

stocks of herring in the Gulf of St. Lawrence and great possibilities are entertained for the future of the herring fishery as a food product when and if markets can be developed for them. The Fisheries Research Board of Canada, which conducts the biological research so essential to the full development of Canada's fisheries, has conducted an extensive program of exploratory fishing over several years, using various European-type fishing nets and trawls. In the southwestern portion of the Gulf of St. Lawrence in 1953 the Board used drift-nets and brought in catches of herring more than double the yield that a similar effort would produce in the North Sea.

Salmon, smelts and alewives are trapped as they enter the river mouths on their way to spawning beds, while mackerel and tuna are netted in open water. Swordfish, and sometimes tuna, are pursued with harpoons. Smelts are caught mainly in New Brunswick, a large share of the catch coming from the Miramichi River. The commercial Atlantic salmon fishery is limited only by the availability of supply. For some years the catch has shown a steady decline and a federal-provincial committee is now directing a research program designed to determine the causes of the decline and to rehabilitate the fishery.

Like the Atlantic salmon, the Maritime oyster fishery is limited only by the supply. Famed among epicures and always in great demand, the oyster is a slow-growing bivalve and the fishermen with their tongs can remove them from the beds much faster than they can be replaced by natural reproduction. The fisheries scientists have experimented with methods of oyster cultivation and considerable success has been achieved. The areas of sea bottoms suitable for oyster growth are limited, however, and progress in the expansion of this industry through oyster farming is slow and uncertain.

One of the most interesting developments resulting from experimental fishing techniques demonstrated by the Fisheries Research Board was the introduction of dragging operations for flatfish in the coastal waters of Nova Scotia. The flounders, witch and plaice had never been exploited by the fishermen until the Board showed how it could be done with small drag-nets. The fishery has flourished into an important industry in the larger Nova Scotia bays, creating a new source of income for the fishermen.

Whales and seals are numerous in Atlantic waters around Newfoundland and have been the basis of important industries in that Province. But markets for the oil have been declining since 1952, resulting in a decrease in activities. In 1951, 585 whales were taken by six whaling ships operating out of Hawkes Harbour, Labrador, and Williamsport in White Bay. In addition, 55 minke whales and 3,102 potheads (blackfish) were caught at Dildo in Trinity Bay. In the following year markets were so unattractive that the larger whaling factories did not operate and most of the catch consisted of potheads.

The Newfoundland seal fishery, which is steeped in tradition, centres around two species of seals, the harp or "saddleback" and the hood or "bladdernose" In the winter they migrate from their homes within the Arctic Circle south to the Grand Banks of Newfoundland. The size of the herd has been estimated at about 3,000,000 seals. In the spring when they start moving north again the sealing fleets from Norway, Denmark and Newfoundland make the kill. At one time, about 400 Newfoundland vessels carrying 13,000 sealers took part in the hunt. In 1953, only three Newfoundland vessels and two other vessels operated by Nova Scotia interests cleared from St. John's for the sealing grounds. The adult seals are taken for the oil, which is extracted from the blubber, and the pups are taken for their fur.