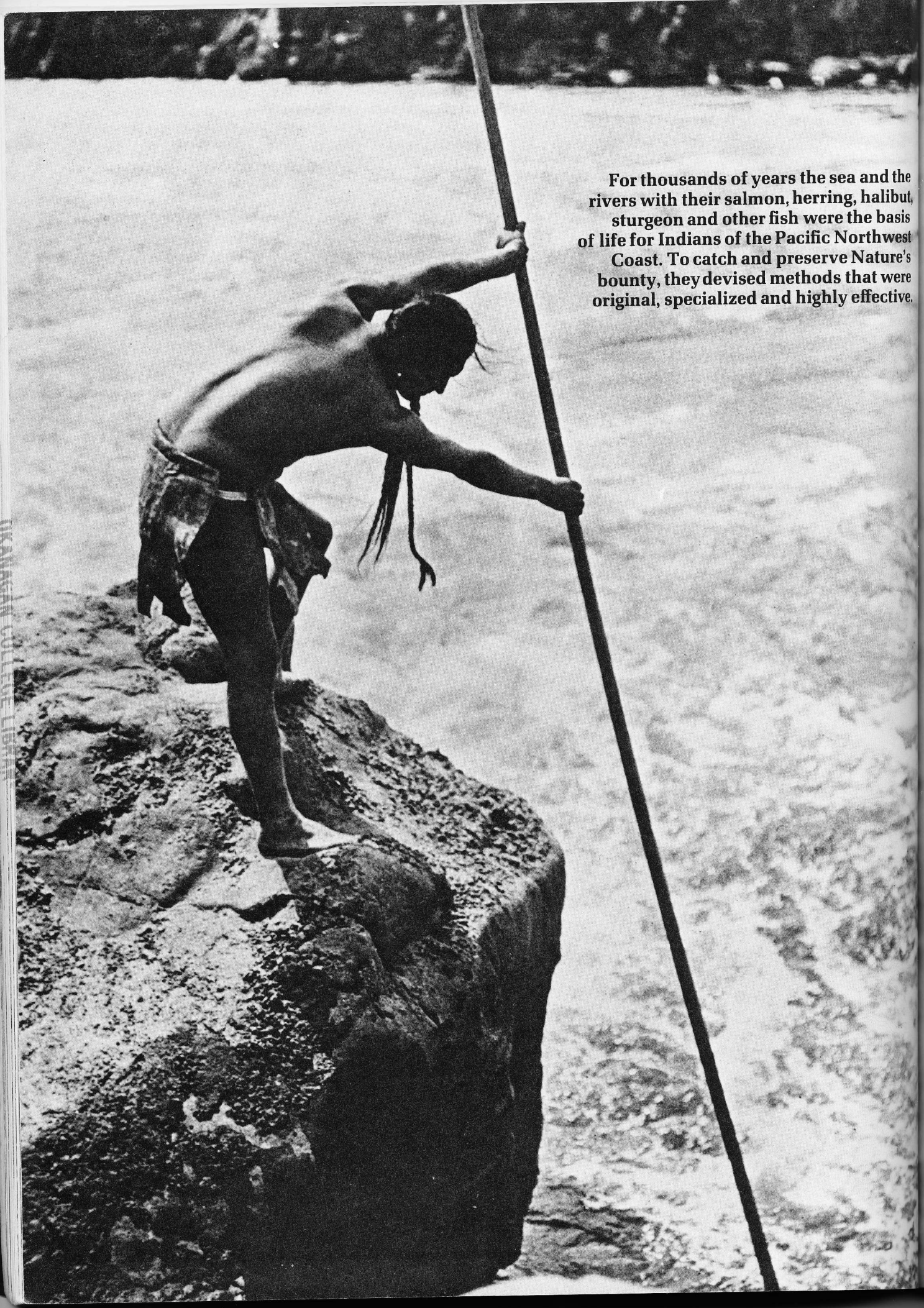


For thousands of years the sea and the rivers with their salmon, herring, halibut, sturgeon and other fish were the basis of life for Indians of the Pacific Northwest Coast. To catch and preserve Nature's bounty, they devised methods that were original, specialized and highly effective.

INDIAN FISHING and COOKING: Ancient ways on the Pacific Coast

by HILARY STEWART

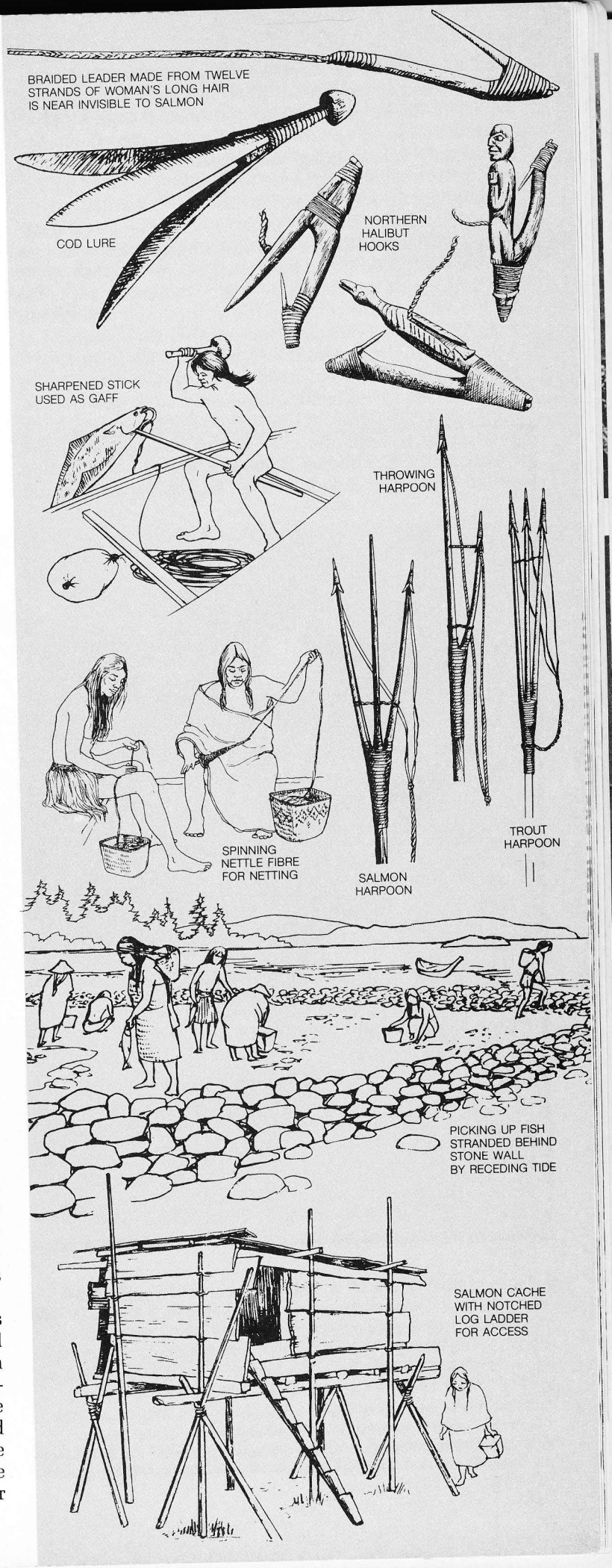
Drawings by the author

He paddled the slender dugout canoe swiftly and with skill, following the cedar-forested shoreline until he came to the river's mouth. His bone-tipped harpoons were beside him – the two-pronged one for the wide, deep part of the river, and the three-pronged for the rapids higher up where he would walk along the bank. He was a Moachaht Indian of what is now called the Pacific Northwest Coast and he was after salmon. The year might have been 1,000 B.C. or much earlier than that because for thousands of years the salmon had been an all-important food resource for the Indians. It returned annually with reassuring regularity, and it came by the millions. Huge quantities could be preserved for the winter, spelling the difference between life and death to the thousands of people in villages on the coast and inland along the rivers.

A part of the vast system of life-support were the scores of rivers and streams which drain into tidal waters, among them the Stikine, Nass and Skeena to the north; Bella Coola and Nimpkish along the central coast; the Squamish and great Fraser to the south. Into these and scores of other waterways swarmed millions of fish on their annual migrations, and along valleys and inlets, and the nearby islands, thousands of Indian people made their homes. All villages hugged the water's edge and all houses faced the water. To the Indians of the Northwest Coast, the sea and the rivers were not just a way of life but life itself.

Because the Indian was completely in tune with the ways of the sea and river and all that was in them, he was able to devise many methods for reaping their harvest. His fishing methods became highly specialized and effective. However, differences in geography, climate, tides, species and variations in culture led to different methods and types of gear to catch the fish. This variation in gear and method was reflected in the staggering array of hooks, lines, lures, sinkers, floats, harpoons, spears, gaffs, rakes, traps, nets, weirs and dams developed over thousands of years.

The size, shape, material and manufacture of hooks show a wide range of ideas and techniques. Baited hooks with bone barbs were used for trolling for salmon and for catching cod, dogfish, kelpfish and other species. In some northern areas, where salmon runs were not as plentiful, the Indians relied more on halibut, and extraordinary looking V-shaped wooden hooks were devised especially for catching this large fish. The shank was made in two pieces, lashed tightly together

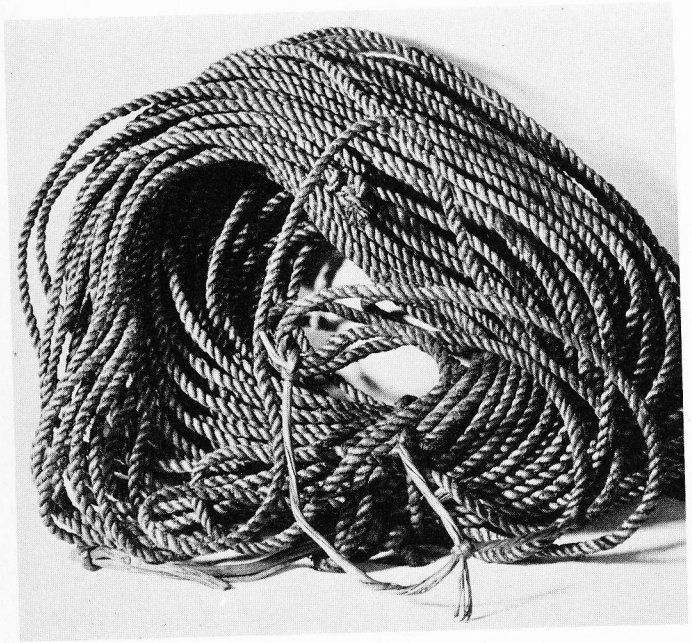


with spruce root. Generally, the upper part was beautifully carved with animal, bird, fish or human motifs, while the lower part carried the barb fashioned from bone. A southern variation was the one piece, U-shaped hook, made by steaming, then bending, a length of knot wood from fir, yew, spruce or hemlock.

So efficient were these hooks that centuries later when European hooks became available along with iron, nails and other hardware, many of the native people continued using their own hooks until well into the 20th century. The bone barb was often replaced with a nail, and on occasion the entire hook wrought in iron, yet it followed the traditional U or V shape and was rigged in the way that had prevailed for centuries.

Ingenious lures were used for attracting fish. White willow was carved to simulate a small fish, and a shining piece of abalone shell attached to the trolling hook and line to wobble and glint in the water. A variation was a small fish, filled with pebbles to make it sink, then pulled through the water on a line until a hungry cod snapped the bait. Similarly, a small fish with the flesh removed from one side so that it appeared wounded was towed through the water to attract attention. These fishing lures were remarkable, often made from the strong inner bark of the cedar, but also sinew, bear gut and lengths of specially prepared kelp stems. Sinkers were perforated or grooved stones attached to the line or hook.

Spears and harpoons were often used for salmon in the rivers, cod lured to the surface, and for large sturgeon in the lower Fraser River. Using the harpoon for sturgeon required great skill. The sturgeon, sluggish in winter, rested head down on the muddy river bottom. For them the fisherman used a two-pronged, heavy duty harpoon with a long shaft and shell-tipped blades. Standing in his canoe while slowly drifting downstream, the fisherman worked the harpoon like a probe. When he felt the touch of something he thrust hard, a tricky act while standing in an unstable log canoe. Often the fish would swim down river, towing the canoe. Then



For fishing the Indians extensively used canoes — strong seaworthy craft hollowed from a cedar tree — such as those above at Quatsino Sound. From the cedar also came fishing line. The halibut line at top left, made from inner cedar bark, is hardly distinguishable from the factory product. Kelp was also made into line. The coil at top right is nearly 200 feet long.
The drawing on the opposite page shows the corner of a large smoke house, a structure that was a vital part of Indian survival.

the fisherman threw out a stone "anchor" to slow down and steady the fast and erratic course of his craft.

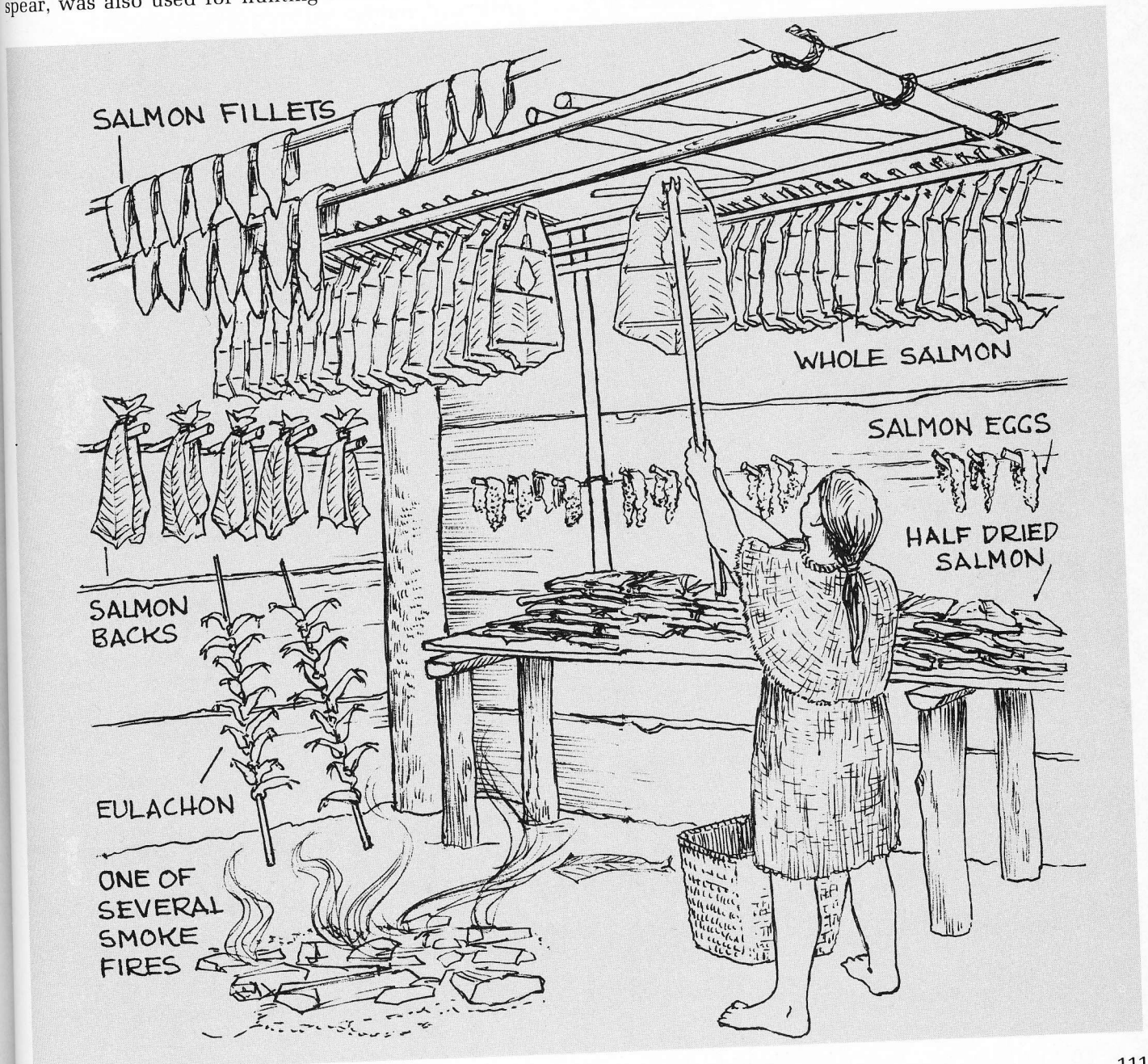
Once subdued, a very large sturgeon could be taken aboard only by the fisherman tipping the canoe to one side and rolling the fish in over the gunwale, then bailing out the water. Some of these sturgeon were huge. An 1827 entry in a journal kept by the factor at Fort Langley, on the Fraser River, records buying from the Cowichan Indians a sturgeon, "weight 400 lbs the guts out."

Harpoons also were used for night fishing in a technique that involved having an actual fire on board the canoe. To accommodate the fires without burning the craft, a layer of green logs was laid across the gunwales near the bow. Wet mud was placed on the logs and a small fire of pitchwood built. Then one man paddled from the stern while the harpooner stood in the bow ahead of the fire. A woven mat between him and the fire prevented his shadow from falling on the water and scaring the fish. This method, with a special type of spear, was also used for hunting ducks.

Another specialized implement was a bone-toothed herring rake. When flocks of gulls screeching and swooping onto the water signified the beginning of the annual herring run, the fisherman would hurriedly launch his canoe. While his wife paddled, he swept his rake, which was about 12 feet long, through the water in a paddling motion. A dozen or so fish at a time would be impaled on the bone teeth. Then he thumped the shaft of his rake on the gunwales, knocking the herring into the canoe. The same method was often used for eulachon, the oil-rich fish that also migrated up river by the millions.

An even more efficient way of taking eulachon was with a long, funnel-shaped bag net. The mouth of the net was attached to two posts driven into the river bed and held open with sticks. The fish drifted downstream with the receding tide and were trapped by the thousands in the narrow tube.

Two types of material were used for making the nets – the inner bark of the cedar and stinging nettles which

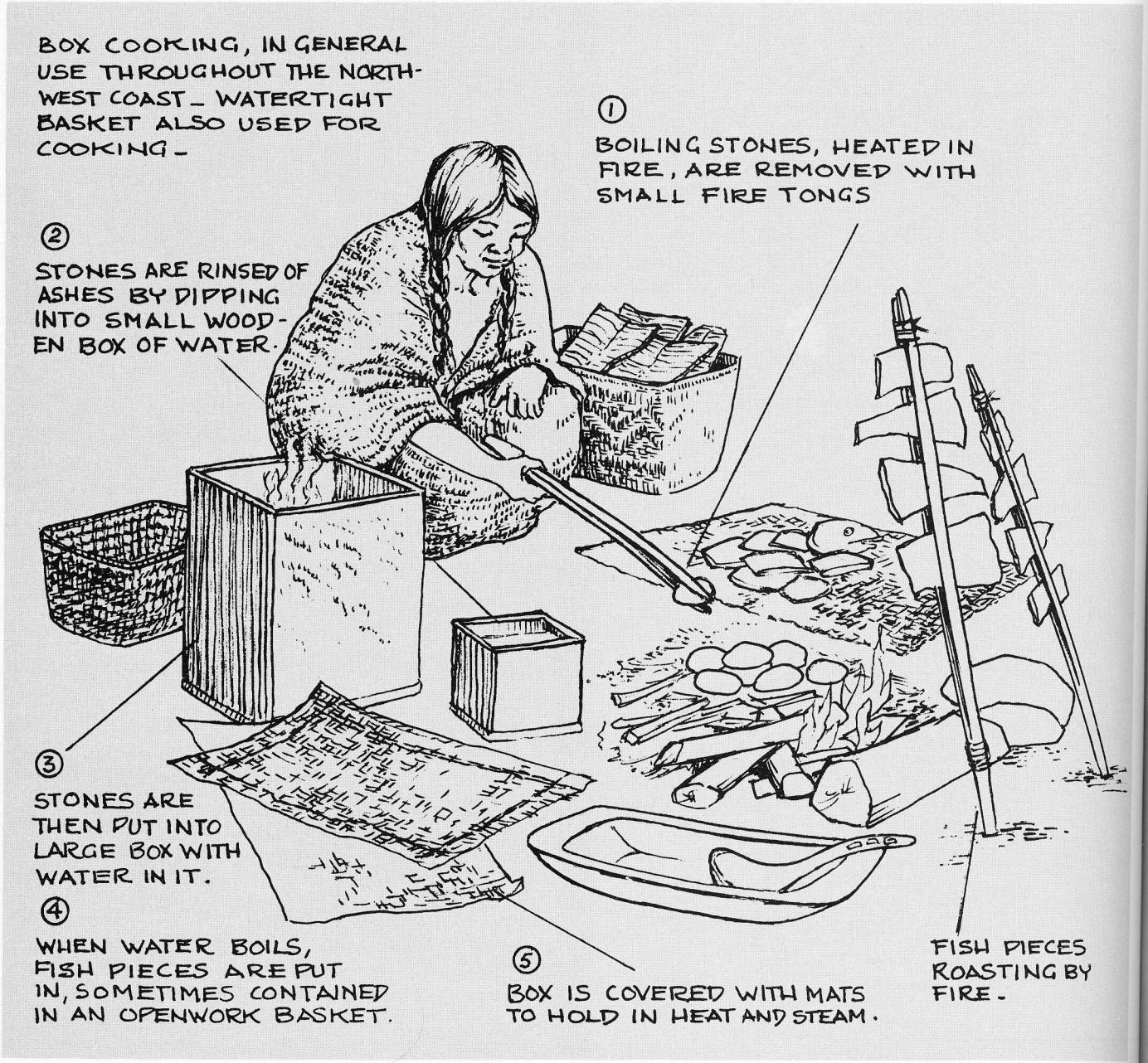


grew tall in the rich soil of forest clearing and river bank. The Indians gathered the nettle stalks in late summer or early fall, split and dried them for a few days and stripped off the outer part which was beaten and shredded into long, fine fibers. These fibers were spun into a two-strand twine on a spindle, or by rolling the fibers on the naked thigh with the palm of the hand. In the Fraser Valley the fiber of a plant later to be called "Indian Hemp" was also spun into a string for twine for fish nets.

On some rivers, nets were pulled between two canoes to harvest the migrating salmon, or beach nets set out then pulled ashore to gather whatever fish there might be. Smaller hand nets were used over the side of the canoe to scoop up herring or eulachon when they were densely massed.

Probably the most productive of any of the fishing devices, however, were traps and weirs which took huge quantities of salmon when the runs peaked. These weirs – fences through which water flowed – were built across a shallow river or angled to guide the migrating fish into traps. These traps were of two kinds – removable ones made in a basketry technique using sticks and lashing, and stone traps, or enclosures of linear rock walls generally built close to river mouths below high tide mark. As the tide rose, fish drifted shoreward with the flow of the water, swimming over the tops of the traps; as the tide receded, they became trapped behind the stone walls.

An important aspect of Indian fishing was the connection between the human and the spirit world. It was not simply a matter of creating gear out of wood and bone and putting it to work. Prayers of supplication and thanksgiving were uttered to the fish, and great reverence shown toward the catch, particularly the hallowed salmon upon which so many villages depended for their livelihood. The first salmon of the season was treated as any honored guest who might arrive at the village and welcomed in a special ceremony. Many and varied were the forms which the ceremony took and the customs



and taboos that were observed. In each lay the deep concern and respect for the welfare of the life-giving fish to ensure their continuing abundance.

But the coastal Indian's ability to catch great quantities of nutritious food at any one time would have been useless without the ability to preserve it for future need. Without a stockpile of food to last the winter, the peoples of the Northwest Coast could not have developed the elaborate ceremonies with feasting and dancing, the high art form and a rich and complex culture that distinguished them from all other North American Indians. Because they did not have to constantly strive to find food during the winter, they had leisure time to devote to socializing and the arts. Feasts and potlatches fostered ceremonies, these in turn required masks, costumes, ceremonial regalia and gifts which included preserved fish.

There were almost as many ways of preserving this fish as there were of catching it. The methods differed with the species, season, climate, and tribal or local tradition. But the result, whatever the method, was dehydration of the fish so that it kept for a considerable time. Well preserved fish was vital to the Indians for in spite of the seeming abundance of food, there could also be difficult times. If the salmon run failed or was poor, there could be hunger, even starvation, in the village. An abundant salmon harvest, however, didn't necessarily assure a plentiful supply of food. Wet weather could mean disaster since the fish wouldn't dry properly. This improperly dried fish turned mouldy and spoiled. Even well dried fish was subject to attack by insects unless frequently inspected and carefully watched. Thus the preservation of the catch was as important as the quantity.

The two basic ways of preserving fish were by smoking and wind drying. In the Fraser Canyon where hot August winds funneled from the arid Interior, drying racks roofed with branches were poised high on rocky outcrops. Here salmon, split and specially sliced with knives made from slate, were hung from the poles where they dried in a few days. Layers of the flat, dried fish were then stacked between green alder boughs to keep them in good condition and away from insects, wasps especially, until they were taken back to the village.

Coastal Indians were not so fortunate because they had to contend with rain and damp unpredictable Pacific weather. They relied on drying and smoking to preserve their salmon, halibut and other fish, and enjoyed the added flavor that smoking imparted.

Smoke houses, some 20- x 30-feet, were a vital part of the fish camp. Built of split cedar planks over a sturdy post and beam frame, the building often had a second storey that was sometimes used for storage. Inside, rows of long slender poles held the fish high and the smoke permeated the flesh before escaping through cracks between the planks in the walls and roof.

Fresh fish was cooked by many different methods, including steaming, baking, boiling and roasting over a hot, smokeless bed of coals, preferably alder. With the last method, the salmon was split and roasted in one piece. Small fish such as herring were cooked whole. Regardless of whether the fish was whole or split, the slow cooking kept them moist and succulent.

Boiling and cooking was done in a "cooking box" – a wooden box made from a steam-bent plank, or sometimes in a waterproof hand-woven basket set near the fire. Heated rocks, picked up with split wood tongs, were dipped into a small box of water to rinse off the ashes, then put into the cooking box partially filled with water. When the water came to a boil, the food was added and the lid put on. Prolonged cooking or simmering was maintained by replacing cooking rocks with freshly heated ones. Other ingredients could be added to the box to make stew. When ready, the food was either ladled or lifted out with a strainer.

Every part of the salmon was cooked, including the tails. They were held in the tongs and toasted over the fire until black, then set near the fire to keep warm. The owner of the house then helped himself when he became hungry. Also toasted were backbones, cut so as to leave a lot of meat on, then dried and cooked when required.

A convenient method of cooking was the steam pit. A blazing fire was maintained in a pit about two feet deep for an hour, with small rocks added so that they became red hot. When the fire died down, unburned wood was removed, leaving the hot rocks on the bottom.

The sides were then lined with large leaves of skunk cabbage or fern and a layer of sea weed laid on the rocks, followed by thimbleberry or other large leaves to make a clean surface for the fish. More leaves covered the food, and the pit was filled with ferns and sea weed. Next a hole was punched through the leaves with a stick and about two quarts of water poured in. Finally the pit was covered with a cedar-bark mat and earth put on top to seal it. Since the steam was unable to escape, the pit became something of a gentle pressure cooker. In about half an hour the covering was removed and dinner was ready. This method also worked extremely well for clams.

For baking fish, a rock oven was used. It was similar to a steam pit but wider and when the fire was removed the fish were placed on top of the hot stones and cooked in the open.

While it was men's work to catch the fish, the women did the cooking and other chores. All of the abundance of food from the rivers and sea would have been useless without the women's skilled hands and hard work. While a trap might take a hundred salmon at once, the fish had to be cleaned one at a time. It was the women who did so, then hung the fish, tended the drying racks, watched the fires in the smoke house, turned the fish at the right time, and took it down when experience told them it was fully cured. Women also stacked the dried flesh, loaded the baskets and boxes for storage, filled the food caches and kept a constant check on the stored fish to ensure that it did not spoil.

Then when north winds blew and shorter days heralded the approach of winter, the result of the months of work brought comforting security to the village. There were feasts and potlatches, with the big house filled with family and guests and the aroma of good food. Bowls of eulachon oil were set beside dishes of salmon and halibut, and large feast bowls were filled with many varieties of fish and other foods. The time of celebration brought spiritual cohesion to a people whose lives evolved around the rich bounty of ocean and river – a unique people who were among the most fortunate in North America. •