OZETTE VILLAGE BASKETRY FUNCTIONAL CLASSIFICATION

The stylistic/technological classification of Ozette baskets, hats, and mats (Figs. 25, 29, and 31) considered above will now be employed to discuss functional characteristics of basketry in the Ozette Village House I context. The different classes are grouped into functional sets, one of which, by way of illustration, might consists of basket classes /OBI, OB2, OB5/. These functional sets are constructed according to how the basketry classes appear to correlate (1) technologically, (2) in terms of content, (3) spatially in the Ozette House I area, and (4) ethnographically. These functional sets are based on presently available data. This functional classification is, therefore, a general examination of the basketry items and provides a basis for discussing them in their prehistoric cultural context. The goal is to establish and support hypotheses about general functions of the Ozette Village basketry items and those from other Northwest Coast wet sites.

The construction of the functional sets combines basketry classes which are similar with respect to the four criteria mentioned above. Each will be discussed below.

Technologically Similar Basketry Classes

One of the major factors involved in creating the functional sets is the extent of technological similarity among the different basketry S/T classes. If they are closely similar in all dimensional features but one or two they also could have been functionally similar and included in the same set. Therefore, if two or more basket classes are similar in terms of construction material (e.g., cedar bark), shape (e.g., flat rectangle), base construction technique (e.g., one row plain twining

or one row checker), size (e.g., small to intermediate), and are only different in body weave construction techniques (e.g., different forms of plaiting), then these basket classes would be considered technologically similar, and considered for the same functional set. If, however, a basketry class is technologically distinct (in most characteristics) and relatively common, it could be isolated as a single functional set. For example, the basket class OB23, with its unique long flap attachment and several other aspects (most instructively, the fishhook found within it), provide a firm basis for isolating it as a single member of a functional class set, i.e., a fishing tackle basket functional class. In every case, however, the other aspects of the functional classification (distribution, contents, and ethnographic data) need to be considered.

Contents of the Baskets

Ozette Village is especially appropriate for a functional analysis of baskets since many of the baskets are found still containing their original contents. Baskets that are described ethnographically as fishing tackle baskets, paint baskets, or whale harpoon baskets, are found containing fishhooks, paints, and whale harpoon points. As might be expected, technologically similar basket classes at Ozette often have similar contents.

Unfortunately, some of the things undoubtedly stored in baskets, e.g., dried fish and mollusks, have not been preserved at Ozette. Baskets that might have contained these products were found empty. In these cases, the last aspect of the functional classification, the ethnographic data, often provide information about the traditional uses and contents of these baskets.

The Patterned Spatial Distribution

The third aspect of the Ozette basketry functional classification is the distributional patterns of the basketry classes in and around the first excavated Ozette House (House I). Computer maps are employed to illustrate the spatial distribution of different basketry classes. Some classes are found in distinct areas of Ozette House I, and this distributional information provides important data concerning the functional role of these baskets in the house and, conversely, illuminates something of the functional nature of different areas of the house. For . example, the flat top hats (OH1 and OH2), which were worn ethno-graphically by "commoners" of the household or village, are often found in certain wall areas (vs. corner areas). The patterned location of these hats in Ozette House I corresponds to the ethno-graphically assigned areas for commoners in a Nootkan household (Drucker 1951:71). These distributional patterns are, therefore, important in suggesting the organizational patterns of the household.

A Cal-comp computer plotter and idealized basketry class symbols have been used to map the distribution of basketry items in and around Ozette House I (cf. Maps 3-24) (Croes, Davis, and Irwin 1974).

Ethnographic Data

Because Ozette Village House I has been occupied relatively recently, approximately 300+ years ago, ethnographic information is very useful in explaining the functions of Ozette Village basketry classes and in helping support the other lines of functional evidence. Ethnographic data were obtained through (1) the literature, (2) informants at Neah Bay, Makah Indian Reservation, and other Native Americans from around this area, (3) museum records, and (4) early photographs showing different activities where basketry items were in use. Unfortunately the ethnographic literature often is limited with respect to basketry, and hampered by being general and without standardized terminology. Sproat's (1868) main comments concerning the basketry made by the Alberni Aht exemplifies well this superficial treatment:

Of all the household articles, the prettiest is the common basket, which is of different sizes, and is used by the women in carrying salmon or berries—being supported on their backs by a thong passing across their foreheads (p. 88).

This situation was expected somewhat since Native American basketry is technologically and otherwise a rather unfamiliar artifact to most Euro-American observers. In the present study much valuable help in understanding the function of Ozette Village basketry was given by Makah senior citizens who, as youngsters, observed the use of many of these basketry items.

The following Ozette basketry functional classifications consider separately the basketry categories of basket, hat, and mat. The functional sets are designated, illustrated, and defined. The initial discussion explains how the set is formed, and considers the technological features of the basketry classes, including the dimensional features not included in the actual basketry class definitions, e.g., gauge of weave, size, ornamentation, etc. Following this are discussions of basketry contents, distributions of basketry in House I, and relevant ethnographic data.

This synthesis provides information concerning the functional role of the basketry items in a single Northwest Coast household (of approximately five families or twenty individuals) approximately 300+ years B.P. Hopefully, it will add to the final synthesis of all the data from

Ozette Village in understanding the makers and users of these items. Finally, these functional assignments will be useful in comparing the functions of basketry objects from Ozette Village with those recovered from other Northwest Coast wet sites.

Ozette Basket Functional Set I. /OBI, OB2/

Large, plaited, cedar bark, cube-shaped, pack and storage basket (Fig. 34)



Fig. 34. Functional Set I. Large, plaited, cedar bark, cube-shaped, pack and storage baskets.

Technological Characteristics

The large cedar bark baskets in this set, OBI and OB2, technologically are quite similar. They share the following characteristics:

- 1. Construction material: cedar bark.
- 2. Base construction technique: checker.
- 3. Shape: cube (though the mouth may have been rounded).
- 4. Rim construction: (open) tuck and wrap.

- 5. Base gauge of weave: coarse-gauge.
- 6. Body gauge of weave: medium-gauge.
- 7. Size: large.
- 8. Transition between base/body: one row plain twining.
- 9. Transition between body/rim: one row plain twining.

The only difference between the two classes is the slight variation in body weave: checker plaiting vs. checker IIB plaiting. The structurally distinct checker IIB body weave on the OB2 class baskets creates an ornamental effect whereas the checker body weave on the OBI class baskets would not. Two baskets of this set were recovered with tumplines tied to their open work tuck and wrap rims, indicating their function as carrying baskets. An OBI basket (2/V/43) is illustrated in Fig. 35, and, as with most large baskets in this set, it had been badly damaged by the Ozette mudslide.

Basket Contents

Baskets at Ozette generally were found to have been either in use at the time of the mudslide or were previously broken and discarded in the house wall areas or refuse midden. Of the twelve baskets in functional set I, six appear to have been in use, and six badly worn and discarded. Those in use usually were found containing bundles of raw cedar bark or cedar bark wallets, sacks, or bags (themselves full of various 69 contents). The contents of baskets of this set are detailed below:



Fig. 35. Fragmented example of a large, checker plaited, cedar bark storage basket (2/V/43; OBI). Note open tuck and wrap rim, and single transition row of plain twining between coarse-gauge base/medium-gauge body and between body and rim.

Basket 28/IV/13 (OBI)

This basket was found empty, but because of its high position in the mudslide, completeness, and location, it probably had been in use, but moved, possibly emptied and badly tangled by the mudslide.

Basket 30/IV/7 (OB2)

10 cedar bark wallets, sacks, or bags with contents (to be discussed in the following section)

1 "ball" of cedar bark strips

Numerous feathers and bird wings

Basket 71/V/6 (OB2)

8 bundles of raw cedar bark with average length of 5.26 M (17.25 feet), and whose average surface area (7,144 sq decimeters) is enough to make about four extra large size baskets

1 wood chisel (?)

Basket 128/IV/6 (OBI)

4 cedar bark wallets, sacks, or bags with their own contents

2 wooden combs

1 spindle whorl

ground stone blades (possibly ulus)

1 bundle of split bone

1 bundle of yarn (?)

5 bone awls (one with a bound wooden handle, two made from ulnas, two made of split bone)

Basket 144/IV/13 (OBI)

7 cedar bark wallets, sacks, or bags

6 raw cedar bark bundles

1 small folded mat

1 bone awl

Large quantity of red ochre pigment (pieces bound together)

Small quantity of white earth pigment

Split limb or root materials

Yarn (?) fragments

Basket 145/IV/72 (OBI)

27 bundles of raw cedar bark

10-1- pieces of two-strand cedar bark strings

8+ pieces cedar bark braid cordage

1 bird bone matting needle

1 tumpline (possibly once attached to basket edge)

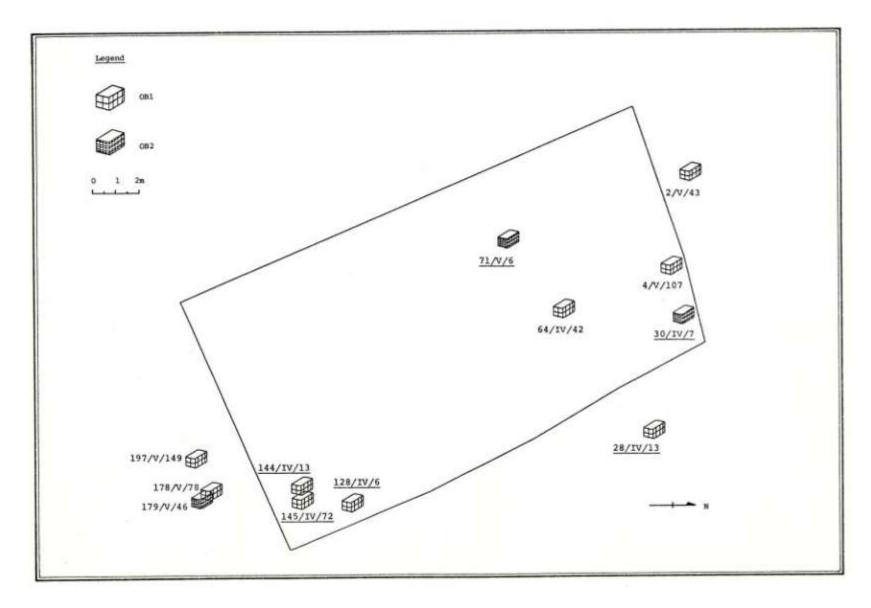
The most common contents of baskets in this set are raw cedar bark bundles (total of 41), followed by the cedar bark wallets, sacks, or bags (total of 21 and each with its own contents). Also found are various types of bone awls (n=7), combs (n=2), spindle whorls (n=1), ground

stone blades (ulus?) (n=3), various lumps of paint pigments, possible lumps of yarn, and pieces of cordage. Most of these contents can be considered women's materials and equipment and perhaps they were women's storage baskets. Two (71/V/6 and 145/IV/72) were found with tumpline straps attached to their rims. Since these contained several cedar bark bundles, they probably were used to gather and carry this important raw material.

The Functional Set I baskets may therefore be summarized as having been used to store cedar bark wallets, sacks, or bags (with their own contents), used to gather and store raw cedar bark bundles, and they likely were the property of women of the household, who were the main users of the cedar bark basketry materials, awls, spindle whorls, combs, and ground stone cutting blades found stored in these baskets.

Distributional Patterns within the Site

Baskets of this set that appear to have been in use at the time of the slide were found in the corner areas of the household (Map 3). They originally were stored on the bench platforms or kept along the walls. Three baskets with their contents intact were found in the southeast corner of the house. This corner appears to have been a family area, and the storage baskets found there contained the largest quantity of raw materials. Full baskets of this class also are found in the northwest corner, again an active area with much whaling equipment, and in the northeast corner area (see Map 3). A basket found just outside the northeast corner came from the house behind House I, and was deposited there by the westerly moving mudslide. The remaining baskets of Class Set I are broken, discarded examples recovered from within the house floor midden or from the outside refuse midden.



Map 3. Distribution of large cedar bark storage baskets recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Ethnographic Data

Historically, this basket class set may have been mentioned first by James Swan, an early resident of Neah Bay, Washington. In discussing baskets he stated that "the large ones, made of bark, which are used for holding dried fish, or blankets, are called klap-pairk" (Swan 1870:46). Reverend Eells next mentioned these baskets when he described eleven different forms of Clallam, Chemakum, and Twana baskets. His Type Nine baskets are described as "Baskets made of the inner bark of cedar, split into strips a half or third of an inch wide and woven. They are of various sizes, holding from two quarts to a bushel or more; used for storing purposes" (Eells 1887:627). Boas provides the best description of this kind of basket in use by the Kwakiutl. He wrote:

Large cedar-bark baskets also serve for keeping dried provisions and clothing in (Fig. 100). These have a square bottom and are quite large. One of them measures 53 cm by 40 cm, and 40 cm high [compare to 46x30x43 respectively for Ozette, 144/IV/13; OBI]. The top of this kind of basket is always made with a strong rope of cedar-bark and the open meshes described before (see p. 392, Fig. 84) [open tuck and wrap rim here]. These meshes serve to pull cedar bark rope through, by means of which the full basket is laced up (1909:418-419).

Drucker, in his list of cultural elements along the Northwest Coast also mentions this basket for the Kwakiutl: "The following kinds of cedar bark checkerwork baskets were made: a large storage basket, for clothes, blankets, etc. (vAkwonol) ..." (1950:262).

Several baskets of this set have been noted in museum collections. The general use described for these baskets is simply as storage baskets. Some museum specimens have tumplines attached, indicating their use as pack baskets. Older informants in Neah Bay, Washington, remember these large baskets, and one lady, Lena McGee Claplanhoo, a Makah basket weaver, remembered as a young girl peeking into these baskets stored on shelving in the old plank houses at historic Ozette Village (ca. 1920). She recalls that various things, including dried fish and clothing, were kept in these baskets.

Summary

Baskets of this set were large storage and pack baskets. They would have been relatively light and flexible. They would not have been good for very heavy or wet loads, such as fish and shellfish, because the cedar bark material would become flimsy when wet and would break with heavy loads. This functional set, then, was used for storing various things of the household, usually in family corner areas along the walls or on benching, and for packing and storing raw cedar bark bundles at Ozette Village. These baskets most likely were used by women since most of their contents are considered to be women's equipment and materials.

Ozette Basket Functional Set II

IIa: /OB3, OB4, OB5, OB6, OB7, OB8, OB9, OB10, OB11, OB12, OB13/
IIb: /OB14, OB15, OB16, OB17, OB18, OB19/
IIc: /OB21, OB22/

Small to intermediate sized, plaited, cedar bark wallets, sacks, or bags (Fig. 36)

Subset IIa

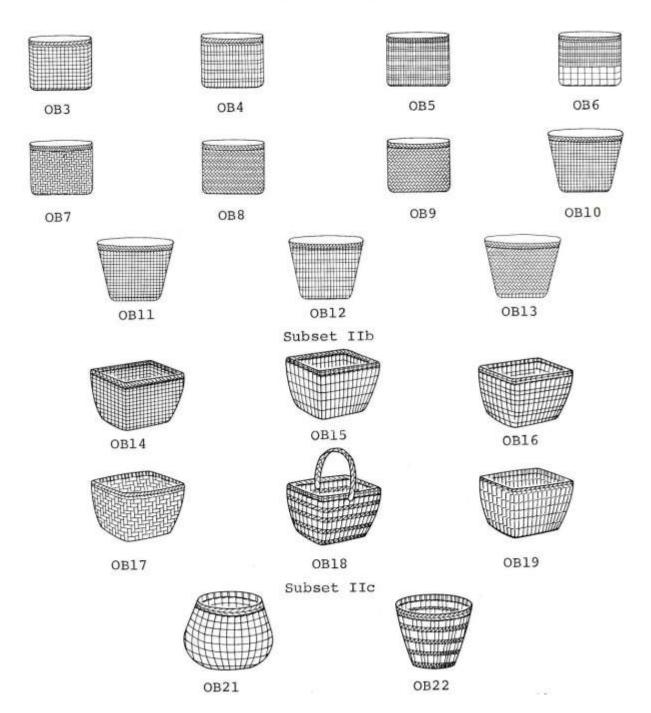


Fig. 36. Functional Set II. Small to intermediate sized, commonly plaited, cedar bark, wallets, sacks, or bags. Subset IIa: flat bag forms; Subset IIb: expanding rounded cube forms; Subset lie: rectangular-base, recurving oval or ovate, inverted, truncated cone forms.

Technological Characteristics

All the baskets in Functional Set II can be considered to be wallets, sacks, or bags. This functional set has been divided into three main subunits which are distinguished by their different shapes:

IIa: flat bag (flat rectangle or trapezoid [see example, Fig. 37])

IIb: expanding, rounded cube (see examples, Figs. 38 and 39)

IIc: rounded oval (see example, Fig. 40)

Baskets of this set were constructed with a wide variety of different plaiting techniques including plain checker, checker IIA, checker IIB, checker IIC, combination checker IIB/checker, twill 2/2, twill on bias, twill 2/1/1 on bias, alternate plain twining/checker, some open twining, and alternate plain twining/ checker II in twos (for definitions of various weaves see Table 7). These different plaiting techniques may have had cultural significance, but patterned site distributions of the different plaiting techniques have not been observed and ethnographic data indicating a symbolic importance of different constructionally ornamental plaiting techniques is lacking.



Fig. 37. Ozette cedar bark rectangular flat bag with structurally ornamental checker IIB body weave and cedar bark, two-strand string attached to the rim (31/V/102; OB4).

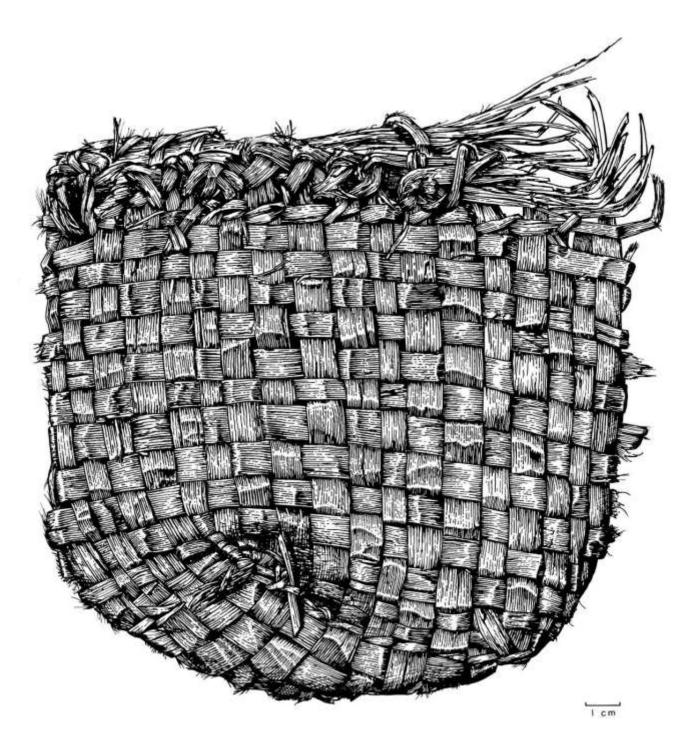


Fig. 38. Cedar bark, expanding rounded cube, checker weave bag (FS/56; OB14). Note row of plain twining as a transition between the base and the body and looped rim construction.



Fig. 39. Fragmented cedar bark bag with an across-the-mouth braid handle (142/IV/23; OB18). Note small bone point placed in alternate plain twined/checker weave.

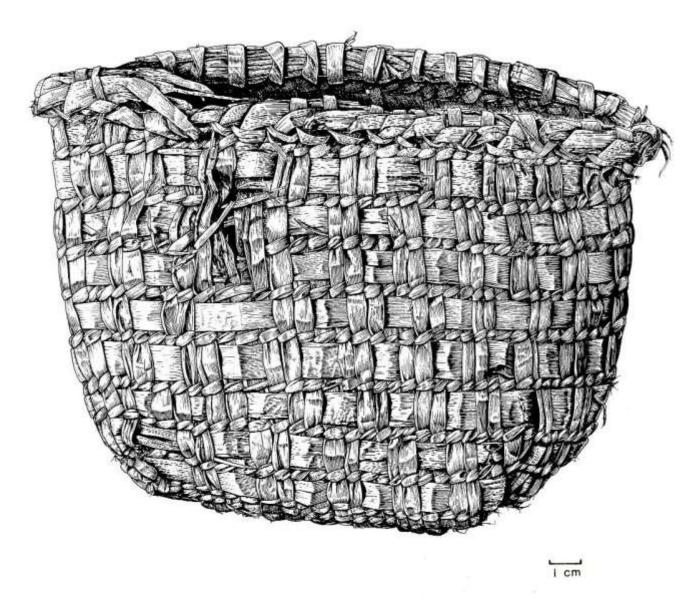


Fig. 40. Cedar bark ovate bag with alternate plain twined/checker II in twos weave (144/IV/13; OB22).

Basket Contents

Thirty-six (38%) of the ninety-five bags appeared to have been in use. The remaining fifty-nine (62%) of them were badly broken, deteriorated, and usually found with other refuse in the midden or house floor. Some broken baskets continued to be of use as padding for cradles and

possibly for other things. The wallets, sacks, or bags that were in use were almost always stored in either large storage baskets (usually those of Functional Set I) or in wooden boxes. While many were found empty, some contained a variety of things and the empty ones may well have once contained animal food products which would have decayed following the mudslide. Those stored inside large storage baskets or wooden boxes have the following contents:

1. Sea gull bones and remnants of feathers.

2. Cattail heads (spikes).

3. Fragments of textiles, and yarn (fibrous materials).

4. Split bones.

5. Decayed black organic matter (pigment?).

6. Bone awls.

7. White/yellow pigments (?).

Four flat bags [(30/IV/ll (OB7), 12 (OB12), 15 (OB7), and 18 (OB11)] and one oval sack [30/IV/17 (OB35)] were found inside a large cedar bark storage basket 40/IV/7 (OB2) (see Map 4). Some of these bags contained feathers, sea gull wing bones, and remnants of bird down. The feathers are in extremely poor condition. The sea gull wing bones include humeri (n-2), radii (n=2), ulnae (n=8), carpometacarpals (n-10), and phalanges (n=7) and were identified as herring gull (*Larus argentatus*), western gull (*Larus occidentalis*), and *Larus* sp. (Table 41). The bags contain only wing bones and no other bird skeletal elements. Apparently only feathers, plus whole bird wings and feathers, and possibly bird skins with feathers were stored in these basketry bags. Gunther notes at least twelve birds that were caught for their feathers, down, or skins, including sea gulls (1936). Feathers, bird skins, and whole wings have been recorded as

having been used as parts of clothing, and/or as parts of costumes in dance and drama, and wing feathers were used as fletching for arrows (Swan 1870, Drucker 1951, Gunther 1972). Bird skins with feathers removed, but with down still attached, ethnographically were collected for the manufacture of special blankets. These skins were dried, stored, and when enough were available they were slightly moistened, cut into narrow strips, twisted around strings (like a boa), and woven into very thick, compact, light, and warm "bird-skin" blankets (Swan 1870-43-44, Gunther 1936). Some cedar bark bags may have been used to store and protect these dried bird skins. Bird down also was used in several different ways: it was used to pad dog hair yarns and frequently was used in dance and drama. In reference to glaucous-winged gulls (*Larus glaucescens*) Gunther recorded this for their use by the Makah:

For dances the white part of the feathers and the down was used. When people were going into the ceremonial house for a gathering, a man might roll down into a blanket and throw it up in the air. This was an invitation for the people present to come to his house for a feast. As a part of some dancing costumes, the hair was wetted and sprinkled with down, which stuck very well to the wet hair (1936:108-109).

Three flat bags [30/IV/23 (OB8), 30/IV/14 (OB11), and 70/VI/5A (OB7)] were found containing cattail heads or spikes (*Typha latifolia*). Two of these flat bags contain a number of complete spikes and were stored in a large cedar bark storage basket [30/IV/7 (OB2)]. The other was stored in a wooden box with a blanket and had only remnants of what appears to be cattail spike fluff [70/VI/5A (OB3)]. These stored cattail spikes could have been used as food, but they appear to be too mature. More likely these spikes were used to pad yarn for blanket weaving. The most complete blanket in House I (70/VI/5) is made with yarn that is heavily padded with the fluffy spike seeds of cattails.

Artifact Number	Bone Identification	Species Identification
30/IV/21 O	distal left humerus	Larus argentatus (herring gull)
30/IV/21 S	distal left humerus	Larus argentatus (herring gull)
30/IV/21 d	left ulna	Larus argentatus (herring gull)
30/IV/21 J	left ulna	Larus sp. (small)
30/IV/21 H	left ulna	Larus argentatus (herring gull)
30/IV/21 C	left ulna	Larus argentatus (herring gull)
30/IV/21 a	right ulna	Larus argentatus (herring gull)
30/IV/21 Y	right ulna	Larus argentatus (herring gull)
30/IV/21 R	right ulna	Larus sp.
30/IV/21 E	right ulna	Larus argentatus (herring gull)
30/IV/21 b	left radius	Larus argentatus (herring gull)
30/IV/21 a	right radius	Larus argentatus (herring gull)
30/IV/21 h	left carpometacarpal	Larus sp. (small)
30/IV/21 M	left carpometacarpal	Larus argentatus (herring gull)
30/IV/21 B	left carpometacarpal	Larus occidentalis (Western gull)
30/IV/21 A	left carpometacarpal	Larus argentatus (herring gull)
30/IV/21 r	right carpometacarpal	Larus argentatus (herring gull)
30/IV/21 s	right carpometacarpal	Larus argentatus (herring gull)
30/IV/21 g	right carpometacarpal	Larus argentatus (herring gull)
30/IV/21 Z	right carpometacarpal	Larus argentatus (herring gull)
30/IV/21 L	right carpometacarpal	Larus argentatus (herring gull)
30/IV/21 G	right carpometacarpal	?
30/IV/21 q	left phalanx	Larus argentatus (herring gull)
30/IV/21 k	left phalanx	Larus sp. (small)
30/IV/21 t	left phalanx	Larus sp.
30/IV/21 n	left phalanx	Larus sp.
30/IV/21 m	right phalanx	Larus argentatus (herring gull)
30/IV/211	right phalanx	Larus argentatus (herring gull)
30/IV/21 v	right phalanx	Larus argentatus (herring gull)

Table 41. Sea gull wing bones found associated with cedar bark bags in storage basket 30/1V/7 (OB2). (Identifications made by Dr. Edward Friedman, April 1976).

NOTE: Minimum number of individuals represented:

Larus argentatus, 5 individuals (left carpometacarpal); *Larus accidentalis* 1 individual (left carpometacarpal); *Larus* sp., 3 individuals (left phalanges).

The butchering technique involves disarticulation between the humerus and the radius/ulna, possibly by pulling or snapping. Only two distal humeri are found, both possibly from the same individual (E. Friedman).

Turner and Bell record this use of the cattail spike for the Salish: "The Saanich spun the wooly Pappus of the fruit with dog wool to make blankets" (1971). Reverend Eells also noted "Three kinds of blankets were formerly in use. One was made of dogs' hair, geese feathers, and the head of the cattail rush, twisted and woven together on a loom" (1887:630).

Two flat bags [144/IV/19 (OB7) and 28 (OB14)] and one rounded cuboidal sack [144/IV/15 (OB31)], all in a large storage basket [144/IV/13 (OBI) see Map 4], contained what appears to be paint pigments. The colors are white, yellow-white, and black. Also found separately in the large OBI storage basket was a sizable quantity of red ochre pigment. Evidently these bags were used for storing separately different colored pigments, in the form of dried earths, to be used as paints. One of the flat bags (144/IV/19) is recorded as containing a "round hard lump, approximately six cm. in diameter of ... white pigment" (Ozette Village field notes, 3/3/71). This basket was folded over and tied closed. The associated flat bag (144/IV/28) contained fibrous materials and yellow/white earth. Possibly dog hair also was once stored in these bags, since historically dog hair used in manufacturing yarn was stored with a white earth. Swan states:

The hair blankets are made from the wooly covering of a species of dog of a yellowish-white color, which, after having been sheared off, is packed away with dry pulverized pipe clay, for the purpose of extracting the oil or grease. When a sufficient quantity has been obtained, and has remained long enough in the pipe clay, it is carefully picked over by hand, and beatened with a stick to knock out the dirt. It is then twisted on strong threads, and finally woven into a thick, strong, and heavy blanket. The pipe clay is procured at Kwilleyute (1870:44).

The pipe clay probably was a whitish diatomaceous earth. Since dog hair is animal matter and very poorly preserved at Ozette Village, these bags of yellowish/white pigment may have contained these materials at one time. Another possible use of the paint pigments found in these bags and in the large storage basket is suggested by the fact that they are of the same colors

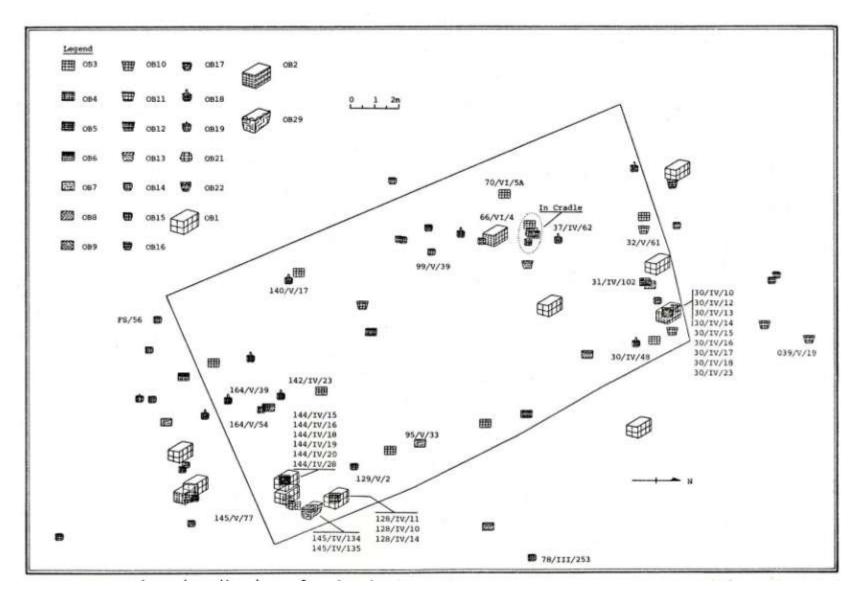
found on some of the painted and carved boards in this southeastern corner of House I. These boards display designs of wolves and thunder-birds which are painted with red negative areas, black figures, and white incised outlines. Possibly the artist(s) resided in this area and stored paint pigments in these bags.

Two other baskets in Functional Class Set II, a flat bag [128/IV/ll (OB7)] and a rounded rectangular sack [145/IV/135 (OB32)] were found containing either fibrous "lumps" or very badly deteriorated textile materials. They appear to be either remnants of dog hair, coarsely spun dog hair yarn, or small pieces of textiles.

The remaining sixteen baskets of Functional Set II were either stored empty or the contents (possibly animal products) have decayed beyond recognition. Six of these were stored inside large storage baskets or wooden boxes. Of the remaining ten, six appear to have been lying on the bench platforms or floor areas. The remaining four appear complete but were found within the house floor midden or the outside refuse midden, apparently lost or discarded.

Distributional Patterns within the Site

The distribution of these small/intermediate size cedar bark wallets, sacks, or bags in and around Ozette House I is illustrated in Map 4. Those that appear to have been in use commonly were stored in either baskets or wooden boxes. The remaining ones that appear to be broken and discarded were recovered within the refuse midden or within the house floor, sometimes stacked with other broken baskets as if discarded together (e.g., in outside southern midden area [Map 4]). The ones in use functioned as small storage containers, placed inside large storage baskets or boxes.



Map 4. Distribution of cedar bark wallets, sacks, or bags recovered from the Ozette House I area. Baskets with designated artifact numbers were in use at the time of the mudslide.

Ethnographic Data

Mention has been made of the ethnographic role of these plaited cedar bark wallets, sacks, or bags. One of the earliest accounts is the following description by Captain Cook relating to a group of Nootka Indians approaching his ship:

But when they are full drissed [sic], they powder their (hair) with the white down of birds, which for the most part they carry about with them in thier [sic] Canoes either in a box or bag (Beaglehole 1967:311-312).

Of possible correlation, bird feather and down remnants were found in bags at Ozette Village. Barnett mentions that "The northern islanders and most of the mainlanders wove a flat sack of cedar bark in checkerwork (gapatet1)" (1955:123), but says little about its use. Drucker suggested a possible use when he wrote:

A small flat wallet (tsa'auts) was also finely woven and used for storing dentalia and similar articles of value. A similar wallet (nuxhwats) is openwork, usually, was used as a ditty bag by men, especially for trips back into the woods. A man would pack some shredded cedar bark, his strike-a-light, small containers of shot and caps, and a ration of dried salmon in his wallet, which lie tucked under his robe above his belt (1951:96).

Boas reported that twill plaited sacks were used to keep salmon and herring roe dry (1909:389) neither of which would have been preserved at Ozette. Two ethnographic sources state that these kinds of baskets were generally for storage purposes: "Soft baskets (guEso'mos) were used by the Snohomish for storing things in the house" (Haeberlin and Gunther 1930:33) and "baskets made of the inner bark of cedar, split into strips a half or third of an inch wide ... of various sizes ...; used for storing purposes" (Eells 1971:627).

Jones has defined this basket type for the Wakashan group as follows: "Undecorated checker flat bag, regular checker, checker 2, checker on bias, rim open with braid [tuck and wrap rim here]" (Jones 1968:51). Accumulated over ten-year intervals, Jones' data indicate that this type of basket made up 11% of the Wakashan baskets collected from 1880-1889, 8% from 1890-1899, 6% from 1900-1909, and was nonexistent from 1910 to 1930 (Jones 1968:53). This indicates a decline in popularity and disappearance of these baskets by 1910, and may indicate why little detail had been recorded ethnographically concerning their use. Gunny sacks and other cloth or paper bags no doubt rapidly took their place. Some of these bags can be found in museum collections but little is recorded as to their functions.

Summary

These Ozette Village cedar bark wallets, sacks, or bags probably functioned to separate, protect, and store certain objects of rather high value. Bird feathers, down, and presumably bird skins were stored in some bags for possible use in the weaving of clothing and blankets. Cattail heads were stored in some bags and probably were used with the dog hair yarn for blanket weaving. Dog hair or yarn, perhaps mixed with diatomaceous earth, appear to be stored in others. And paint pigments of different colors were stored separately in these bags. Considering the previous conclusion that women maintained the large cedar bark storage baskets (OBI and OB2) containing many of these wallets, sacks, and bags, then it follows that these bags mainly were used by women to store and separate different items for basketry and blanket weaving. Males certainly could have used the bags as ditty bags (as explained by Drucker above) and the paint pigments may have belonged to a male artist in the household. At any rate, these small/intermediate, cedar bark wallets, sacks, or bags undoubtedly were used for many purposes, but mainly to separate, protect, and store limited quantities of special materials.

Ozette Basket Functional Set III /OB23/

Plaited, cedar bark, "fishing-tackle" basket with an extra long flap extension (Fig. 41)

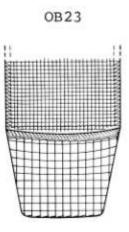


Fig. 41. Functional Set III. Plaited, cedar bark, "fishing tackle" basket with an extra-long flap extension.

Technological Characteristics

The Ozette Village baskets in this functional set, OB23s, are technologically distinguished from other plaited flat bags in that a very long flap extends from the body weave of one edge (both complete examples have flaps measuring 83 to 84 cm long, four times as long as the height of the bags [19 to 19.5 cm high], see Fig. 42). In most other features these baskets are similar to the cedar bark, plaited, flat trapezoid bags of functional subset IIa. The flap on this class of basket extends from the bag with the same cedar bark warp strips used in the body of the bag, but the strips are split to create a fine-gauge plait weave in the flap (see Fig. 42). The flap is constructed with an around and back mat edge and on one of these baskets (145/IV/38) is woven in a very complex twill 2/2 and checker weave combination. The twill 2/2 is done in such a way as to produce a chevron pattern (Fig. 42).

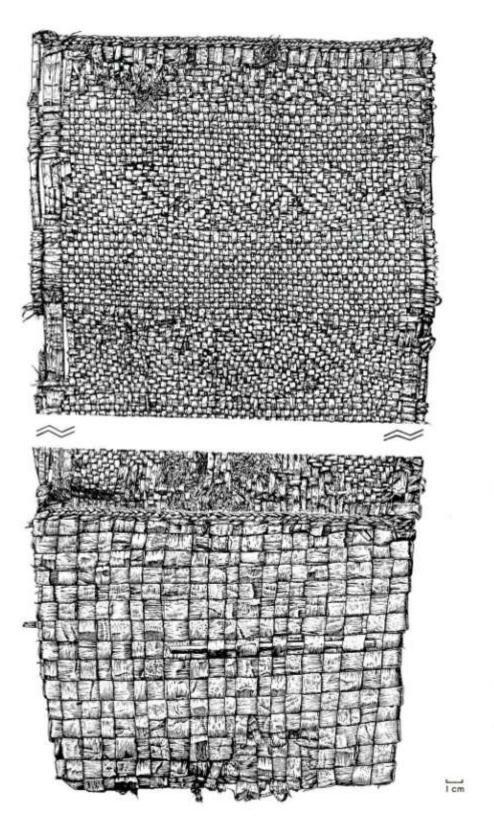
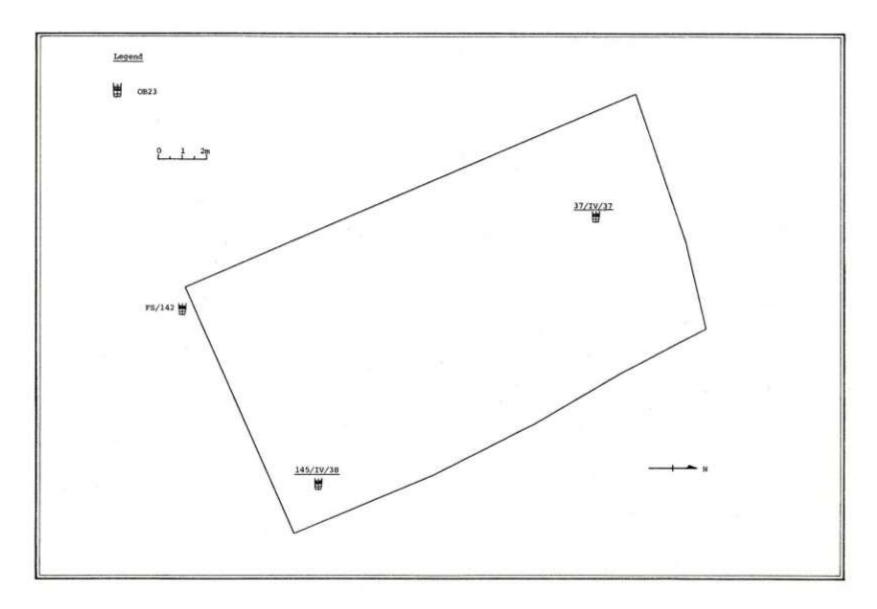


Fig. 42. *Cedar bark, plaited fishing-tackle bag with long flap extension (145/IV/38; OB23). Not the complex combination of checker and twill 2/2 weave creating a chevron pattern in the flap construction.*

Basket Contents

Only three baskets of this class were recovered in and around Ozette House I. One (FS/142) is a broken, discarded specimen outside the house and within the refuse midden. The remaining two had been in use and were found inside the house structure. One (37/IV/37) was found folded up and empty. This basket appears to have been stored with four raw cedar bark bundles and six halibut hooks inside a badly broken wooden box. The folded basket and the other artifacts appear to have been stored along the north wall of the house (see Map 5). The third basket (145/IV/38) was stored in a large wooden box (145/IV/37) which had a telescoping lid (a slightly larger box placed up-side-down over the top of the main box). This well-made box, with incised lines and remnants of red paint on its surface, also contained two woven cedar bark "pillows" full of cattail head fluff, and a well carved wooden mat creaser. The long flap on this basket was wrapped four times around the bag. Inside were found several small fishhooks and other fishing gear. Nine complete double-barbed fishhooks were found in this bag (145/IV/57-65). Each hook has two bone barbs bound with cherry bark to a wooden shank. In addition to fishhooks, five cherry bark-wrapped wooden "tubes," one bundle of fiber, a fine grain sandstone whetstone (probably for sharpening bone hooks), five unused wooden fishhook shanks, and two small sharpened bone points (probably unused fishhook barbs) were stored in this basket. Incorporated into the body of this basket (see Fig. 42) was a long straight stick held in the weave. A similar stick was found in the other complete basket (37/IV/37). This stick may have been used as extra material for constructing additional wooden fishhook shanks. The fishing equipment found in this basket of course provides specific evidence for the function of these bags. Additional data, discussed below, further support this functional assignment.



Map 5. Distribution of fishing tackle baskets recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Distributional Patterns within the Site

The distribution of these three baskets in and around House I is shown in Map 5. Both of the baskets inside the house were found associated with or stored within large wooden boxes, and appear to have been stored on the bench platforms or shelving along the adjacent walls. They apparently were stored along with other things in family areas. The broken basket recovered outside of the house was deep within the refuse midden and must have been discarded.

Ethnographic Data

These plaited, cedar bark fishing tackle flat bags with long flaps are described by Drucker in his discussion of Nootka and Kwakiutl basketry. He states that the Kwakiutl made a "fishhook and harpoon wallet with a long folding flap (ohLadzi)" (1950:262). With reference to the Northern and Central Nootka he writes:

Tackle bags, for fishhooks and other small oddments, were woven of very fine strips of bark into a form like that of a modern folding tobacco pouch: a long strip folded double and bound along the edges to make a compartment at one end and closed by folding the long flap over two or three times (1951:96).

Both of the above are good ethnographic descriptions of this basket class, and the function denoted for these types of baskets in both cases corresponds to their use at the Ozette Village site. The purpose of the extra long flap, besides folding around the pouch, is uncertain. Since the flap usually was woven in a much finer gauge weave, and sometimes with a decorative twill 2/2 weave, fish probably were not routinely cleaned on the flap. The flap probably functioned to hold in and protect the fishing equipment.

Jones, in her recent study of nearly 3,000 Northwest Coast museum baskets, records six baskets of this class and attributes them to a Nootkan origin (1976). This basket class apparently is a distinctive Nootkan Wakashan style.

Summary

The above information clearly demonstrates that the fishing tackle basket class and functional set can be considered a unique and highly specific functional type of basket. Apparently it has been also a Nootkan/Makah style for the last several hundred years.

Ozette Basket Functional Set IV /OB24, OB25/

Extra-large, plaited, cedar bark, "whale harpoon" flat bags (Fig. 43)

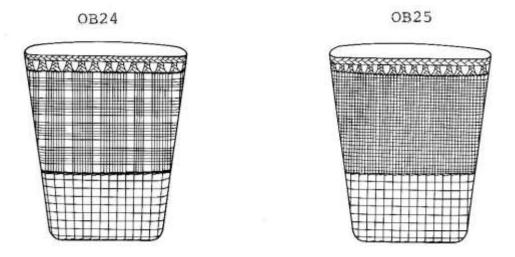


Fig. 43. Functional Set IV, Extra-large, plaited, cedar bark "whale harpoon" flat bags.

Technological Characteristics

Whale harpoon bags are some of the largest baskets recovered at the Ozette Village site. In fact the two largest Ozette Village baskets, with surface area measurements of 108.21 and 103.14 square decimeters, are an OB24 and OB25 respectively (see pp. 165-166), The bags in this set share these technological characteristics:

- 1. Construction material: cedar bark.
- 2. Shape: flat trapezoid.
- 3. Base construction technique: one row plain twining.
- 4. Body construction technique: two distinct sections of plaiting:
 - a. The bottom one-third to one-half woven in a coarse-gauge checker weave.
 - b. The upper one-third to one-half woven with either a medium-gauge checker weave, or a complex checker II plaid weave (see Fig. 44). (The transition between the upper and lower section is composed of one or two rows of plain twining.)
- 5. Rim construction technique: open braid.
- 6. Size: large to extra-large.

At Ozette, the open braid rim construction is recorded almost exclusively on these bags.



Fig. 44. Extra-large, plaited, whale harpoon bag with an open braid rim construction (71/IV/32; OB24). Note two sections of weave; lower coarse checker and upper checker II plaid weave. This bag was found directly on top and attached with a cordage line to another whale harpoon bag. Both contained harpoon heads in folded cedar bark sheaths (OM1s).

Basket Contents

Seven baskets in this functional set have been recovered in and around the House I area. Of these, five were found badly broken and discarded in the outside refuse midden. The remaining two were lying one directly on top of the other inside the house. Each contained whaling harpoon heads in sheaths (OM1s) and remnants of the harpoon lanyards. The specific contents of each bag included:

Basket 71/IV/32 (OB24)

two harpoon sheaths containing harpoon heads two separate harpoon valve halves one plug for a seal skin float

Basket 71/IV/33 (OB24)

three harpoon sheaths containing harpoons

one composite tool: a wooden shaft or rod handle with a hafted iron blade point (possibly the foreshaft for the whale-killing lance or an instrument for slitting the dead whale's jaw for tying the mouth shut)

These two bags appear to have been hanging along the wall (see below) and to have fallen,

scattering some of their contents. Immediately outside the mouth areas of these bags were found:

four harpoon sheaths containing harpoons

one pair of bone harpoon toggle valves

killing lance heads, two unbarbed and bound wooden harpoon valves with mussel shell blades

a very large quantity of coiled cherry bark strips, once wrapping the sinew lanyards; the

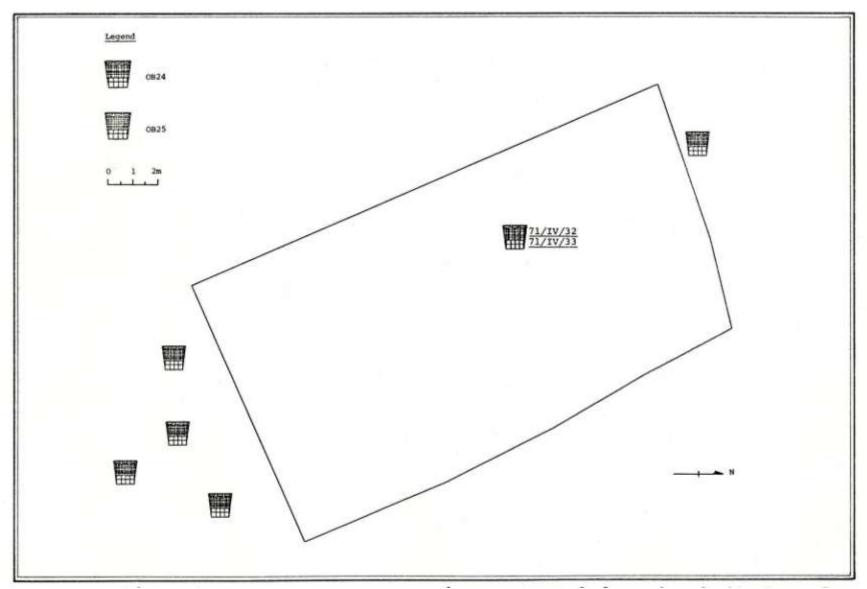
sinew in these harpoon lanyards has decayed leaving only the cherry bark wrapping element extending out of the harpoon bags

a knob-top hat (71/V/18; OH5) (probably outside of the bags, see below)

These contents clearly identify the function of these baskets as special bags used to store and protect the numerous whale harpoon points in their individual sheaths. The coils of cherry bark, once wrapped around the sinew lanyard, extended from each sheath. The cedar bark sheaths are folded over each point and are themselves bound shut (sheaths [OM1s] are discussed separately below).

Distributional Patterns within the Site

The two bags that were found containing harpoons (71/IV/32 and 33) were recovered, as mentioned above, lying one directly on top of the other; they appear as one basket in Map 6. These bags were pinned under large wall boards. One bag has a well-made spruce root cord tied to its open braid rim (71/IV/32; see Fig. 44) which ran through the open braid rim of the other bag (33) thereby binding the two together. This cord was tied around a pole (71/IV/SR9) from which the two large bags probably hung. It appeared that the two bags originally were hanging from a rafter or sub-rafter pole along the northwest section of the west wall. This area of the house contained whale harpoon shafts and other whaling equipment and probably was occupied by a whale hunter and his family. From these and other indications the occupants of House I must have been actively engaged in whale hunting.



Map 6. Distribution of whale harpoon bags recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide. Bags 71/IV/32 and 33 were one on top of the other.

The broken harpoon bags found in the outside midden refuse (especially 199/tVII/65 and 197/tV/44, see Map 6) are woven in a slightly different plaiting technique than the two OB24s found within House I. They have a fine checker weave upper section and a coarser checker weave lower section. These bags had been discarded earlier, and may reflect an earlier style.

Ethnographic Data

Ethnographically, little has been mentioned concerning whale harpoon bags. Waterman, in *The Whaling Equipment of the Makah Indians*, does illustrate a whaling harpoon bag (Plate 5:61), and states:

Several harpoon heads are taken along on each trip, each one enclosed in a separate sheath. The collection of heads is kept in a special basket, called ha'3aL (Plate 5). This bag or basket is of checkerwork, and has a flaring top (1920:32-33).

Apparently this type of large harpoon bag was not common farther north among Nootka whalers. Drucker describes a small bag for each harpoon among the Central and Northern Nootka: "Harpoon baskets (la'ac) were small flat bags; those for the whaling harpoons were just the size of the individual harpoon" (Drucker 1951:96). Early photographs show these bags as part of the whaler's equipment, and all Neah Bay senior citizens recognize these bags as whale harpoon bags. Moreover several museum collections possess these bags, and usually they are described as whale harpoon baskets. Evidently these were a southern Makah/Nootka and possibly Quileute and Quinault form of basket, and particularly distinctive of the Makah whale hunting equipment. Unfortunately the ethnographic literature deals only with descriptive information about these bags, and does not provide information about their cultural significance and their role in the actual whale hunts,

Ozette Basket Functional Set V /OB26, OB27/

Plaited, cedar bark, two-edged "infant face cover" (Fig. 45)

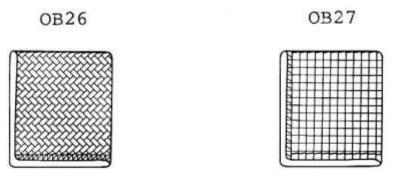


Fig. 45. Functional Set V. Plaited, cedar bark, 2-edged "infant face covers."

Technological Characteristics

The basketry items in this set have two continuous opened and finished edges. These basketry items apparently were opened by spreading apart these edges, creating a conical looking shape, which was inverted over a baby's face in the cradle to keep out light, dust, smoke, and noise. In a sense this is not truly a basket form, functionally being more similar to a hat, but since it is generally a flat, plaited wallet-like form it has been placed within the basket category here. The twill on bias example (OB26) has one edge finished with a turned in rim and the other with a bent back edge (Fig. 46); the checker example had one edge finished with a twined weave and the other with the around and back edge common to Ozette Village mats (see #10, Table 20). The size of the infant face covers varies from extra-small to small-intermediate. The extra-small

example (65/V/21) is probably a miniature, since it is too small to have been functional. It may have been used with one of the miniature (toy) cradles recovered at the site.

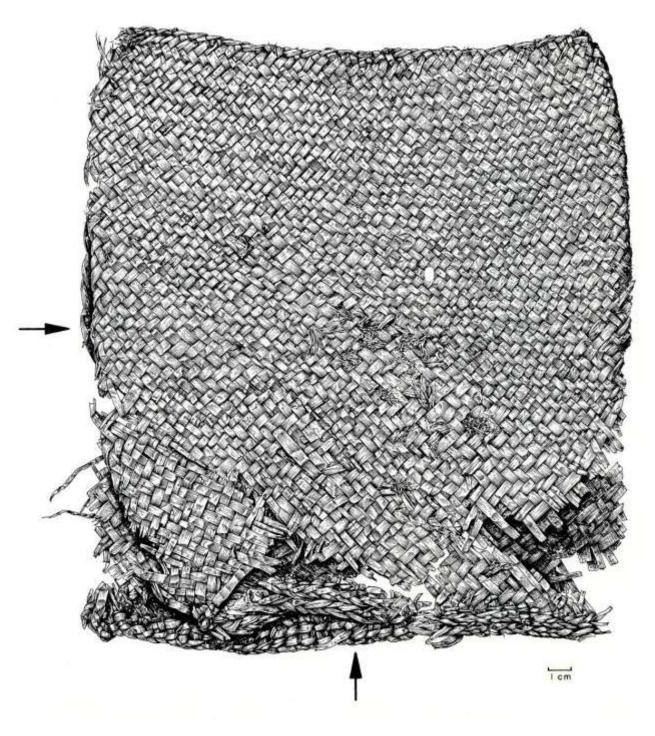
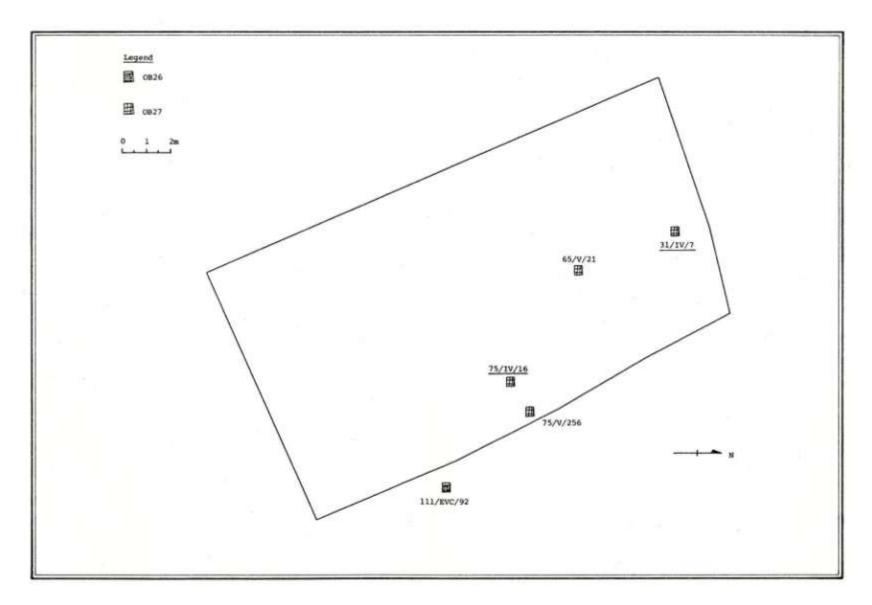


Fig. 46. *Infant-face-cover with two opened edges (open edges shown by arrows) (111/EVC/92; OB27). This example was woven with the elaborate twill on bias weave.*

Distributional Patterns within the Site

Five infant face covers were recovered in and around the Ozette House 1 area. Only two of these are in a usable condition and these were kept with other stored items in the household.. The remaining three were broken and located either within the house floor midden matrix or the outside refuse midden (Map 7). As would be expected, none of these flat bags contained any objects and all were folded flat. The single example with the twill on bias weave (the OB25, III/EVC/92, Fig. 46) was recovered within the refuse midden outside of House I (Map 7). This specimen is made with an exceptionally elaborate weave, and it may reflect the social status of the infant and/or the family. The miniature example (65/V/21) mentioned above was found discarded or lost in the house floor midden. The numerous miniatures (toys or models) recovered at Ozette, including miniature cradles, have been described in a previous study (Koch 1975). Two examples that probably were in use (31/IV/7 and 75/IV/16, see Map 7) were found with numerous other artifacts in the east wall and north wall family areas of House I.



Map 7. Distribution of "infant face covers" recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Ethnographic Data

In the ethnographic literature two specific references are made to this basketry class. Reverend Eells wrote: "A cap of cedar bark, usually of Makah make, is sometimes used by the Klallams as a cover to protect the babies from smoke" (Eells 1971:656). Significantly he characterizes these "caps" as a Makah product and identifies the function. Boas, when discussing Kwakiutl cradles, describes and illustrates an infant face cover. He wrote: "A small hood made of cedar-bark matting is placed over the head of the child as a protection against light and insects" (1909:460, Fig. 135). At least two Makah senior ladies, Isabella Ides and Nora Barker, remember these face covers. Nora owns a well made miniature Makah cradle with a miniature infant face cover over the doll's face. Mrs. Ides and Mrs. Barker agree they were to keep out light, dust, and noise. Also a miniature cradle collected by James Swan in the 1860s (Smithsonian USNM 5366) has a two-edged infant face cover tied onto the head position of the cradle. An excellent early photograph by S. G. Morse of Port Angeles (photo #48) illustrates a woman with her baby in a suspended cradle next to which is an opened two-edged infant face cover (see Fig. 47). The above information clearly indicates the specialized function of this unique basketry form.



Fig. 47. Early photograph of a child in a suspended cradle with an infant-face-cover opened and in the foreground (arrow). (Photo by S. G. Morse, ca. 1910, 148)

Ozette Basket Functional Set VI

VIa: /OB28, OB31/

VIb: /OB29, OB30/

VIc: /OB32/

Twill 2/2 plaited or open twined; splints or combination splints and cedar bark; expanding, rounded cube; storage and carrying baskets; commonly with continuous loop handles around rim (Fig. 48)

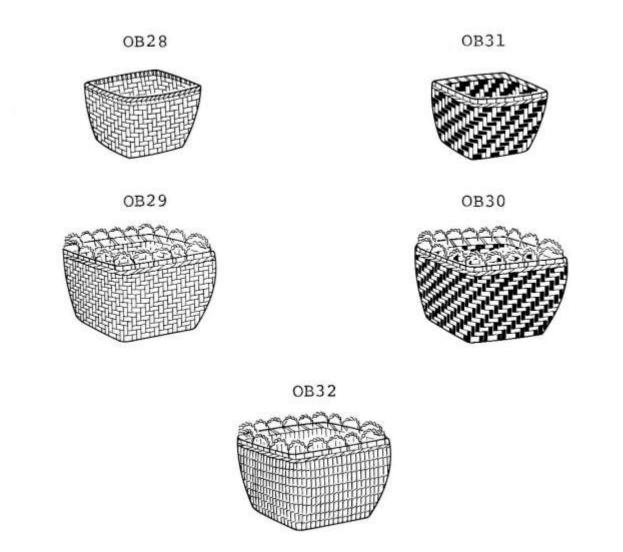


Fig. 48. Functional Set VI. Twill 2/2 plaited or open twined; splints or a combination splints and cedar bark; expanding, rounded cube; storage and utility baskets, commonly with continuous loop handles around rim.

The baskets in Functional Set VI generally are expanding, rounded cuboidal in shape with a twill 2/2 plaited base and body weave and constructed of splint cedar bough and/or root. Variations include body weaves of open twining (OB32) and materials including weft or warps of cedar bark or whole baskets of split vine maple (?) wood. The majority of these baskets (OB29, 30, and 32) have a continuous, two-strand cordage loop handle (see pp. 113-114). This functional set is further divided into three subunits--VIa, VIb, and VIc—which are distinguished by size, construction materials, and/or construction techniques. The specific features distinguishing these subdivisions are:

VIa: Smaller size, lack of continuous loop handles (see Fig. 49)VIb: Generally intermediate to large size, continuous loop handles (see Fig. 50)VIc: Open twining body weave, continuous loop handles

The number of baskets and the basket classes within these subdivisions from the Ozette House I area are VIa: six (OB28:3, OB31:3); VIb: forty-nine (OB29:46, OB30:3); and VIc: one (OB32:1). It is apparent that the baskets of Functional Class Subset VIb are very abundant; in fact Ozette Village basket class OB29 is the single most common basket class at Ozette (19% of all baskets recorded). For this reason Functional Subset VIb will be considered here in most detail. Each subset is considered separately below.



Fig. 49. *Small, twill 2/2, cedar splints basket in basket functional subset VIa. Note transition rows of twining between base and body, body and rim.*



Fig. 50. Expanding rounded cube, twill 2/2, cedar splints basket with continuous, one-under, looped cordage handle (4/IV/6; OB29). Note color contrast patterning created by leaving the bark adhering to certain warp elements.

Subset Via

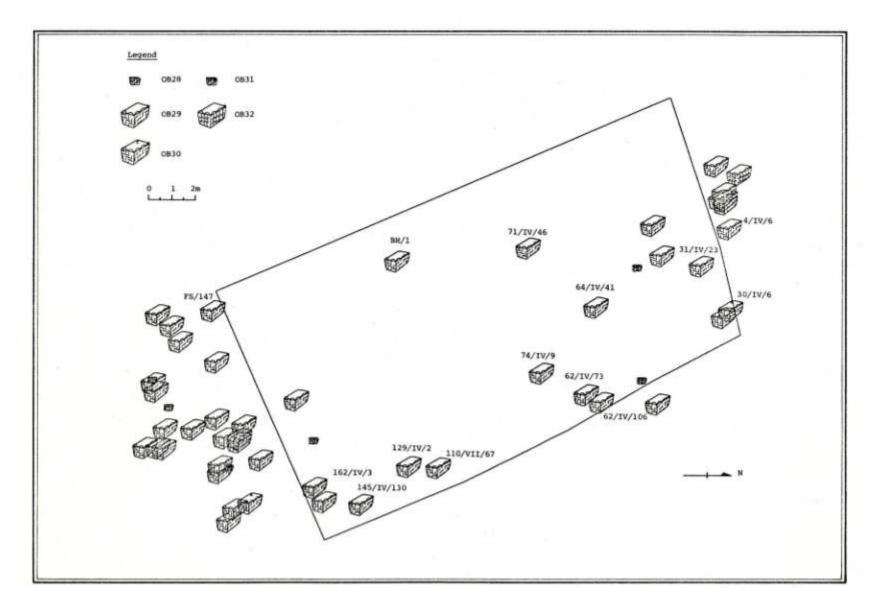
Of the six baskets in this subset, none appears to have been in use at the time of the Ozette mudslide. All were broken and discarded, recovered either from within the refuse midden or from the house floor (Map 8). These small rounded cube-shaped baskets never contained any

objects or materials when found, but may have had a function similar to the small, rounded rectangular cedar bark sacks (see Functional Set IIb, p. 275). The main difference is that Subset Via baskets are constructed with cedar splints materials and are, therefore, a much less flexible basket. However, splints would be less affected by moisture, and the gathering of juicy berries, for example, might have been less of a problem with this form of basket. These baskets could have had many uses, and probably were used most often as a small gathering container.

Subset VIb

Technological Characteristics

As mentioned, the basket class with the most members at Ozette Village is the OB29 form. Forty-six OB29 baskets have been recovered in and around the House I area. These are made of cedar bough and/or root splints, though some appear to be made of vine maple wood splints. The base and body are twill 2/2 plaited. For ornamentation the bark was left on some splints and these were arranged so as to create a color contrast geometric pattern on the basket body (see Fig. 50). The rim finish usually is looped or hitched. Continuous looped handles are attached entirely around the basket mouth, hooking under the rim. In general, these characteristics add up to a close-weave, sturdy, spacious basket as large as most of the Ozette Village wooden boxes, but much lighter, more flexible and, with the hand-holds, probably easier to carry. The twill 2/2 weave on these baskets would have allowed ventilation and would have permitted moisture to escape; the splint construction material would have been sturdy and non-absorbent. Baskets of the associated basket class in this subset (OB30) were less common. The only technological difference between them is that either warp or wefts on the OB30 are constructed of cedar bark instead of both being of splints.



Map 8. Distribution of large, cedar splint, twill 2/2 storage baskets recovered from the Ozette House I area. Baskets with designated artifact numbers were in use at the time of the mudslide.

Basket Contents

Even though this basket class is very common at Ozette Village, only a few appear to nave been in use in House I at the time of the mudslide. Of the forty-nine baskets in this subset, only fourteen or 29% were potentially in use. The remaining thirty-five or 71% were badly broken and discarded within the outside midden refuse or within the house floor midden deposit. Since these baskets are so common, the few that were in use at the time of the slide is surprising. It is possible that many of the baskets belonging to the household at the time of the mudslide were in use elsewhere, perhaps in some seasonal gathering activities.

Of the fourteen baskets of this subset that appear to have been in use, thirteen were OB29s and one was an OB30. Ten of these baskets were found without contents. The possibility exists that they had contained dried foods which would not have been preserved. The four baskets which did contain material are described individually below.

Basket 4/IV/6 (OB29; see Fig. 50)

This small OB29 contained remnants of another basket of the same class. The basket inside appears to have been slightly smaller and had been placed inside in the same orientation. This inner basket is very fragmentary and appears to be constructed of vine maple wood splints, a hardwood material that preserved poorly at the site. This basket had been stored along the central area of the north wall with several other artifacts (see Map 8). This OB30 was found in close association with the large, plaited, cedar bark, cube-shaped storage basket (OBI; 30/IV/7). Both contained cedar bark flat bags (3C/IV/20 in the OB30), bird feathers, and sea gull wing bones. Evidently this OB30 stored and protected a number of bird feathers, wings, and possibly skins as did the OBI. (See discussion, pp. 281-284) This basket was stored with the OBI on the bench platforms in the northeast corner of House I (see Map 8).

Basket 64/IV/41 (OB29)

This OB29, though found upside down, was full of "boiling stones." Twelve hard, smooth stones were found inside or directly associated with this basket. They average about 5x10x15 cm, and are of different varieties of rock. Since the basket was found close to a hearth area in the north central area of the house, these stones are considered boiling stones ready for use in cooking.

Basket 145/IV/130 (OB29)

This OB29 was evidently a "special" storage basket, containing a coiled basket (145/IV/133, see Fig. 69), two cedar bark bags (145/IV/34 and 135), disintegrated textiles and braids (145/IV/131, 132, and 137), and a large double barbed fishhook (145/IV/138). The splint materials used in its construction are extremely fragile and broke into small pieces during excavation.

Ethnographically these classes of baskets are reported to have been made of either splints of vine

maple wood or cedar boughs/ roots. The appearance and fragile condition of this particular basket probably means that it is made of vine maple wood splints. It might be noted that vine maple trees are rare in the immediate Ozette Village site area, but were used frequently in the construction of this kind of basket in areas where more abundant (below). Vine maple splints are finer and lighter in color (almost white) than cedar bough splints, and their rarity around Ozette Village may have lent this particular basket its character as a special basket, used to store important items such as coiled baskets, textiles, and the large double fishhook. It was found with other storage baskets (OB1s) in the southeast corner family area of House I (Map 8). The numerous artifacts recovered in this area of House I reflect the wealth of the occupants of this corner of the household.

Distributional Patterns within the Site

The distribution of the usable baskets of this set (n=14) was along the house walls, probably once on or behind benching (see Map 8). The only basket in the central area of the house was the OB29 that held boiling stones and this was located, as would be expected, near a cooking hearth.

Ethnographic Data

These baskets are poorly documented in the ethnographic literature. In 1887 Reverend Eells described different baskets of the Twana, Chemakum, and Clallam, and he may have been writing about this class when he wrote:

(5) A basket made of a bush split and shaved on both sides [this probably was vine maple].

The pieces are a third or half an inch wide, and are woven together at right angles. It is used more by the whites than the Indians as a clothes basket, and seems a copy of some American baskets [most likely he is referring to oak splint Euro-American baskets common in the east at that time] (1887: 627).

Otis Mason describes this class of basket and calls it a large fish basket:

The National Museum has an example of twilled weaving from Vancouver Island . . . It is a large fish basket made from the split root of cedar. Attempts at ornamentation are, first, in using alternatively the smooth, natural wood and the inner, coarse surface of the splints, also by introducing strips in cedar root with the bark adherent The upright elements in the weaving are bent down on the inside and held together by a continuous row of buttonhole stitches [hitched rim here]. On the border is a scallop formed by a two-strand rope which passes underneath the border, back and through itself Collected by G. T. Emmons. (See Plate 152) (1970:420; see Fig. 51).

Also, Mason describes a similar basket of this class from the Clallam Indians:

Fig. 153 represents a specimen of twilled work by the Clallam Indians and should be compared with Nutka example, Plate 152. It is made of flat splints of white wood, resembling birch [the wood probably was vine maple] (Mason 1970:432).

Both baskets described by Mason are examples of the OB29 basket class. Unfortunately little information is given concerning function (except as a large fish basket; they may have been used commonly to either carry or store fish). The baskets described by Mason above, as well as others of this class are at the U.S. National Museum, Washington, D.C.

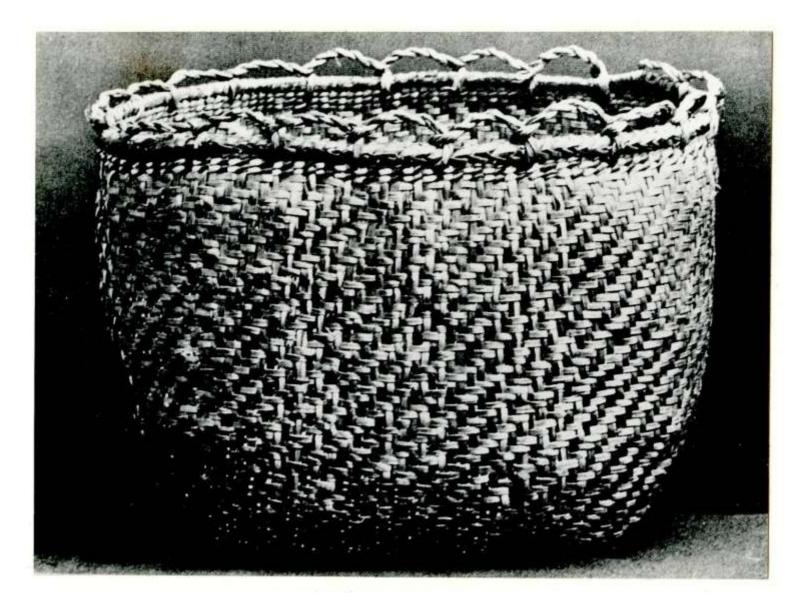


Fig. 51. Early photograph of a historic OB29 class basket (source: Mason 1902: Plate 152) (see p. 318).

Erna Gunther has indicated that this kind of basket was common in the Puget Sound and Coastal Washington areas, but less so in Northern Nootkan museum basket collections. She explains that the recent informants considered them as utility baskets and not ones that collectors would like to purchase. The rope loop handles often were used to tie lines through in a crisscross fashion to hold in the contents which first were covered with large leaves (Gunther, personal communications).

Senior Makah ladies also remember this basket form. Nora Barker, Lena McGee Claplanhoo, Isabella Ides, and Meridith Parker all consider this a utility basket for carrying various items. They were used in historic times as suitcases when families were traveling. Clothes, blankets, and food were placed in them, tied securely, and put into the canoe for the trip. Meridith Parker thought that earlier these baskets stored dried fish on high shelves around the walls of the house. She also thought they were made mostly of split cedar boughs or vine maple wood. They once were very common and not considered commercially valuable—just utility baskets.

Summary

The high frequency of this kind of basket at Ozette Village suggests a common use. They may very well have been used to store the large winter supply of dried foods (fish and molluscs), Large quantities of salmon, halibut, and molluscs were in fact stored in the house for winter use, but since they and other animal food products were not preserved archaeologically at Ozette Village, only a speculative function for these common baskets, i.e., to store these food products, can be suggested. The storage of other goods, as mentioned above, also is noted.

Subset VIc

The single OB32 recovered was broken and buried deep in the refuse midden outside of House I (see Map 8). In material, shape, base construction, rim formation, handle attachments, and size, this basket is very similar to baskets of subset VIb. The only distinguishing feature is the unique open twine body weave. This single basket might possibly represent a variant or earlier style of Functional Class Subset VIb. No ethnographic reference to this specific class of basket has been found.

Ozette Basket Functional Set VII

VIIa: /(OB34), OB36, OB37/

VIIb: /OB34, OB35, OB38, OB39/

VIIc: /OB40, OB41, OB42/

Intermediate-large; open twined; cedar splint and/or bark; ovate, inverted, truncated cone; carrying and storage baskets (Fig. 52)

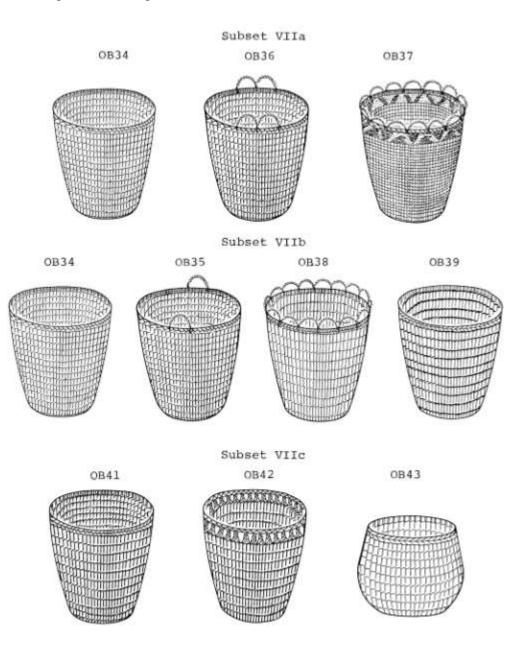


Fig. 52. *Functional Set VII. Intermediate to large; open twined; cedar splints and/or bark; ovate, inverted, truncated cone; carrying and storage baskets.*

Technological Characteristics

Baskets in this functional set usually have a small, twill 2/2 base weave and an expanding, open twined body weave. Often the mouth has a series of attached loop handles or open braiding. Most of these baskets were coarsely and quickly constructed. Some, however, were very carefully woven with applied overlay decoration. This functional set is divided into three subsets. These subsets are characterized by the following important differences:

VIIa: Fine, closely spaced open twining, often with white grass overlaid warp and weft (see Fig. 53; n=4)

VIIb: Coarse, widely spaced open twining, made of splint cedar limb and/or root materials, often with continuous, one-strand under, looped handles (see Fig. 54; n=21)

VIIc: Coarse, widely spaced open twining, made of cedar bark materials, often with an open braid rim (n=10)

These subsets are technologically similar and the baskets probably functioned as general carrying and storage baskets. As will be seen, the Subset VIIa was, possibly, an introduced basketry form, but functionally it probably was similar to the other subsets. Subset VIIb and c are different in construction material, i.e., cedar splints vs. cedar bark, and this functionally significant characteristic is used here to separate baskets into these subsets. Each subset is considered separately below.

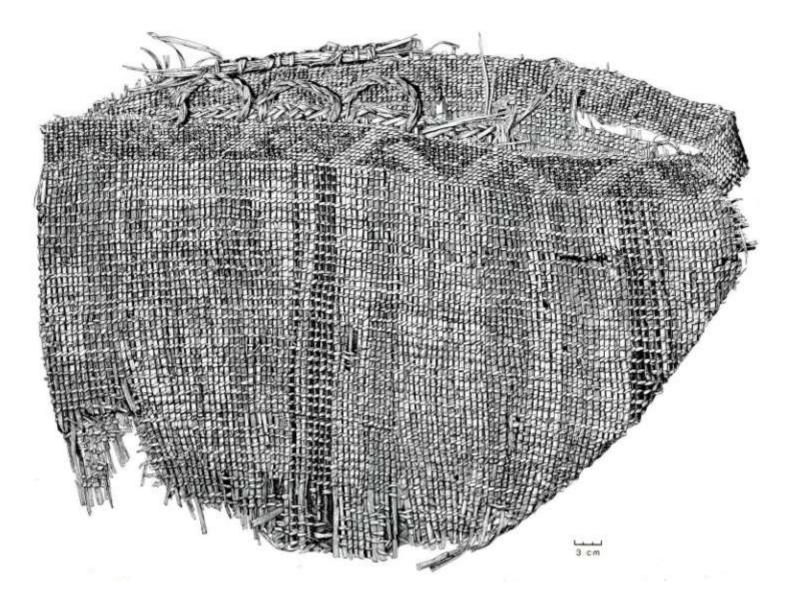


Fig. 53. Elaborately ornamented, open twined basket in functional subset VIIa (210/tV/l; OB37). Note bear grass overlay on both sections of warps and on every other two weft rows and the "zigzag" design in the plain twined section along basket mouth.



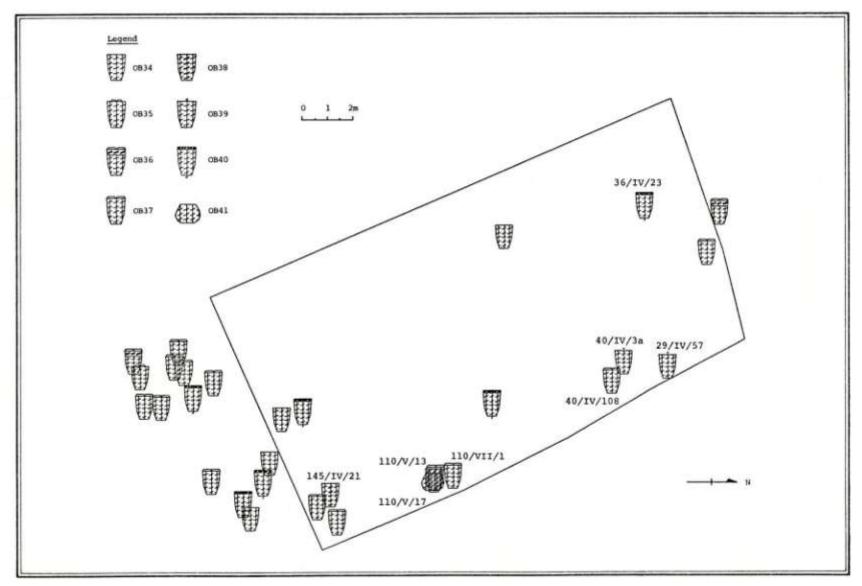
Fig. 54. Coarsely woven open twined cedar splints, utility-storage basket with continuous looped handles (110/V/13; OB38). Note cedar bark repairs in body areas and twill 2/2 base weave.

Subset VIIa

Of the four baskets in this subset, only one appears to have been in use at the time of the mudslide (110/VII/l; OB34). Two of the basket classes in this subset, the OB34 and OB36, had a very fine, closely spaced open twined weave (see Fig. 53). The warps on these baskets are ornamented with bear grass overlay and different colored strands. This was done by leaving the warps of some sections as plain yellow-brown splints, some with the dark bark still adhering to the splint surface, and some with white bear grass overlay on the splint surfaces. This creates attractive alternating sections of light yellowish-brown, dark brown, and white, respectively. Also, alternate weft rows are overlaid with white bear grass creating horizontal rows of white color across the basket body. The top 4.5 cm of the body weave on the OB36 is woven in plain twining, and the dark (dyed) and white grass overlay creates a zigzag design along the edge (see Fig. 21A, p. 177). As seen in Figs. 21A and 53 this is not a regular zigzag design, but each dark triangular area had a slight extension to the right (see discussion of this design, pp. 176-177). The rim on the OB34s and OB36 is mock braid. The continuous loop handle on the OB36 is a two-under attached handle (see Figs. 9B, #3, and 53). The fine, close spaced open twining; the color contrast warps and wefts, using white bear grass overlay; the zigzag plain twining overlaid design around the top of the OB36; the mock braid rim; and the two-under attached continuous loop handle on the OB36, all are basket modes, single and in combination, which are rare at the Ozette Village site. These specific basket modes are, moreover, historically uncommon in the Makah/Ozette area, being historically most common to the south coast Quinault Salishan basketry, and less so to Puget Sound Skokomish (Twana) Salishan basketry and that of some neighboring Salishan groups. These baskets recovered at Ozette Village probably were obtained, therefore, as the result of some form of contact with these groups. If so, this contact could have

taken several different forms including trade, gifts, raids, inter-marriages, slaves, etc. The bear grass alone is suggestive of this contact since it grows almost exclusively in Queets Prairie in Quinault territory. Willoughby wrote in regards to the bear grass materials of the Quinault that: "the yellow fiber of squaw grass used by Indians, for the outside of baskets is a great source of traffic, as it is only found in this location" (Mason 1902:434). Modern weavers among the Makah still obtain this grass from Quinault.

These prehistoric baskets may have been used to hold food products, e.g., dried shellfish, salmon, halibut, deer, elk, etc., and traded as basket-full units between groups. At Ozette Village none of the baskets in Functional Subset VIIa and b was found containing any material but originally may have contained dried foods or other animal matter. The single OB34 thought to have been in use at the time of the mudslide (110/V/13) was found at the base of one of the rear main support posts along with several other Functional Class VII baskets; all may have been hanging on or near the cross-beam (see Map 9). The OB34 has a broken line on its rim that may have tied it to the rafters. This elevated position would have allowed smoke from the cooking fires to circulate around these baskets with their stored dried foods. This basket type may have functioned in a way similar to the other Functional Set VII baskets at Ozette Village, but its fine weave, decoration, and its possible foreign import may indicate a special function, such as storage of particularly valued foods.



Map 9. Distribution of large, open twined storage-utility baskets recovered from the Ozette House I area. Baskets with artifact numbers were in use at the time of the mudslide.

The single OB35 recovered at Ozette was discarded in the southern refuse midden (see Map 9). This basket is not finely twined or decorated, and its only distinguishing feature is a double loop opposing handle; it is because of this characteristic that it has been tentatively placed in this subset. As previously discussed, this is the handle attachment technique common to the late prehistoric Puget Sound (Salishan [?]) sites of Conway and Fishtown (see pp. 117-119). This basket also may have been introduced to Ozette.

Subset VIIb

Of the twenty-one baskets in this subset, only three appear to have been in use at the time of the Ozette Village mudslide. The rest were badly broken and discarded. The OB34s, incidentally, are not like the finely woven OB34s in Subset Vila, but are essentially like OB38s without continuous loop handles. None was found in use. The single OB35 was badly worn or damaged and recovered in slumped areas outside House I. Two OB38s of coarsely woven open twining, splint cedar boughs and/or roots, appear to have been in use. These were located in the rear of Mouse I, below the back main support posts from which originally they may have hung. One OB38 (110/VII/13, Fig. 54) had been broken and patched with cedar bark binding. This broken condition indicates a rigorous use for these types of baskets. The OB39 is only slightly different from the others, with an open twined base and a part cedar bark, part cedar splints weft. This basket (145/IV/21) also was located in the rear corner of the house (southeast corner, see Map 8), and may have been hung or stored high in the ceiling area. None of these baskets contained any material when found, but again, they may have held food products that did not preserve.

Subset VIIc

These large, open twined baskets are distinct in their cedar bark construction material, which makes them much more flexible than the Subset VIIa and VIIb splint cedar bough and/or root open twined baskets. They would not, however, have been as sturdy or water-resistant as the bough and/or root splints baskets. Of the ten recovered in this subset, four appear to have been in use at the time of the mudslide. One of these, an OB40, contained several bundles of raw cedar bark. The rest were empty when found. The main difference between these basket classes is the shape of the OB40 and the open braid rim construction of the OB41. Considering all the baskets in this subset a generally unique feature is the lean of the twine. Six of the ten baskets had a lean of the twine up-to-the-left. By far the majority of all the twined basketry at Ozette has a lean up-to-the-right. The reason for this variation in lean in the large open twined cedar bark baskets is puzzling. Lean of the twine generally is a culturally prescribed feature, and most southern Northwest Coast twining is up-to-the-right lean. Be that as it may, the lean of the twine up-to-lhe-left on this class of basket was common.

Distributional Patterns within the Site

In terms of overall spatial distribution of Functional Set VII baskets, the eight baskets that probably were in use clustered in the corner areas and in areas directly below rear main house posts (Map 9). Many of them have broken tie lines on broken rims. These circumstances suggest that these baskets were stored high in the house, probably hung from rafter poles near the rear main house support posts.

Basket Contents

Since all but one of these baskets were found empty they may originally have been either empty or have held dried animal matter, including halibut, salmon, and mollusca. These foods probably were placed in these large, well ventilated baskets, and stored high in the house where their preservation would have been enhanced by the smoke from the cooking fires.

Ethnographic Data

Historically these baskets have been considered coarse utility baskets or food storage baskets. Reverend Myron Eells mentioned this general class of basket in 1887:

Baskets made of cedar limb split, the bark usually taken off, are woven. They hold commonly from a half bushel to a bushel. Those whose capacity is only a half bushel are ordinarily used for rough work, such as carrying fish, potatoes, clams, muscles [sic], and roots. The upper loops are made also of cedar twigs twisted, and in these the carrying strap is fastened (1887:627) [since his description is not clearer, this also may be a description of an OB44 pack basket as well (see below)].

Another reference concerning the use of this kind of basket states that "the loosely twined baskets were used by the Nisqually for storing dried foods. Often these baskets were lined with maple leaves" (Haeberlin and Gunther 1930:33). Further, "The open baskets every woman makes for herself. She needs large numbers of them for daily household use and for storing food" (Gunther 1927:222). Gunther also provides an accurate description of how these baskets were made.

These baskets are not well represented in museum collections or in early photographs. Collectors did not generally obtain the coarser open twined utility and storage baskets, preferring the more finely woven and decorated baskets, the OB34 and OB36s. Many senior Makahs remember them as being used for gathering and storing dried foods and that they were kept high in the house. One Makah senior citizen, Meridith Parker, mentioned specifically that these baskets stored the dried foods, fish and shellfish, and were kept high on shelving so that the food would stay dry and well preserved.

Summary

Baskets of this functional set can be considered multipurpose utility and food storage baskets. They probably were used to gather and carry shellfish, salmon, and other fish caught in large quantities, and also firewood, roots, etc. They were not the "special" pack baskets, as will be discussed below, but were coarser carrying and storage baskets. The finer weave baskets of Subset VIIa are exceptions and, since it is probable that they were baskets made by the southern Salishan speaking people of the central Washington coast, originally they may have held "basket-load" units of dried foods traded from those areas. In addition, they probably were used to hold, transport, and store dried foods at Ozette Village.

Ozette Basket Functional Set VIII /OB43, OB46/

Small; open weave; cedar splints; expanding, rounded cube-shaped baskets (see Fig. 55)



Fig. 55. Functional Set VIII—small, open weave, cedar splints, expanding rounded cube-shaped baskets.

Baskets of this functional set were constructed in an open twining or open wrapping body weave (see Fig. 56). These baskets are similar to those of Functional Subset VIb, the small, twill 2/2 plaited, splints, expanding rounded cuboidal baskets, but are separated here because of the open weave common to the Set VIII baskets. Three baskets are recorded in this functional set and, potentially all were in use at the time of the Ozette mudslide. Two were found empty, and one, the OB46, was found containing bits of abalone shell and fragments of yarn weaving materials (?). They were recovered from inside the house, perhaps kept with the numerous other possessions recovered along the wall areas (see Map 10). Ethnographically, little is mentioned specifically about these small open weave cedar splint baskets. It is likely that they had several gathering or storing functions.

Waterman describes this kind of basket in his notes as:

Small twined openwork basket of cedar-root. cxwa'xwad. This is without a handle, and is used in the canoe for containing bait, or for storing small objects, etc. (1973:8).

Drucker also records:

Small hand baskets (noxhats), for picking into when berrying, were made the same way [with open wrapping], except that they had flat bottoms of simple checkerwork, and were wrapped

twined only from sides to rim [OB46] (1951:98).

These baskets were relatively nondistinctive and probably functioned, as mentioned, for many gathering and/or storing and holding purposes.

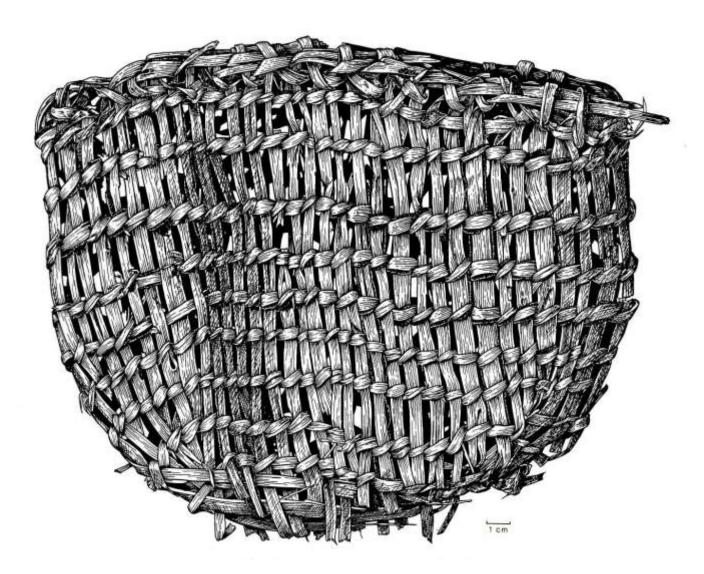
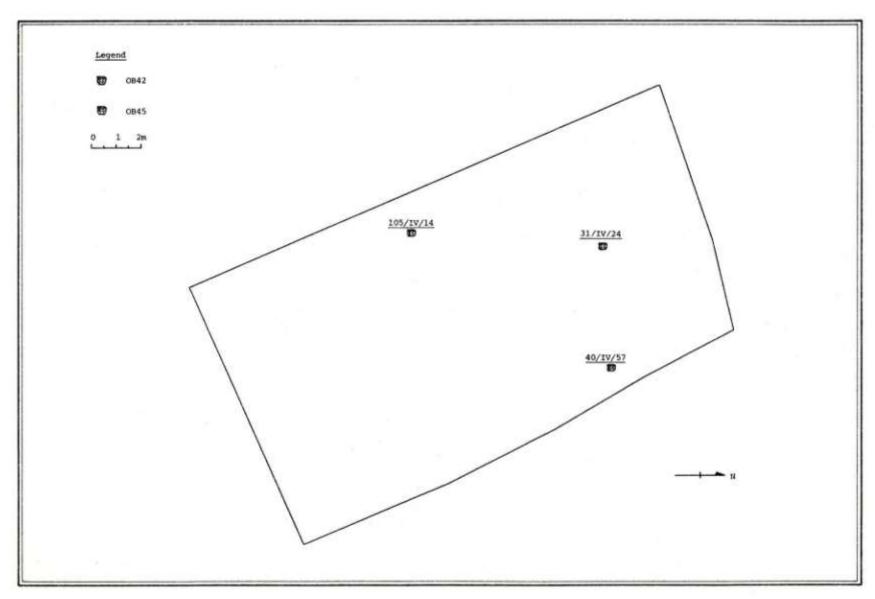


Fig. 56. Small, cedar splints, open twined basket in functional set VIII (62/V/62; OB43). Note twill 2/2 base and looped rim.



Map 10. Distribution of small, cedar splint, open weave baskets recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Ozette Basket Functional Set IX /03344, OB45/

Open wrapped; splints; inverted, truncated pyramid; pack baskets (Fig. 57)



Fig. 57. Functional Set IX open wrapped pack baskets made of splints with an inverted, truncated pyramid shape.

Technological Characteristics

These baskets, often referred to as clam or carrying baskets, were constructed of thick splint cedar bough and/or root materials; the wrapping element is occasionally cherry or cedar bark strips. The main elements forming the narrow base were bent around and up forming the basket body warps. The small base often is cross wrapped to provide a well-reinforced base area (Fig. 58). The body shape expands rapidly with the addition of new warps (Figs. 59 and 60). These baskets often have distinct corners, formed by very thick half-split or unsplit warp elements. The shape of the baskets is very narrow and slightly rounded at the base, expanding rapidly into a four-cornered inverted pyramid shape, and finally turning inward slightly at the large mouth (Figs. 58 and 59). This shape has definite functional qualities that are discussed below. The open wrapped body weave generally has wrapping elements that alternate between a right and left lean between rows. This process adds strength and, according to informants, keeps the warps from becoming oblique to the vertical plane of the basket, as in wrap twining (Jones, personal communication). These baskets usually are finished with a tuck and wrap rim that is wrapped over as a coiled rim. Cordage tumpline loops are attached to two of the upper corners of the OB44 baskets (Fig. 61).

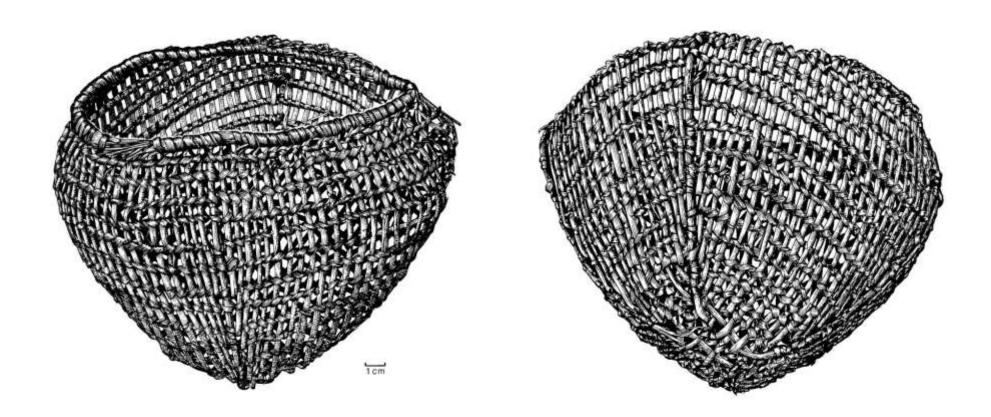


Fig. 58. Small, open wrapped gathering basket with an inverted, truncated pyramid shape (164/V/7; OB45). Note double wrap reinforcement initiating base weave and cherry bark wrapping element.

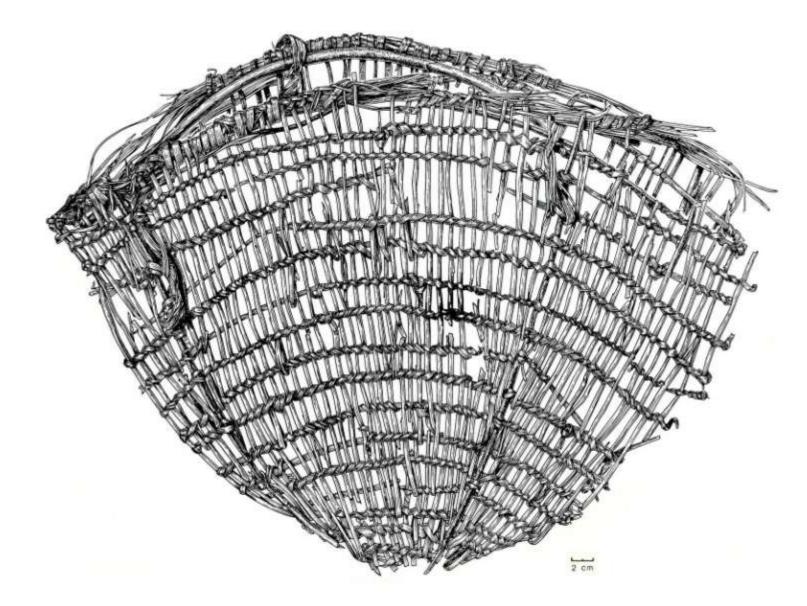


Fig. 59. Open wrapped pack basket with an inverted, truncated pyramid shape (178/tV/20; OB44). Note cordage tumpline loops in upper corners and tuck and wrap rim covered with coiling.

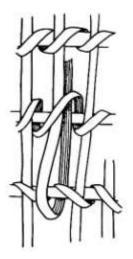


Fig. 60. Method of introducing new warp elements into open wrap weave.

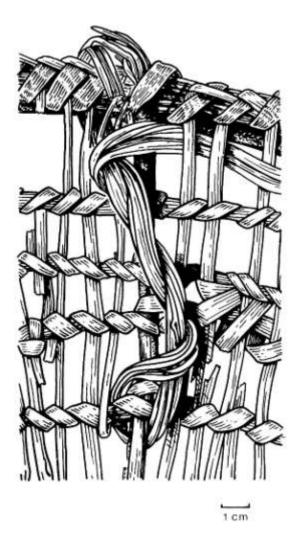


Fig. 61. Cordage tumpline loop attached to upper corner of an OB44 pack basket.

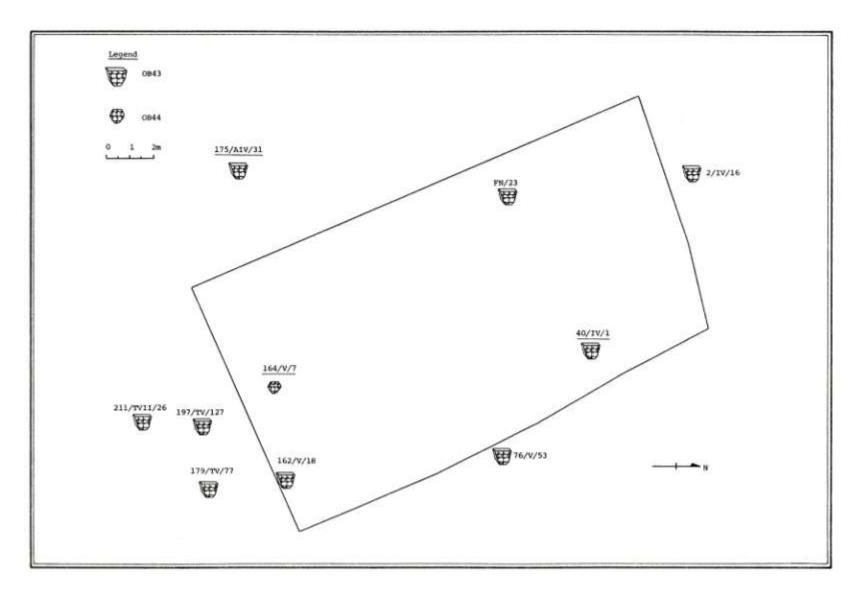
The single OB45 recovered is a very well constructed, small basket with cherry bark wrapping elements (Fig. 58). This basket is too small to be an adult pack basket but can be considered a miniature OB44, and may have been constructed for use by a child or for use by an adult as a small gathering basket. Since small tumpline loops are not attached to the OB45, it cannot be considered an accurate model of an OB44. It is not, however, too small to have been useful for gathering or storing purposes; in fact it would have been excellent as a "hand basket" for gathering berries, chitons, olivela shells, and other smaller sea foods, for storing bait, etc.

Basket Contents

At Ozette only three of the thirteen baskets of Functional Set IX appear to have been in use at the time of the mudslide (the one OB45 and two OB44s; see Map 11). None contained any material when found. They may have been stored empty or perhaps whatever they contained has not been preserved.

Distributional Patterns within the Site

The baskets of this functional set do not have any distinct distributional pattern within Ozette House I, Broken examples usually were found within the refuse midden (Map 11). Both of the two OB44s that may have been in use were recovered in deposits displaced by the mudslide. One (175/AIV/31) was in a slump block deposited well in front of House I (see Map 11), and the other (40/IV/1) was high in the mudslide in the northeast area of the house. This latter OB44 appears to have come from the house immediately behind House I. The single OB45 (164/V/7) was associated with a bench platform and several other artifacts in the south central wall area of House I (Map 11). It no doubt was kept with the other household objects in this family living area and was stored along the wall.



Map 11. Distribution of cedar splint open wrap pack baskets recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Ethnographic Data

These distinctive pack baskets are well represented in the ethnographic literature, in museum collections, in early photographs, and in informant accounts. In 1870 Swan recorded information concerning the function and shape of these distinctive baskets, including their use in back-

packing. He wrote:

Carrying-baskets, worn on the back, with a strap around the forehead, are made of spruce roots or cedar twigs. They are woven quite open, and much larger at the top than at the bottom, the form tapering down in something of a wedge-shape. This enables them to carry loads with greater ease, as the weight is kept well up on the shoulders. These baskets are called ho-he-vi (1870:46).

Eells may have described this kind of basket in 1887:

Baskets made of cedar limbs split, the bark usually taken off, are woven. They hold commonly from a half bushel to a bushel. Those whose capacity is only a half bushel are ordinarily used for rough work, such as carrying fish, potatoes, clams, muscles [sic], and roots. The upper loops are made also of cedar twigs twisted, and in these the carrying strap is fastened (1887:627).

Boas gave a very good description of this basket form and a detailed illustration of the bottom construction technique (1909:385). He also recorded an informant's detailed description of its construction (1913:134-135). Barnett described two functional varieties of these carrying baskets for the Coast Salish of British Columbia:

For berries, the wefts were close together and of finer materials, and the rounded, keeled bottom was pronounced. For clams, the wefts were coarse and farther apart, the bottom was much flatter (1955:123).

Drucker describes this kind of basket as follows:

These baskets, because they were openwork and yet very strong, were widely used as fishcarrying baskets, even though the technique [open wrapping technique (?)] was not otherwise used. They were usually called by the Kwakiutl word for 'wrapped twining'—tsAla (1950:266).

It might be mentioned that in Drucker's culture element distribution list the wedge-shaped open wrap baskets occur mainly among Nootkan groups and in only one Kwakiutl group. The Kwakiutl and some other coastal groups primarily made rectangular flat bottom forms (Drucker 1950:193, Jones 1976). He describes three varieties of these baskets among the central and northern Nootka:

Burden baskets, hand baskets, and some tool baskets were made in the wrapped twine technique. The tool baskets of this type tended to be rather rough, but the carrying baskets were neat and well made, as a rule, although roughly made baskets sometimes were used for gathering wood, clams, and the like. Slim evenly trimmed splints of cedar bough were used for the warps. Carrying baskets (ka'ots) were made with a narrow base, so that from the side they had a sort of blunt wedge shape. Two warp rods somewhat heavier than the rest were wrapped together at their centers, then separated and bent upward to form the corners. The other warp elements of the sides were bent over them; those of the ends were inserted into the wrappings as the basket widened. Similar strands of cedar were run around the inside of the warps of wild cherry bark. Such baskets are still made and used, chiefly for berrying. The closely spaced turns of the glossy cherry bark give them a very pleasing appearance. To make rougher but stronger baskets in this technique, spruce roots would be used for the wrapping material (1951:98).

The OB44 at Ozette Village appears to be the pack baskets described by Drucker and the smaller

OB45 may have been a hand basket described as:

... small berry-picking baskets, which women carry suspended from the neck in front to pick into. When full, the basket is emptied into the large burden basket on the back (Drucker 1950:266).

Many early photographs depict the use of these specialized pack baskets (Figs. 62 and 63). The manner of carrying the basket with the tumpline and various gathering activities are well illustrated. Several of these burden baskets may be found in museum collections. Few, if any, weavers are making these baskets today; the author spent a week in the summer of 1973 on Vancouver Island looking for weavers who make these baskets today, but none was located.

Senior citizens in Neah Bay, Washington remember their elders using these baskets, and several still own baskets that have been handed down. The older people agree that basically these were specialized pack baskets used to carry different products. Uses mentioned were (1) to carry fire wood (especially alder wood for the smoke house fire), (2) gather clams, (3) carry cleaned fish (especially large loads of salmon and halibut), and (4) gather berries. This type is, moreover, the pack basket that was used by the mythical cannibal woman of this area to carry captured children to her house in the woods.

Summary

The OB44 specialized pack basket and OB45 "hand basket" were common in and around Ozette House I. They are well described in the literature, and appear to be a common pack basket. They are most common among the Wakashan and surrounding groups (Mason 1902:417; Jones 1976; Croes I976c: 218-224, 230). These baskets are well designed for packing, and can be considered a technological form with a very long period of continuity and functional efficiency. Indeed, evidence from the Hoko River wet site (45CA213, discussed in more detail below) indicates that this form of basket has been popular for at least the last 2,500 years.



Fig. 62. Open wrapped pack baskets being used to transport halibut in Neah Bay (Photograph by S. G. Morse, ca. 1910).

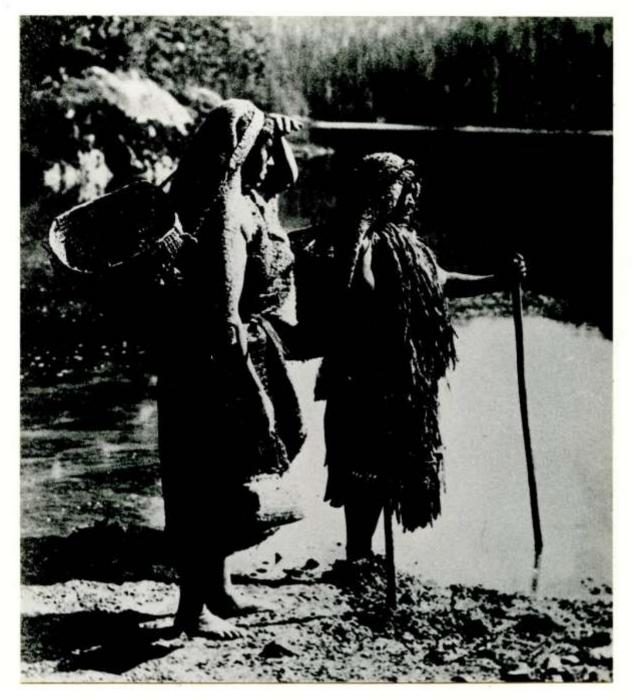


Fig. 63. Women carrying open wrapped pack baskets (photograph by Edward S. Curtis; source: Andrews 1962:167).

Ozette Basket Function Set X /OB47, OB48/

Small, open wrapped or checker plaited, splints and/or cedar bark, elliptical basketry trays (Fig. 64)



Fig. 64. *Functional Set X. Small, open wrapped or plaited, elliptical basketry trays made from splints and/or cedar bark.*

Technological Characteristics

These small baskets share the characteristics of a low-sided elliptical shape and small size. Referred to as basketry trays because of their long and shallow form, the OB47 baskets are constructed with sturdy splints and an open wrapped body weave (Fig. 65) and the more flexible OB48 baskets are woven using a cedar bark checker plaiting technique.

Basket Contents

Of the five baskets in this set, three probably were in use at the time of the mudslide. All were empty when found.

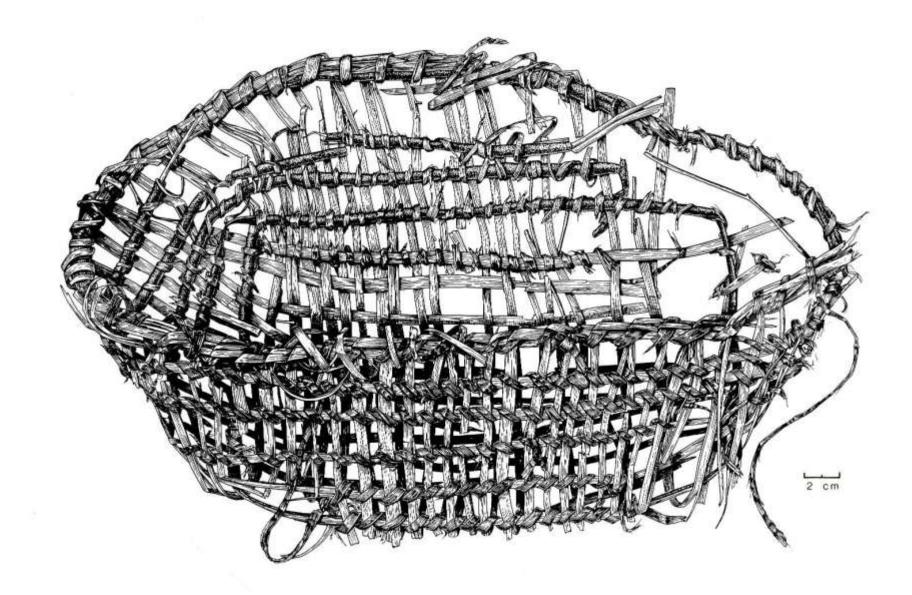


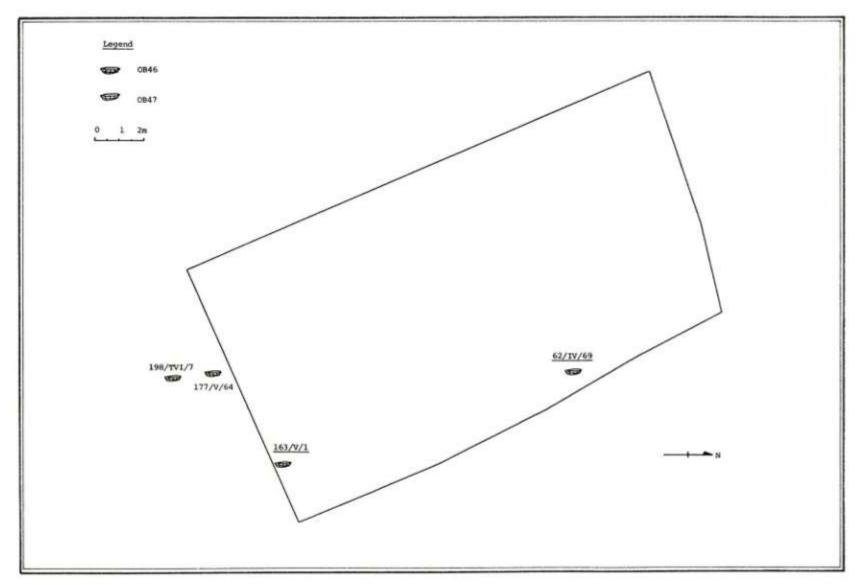
Fig. 65. Open wrapped basketry tray (163/V/l; OB47).

Distributional Patterns within the Site

The three baskets that may have been in use at the time of the mudslide were recovered from inside the House I area (Map 12). One OB46 basketry tray (163/V/l) was found along the southeastern wall with several other artifacts, including combs, other baskets, and clubs. This area was a family living area, and this basketry tray was in association with the other family possessions. The other two baskets, one OB47 (62/IV/69) and one OB48 (31/IV/26), were located high in the mudslide and appeared to have been transported by the slide from outside of House I, possibly from within adjacent houses.

Ethnographic Data

No specific ethnographic reference to these kinds of basketry tray has been found. Suggestions can be made, however, concerning their specific functions. They may have served as food plates: this was a common function for shallow wooden trays of a similar size and shape at Ozette Village and elsewhere. They also could have been used for gathering.



Map 12. Distribution of basketry "trays" recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Ozette Basket Functional Set XI /OB51, OB52, OB53/

Small, cedar or spruce root, coiled baskets (Fig. 66)

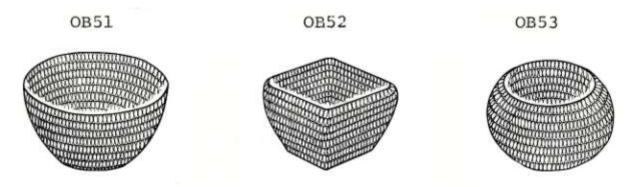


Fig. 66. Functional Set XI. Small, cedar or spruce root, coiled baskets.

Technological Characteristics

Coiled baskets are relatively rare at the Ozette Village site. These hard, thick baskets were coiled using split cedar or spruce roots. Two were started with a spiral base and one with a meander "parallel" coiling (Haeberlin, Teit, and Roberts 1928:171; Figs. 67 and 68). Fragmentary examples were found with an "elongated watch-spring" base (Haeberlin, Teit, and Roberts 1928:171; Fig. 67b). From these base forms the coiled baskets were developed into at least three shapes. The rim on the coiled basketry usually was finished with a plain coiled edge, but one fragment has evidence of a "braided" rim (Haeberlin, Teit, and Roberts 1928:182, 183),

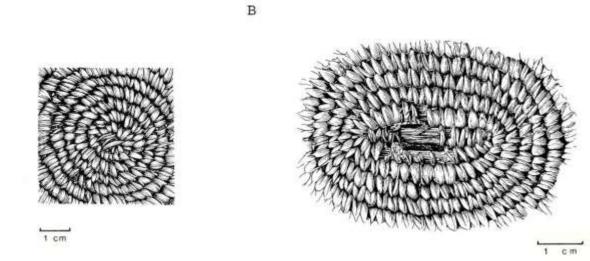


Fig. 67. Examples of spiral-based coiling techniques circular start, and B. oval start.

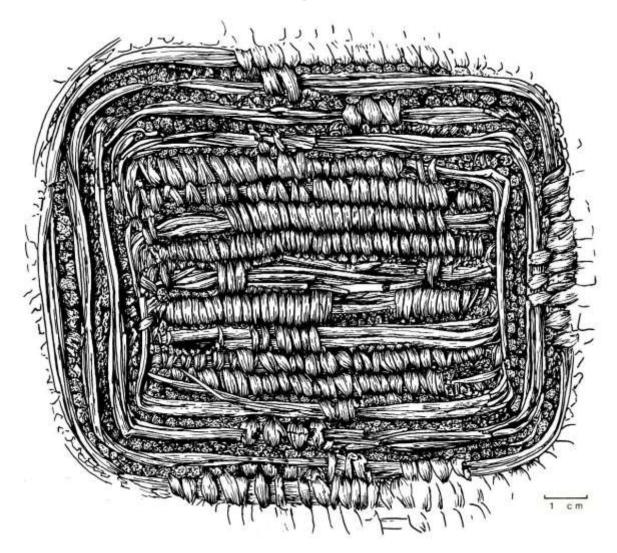


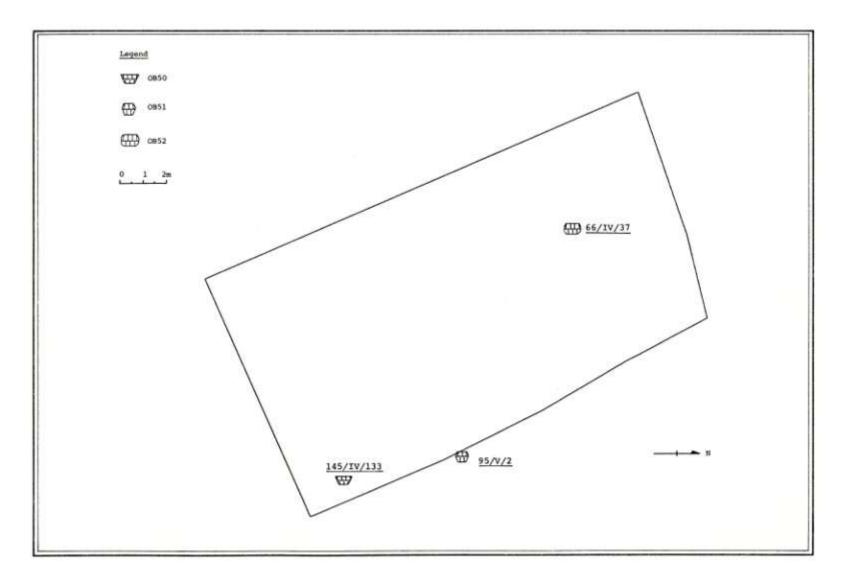
Fig. 68. Example of the meander "parallel" coiling technique creating a rectangular base.

Basket Contents

All three of the complete coiled baskets recorded from House I appear to have been in use at the time of the Ozette mudslide. Two were recovered empty and one was found containing a large quantity of red ochre. The excavation field notes record the contents as red ochre paint, mud, cedar bark string, and some grass fiber. Since red ochre pigment was used as paint, this coiled basket could be considered a special paint or paint pigment container. Small Northwest Coast coiled baskets from museums often are recorded as having their insides stained with red paint pigments. Coiled baskets such as those recovered at Ozette Village often are water tight and can hold liquids, such as water or paints.

Distributional Patterns within the Site

The locations of the three coiled baskets recovered in and around Ozette House I are shown in Map 13. The OB51 bowl shaped coiled basket was found stored inside an OB29 basket (145/IV/133; see Fig. 69 and Map 13). This OB29 has been described as a "special" storage basket (p. 317) containing, in addition to this coiled basket, two cedar bark bags (145/IV/134 and 135), disintegrated textiles and braids (145/IV/131, 132, and 137), and a large bi-barbed fishhook (145/IV/138) (see pp. 317-318). This storage basket and its contents probably were once on a bench platform in the southeast corner of House I. The OB52 coiled basket filled with red ochre paint (95/IV/2) was recovered just outside of the southeast wall of House I. Apparently it was from the house directly behind House I (House II), and was deposited in this location by the southeasterly moving mudslide. The OB53 coiled basket with the round shape (66/IV/37), was found in the northeastern area of House I and was associated with a large number of artifacts that probably were kept on or behind bench platforms in this area of the house.



Map 13. Distribution of coiled baskets recovered from the Ozette House I area Baskets with underlined artifact numbers were in use at the time of the mudslide.

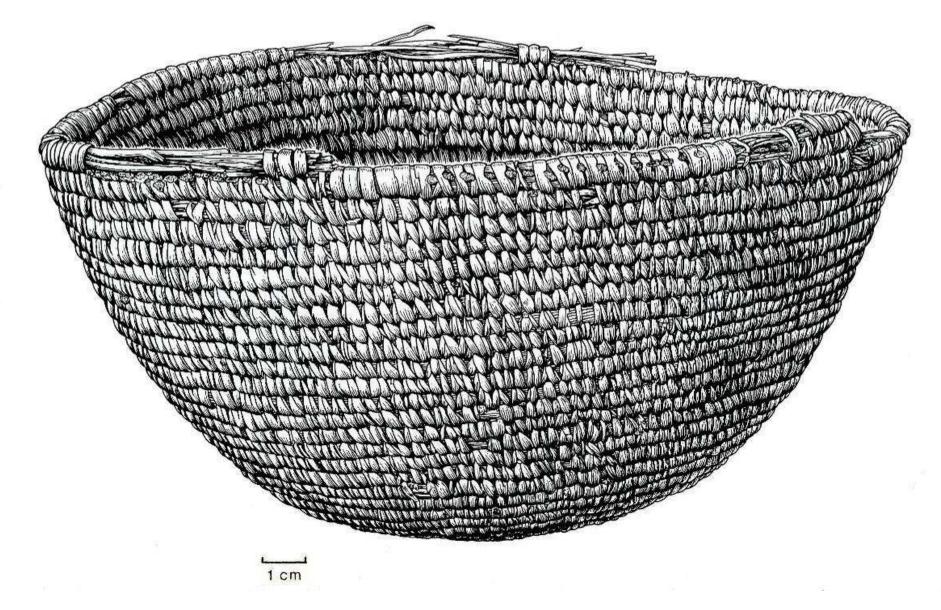


Fig. 69. Bowl shaped coiled basket (145/IV/133; OB51). Note split stitch coiling technique and bundle of sectioned roots as the foundation elements.

Coiled Basketry Fragments

Though only three complete coiled baskets were recovered in and around the Ozette House I area, numerous cut fragments occurred. Fourteen such pieces were recovered and all appear to have been intentionally cut into small strips, ribbons, or trapezoidal shaped pieces (see Figs. 70 and 71). Distinct cut marks, especially through foundations, are visible on these pieces (see Fig. 71). Some have imbricated designs (Fig. 70). The question remains as to why the coiled baskets were cut into these pieces. Since coiled baskets appear to be relatively rare at Ozette, and since historically this was not an area where coiled basketry was made (Haeberlin, Teit, and Roberts 1928: 136), they probably were imported and a certain amount of value must have been placed on them. It is interesting to note in this context that at historic potlatches, blankets, as an important standard of value, commonly were cut into ribbons and distributed as potlatch gifts (Gunther 1927:221, personal communications). Sproat also wrote about this practice at potlatches in the Nootkan Alberni area in the 1860s. He wrote that "to include all present at such a feast, a single blanket is sometimes torn into twenty pieces" (1868:113), and, further that "sometimes a new musket is divided, and the stock, lock, and barrel given to three different persons" (p. 111). It seems likely that the Ozette coiled baskets, as objects of special value, were similarly cut up and distributed as potlatch gifts. Significantly, most of these cut pieces are not found discarded within the house or refuse midden, but stored with other important possessions along the walls in the house.

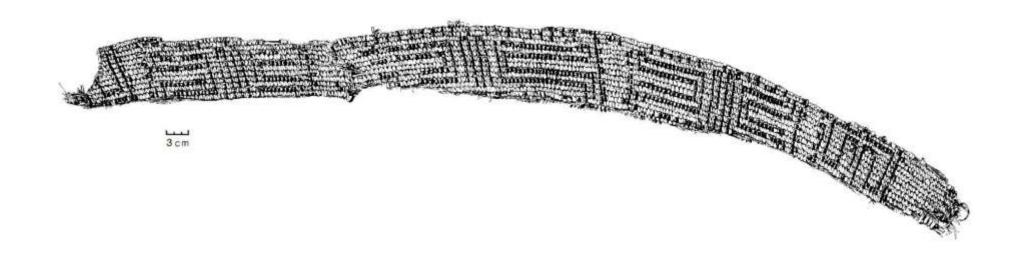


Fig. 70. Cut ribbon of Ozette coiled basketry with imbricated design (179/tV/140).



Fig. 71. A trapezoid shaped cut piece of Ozette coiled basketry (SB/III/118). Arrow indicates cut begun in upper rim area.

Ethnographic Data

As has been mentioned earlier the Ozette area historically was not one where coiled basketry typically was manufactured. In fact, ethnographic and present archaeological evidence indicates that coiled basketry was a recent introduction to the general southern Northwest Coast area (Haeberlin et al. 1938:136; Croes 1975:65). In this regard Barnett, speaking of the Sanetch Salishan of southern Vancouver Island (only 120 miles east via the Straits of Juan de Fuca from Ozette Village), states:

One or several baskets of this type, with or without imbrication, was to be found in almost every household in 1936. Two Sanetch informants, however, said that they were never made by their people, or by any on the island. All such baskets, they said, came from the Fraser River people and from the Sechelt. And, when any individual specimen was inquired about anywhere on the island, it was admitted that it had come from across the strait. In corroboration, W. A. Newcombe of Victoria writes in a personal communication:

In forty years of collecting and handling collections of others I know no coiled basketry being made on Vancouver Island. Although the collections have contained two or three hundred specimens all were said to have been secured from the mainland.

This statement is in agreement with my conclusions based upon more limited experience. Furthermore, it seems to me that it is justifiable to conclude that this style of basketry was introduced comparatively recently, even on the mainland. Chief Tom volunteered that it was, and I found no reason to doubt his information. He said that the Slaiaman and others on the Coast had learned the technique from the Lillooet. That was 'their way,' not the 'saltwater way. '

If this interpretation is correct, it appears that the Coast Salish, at the time of discovery, could have used woven containers, either flexible or rigid, only for carrying or storage. They could not have used them for heating water or for cooking. They had no watertight baskets until the Lillooet form was adopted, and, even after its adoption by the mainlanders, the islanders were, for a considerable time, without it (Barnett 1955:124).

The Lillooet are an upper Eraser River group. These interior groups used watertight coiled baskets for cooking (boiling) with heated stones. At Ozette Village and in general on the Northwest Coast, watertight bent-wood boxes were used for cooking. The use of watertight coiled baskets for cooking probably would be as efficient, but the production of coiled baskets would certainly be more time consuming. This may partially explain the lack of a developed coiled basketry technology at Ozette Village and elsewhere, their apparent value as possible imports (on the southern Northwest Coast), and their use as special paint baskets and for other things.

In terms of archaeological data, coiled basketry apparently was introduced late. In analyzing Musqueam Northeast basketry and cordage it was noted that:

Historically the most predominant basketry technique among most of the eastern Gulf of Georgia-Puget Sound Salishan groups is cedar root coil basketry. However, none of the seven prehistoric water-saturated archaeological sites in this Salishan area (sites dating from about 500-3,000 years B.P.) have any examples of coil basketry (with the possible exception of a very small fragment, measuring about 2x1 cm., from the Fishtown site). For this and other reasons, it appears that coil basketry techniques were introduced very late in this area, and must have become popular in this late period. European influence after contact may have created some of the popularity of coil basketry; they seemed to buy the imbricated coil baskets much more than the other forms, and much of the basketry after contact was basically made for the European [Euro-american] market (Croes 1975:65).

And in this regard, Waterman points out:

According to my own observations, twined and checker-work baskets are quite as numerous as coiled ones, and they are equally important in the life of the people. Such baskets, however, are not valued nearly so highly by the Indians, nor by White collectors (1973:4-5).

As for historic coiled basketry, the Ozette examples appear to be most similar to upper Fraser River coiled basketry (Lillooet and Thompson groups). The use of meander "parallel coiling" on the bottom and the distinct corners on the body of the OB52 are very distinctive of the Upper Fraser area (Haeberlin 1928; Waterman 1973:5-6; and Gunther, personal communications). Also the actual imbricated designs found on Ozette Village coiled basketry fragments, especially the numerous right angle patterns that parallel each other (examples in Fig. 70), are typical of the upper Fraser area. These specific features, plus the use of split stitches, and bundle foundations, point to an upper Fraser River origin for the Ozette Village coiled basketry. These baskets probably were introduced through trade or other forms of contact. The Makah/Ozette historically were very active traders (Singh 1956; Jewitt 1896; Espinoza y Tello, 1930) and, apparently, in prehistoric times as well.

Summary

The sewn coiled basketry at Ozette Village is a unique form. These items probably were imported and held in special value. The source appears to have been the east, possibly from the upper Fraser River (Lillooet-Thompson) area. Numerous intentionally cut pieces, in the shapes of ribbons, rectangles, and trapezoids, are also recovered at the site. These cut coiled basketry examples probably were used as symbolic gifts of value at potlatches. Also these baskets demonstrate another direction, the east, for outside cultural contacts for the prehistoric Ozettes.

Ozette Basket Functional Set XII

XIIa: /OB54/

XIIb: /OB20, OB55/

Small, plain twined, cylindrical or expanding rounded cube-shaped "gathering" baskets (Fig..72)

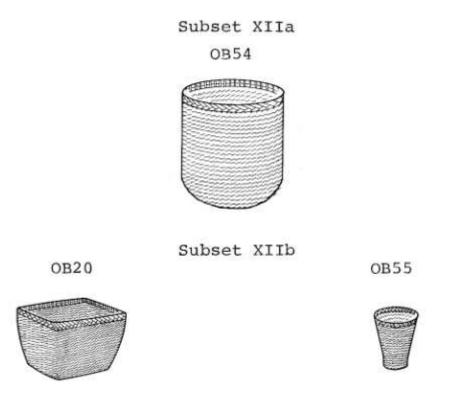


Fig. 72. Functional Set XII. Small, plain twined "gathering" baskets

Technological Characteristics

The baskets in this functional set are the only ones at Ozette Village with a plain twined body weave, a technique used more frequently for hat construction. These baskets are made from cedar bark or root materials. This functional set is further divided into two subsets, XIIa and XIIb, distinguished by base construction, decoration, and rim construction techniques, which are specified as follows: XIIa: Spiral based twining, bear grass overlay ornamentation, and mock braid rimXIIb: Checker plaited base weave, no body ornamentation, and turned in rim

The actual occurrence of baskets in these subsets from the Ozette House I area was four in XIIa and three (OB20:2; OB55:1) in XIIb,

Each subset is considered separately below.

Subset XIIa

Technological Characteristics

The OB54s of this subset usually were constructed with a distinct spiral, spoke-warp base twining (Fig. 73). The transition between bottom and body weave consists of a single row of three-strand twining. All the OB54s are elaborately decorated with white bear grass overlay designs which are of geometric form and repetitive around the basket body. The four patterns recorded are illustrated in Fig. 21C, D, E, G (p. 177).

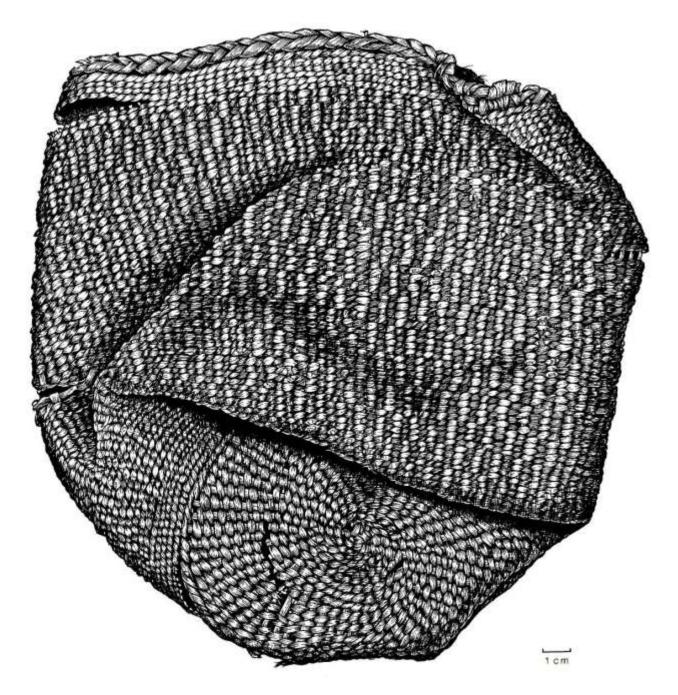


Fig. 73. A plain twined, rounded-base cylindrical basket with bear grass overlay ornamentation (164/VII/10; OB54) Note spiral-based twining, row of three-strand twining between base and body, and mock braid rim construction.

These OB54 baskets are very similar to many historic south coast Quinault baskets with which they share the following distinctive features:

- 1. Rounded-base cylinder shape.
- 2. Spiral based twining.
- 3. Three-strand twining transition between base and body.
- 4. Plain twined base and body weave.
- 5. Mock braid rim.
- 6. Bear grass overlay decoration.
- 7. Repetitive geometric design pattern.

Most of these characteristic modes of the OB54s are otherwise absent at Ozette Village, and the combination of these features is unique to these baskets. This class of basket, as mentioned above, is most common among historic Quinault basketry (Farrand 1900) and less frequent among that of the Makah (Swan collection, U.S.N.M.; Jones 1976). The OB54 class at Ozette Village may have been a form introduced or obtained from the south.

Distributional Patterns within the Site

Of the four OB54 baskets recovered, two appear to have been in use at Ozette Village. The other two were badly broken and found within the refuse midden or house floor. Of the two complete baskets, one (78/111/176) was recovered from Unit III, in an early historic house covered by a later mudslide and above the major prehistoric mudslide (Map 14). This basket was found next to a bench plank along a wall and was associated with numerous other artifacts kept in this upper

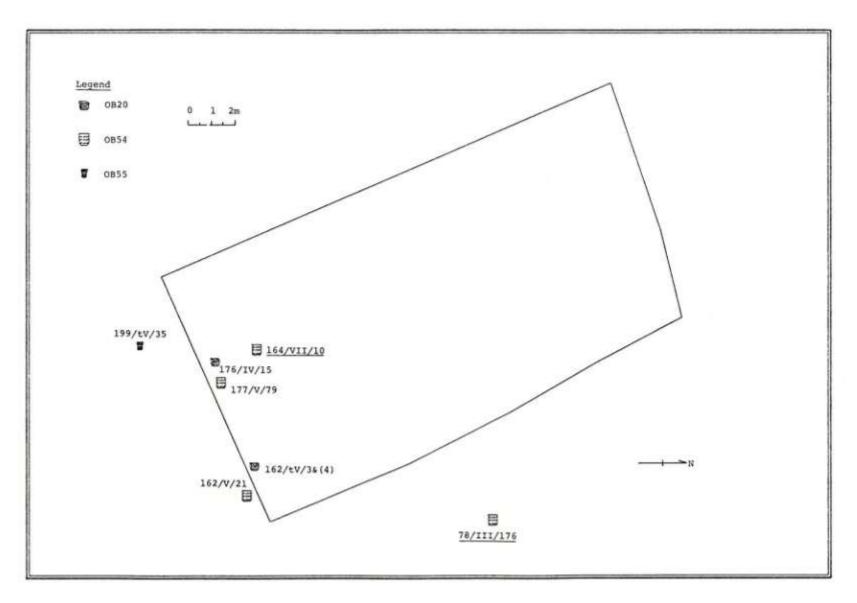
level house area. The second basket (164/VII/10; see Fig. 73) was found along the south central wall inside House I (see Map 14). It was found with several other artifacts and apparently was kept on or behind the bench platform in this family area. Both of the complete baskets were empty when found. In general distribution, baskets of this subset (excluding the Unit III basket, 78/111/176) were recovered in the southern area of the house (Map 14). The use of these kinds of baskets may have been associated with a family group in this area. Their anomalous presence might indicate that a family member or perhaps a slave from the south coast Quinault area could have made this kind of basketry, or perhaps the family had trade relationships to the south. Other explanations are also possible.

Ethnographic Data

In the ethnographic literature, these baskets are poorly represented. Swan describes this class for the early historic Makah as follows:

Small baskets are made of bark and grass, dyed of various colors. Some are woven with designs intended to represent birds or animals [probably wrapped twined baskets]; others in simple checks of various patterns [probably plain twined OB54 baskets] (1870:46).

While a resident at the Makah Indian Reservation during the 1860s, Swan personally collected approximately twenty-two Neah Bay baskets that definitively can be identified as OB54. Most of these baskets may be found at the U.S. National Museum, Smithsonian Institution. Decorated with bear grass overlay in various geometric designs, many are very similar to the Ozette Village OB54 baskets. Their use evidently was quickly discontinued soon after Swan's stay in Neah Bay.



Map 14. Distribution of plain twined baskets recovered from the Ozette House I area. Baskets with underlined artifact numbers were in use at the time of the mudslide.

Jones, working with 516 historic Nootka-Makah museum baskets, has found that this type of basket (mostly from the Swan collection) was common in the 1860s but rare from all later periods (Jones preliminary data, June 1974; 1976). This situation is unusual because the Swan collection, with a high frequency of OB54s, is not typical of prehistoric or later historic collections from this area, and some bias in his collecting may have existed. All of the baskets he obtained may not be Makah baskets. They may have been obtained by Makahs from the south coast to sell to Swan, who, at this very early period, was buying for the Smithsonian. The Makah may, of course, have made this kind of basket themselves, but the technological similarity with the common south coast baskets of this class would indicate some cultural contact or influence. One or more south coast weavers may have lived in the area at the time (possibly slaves or marriage partners), or trade may have been a vehicle since Makahs had strong trade contacts to the south (see Singh 1956).

It is probably this class of basket which Eells described in 1881 for the Clallam, Twana, and Chemakums as:

Small baskets, usually holding not over 2 quarts; they are made of small grass, obtained by the Makahs, and used by women for holding sewing materials and similar articles (Eells 1971:627).

If the small grass used was obtained from the Makahs, and if it was bear grass (as was used in these baskets), then the Makah must have gotten it in turn from the Quinault area (the only area where it grows [Mason 1902:434]).

Mason discusses and illustrates several baskets of this class (1902:434-435; Plates 74, 77, 78, 79, and 162). These were made by Quinaults. Many of Mason's plates are from Farrand's article

titled "Basketry Designs of the Salish Indians" (Farrand 1900).

Waterman also described a similar basket when discussing the Indians of Puget Sound:

Close-woven twined basket. gweyo'lEtcld.

These baskets are light and easily handled. They were used, for one thing, in picking blueberries, which grow close to the ground. . . . They were employed of course in a variety of other ways (1973:8).

The use of this kind of close weave, flexible basket for berry picking probably was common.

Subset XIIb

The two classes of basket recorded for this subset, OB20 and OB55, were constructed with a checker plaited base weave, turned in rims, and without body surface ornamentation. Shape is the main distinguishing characteristic. All baskets in this subset were recovered broken and discarded within the House I floor midden or outside refuse midden (Map 14). As flexible, close weave sacks or bags, they probably were used to store or gather different products, as were other bags and sacks recovered at Ozette Village.

Summary

The baskets in this functional set probably were multipurpose small gathering baskets. The grass overlay OB54s may have been introduced through some form of outside cultural contacts, since they are very similar to historic south coast Salishan basketry. They were a unique and undoubtedly "special" ornamented form in the Ozette Village household.

Ozette Miscellaneous Basket Functional Set XIII

XIIIa: /OB33/

XIIIb: /OB48/

XIIIc: /OB49/

XIIIa: Extra-small; splints; rectangular-base, recurving oval; open twined basket with a continuous looped handle (Fig. 74a)

XIIIb: Medium-small, cedar bark/splints, cylindrical, checker weave basket (Fig, 74b)

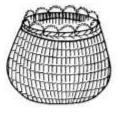
XIIIc: Small; splints; ovate, inverted, truncated conical; checker weave basket (Fig. 74c)

These small unique baskets, each of which is represented by a single example, are here grouped together in this miscellaneous functional set of smaller, possibly special, "trinket" baskets. They may have been personalized variations in construction, introduced baskets, or simply rare classes of Ozette Village baskets. Each basket subset is considered separately below.

Subset XIIIa

The single basket in this subset is constructed of split root (?) and has a fine gauge, open twined body weave (Fig. 75). The rim is mock braid, a rare rim technique at Ozette. A continuous twostrand cordage handle is attached around the mouth (Fig. 75a). The outside surface has a brilliant red stain apparently derived from the contents bleeding through the basket; it contains some ground wood, pulp-like materials which produce a bright red liquid when wet. These materials tentatively are identified as remnants of alder or some similar bark. Red alder was used commonly as a red dye material in historic times (Gunther 1945:27). OZETTE MISCELLANEOUS BASKET FUNCTIONAL CLASS SET XIII

Subset XIIIa: OB33



a. Extra-small, splint, rectangular based recurving oval, open twined basket with a continuous looped handle

Subset XIIIb: OB48



b. Medium-small, cedar bark/splint, checker weave basket with a cylindrical shape

Subset XIIIc: OB49



c. Small, splint, checker weave basket with an ovate, inverted, truncated cone shape.

Fig. 74. Ozette miscellaneous basket Functional Set XIII.

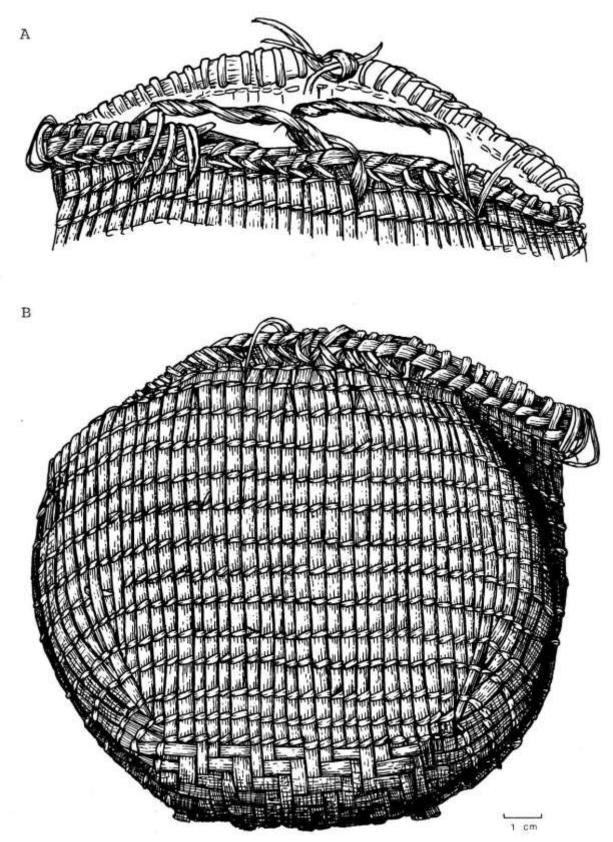


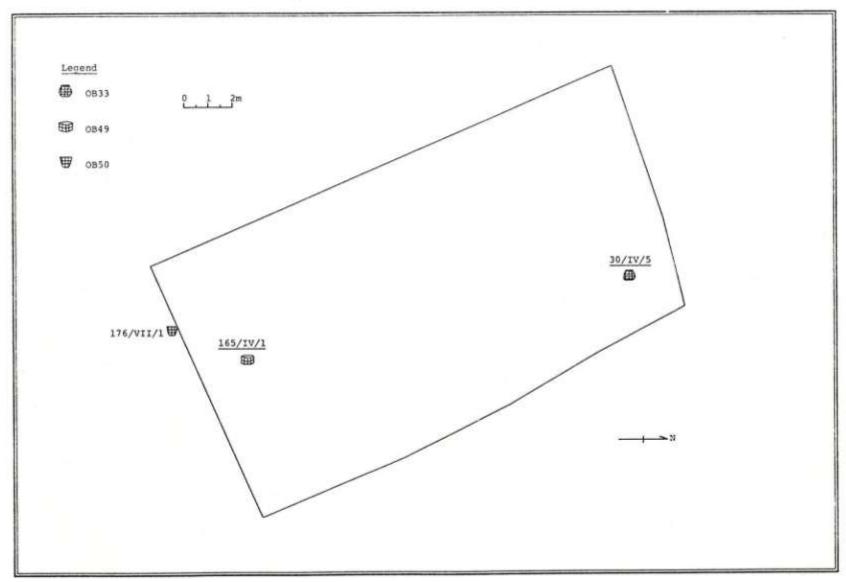
Fig. 75. Extra-small, splint, open twined basket with a continuous looped handle (A) (30/IV/5; OB33). Note fine-gauge open twining and twill 2/2 base weave.

This basket was recovered in the northeast corner of the house on a bench platform next to a large cedar bark storage basket (OB2: 30/IV/6) and a large expanding, rounded cube, twill 2/2 utility basket (OB30: 30/IV/7). It may have been stored with these other baskets or have fallen out of one of them during the mudslide (Map 15).

No direct ethnographic reference has been recorded for this class of basket. Makah senior citizens were impressed and interested in its construction and appearance, but otherwise considered it a small "trinket-like" basket. At Ozette it may have been a special container for storing the special dye materials.

Subset XIIIb

The single basket in this subset was constructed using splint body weft elements and cedar bark base and body warps (Fig. 76). The mouth is finished with a hitched rim. The cylindrical shape is unique to this basket.



Map 15. Distribution of small "miscellaneous" baskets within the Ozette House I Baskets with underlined artifact numbers were in use at the time of the mudslide.

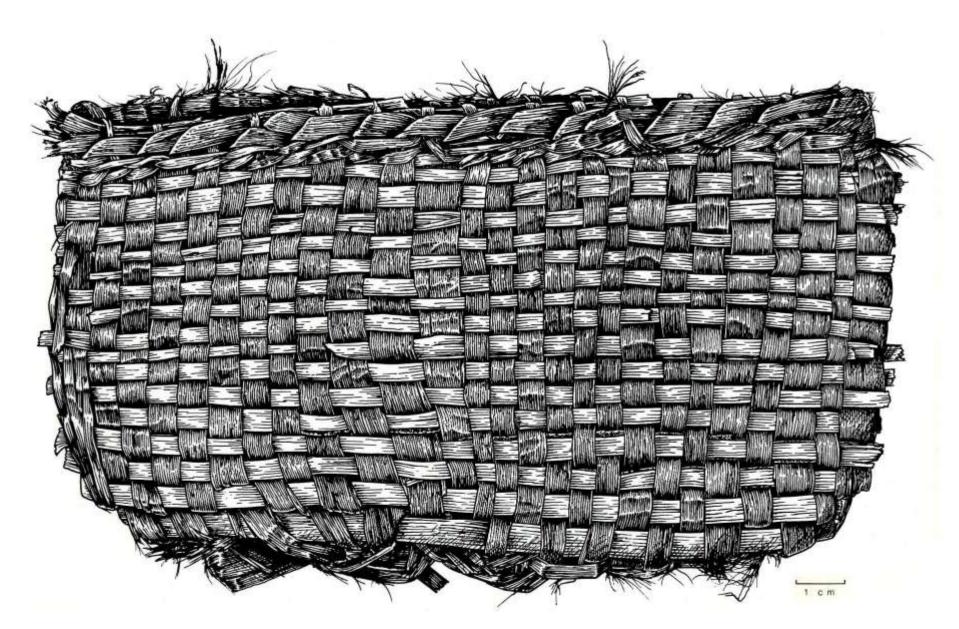


Fig. 76. *Small, cedar bark/splint, checker weave basket with a collapsed cylinder shape (165/IV/1; OB48). Note hitched rim.*

Nothing was found inside this specimen. It was found in the south central area of the house and probably was stored on or behind the bench platform (see Map 15).

No specific ethnographic reference to this basket class has been found. Possibly it was a "freestyle" basket not necessarily modeled after any particular form.

Subset XIIIc

The single cedar splint basket in this subset was constructed with a checker body weave. Some of the body splints have the bark still adhering which has created a color contrast decorative effect (Fig. 77). The basket has a hitched rim finish. This small basket with an ovate, inverted, truncated cone shape had evidently been discarded in the refuse midden outside the southern house wall (Map 15). It was empty when found.

No ethnographic data were located concerning this basket. The use of cedar splints in a checker body construction historically is more typical of Coast Salishan areas.

Summary

These small, unique baskets may be considered "freestyle," not specifically modeled after any common basketry class. Tentatively they may be called miscellaneous or "trinket" baskets, but as more of the Ozette Village site is excavated other examples may be found and these conclusions may need to be modified.

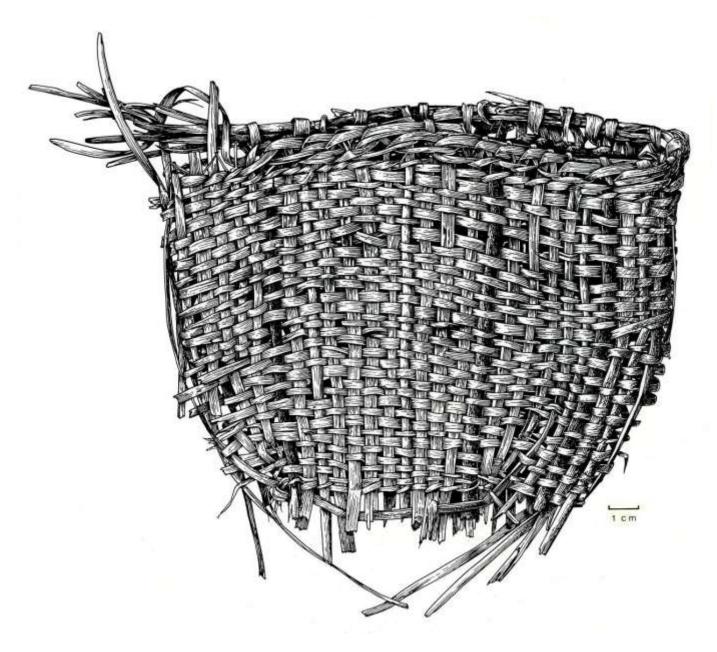


Fig. 77. *Small, splint, checker weave basket with an ovate, truncated conical shape (176/VII/l; OB49). Note certain warp elements with bark left adherent for ornamental patterning.*

Ozette Basket (Cradle) Functional Set XIV /OB55/

Cedar bark, checker weave cradles with wood slat bases (Fig. 78)



Fig. 78. Ozette Basket Functional Set XIV. Cedar bark, checker weave cradle with wood slat reinforced base.

Technological Characteristics

Cradles from Ozette Village were constructed with wooden cedar slats interwoven into the base weave. The base was formed with very coarse gauge checker plaiting with strips averaging 3 to 4 cm wide. These were split further to constitute the body warps. The wooden slats, numbering from four to five when present, were partially smoothed before being woven into the cradle base and were tapered to produce the finished shape (see Fig. 79). The cradle rim is finished with the hitched rim technique. Braid loops frequently were placed along the inside edge of the cradle to aid in tying in the child (Fig. 9D; Drucker 1951:122).

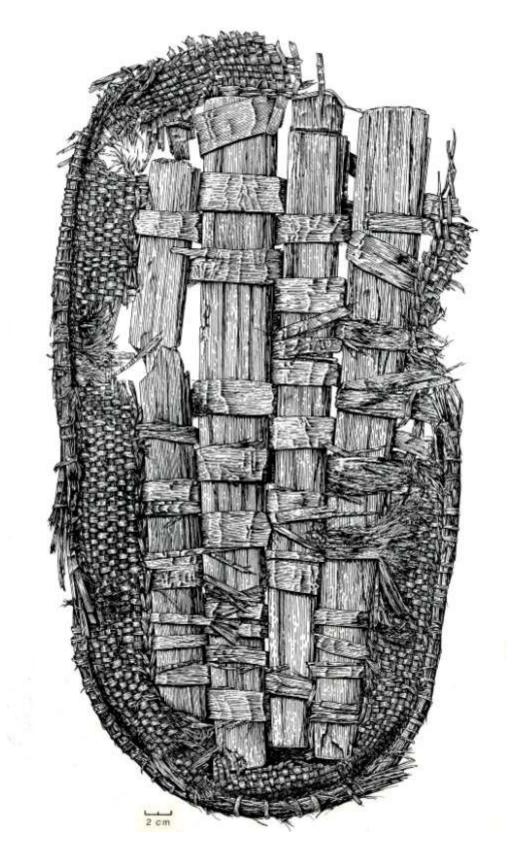


Fig. 79. Ozette cedar bark cradle (163/V/62; OB55). Note tapered cedar wood slats interwoven to form support for the base.

Cradle Contents

Twelve cradles in this functional set have been recovered from in and around the House I area. Of these, only one appears to have been in a usable condition, the others being fragmentary, discarded examples, usually from the outside refuse middens.

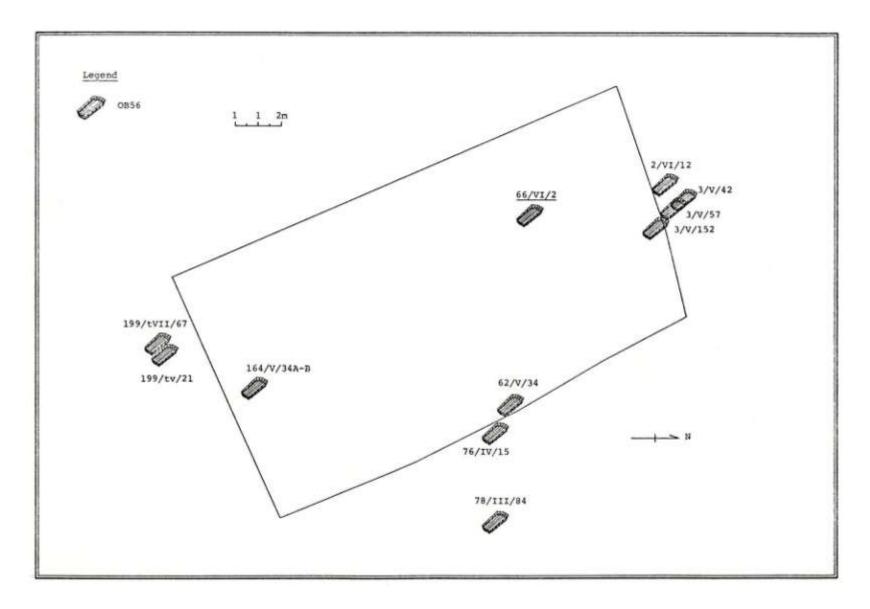
The single usable cradle (66/VI/2) was in storage on or behind a bench platform in the northwest corner of the house (Map 16). This cradle was amply padded inside with a layer of moss on the bottom covered by pads of shredded cedar bark, with worn cedar bark flat bags and thin bundles of bark on top of this. These layers of materials provided protection and comfort for the infant (see ethnographic data below).

Distributional Patterns within the Site

The usable cradle was found in association with numerous other stored items in the northwestern corner of the house (Map 16). The broken examples either were close to the house walls or in the refuse midden directly outside the houses.

Ethnographic Data

Swan describes in detail a Makah cradle and its use:



Map 16. Distribution of cradles in the Ozette House I area lined artifact number was in a usable condition. Cradle with underlined artifact number was in a usable condition.

As soon as a child is born it is washed with warm urine, and then smeared with whale oil and placed in a cradle made of bark, woven basket fashion. . . . Into the cradle a quantity of finely separated cedar bark of the softest texture is first thrown. At the foot is a board raised at an angle of about 25°, which serves to keep the child's feet elevated; or, when the cradle is raised to allow the child to nurse, to form a support for the body, or a. sort of a seat. This is also covered with bark, he~se~yu. A pillow is formed of the same material, just high enough to keep the head in its natural position, with the spinal column neither elevated nor depressed. First the child is laid on its back, its legs properly extended, its arms put close to its sides, and a covering either of bark or cloth laid over it; and then, commencing at its feet, the whole body is firmly laced up so that it has no chance to move in the least. When the body is well secured a padding of he-se-yu is placed on the child's forehead, over which is laid bark of a somewhat stiffer texture, and the head is firmly lashed down to the sides of the cradle; thus the infant remains, seldom taken out more than once a day while it is very young, and then only to wash it and dry its bedding. " (1870:18-19).

The shredded cedar bark padding Swan describes (he-se-yu) is found in the complete Ozette cradle, as were the braid loops utilized to bind in the child. A miniature cradle collected by Swan in 1867 also was examined at the U.S. National Museum, Smithsonian Institution (Ace. #5366). It is identical in most respects to the full-sized Ozette cradles and possibly was Swan's model for the above description.

Drucker, in his Northwest Coast culture element distributions list, indicates that cedar bark basketry cradles with "4-slat reinforced bottoms" only occurred among Nootkan groups. He described such a cradle as "an ovoid checkerwork basket, with four longitudinal splints substituted for warps in the bottom for rigidity, and reinforced rim" (1950:206, 274). This type of cradle was a Makah/Nootka type at least as early as the Ozette time period.

Functional Analysis and Classification of Baskets Recorded from other Northwest Coast Wet Sites

While many of the much earlier sites lack baskets which may be considered precise ethnographic analogies, as at Ozette, they nevertheless do have technological and site-context characteristics that can be used to suggest their uses.

As discussed above, Ozette Village is an ideal site to conduct a basketry functional analysis: many of the baskets were found in their functional context, often still holding their original contents and in their original places inside the Ozette House I structure. Other Northwest Coast wet site basketry items were not recovered in such explicitly functional circumstances-indeed they usually were discarded or lost specimens that had become waterlogged and settled in waterways adjacent to areas of human activity. Their uses at a particular site location, however, can often be inferred. In conducting a functional analysis of the different collections of wet site baskets, two features were considered as of most value: (1) technological characteristics and (2) total site context in terms both of associated artifacts and of the site functional context. In general, three site-use categories have been identified on the basis of their primary economic activity: (1) village sites: Ozette Village, Lachane, and Axeti; (2) fishing stations: Little Qualicum River, Musqueam Northeast, Biederbost, Hoko River, and Wapato Creek; and (3) shellfish (?) gathering areas: Conway, Fishtown, and English Camp (?) (Croes 1976d:294). The "use" identifications of these sites were derived from data beyond just the basketry, and include all artifacts and site context. These data often are strongly indicative of the activities taking place at a wet site. The functional classification of baskets from each site was conducted in a fashion similar to the functional classification of Ozette Village baskets. Functional sets were created in a like fashion according to technological similarities of the S/T basket classes, and the

site context or "use" interpretations. Unlike Ozette Village, none of the baskets from other Northwest Coast wet sites was recovered with its original contents intact, so this characteristic cannot be used in arriving at the functional classification. When appropriate, general ethnographic analogies and comparisons with technologically similar basket classes recovered at Ozette Village are made, but these are only tentative since some of the sites are thousands of years old. The baskets from each site are considered separately below.

Lachane

All recorded Lachane basket classes are considered members of the same functional set (Fig. 80). They all are technologically similar except in one feature, the dimension of body weave. In stylistic/technological terms, all Lachane basket classes can be defined as small, cedar bark, twined or plaited baskets with a square base, cylindrical shape. This class of basket is markedly similar to historic Coast Tsimshian museum baskets and this specific basket construction style appears to have had a long period of continuity in the Coast Tsimshian area (Inglis 1976; Croes 1977).

All of the Lachane baskets were recovered from a spring or creek running between two large houses in a village complex. They appear to have been discarded and become waterlogged with other materials in this peaty aquifer micro-environment approximately 2,000 years ago. In historic terms, baskets of this functional class generally were used in the Tsimshian area as gathering baskets, often for berries. The baskets from Lachane likewise may have functioned as general gathering baskets or sacks.

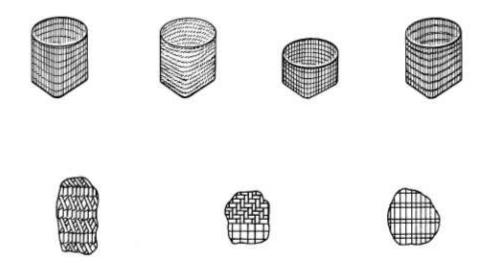


Fig. 80. Lachane Basket Functional Set I. Small, twined or plaited, cedar bark bags (or bag fragments) with a square-base cylindrical shape.

Axeti

Axeti has three basket functional sets (Fig. 81) with two baskets recorded in each set. Axeti Functional Sets I and II contain baskets found also at Ozette Village and in historic museum collections, thus providing some grounds for analogy. Axeti, a relatively late village site, dates from approximately 600 years B.P. Its materials, therefore, may readily be compared with later materials. The Axeti baskets apparently were discarded in the protected waterways adjacent to the village and then settled to the muddy bottom directly offshore. Each functional set is discussed separately below. The two baskets placed in this functional set are technologically identical to those in Ozette Village basket class OB2, and can be compared with Ozette basket Functional Set I (p. 265). These were used in Ozette House I to store cedar bark wallets, sacks, and bags, and/or raw cedar bark bundles. Some Ozette examples also are recorded with tumpline straps, and were used as pack baskets, and these large, cedar bark baskets probably were used in the same manner at Axeti.

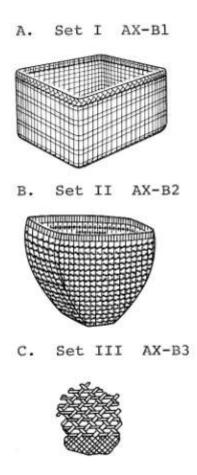


Fig. 81. Axeti basket functional sets. A. Set I: Large, checker ??b plaited, cedar bark, cube-shaped pack and storage baskets. B. Set II: Open wrapped, splints, pack baskets with an inverted, truncated pyramid shape. C. Set III: Cross-wrap plaited, cedar bark bags.

The two baskets in this set are identical to those in Ozette basket class OB44 in Ozette Functional Class Set IX. Considered specialized pack baskets at Ozette Village, they have the inverted, truncated pyramid shape and open wrapped weave. The Ozette examples were carried on the back supported by a tumpline strap across the forehead. Though tumpline loops are not found attached to the fragmentary Axeti examples, some fragments of possible tumpline straps were recovered at the site (p. 253). Historically, this class of specialized pack basket most commonly is reported from among Wakashan groups (especially Nootkans), but is common also in adjacent areas. This class of basket is well represented from the Bella Coola Salishan areas where the Axeti site is located (Jones 1976). It also was the major form of utility basket recorded from the early (2,500 years B.P.) Hoko River site (below).

Ethnographically these baskets were used to carry heavy loads of fish, shellfish, firewood, and other products.

Axeti Basket Functional Set III /AX-B3/_(Fig. 81C)

The two baskets recorded in this functional set are unique to Axeti. These cross-warp plaited, cedar bark bags possibly were used in a manner similar to the Ozette Village wallets, sacks, and bags. The open weave and flexible nature of the Axeti bags may indicate a specialized use as well.

Musqueam Northeast

Though seven S/T basket classes are reconstructed from Musqueam Northeast, all are considered technologically similar and part of the same functional set (Fig. 82). Differing only in the body weave dimension, they all may be defined as large, cedar splint, sturdily constructed (with reinforcement rows) baskets with an inverted, sub-rectangular, truncated conical shape (Croes 1975).

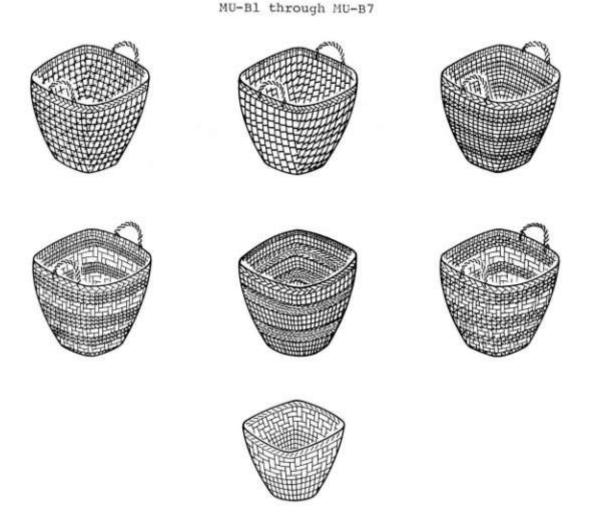


Fig. 82. Musqueam Northeast Basket Functional Set I. Large, plaited or twined, cedar splints, carrying baskets with an inverted, sub-rectangular, truncated conical shape and single opposing or series of looped handles. Some examples have double or single wrap reinforcement rows incorporated onto the body.

Because of its site context (adjacent to a stream channel) and associated fishing gear (nets, anchor stones, etc.), the early Musqueam Northeast site is considered to be a fishing station where large quantities of salmon were being caught during the migration runs (Croes 1975; Borden 1976). The very high concentration of the heavy-duty utility baskets recovered at this site (100% of all baskets and basket fragments recovered; n=114) suggests their being used to carry fish and/or other products being procured at this location. Eventually damaged and discarded, some became waterlogged and settled in the bed of the stream running through the site.

The Musqueam Northeast baskets constitute an example of the correlation between basket functional classes, in this case the utility-burden baskets, and the activities being performed at the site, in this case those associated with a fishing station. This strong correlation between basket functional category and site-use also may be observed at other fishing stations considered below.

Biederbost

Two of the Biederbost S/T basket classes are technologically similar and are considered part of the same functional set (Fig. 83). As indicated above, the Biederbost baskets technologically are very similar to those recovered at Musqueam Northeast, a reflection of interrelated basketry technologies and probably cultural groups as well. The Biederbost and Musqueam Northeast functional set (I) could be considered equivalent, with essentially the same functional category of basket: the large, cedar splint, sturdily constructed (with reinforcement rows) basket with an inverted, sub-rectangular, truncated conical shape.



Fig. 83. Biederbost Basket Functional Set I. Large, plaited or twined, cedar splint, carrying baskets with an inverted, sub-rectangular, truncated conical shape and single handles on reinforcement rows, single opposing handles on rim, or series of looped handles on rim.

Biederbost is about twenty miles upriver from the Skagit delta on the Snohomish River. The site was occupied 2,000+ years B.P. Weir fragments were recovered from the site (Nordquist 1976) and probably were used for the salmon runs that went up a stream channel running into the present river. The very high concentration of the large, heavy-duty, utility-burden baskets recovered from this site (98% of all baskets and basket fragments recovered; n=47) again indicates their probable use in transporting fish (salmon). Worn-out baskets also were discarded here, became waterlogged, and settled into the river bottom.

English Camp

Only a single basket was recovered at English Camp (Sprague 1976). Technologically very similar to Musqueam Northeast and Biederbost baskets, it should be considered a member of the Functional Set I of those two sites (Fig. 84). Baskets of this set are characterized as large, cedar splint, sturdily constructed (with reinforcement rows) baskets with an inverted, sub-rectangular,

truncated conical shape. The actual use of this basket at the English Camp site is unknown; certainly it would have had the same carrying-utility uses as those recovered at Musqueam Northeast and Biederbost.

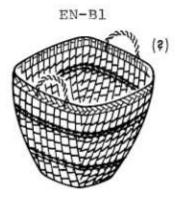


Fig. 84. English Camp Basket Functional Set I. Large, open twined, cedar splint, carrying basket with an inverted, sub-rectangular, truncated conical shape (?) and double wrap body reinforcement rows.

The wet section of the English Camp site is undated, but is located in stratigraphic layers dating prior to 1250 B.P. (Stephen Kenady, personal communications). Since this basket type is so similar to the early Musqueam Northeast and Biederbost baskets, it probably dates from about the same time period (2, 000 to 3,000 years B.P.). Apparently baskets of these S/T classes were used by groups throughout this Puget Sound/Gulf of Georgia area at this early time period.

Conway

Conway, dating from approximately 600 years B.P., has three basket functional sets (Fig. 85). The first and most common is a utility-storage basket, the second a cradle form, and the third a cedar bark basket form. Each functional set is considered below.

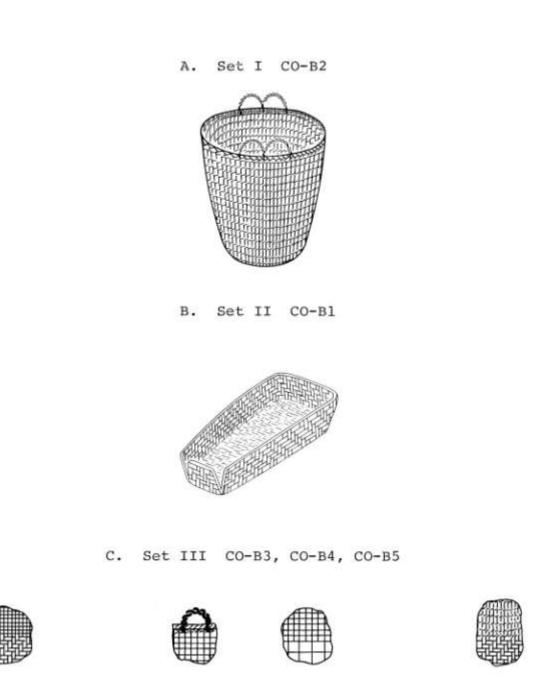


Fig. 85. Conway basket functional sets. A. Set I: large, open twined, cedar splint, utility-carrying baskets with an ovate, inverted, truncated conical shape and single or double loop opposing handles. B. Set II: cedar splint, twill 2/2 cradles. C. Set III: cedar bark, twined or plaited basket fragments.

Conway Basket Functional Set I /CO-B2/

The most common basket at Conway is the cedar splint, twill 2/2 base, open-twined basket with an ovate, inverted, truncated conical shape and opposing double or single loop handles (79% of

all baskets and basket fragments recovered; n=27) (Munsell 1976b). Essentially, this is equivalent to Ozette Functional Class Set VII, where these general utility-storage baskets would have been used to gather various products, such as shellfish, fish, firewood, etc., and were used as dry food storage baskets (p. 321). The concentration of this class of basket at Conway suggests that this site had been used as a gathering area. Since little direct evidence indicates what was gathered, only possibilities may be inferred. One such possibility is based upon structure: these quickly-constructed, open twined, well-drained and ventilated, cedar splint baskets would have functioned well for gathering and carrying shellfish and/or fish from this slough area.

Conway Basket Functional Set II /CO-B1/

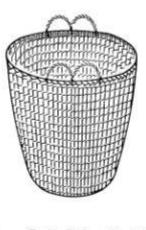
The cradle recovered at Conway performed an obvious function and is represented in Fig. 85 (see also Munsell 1976b, Plate VII).

Conway Basket Functional Set III /CO-B3, CO-B4, CO-B5/

These fragmentary cedar bark basketry forms have been lumped together into this general functional set. Too fragmentary to be completely reconstructed, their association demonstrates the use here of relatively large, flexible, cedar bark baskets and probably for gathering or carrying purposes.

Fishtown

Fishtown, dating from approximately 700 years B.P., has three functional sets which are equivalent to Conway Sets I, II, and III respectively (Fig. 86). Both sites have the same S/T basket classes and functional sets. They are spatially and temporally close (Maps 1 and 2) and no doubt represent culturally related groups. Both sites probably were used in similar ways. The Fishtown functional sets are discussed below.



B. Set II FI-B1



C. Set III FI-B3, FI-B4





Fig. 86. *Fishtown basket functional sets. A. Set I: large, open twined, cedar splints, utility-carrying baskets with an ovate, inverted, truncated conical shape and single or double loop opposing handles. B. Set II: cedar splint, twill 2/2 cradles. Set III: cedar bark, twined or plaited basket fragments.*

Fishtown Basket Functional Set I /FI-B2/

The most common basket at Fishtown, as at Conway, is the cedar splint, twill 2/2 base, open

twined basket with an ovate, inverted, truncated conical shape and opposing double or single

loop handles (67% of all baskets and basket fragments recovered; n=6) (Onat 1976). This set is essentially similar to Ozette Functional Set VII. The concentration of these baskets here suggests the area was used in gathering a particular product, probably shellfish, fish, or both, from the adjacent slough area. The shell middens adjacent to the wet area of the site indicate the use of shellfish products, and suggest a use for these quickly constructed, open twined, well drained and ventilated, cedar splint utility baskets.

Fishtown Basket Functional Set II /FI-B1/

The cradles recovered at Fishtown and Conway were identical in construction. This style of cradle was used by both groups for carrying and securing infants.

Fishtown Basket Functional Set III /FI-B3, Fl-B4/

These fragmentary cedar bark basketry forms have been lumped together into this general set, as at Conway. The presence of these baskets at Fishtown and Conway indicates the need for relatively large, flexible, cedar bark containers for gathering or carrying purposes at both sites.

Hoko River

Four basket functional sets are recorded for the early Hoko River site. These include a large, open wrapped burden-utility basket; a small, conical basket; a small, flat bag form; and a large, wrap around plaited, utility basket (Fig. 87). The Hoko River site dates from approximately 2,500 years B.P. and was contemporary with the early Musqueam Northeast and Biederbost sites in the Puget Sound/Gulf of Georgia area. It was a fishing station, and the majority of the artifacts relate to fishing activities. These include bent-wood fishhooks, composite fishhooks, fishing line, fish line floats (?), and wooden fish-spear (?) projectile points (Croes 1976c). As might be expected, the baskets at this site also reflect the fishing activities. The functional sets are discussed below.

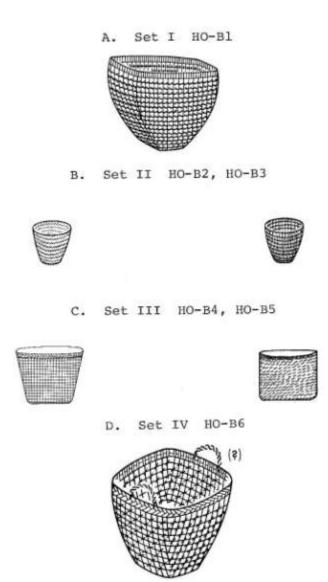


Fig. 87. Hoko River basket functional sets. A. Set I: Large, open wrapped, splints, carrying baskets with an inverted, truncated, pyramid shape. B. Set II: Small, close weave, cedar bark or root, inverted truncated conical baskets. C. Set III: Small, twined or plaited, cedar bark flat bags. D. Set IV: Large, wrap around plaited, cedar splints, carrying-utility baskets with an inverted, sub-rectangular, truncated conical (?) shape.

Hoko River Basket Functional Set I /HQ-B1/

The S/T class in this functional set (HO-B1) is the most common class at Hoko River (68% of all baskets and basket fragments recorded; n=13). It is defined as a large, open wrapped, cedar splint, burden-utility basket with an inverted, truncated pyramid shape. It is essentially equivalent to the Ozette Village specialized pack basket class OB44 in Ozette Basket Functional Set IX. This close stylistic/technological similarity between these classes at Hoko River and Ozette Village suggests a 2,000+ year period of *in situ* technological continuity for this burden basket class in the south-central coast regional area (Croes 1976c).

At Ozette Village these pack baskets are low in frequency relative to other baskets from Ozette House I (4%). At Hoko River, on the other hand, this class of basket was the most abundant type recovered (68%). The differential concentration at the two sites is best explained by the functional context of the two areas. Hoko River appears to have been an important fishing station, and at a fishing station only certain basketry items would be important. Large numbers of the utility-pack baskets would be expected for the purpose of transporting the fish being caught. At Ozette Village, however, one finds a wide variety of functionally distinct baskets as would be expected of a village. The inordinate concentration of utility-burden baskets also was noted at the fishing stations of Musqueam Northeast and Biederbost. They are, therefore, considered to have been used at these sites for the same purpose as at Hoko River and to have been functionally equivalent. It should be pointed out, however, that although used in identical manners, those recorded at Musqueam Northeast and Biederbost are stylistically/technologically similar to each other, and very different from common Hoko River burden-utility baskets. The latter are more similar to functionally equivalent baskets at Ozette Village and to those recorded

historically in this south-central coast regional area. This provides one part of the data indicating a technological, and perhaps in broader terms, a cultural continuity in this area of the Northwest Coast for approximately 2,500 years.

Hoko River Basket Functional Set II /HO-B2, HO-B3/

Hoko River baskets in this functional set are small, close weave, cedar bark or root, conical baskets. Essentially small flexible pouches, they are somewhat similar to baskets in Ozette Village Functional Class Set XII.

The specific use of these baskets at Hoko River is uncertain. One suggestion, based on their size and shape, is that they were used to hold the common bent-wood fishhooks recovered at the site (Croes 1976c). If so, it is expected that fishhooks might be recovered in baskets of this class in future excavations of this site.

Hoko River Basket Functional Set III /HO-B4, HO-B5/

The cedar bark, flat bags in this functional set are similar to the common cedar bark flat bags from Ozette Village (Basket Functional Set II).

The function of these small bags at Hoko River is uncertain. They may well have had several uses, or perhaps were special containers used to hold and protect articles of importance, as were the cedar bark flat bags at Ozette Village.

Hoko River Basket Functional Set IV /HO-B6/

The single basket in this functional set is stylistically/ technologically distinct from other baskets at Hoko River, but equivalent to the common burden-utility basket class /MU-B1/ recovered at the early and contemporary Musqueam Northeast site. This unique basket at Hoko River may have been introduced to the site through contact from the Puget Sound/Gulf of Georgia area, where it was more common. It may have been used in transporting fish as proposed for the common open wrapped burden-utility baskets.

Little Qualicum River

Only two fragments of baskets were recovered from Little Qualicum River and both appear to be examples of large, open wrapped, cedar (?) splint, burden-utility baskets (Fig. 88). Since this site was considered a fishing station (Simonsen 1976; Bernick 1976:7) these baskets also may have served mainly for transporting fish.

QU-B1



Fig. 88. Little Qualicum River Basket Functional Set I. Open wrapped, cedar splints, basket fragment with single looped handles attached two weft elements below the rim.

Summary

The functional classification of Ozette Village and other Northwest Coast wet site baskets indicates a wide variety of uses for prehistoric Northwest Coast baskets. As shown, the actual use of the site location itself is an important variable in considering the functions of the baskets recovered from the sites. Ozette Village, Axeti, and, to a lesser degree, Lachane, have a wide variety of functionally distinct baskets. These sites are considered major village locations. Ozette Village, where an entire prehistoric household may be examined, provides information concerning the whole range and variety of functionally distinct baskets from a village. Sites that were fishing or shellfish (?) gathering stations usually have a concentration of burden-utility baskets which were used as part of the fishing or shellfish procurement activities. Burden-utility baskets used in such activities at the early fishing stations of Musqueam Northeast and Biederbost technically are very similar; those used at the early Hoko River site fishing station were used for the same purpose, but are technologically distinct from the contemporary Puget Sound/Gulf of Georgia burden-utility basket styles. The Hoko River baskets are most similar to burden-utility baskets at Ozette Village and to those made within the historic period in the southcentral coast region. Although functionally equivalent baskets often are stylistically/technologically distinct, they can provide important comparative data for identifying similar activities occurring at different sites. In the final summary of this basketry functional analysis, further comparisons will be made employing the percent frequency of different basketry functional categories at the sites in order to test for similar or dissimilar site functions.

The functional classifications of Ozette Village hats and those from other sites will now be considered.

Ozette Hat Functional Set I /QH1, OH2/

Plain twined, cedar bark, truncated (flat-top) conical hats with cedar bark inner layer and headband (Fig. 89)



Fig. 89. Ozette Hat Functional Set I. Plain twined, cedar bark, truncated "flat-top" conical hat with cedar bark inner layer and headband.

Technological Characteristics

The flat-top conical hats at Ozette Village (see example, Fig. 90) are woven with cedar bark and have an outer and inner layer. Both layers were initiated at the top of the hat with a double layer of checker weave (Fig. 90). This start is encircled with rows of plain twining and further split to form the initial hat warp elements. The lower layer elements form the inner layer, and those of the upper section form the outer surface layer. As they were being woven, new warp elements were systematically added to create the expanding conical form. The inner layer is often constructed with a combination of different twining and plaiting techniques (see pp. 84 - 85). The headbands are formed from folded-down sections of the inner layer warps (see Fig. 12, p. 123) which were woven together with different twining and plaiting techniques.

This hat functional set is distinguished basically by its flat-top conical shape. The distinctive flat-top is demarcated from the body with a single transition row of three-strand twining. Most of these hats have a symmetrical conical form, but one example (30/IV/44) has an asymmetrical, "southwester" shape with one side longer than the other.

Hat Functional Implications

Functionally, basketry hats are a form of clothing used to protect the wearer's head and upper body from rain or sunlight. This basic function often is coupled with a distinct social function as well. Hats in most societies are, to varying degrees, indicative of the wearer's status. In the Ozette context it appears that differing hat forms functioned as social indicators relating to class status. These flat-top conical cedar bark hats, for example, ethnographically have been attributed to a wearer of "commoner" status in the general threefold status system of the Nootka/Makah groups. This system was comprised, from lowest to highest, of slave, commoner, and noble (Drucker 1965:47). More will be discussed about this ethnographic information below. For present purposes, this framework expands hat shape function to include that of social status marker, an important consideration.

Distributional Patterns within the Site

The hats of this functional set mainly were found in the northern area of Ozette House I (see Map 17). Three of the five hats in this set appear to have been in use at the time of the mudslide, the other two apparently having been discarded. One of these (60/111/16) was found in the unit III house, and therefore deposited later in time than the other hats (Map 17). Of those in good condition, one (32/IV/2) was found on the outside surface of the collapsed north wall, apparently

having been carried by the mudslide from the house area outside and to the north of House I (Map 17). Another hat (62/IV/62) was broken probably by the mudslide, and in the northeastern wall area of House I. One in very good condition (30/IV/44, see Fig. 90) was found in the northeastern corner of the house. This hat undoubtedly was new at the time of the mudslide, and was easily reformed into its original shape in the Ozette laboratory (Fig. 90). The distribution of many of these flat-top hats in the north-northeastern area of the house may be indicative of a commoners' living area, though comparison and analysis of other artifact categories and their distribution is needed to further test this possibility.

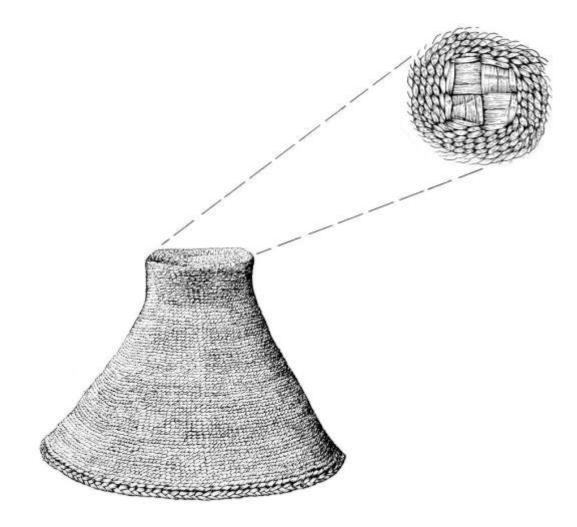
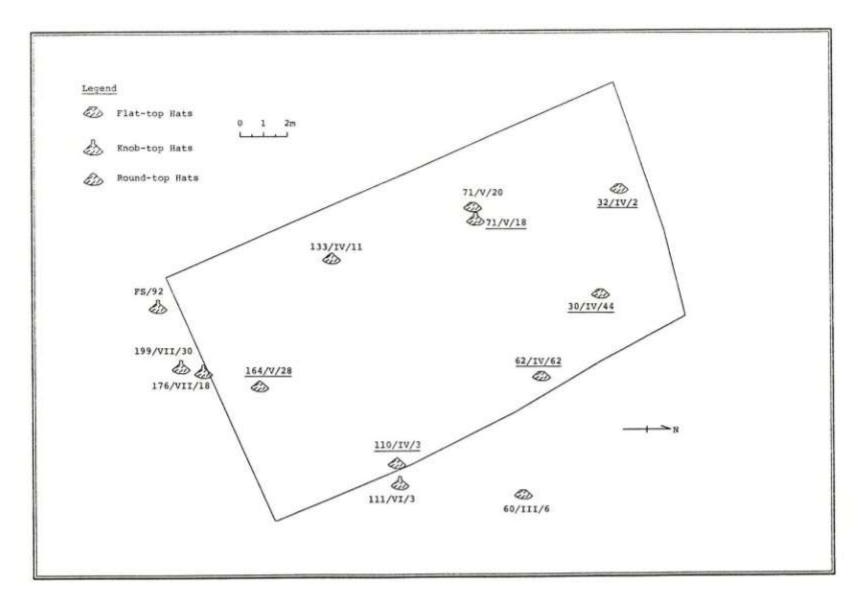


Fig. 90. Ozette flat-top, plain twined, cedar bark hat (30/IV/44; OH2). Note checker weave initiating construction of the hat.



Map 17. Distribution of hats in the Ozette House I area. Hats with underlined artifact numbers were in use (good condition) at the time of the mudslide.

Ethnographic Data

Conical flat-top hats usually are depicted ethnographically as those worn by commoners. This information is derived largely from early explorers' writings and drawings of individuals of different status (Fig, 91). The earliest description of what appears to be flat-top hats is from Cook's journal, written in 1778 at Nootka Sound. He wrote: "For a head dress they have a strong straw hat which is shaped like a flowerpot ..." (Beaglehole 1967:313-314). This description of them as strong "straw hats" suggests that they may have been made of a root material as they commonly were made to the north and as described below for a separate set (III) of Ozette hats. The earliest actual consideration of hat shapes as a mark of status is given in Jose Mariana Mozino's account of Nootka Sound in 1792 (Mozino 1970). He wrote: "But more common are two kinds of hats The shape of the hat is like a truncated cone, more or less elevated, upon which the nobles [as distinguished from the commoners] superimposed another small one [knob-type] that terminates in a sharp point. Those of the commoners are of a coarser material and have no design This Spanish artist lived approximately five months at Nootka Sound and depicted a Nootka commoner with a flat-top conical hat (Fig. 91). The tassels on the hat illustrated are recorded as being leather strips, a material that would not preserve at Ozette.



Fig. 91. Early Spanish drawing (ca. 1792) of a Nootka commoner wearing a flat-top conical hat (source: Mozino 1970, Plate 8).

John Jewitt, a captive and slave of the Nootkas from 1803 to 1805, made the following observation of his captors: "On their heads when they go out upon any excursion, particularly whaling or fishing, they wear a kind of cap or bonnet in form not unlike a large sugar loaf with the top cut off" (Jewitt 1896:57). He distinguished a hat worn by the "king" with "the top, instead of being flat, having upon it an ornament in the figure of a small urn" (1896:57)—undoubtedly a knob-topped hat. In later ethnographies, Sproat described the use of hats by Alberni Nootkas as follows: "They use no covering for the head or feet except on canoe journeys, when hats and capes made of bark or grass are worn" (Sproat 1868:25). And Swan, with reference to the Makah Indians, observed that "during rainy weather they wear, in addition to the blanket, a conical hat woven from spruce roots, so compact as to exclude water . . ." (Swan 1870:16). Many of the hats he collected for the U.S.N.M., Smithsonian Institution, however, are cedar bark, flat-top conical in shape, and very similar to Ozette hats of this class (personal observations). He may have simply misidentified the construction materials.

Summary

Cedar bark, flat-top conical hats of this set can be distinguished best in terms of their social function, their form being indicative of commoner status. Further, these Ozette hats usually were of an intermediate to large size and probably were worn by adult males. Since hats were indicative of the wearer's social status, these data add a particular analytic value to these Ozette artifacts. Their distribution in the houses will be considered closely in determining the arrangement of different class individuals in the house living areas. Additional data are discussed below.

Ozette Hat Functional Set II /OH3, OH4, OH5/

Plain twined, cedar bark, knob-top conical hat with cedar bark inner layer and headband (Fig. 92)

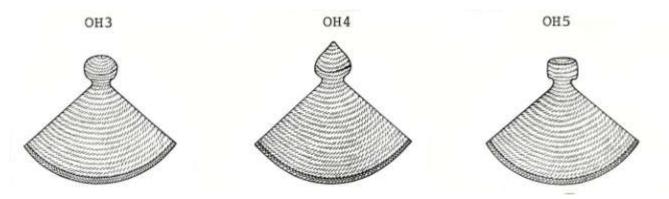


Fig. 92. Ozette Hat Functional Set II. Plain twined, cedar bark, knob-top conical hat with cedar bark inner layer and headband.

Technological Characteristics

The main distinguishing feature of this hat set is the knob-top shape. Woven with cedar bark, sometimes with a split root (?) warp, these conical hats were constructed essentially like the previously discussed flat-top conical hats (Set I), with a double layer and a folded-down headband. On most of the knob-top hats the inner layer begins at the top, inside the knob structure, although one example (71/V/18) has an inner layer that began below the knob, in a flat form.

These hats usually are larger and have a more flaring brim than other hat forms. The knob-tops themselves are formed in a number of different shapes, described as rounded (OH4, Fig. 93), cylindrical (OH5), and "onion" dome (OH6). These shapes may have had distinct meaning; for example, they may have been indicative of a family member, different status in upper class, and so on. It also is possible that they may have been simply style variations.

The knob construction begins like the flat-top conical hats, with a fine gauge checker weave anchored by rows of plain twining (Figs. 93 and 94). The knobs are woven in plain twining, but often with one or more rows of three-strand twining or diagonal twining for decoration (see Fig. 93). On one example (71/V/18), the constricting bottom of the knob has seven rows of plain twined split root, creating a color contrast effect. The inner layer and headband are constructed as with the flat-top conical hats, the inner layer incorporating a combination of different twining and plaiting techniques (see pp. 84 - 85). The headbands are woven with plain twining or checker weave (Fig. 12, pg. 123).

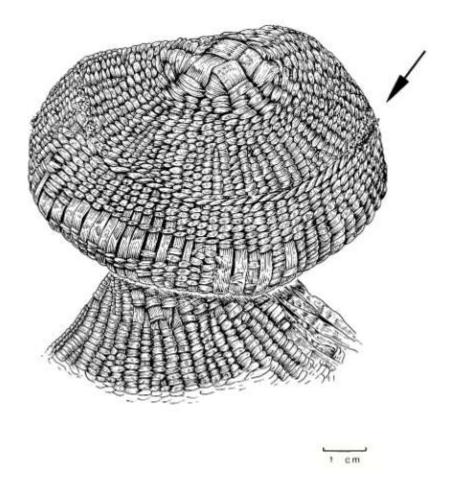


Fig. 93. Example of round-knob woven on top of Ozette hat (FS/92; OH3). Note checker weave initiating top construction, and row of 3-strand twining (arrow) for ornamentation.

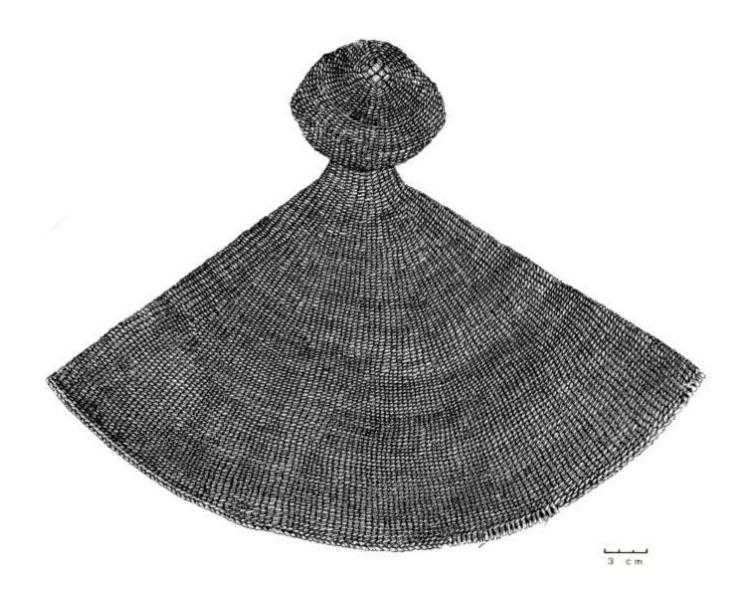


Fig. 94. Ozette round-knob top conical hat (FS/92; OH3). Note checker weave at top, addition of new warp elements creating an expanding conical shape, and the braid-like turned in brim construction. (Illustration by Madge Gleeson).

Distributional Patterns within the Site

Most of the knob-top hats were recovered outside of Ozette House I, in a broken, discarded condition, from within the refuse midden areas (Map 17). Two of these hats are badly broken (176/VII/18 and III/VI/3) and the other two (FS/92 and 199/VII/30) are in fairly good condition. The only knob-top hat that appeared to have been in use inside Ozette House I was the hat with the cylindrical knob (71/V/18, Map 17). Found in the southwest corner area, this hat had been stored in or with two large whale harpoon bags. It was found directly on the mouth of one of these bags (71/IV/32 and 33, p. 299). When the items stored along the southwest wall fell into the house, they were spread over the general area. Some whale harpoon sheaths and lanyards evidently spilled from the whale harpoon bags and this knob-top hat was found with these and other items of whaling equipment. The hat probably belonged to a whale hunter who occupied this area of the house and it was evidently kept with his equipment. The fact that only this single knob-top hat was in use in this house may be indicative of a generally lower status house, or simply a matter of sampling error (e.g., high status individuals were out of the house at the time of the slide). Additional comparison with other houses to be excavated will be needed.

Ethnographic Data

These hats frequently were recorded and drawn by early explorers who were most intrigued by those owned by the headmen, since these hats often were highly decorated with designs created with bear grass overlay. The designs usually depicted whale hunters in their canoes pursuing harpooned whales (Figs. 95, 96, and 97). Cook wrote: "The whole process of their whale-fishery has been represented ... on the caps they wear" (Willoughby 1903:66). The knob-topped

shape of these hats was variously described. The Spanish explorer, Mozino, wrote: "The shape of the hat is like a truncated cone, more or less elevated, upon which the nobles superimpose another small one that terminates in a sharp point" (Mozino 1970:15). And Cook described these as "ornamented with a rounded knob" (Willoughby 1903:66), Mention of these hats had stopped by the mid-180Os and they are absent from museum collections from later time periods. Swan, in the 1860s, recorded only a flat top or conical hat for the Makah (Swan 1870:16). Gunther, working with early museum collections and explorers' journals, states:

At Nootka Sound there was a very stylish hat that aroused much comment by travelers (Fig. 6). It was shaped essentially like many other hats but had a pear-shaped bulb on top as decoration . . . the pear-shaped bulb is definitely an eighteenth-century decoration, for it was not used later . . . (1972:30).

And Drucker, when discussing the northern and central Nootkan, states "... the ancient doublelayer hats with' designs imbricated on a background of overlay are no longer remembered" (Drucker 1951:98). For some unknown reason this style of hat disappeared soon after contact.

At Ozette none of the knob-top hats has whaling designs on its surface and only one of the five hats has bear grass overlay ornamentation (lll/VI/3). This is a broken, discarded, and poorly preserved example which appears to have been entirely covered with white bear grass (Xerophyllum tenax) overlay, with no areas of dark contrast. The entire hat, therefore, was white, which itself would have been attractive. Possibly only the highest ranking nobles had hats with the elaborate representational designs.

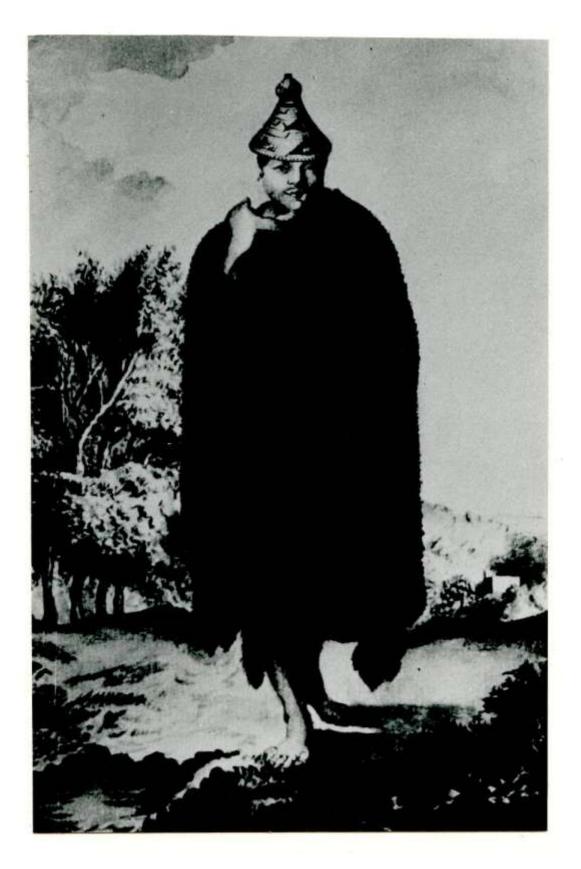


Fig. 95. Early Spanish drawing (ca. 1792) of a Nootka chief (noble) wearing a knob-top hat (source: Mozino, 1970, Plate 5)



Fig. 96. *Chief Tatoosh of Neah Bay as illustrated by the Spanish (ca. 1792). Note whaling design on knob-top hat (source: Espinoz'a y Tello 1930: 30).*



Fig. 97. Chief Maquina of Nootka Sound as illustrated by the Spanish (ca. 1792). Note whaling design on knob-top hat (source: . Espinoza y Tello 1930: 14).

Summary

Hats of the knob-topped form functioned as social marker for "noble" individuals. The single knob-top hat that appears to have been in use in the Ozette House I (71/V/18) was found in the northwest corner closely associated with large amounts of whaling equipment. The owner probably was a whale hunter and the owner of the whaling equipment.

These and most hats at Ozette probably were made by specialists. The complexity of construction and the skills required for the finer weave most likely restricted the craft to the most talented weavers.

Ozette Hat Functional Set III /OH6, QH7/

Complex twined, (spruce) root, rounded-top conical hat with an attached cedar bark headband (Fig. 98)



Fig, 98. Ozette Hat Functional Set in. Complex twined, (spruce) root, rounded-top conical hat with an attached cedar bark headband.

Technological Characteristics

These rounded-top conical hats are woven with different combinations of twining techniques, using a very finely split spruce (?) root material (see Fig. 99). Having no inner layer of weave, they do, however, have a woven cedar bark headband attached to the inside surface. The top construction began with a narrow gauge checker weave, as with the flat-top and knob-top 430 hats (Figs. 90 and 93, cf. Mason 1902:Fig. 36). The elements in this checker weave are split and used as the initial body warps. In terms of hat body weaves, two distinct combinations of twining techniques are noted: on one example (OH6) the body weave has eleven alternate bands (approximately 1 cm wide each) of plain and diagonal twining (Fig. 100A); the others (OHVs) are constructed, from top to bottom, with a plain twined section, then a section of diagonal twining, and a last and largest section which is a combination of plain and diagonal twining, creating distinct diagonal rows with an up-to-the-left slant (see Figs. 99 and 100B). The last section, created by a combination of twining techniques, is called "skip-stitch" twining and is characteristic of the northern Chilkat (Willoughby 1910:4). Figures 99A and 99B are drawings of two of these hats and Fig. 100 illustrates in detail the composition of the three main sections. Usually, a single row of three-strand twining creates the transition between the three main sections.

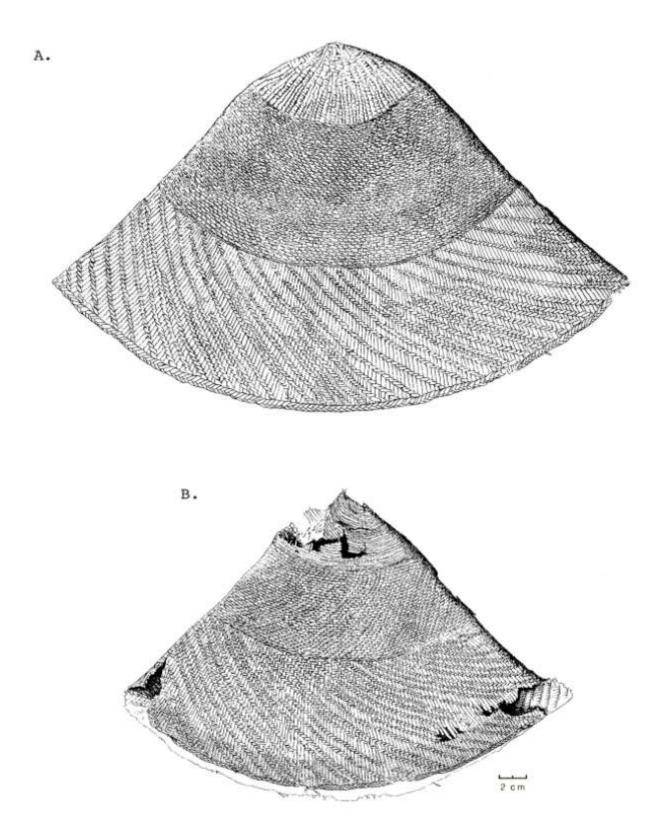


Fig. 99. *Rounded-top conical hats with woven bands of, from top to bottom, plain twining, diagonal twining, and "skip-stitch" twining (OH7s; A: 160/tV/1, B: 110/IV/3). Example B had been painted with a red band around the brim (stippled) and black paint on the upper body.*

With reference to the general twining used in these hats, a distinct contrast is observed in the lean of the twining—the way the twining leans up-to-the-right or up-to-the-left. Lean is usually culturally specific, i.e., at Ozette almost all twining is up-to-the-right. However, three of the four hats in this set have a twining with a lean up-to-the-left (e.g., see Figs. 99A and 100). All the flat-top and knob-top hats are woven with a lean up-to-the-right. This situation is noteworthy since the northern weavers, particularly the Haida and Tlingit, twine with a lean up-to-the-left. In contrast, the Nootka/Makah and most other southern Northwest Coast groups twine most of their hats and baskets with a lean up-to-the-right. Moreover, the Ozette hats in this subset are woven with spruce (?) root, and this, plus the specific three sections of weave composition and up-to-the-left twining are commonly northern hat traits. It seems reasonable therefore, that these Ozette hats may have been introduced through trade or some other form of contact from the north (see discussion below).

The headbands on these hats are attached onto the inner weave and are approximately 4 cm wide and placed about 8 cm above the rim. They are woven in alternate plain twining and checker (see Fig. 12, p. 123) technique using the more flexible cedar bark materials.

The hats in this set vary in size from small to intermediate and hence are probably worn by younger individuals or adult females. Unfortunately, there is little Makah/Nootkan ethnographic information indicating who would wear this class of hat.

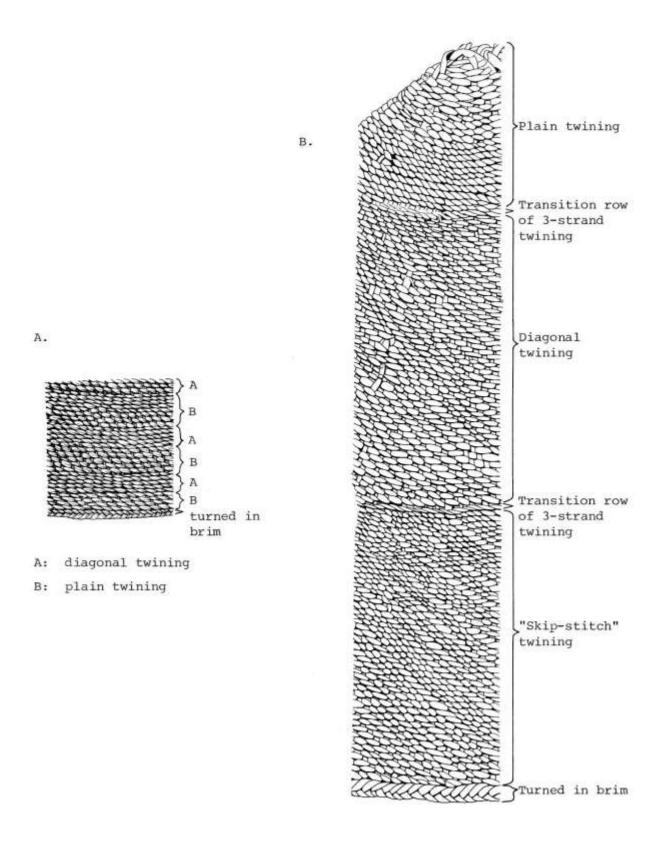


Fig. 100. Sections of rounded-top conical hats (A: 133/IV/ll; OH6, B: 160/tV/l; OH7). A: OH6 class hat with alternate bands of plain twining and diagonal twining. B: OH7 class hat with three sections of distinct twining. Note uncommon up-to-the-left twining in both examples.

As mentioned above, these spruce root hats are ornamented mainly through their complex twined body weave. However, one specimen is painted (110/IV/3) with a band of red paint around the brim (indicated in stipple pattern in Fig. 99B) and black paint on the upper body. The black paint is poorly preserved, so it is impossible to determine if a design is intended or if the whole upper hat originally had been black.

Distributional Patterns within the Site

All the hats of this set recovered from within House I appear to have been in use at the time of the mudslide. One found outside the house, though in good shape, evidently had been discarded in the refuse midden. Those inside the house mainly were in the southern area, along the walls (Map 17). These hats may have been kept on benches and boxes with other household objects.

Ethnographic Data

Historically, little has been recorded about these rounded-top, spruce root hats on the southern Northwest Coast. The Spanish explorers illustrated one possible example worn by a high ranking woman, "second wife of Tetaku," the noble Tatoosh of Neah Bay (Fig. 101; Gunther 1972:69). However, this hat is highly decorated on the surface which is not the case with Ozette hats. Many of them did have broken and loosely woven rows of weave around the crown, and originally may have held feathers or thin leather tassels such as shown in the illustration; neither of these materials would have preserved.



Fig. 101. Early Spanish drawing (ca. 1792) of a wife of Chief Tatoosh, Neah Bay. She wears a cap that possibly was an OH7 class of hat. Note the up-to-the-left twining depicted in this drawing (the knob-top hats in other Spanish drawings (Figs. 96 and 97) had a lean of the twining up-to-the-right) (source: Gunther 1972:69).

Cook also described hats ornamented with "a bunch of leather tassels" (Willoughby 1903:66). Swan in the 1860s described Makah hats as "a conical hat woven from spruce roots, so compact as to exclude water ..." and illustrated a person wearing a painted hat (Swan 1870:16). Gunther records a spruce root hat collected by explorers in the Inside Passage of Vancouver Island. This

hat

.... is woven of spruce root and painted. It resembles one in the Cook collection. In the Hewitt manuscript the piece is called a cap, which is very understandable. In the eighteenth century this hat had a very steep and narrow brim and was tied with a chin strap so that it had the appearance of a close-fitting cap. Spruce-root hats are a northern specialty on the Northwest Coast, but they were traded south. They were usually painted on the crown only, whereas the nineteenth-century hats had broader brims and were painted all over (1972:116).

And Drucker recorded Nootka hats that were thought to be made entirely of spruce root (1951:99). Though not well described in the ethnographic literature of the southern area, these hats are mentioned and generally thought to be introduced from the north where they were more common. Hats apparently were an item of trade, and Makahs themselves traded them into Puget Sound (Eells 1971:630). So it is possible, if not likely, that some of the hats in this set were obtained through trade from the north.

Summary

These Ozette spruce root hats or caps are finely woven with a tight and complex twining. They have a root construction material, a complex twine weave composition including "skip-stitch," and often a lean of the twine up-to-the-left, and these are all characteristics more common to hats from the northern Northwest Coast. They may, therefore, have been an introduced form, through trade or other avenues of contact. These Ozette hats sometimes were painted, and were relatively small, possibly worn by a young person or adult female. They also may once have had feathers or leather tassels attached around the crown.

Functional Analysis and Classification of Hats Recorded from Other Northwest Coast Wet Sites

Hats from other Northwest Coast wet sites were recovered not from within a single household, as at Ozette Village, but along with discarded or lost artifacts that had become waterlogged and settled in waterways adjacent to areas of activity. Though fragmentary, most are complete enough for reconstruction. In addition to their general protective function, these early Northwest Coast hats also probably had social connotations associated with the different hat shapes and complex weaves. The interpretation of the social meaning is more difficult at these other and generally earlier sites. The functional class sets for the different sites are created and illustrated in Fig. 102 and will be discussed separately below.

Axeti

The two hat classes recorded at Axeti are basically of the same construction material (cedar bark) and shape (rounded-top cone) (Fig. 102). The main difference is the hat body weaves. This functional set is technically similar to Ozette Village Hat Functional Set III. The AX-HI hat class is very similar to Ozette hat class OH7, particularly because of the "skip-stitch" construction technique. This hat, with "skip-stitch" twining, and a lean of the twine up-to-the-left, is a northern style and, based upon ethnographic specimens, would be expected from this northern site (see discussion, p. 435).



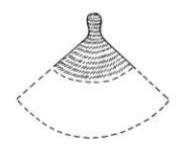
AXETI HAT FUNCTIONAL CLASS SET I

EN-H1



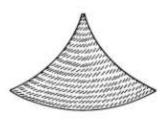


HO-H1



HOKO RIVER HAT FUNCTIONAL CLASS SET I

WA-H1



WAPATO CREEK HAT FUNCTIONAL CLASS SET I

Fig. 102. Hat functional class sets from other Northwest Coast wet sites.

English Camp

The single hat in this set also is similar in shape to Ozette hat set III (Fig. 102). The plain twined technique, up-to-the-right lean of the twine, and cedar bark materials are hat characteristics common in the southern Northwest Coast area.

Hoko River

Both of the hats recorded in this functional set are of a knob-top conical style (Fig. 102). The general style is similar to Ozette Functional Set II. Whether the knob-top hats from Hoko River had status-marking connotations cannot be demonstrated; however, since Hoko River is in the same area as Ozette Village and near other Nootkan territories, and since Hoko River basket technology appears to be interrelated with the later basket technologies of that area, a possible social status function may reasonably be deduced although its exact role cannot be specifically determined. If this is so, then knob-top hats have had a status-marking function for approximately 2,500 years in this area. Further excavations at the Hoko River site should provide more hat examples and possibly indicate other hat shapes occurring at the site. This might further support the possibility of hat shapes having social connotations at Hoko River.

Wapato Creek Fishweir

The single hat from this site is a cedar bark, plain twined, flaring conical hat (Fig. 102), The body of the hat is incomplete, and the top is in a partially broken condition. The top warp

elements appear to have been intentionally tied together to form a pointed top (Munsell 1976a).

Summary

Unfortunately very few hats have been recovered from Northwest Coast wet sites other than Ozette. The sites with no examples probably did in fact have them but they remain unrepresented in the collections recovered so far.

Of those sites with examples Ozette Village has the widest variety of hats and provides suggestions of a status-marking role for hat shapes. Those from other sites vary in shape and technique. Hoko River has the best examples of a distinct knob-top hat other than Ozette. This shape could have had specific status-marking connotations here as well. Other Northwest Coast prehistoric hats commonly were twined with cedar bark and had a rounded or pointed conical shape. As more are recovered from Northwest Coast wet sites, they should provide, among other things, more information concerning the antiquity of Northwest Coast social status systems.

Ozette Village mats will now be considered in a functional classification.

Ozette Mat Functional Set I /OM1/

Small, folded, plain cedar bark, rectangular "harpoon sheath" with plain twined and cut off ends (Fig. 103)



Fig. 103. Ozette Mat Functional Set I. Cedar bark, rectangular "harpoon sheaths" with plain twined and cut off ends.

Technological Characteristics

The Ozette harpoon sheaths are constructed with either a single layer or a folded double layer (Fig. 104) of cedar bark. Folded in the middle, these prepared strips of bark secured, protected, and separated the whale harpoon points. Ozette sheaths with harpoon points were commonly found stored in the specialized whale harpoon bags (p, 297).

The ends of the strips were split (frayed) so that they could be bound together with from two to six rows of plain twining (Fig. 105), with one example having eight rows. This contrasts with most ethnographic examples that typically have eight to sixteen + rows of plain twining (cf. Waterman 1920, Plate 8). Of the thirty-one Ozette examples with well preserved ends, fourteen (45%) have two rows, eight have three rows (26%), two have four rows (6%), three have five rows (10%) , three have six rows (10%), and one has eight rows (3%).

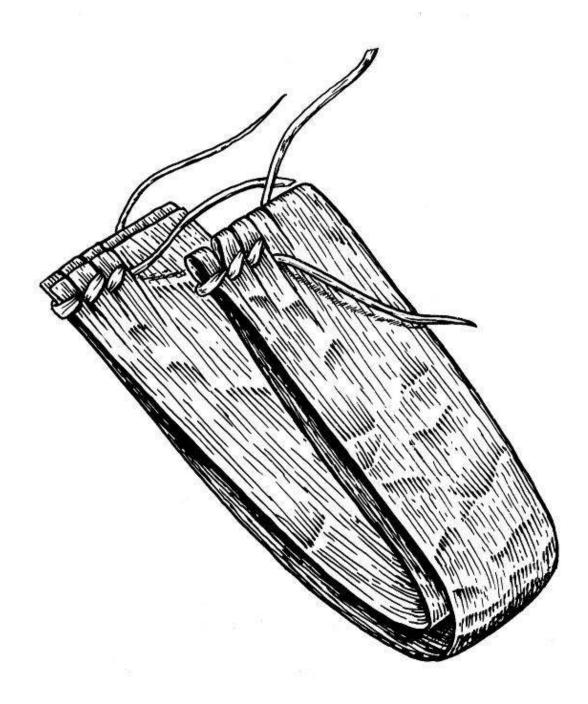


Fig.104. Construction of Ozette Village harpoon sheaths (OM1). Note double layer of bark and twined ends of the sheath.

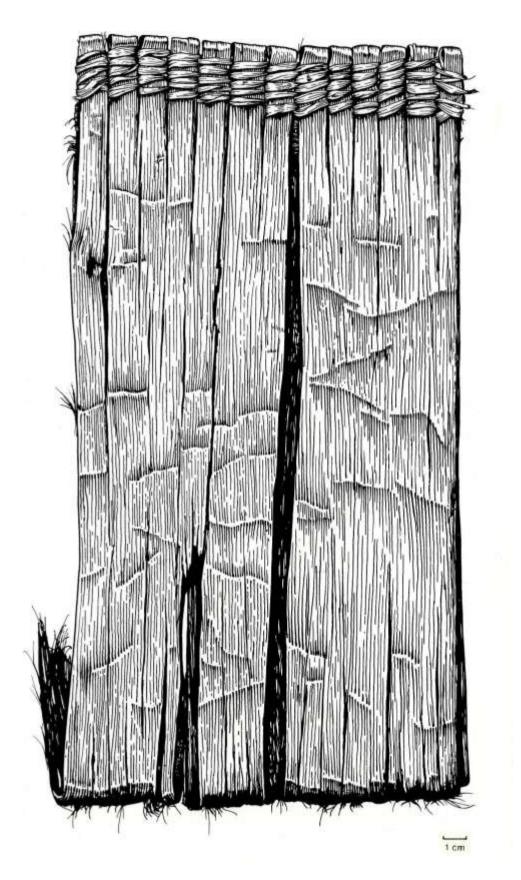


Fig. 105. Example of Ozette Village whale harpoon sheath (176/VII/3; OM1).

The Ozette harpoon sheaths have two sizes: a smaller size measuring 20 to 35 cm long x 5 to 7 cm wide, and a larger one measuring 30 to 60 cm long x 6.5 to 24 cm wide. The average sheath was 40 cm x 10 cm. These two size ranges overlap, but show a clear bimodality. With a larger sample they may prove to be distinct. The smaller size presumably would have contained smaller harpoons, and the larger the whaling points.

Harpoon Sheath Contents

Of the thirty-eight harpoon sheaths recorded, only ten or 26% appear to have been in use at the time of the Ozette mudslide. The majority, or 74%, were broken and discarded in the refuse midden or house floor matrix (Map 18). Of those in use, eight are found containing points. Each protect a single, bivalved whale harpoon point placed with the point towards the inner fold. Remnants of the harpoon lanyard—the coils of cherry bark binding—protrude from the ends of the sheaths and were once attached to the points. Two-ply cedar bark strings are bound several times around the end of the folded sheath to secure the point and lanyard. These sheaths holding points were kept together as a hunting kit in the whale harpoon bags.

Distributional Patterns within the Site

The eight harpoon sheaths containing points were recovered either within or directly associated with the two whale harpoon bags (71/IV/32 and 33) in the northwest corner area of the house (see Maps 6 and 18). Two were within bag 71/IV/32, three within bag 71/IV/33, and the other three were directly outside the mouths of these bags and probably had fallen out during the

mudslide. The two harpoon sheaths recovered without harpoon points were stored under the bench platforms in wall areas of the house,, One (30/IV/101) was found in the northwest wall area under a bench platform, along with several canoe paddles, a loom, weaver's swords, a tumpline, wood wedges, and other stored items (Map 18). The broken and discarded harpoon sheaths were found mainly in the outside refuse midden or along the wall areas in the floor midden. The distribution of the harpoon sheaths in the house may be indicative of where whale hunters had lived. The frequent broken harpoon sheaths found along the south wall probably indicates one such area (Map 18).

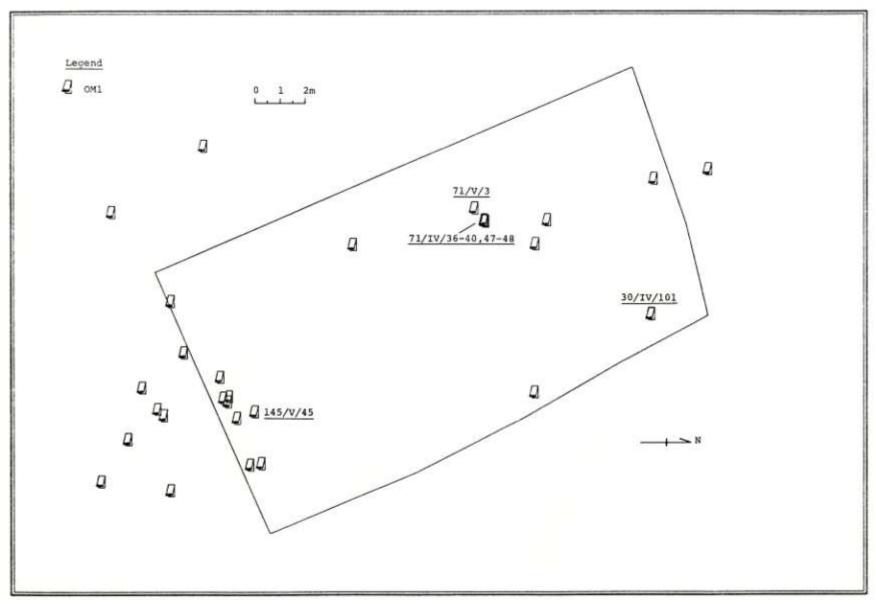
Ethnographic Data

Whale harpoon sheaths are recorded in the ethnographic literature, and some were collected for museums. Waterman, discussing the whaling equipment of the Makah Indians, describes harpoon sheaths as follows:

The harpoon head is kept in a sheath made of a rectangular piece of cedar bark. This is folded over across its middle. The ends are frayed out for several inches, and fine shreds of cedar-bark are worked across in plain twining (called tc^lba'tyn, cf. tci'bat - canoe mat). Several harpoon heads are taken along on each trip, each one enclosed in a separate sheath. The collection of heads is kept in a special basket, called ha'3aL (Plate 5) (1920:32-33, Plate 8).

The northern and central Nootka evidently did not use this form of harpoon sheath. Drucker states:

The small individual harpoon sheaths were called . , . la'ac. These were entirely of woven-in checkerwork, and never folded strips of bark with only the ends split and woven together like those the Makah made (1951:30-31).



Map 18. Distribution of Ozette harpoon sheaths (OM1). Harpoon sheaths with underlined artifact numbers were in use at the time of the mudslide.

Harpoon sheaths very similar to those from Ozette Village are found in museum collections where they usually are attributed to the Makah (personal observations).

Summary

Whale harpoon sheaths are common at Ozette Village. The majority were broken and had been discarded, but their distribution may be indicative of house areas occupied by the whale hunters. The sheaths that had been in use contained harpoons, and were found in or near two whale harpoon bags in the northwest corner area of the house. Ethnographically these sheaths were recorded as Makah whale harpoon sheaths, and evidently not of a style used among the northern Nootkan whale hunters. This class of harpoon sheath can be considered a cultural marker of Ozette-Makah whale hunters for at least 300 years.

Ozette Mat Functional Set II /OM2, OM3/

Small, cedar bark, checker on bias or checker weave mats with a square (to rectangular) shape (Fig, 106)



Fig. 106. Ozette Mat Functional Set III. Small, cedar bark, checker on bias or checker weave mats with a square (to rectangular) shape.

Technological Characteristics

The OM2 and OM3 Ozette mat classes are combined here because of their square shape, cedar bark material, and small size. The combining of the two should not, however, blur important technological distinctions between them and they will be considered separately below. Mats of the OM2 class appear to have been expanded from a corner braid into the body of the mat proper (Fig. 107). The resulting checker on bias weave with a bent back edge technique forms a small, flat-edged, square mat.

In contrast, the OM3 class mat is constructed in a checker weave and often has two adjacent sides with around and back edges, and the remaining sides with rows of cut off plain twining. Some have opposite sides with around and back edges and the ends cut off. They are from square to rectangular in shape.

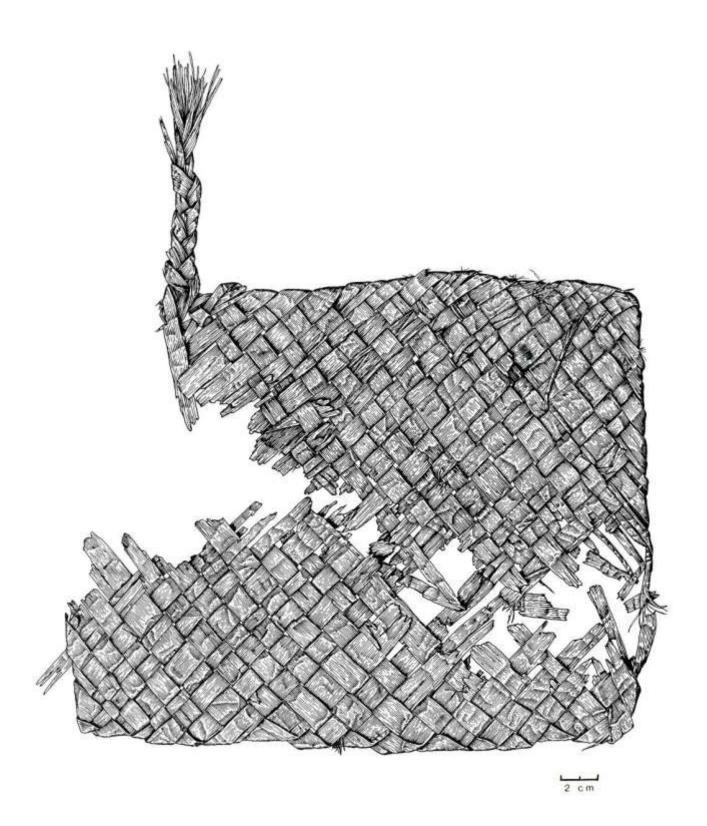


Fig. 107, Small, square, checker on bias, cedar bark mat (197/V/5; OM2). This mat appears to have been initiated from a corner 3-strand braid extension.

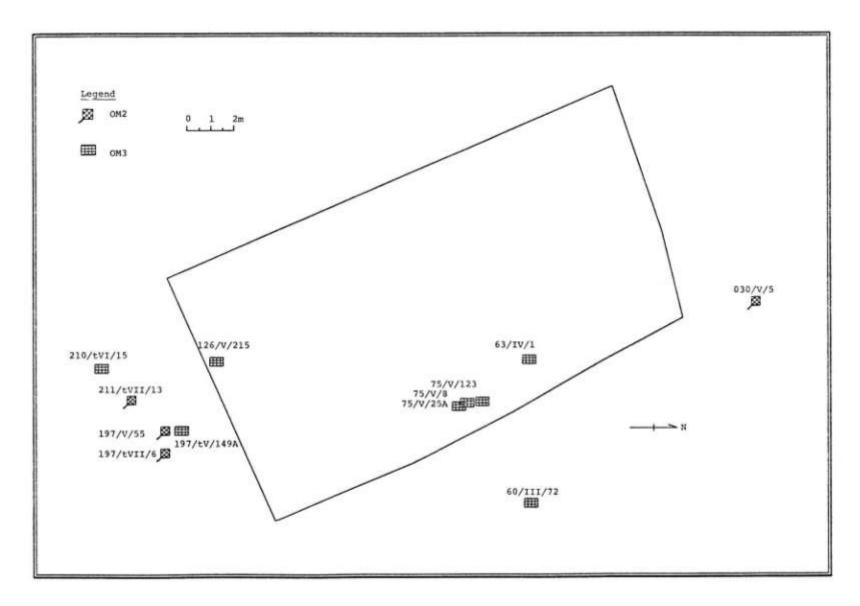
Distributional Patterns within the Site

None of the baskets of this set appears to have been in use in Ozette House I. All were broken and apparently discarded in the refuse midden outside the house or within the house floor areas along the wall (Map 19). Since they had been found neither holding, covering, nor under anything, no functional assignment could be made for them. One cluster was discovered in the east central wall area of the house (Map 19) within the house floor matrix. They were found near six halibut hooks and halibut hook shanks but there may or may not have been a functional association here. One of these mats (75/V/8) had been evenly folded in half three times.

Ethnographic Data

No specific ethnographic reference to this mat functional set has been located. They could have had several functions; for example, they may have been place mats, covers for water buckets, fire fans, etc. But again, since none was recorded in a functional context and no definite ethnographic record exists, their uses may only be suggested. One possible reference to a mat form, though not necessarily this specific form, was given by Sproat for the Ahts: "A small mat, specifically kept for strangers, is spread as a set ..." (1868:57).

As other Ozette houses are excavated, mats of these classes may be recovered in a functional context and their uses become better understood.



Map 19. Distribution of small, square to rectangular, cedar bark mats within the Ozette House I area. Mats with underlined artifact numbers were in use at the time of the mudslide.

Ozette Mat Functional Set III /OM4, OM5, OM6, OMF1/

Intermediate to extra-large, cedar bark, checker weave mats with a constricted midline rectangular shape and around-and-back edges (Fig. 108).

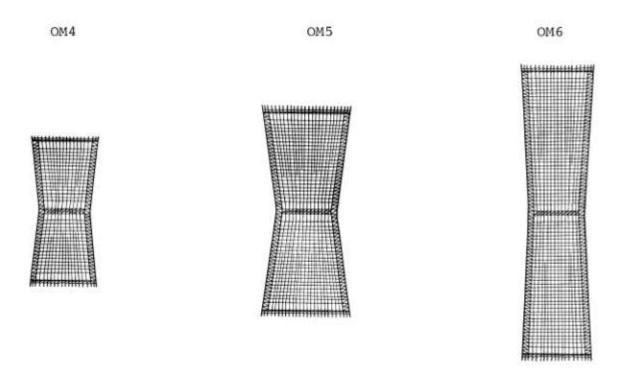


Fig. 108. Ozette Mat Functional Set III. Intermediate to extra-large cedar bark, constricting midline, checker weave mats with around and back edges and cut off ends.

Technological Characteristics

Mats in this functional set are the most frequent "true" long mats recorded at Ozette Village. Each of these classes technologically is very similar; the distinguishing feature is size, and the main variation in size is in length. They vary from approximately 60 to 320 cm long. The width has a much smaller range, generally from 25 to 75 cm, with an average of approximately 47 cm. The constricted midline typically is formed with an "anchor" row of three-strand twining (Fig. 109) or sometimes plain two-strand twining. This row probably functions in anchoring the warp strands when construction of the mats is initiated. The checker weave elements on either side of the midline twining, on either end of the mat, and next to the edges are commonly of a Checker II weave variation (Fig. 109). The edges are formed with the around and back technique (Figs. 110 and Table 20, #10). The ends typically are finished with two rows of plain twining, and the end warps cut off to leave a distinct fringe (Fig. 110).

Mat Functional Implications

At Ozette these mats, particularly the large to extra-large forms (OM5 and OM6), often were found covering wall boards, shelves (?), and bench platforms, or folded or rolled and stored on and under bench platforms. Of the ten large to extra-large mats recovered, two were folded several times and stored on or behind bench platforms (31/IV/81 and 71/IV/34) and two were in a worn out condition and rolled up (163/IV/9) or folded (32/IV/54) and under a bench platform with other stored objects (Map 20). One 3 m long mat (31/IV/67) had been folded in half and covered a bench platform. As this was a sleeping platform, the doubled mat probably functioned as a mattress. Directly under this was found a very worn out mat (31/IV/79), which would have provided extra cushion. Two large mats (31/IV/59 and 31/IV/60) were partially folded and both covered what appears to have been either wall or shelving (?) boards (Fig. 111). If wall boards, then these large mats may have been hung on these walls to stop air drafts in this sleeping and family area. If on shelving boards, they probably were either stored on or used to cover the shelves.

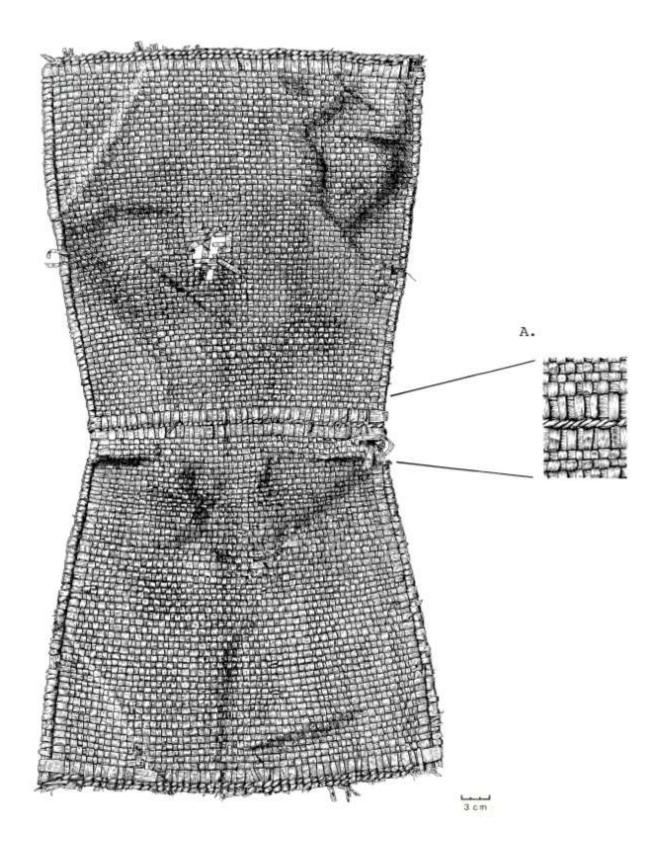


Fig. 109. Long, constricting-midline, checker weave, cedar bark mat (31/IV/83; OM4). Note twined midline, checker II edging, and twined and cut off ends. Insert (A) is a close-up of 3-strand midline twining as viewed on reverse side of mat.

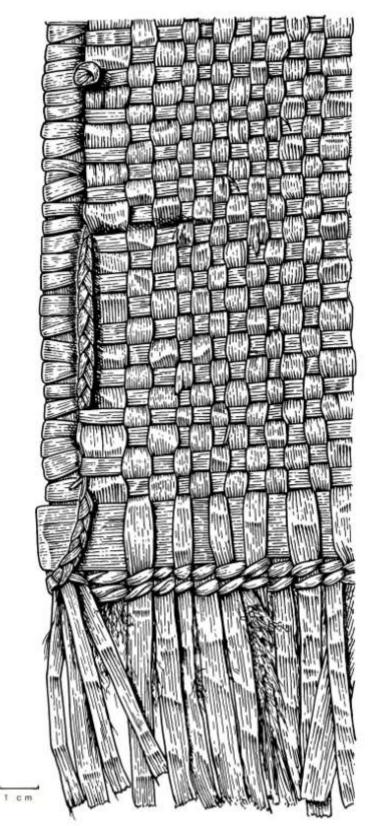
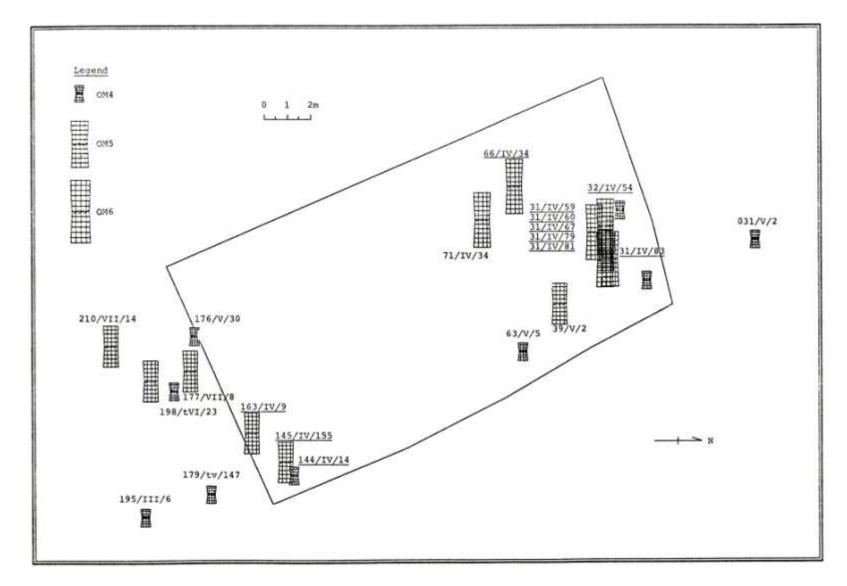


Fig. 110. Close-up of mat edge and end construction technique (OM4, 5, and 6) Note the around-andback edge, 2 rows of plain twining anchoring the end (derived from an interwoven braid line), and fringe left on the end.



Map 20. Distribution of long "true" checker weave, cedar bark mats in Ozette House I area. Mats with underlined artifact numbers were in use at the time of the mudslide.

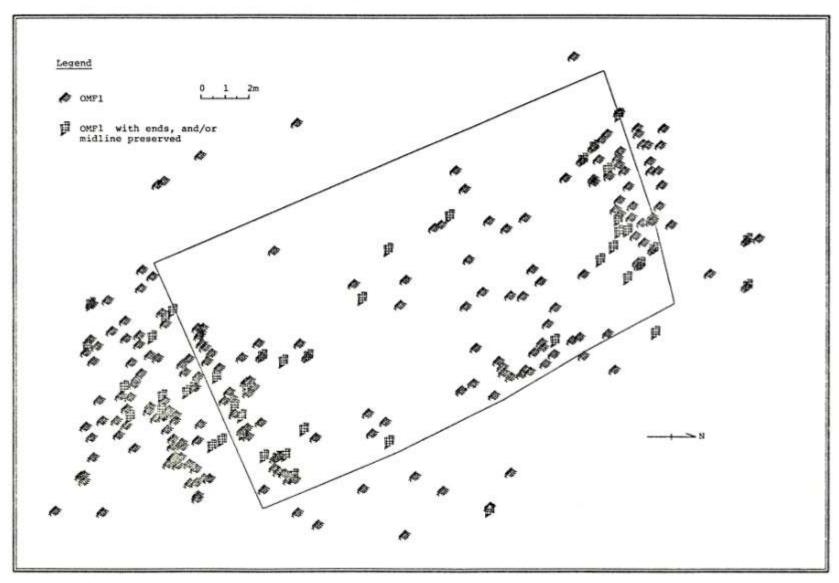


Fig. 111. Long cedar bark mats (OM6s) located on collapsed wall boards in the northern area of House I (see Map 20).

Two large mats (66/IV/34 and 145/IV/155) were badly twisted and displaced by the mudslide. Of the two intermediate sized mats apparently in use, one was folded in half along the midline and lying on a bench platform (31/IV/83; Fig. 109). The other (144/IV/14) also was folded in half and stored, along with several cedar bark flat bags and raw cedar bark bundles, in a large storage basket (OBI, p. 269). In summary, the mats found in use in Ozette House I appear to have been used to cover bench platforms, probably as mattresses, and to cover walls, shelving (?), and/or floor areas. Other possible uses are discussed below.

Distributional Patterns within the Site

A concentration of the large OM6 mats was recovered in the northeastern corner family area (Map 20, Fig. 111). Many 3-1- m long mats were covering the bench or sleeping platforms there, and some apparently were covering the walls. Of the mats recovered from the southeast corner area, one apparently was unfolded and covering benches or walls, but was badly twisted and disturbed by the mudslide, as mentioned above. The other two were folded or rolled and stored in this area. Of the two in the northwest corner one was folded and kept on a bench platform and the other unfolded, but badly twisted and disturbed by the mudslide. The mats found outside of the house in the midden refuse were badly torn and discarded. Badly torn mat fragments (OMF1) also were mapped (see Map 21), and most were either outside of the house, in the refuse midden, or recorded along the inside wall areas of the house. These fragments probably were discarded along the walls and/or used between wall planks as caulking to stop air drafts in the house (Map 21).



Map 21. Distribution of mat fragments (OMF1, n=301) within the Ozette House I area. Note concentrations along wall areas.

Ethnographic Data

Historically the Makah area was noted for its cedar bark mats, and they were traded to southern Washington Coast and inland Puget Sound areas. Swan, who lived with the Makahs in the 1860s, noted that:

Mats constitute one of the principle manufactures of the females during the winter months. With the Makahs, cedar bark is the only material used. Other tribes, who can obtain bulrushes and flags, make their mats of these plants, which, however, do not grow in the vicinity of Cape Flattery. Cedar bark, which constitutes an important item in their domestic economy, is prepared by first removing the outer bark from young trees, then peeling the inner bark off in long strips, which are dried in the sun, folded in a compact form, and used as articles of trade or barter. When wanted for use, if for making mats, the strips are split into strands varying from an eighth to a quarter, of an inch in width, and as thick as stout wrapping-paper. These are then neatly woven together, so as to form a mat six feet long by three wide. Formerly mats were used as canoe sails, but at present they are employed for wrapping up blankets, for protecting the cargoes in canoes, and for sale to the whites, who use them as lining of rooms, or as floor coverings (1869:45).

Swan purchased a large number of these mats (at about 40 cents each) and forwarded them to the U.S. National Museum, Smithsonian Institution. Thirty-six of these were examined by the author (mats # 54101-54135, 74789, 74704). Made in the same manner as the Ozette mats in this functional set, they are generally twice as wide, averaging 225 x 109 cm in comparison with large Ozette mats averaging 233 x 59 cm. It should be mentioned however, that some of the mats collected by Swan (54102, 54120, 74789) are in fact as narrow and long as the Ozette mats. The wider mats probably were preferred by whites, especially for wall hangings and floor coverings, and the Makahs probably manufactured them primarily for the Euro-American market.

Reverend Eells describes seven kinds of mats used by the Twana, Chemakum, and Clallam. One was "made from the inner bark of the cedar, which is split into strips a quarter or a third of an inch wide These mats are usually about 4 feet by 7 or 8, and were formerly used for sails, but are now used for house lining, matting, and to place food on at feasts" (1887:627). These undoubtedly were constructed in a fashion similar to those of the Makah, and possibly many were obtained from them (cf. Waterman 1973:27). It is notable that both Swan and Eells state that these mats formerly were used as sails. Waterman also illustrates a mat sail used by the Makah (1920:22-23), but no sails of this particular form have been recovered at Ozette Village.

Several later ethnographers describe the function of these large cedar bark mats as feast mats to sit and eat upon, as bedding to sleep on, as makeshift sails in the contact and earlier periods, as wrappings to cover cargo, as capes, as covers to protect beached canoes from the sun's rays, as shrouds for the dead, as temporary shelters, and as wall linings (Drucker 1965:37; Sproat 1868:60; Olson 1967:71). At Ozette Village these large mats probably were used for all of these purposes. In the Ozette House I the large mats apparently were being used on bench platforms, as wall hangings, as bedding, and also were folded and stored away under bench planks. They probably were used in numerous ways to place things on, to cover things with, and to wrap things within as recorded in the ethnographic literature.

Ozette Mat (Tumpline) Functional Set IV /OM7, OM8/

Cedar bark, twill or checker on bias tumpline straps with long braided line extensions (Fig. 112)



Fig. 112. Ozette Tumpline Functional Set IV. Small, cedar bark, checker or twill on bias weave tumpline straps.

Technological Characteristics

Plaited cedar bark tumplines, used as pack straps for carrying loads, were numerous in and around the Ozette House I area (n=45). Composed of a narrow, flat body area (to be placed across the forehead) they are woven with flat turned back edges (see example Fig. 113). Six tumplines have complete body strap areas remaining and the length of these bands range from 33 to 54 cm long, with a mean of 41.2 and standard deviation of 8.9 cm. The width of most tumpline body straps can be measured (n=43) and these range from 1.3 to 4.8 cm wide, with a mean of 3.42 and standard deviation of 1.00 cm. Extending on either side of these plaited bands are braided lines. Most braided lines are fragmentary, but some measure 80 to 120 cm long. Two examples have complete straps, with the individual straps on one example measuring 40 and 74 cm long, and on the other 40 and 87 cm long.

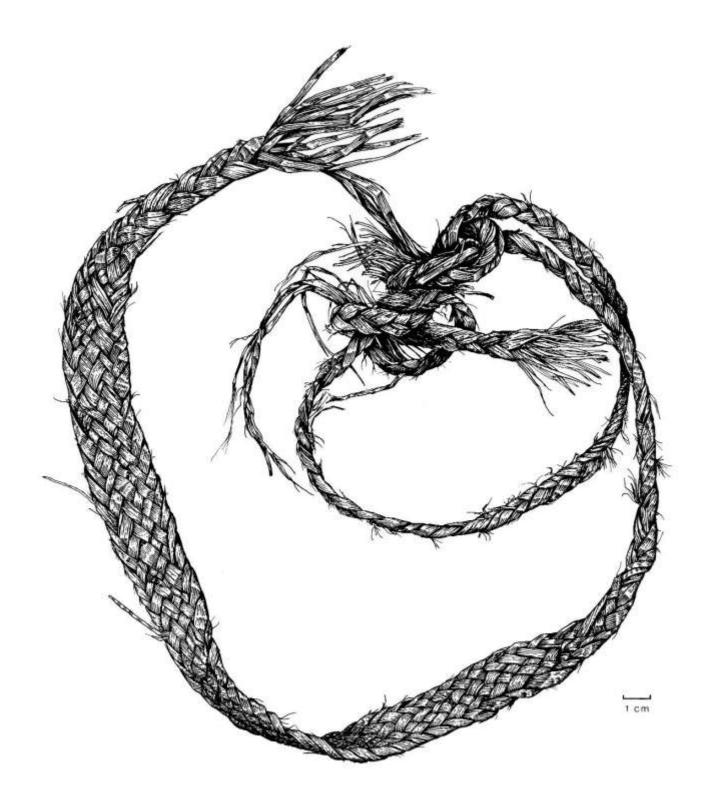
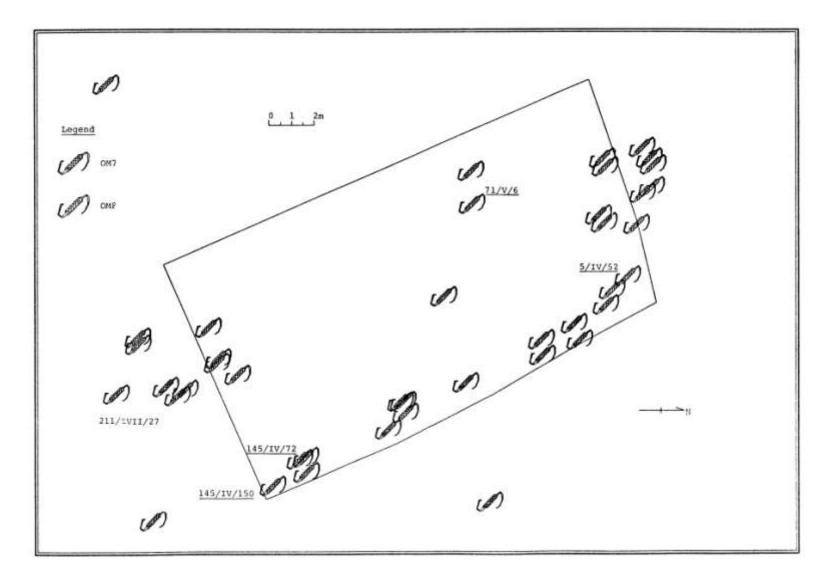


Fig. 113. Ozette cedar bark tumpline with a twill on bias body weave and long 3-strand braid line extensions (145/IV/150; OM8).

Distributional Patterns within the Site

Tumpline straps usually were broken and discarded and found along the house wall areas in the floor debris, or in the outside midden refuse. Only four (9%) appear to have been in a usable condition. Two of these (5/IV/52 and 145/IV/150; Fig. 113) were found stored along with other items in house corner areas (Map 22). The other two examples (71/V/6 and 145/IV/72) were found tied to the edge of large cedar bark storage/pack baskets (71/V/6? OB2 and 145/IV/72;OBI, see p. 270). These baskets appear to have been stored on or behind the bench platforms in the northwest and southeast corners of the house respectively (Maps 3 and 22). The 71/V/6basket contained eight large cedar bark bundles and the 145/IV/72 basket contained twentyseven bundles. The attached tumplines indicate that these probably were baskets used for carrying these raw cedar bark materials back to the house. The baskets are Functional Set I examples with an open tuck-and-wrap rim construction. Onto these rims the tumplines were tied with overhand knots along one side. One other basket, a discarded specimen from the outside refuse midden, also was found with a tumpline attached to its edge. This specimen was an expanding, rounded cube; cedar splints; twill 2/2; storage basket (211/tVII/27; OB29) with a continuous series of cordage looped handles attached along its rim. The fragmentary tumpline is interlaced between cordage looped handles and may have once been tied to its edge. None of the specialized pack baskets (OB44) with tumpline loops was found with tumplines attached--though undoubtedly they were used on these pack baskets as well.



Map 22. Distribution of tumpline straps within Ozette House I area, Tumplines with underlined artifact numbers were in use at the time of the mudslide.

Ethnographic Data

Tumplines are frequently recorded in the ethnographic literature. In 1887 Reverend Eells described their use in the carrying of large loads, especially by women:

The way they usually prefer to do this is to take the carrying strap, tie the ends, which are several feet long, around the load, when it is of wood, mats, and such articles, or into the handles of baskets filled with potatoes, fish, apples, and other small objects. They then place the load on the back, and the flat part of the strap around the forehead. Formerly these straps were made of some tough bark, such as that of alder, braided. Now they use straps woven of strings and rags (1887:643).

Other good descriptions include those by Olson and Drucker:

The packstrap (carrying strap or tumpline) was about 15 to 20 feet long, braided rope-like except for a plaited section about two feet in length at its center. This section was woven or plaited two to three inches wide (Fig. 31 c, d). The material was of beach grass, cedar, or willow bark (Olson 1967:88).

And

The tumpline (mama'anim) was made of lengths of selvage twined together loosely in the middle to make a flat band, and with the ends braided in three-strand. Both men and women used it to carry loads, such as firewood. A cross-chest carry was used more commonly for heavy packs than the head carry. The tumpline was used by women for berry baskets, and other containers, such as the cedar-bark "basket," or bags called Lapat [basket classes OBI and OB2 here], in which dried fish were packed (Drucker 1951:104).

Significantly, at Ozette Village tumplines attached to two Functional Set I baskets, the Lapat

basket, were recorded.

Tumplines also were well illustrated by Boas (1909:450; Fig. 124), and commonly are shown in use by Indian women carrying baskets in early photographs from the Northwest Coast region (cf. Figs. 62 and 63, pp. 347-348).

Both Drucker (1950:196) and Waterman (1973:37) indicate that this general form of tumpline was commonly used throughout western North America. The tumpline is recorded as typically used across the forehead, but also as used with another tumpline across the chest (Boas 1909:450) or worn across the shoulder when carrying arrows in a quiver (Koppert 1930:46).

They were used also to carry items baled up in long cedar bark mats (Drucker 1951:105).

Summary

Tumpline straps were numerous at Ozette, though few were in use at the time of the slide; three were found attached to basket rims. Ethnographically, they were used to facilitate carrying, and were attached to basket-loads, rolled mats and their contents, loads of firewood, quivers, and other loads. Only one other Northwest Coast wet site potentially has examples of tumpline straps, Axeti (AX-F3, p. 252), where three fragments of cedar bark, checker on bias woven bands were found. No braid straps extending from these fragmented examples were found.

Ozette Mat Functional Set V /OMF2/

Tule (bulrush) or cattail sewn mats (Fig. 114)

OMF-2



Fig. 114. Ozette Mat Functional Set V. Tule or cattail, sewn mats.

Technological Characteristics

Mats in this functional set are badly fragmented and deteriorated since these fragile tule or cattail materials do not preserve well at Ozette. These mats are constructed with a sewing technique in which the tule stems or cattail leaves, placed in a row, were pierced and sewn together with two-strand sewing elements (Fig. 115). At Ozette Village these elements are spaced at approximately five to eight centimeter intervals. Because of their poor condition, very little can be determined concerning size, shape, or edge construction technique. One specimen (71/IV/44) has remnants of a four-strand braid element sewn along its edge, similar to the braid in Fig. 115.

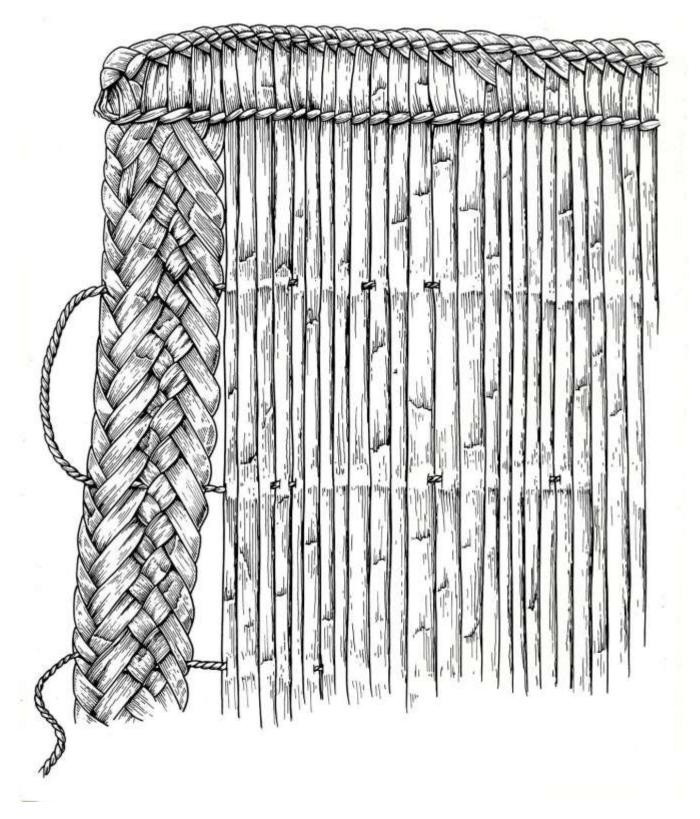


Fig. 115. Example of sewn tule mats similar to those recovered from Ozette Village.

Distributional Patterns within the Site

Most of these mats are too fragmentary to determine how they were being used within Ozette House I. The best preserved tule specimen (29/IV/113; measuring 140 x 48 cm fragmented) was found covering the top of a bench platform and probably served as a mattress. Fresh tule stems are very springy and are commonly recorded ethnographically as being used for mattresses (see below). Some mats appear to have been folded and stored with other household equipment along the walls (see Map 23).

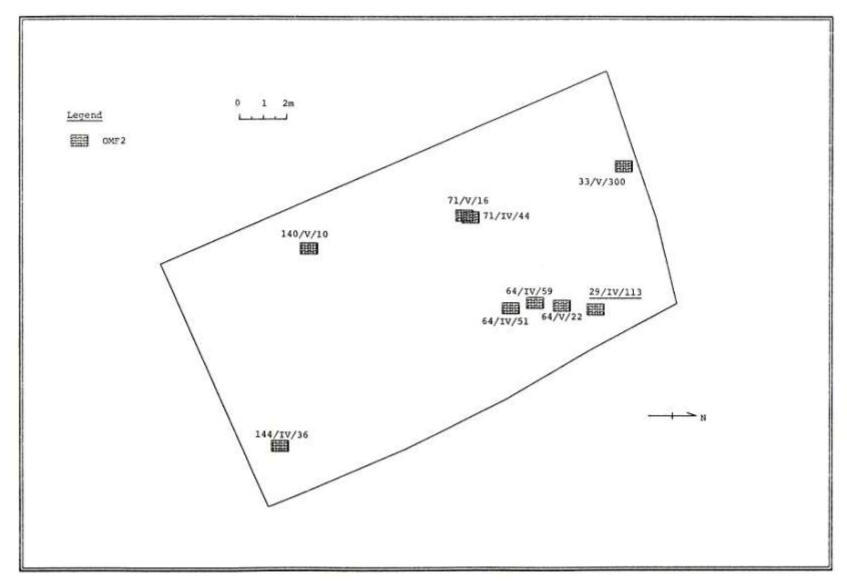
Ethnographic Data

Tule/cattail mats were common in the early historic period among many Northwest Coast groups. Eells describes cattail and tule mats for the Twana, Chemakum, and Clallam Indians:

The largest mats are used chiefly for lining wooden houses and in constructing mat houses. Those of medium size are used at times for the same purpose, for the half-circle camps, for beds, pillows, seats, table covers, and as substitutes for umbrellas and oil-cloth, two layers forming almost complete protection from the rain. The narrowest mats, usually 3 to 4 feet long, are used mostly for cushions, as in canoes and for the paddlers to kneel on (1971:626).

Most authorities agree with Eells that these mats were used as wall liners, mattresses, cushions for paddlers, and for temporary shelters. In 1868 Sproat enthusiastically described mats used by the Ahts for mattresses. He wrote:

... and round the sides of these squares are wooden couches [bench platforms], raised nine inches from the ground, and covered with six or eight soft mats for bedding. A more comfortable bed to rest upon I do not know, ... (1868:42).



Map 23. Distribution of tule/cattail mat fragments (OMF2) within the Ozette House I area. Mat with underlined artifact number was in use at the time of the mudslide.

Eells provides an early and good description of the manufacture of the mats:

The ends of the rushes are first fastened together in the shape of the mat, then strings of the same material, shredded and twisted, are passed transversely through these rushes, and about 2-1/2 inches apart. This is done with a needle of hard wood 3 feet long, half an inch wide, three cornered, and with an eye in one end, in which the string is placed. After the string is passed through, a small piece of wood with a crease in it, is pressed over the mat where the strings are, to render it firm and of good shape. The edges of mats are fastened by weaving the ends of the transverse threads firmly together (1887:626).

Matting needles and mat creasers are recovered at Ozette. Other good descriptions of how these mats were constructed are provided by Waterman (1973:24-29), Underhill (1945:107), Barnett (1955:122), Haeberlin and Gunther (1930:32), and Gunther (1927: 220).

Gunther mentions that "Makah get tule at Lake Ozette and use it for making mats" (1945:22). The Ozette certainly used this source also. Unfortunately at Ozette these mats are poorly preserved artifacts and cannot be completely described. These mats are recorded at no other Northwest Coast wet site. They may well have decayed completely--if they occurred at all--in the earlier sites.

Functional Analysis and Classification of Mats Recorded from Other Northwest Coast Wet Sites

Complete mats, relatively infrequent at Ozette Village, are absent from other Northwest Coast wet sites. However, distinct mat fragments, providing data for reconstruction of mat classes, were found at Lachane and Axeti. Both these sites have cedar bark, checker weave mats with turn-in-and-back or cut off edges and ends. The shapes of these mats cannot be determined, but one fairly complete Axeti example indicates a rectangular shape. The similar mat functional sets from Lachane and Axeti are illustrated in Fig. 116.

AX-M1



Axeti Mat Functional Set I

LA-M1

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Lachane Mat Functional Set I

Fig. 116. Mat functional sets from other Northwest Coast wet sites.

The function of the mats from Lachane and Axeti probably corresponds to that of the "true" long mats at Ozette Village, in Mat Functional Set III. As indicated above, they probably were used

to sit and eat upon, as bedding to sleep on, as wrappings to cover cargo, as capes, as covers to protect beached canoes from the sun, as shrouds for the dead, as temporary shelter covers, as wall linings, and as other things.

The occurrence of numerous cedar bark, checker weave mats or mat fragments at Northwest Coast wet sites appear to correlate with the use of the site area. The only such sites with numerous examples, Ozette Village, Lachane, and Axeti, were village sites (vs. fishing-gathering areas) and as such were semi-permanent, major settlements. The frequent occurrence of cedar bark, checker weave mats and mat fragments from Northwest Coast wet sites is one possible indicator of a village location.

Summary of the Ozette Village Basketry Functional Analysis

The functional analysis of Ozette Village basketry objects has demonstrated a wide range of uses for these items within the Ozette House I area. The basketry functional sets and their frequency of occurrence are listed in Table 42.

To better discuss the functional role of these basketry items in the prehistoric Ozette Village House I context, a computer map is used that includes only basketry items that were in use at the time of the mudslide (Map 24). As can be seen in the map, the basketry artifacts generally cluster in the corner areas of the house and these corners probably were occupied by separate but related nuclear families (corners A, B, C, Map 24; corner D would also have been occupied by a separate family, but most of the materials have been destroyed by ocean wave erosion prior to excavation) (cf. Drucker for typical arrangements of families in Nootkan house 1951:71).

Basł	xetry functional sets and names	Basketry class members	Number of examples in each set	% of total basketry category	
Baskets					
I.	Large, plaited, cedar bark, cube- shaped, pack and storage baskets	OB1, OB2	12	5	
II.	Small to intermediate, plaited, cedar bark wallets, sacks, or bags	OB3, OB4, OB5, OB6, OB7, OB8, OB9, OB10, OB11, OB12, OB13, OB14, OB15, OB16, OB17, OB18, OB19, OB21, OB22	90	34	
III.	Plaited, cedar bark, "fishing- tackle" baskets with an extra long flap extension	OB23	3	1	
IV.	Extra-large, plaited, cedar bark "whale harpoon" trapezoid flat bags	OB24, OB25	7	3	
V.	Plaited, cedar bark, two-edged "infant face covers"	OB26, OB27	5	2	
VI.	Twill 2/2 plaited or open twined, splints or combination splints and cedar bar, storage and carrying baskets with an expanding, rounded cube shape and commonly with continuous loop handles around rim	OB28, OB29, OB30	56	23	
VII.	Intermediate-large, open twined, cedar splints and/or bark, carrying and storage baskets with an ovate, inverted, truncated cone shape	OB34, OB35, OB36, OB37, OB38, OB39, OB40, OB41, OB42	32	13	
VIII.	Small, open weave, cedar splints, expanding, rounded cube-shaped baskets	OB43, OB46	3	1	
IX.	Open wrapped, splints, inverted, truncated pyramid, pack basket	OB44, OB45	10	4	

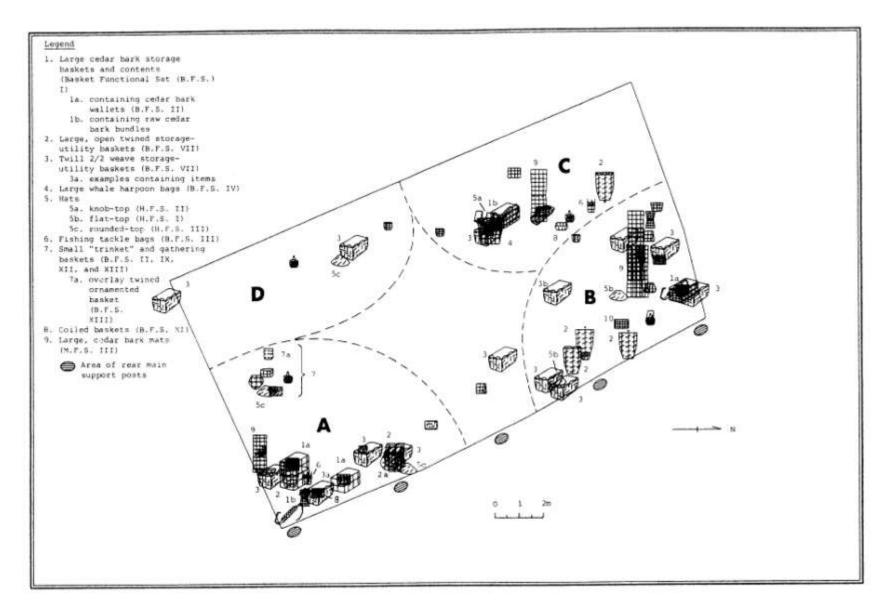
Table 42. Frequency of Occurrence of Ozette Village Basketry Functional Sets

Bas	ketry functional sets and names	Basketry class members	Number of examples in each set	% of total basketry category	
X.	Small, open wrapped or plaited, splints and/or cedar bark, elliptical basketry trays	OB47, OB48	4	2	
XI.	Small, cedar or spruce root, coiled baskets	OB51, OB52, OB53	3	1	
XII.	Small, plain twined, "gathering" baskets	OB20, OB54, OB55	7	3	
XIII.	Miscellaneous small baskets	OB33, OB48, OB49	3	1	
XIV.	Cedar bark, checker weave cradles with wood slat base	OB56	11	5	
Into		TOTAL	246		
<u>Hats</u> I.	Plain twined, cedar bark, flat-top conical hats with cedar bark inner layer and headband	OH1, OH2	5	33	
II.	Plain twined, cedar bark, knob-top conical hats with cedar bark inner layer and headband	OH3, OH4, OH5	6	40	
III.	Complex twined, (spruce) root, round-top conical hats with a cedar bark inner headband	OH6, OH7	4	27	
<u>Mats</u>		TOTAL	15		
I.	Small, cedar bark, rectangular "harpoon sheaths" with plain twined and cut off ends	OM1	38	28	
II.	Small, cedar bark, checker on bias or checker weave mats with a square (to rectangular) shape	OM2, OM3	13	10	
III.	Intermediate to extra-large, cedar bark, constricted midline, checker weave mats with around-and-back edges and cut off ends	OM4, OM5, OM6	23	17	
(IIIa.	Fragmented examples of OM4, OM5, OM6 large cedar bark, checker weave mats	OMF1	301	***)	

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Basketry functional sets and names		Basketry class n	nembers	Number of examples in each set	% of total basketry category
IV.	Cedar bark, twill or checker on bias tumpline straps with long braided line extensions	OM7, OM8		45	33
V.	Tule (bulrush) or cattail sewn mats	OMF2	TOTAL	16 135	12

In the corner areas each "family" had duplicate examples of large cedar bark storage baskets (klap-pairk [Swan 1870:46]; Functional Set F.S. I). These baskets were located on or behind the bench platforms and contained similar stored raw materials. They held bundles of raw cedar bark; wallets, sacks, or bags (F.S. II) containing cattail heads, bird feathers-skins-down, paint pigments, etc.; awls, slate knives, and other equipment. Also they once might have contained dried foods. In corners A and B these baskets contained numerous wallets (designated la, Map 24), and in corners A and C they contained numerous cedar bark bundles (designated la, Map 24). The baskets in corners A and C (Ib) have a tumpline attached for carrying. Those found in corners B and C were woven with a checker lib body weave which was in contrast to those in corner A with a plain checker body weave. This difference possibly is indicative of separate weavers in those areas. The fact that each corner area has duplicate storage baskets with similar stored raw materials demonstrates that each family kept its own supplies of these raw materials (cf. Drucker 1951:71). The persons who maintained these baskets probably were the women of the family unit as indicated by the women's raw materials and equipment.



Map 24. Distribution of basketry items that were in use in the Ozette House I area at the time of the mudslide. Letters indicate separate "family" corner areas.

The large open twined storage/utility baskets (F.S. IV; designated 2, Map 24) typically were found in the rear corner areas of the house, below and associated with the rear upright support posts. These large baskets were found empty, but probably once contained dried foods that were kept in these open weave baskets and high on the support post to allow smoke concentrating along the ceiling to circulate through the contents. These baskets were most common near the second rear support posts in family corners A and B (Map 24). Their broken handles and rims indicate they were once tied up high in these areas.

The large; twill 2/2; splints; expanding, rounded cube; storage/utility baskets with continuous looped handles (F.S. VI; designated 3, Map 24) typically were located along wall areas on or behind bench platforms. These were the single most abundant baskets in a functional set (n=56), constituting approximately 25% of all baskets recorded (Table 41). They usually were found empty, and probably held stocks of dried foods needed for the winter season. Ethnographically they are recorded as fish baskets and general utility baskets. Each family probably needed a certain number of these baskets to hold their dried food stocks for the off-season. One example (designated 3a, Map 24) in family corner A was a "special-case" storage basket, made of white vine maple wood splints (in contrast to the typical cedar bough root splints materials). It held a "valuable" coiled basket, a cedar bark wallet, bird feathers-wings-down, and a large fishhook. A second example (designated 3b, Map 24) was the only basket found in the otherwise clear central house area. This basket held twelve large boiling stones. The central area of the house was where the families cooked their meals on the hearths. This basket was centrally located, near the family cooking areas in the south end of the house, and conveniently held the boiling stones for cooking. The stones probably were used by families in corners B and/or C. The proper stones

could have been collected along the beach front with this sturdy splints basket and carried to the house.

Whale hunting equipment, in the form of whale harpoon bags containing numerous harpoon sheaths and heads (designated 4, Map 24), appear to be important possessions of family members in the northwest corner area (C). These bags apparently had hung together from a sub-rafter or rafter in this corner and collapsed to the floor during the mudslide. This equipment indicates that the main whale hunter of the household occupied this northwest corner area. The only knob-top conical hat in House I was also found associated with the whaling equipment (designated 5a, Map 24). The owner of this hat was a high ranking "noble" and probably the whale hunter who owned the whale harpoon bags and harpoon heads. Every able male in the household probably participated in the whale hunt to some extent, but the main harpooner living in the northwest corner of the family.

Fishing equipment, in the form of fishing tackle bags and hooks (designated 6, Map 24) were in family corner areas A and C. These bags, filled with hooks, probably were used by fishermen who lived in these corner areas.

Flat-top hats (designated 5b, Map 24) were worn by commoners living in the southwest corner area. The rounded-top conical, complex twined, spruce (?) root hats (designated 5c, Map 24) were found in the southern area of the house, and, because of the smaller sizes, may have been worn by high ranking young individuals or adult females of this area in the house. These spruce root hats are of a northern style and may have been obtained through import (below).

The cluster of small "trinket" baskets (designated 7, Map 24), associated with a spruce root hat, also were found in the southeastern family corner area (A). These examples include a plain twined, grass overlay decorated, gathering basket (OB54; designated 7a, Map 24) which appears to be of a central Washington Coast Quinault style. This plus another grass overlay decorated, open twined basket (OB34; designated 2a, Map 24) in the southeastern corner, probably also were imports from the central coast.

Coiled baskets, derived from the eastern Puget Sound/ Gulf of Georgia Salishan region (designated 8, Map 24), were owned by families in corner areas A and C.

Almost all of the "imported" baskets were found in family corner A, with only one imported basket, the coiled example, being in another area of the house (C). They possessed basketry that appears to have been obtained from northern (the hats), eastern (coiled baskets), and southern (the overlaid twined baskets) areas. This situation probably is indicative of the considerable wealth of this family. This family also had an abundance of storage baskets full of raw materials and many of the other wealth - indicative artifacts (wood carvings, abundance of boxes, and other things) (below).

Long cedar bark mats (designated 9, Map 24) were found in each family corner area, but particularly in the northeast corner (B). These mats, plus a tule mat (designated 10, Map 24), were found stacked on bench platforms, forming mattresses in this family area.

In summary the basketry items that were in use in House I cluster in such a manner as to demonstrate at least three family units living in the House I corner areas (the fourth corner, D,

was eroded away by ocean wave-action). Each family corner area had its own and duplicate arrangements of storage/utility baskets. Each had large cedar bark baskets containing their supply of raw cedar bark weaving materials, and wallets separating and protecting different products, stone blades, awls, and other materials. Each family had similar open and twill 2/2 weave food storage baskets for their food stocks. The family units in the northern half of the house had a basket holding boiling stones in the central hearth area of the house for their cooking. The main whaler probably was living in the northwest corner (C) where the whale harpoon bags filled with harpoon heads were found. Also, indicative of high-status, the knob-topped conical hat was kept with the whaling equipment. In the southeastern corner (A), evidently the most wealthy (and possibly eldest) family unit resided. Almost all "foreign" imported fancy baskets were owned by members of this family. Also the largest quantities of stored raw materials in baskets were owned by this family unit.

Each corner area of the house had its own equipment including well-formed bench platforms, long cedar bark mats, wooden boxes, elaborately carved boards, looms, spindle whorls, and other equipment. The families in each corner undoubtedly were the main occupants, if not exclusive owners and occupants, of Ozette House I. As Drucker ethnographically described:

These four [corners] . . . areas were considered to have been owned by their occupants, Each individual family, whether of high rank or low, had its own fireplace, a plank or two along the wall for a bed, and stacked its possessions, wooden boxes, dishes, baskets, and the like around the sleeping place (1951:71). This certainly appears to have been the situation in Ozette House I.

This study demonstrates that baskets were a highly functional part of the cultural life style occurring at Ozette in the late prehistoric period. Basketry reveals one aspect of this life style

and thus provides information concerning related aspects and activities of these people. Some of the functional information is synthesized and tabulated according to functional sets as follows:

Baskets

- I. The large cedar bark pack and storage baskets contained bundles of raw cedar bark, a valuable raw material for manufacturing many classes of artifacts including baskets, hats, mats, clothes, and cordage.
- II. The wallets, sacks, and bags stored in the large cedar bark storage baskets (above) contained cattail heads for padding the dog hair yarn, paint pigments for makeup and painting, down and possibly bird skins for blanket weaving, and seagull wings, possibly for down and feathers or use in dance and drama.
- III. The whale harpoon bags protected the special whale harpoon points and lanyards.
- IV. The fishing tackle bags held the small fishing hooks and other equipment for fishing activities.
- V. Infant face covers were used in caring for the infants, and may have had a special social significance.
- VI. The numerous dry food storage baskets held the stores of dried foods, including fish and shellfish, needed for the slack winter months.
- VII. Large open twined utility baskets were used for gathering and carrying materials and for storing materials in the house.
- VIII. Small open weave baskets were used for gathering purposes and possibly for holding bait and other small objects.
 - IX. Specialized pack baskets of open wrapping and with an inverted, truncated pyramid shape, were used for gathering and transporting activities.
 - X. Trays possibly were used in gathering things or for serving foods.
 - XI. Coiled baskets, probably imports from the east, were valued baskets, some were used as paint containers and some were intentionally cut into pieces, possibly as symbolic gifts of value.
- XII. Plain twined bags also were special gathering baskets, possibly imported from the central Washington Coast.

- XIII. Miscellaneous "trinket" baskets were unique, small, special baskets.
- XIV. Cradles held and secured infants.

Hats

- I. Flat-top hats probably were owned by, and identified, people of the commoner's status.
- II. Knob-top hats probably were owned by, and identified, people of the upper (noble) status.
- III. Rounded-top root hats, very possibly imports from the north, probably were owned and worn by younger people or by adult females of higher status (?).

Mats

- I. Flat harpoon sheaths were carefully folded around and protected individual harpoon points used in whaling.
- II. Small square mats were of as yet unknown use.
- III. True long mats of cedar bark were used as bench covers, house wall liners, to sleep on, and probably to cover beached canoes, wrap cargo, and possibly used as makeshift sails.
- IV. Tumplines or carrying straps were used to carry basket-loads, and probably firewood, baled mats with cargos, quivers and other loads.
- V. Tule/cattail mats of soft and water-repellant stems or leaves provided mattresses and wall hangings, and probably were used for temporary shelters as well.

The basketry artifacts examined here were used in many and diverse activities in the Ozette Village prehistoric cultural context.

As indicators of outside cultural contacts with Ozette Village, basketry artifacts provide important data. The bear grass overlay basket classes (OB37 and OB54) probably were derived through contacts with the central Washington Coast. The coiled baskets (Functional Set XI) probably were derived from the upper Fraser Salishan groups (Lillooet-Thompson). And some of the rounded-top conical root hats probably were derived from the northern Northwest Coast. These contacts may have taken several different forms, including trade, raids, visits, enslaving foreign people, or marriage. In any case these particular basketry artifacts were stylistically and technologically much more common to outside cultural areas and therefore provide strong evidence of southern, eastern, and northern contacts. Historically the Makah area was known to have been an important trade center (Singh 1956) with three directions of contact. The basketry from Ozette Village indicates that this trade had considerable antiquity. Trade would have brought new items, new ideas, and perhaps new technologies as well, creating an important center of cultural influence and development.

Comparison of Basketry Functional Classes from all Northwest Coast Wet Sites

Each Northwest Coast wet site has a specific range and frequency of basketry functional categories. Ozette Village House I, as a complete village household, has the widest range and variety of basketry artifacts. Other Northwest Coast wet sites have smaller sample sizes, but the functional categories of basketry, and especially the frequency thereof, provide data indicating the activities taking pace at each site. Though at most wet sites the site context and entire artifact assemblages provide information about the activities conducted at each site, the basketry artifacts alone provide important information. The general functional categories of basketry artifacts (disregarding at this point the stylistic/technological characteristics), their assigned functional sets, and their frequency of occurrence for each Northwest Coast wet site are listed in Table 43.

	Basketry Functional Categories	Ozette Village	Hoko River	Lachane	Axeti	Musqueam Northeast	Biederbost	Conway	Fishtown
Bas	skets								
1	Large, cedar bark, plaited storage baskets	I / 12 (2)			I / 12 (2)				
2	Cedar bark, wallets, sacks, or bags	II/ 90 (13)	III/ 2 (10)	I/ 13 (76)	III/ 2 (6)				
3	Special hunting or fishing flat bags	III, IV/ 10 (1)							
4	Infant face covers	V/ 5 (1)							
5	Splints, close weave, dry food storage baskets	VI/ 56 (8)							
6	Utility, pack basket	VII, IX/ 40 (6)	I, IV/ 14 (67)		II/ 2 (6)	I/ 110 (100)	I/ 47 (98)	I/ 27 (82)	I/ 6 (67)
7	Open weave, "bait" baskets	VIII/ 4 (1)							
8	Miscellaneous "trinket" and coil baskets	XIII/ 7 (1)					II/ 1 (2)	III/ 4 (12)	III/ 2 (22)
9	Small, close weave bags	XII/ 7 (1)	II/ 3 (14)						
10	Cradles	XIV/ 11 (2)						II/ 2 (6)	II/ 1 (11)
11	Trays	X/ 4 (1)							
<u>Hat</u>	<u>.s</u>								
12	Plain twined, flat-top hats	I/ 5 (1)							
13	Plain twined, knob-top hats	II/ 6 (1)	I/ 2 (10)						
14	Complex twined, round-top hats	III/ 4 (1)			I/ 2 (6)				
Ma	ts								
15	Cedar bark, harpoon sheath	I/ 38 (5)							

Table 43. Occurrence of functional categories of basketry at Northwest Coast wet sites (Roman numerals indicate the functional set being utilized at each site. Percent of total occurrence is indicated in parentheses.)

	Basketry Functional Categories	Ozette Village	Hoko River	Lachane	Axeti	Musqueam Northeast	Biederbost	Conway	Fishtown
16	Cedar bark, checker weave, square mats	II/ 13 (2)							
17	Cedar bark, checker weave, "true" mats	III/ 23 (3)							
18	Cedar bark, checker weave, "true" mat fragments	III/ 301 (43)							
19	Cedar bark, plaited tumplines	IV/ 45 (6)							
20	Bullrush/cattail mats	V/ 16 (2)							
	Total	696	21	17	32	110	48	33	9

As can be seen, each site stresses the use of certain functional categories of basketry (as seen in percent frequency). To compare the degrees of functional similarity between sites--in terms of which functional categories of basketry are stressed--a close-proximity analysis is conducted using percent frequency data and Robinson's method to form the coefficient of similarity matrix. The resulting double-link chain series is illustrated in Fig. 117. The results of this test provide the basis for the following discussion.

This close-proximity analysis considers the similarity of the frequency of general functional categories of basketry from each site, and disregards stylistic/technological similarities among the basketry from these sites. Sites that cluster together would not necessarily be considered culturally interrelated, but functionally similar in terms of site use. Ideally, sites that functioned as major villages, fishing stations, shellfish gathering stations, hunting camps, or otherwise, would cluster in the test most closely since only certain basketry items would have been used for

certain activities. Two main clusters are demonstrated in the double-link chain series (Fig. 117, A and B). Each cluster will be discussed separately below.

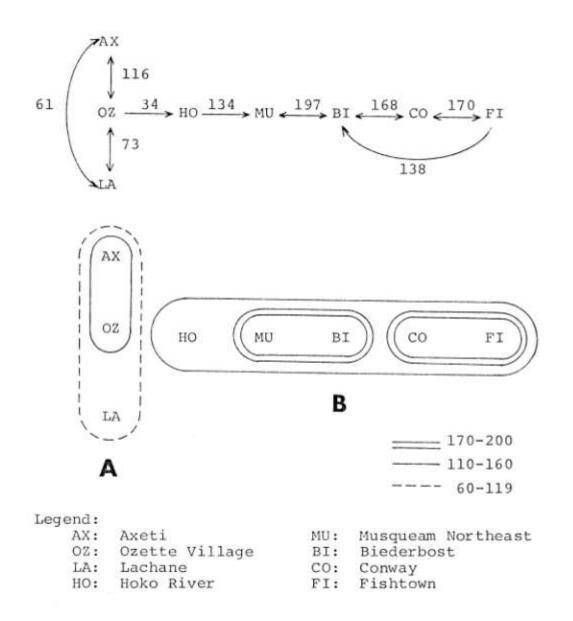


Fig. 117. Double-link close-proximity chain series for functional categories of basketry recorded at Northwest Coast wet sites. Degrees of similarity: 0 = no similarity to 200 = complete similarity. Cluster A: Major village sites Cluster B: Fishing-gathering stations.

Cluster A (Fig. 117) includes Axeti, Ozette Village, and Lachane. Functionally, each of these sites has been considered a major village site. This cluster brings together sites that have (1) a wider variety of basketry; (2) cedar bark wallets, sacks, or bags; (3) large cedar bark storage/pack baskets and cedar bark hats (Axeti and Ozette Village); and (4) numerous cedar bark, checker weave mats and mat fragments. Note that although the site context and other site artifacts indicate that these sites were villages, the basketry functional categories by themselves provide evidence for this designation. Hobler (1976:150-151) has pointed out the similarity in general artifact frequencies between Ozette Village and Axeti sites, and, as he recognized, this does not necessarily indicate strong or, indeed, any cultural relationships, but indicates similar artifact and site use.

Cluster B is an association of sites that appear to have been fishing or gathering stations. Hoko River, Musqueam Northeast, and Biederbost all are situated along streams or rivers, and their artifacts (including fishhooks, fish lines, fish weirs, nets, and fish spears [?]) indicate the site function or use as fishing stations. In terms of basketry, the most common functional category is large, open weave, burden-utility baskets (from 67% to 100% of all baskets found at these sites; Table 42). At a fishing station these baskets would be important for transporting the quantities of fish being caught. Their concentration is a good indication of the general function of the sites. The other two sites in this cluster, Conway and Fishtown, are considered to have been fishing and gathering stations. The site context, i.e., along shallow coves or lagoons, and the high frequency of large open twined baskets indicate the gathering of shellfish, driftwood, fish from weirs, and/or other special products taken from along these areas.

In summary, the frequency of different basketry functional classes provides clear evidence for

the functions or activities of a site. The similarity in the percent of different functional categories of basketry does not indicate cultural interrelationships among sites, but does suggest functional similarities at least. Conversely, the substantial difference in the frequency of open wrapped, inverted truncated pyramid pack baskets of the same stylistic/technological class (HO-B1 and OB44) from Hoko River and Ozette Village (73% and 4% of the baskets respectively) indicates that these sites were used in different ways, one as a village and one as a fishing station. It is the occurrence (presence/absence) of basketry modes and S/T classes from these sites that demonstrate the potential cultural associations.

SUMMARY AND CONCLUSIONS

Ozette Village basketry and the basketry from other Northwest Coast wet sites has been analyzed on three levels: the level of basketry attributes (modes), the level of basketry classes (types), and the level of functional classes or functional sets. The first two levels are concerned with the stylistic/ technological characteristics of basketry, and the third basically is concerned with the functional role of basketry artifacts in the Ozette cultural context and at other Northwest Coast sites. The results of these three levels of analysis will be summarized separately below, and the implications of these combined results considered.

Basketry Mode Analysis

The first level of analysis involved the definition, description, and comparison of individual Ozette Village basketry modes based upon the different analytic dimensions of basketry. The intersite comparisons involved the use of cluster analysis techniques in order to demonstrate the degrees of similarity and patterns of association among the basketry technologies from all Northwest Coast wet sites.

The eight analytic dimensions of basketry considered in this study had their own degrees of usefulness for intersite comparisons. Basketry construction materials, base and body construction techniques, extensions on basketry objects, and selvage techniques were found to be the most useful areas of study, especially for intersite comparisons. These basketry features have sufficient complexity and variability to allow intersite close-proximity cluster analyses to be conducted. The amount of data that could be obtained concerning basketry shapes and surface

ornamentation techniques limited and restricted the analytic usefulness of these basketry features. Basketry gauge of weave and size data were too general, at least in terms of the objectives of this study, for meaningful intersite comparisons.

The results of the intersite comparisons of basketry modes demonstrates a pattern of regional continuity of basketry technologies in at least three regions of the Northwest Coast (Figs. 2B and 8). To further evaluate these patterns, an average linkage cluster analysis of the main basketry dimensions was conducted. The resulting dendrogram again demonstrates the clustering of basketry technologies through time in three major regions (Fig. 24). Since the basketry technologies associate in regional patterns, the data suggest a model of techno-cultural continuity for 2,000 to 3,000 years in at least three regions of the Northwest Coast. This hypothesis is discussed further below.

Basketry Class (Type) Analysis

This second level of analysis considers the combination of the basketry modes in defining the classes (types) of basketry occurring at Ozette Village and other Northwest Coast wet sites. Basket, hat, and mat classes have been defined by systematically combining modes from basketry dimensions that were considered to be analytically useful. In each case only a small proportion of the potential combinations (into classes) of modes were recorded with basketry members. Many of the classes had numerous inclusions. These data indicate the Ozette cultural patterns for combining particular materials, shapes, and techniques to produce basketry items. The basketry classes occurring at Ozette and other wet sites also are sensitive for intersite comparisons. The comparison of the distinct basketry classes among sites would not necessarily be expected to produce the same results as the comparison of individual basketry modes. The basketry classes occurring at Northwest Coast wet sites were compared in an average linkage cluster analysis (Fig. 33). The results again grouped sites regionally, with the most similar classes of basketry occurring through time in three separate regions. This test additionally supports a model of regional continuity in basketry styles for the last 2,000 to 3,000 years. Though the basketry class data are weaker than the basketry mode data in that reconstructions were necessary, the general patterns emerging are significant. The hypothesis of cultural continuity and stability in at least three regions of the Northwest Coast is further supported.

In this light, it should be pointed out that prehistoric Northwest Coast cultural continuity models are not new. They have been suggested for the southern coast by Mitchell (1969) and for the northern Tsimshian archaeological area by MacDonald (1969). The basketry artifacts from Northwest Coast wet sites, however, demonstrate technological continuity in three different regions. Other artifact categories, in particular bone barbs-tines-points, antler wedges, bone wedges, abraders, adze-chisel blades, pebble-cortex spall tools, sinker stones, ground slate knives, and needles usually do not demonstrate sensitive style variability among different regions through time. From wet sites, wooden wedges with three-strand rope collars and of similar sizes and shapes occur at most Northwest Coast sites for the last 3,000 years (Croes 1976d:293-294). This also is the case with bent-wood fishhooks (Croes 1976c:216-218). However, basketry artifacts appear to be more sensitive and stylistically distinctive in different regions of the coast. As a point of reference it would be appropriate to quote Giddings1 statement concerning continuity trends in western arctic prehistory:

The fabric of Bering Strait archaeology, it appears to me, has its warp in the patterns of behavior handed down by parents to their children in a single locality, and a weft made up of the continuous interchange of thoughts outward through space. The passage of ideas by contemporaries may be lightning swift. It need not be conceived as a result of either migration or slow, directional drift. While I do not wish to doubt the occasional migration of groups, or the retardation of drift, I am drawn to the probability that cultures also come to look alike across spans of a similar environment because they are constantly receiving impulses—accepting ideas--on the same time level (1961:157).

In this case, "weft" cultural aspects, or artifact categories of a more widespread nature, would include, as noted, wooden wedges for splitting technologies, bent-wood fishhooks, abraders, adzes-chisel blades, and other artifacts. Specific forms of these artifacts could have been found to be efficient for a given purpose, and quickly adopted by neighboring groups who had not yet developed the best forms.

On the other hand, the basketry artifacts can be considered sturdy "warps" that are passed on by parents to children in the training process. Basketry technology is very complex in that a large number of different materials, construction techniques, selvages, handle attachment techniques, shapes, sizes and ornamentations can be combined to form basketry for similar functions. Because of this substantial variability, different cultural groups readily develop their own basketry styles for functionally equivalent tasks and these "plans" for making their cultural style of basketry are passed on, certainly overtly, through the generations. There would be little motivation for a neighboring group to "copy" a pack basket style, point for point, if they have developed an equally efficient form. Therefore, basketry technologies probably were not a "weft" cultural aspect that was part of a rapid "interchange of thoughts outward through space" (ibid.). Certainly most if not all coastal groups were basket-makers from the earliest periods of

their coastal occupancy, and each group had "efficient" basketry technologies that were taught to their members at a young age. Certainly these technologies would form a central core of any group's training activities, especially for female members. With the assumption that basketry techniques are passed down within groups from generation to generation, probably from mother/grandmother to daughter/ granddaughter, it is proposed here that the more interrelated or associated cultural groups were through time (especially linguistically for promoting communications and interaction), the more likelihood there would be that their basketry technologies would be stylistically and technologically similar. Basketry styles, therefore, may be one of the most sensitive artifact categories for studies of regional cultural development on the Northwest Coast. As pottery in the Southwest, and lithics in other areas, basketry potentially may become the major criterion for developing sensitive chronologies and for tracing the development, interaction, and movement of cultural manifestations on the Northwest Coast.

On the basis of data presently available, the intersite comparisons and cluster analyses indicate varying degrees of similarity for 2,000 to 3,000 years in three regions of the Northwest Coast, Some of these trends should be projected into, and be observed in, basketry technologies of the contact periods on the coast. It is proposed here that they do to some degree.

The major difficulty in relating these data to the historic museum collections is that the large amount of basketry available in the museum collections tends to mask any general similarities. Other factors affecting the comparison of prehistoric baskets to historic baskets include the facts that: (1) a considerable amount of error in labeling or lack of labels plagues museum collections, (2) functionally important aboriginal utility baskets were soon replaced by Euro-American gunny sacks and other cloth bags, paper bags, cardboard boxes, wooden chests, etc., (3) historically Native American basketry quickly took on a new function, that of a readily salable item to Euro-Americans, and (4) of ten collectors were biased in that they selected mostly ornamental baskets vs. utility baskets. Many other aspects also possibly skew the usefulness of museum collections for direct comparisons, e.g., collectors only obtained small baskets since they could get more for the same amount of money, baskets were ornamented to please the Euro-American tastes, and so forth (cf. Jones 1976:33-34).

However, certain similarities can be detected from the prehistoric to historic collections which include these general patterns: (1) in the northern region, prehistoric Lachane basketry technologies were very similar to historic Tsimshian basketry of that area, especially when compared to the very different basketry technologies of the historically adjacent Tlingit and Haida (Croes 1977); (2) the south-central coast basketry at Hoko River and Ozette Village included the use of open wrapped, inverted truncated pyramid pack baskets; cedar bark flat bags; cedar bark, plain twined, knob-top hats; and other basketry characteristics common to the historic Nootka/Wakashans; and (3) in the Puget Sound/Gulf of Georgia region, the stress on open twined, twill 2/2 base, cedar splints utility baskets with mock braid rims; checker plaited, cedar splints, utility baskets with an ovate, inverted, truncated cone shape; and other characteristics appear to continue into the historic period among Salishan groups, (Especially noted are similarities between prehistoric Puget Sound/Gulf of Georgia basketry and that of the historic Twana and Washington Coast Quinault). Coiled basketry becomes common in the Puget Sound/Gulf of Georgia area only in late prehistoric and historic times, possibly because the Euro-American market created the popular demand (Croes 1975:65). But these are generalizations, and strict tests of similarity between the prehistoric and historic basketry technologies in most cases remain to be done. At this point the continuation of thousands of

years of stylistic similarities in a region and projecting this into the historic period can be suggested.

In summary, based upon a study of the basketry from the Ozette Village site and extensive comparison with basketry modes and types from other Northwest Coast wet sites, the following conclusions have been reached:

- 1. Lachane and Axeti sites have certain similar basketry technologies, although they also have many differences as well, and these technologies basically demonstrate a general northern style of basketry, different from that of the southern Northwest Coast.
- 2. Lachane (from a separate study [Croes 1977]) has a high degree of similarity with historic Tsimshian basketry. This suggests a pattern of techno-cultural inter-relationship and continuity for at least 2,000 years in that area.
- 3. The south-central coast sites, Hoko River and Ozette Village, have basketry technologies that demonstrate the closest degree of similarity, and both also are most similar to historic Nootka-Makah basketry styles of that region. These data demonstrate a pattern of techno-cultural style continuity in this region for at least 2,500 years.
- 4. The early Puget Sound/Gulf of Georgia sites of Musqueam Northeast (approx. 3,000 years B.P.), Biederbost (approx. 2,000 years B.P.) and English Camp (earlier than 1,500 years B.P.) have similar basketry technologies. Musqueam Northeast is within a Locarno Beach Phase archaeological component. Therefore interrelated aspects of this phase were common throughout this Puget Sound/Gulf of Georgia region at this 2,000 to 3,000 year B.P. time period.
- 5. The late Puget Sound sites of Fishtown and Conway had the most similar basketry technologies and represent groups that culturally were closely related.
- 6. All the Puget Sound/Gulf of Georgia sites demonstrate the closest degree of intersite similarity through time and were in a region of techno-cultural continuity, possibly associating ultimately with Coast Salishan basketry styles and cultures of that region.

The continuity models developed here hypothetically interrelate through time the prehistoric basketry styles in three separate regions. This does not mean that there were no differences between basketry technologies among sites within a region; but it does mean that the technologies in each region, according to the available data, exhibited more similarities among themselves than to those from other regions. Certainly the available data are limited at this time, but these are the present patterns emerging. These are tentative conclusions and with future access to much more data they will become better tested and evaluated producing much firmer conclusions.

Functional Analysis of Basketry

Ozette Village site has provided an ideal opportunity for recording the functions of basketry items from a pre-contact village. Many of the baskets were in use at the time of the mudslide. Also, since Ozette was of a relatively late time period, many of these basket classes and their common uses were observed in the historic period. Basically we have a nearly complete inventory of the basketry used and how it was arranged in a prehistoric household at that late prehistoric time period at Cape Alava. Because of these unique data, we have a much clearer perspective of these materials in a prehistoric cultural context than previously had been possible.

As would be expected in a household setting, many of the Ozette baskets performed storage functions. Each family corner contained duplicate storage baskets that were used to hold and/ or separate similar raw materials, valuables, and food products.

Some basketry items were "specialized" whale harpoon bags, whale harpoon sheaths, fishing tackle bags, and paint baskets. These baskets reflect some of the activities in which the household members participated. Most baskets were stored with other items along the back of the bench platforms, in each of the family corners, and along the walls. Hats, reflecting class statuses, were found in different parts of the house. The single knob-top hat was found in the northwest corner of the house and was associated with whaling equipment—the whale harpoon bags and points. The flat-top hats were found along the northeastern wall indicating commoner status occupants. "Imported" root hats were common in the materially wealthy southeastern corner of the house. Other exotic "imported" baskets were found mainly in this southeast corner. The foreign baskets appear to have been derived from different regions including northern, eastern, and southern coastal areas. These imported baskets reflect the dynamics of the contact, probably mainly through trade between Ozette and other groups. Mats, including long, cedar bark, checker weave mats and tule/cattail mats, were found covering the bench platforms, or on walls in each family area. Tumplines also were frequent around the house, reflecting a part of the equipment used for transporting goods to the house. Basketry cradles and infant-face-covers used in infant care also were common in the house. In summary, the basketry functional analysis provides a much clearer picture of the Ozette prehistoric household, the occupants, and their activities.

The compilation of functional information about basketry from Ozette has aided in comparing and deriving functional information concerning basketry from all other sites. These comparisons demonstrate that the frequency of distinct basketry functional categories gives direct indications of the activities being performed at different sites. Village sites, with a wider variety of basketry items, were found to be distinct from fishing and gathering stations, which had a high frequency of burden-utility baskets. It was found that certain kinds of basketry tended to be used at certain locations; e.g., mainly pack baskets were brought to fishing locations or to shellfish gathering areas, undoubtedly to transport the large quantities of fish being caught or clams being gathered. Cluster analyses separated sites occupied as main village locations from those being used as fishing/gathering localities.

Conclusion

The three-level analysis of basketry from Ozette Village and other Northwest Coast wet sites has demonstrated a special analytic value for basketry artifacts in Northwest Coast prehistory research. The first two levels of basketry analysis demonstrate the wide range of materials, shapes, techniques, and basketry items from a single prehistoric household. They also provide the basis for establishing a cultural continuity model for at least three regions of the Northwest Coast over the last 2,000 to 3,000 years.

On the last level, the functional level, basketry provides additional information on the activities being performed at different locations. The Ozette materials provide a unique example of how basketry items were used in a single prehistoric Ozette household. They also reflect the location of different family units in the house and some of the activities of the occupants. At Ozette and other sites this basket functional information, coupled with other information from the sites, will increase our understanding of domestic living areas and the seasonal camps on the Northwest Coast. As other sites are found, including earlier ones, the identification of different and specific activity areas will provide more information about seasonal rounds and the evolution of equipment used at different activity stations. Basketry artifacts have been depicted as a core and sturdy "warp" aspect of Northwest Coast culture with styles being passed on from generation to generation through time. But on the third analytic level, function, basketry can be said to take on some widespread characteristics or "weft" features of Northwest Coast cultures. Functionally equivalent categories of pack baskets, storage baskets, bags, mats, tumplines, cradles, etc., were used throughout the Northwest Coast for the same purposes. A high concentration of functionally equivalent categories of basketry at two sites indicates similar activities being performed, though stylistically the basketry may be very different (e.g., Hoko River and Musqueam Northeast). On this general level these materials reflect the similar uses of similar environmental niches throughout this area and through a considerable period of time.

Basketry artifacts undoubtedly will play an increasingly important role in understanding many new aspects of Northwest Coast prehistory. The Ozette Village site provides the important datum point needed for the initial study of Northwest Coast prehistoric basketry. Certainly in the future many more Northwest Coast wet sites will become discovered and excavated allowing the preliminary conclusions of this study to be evaluated, modified and/or expanded upon.

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