal, creel census studies, fish tagging and other related subjects.

Manitoba.—For the year ended Mar. 31, 1957, the freshwater commercial fisheries of Manitoba, made possible by nearly 39,255 sq. miles of lakes and streams in the province, yielded a catch of 30,395,800 lb. of choice edible fish, the market value of which was \$5,390,267. Fifteen varieties of fish make up the commercial catch, the most important, according to value, being pickerel, whitefish, sauger, pike and tullibee. In addition to commercial production, sport fishing yielded a considerable poundage.

The fisheries of Manitoba provide a rich harvest of protein food, about 90 p.c. of which is sold to United States dealers. Actual fishing operations employ about 5,400 men and at least a similar number find total or partial employment in the many industries dependent wholly or in part on the fisheries.

Since the commercial fishing industry began in Manitoba about 75 years ago, equipment has improved and methods of handling fish have changed to meet modern demands for a packaged product ready to serve or convenient to cook. Oars and sail have given way to high-powered internal combustion engines and boats that can lift nets in almost any weather. Coarse linen gill-nets have also disappeared in favour of the finest of nylon gill-netting. In marketing, whole fish packed in ice is being replaced, in part at least, with a packaged filleted product, or pre-cooked items. Throughout the fishing industry there is a keen appreciation of the necessity of producing a first-quality product, convenient to prepare, attractively packaged, and appealing to the eye, palate and the cook. The city of Winnipeg has become one of the largest freshwater fish marketing centres on the Continent and the provincial Department of Mines and Natural Resources maintains a city patrol service to ensure, as far as is possible, that only fish of first quality is marketed or offered to the consumer. This patrol operates in co-operation with officials of the federal Department of Fisheries. To regulate the fishery operation and to ensure that seasons and limits are observed, the Fisheries Branch of the provincial Department operates a fleet of patrol boats in summer and a number of snowmobiles in winter.