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3. Northwest California to the Columbia River Mouth

With this region we enter a portion of the nuclear zone of the Salmon Area. The Columbia River stands with the Fraser, the Yukon, and the Amur as one of the major salmon streams of the world. Next in importance to the Columbia comes the Klamath River, and then the Smith, Chetco, Pistol, Rogue, Sixes, Coquille, Umpqua, Siuslaw, Alsea, Yaquina, Siletz, Nestucca, and Nehalem, of roughly similar yield. Unlike the preceding region, the coast is backed by several large and shallow bays favorable for fishing and the gathering of mollusks. The largest of these are the Columbia estuary, Humboldt Bay, Coos Bay, Tillamook Bay, and Willapa Bay (Shoalwater Bay), but there are many smaller inlets, and lagoons like Siltcoos Lake.

The Nongatl, on Van Duzen Creek and a short segment of the lower Eel, the Whilkut, and the Chilula of lower Redwood Creek, augmented their food supply based on salmon with lampreys, suckers, and trout. None of these groups held any portion of the sea coast, but they undoubtedly obtained sea foods from time to time from the Wiyot or Coast Yurok to the west of them. They used the A-frame net, not the arc-net, and placed small weirs in the creeks draining their territories. In the dry season they used scaproot poison for taking suckers or trout, which may be regarded as an indication of their peripheral position in the nuclear Salmon Area.¹¹⁷

117. Driver, 1939; writer's fieldnotes, 1940.

The Wiyot had several tidewater specializations. In the tidal channels which meander over the mudflats of Humboldt Bay they set portable fence weirs. For flounders on the shallow bottom of the Bay, multi-pronged spears were employed. These were likewise useful in the Eel River estuary. For salmon and lampreys, large weirs with several pounds or corrals were erected on the Eel, surpassing in complexity anything found to the south (see fig. 6). Other weirs were simpler (fig. 5), and worked in conjunction with A-frame dip-nets. The possession of good dugout canoes permitted much more fishing in the bay, possibly at night by torchlight. The long stretch of beach from west of the modern town of Ferndale to north of Little River and Mad River was the site of surf fishing with A-frame nets for smelt. Sea mammals (sea lions and possibly fur seals) were harpooned or clubbed. The harpooners went out in dugouts from the mouth of Eel River for these animals (see fig. 104).¹¹⁸

Although their fishing was basically similar, there were enough differences in detail between the methods of the Yurok, Hupa, and Karok to warrant separate treatment of each. The differences were for the most part clearly correlated with hydrographic conditions, and were not due to arbitrary cultural traditions. The members of each of these groups were familiar even in aboriginal times with the fishing

118. Driver, 1939; Loud, 1918; writer's fieldnotes, 1940.

methods of the other two. Most divergent were the Coast Yurok south of the Klamath estuary, at Orick, Stone and Big Lagoons, and Trinidad. The last, on a rugged headland without any large stream, depended on fishing from shore rocks and from canoes in the choppy cove inadequately sheltered by Trinidad Head.¹¹⁹ The salmon run on near-by Little River was negligible. Sea lion hunting and gathering of mussels from offshore rocks were of considerable importance. A-frame nets were used for salmon in Little River and for surf fish on the beach. The resources of Orick, at the mouth of a small creek, were equally limited, though six miles offshore is prominent Redding Rock, a noted resort of sea lions, visited in good weather by harpooners in canoes (see fig. 107). Figure 8 illustrates the type of salmon trap set in creeks by the Coast Yurok. At Stone and Big Lagoons, even slimmer aquatic resources could be exploited. Here a few fish could be taken in summer in the brackish waters of the lagoon, and possibly trout in the brooks. Sea lions, surf fish, and mollusks must have taken the place of salmon. There was always the chance that a whale might be stranded along the coast, and such events were probably fairly common in the days before commercial whalers entered the North Pacific. It is worth noting that throughout the Yurok area

119. The common rockfish of the Pacific coast, probably the chief object of this type of fishing, belong to the genus Sebastes, of which there are more than fifty species. Jordan and Evermann, 1908:496-7.

property rights in fisheries were apt to be far-flung, and a native of Orick might be a shareholder in a productive eddy on the Klamath River ten or fifteen miles from its mouth. Many Klamath Yurok, for example, owned shares in the sea lion hunting at Redding Rock. It is difficult to tell at this date how these claims were actually exercised.^{119a} Seaworthy canoes made travel and transportation of fishery products feasible for comparatively long distances. Thus, the Klamath Yurok made canoe trips with cargoes of salmon as far north as Crescent City (in Tolowa territory) even in heavy weather, during the early historic period.¹²⁰

Chinook salmon enter the Klamath estuary in mid-July, the runs reaching their peak in August, and continuing though declining in volume until November. Silver salmon follow the Chinook, with their peak in October, after which come steelhead.¹²¹ The principal method of salmon fishing on the Klamath below Ishipishi Falls (in Karok territory, a few miles above Orleans) was in eddies with A-frame nets, on platforms about six to eight feet above the river. Figures 68a, 69, and 70 illustrate the type and its principles of operation. The eddy functions to drift the bag of the net upstream, an important feature, since the migrating salmon nearly always swim in that direction. Since the current was

119a Waterman, 1920; writer's fieldnotes, 1940.

120. Rau, 1884 (after Powers).

121. Snyder, 1931; 1923.

slacker near the banks, most of the fish tend to keep to the sides of the river, which meant that the fishermen at their platforms were able to take advantage of nearly the whole of the run. At the mouth of the river, a productive eddy is created by the rocks at the shore side of the channel across the bar. When the bar is joined to the north shore of the river mouth, the rock on the south (or Welkwa^w) side was used, and the rocks at the north side were stranded, and vice versa. At the time of observation (1940), the channel was at the north, or Requa (Rekwoi) end.¹²² There were few eddy-fisheries of importance in the deeper water of the estuary than several miles up-river. An intensive surf fishing for smelt (probably Hypomesus olidus) was carried out along the bar with small A-frame dip-nets. When the fishing was on, women were kept busy hauling baskets full of fish to the estuary side of the bar, where they were loaded into waiting dugout canoes for transport up-river.¹²³ Sea lions were clubbed or harpooned both on rocks offshore and in the estuary, which they frequently entered in pursuit of salmon. They might be taken at such times as they basked on sand banks or along the edges of the river. Other important fishing methods near the mouth of the river included taking salmon with single pronged toggle harpoons (double pronged harpoons were preferred upstream), use of eel-pots

122. Fieldnotes, 1940.

123. Rau, 1884:296-7; Jordan and Evermann, 1908:231.

for lamprey (possibly recent; see fig. 44), wrestling with large sturgeon, which often tumbled rather helplessly downstream after spawning, and the use of gill-nets dragged between two drifting canoes (fig. 90). Subordinate techniques were angling from shore rocks, the catching of crayfish, and the building of weirs, straight across streams, to be used with A-frame dip-nets. Converging weirs and wing dams were sometimes put in shallow water late in the year, and open-top basket traps were placed in creeks principally for trout.

The construction of fishing weirs across the main Klamath River and, by the Hupa, across the narrower Trinity River, were communal enterprises requiring considerable engineering skill and coordination of labor in the assembling of suitable timber and actual installation. The Kepel dam may have been erected only in alternate years, as were the Hupa weirs on Trinity River, where two villages, MediIdin and TakimiIdin, alternated in the building of smaller structures, with much less ceremonial association. There were only two or three sites at which weirs could be placed in the lower reaches of the Klamath. The Kepel "fish dam" was operated only for ten days during the summer, although heavy salmon runs continued for three times as long a period. Whether the deliberate dismantling and removal of the weir after so brief an interval was based on recognition of the needs of fishermen farther up-river (the weir completely prevented the passage of fish), or on the even more recondite necessity

for permitting the salmon to spawn in upstream tributaries, is not known. Perhaps it was merely for ceremonial reasons. For a detailed study of the elaborate ceremonial surrounding the Kepel weir, see the paper by Waterman and Kroeber.¹²⁴ For the Hupa salmon weirs, see figure 7, and Goddard.¹²⁵ The salmon weirs of the Karok were not clearly remembered by present day informants; if any were built, they were probably installed near the native village of Panamenik (Orleans). These large weirs were simply barriers on the downstream side of which there were several platforms for the use of A-frame dip-nets, similar to those manipulated from scaffolding along the banks of the river. After the fish were landed either at scaffolds or on weirs, they were clubbed with specially made implements (see figs. 164, 165.)

The Karok, situated in the vicinity of the only important falls on the lower Klamath River, used a special thrusting net, shown in figure 71, for both salmon and lamprey. The wielder of this net stopped it with the back of his head as he reached the end of its thrust, to keep it from flying out of his hands; for this reason, according to informants, the Karok men wore basketry caps. Farther upstream even such nets as these cannot be employed, and the harpoon, and a smaller version of the A-frame net were

124. Waterman and Kroeber, 1938.

125. Goddard, 1903. See also Snyder, 1924. The Hupa weir was left standing for a longer period than that at Kepel.

commonly used. Lampreys were taken in small elliptical hand dip-nets. The Karok also had acute-angle hooks of wood. (fig. 138).¹²⁶

The existence of elaborate rituals for the "first salmon" of the year, related to an entire ceremonial series celebrated jointly by Yurok, Hupa, and Karok, may be mentioned in passing. Performance of some of the rite at the mouth of the river relieved those upstream from repeating it, though fishing restrictions existed in connection with the Kepel weir, and during other ceremonies.¹²⁷ We shall not refer again to this wide-spread ritual procedure for insuring the appearance and abundance of the salmon; adequate analyses of the ceremony have been made by Gunther, and the whole complex, with additional citations of occurrences, is taken up by Birket-Smith and de Laguna.¹²⁸ Without going into a detailed listing of its distribution, it is known from many Plateau groups, the Northwest Coast except for the Tlingit and Haida, and to the south it extends to some of the Maidu and Nisenan. Its distinctiveness as a trait complex is low, as on the fringes of the area it blends with first-fruit and similar ceremonies. Birket-Smith and de Laguna find it among the Eyak and Tanaina. With the voluminous data now available in the culture element surveys, a reexamination

126. Driver, 1939:379.

127. Driver, 1939:314, 380; Drucker, 1936:27 ff.

128. Birket-Smith and de Laguna, 1938:488-490.

of the first salmon data may be in order. In the same connection, shooting of fish with bow and arrow seems to be prohibited with almost the strength of a tabu on the lower Klamath River and lower Trinity region, although it was practiced without compunction by the Shasta who lived along the Klamath. Whether the sporadic appearance of reported tabu on shooting of fish in the Salmon Area is significant or not might also be tested with the aid of the culture element data.

North of the Yurok, the coastal Athabaskan and other peoples show a progressive diminution of dependence on salmon, and a lower degree of fishing specialization, until the vicinity of the Columbia River estuary is reached. In Tolowa territory, three sub-areas may be distinguished on the basis of fishing resources: Crescent Bay, Lake Earl, and Smith River.

Crescent Bay with its low rocky shore and with numerous sea stacks off Point St. George, provided various marine species such as cod, halibut, and some surf fish. Sea lions were harpooned in Yurok fashion from canoes (see fig. 105 and 106). The salmon consumed had to be taken in Mill Creek or Smith River. Informants reported that fish hooks of mussel shell were once used by the Tolowa. (See fig. 139, based on their descriptions.) If so, this is their first appearance north of the Chumash of Southern California. It may be that the hooks in question were made in imitation of

iron hooks after contact with the whites. Fish hooks were floated as shown in figure 140.

Lake Earl, a brackish lagoon bordered on the ocean side by a long beach, was the site of fishing with long gill-nets, traps, and on the beach, A-frame dip-nets for surf smelt. In the upper course of Smith River, with its fairly heavy run of salmon, double weirs were installed, as shown in figure 9. The downstream weir is low and easily passed by the fish, but they are blocked by the high, upstream weir, and eventually drift back to the trap, or are taken with dip-nets or harpoons from the space between the fences. The Smith River Tolowa combined fishing in the estuary of the river and on the beach with salmon fishing in the river with single pronged harpoons (fig. 98). The Smith River, and most of the Oregon coast streams, lack the strong eddies of the Klamath and the Trinity, so that platform fishing with A-frame nets was not developed. The natives of the Chetco and Winchuck rivers were restricted to small salmon runs, and few sea lions were available. Surf fish, mollusks, and flounders, the latter gaffed in the river-mouth lagoons, were present, however. (See figs. 73, 121.)¹²⁹ Shell or claw rattles as alarms to signify the entrance of a fish were used, at least by the Chetco and Tolowa.

The Rogue River was a fairly productive stream in salmon and steelhead. The tangential-handled lifting net, an

129. Drucker, 1937.