

lb. of lake trout. Approximately 1,500 commercial fishermen harvested a record of 14,515,030 lb. of fish (all species) with a market value of \$3,165,696. The value of this production to the primary producer was \$1,385,423. The 14 processing plants operating in the province produced 2,682,149 lb. of fillets. There has been noted improvement in handling and processing methods. A program for the development of improved harvesting techniques and production equipment is being undertaken to assist the commercial fisherman to increase his efficiency as a producer. Interest has been expressed by the fishermen in a boat-building program, which has been facilitated by the Fisheries Branch providing the blue prints and assisting in the construction of boats in a number of fishing areas.

During the 1961-62 fiscal year, 1,256 domestic fishing licences were issued and an estimated 1,256,000 lb. of fish harvested; 276 free Indian permits were issued and 73 fur farm fishing licences. Mink ranchers utilized 5,610,310 lb. of coarse fish (mainly burbot, suckers and cisco). Sport fishing continues to be the main outdoor recreational attraction in the province; in 1961-62, 96,623 angling licences were sold, 87,777 of them to residents.

During the past 15 years, biological and fisheries investigations have been carried out on major water bodies ranging from the Precambrian Shield to southern agricultural areas. Study projects are conducted by the Fish Research Division to: (1) determine productivity of water bodies; (2) secure information on relationship of fish species; (3) investigate ecology and assess factors which may affect environment of fish; (4) develop techniques to achieve maximum harvest of fish populations without prejudice to continued production. Among the 11 major projects carried out during 1962 was the examination of saline lakes reported to contain brine shrimp (*Artemia salina*); observations suggest that populations of brine shrimp exist in most of the major sodium sulphate lakes of Saskatchewan. Basic limnological and fisheries surveys were continued on lakes in the Precambrian area, along the highway from Lac la Ronge to the Churchill River and the Hanson Lake road and on provincial park lakes. The creel census project on Lac la Ronge was carried out for the twelfth consecutive year.

Lake trout, northern pike, pickerel (walleye), rainbow and eastern brook trout eggs were incubated and hatched at the Fish Culture Station located at Fort Qu'Appelle. In addition, 215,000 Kokanee fingerling were stocked in Madge Lake on an experimental basis and whitefish fry were stocked in four water bodies. In all, 71 lakes were stocked with 29,827,000 fry, 576,550 fingerling and 3,157 yearling and adults.

Alberta.—Commercial and game fishing is administered by the Fish and Wildlife Division of the Department of Lands and Forests under authority of the Fisheries Act (Canada) and the Fishery Act (Alberta).

Commercial production of fish from Alberta waters in 1962 amounted to 9,263,000 lb. which had a market value of \$1,416,000. This represented a considerable decrease from the production of the previous year, the result of a 50-p.c. reduction in the catch from Lesser Slave Lake which usually amounts to about one half the provincial total. Whitefish accounted for about one third of the catch and 60 p.c. of the market value; other fish taken in order of market value were pickerel (walleye), tullibee—a low-priced animal food fish—northern pike, lake trout, yellow perch, burbot, sucker and goldeye.

Fisheries research at the Alberta Biological Station at Gorge Creek during 1962 involved a study of the relationship between stocking rates and the mortality of hatchery trout stocked in streams. Biological studies and investigations included sampling of populations to determine growth and abundance, analysis of basic lake productivity, and comprehensive continuing studies of major commercial lakes. In connection with sport fisheries, eleven lakes and a number of streams in the North Saskatchewan, Athabasca and Churchill drainages were examined and coarse fish removed with the use of chemicals in seven lakes and three streams in preparation for trout stocking. Study of the recovery by anglers of hatchery-reared trout was continued on Carbondale River and Jumping Pound Creek and evaluation of trout-stocking practices in lakes was conducted by creel census at two locations in the province.