

are found throughout much the same region as pollock. The development of a stronger market for groundfish products could be expected to lead to increased utilization of these species.

The common or striped wolffish occurs mainly in the southern part of the Atlantic Coast area and the spotted wolffish farther north. Wolffish are, like cusk, excellent food-fish, being marketed chiefly as ocean catfish fillets, but the density of stocks is low and they are usually caught incidentally in line fishing or dragging for other species. Like halibut, the wolffish would be taken more intensively only if there were a substantial increase in their price relative to cod prices.

Turbot, or Greenland halibut, is a flatfish species caught with line gear principally along the northeast coast of Newfoundland. At present it is salted and dried, but expansion of the fishery could follow development of facilities to market it in fresh or frozen forms.

There are substantial stocks of skate and dogfish in Atlantic waters but little use is being made of either, although both species could be utilized for food or for reduction into fish meal and oil. Some skate is caught incidentally but there is no demand for dogfish as a food, and evidently a fishery for reduction purposes would not pay in the present state of technology and demand for the products.

#### PACIFIC SPECIES

Pacific halibut are found on the Continental Shelf from the Aleutian Islands to Juan de Fuca Strait, mostly in depths of 30 to 250 fathoms. Line gear is used mainly but some are taken by trolling. The bulk of the catch is marketed in frozen dressed form. The total catch of about 60,000,000 lb. annually, of which the Canadian portion is somewhat less than 40 p.c., is estimated to be about 9 p.c. of stocks. On the basis of the recovery of the stocks over the past twenty years, a moderate increase in exploitation is considered feasible. The fishery is under the control of an international commission under the Northern Pacific Halibut Convention of 1953 between Canada and the United States, the first agreement for joint regulation of the halibut fishery having been signed in 1924. An annual catch quota has been maintained and competition among fishermen for a higher share of the quota has resulted in a pronounced increase in the size and efficiency of the halibut fleet.

The grey cod is the true cod of the Pacific and is related to the cod of the north Atlantic. The species is abundant in Hecate Strait and off the west coast of Vancouver Island. Otter-trawlers account for the greater part of the catch but small quantities are taken incidentally by line fishermen. The catch is landed dressed and then filleted for freezing, but some is sold in the fresh market or smoked. Canadian annual landings of grey cod are 4,000,000 to 5,000,000 lb.—less than one-half of the total catch.

The blackcod or sablefish is not a true cod but a member of the skilfish family. Most of it is taken in the off-season for halibut, with line gear in deep water at 70 to 250 fathoms off the Queen Charlotte Islands and the coast of Alaska. The major part of the catch is smoked. The Canadian catch of about 1,500,000 lb. is one-quarter of the total.

The lingcod is one of the larger commercial fish of the Pacific Coast, found from California to Alaska in both shallow and deep water. The greater part of the British Columbia catch is taken with line gear but some is taken by jigging and with otter-trawls. Lingcod are marketed either fresh or frozen, whole or filleted. The liver oil has a high vitamin A content. The volume of catch as well as the price received by the fisherman has varied widely from year to year.

There are 23 or 24 species of rockfish on the British Columbia coast, of which about ten have been fished quite heavily during the past decade for the fresh and frozen fillet trade and for fish stick production. They are taken over a wide range of depths up to 300 fathoms with hand-line, long-line, and trawls. The annual catch is about 9,000,000 lb.—but only 10 p.c. of it by Canadian vessels. Rockfishes are slow growing and it is unlikely that the present catch rate, based upon accumulated stocks of older, larger fish, can be long maintained.