

## 7.—NOTES ON THE HALIBUT FISHERY OF THE NORTHWEST COAST IN 1895.

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The halibut fishery of the northwest coast has developed into an industry of considerable importance, there being double the number of vessels engaged in it that there were four years ago. The demand for this fish five years ago was mostly limited to local orders; now large shipments are made to all parts of the West. For the past two winters important shipments have been made to the Atlantic Coast by Canadian fishermen. The American catch finds a market in the States west of the Mississippi River. There being less demand for halibut in summer, the Canadian vessels continue in the fishery only a part of the year.

In 1890 there were landed at various points on Puget Sound 740,000 pounds of halibut, valued at \$16,750. In 1891 the amount increased to 994,000 pounds, valued at \$23,620, and in 1892 to 1,410,000 pounds, representing a value of \$29,140. The amount caught continues to increase yearly. From estimates made by wholesale dealers and fishermen it is safe to say that about 2,500,000 pounds were landed in Puget Sound in 1895. Two-thirds of this amount were taken in northern waters on banks off Cape Scott, Vancouver Island, Rose Point, and North Island, which lie off the northern end of Queen Charlotte Island.

For several winters past, one and sometimes two steam vessels have fished for halibut on the northern banks, sailing from Vancouver, British Columbia. At first the enterprise was not very successful, owing to the limited demand for halibut and also to the inexperience of the fishermen. But it did not take long to find the best fishing-grounds, and much valuable time was thus saved. The success of these vessels caused dealers and fishermen of the East to become interested, and soon their capital was invested, and in the winter of 1895-96 three steam vessels were fishing for halibut on the northern banks. Two sailed from Vancouver and one from Victoria. At Vancouver the fishery is under the management of Americans and is controlled by American capital. It is estimated that the catch of these vessels was nearly half that of the American fleet, or about 1,000,000 pounds, nearly all of which was exported to the United States. Fish landed at Victoria was shipped to Tacoma; that which came into Vancouver was shipped east over the Canadian Pacific Railroad, and distributed over the Eastern States.

When this fishery began on the Pacific Coast, Port Townsend was its center, on account of having better harbor accommodations than most places on Puget Sound, but for the past few years Tacoma and Seattle, chiefly the latter, have absorbed the business. This was brought about by their having much better shipping facilities and a larger population. Now only an occasional fare is landed at Port Townsend. At one time there were three wholesale and retail fish-dealers here, but during the past year there has been only one.

Nearly all the halibut caught on local banks and in northern waters by American fishermen is landed at Seattle and Tacoma. Fairhaven and Whatcom, during the past two years, have made shipments of halibut, but only in a small way as compared with Seattle; herring, smelts, and salmon are the fish mostly shipped from this northern part of Puget Sound. This industry has increased 50 per cent in the past year.

In 1895 there were 48 small boats sailing from Port Townsend, Seattle, and other places on Puget Sound engaged in this fishery. These boats ranged in size from 5 to 10 tons; most of them were sloops, but a few were schooners. They carry a crew of 2 to 4 men. The smallest confine their fishing to the banks off Cape Flattery and in the Straits of Fuca. A few of the larger boats make occasional trips to Cape Scott and the Queen Charlotte Islands.

In addition to the small boats there is a fleet of 10 larger ones, ranging from 18 to 40 tons, averaging about 25 tons. Most of these are schooner-rigged and were built for the halibut fishery. This style of craft is the outgrowth of the small boats first used. As more northern waters were sought, it was found that boats under 10 tons were too small either for comfort or safety. They can be run economically, but the amount they carry is too small for the voyage to be remunerative. A few fishermen have talked of introducing sailing vessels of from 75 to 100 tons in this fishery, similar to those employed on the Atlantic Coast. Such vessels would be very expensive, and it is claimed that they would be less profitable than the vessels now employed. The banks on this coast not being so large as those on the Atlantic, a fleet of 10 or 12 large vessels fishing in one locality would soon temporarily exhaust the supply, and considerable time would be lost in searching for new grounds. The experience of the past few years shows that vessels of from 30 to 40 tons are best suited for the halibut fishery on the Pacific Coast, and are the type most likely to be used in the future.

In spring most of the small boats and some of the large ones fish on Flattery Bank and adjacent grounds. As the season advances halibut in this region grow scarce and better fishing is found on local "spots" in the Straits of Fuca. During the spring and summer months good fishing is found on small banks off the San Juan Islands and in the vicinity of Port Townsend.

As the halibut fishery has increased, fishermen have been searching for new grounds. The first ground of any importance discovered north of Cape Flattery Bank was in the vicinity of Cape Scott, on the northern end of Vancouver Island. Halibut were found here in considerable numbers and it was thought that the ground covered a large area, but it was soon learned that the bank was small and the best localities confined to small patches, found only by landmarks. On these places fish are sometimes very abundant, but no extensive fishing can be carried on. A fleet of vessels would soon exhaust the supply. Fishermen say that halibut on this ground are now very scarce as compared with two years ago.

The character of the bottom on the Cape Scott ground is rocky. The weather here at times is very stormy, making fishing very difficult. Foggy weather prevails for many days at a time, and at such times when fish are scarce in one place it is not easy to find another ground, owing to the landmarks being hidden from view.

On several occasions halibut on this ground have suddenly disappeared, and on investigation they were found on the north side of Hecate Strait, in the vicinity of Provost Island. It was reported that a prolific ground was off Lyall Island, from 5 to 8 miles off shore, but only small catches have been taken there.

One of the best grounds yet discovered lies off the northern end of Graham Island, between Rose Point and North Island. All along this shore, a distance of 60 miles, good fishing is found in from 25 to 40 fathoms of water. The bottom is chiefly sand. Fish are found here in considerable numbers at all seasons, but they are more abundant in the winter and fall months.

From Rose Point southward below Cape Fife nearly to White Cliffs, a distance of nearly 30 miles, halibut are abundant. The bottom is sandy, and the water very shallow, from 4 to 5 fathoms being the depth where the most fish are taken. Vessels on this ground are frequently in a dangerous position, there being many bars and shoals not located on the chart. When fishing off the northern end of Graham Island, the only shelter to be had when a gale suddenly comes on from the northwest is under the southeast side of Rose Point. If vessels are fishing on this side of the island, and the wind increases fresh from the eastward, they are compelled to seek shelter on the west side of Rose Point. When the wind blows here with any great force, the sea becomes very rough. Fishermen say that it is a dangerous locality, and those not thoroughly acquainted should give it a wide berth.

Across Dixon Entrance, on the south side of Prince of Wales Island, in the vicinity of Nicholas Bay and Cape Chacon, a few schooners have taken good fares. Here, as at Cape Scott, the ground is made up of small "spots," which can only be located by landmarks. Only a few vessels can fish on this ground; it is said that even a small fleet would soon exhaust the ground, not permanently, but for some weeks. The Indians of this locality catch halibut here in considerable numbers, and from these people the white fishermen soon learn the best places.

The best banks, so far as discovered, are in the Canadian waters; few places in southeastern Alaska have been found where halibut are in such abundance as on the above-mentioned grounds.

Canadian vessels fish mostly on grounds off Banks, Goschen, and Stephens islands, which lie on the east side of Hecate Strait. The bottom is composed of sand, shells, and patches of rock, with a depth of water varying from 6 to 35 fathoms. A bank makes off from the Warrior and Seal Rocks and extends nearly across the Strait to Cape Fife.

From the northern end of Banks Island to Shrub Island on the south, and also off Goschen and Stephens islands, halibut are abundant during the winter months.

Around the Gardner Islands, which lie 32 miles SE. by E. from Banks Island, is a good fishing-ground. In the winter of 1895, 90,000 pounds of halibut were caught there by one vessel in three days. About 12 miles S.  $\frac{3}{4}$  W. from the southern end of Gardner Islands is a small bank covered by 14 fathoms of water, where at seasons halibut are found in abundance; several trips have been taken here.

Sixty miles farther south from the last place mentioned is a small bank off the north side of Hecate Island. Indians of this region fish with set lines. Few white fishermen have ever taken halibut here, though Indians catch considerable quantities near Killisnoo; but the ground is not large enough to induce a fleet of vessels to fish on it. In many places around Prince of Wales Island halibut are plentiful, but there are no extensive banks.

Halibut on the northern banks are sometimes very erratic; in places where they are numerous one day few will be found the next. It frequently happens that a vessel will have good success for several days and in a few hours' time fish will

become so scarce that it is useless to remain longer on the ground. Fishermen can give no cause for this sudden disappearance other than that the halibut are traveling in schools, going from one bank to another, not stopping long at any one place.

On all the grounds halibut are more plentiful in winter than in summer, and are scarcer in June than at any other time in the year. At this season they begin to scatter all through the numerous bays and channels of British Columbia and south-eastern Alaska. At places where salmon canneries are located, halibut in considerable numbers are seen feeding on the offal that is thrown away. In the fall months fewer halibut are found among the islands; it is then that they seek more remote localities.

Fishermen say that on banks composed of rock, sand, and gravel bottom the food of halibut is largely sand-lance. In the vicinity of Rose Point their food is mostly crabs, the bottom being thickly covered with that species. It is said that on ground where red rockfish are plentiful few halibut may be looked for.

Herring, both fresh and salt, is the bait principally used for catching halibut. Boats sailing from Puget Sound ports lay in a supply before starting out on a voyage. It is generally kept on ice, although sometimes a quantity is salted. Considerable salt herring is used by the Canadian vessels. When on the fishing-grounds the trawls usually take large quantities of small fish of various species, which are not marketable; these are also used for bait. Halibut, not being very particular as to what kind of bait is presented to them, it is not at all difficult to satisfy their appetite. Dogfish, with the skin removed, makes a very good bait; good catches have been taken with it.

The price of halibut on this coast does not fluctuate in the same manner as it does in the East. While it sometimes suddenly rises 4 and 5 cents a pound, it seldom goes above 10 cents a pound. The average price for 1895 and 1896 was from 2½ to 3 cents a pound. During the month of June several trips were sold for a cent a pound. A trip of 20,000 pounds lay in the harbor of Seattle a week without receiving an offer, the fish being finally taken to Tacoma and sold for a cent a pound. As a rule the supply of halibut exceeds the demand, keeping the price at a low figure.

Halibut caught on Flattery Bank average about 18 pounds; those taken on grounds in the Straits of Fuca run about 25 pounds. Fish from the Straits are better in quality than those from the offshore grounds. The northern halibut are still larger than those in the Straits of Fuca; they average fully 30 pounds, and occasionally individuals weighing 175 and 200 pounds are caught. As a rule, fish of this size are inferior in quality, and many of them are not considered worth saving at all.

Frequently among the large halibut gray ones will be found, but few of this color are found among small fish.

An occasional trip of fletched halibut is caught on the northern banks, but this branch of the fishery has never been carried on very extensively, owing largely to the light demand for smoked halibut on the Pacific Coast. A number of carloads of fresh halibut shipped east that did not meet with ready sale have been fletched and smoked. Fletches from northern halibut are of good quality, but those from halibut caught in the vicinity of Cape Flattery are not considered so good.