

## SALVAGE EXCAVATION AT TWO COASTAL MIDDENS

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### INTRODUCTION

Two prehistoric sites, the Hamilton Beach site on Pender Island and the O'Connor site at Port Hardy, were tested during the summer of 1971 as both were threatened with destruction by impending construction projects.

#### THE HAMILTON BEACH SITE DeRt 11

Pender Island is in fact two islands, North and South Pender, which are situated toward the southern end of the Gulf Islands in the Strait of Georgia. DeRt 11 (Hamilton Beach) lies on the western edge of Port Browning just south of Brackett Cove on North Pender. Historically this locality was occupied by the Saanich Indians. DeRt 11 is a shell midden extending from south of the public access road, north along the beach to a rocky mound with fir trees at the entrance to Brackett Cove. The midden appears as a rise of land approximately 120 meters in length between the beach and a swampy area to the west. At the southern end of the site and east of the actual midden lies a cleared area where the old Hamilton house once stood, and to the north of this area is an orchard (Fig. 22).

Vegetation is predominantly wild grasses and rose bushes, and on the bank at the south end of the site, about 12 feet above the beach, stands a large old Garry oak tree. Little clearing of the site was necessary. Fish, sea mammals, and shellfish are found in the waters of Port Browning, and deer are present in large numbers on the island.

Construction of a new marina/resort complex was underway and the site was in immediate danger of being destroyed. In

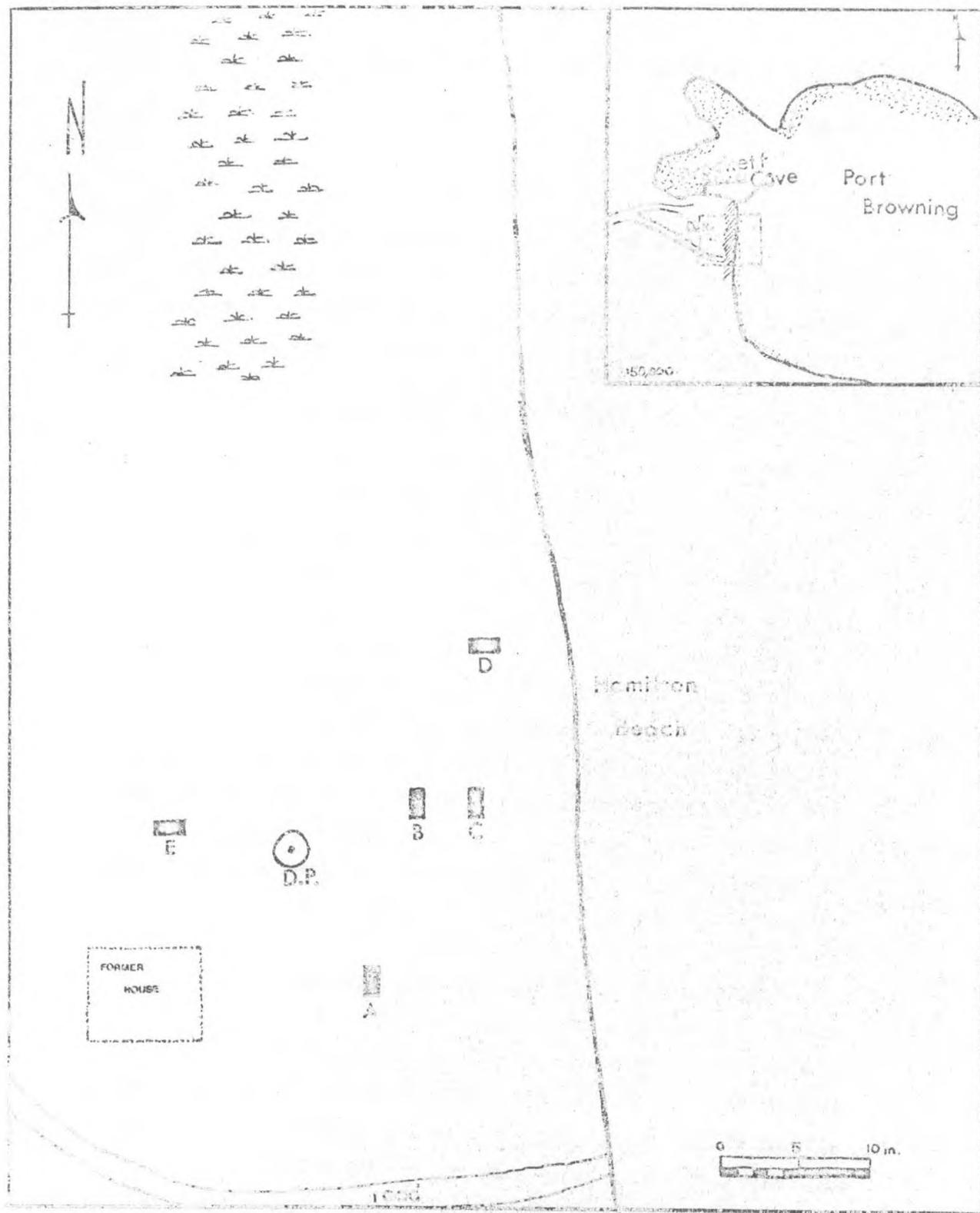


FIG. 22. Plan view of Dart II, showing excavated test pits

1966 a "partial burial and two ground slate objects" were reported as found near a large uprooted Douglas fir tree here; however, we found no remaining evidence of either the tree or the human remains.

#### Excavation

A datum point was established at the centre of a cement-topped cistern which is located at the southerly end of the site near where the old house stood. A north-south base line was run from this point. A total of five test pits were sunk, and the material recovered indicated that the midden was partially disturbed and not particularly productive. Each test pit was 1 meter by 2 meters horizontally and for the most part each was excavated in 10 centimeter levels. The depth of deposit varied from a minimum of 40 centimeters in one pit to a maximum of 110 centimeters in two others. Approximately 8 cubic meters of midden were excavated and a total of 20 artifacts were recovered.

#### Stratigraphy

The earliest deposit is dark brown in colour and is littered with loose clusters of rock. It varies in thickness, but is generally about 25 centimeters thick. No cultural material was recovered from this layer. Following this layer the stratigraphy changes within each pit. In pit A sterile hard packed clay forms the next stratum. In pits B and C a deposit of brown soil mixed with highly fragmented shell follows. Pit D shows a mussel shell lens, 5 to 20 centimeters thick, above a stratum similar to that in pits B and C. This deposit and the one above it yielded all but four of the artifacts. The youngest stratum, just below the layer of topsoil, was predominantly concentrated

whole and fragmented clam shell with some mussel, barnacle and whelk. This deposit varied in depth in each pit from a maximum in pit D of 50 centimeters, to about 20 centimeters in pit A and was non-existent in pit E. Charcoal was found scattered throughout this unit, as well as in distinct lenses. Loose brown turf and topsoil mixed with some fragmented shell forms the top 0 to 20 centimeters in each pit, and aside from intrusive nails and glass the remaining four artifacts were excavated here.

#### Artifacts

Of the 20 artifacts catalogued, 16 were manufactured of bone and of these only six were complete or identifiable. All came from the main strata of shell. They are:

The butt end of a unilaterally barbed point, ground and highly polished. It is broken just below the first small barb (Fig. 23a)

Bone point for a composite toggling harpoon (Fig. 23b)

A ground and polished awl or needle of which the basal portion is missing (Fig. 23c)

A splinter awl, or fragment of a deer long bone which has definite signs of wear at the tip (Fig. 23j)

A bone bi-point (Fig. 23d)

A broken (tip) of a bone point (Fig. 23e)

The remaining bone material was fragmented and either ground, polished or incised. With the exception of one polished and incised deer rib, these were predominantly mammal long bone fragments, too small to be specifically identified.

There were two antler artifacts. One, an elk(?) antler, found in the layer of topsoil at a depth of 15 centimeters, of which the tip has broken and splintered. This tip is not

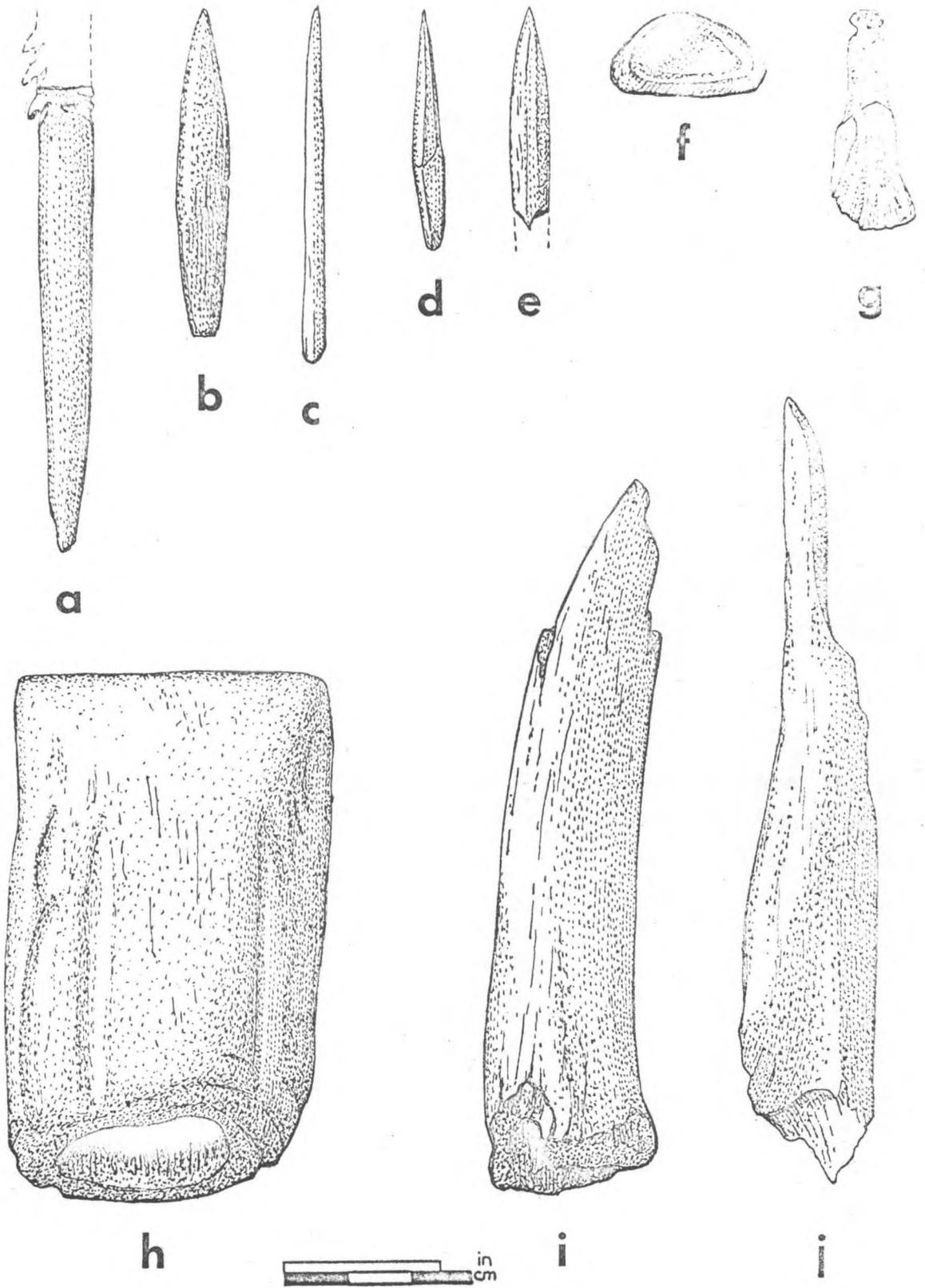


FIG. 23. Artifacts from DeRt 11, the Hamilton Beach site

ground, but has been worn smooth, perhaps through use (Fig. 23i). The second is a well-fashioned antler sleeve haft with a slot at one end for the adze blade, and a shallow, hollowed out space at the other end to facilitate hafting it to another handle (Fig. 23h).

Only two artifacts of stone were recovered, and both were found in pit B between 20 and 30 centimeters. There was one retouched basalt flake, and one small oval pebble battered on both sides (Fig. 23f). This is somewhat similar to the "what's its" characteristics of the Gulf Islands, particularly some of those recorded by Wilson Duff at the Canal site, Pender Island.

One notched elk(?) incisor pendant was the only artifact made of such material (Fig. 23g). No shell artifacts were excavated.

#### Discussion

A faunal analysis has not yet been made, however brief examination showed that deer was the most common of land mammals present. Sea mammal remains were significant, but certainly not so plentiful, and with the many assorted fish remains a livelihood with maritime adaptation is indicated. Neither fire hearths nor burials were discovered.

Table 6 shows the distribution of artifacts, and it is clear from that alone that the midden does not extend as far west as pit E, and only very marginally west to pit A. Only pits B, C and D were productive, thereby confining the midden to the approximately 12 meter strip of land parallel to the beach, and within this area the midden diminished from the bank westward.

DeRt 11 is an extensive site, horizontally, but not very productive. Had a larger area been excavated, more material would undoubtedly have been recovered, however I think little

Table 6. Distribution of Artifacts at DeRt 11,  
Hamilton Beach

Depth	PIT A	PIT B	PIT C	PIT D	PIT E	TOTAL
0-20 cm.		••	✓	•		4
20-30		•XX	•			5
30-40	•			••		3
40-50			•			1
50-60			•	••		3
60-70				•		1
70-80						0
80-90			••	✓		3
90-100						
TOTAL	1	5	7	7	0	20

Bone •  
 Antler ✓  
 Lithic X

more information would have been gained. The few artifacts recovered suggest that the site is late and probably a component of the San Juan phase (Carlson 1960).

#### THE O'CONNOR SITE EeSu 5

This site is located on the east side of Hardy Bay opposite Port Hardy (Fig. 24) on the north end of Vancouver Island. Historically this area was occupied by the Kwakiutl, and today the two main reserves are at Fort Rupert and Tsulquate just outside Port Hardy. A logging road cuts through EeSu 5, and where the road bends north, a cutaway bank has already been eroded. A major part of the remaining site area was in imminent danger as plans for construction of a new log dump and house were underway. Excavation was concentrated in the area east of the road and north of the creek (Fig. 25).

The vegetation on the site was a fairly heavy cover of berry bushes (huckleberry, salmon berry and thimble berry), as well as some grasses and young fir and hemlock trees toward the eastern edge of the midden. Several old stumps of cedar and fir are in the excavation area. Salmon run annually in the Quatse River and past the point, and numerous species of fish are found in Hardy Bay. Sea lion, porpoise and harbour seal are common there, and the area supports a large population of the small deer native to Vancouver Island.

#### Excavation

A datum point was established (19 meters northeast of a Quatse Investment survey marker, Fig. 25, Q.M.) on the small rise of land east of the road at the main excavation area (Fig. 25 D.P.). A British Columbia Legal Survey Plaque (1964) is on the beach southeast of pit F, and is 66.6 meters from the datum point. A north-south base line was run from this datum, and pits A, B, C, D, and E, each 1 meter by 2 meters,

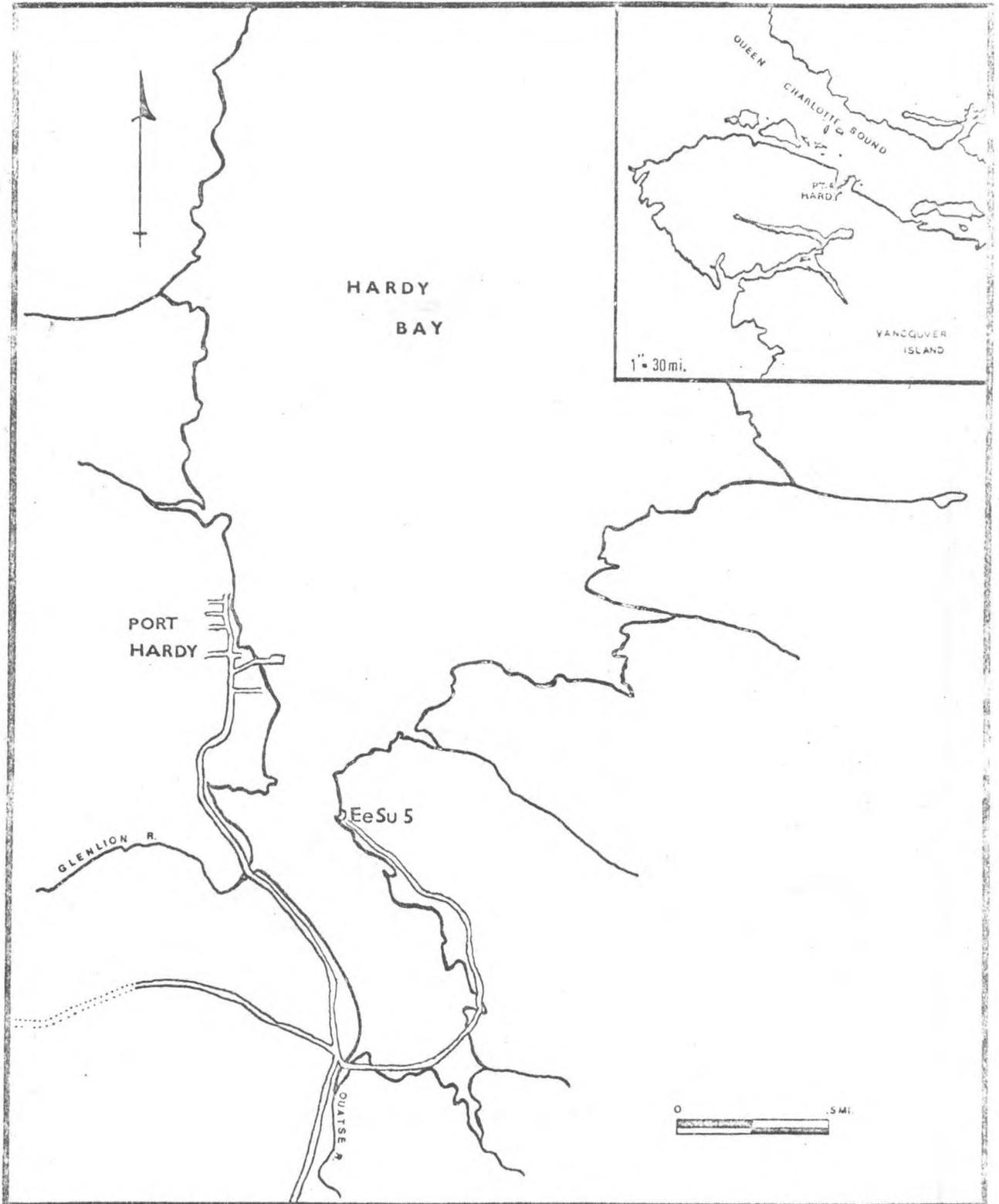


FIG. 24. Location of the O'Connor site, EeSu 5

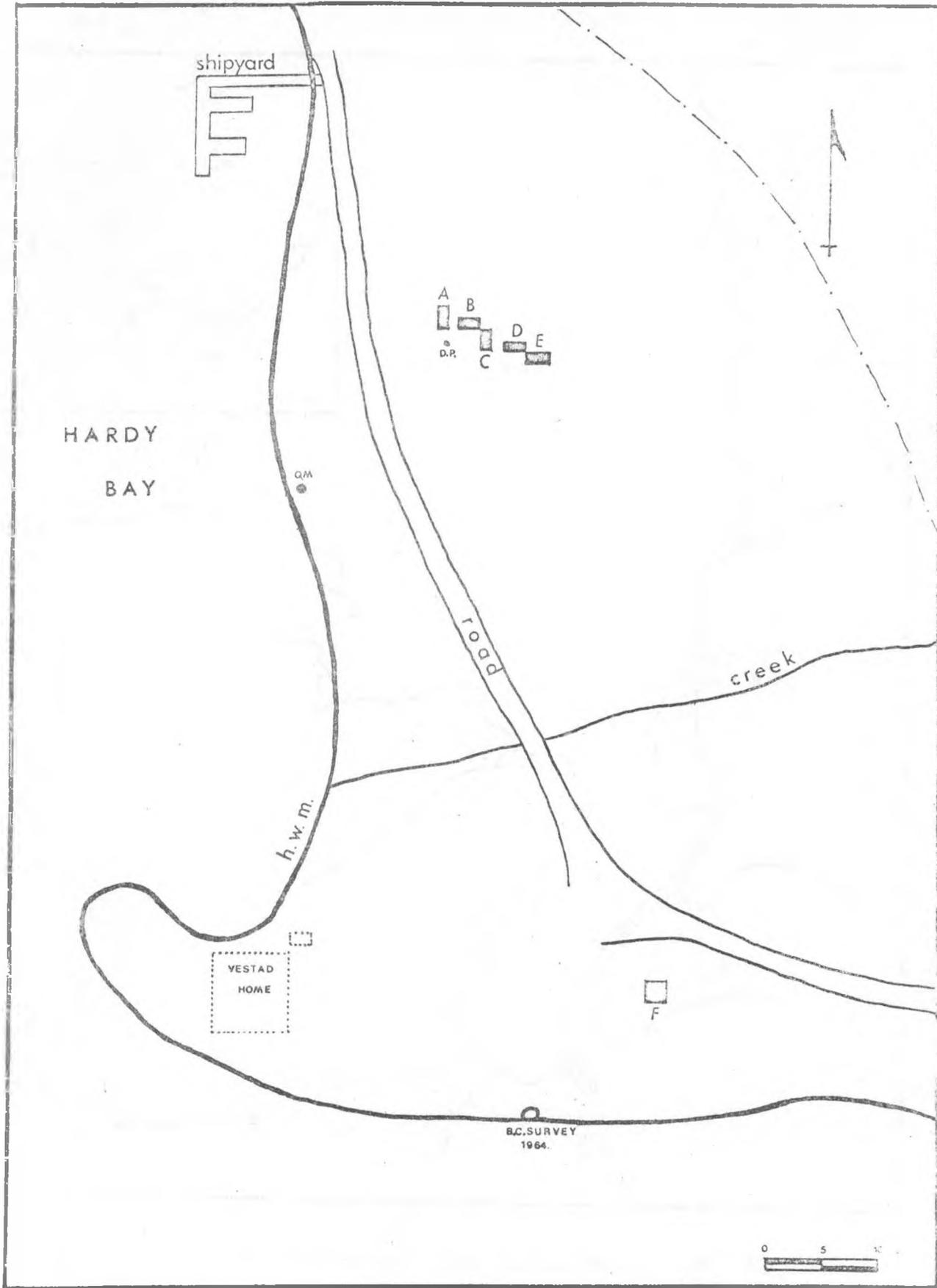


FIG. 25. Location of test pits at EeSu 5, Port Hardy

were staked out. Pit F was originally 2 meters by 2 meters, however excavation was discontinued in the northern half at a depth of 70 meters below surface. All excavation was carried out in arbitrary 10 centimeter units and one quarter inch screens were used. A total of 28 cubic meters of midden deposit were removed, yielding 274 artifacts.

### Stratigraphy

Three principle stratigraphic units were evident in pits A - E; pit F varied only slightly in this. From oldest to youngest the identified strata are as follows:

A. A dark brown deposit littered with pebbles and gravel which lies in part on yellowish till and hardpan. It generally appears at 185-200 centimeters below the surface and is approximately 30 centimeters thick. Pits D and C, the furthest back from the water, were exceptions in that they showed a thin mussel shell lens and a small deposit with disintegrated bone at approximately 220 centimeters. No artifacts were recovered from this stratum.

B. A layer, approximately 90 centimeters thick, of black soil mixed with highly fragmented shell. Within this stratum were concentrations of whole and fragmented clam shell with some whelk, barnacle and mussel, and a lens of mussel shell as well; charcoal was scattered throughout, but seldom in distinct lenses. Approximately half the artifacts were recovered from this stratum, and it was from here, in pit D at 150 centimeters that a charcoal sample was dated to 590  $\pm$  120 B.C. (GAK 3901).

C. A unit of concentrated fragmented shell in a black/brown deposit approximately 80 centimeters deep, with frequent patches of charcoal and ash. This strata and the one immediately below contained all the fire hearths and the

majority of artifactual material.

D. A layer approximately 20 centimeters thick of dark brown turf and topsoil which was slightly disturbed and which produced several aboriginal artifacts but no historic goods.

#### Artifacts

A total of 274 artifacts were recovered during the excavation of which the majority were made of bone. Only one antler artifact has been positively identified, and the remainder of artifacts were made of stone. Sandstone abraders and whetstones are the most common in the latter category; the hammerstones which are normally so characteristic of coastal sites, are practically absent. 292 obsidian fragments were found, predominantly in the form of debitage, but some show utilisation and retouch. No tools manufactured of obsidian were recovered. There were no shell or tooth artifacts. A complete artifact analysis has not yet been made, therefore the following is but a very general overview of the material.

## Bone artifacts

- Harpoons:** Two bone harpoon heads, both incomplete were found. One, made from a deer long bone, had three unilateral barbs, the first of which was open, the other two closed. It was broken at a line guard notch at the basal end (Fig. 26a).
- The second is only the basal portion of a unilaterally barbed harpoon, with a line guard intact, found at 110 centimeters.
- Harpoon points:** Two points possibly for composite toggling harpoons were catalogued, both from pit E in strata C (Fig. 26c).
- Needles:** One complete needle and one with the tip missing, both with a drilled eye and flat cross section, were also found in layer C of pits D and E (Fig. 26j, k).
- Two bird bone 'needles', each obliquely ground to form an 'eye', were found in pit C, strata C (Fig. 26d, e).
- Awls:** One awl manufactured from the proximal end of a deer ulna. It was found at 67 centimeters in pit D (Fig. 26m).
- One splinter awl made from a deer radius fragment, ground at the tip was found between 140 - 150 centimeters in strata B (Fig. 26l).
- Bipoints:** Analysis of the bipoints has not yet been completed. A total of 30 bone bipoints are listed; the majority of the small ones are in all likelihood fish hook barbs and are included here rather than in a separate category.
- Of the 30 bipoints, six are greater than 4.7 centimeters in length; three have medial constrictions suggesting possible use as fish gorges, and two are 'diamond' shaped (Fig. 26h). The maximum length is 7.2 centimeters; the minimum length 1.9 centimeters; and the mean is 3.7 centimeters.

The vertical distribution ranged from the first 20 centimeters of deposit to a depth of 140 centimeters with a definite concentration at 70 to 80 centimeters. As shown in table 7 pits B and C produced more than half the total number of bipoints. A representative sample of these bone bipoints is shown in figure 26f - i.

Large bone points

There are four bone points manufactured of land mammal long bone fragments. The smallest of these is 6.1 centimeters, the largest 9.4 centimeters long (Fig. 26n); all were found between 140 and 190 centimeters.

Miscellaneous bone points

This group includes all the remaining bone points and identifiable fragments of tips of bone points. As with the bipoints, this preliminary category is very broad and general. At this stage I shall give only a brief description of the various types represented, as further analysis and a larger sampling is necessary for a complete typology.

53 pieces fall in this category 49 of which are complete or points with the tip intact, ranging in size from 1.5 to 4.5 centimeters. The remaining four have only a portion of the tip missing and are readily identifiable.

Within this group the major differences other than size are in the cross-section of the point itself (i.e. round or flat), in the formation of the tip (e.g. ground smooth, faceted) and in the width of the point. Figure 27a - i illustrates a sample of the variety.

Miscellaneous:

The category of miscellaneous bone includes eight identifiable mid-sections of points, five bone splinters which are worked or show signs of wear at the tip, and 53 fragments of worked bone.

Table 7. Horizontal distribution of artifacts - EeSu 5

ARTIFACT TYPE	PIT A	PIT B	PIT C	PIT D	PIT E	PIT F	TOTAL
BONE:							
harpoon <small>UNILATERAL</small>		1		1	1		3
point						2	2
bipoint	2	10	9	6		3	30
large point		2		2			4
misc. point	4	9	15	6	8	11	53
needle		1	2	1			4
awl			1	1			2
misc.	14	11	23	6	6	8	68
TOTAL	20	34	50	23	15	24	166
LITHIC:							
abrader/ <small>WHETSTONE</small>		1	1	1	2	6	11
hammerstone						1	1
gr. slate point						1	1
misc.				2	1	1	4
TOTAL		1	1	3	3	9	17

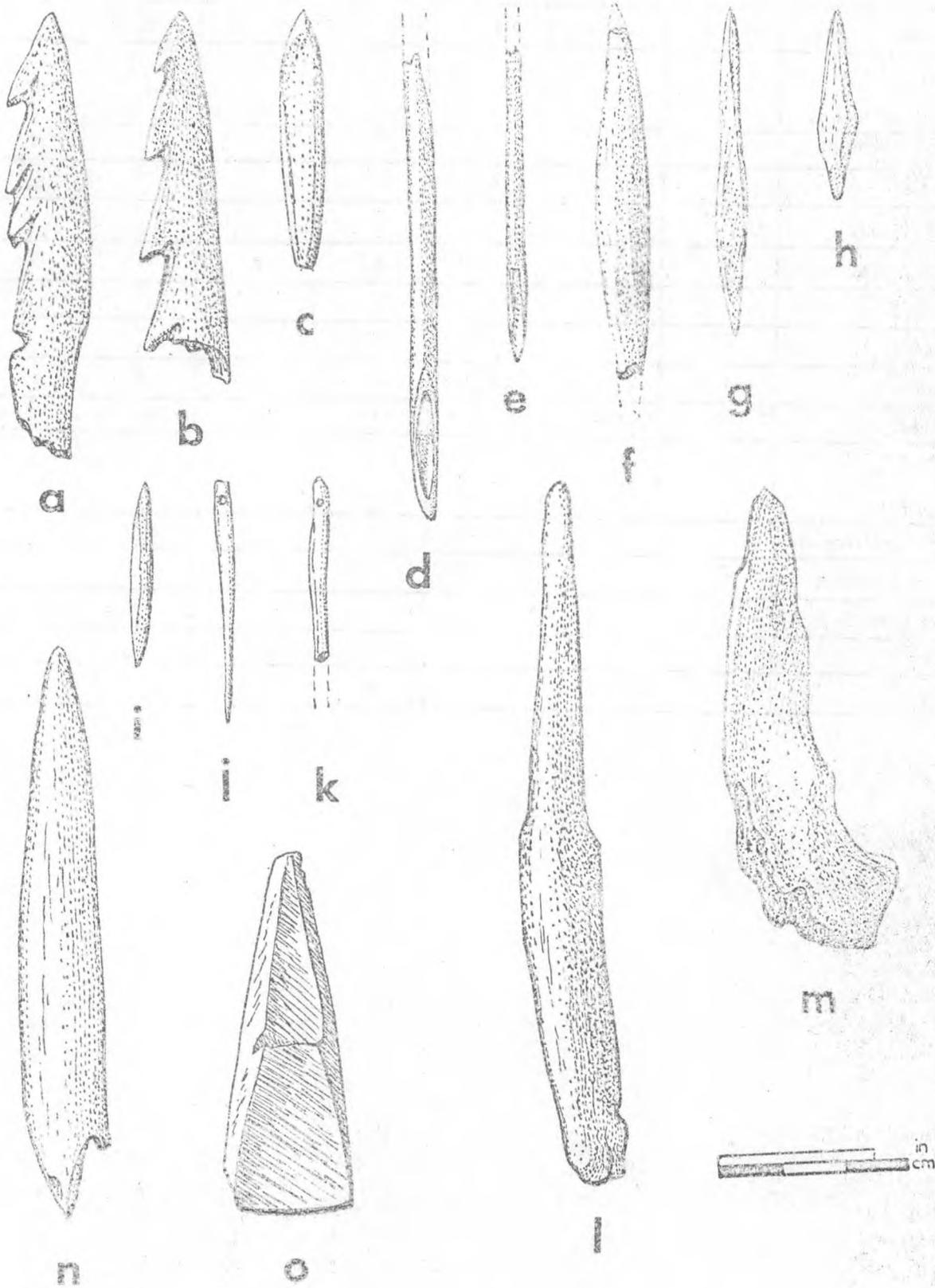


FIG. 26. Artifacts from Esu 5, Port Hardy

## Antler Artifacts

The single antler artifact was a unilaterally barbed harpoon, 6 centimeters long with three barbs, and broken at the fourth barb. It was recovered in strata C at 60 - 70 centimeters (Fig. 25b).

## Stone Artifacts (excluding obsidian)

- Abrasive stones:** There are a total of 11 abraders or whetstones, all of sandstone; none appear to have been intentionally shaped. The six of these varied from a small one approximately 4 by 6 centimeters to a very large heavy one approximately 40 by 20 centimeters. Over half were recovered from between 60 and 90 centimeters in pit F.
- Hammerstone:** Only one hammerstone was found, and that was fragmentary.
- Ground slate point:** The ground slate point from pit F was the only one recovered. It is 5.8 centimeters, thin and triangular in shape (Fig. 26o). It was in strata C at 35 centimeters.
- Miscellaneous:** This includes one small stone flake, two fragments of polished stone which may be portions of hammerstones or mauls, and one large granitic rock with signs of battering on one side.
- Quartz:** Two milky quartz and three clear quartz fragments all from pits D and E were recovered from each strata.
- Obsidian:** Over 95 percent of the 292 small pieces of obsidian were recovered between 100 and 200 centimeters, with the greatest concentration between 140 and 180 centimeters. Pits D and E contained the most although small samples from pits A, C and F were found as well (Table 8).

The obsidian varies noticeably in colour, density and impurities and likely comes from several different sources. No implements are immediately apparent, however I do not want to exclude the possibility that on further analysis some of the flakes now classified as 'retouched' may in fact be small fragments of tools. Of the 292 pieces, 201 are debitage, 62 show some indication of use, and 29 show some retouch.

### Features

There were seven features recorded at LeSu 5, two in pit B, three in pit C and two in pit F. All were fire-hearths, and are best described as concentrations of fine cracked rock with ash, charcoal and, frequently, charred bone and shell in direct association. Three (two in pit B, one in pit C) are well-defined circular hearths; one was in strata C between 70 and 80 centimeters and the other two were in strata B between 140 and 150 centimeters. Pit C produced two other disturbed hearths from each of these layers, and the remaining such features were in pit E. Although no definite living floor was evident, these fire-hearths are situated in the two peak concentrations within the artifact distribution.

One other feature worthy of note was a well-defined depression on the south wall of pit E. The vertical depth of this was approximately 100 centimeters at the deepest point, and it was 'lined' with several rocks about 10 to 20 centimeters from the outer edges. There was a noticeable difference in soil colour and texture here - a loose, dark brown deposit with some decomposed wood and no shell. This feature appears to be very much like a post-hole, and further excavation in the adjacent area would be desirable.

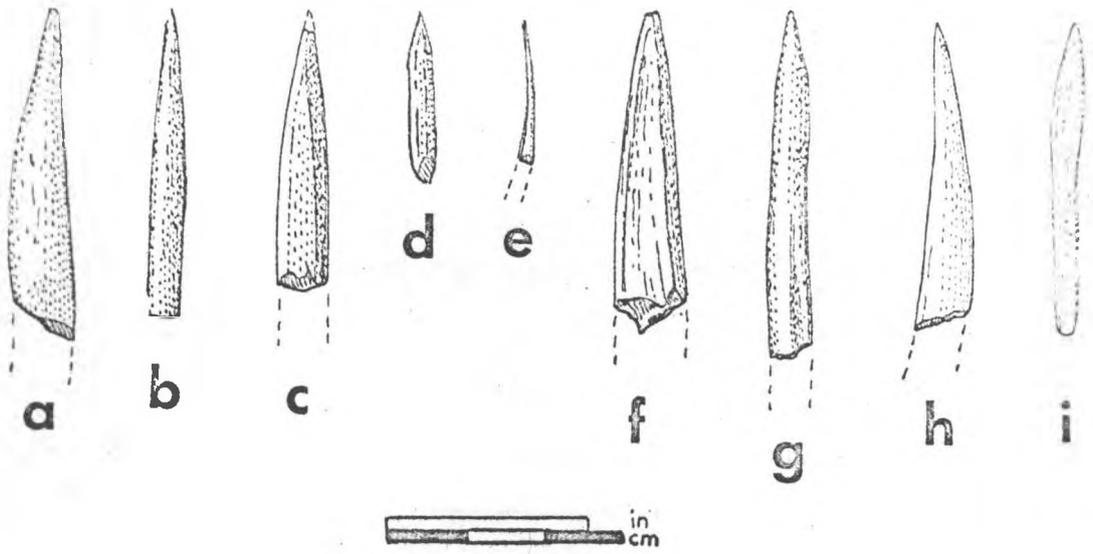


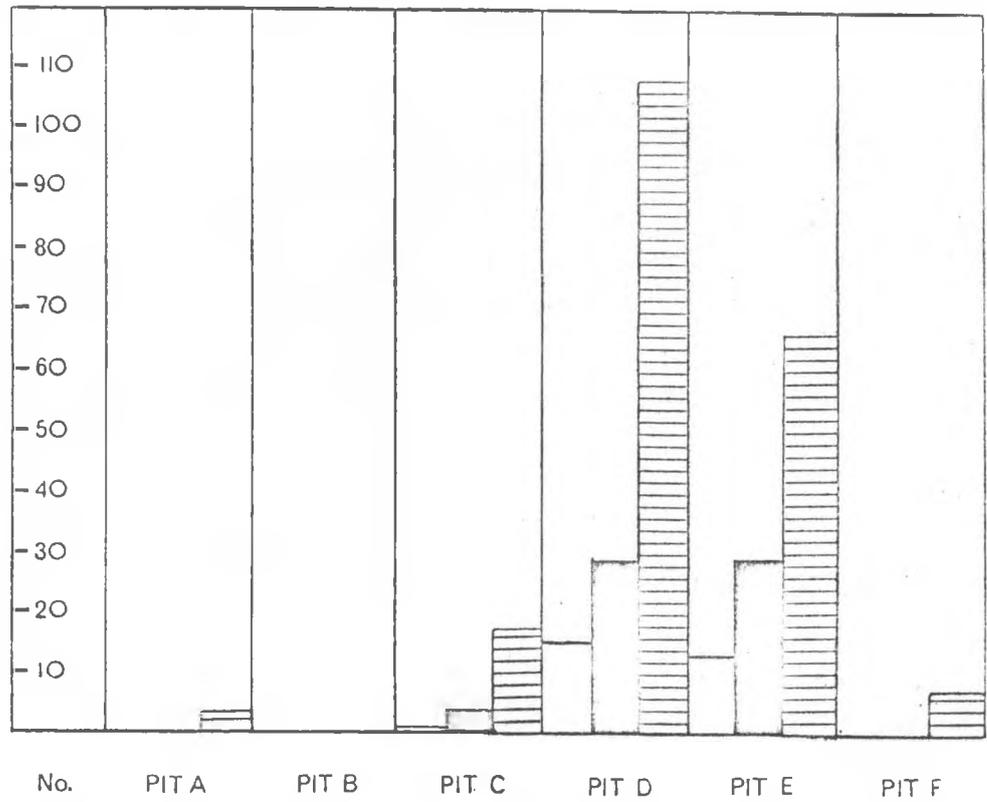
FIG. 27. Artifacts from EeSu 5, Port Hardy

Table 8. Vertical distribution of artifacts at Esu 5 - total  
excludes obsidian and quartz debitage

Depth in cm.	harpoon BONE	harpoon ANTLER	harpoon point	bipoint	large point	misc. point	needle	awl	misc. bone	abrasive stone	hammerstone	gr. slate point	misc. lithic	obsidian flake RETACHED	obsidian flake UTILIZED	Obs. fl. CONTACT	quartz	Total
0-20				2		1			7					1	1	23	1	12
20-30	1			1		1	1		3	2			1			1		10
30-40			1	2		5	1		7			1				2		17
40-50				3		4			6				1	1	1	3		15
50-60			1	2		9			7					1	1	2		16
60-70		1		3		5		1	5	1	1							17
70-80				6		12	1		10	3			1					33
80-90				3		4			2	1								10
90-100				2		3			2	1				1			1	9
100-110	1			1		2			2	2				2	5	9		13
110-120				2		6			7				1	8	15	17		39
120-130				1		2			3					3	9	27		18
130-140				1		1			1					3	3	13		10
140-150					1			1	3					2	10	19		17
150-160									1					3	8	34		12
160-170						1				1				1	2	15		5
170-180									2					4	4	30	1	30
180-190														1	1	2	1	3
190-200														1	2	4	1	3
200-210																		
TOTAL	2	1	2	29	4	50	3	2	65	11	1	1	4	29	62	201	4	269

Exact provenience of 1 bipoint, 1 needle (bird bone) & 3 small bone points is not known.

Table 9. Horizontal distribution of obsidian - FeSu 5



retouched flake
  debitage  
 utilized flake

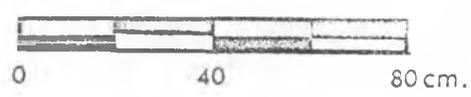
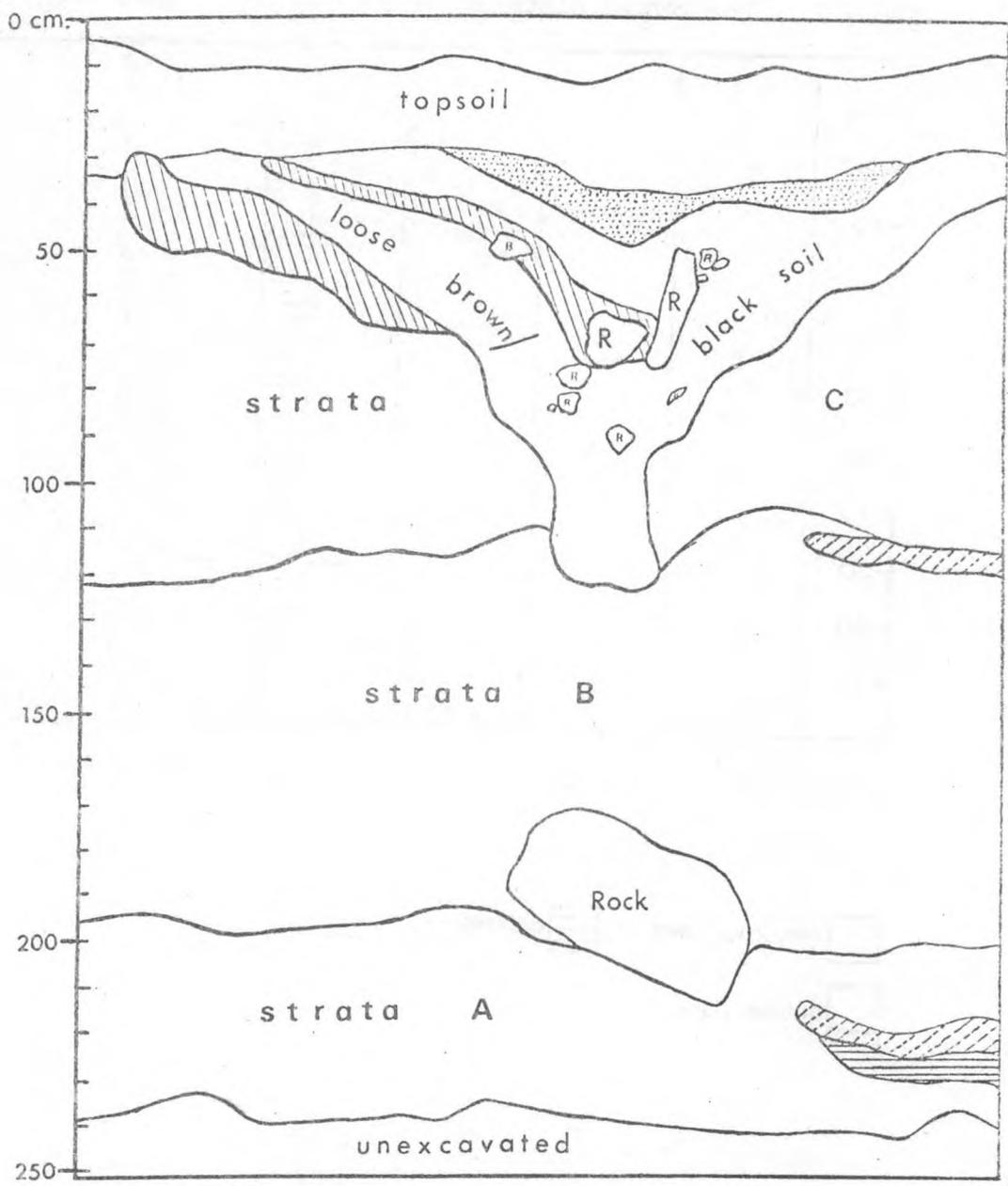


FIG. 28. Simplified profile of the south wall of pit E, EeSu 5

### Burials

One disturbed burial was excavated at EeSu 5. It appeared in pit F between 70 and 80 centimeters. The vertebrae were complete and articulated, as were the flexed long bones of the right leg. However, the remaining skeletal material, although immediately adjacent, was scattered and many bones were totally absent. There was no skull, yet the possibility that it might have been in the south wall of the pit cannot be ignored. Both pelvic bones were recovered, although somewhat deteriorated, and from these and the other remains the individual has been identified as a female, approximately 24 years old at the time of death (T. W. McKern, personal communication). There was no indication of a pit having been used, and no grave goods or artifacts were found in direct association. With the exception of one third molar found in pit D at approximately 170 centimeters there were no other human remains at EeSu 5.

### Faunal Analysis

Faunal analysis is at the initial stage and as such only a few preliminary and general observations may be made. A brief examination of the material indicates that of the land mammals, deer is predominant. Various sea mammals compose another portion of faunal remains, with only harbour seal, whale and sea lion positively identified at this time. As expected at such a coastal midden, assorted fish remains are far more abundant than any other faunal material. Shell samples were collected from each distinct strata in each pit, both for a qualitative sampling and with hopes that some may be processed and dated. An economic reliance on molluscs and some snails as well as fish was evident. Bird remains were present at all levels in all pits, but never in any quantity.

## Discussion

A definite spatial pattern with the site is discernable. First, pit A produced very few definite artifacts, no lithic material and in comparison with the other pits had a much larger concentration of whole and fragmented shell. Pits B and C between them yielded more than 50 percent of the bone artifacts, contained the only five fire-hearths in this area of excavation and produced a minimal amount of obsidian and lithic material. Pits D and E on the other hand, produced a smaller quantity of bone artifactual material and contained approximately 90 percent of the obsidian found at EeSu 5. Pit F had an average sample of bone artifacts, disturbed hearths and lithic material as well as the only burial. Clearly there is a distinct working area toward the eastern edge of the midden at D and E with a 'kitchen' area somewhat to the west.

Obsidian is not naturally found on Vancouver Island, and it must therefore have been traded or brought into the area by some means. Considering this, and the quantity of such material at EeSu 5, one would expect to find at least a minimal sample of tools manufactured of obsidian. None were found however. At this stage the author is inclined to feel that the absence of tools is mainly due to the fact that a large enough area was not excavated and too small an assemblage recovered. Further excavation in the area adjacent to, south and east of pits D and E may provide additional information.

Little archaeological excavation has been conducted in this area, thereby making it very difficult to establish any chronological sequence or correlation with other sites. Capes' work at nearby Fort Rupert in the early 1960's produced a radiocarbon determination of  $3325 \pm 110$  B.C. (Capes 1964:76). Capes' sampling of artifacts was very small (approximately

25 artifacts) and there is no assurance that the single date is accurate. Also, EeSu 1 (Fort Rupert site) produced one bilaterally barbed harpoon, characteristic of the Mayne phase (Carlson 1970:115), and none were found at EeSu 5. The remainder of the material however was quite similar to that at Fort Rupert. Further excavation and analysis of material from EeSu 5 is necessary to determine whether or not any temporal or cultural correlation is suggested between the two sites.

It is most important that excavations continue in the Port Hardy/Fort Rupert area in order that the area's prehistory may be recorded and hopefully a cultural and chronological sequence established before the remainder of EeSu 5 and the many other endangered sites in the area are destroyed.

#### Acknowledgements

The students who participated in the excavations were Jean Bussey, David Butlin, Greg Calder, Shawn Herman, Brian Seymour and Stuart Syme. Very special thanks are due to Dave O'Connor (O'Connor Logging and Quatse Investment and Development Ltd.) for his constant interest and support of our work and for his unceasing generosity. Also, I would especially like to thank Marvin and Louise Vestad whose home on the point at EeSu 5 was open to the crew at all times and who were always most generous and helpful.

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