

# A Cache of Aboriginal Fishing Gear from the Queen Charlotte Islands

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The cache described below was found in a small rock-shelter on the north side of Tasu Sound on the west coast of Moresby Island\* (Hobler 1976a). The materials were recovered from the surface without excavation (fig. 1). There is no surface evidence of the use of the shelter for regular habitation or for burials. No objects of clearly European manufacture were found although one unique hook of a composite barbed type appears to have once had an iron barb. These somewhat tenuous bits of evidence point to a late prehistoric or early historic date for the cache.

The collection consists of seventy wooden hooks or hook fragments (fig. 2) and five other objects of wood or plant fibre. Sixty-nine hooks are the curved snap-shut type still recognized by a few older Haida informants as black cod hooks. Two varieties of this type of hook are found in the collection: *one-piece* (46) (fig. 2a) made from a single shaft bent all the way around to form both the main body of the hook and the pointed tip; and *composite* (20) (fig. 3b) made of two pieces, with the sharply curved wooden tip made separately and then attached to the main shaft by a lashed scarfed joint. The maximum shaft thickness for both types is about midway along the shaft and averages 11.5 mm (s.d. = 1.4). The mean length of one-piece hook shafts measured along the curve is 392 mm (N=32, s.d. 25). Most of the hooks have straightened somewhat since abandonment but in twenty-seven cases it is possible to figure the original length of the hook in its curved functional shape. The mean of these lengths is 161 mm. Mean length of composite hook shafts without the tip end is 321 mm (N=10, s.d. = 38).

Leader attachment is facilitated by a carved widening at the proximal end of the hook shaft. This feature is present on every proximal hook end in the collection and seems to have been a functional requirement. Most

\* The find was made during an archaeological site inventory sponsored by Simon Fraser University's Department of Archaeology and the Office of the Provincial Archaeologist. The specimens are now in the Queen Charlotte Islands Museum, Skidegate.

(54) are a simple unilateral barb with the tip of the barb inward on the hook. The feature takes a zoomorphic form on six pieces (fig. 4). Haida informants explain that a skein of tackle (the long line, hooks, leader, etc.) was often the property of more than one individual. Owners identified their individual hooks by special carving. Such may have been the purpose of the zoomorphic leader ends. Fragments of leaders preserved on three pieces appear to be spruce root. The leader is "Z" twisted (the lay running from the upper right to the lower left when viewed vertically). Leaders are looped around the hook shaft and fixed in place by separate lashing.

The sharply curved distal end of the hook is held from straightening under the pull of a heavy fish by a lashed cross tie. On some one-piece hooks and on all composite examples the proximal end of the cross tie is fixed with a complex symmetrical lashing technique (fig. 3b). On composite pieces this elaborate lashing also serves to hold the scarfed joint together. On well-preserved specimens a second tie extends from the sharpest bend in the hook to the cross tie. This adds tension to the cross tie, making a more effective reinforcement. There was no specific evidence that the cross tie served for securing the bait.

The composite iron barbed hook is about the same size as the others but has a thicker shaft. Line attachment is by means of a shallow groove part way around the shaft near its proximal end opposite the approximate position of the tip of the barb.

*Other objects* recovered include three small fragments of twined cedar matting that may be from small twined bags. A split cedar stick carved to a point at one end and broken at the other may be part of a device used to hold fish upright for barbecuing. Its pointed end is blunted by impact and it is charred along most of its length. A more problematic object is a long, thin, slightly scoop-shaped object with a neatly carved crescent at one end (fig. 5). It measures 110 mm in width and averages 12 mm in thickness. Its present length, nearly the original length of the object, is 468 mm. Abrasion of the thin edge at the wide end indicates that it may have been used as a scoop.

*Manufacture and use of hooks.* Although Haida black cod hooks are to be found in the ethnographic collections of many museums there are surprisingly few technical descriptions (Niblack, 1890, pp. 291-92; Stewart, 1977, p. 40; Swan, n.d.). Solomon Wilson and Richard C. Wilson of Skidegate recently provided the following details. Wood suitable for the manufacture of bent hooks came from branches in rotten hemlock logs. After splitting and shaping, the pieces are slipped inside sections of



FIGURE 1

Rock-shelter site FeUa 3 in Tasu Sound. Part of the fish hook can be seen in the foreground.

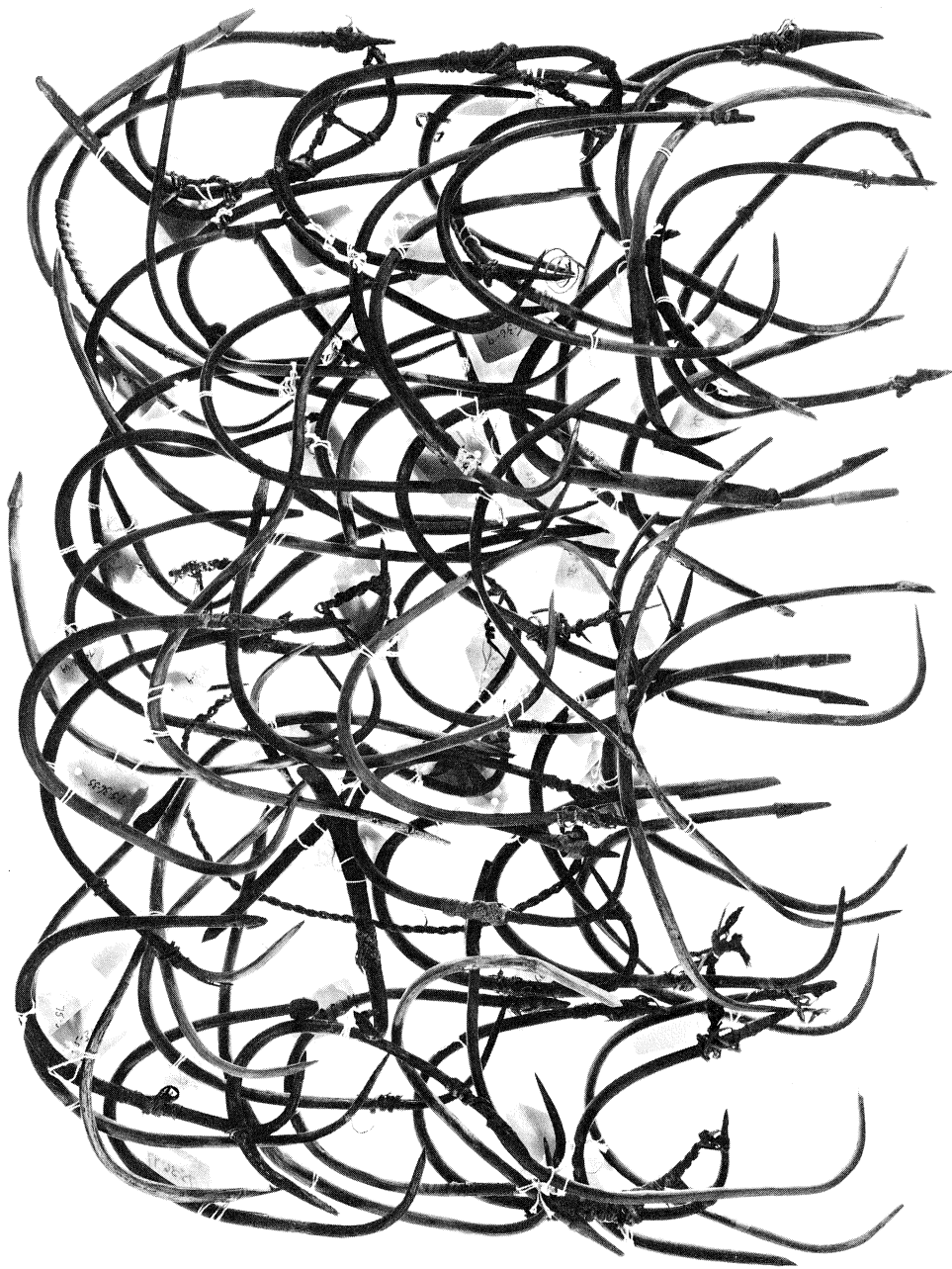
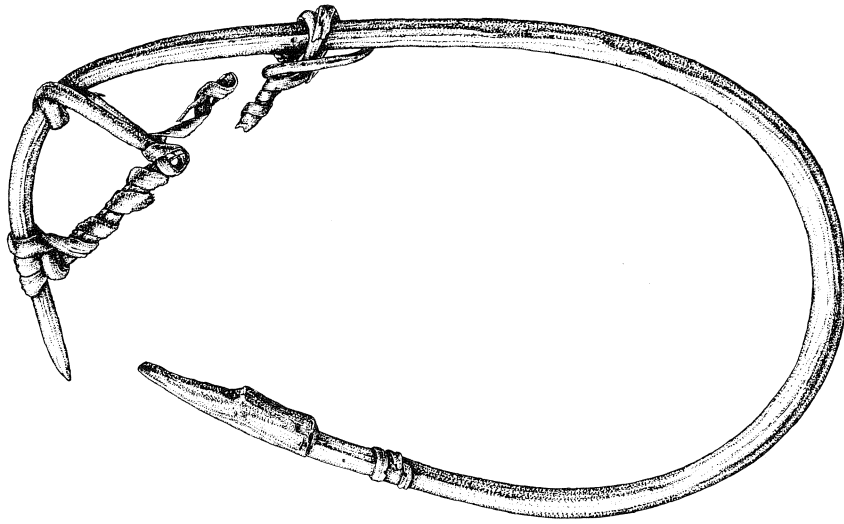
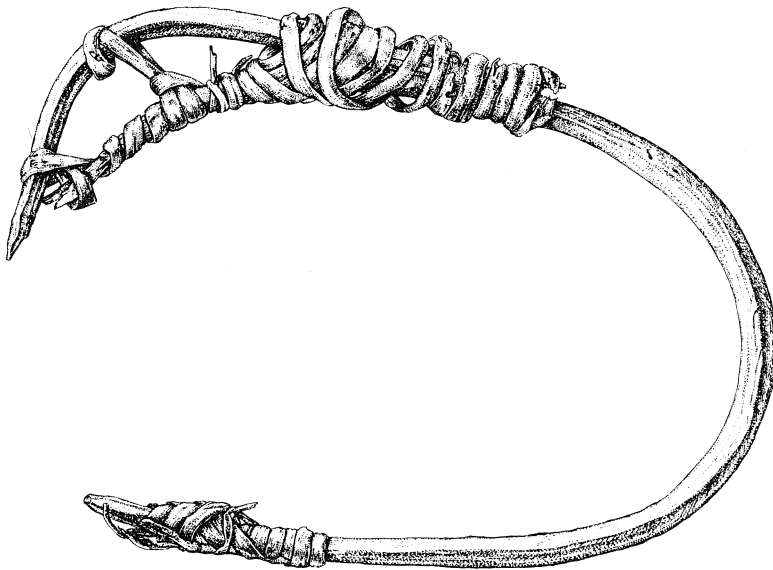


FIGURE 2  
The complete collection of hooks and hook parts from site FeUa 3.



a



b

FIGURE 3

The two types of black cod hooks: *a*, one-piece; *b*, composite. Length of *a* is 177 mm.

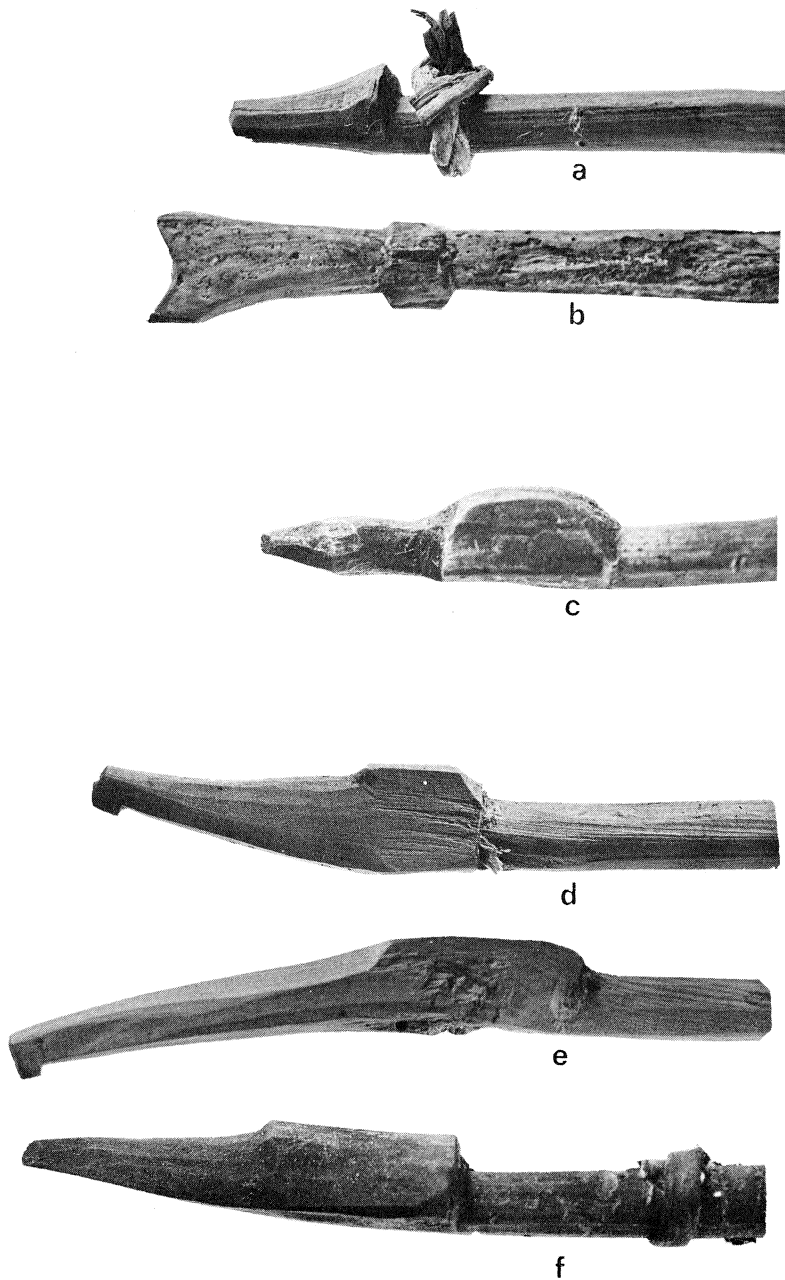


FIGURE 4  
 Carved leader ends of hook shafts: *a*, undecorated; *b*, unclassified;  
*c-f*, life forms. The length of *f* is 68 mm.



FIGURE 5. Wooden scoop-like object. Length is 468 mm.



FIGURE 6

Evidence of use on a hook shaft. The parallel scratches were probably made by black cod teeth. The shaft width is 12 mm.

fresh kelp, covered top and bottom with wet seaweed, and placed on a bed of hot rocks to steam. The kelp is placed in such a way that individual pieces can be pulled out to test. When specimens have steamed long enough to become workable they are removed, bent, and tied so as to prevent straightening upon drying. This style of hook is known to be suitable only for the relatively soft mouth of the black cod. Gear of this type was well cared for. Individual hooks were meticulously scrubbed at the end of the season and the entire skein of tackle hung up in a dry place inside the house. Women did not use such tackle and were not allowed even to touch it or be in its immediate vicinity.

James Swan provides the following description based on field work with the Haida Indians begun in 1873.

the lower portions of these hooks are curved inward to form a barb, and when not in use the two ends of the hook are fastened together by a piece of twine, which is also used to tie on the bait. When the hook is to be used, the two parts of the hook are separated by means of a stick or peg, which the fish knocks out when he takes the bait, and the two ends of the hook close together and hold him fast. The peg floats to the surface and indicates to the Indian that he has caught a fish. . . . [T]he Haidas frequently put on one hundred hooks to a single line, which acts like a trawl, and so plentiful are the black cod that often from fifty to seventy-five are hauled in at one time. (Swan, n.d.)

Swan goes on to relate that herring, squid or bits of halibut belly were preferred as bait for the *skil*, the Haida name for the black cod.

The main evidence of use wear on the hooks from the cache consists of scratches in the dark surface patina. This fine scratching is still present on twenty-six of the hooks in the collection and may have been eroded from a good many more since abandonment. The scratches are found along



any part of the hook shaft away from the leader attachment but are most common just inward from the proximal end of the cross tie (fig. 6). The sub-parallel scratches fairly closely match the small size and close spacing of black cod dentition. A quick look at ethnographic black cod and halibut hooks in the collection of the SFU Museum of Archaeology and Ethnology showed clear evidence of chewing on most specimens. V-shaped northern halibut hooks, in particular, are usually heavily chewed, showing a smaller number of deeper, more gouge-like tooth marks.

The small sticks used to trigger these hooks were not found in the rock-shelter. No wear or special provision for seating these sticks could be discerned on individual hooks.

The seventy hooks and other items as they were found in the rock-shelter probably do not represent an intact cache. It looks as if a skein of tackle may once have been cached in the shelter, probably in a wooden box. Later someone returning to the site may have dumped out the contents, stripping hooks from the mainline and leaders and leaving them as they were found, scattered in an area of about one square metre. Significantly, none of the hooks was tied shut in its normal storage configuration. Several recent excavations of waterlogged coastal archaeological sites with wood and plant fibre materials preserved give a new perspective on the history of bent-wood hooks on the coast. Of eleven sites of various ages with waterlogged perishables, five have bent-wood hooks (Croes, 1976).  $^{14}\text{C}$  age estimates for these are as follows:

<i>Site</i>	<i><math>^{14}\text{C}</math> age estimate b.p.</i>
Hoko River	2750 $\pm$ 90, 2210 $\pm$ 70
Biederbost	1940 $\pm$ 80
Fishtown	1220 $\pm$ 70
Kwatna	240 $\pm$ 80, 450 $\pm$ 90, 1280 $\pm$ 100
Ozette	late prehistoric

Significantly, the best represented hook type at the Hoko River site is a one-piece bent hook similar to the triggered Haida black cod hooks. Although the excavator expresses uncertainty as to how such hooks may have worked (Croes, 1976, p. 216), it is clear from the illustrated specimens that they must have been designed to snap shut in the manner of the much later Haida black cod hooks. The three illustrated Hoko River specimens range from 58 to 109 mm in functional length and thus are, in size at least, much like the specimens from the Biederbost site on the lower Snowqualmie River (Nordquist, 1976). Very small bent-wood hooks were

also discovered by Onat at the Fishtown site on the Skagit River delta (Onat, 1976).

The site of Axeti at Kwatna on the B.C. coast in the Northern Kwakiutl-Bella Coola territory produced numerous one-piece bent-wood fish hooks (Hobler, 1970, 1976b). Most had straightened but a few better-preserved specimens show the sharply recurved tip characteristic of a triggered hook. Hook shafts are of smaller diameter and shorter overall length than the examples in the Moresby Island cache. The general size and ruggedness of the Kwatna hooks seem greater than the earlier hooks from Washington sites. Technical details of the Ozette hooks are not yet available but illustrated specimens and those observed by the author seem well within the range for ethnographic hooks of comparable type.

In summary, the principle of a hook that closes on a fish's mouth seems to have reasonable antiquity on the coast. Hook size and ruggedness increase through time. It should be noted that the distribution of bent-wood hooks is by no means uniform. They are missing entirely in the collections from more than half of the reported waterlogged sites. This absence may be indicative of site function.

The Moresby cache is a reminder to us of the point stressed by ethnographers and by the Haida themselves that the Haida were exploiters of bottom fish: cod and halibut. Perhaps more than any other British Columbia group they were dependent upon these several species. Even the somewhat unusual locations of the historic Haida towns on Moresby Island, in exposed outer areas, may have been a response to changes in fishing technology. Perhaps it was the development of long lines or the re-adaptation of the older small snap-shut hook that permitted the exploitation of the rich resource of the deep water black cod in these areas.

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