

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.

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, 1956, 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 34,936,600 lb. of choice edible fish, the market value of which was \$6,146,761. Fifteen varieties of fish make up the commercial catch, the most important, according to value, being pickerel, whitefish, sauger, pike and perch. In addition to commercial production, sport fishing yielded a considerable poundage.

The fisheries of Manitoba provide a large harvest of rich protein food about 90 p.c. of which is sold to United States dealers. Actual fishing operations employ over 6,000 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 precooked 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 bombardier snowmobiles in winter.

Four fish hatcheries are engaged in the artificial propagation of pickerel and whitefish on commercial fishing lakes and a trout hatchery provides a supply of lake, rainbow and speckled trout for sport fishing waters at the northern extremity of West Hawk Lake in Whiteshell Provincial Park.

**Saskatchewan.**—The fisheries of Saskatchewan are administered by the Fisheries Branch of the provincial Department of Natural Resources with head office at Prince Albert. Most of the fisheries resources are concentrated in the northern half of the Province where the lakes have always been a source of food to the fur traders, trappers, prospectors and the Cree and Chipewyan Indians who inhabit the area; they also provide food and supplementary income to settlers and homesteaders on the agricultural fringe.

There are approximately 135 commercially fished lakes in the Province and the principal species of fish include lake trout, whitefish, pickerel, northern pike, sturgeon, cisco, Arctic grayling, goldeye, mullet, perch and burbot. The growth of the filleting industry has been of particular significance, 12 filleting and 11 packing plants having been established since 1945. The importance of the fishery resources to mink ranchers in the Province is shown by the fact that in the year ended Mar. 31, 1956, 78 fur-farm fishing licences were issued and 43,167 mink were fed under these licences; 722 domestic licences and 1,769 free licences to Indians were also issued.