TRADITIONAL OCEAN FISHERIES

OF THE

QUINAULT INDIANS

Prepared for: The Quinault Tribe

by: Barbara Lane, Ph.D.

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APP. F

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This report provides a brief overview of some of the marine resources harvested by the Quinault Indians before, during, and for some time after the Treaty of Olympia was negotiated. Inshore fisheries such as surf-smelt fishing, shell-fishing and the harvesting of other species close to the shore are not dealt with in this report.

The Quinault Indians, like all of their neighbors along the coast of the Olympic Peninsula, hunted marine mammals and fished in the waters of the Pacific Ocean. The fish species taken in marine waters by the Quinault fishermen included halibut, salmon, cod, herring, rock cod, sea bass and sole. The sea mammals hunted by the Quinault included whale, sea lion, seal, sea otter, and porpoise. The marine species were harvested with a variety of gear and techniques including harpooning, raking, and trolling with hook and line.

Special ocean canoes and associated gear were used in navigating the marine waters and in pursuing the marine fisheries. In their large ocean canoes the Quinault were able to cruise the Pacific for many miles offshore. It is not feasible to document the outer limits of Quinault fishing, but it appears that Quinault fishermen were familiar with offshore resources for at least thirty miles west of the Olympic Peninsula.

The species harvested in marine waters provided the Quinault with food which could be eaten fresh, preserved for later consumption, or sold to other Indians or to whites. The marine species harvested by the Quinault also provided them with raw materials for manufacture into a variety of containers, tools, and other artifacts. The marine resources used by these people constituted an important part of their traditional economy.

Olson, who has published the only full length ethnography of the Quinault, recorded information regarding their ocean fisheries. Olson collected these data in 1925-26 and 1926-27, some fifty years ago.

Halibut (tcalo s), cod, rock cod (t'oxla tse), sea bass (ke toh), and sole were caught with hook and line. They could be taken anywhere along the coast within six miles of shore. Calm weather was essential, so the period from June to September was the only time that anyone attempted to take these fish. Flounders might be taken in the ocean in the same way, but more frequently they were caught in the lower miles of the river. The same equipment was used for all these fish. The line was of dried and twisted stems of kelp (xo tkah) fastened together to make the desired length. A grooved stone sinker (kai sa k) was tied to the end. This rested on the bottom. Several feet from the sinker a short line or leader (tu lnatcta n), about three feet long, was tied to the main line. The lure was tied at the end of this leader. It was simply a rounded plug of newly cut white willow to which was lashed a barb. The hook was a straight piece of bone, with a fork on one end which straddled the plug. The other end tapered to a long sharp point and was so fixed that it formed an acute angle with the pointed end of the plug, to which the line was attached. No bait of any kind seems to have been used. (17)

(17) Another informant stated that either willow or alder might be used for a plug and that a whole smelt might be used for bait in bass and cod fishing. The hook rested either directly on the bottom or a few feet above. Where bait was used it seems likely that a more elaborate form of hook was employed. Sunny days were especially favorable for ocean fishing.

One informant stated that trolling was known; that Cohoe salmon, cod, and black bass were caught in the ocean in this way. The "spoon" was the white stem of a devil club carved in the shape of a fish, with a bone barb lashed to it.

[1]

Olson's information that the Quinault trolled for salmon in the ocean as well as harvesting them in the river fisheries agrees with evidence of ocean trolling for salmon recorded for other Olympic Coast Indians.

Olson's information that halibut and the other species mentioned could be taken "anywhere along the coast within six miles of shore" does not preclude that some of these species also may have been harvested at greater distances offshore.

When the United States Fish Commission began doing hydrographic work off the west coast and explored for fishing grounds, they relied largely on Indian fishermen to alert them to the location of productive fishing areas. In 1888 the Commission was alerted to the existence of a halibut bank lying 30 miles west (magnetic) from Shoalwater Bay by Indians.

It is not stated whether these were Quinault Indians, but they might very well have been. The Quinault were accustomed to visit Shoalwater Bay regularly and they were also reported to range thirty miles offshore in their whale hunts. They were thus in a position to have known of the existence of the halibut grounds reported to the Commission.

The Quinault are reported to be the most southerly people on the Olympic Peninsula who actively hunted the whale. Their neighbors to the south reportedly made use of whales which were stranded on their shores, but did not pursue them on the open sea.

Assuming this information to be correct, it does not necessarily follow that the more southerly Indians were unfamiliar with the offshore waters. However, the extent of offshore fisheries of the Indians south of the Quinault is outside the scope of this report.

Whether the Indians who advised the Commission about the halibut bank thirty miles west of Shoalwater Bay were Quinault Indians or not, the point is that for coastal Indians to be aware of fishing grounds that far offshore, they must have been familiar with the coastal waters at least that far. It also suggests that they pursued marine fisheries at distances greater than six miles offshore when they discovered productive areas.

The distances offshore at which various species were taken related in part to the locales which they were known to frequent. Some species could be taken in large numbers close to shore; others had to be taken at greater distances offshore.

At certain seasons herring schooled close in and could be taken from canoes by raking. According to Olson's report

> *Herring appeared in great numbers during the summer. They were taken anywhere within a mile of the beach. The herring rake, common everywhere on the Northwest coast, was used from a canoe. It was simply a long sword-like stick with sharp bones set in one edge. An edgewise sweep through the water impaled the fish on the points and the fish were then shaken off in the canoe. A canoe could be filled in a short time. The rake was not used for smelt or candlefish.*
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> [2]

In contrast to the herring which could be taken quite close to shore, whales and seals were harvested as far as twenty-five and thirty miles offshore.

Olson's account of Quinault whaling is quoted here at some length because it provides information regarding Quinault seamanship and the distances at which whales were pursued as well as data regarding gear and techniques used in the harvesting of whales.

The canoe used was of the ordinary "ocean" type . . . . sometimes manufactured by the Quinault, but more often received from the Quilleute or Makah in exchange for dried salmon, or for sea otter skins. The necessary crew consisted of eight men, six of whom acted as paddlers (and seated themselves two on a thwart), a steersman, and the harpoon thrower. The latter was the headman, and to him the others looked for instruction as to equipment and procedure. A movement of the hand served to order them to rest on their paddles or to paddle briskly in the tense minutes just before the whale was harpooned.

The harpoon was in all respects like that used by the Makah and Nootka. The shaft was an eight-foot length of yew tapered from the middle toward the ends, the point being more slender and shaped to fit the socket of the point. The blade of the point was of mussel shell. The double barbs were of bone, lashed together and to the blade by elk sinew. The wrappings were carefully coated with pitch. The line of braided and twisted sinew was some eight feet long. To this were attached several lengths of inch-thick line made from the slender branches of the swamp cedar, which were first twisted as for withes. These frequently grow to a length of 20 feet without the larger ends being of greater diameter than a lead pencil. Eight to fifteen of these "strands" are necessary to make a line of the required strength. About 100 fathoms of this line were ordinarily coiled ready in the bottom of the canoe. At more or less regular intervals along the central three-fourths of the line, six-foot leaders lead to buoys made of the whole skins of the hair seal.

Whales were most often encountered 12 to 30 miles off shore. The head whaler (harpooner) never aided in paddling the canoe, but stood in the bow and scanned the ocean for signs of the quarry. If a whale were sighted asleep, the canoe approached as quietly as possible. If the whale were swimming leisurely along, the men paddled to within a half-mile or so. The harpooner then gave his orders regarding the line and buoys and took his position with one foot on the back of the bow-piece, the other on the forward thwart. The harpoon was held with the backs of the hands uppermost, thumbs not grasping, but resting alongside the index fingers. It is said that a more powerful throw was possible with this than with other grips.

The harpooner now signaled to his crew with the hand. If the whale dove the men paddled briskly. When he came to the surface the crew sat silent, allowing the canoe to drift. When nearly close enough for the thrust, a good whaler would know just at what point the whale would come

up. As the animal was ready to dive again the harpooner hurled his shaft and, if the weapon struck, the men backed water to avoid the lashing tail. The harpoon was aimed at a point back of the fin ("like under the arm"). Not all whales lashed about with their tails; some only dashed away. A whale was never struck as he came to the surface. Some whales were very wary and could never be approached within harpooning range.

Almost with the same motion with which he threw the harpoon, the head whaler jumped down to pay out the line and to throw over the several buoys in their turn. When the end of the line was reached one paddler joined the headman, and, like him, braced himself in the bow and held tightly to the end of the line. In the meantime a second man placed himself beside the steersman to aid in keeping the canoe on a course in the whale's wake. The other paddlers did all they could to keep the canoe steady, for during the early minutes, the whale in his agony thrashed about in a fearful fashion, sounding, running at full speed, and often turning sharply about. These were the exciting and dangerous moments of the chase. A single canoe seldom dared venture out for whales. Usually a second was close at hand to lend aid in case the first was wrecked or overturned. Though it was usual to hold fast to the end of the line, it was not always feasible. A lightly-struck or a dangerous whale (one that turned on the canoe) might force abandonment of the rigging or might necessitate following the whale for a long way and at a respectable distance.

If the harpoon hit the proper spot and was deeply imbedded, the whale bled internally; the buoys and the canoe, which he must tow, served to impede his progress and in a few minutes he began to show signs of tiring. The second canoe, if possible, now came on the scene and at an opportune moment a second harpoon was sent to its mark. This infuriated the whale still further, but, already weakened by the first, his violent exertions were of shorter duration this time, and after running a few miles he usually became too weak to be dangerous. Once more a canoe approached and wounded him severely with a long lance or a lineless harpoon. A few thrusts were sufficient to end his life and the rigging was once more assembled in the canoes and the whale towed to the village at the mouth of the river. A strong whale might run as much as ten or fifteen miles before being killed, but, if the whaler's "power" were strong enough, the whale would always run toward the shore instead of out to sea.

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The foregoing account gives some sense of the seaworthiness of the ocean canoes used by the Quinault and the seamanship of the men who engaged in the whale fishery. Elsewhere Olson provided details regarding the construction of the ocean canoe and the paddles, floats and other gear used with it.

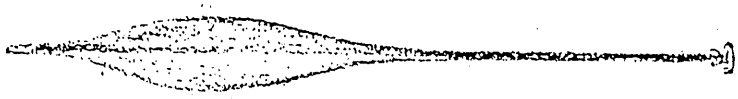
The Quinault made a number of different types of canoes, each one adapted to a particular purpose. There were canoes for whaling, for sealing, for sea otter hunting, for duck hunting, and so on. Each of these canoes was made from half of a single cedar log. Bow and stern pieces were constructed separately and then attached to the hull.

Although almost all Quinault men were capable of making canoes, certain men were professional canoe makers and were commissioned to construct canoes for others.

According to Olson,

> *An ocean canoe (lo klel) was usually six or seven fathoms (35-42 feet) long and as wide as a man's reach minus the distance from the fingertips to the elbow. Five fathoms was the average length of a sealing canoe (alo ka, "canoe"). Its width was as great as that of the ocean canoe. . . . .*
>
> *All these types were made by the Quinault themselves, but the greater part of the large ocean canoes and many of the sealing canoes were secured from the tribes to the north. Both Quilleute and Makah manufactured them to some extent but the Nootka were the acknowledged masters of the art. Many Nootka ocean canoes were traded to the Makah who traded them to the Quilleute and they in turn to the Quinault. The Quinault traded them to the tribes of the Columbia and of the Oregon coast at least as far south as the Tillamook. Furs, dried clams, salmon, dentalium shells, and slaves might serve as media of exchange.* [4]

The Quinault fashioned several different styles of paddles suited for use with the separate types of canoes. The paddle used with the ocean canoes was longer than those used with river canoes and had a long tapering point.



QUENIULT PADDLE

(drawing by James G. Swan circa 1853)

The Quinault made sails of thin boards sewed together as did other coastal Indians, but they more frequently used sails made of cedar mats.

Olson reported that

The sail was carried from a short mast which was lashed to a thwart. I believe that upper and lower crosspieces were employed, at least with the mat sail. No attempt to tack or sail with a side wind was made and the sail was always carried at right angles to the boat. If the wind were not blowing from the stern the sail was taken down.

[5]

Despite their limited utility, the native wooden and mat sails undoubtedly provided some relief to paddlers on long ocean voyages and probably served to extend the cruising range in offshore travels.

As another aid in ocean cruising, the Quinault carried along a supply of inflated seal skins if there was danger of rough weather. The skins could then be tied to the sides of the canoe serving to lift it and thereby lessen the danger if the canoe should begin to ship water.

No attempt has been made in this report to include details of manufacture of the Quinault ocean canoes, or information concerning the care, maintenance or repair of these craft. Clearly ocean canoes represented one of the most valuable items of material property in traditional Quinault culture.

In addition to his extensive discussion regarding the manufacture of canoes, Olson has reported briefly regarding the manner in which the canoes were navigated.

Like all peoples of the Northwest coast the Quinault were expert canoemen. It is rather difficult to give a description of the fine points essential to the management of a canoe so I confine myself to a few specific remarks. Near the finish of the stroke the stern paddler altered the direction of his stroke and the plane of the paddle. If he

desired to turn the canoe about, the side of the canoe might be used as the fulcrum, the paddle like a lever. On ocean voyages, when the sea was running high, care was taken not to cross the larger waves directly at right angles. A slightly diagonal course kept most of the keel in the water and eliminated the danger of breaking the canoe.

It was customary to always land ocean canoes stern foremost. This had a practical significance in surf landings, for the high bow, facing outward, prevented high waves from swamping the boat during the time of waiting for the proper wave.

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Elsewhere Olson has noted that in rough weather Quinault ocean canoes always ran before the wind.

Six or seven directional points were recognized and the winds were named from the directions. Olson reported that at sea the ocean swells were watched because they always came from the west.

Most whales were taken in the period May through August. Olson reports that whalers among the Quinault spent those months cruising the ocean waters in search of these mammals.

The season for hunting fur seals immediately preceded the search for whales. Olson recorded the following information concerning the distances at which fur seals were harvested.

Usually it was necessary to go from ten to twenty-five miles off-shore in an ocean canoe to find fur seal (ma a i). The animals were hunted in the months of April and May. The animals were at this time on their annual migration to the islands off Alaska, hence were not encountered along the shore. An ocean canoe was used, but only three men were needed for the venture. The canoe cruised about until a seal was sighted asleep in the sun. Quiet paddling was necessary to get within harpoon range. When struck the animal was hauled in, killed with a club, and hoisted aboard. The skins were used for blankets and robes. The meat and fat were treated in the same manner as with sea lion.

[7]

Hair seal were sometimes taken while hunting for fur seal, but the hair seal were commonly taken closer inshore.

The various species harvested in the ocean waters provided the Quinault with useful materials for clothing, bedding, rope-making, tools, containers and other useful objects as well as with food.

A few examples will serve to show the importance of marine resources to the Quinault at treaty times. Some of these have already been noted in earlier portions of this report.

Inflated hair seal skins were used for floats and buoys in the capture of whales and sea lions and as a safety device for ocean cruising in rough weather. The skins of hair seal were also used as bedding along with rush mats which served as mattresses.

Hair seal fat was rendered by stone boiling and then pressing. The lean meat was cut in long strips and smoke-dried. Before eating it, the meat was soaked in water and then boiled.

The meat and fat of fur seals and of sea lions were treated in the same manner.

Fur seal skins were used for blankets and robes.

Sea otter skins were especially valuable and were much in demand as neighboring tribes did not have access to these animals. Only chiefs could afford to wear robes of sea otter fur.

Sea lion gut was used for bow strings.

Whale meat and whale blubber were highly prized foods. Whale oil was an important part of the native diet. It was used as a side dish or condiment. Dried foods were dipped in oil before they were eaten The rendered fat was stored in the stomachs of seal or sea lion and in bags which were made from sections of whale intestines.

Salmon was the staple food of the Quinault and much of it was smoke dried for later consumption and for sale to other Indians.

Olson noted that halibut, rock cod, and bass were dressed and dried in the same manner as salmon. That is, they were split down either side of the backbone so that a fairly uniform layer of flesh remained with the skin. The pieces were strung on racks and smoke dried for about a week over a maple or an alder fire.

The fish were usually soaked in water and boiled before being eaten.

It is not feasible on the basis of the available record to document the amounts harvested of the various ocean species. It seems clear that sufficient quantities were taken to warrant curing and preserving them for later consumption.

SUMMARY

The Quinault Indians were accustomed to harvest a variety of marine species in the ocean waters off the coast of the Olympic Peninsula. The fish and mammals taken in these fisheries were used for food in both fresh and cured form and also for trade to other Indians and to whites.

The Quinault were expert ocean navigators and were reported to travel twenty-five miles offshore to hunt fur seals and as much as thirty miles offshore in pursuit of whales. It is not possible on the basis of the available record to document the outer limits of Quinault offshore navigation.

The fish harvested by the Quinault in the Pacific ocean included salmon, halibut, cod, sea bass and herring as well as other species.

Specialized gear and techniques were used in the harvest of the above species of fish and in the taking of marine mammals such as whales, seals, sea lions, and sea otters.

While it is not feasible on the basis of the existing record to document the outer limits of Quinault offshore fisheries at treaty time nor the amount of harvest obtained in the offshore fisheries, the record is clear that the Quinault possessed seaworthy canoes, navigational skills, and gear and techniques designed to harvest a variety of offshore fisheries and that they customarily did so.

REFERENCES

[1] Olson 1936:36-38

[2] Olson 1936:38

[3] Olson 1936:44-45

[4] Olson 1936:68

[5] Olson 1936:72

[6] Olson 1936:73

[7] Olson 1936:49

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