

the latter with a view to improving fish cultural and farming methods and also to improving fish farm and hatchery stocks. Besides these basic studies, new fishing grounds and new species for exploitation are sought and experiments in improving fishing methods are undertaken.

The biological work on the Atlantic Coast is conducted out of research stations located at St. Andrews, N.B., and St. John's, Nfld.; work on Arctic fisheries and on sea mammals is directed from a laboratory situated in Montreal, Que.; freshwater work is carried out from a station in London, Ont.; and work on the Pacific Coast is directed from research laboratories situated at Nanaimo, B.C. The Board operates 15 research vessels for its biological studies. These vary from small inshore and lake craft to large seagoing ships specially built for this purpose. The Board also acts as Canada's research agent for three international fisheries commissions and two international sea-mammal commissions to which Canada is party.

*Oceanography.*—Oceanography includes the study of the marine (and freshwater) environment in which aquatic organisms live. This is under continuing study to further knowledge in primary and secondary productivity and the occurrence of ocean and freshwater life of importance to man. Encompassed here also are investigations into the distribution and physical and chemical characteristics of major ocean currents and the physical and biological structure of large ocean areas including the ocean bottom where concentrations of fish and other aquatic life occur. Ocean climate and ocean weather as they affect the distribution of fish and other living organisms as well as the vertical and horizontal distribution of nutrient matter and the cycle of energy and life in the seas are regularly observed and correlated. These studies, as well as special studies of interest to the Royal Canadian Navy, the Department of Transport and the international fishery commissions, are carried out by the Board's two oceanographic groups operating from Halifax, N.S., and Nanaimo, B.C., with strong ship support from the Navy and the Department of Transport.

*Technology.*—Technological studies in general are aimed at making the best possible use of Canada's fish catches. Investigations are conducted toward improving methods of preserving, processing, storing and distributing fish products, as well as of utilizing all parts of the fish including parts now wasted. These include developments in refrigeration and the use of antibiotics as fish preservatives, of improved refrigerated rail cars for fish distribution, improvements in canning, smoking and salting of fish as well as the development of new products such as protein concentrates (fish flour) and new uses such as the development of wieners for the utilization of abundant species that are not now used for food. Fundamental studies of the structure and composition of fish proteins, fish oils, fish hormones, the energy expenditure of migrating salmon and the nutrition of marine bacteria are also under way. In recent years handling and processing techniques have been investigated for the purpose of increasing over-all production efficiency and improving the product.

Technological investigations on the Atlantic Coast are carried out at research laboratories situated at Halifax, N.S., and Grande Rivière, Que., and applied work for Newfoundland is carried out at a Technological Unit at St. John's. For inland areas there is a Technological Unit in London, Ont., and a Technological Research Laboratory in Vancouver, B.C., undertakes investigation of Pacific Coast problems.

**The Fisheries Prices Support Board.**—Under the Fisheries Prices Support Act passed in 1944, this Board was set up in July 1947 to recommend to the Government price-support measures when severe price declines occur. The Board functions under the direction of the Minister of Fisheries and consists of a chairman, who is a senior officer of the Department of Fisheries, and five members chosen from private and co-operative firms in the industry, representative of the various fish-producing regions of Canada.