# Test Excavations at Randomly Selected Sites in Eastern Queen Charlotte Strait

DONALD H. MITCHELL

This paper reports on a project that forms part of a long-range investigation of Southern Kwakiutl culture history. Site location surveys within the Queen Charlotte Strait-Johnstone Strait area (Mitchell, 1969, 1972) have provided a reasonably good picture of the number and distribution of at least the more obvious kinds of archaeological sites.

The number of sites available for investigation is impressive, posing some very practical problems to be considered in the design of subsequent, presumably more intensive, research in the area. What is currently being followed are two distinctly different lines of investigation — one making use of Kwakiutl ethnographic and historic data to structure "direct historic" projects, the other using the roster of sites provided by the earlier surveys as a population to be sampled. It is useful to distinguish between these lines of enquiry because, although they do complement one another and should both be part of a comprehensive archaeological study, they have quite different objectives and require different sampling procedures.

The first approach takes as its starting point the fact that no sites in Southern Kwakiutl territory were occupied the year round. Kwakiutl ethnography informs us that each local group moved several times in the course of a year as first one and then another of the various resource locations was visited. The "direct historic" avenue of investigation, then, is designed to examine representatives of each of these seasonal sites in order to learn what kind of archaeological assemblage will be associated with what kind of seasonal activity. Selection of suitable sites to excavate is a fairly simple matter. One needs sites whose occupancy and use are reasonably accurately known — e.g., winter village sites, eulachon fishing and processing sites, seaweed gathering camps, halibut fishing camps and salmon fishing settlements.

Ideally, these should all come from the territory held or used by a single Kwakiutl local group, to reduce the possibility that the intersite variability results from local group cultural differences. Ideally, also, one



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would sample the seasonal assemblages of each of the local groups, specifically to identify those intergroup cultural differences, if they exist in any significant way. When we consider that there were, at contact, from twenty to twenty-five Southern Kwakiutl local groups, each with five to seven kinds of seasonal sites, the size of the archaeological task becomes evident. Even if we are considering only the protohistoric and historic period, we must look at from 100 to 175 sites to sample known intergroup and seasonal variability.

A start was made on this kind of investigation in 1974 with excavations at Hopetown, winter village of the Kwawwawaineuk, the local group inhabiting the Drury Inlet, Mackenzie Sound area. Work that season recovered about 850 artifacts and much faunal material from three adjacent, checkerboard 2 x 4 m excavation units. By the end of the season, two of these units had been carried to about 4 m depth with no signs of bottoming-out.

The second investigation strategy is very different in that it has as its objective discovery of the probable range of archaeological material to be encountered in the Southern Kwakiutl area. Given the large number of sites to be considered, the question of sample design becomes very important. The sample of sites to be excavated must be selected in such a way that it reasonably can be used to make inferences about the nature of archaeological resources in all sites — whether excavated or unexcavated.

In developing this research approach, the entire Southern Kwakiutl area was first divided into sampling units (much like census tracts). It was assumed that eventually all of these would have to be sampled before generalizations could be made to the entire area. Within one approximately triangular unit containing ninety-nine excavatable sites (excluding rock art sites, canoe runs, etc.) in the southeastern Queen Charlotte Strait archipelago, a 13 percent, stratified random sample was selected for test excavations. The thirteen sites were drawn proportionately from three categories as follows: (1) shell-middens with house platforms (these are generally large — three sites); (2) shell-middens without house platforms (these are generally small — eight sites): (3) refuge sites (steep islets and hillocks with shell-midden — two sites).

Field-work began on this sample in 1973, in the form of a month-long large-scale test excavation project staffed and serviced by Armed Forces personnel as a training exercise. Seven of the randomly selected sites (Figure 31) were examined, including two of the three shell-middens with house platforms, three of the eight without, and both refuge sites. In addition, a non-randomly selected refuge site was examined.

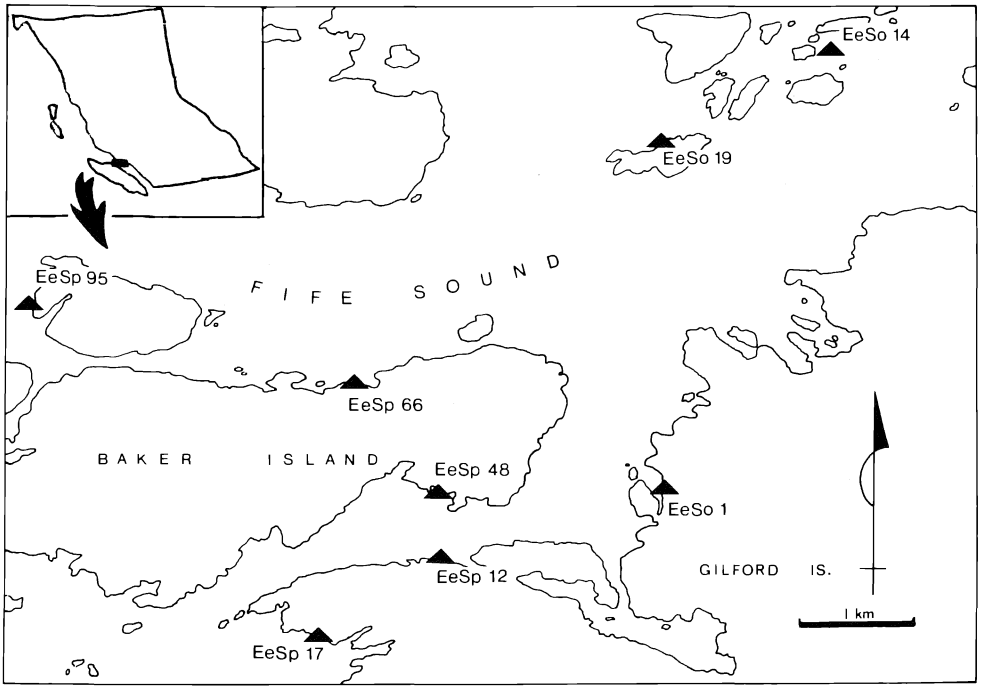


FIGURE 31. Location of sites investigated, spring 1973, in southeastern Queen Charlotte Strait.

Sites were chosen at this stage because of their proximity to the base camp. (They had to be within reasonable travelling time from the base facilities at Echo Bay.) Until the rest of the sites in the random sample have been tested, we are not justified in generalizing the results to the sampling unit, but as work will not likely resume in the near future, it seems desirable to tender at least a preliminary report on the project.

Each site is discussed in turn before some concluding remarks are offered on project results to 1974. As the crews were inexperienced in archaeological work, artifact tallies in the accompanying tables should be considered preliminary statements only. Analysis of the level-bag material is only partly completed but has already contributed a number of items to the artifact assemblages.

## PROJECT RESULTS — SHELL-MIDDENS WITH HOUSE PLATFORMS

### EeSo 1

The largest site examined during this first phase of the project was the much-disturbed shell-midden at the head of Echo Bay on the northwest

shore of Gilford Island. Reportedly a traditional Kwicksutaineuk village (Rohner, 1967:34), it was for many years the location of a British Columbia Forest Service base. This installation, along with an adjacent boatshed, marine railway, school and playground, has considerably altered portions of the site. Despite this disturbance, it was still possible to discern a row of three or four house-platforms along the forward edge of the midden, in front of the remaining Forest Service buildings.

The platform with the most distinct outline was selected for examination — initially with the idea that only the assemblage associated with the dwelling would be collected. As the surface proved to have been disturbed and as no trace of the house floor could be located, this restriction was soon abandoned and the excavation concentrated instead on the underlying deposits.

The excavation unit was 2 x 5 m and at its deepest it reached 5.90 m beneath the surface. Unfortunately, water was encountered before the bottom of the shell deposits was found. To a depth of 2.30 m the profiles show deposits typical of living floors, with compact crushed shell interspersed with layers that are predominately charcoal, ash and crushed shell. Although there is differentiation into strata below 2.30 m, the layers are thicker and comprise primarily shell, including a high percentage of barnacle. The portion of EeSo 1 sampled in 1973 seems to have been a living area for the later period of site use and a dump region for at least part of the earlier period, but until the bottom has been reached we cannot say what the initial use was.

Artifacts recovered from the site are listed in Table 8 and some are illustrated in Figures 32 and 33. Although there is no clear separation in the excavation unit, chipped stone categories are relatively more prominent in the lower deposits than in the upper layers. The blue bead is from the upper 20 cm.

Eleven artifacts of obsidian were submitted for analysis under the Simon Fraser University obsidian source project. Four were of Type A and seven of Type B, both distinctive obsidian types whose sources are not yet known. Eight specimens came from the test excavations (the rest were surface finds) at depths ranging from 2.0 to 4.2 m. There was no correlation between type and depth.

### EeSp 48

EeSp is located on the wooded north shore of a small, well-protected cove on the Cramer Passage side of Baker Island. As it proved to be larger than originally estimated, the randomly chosen excavation units

TABLE 8

*Artifacts from EeSo 1*

| *Class* | *Number* | *Percent* |
|---|---|---|
| STONE | | |
| *Chipped Stone* | [43] | [32.22] |
| Leaf-shaped point (Fig. 32g) | 1 | .75 |
| Cores (Fig. 32e, k) | 4 | 3.00 |
| Miscellaneous bifaces (Fig. 32a-d) | 17 | 12.78 |
| Flake unifaces (Fig. 32f, h) | 21 | 15.79 |
| *Ground Stone* | [ 1] | [ .75] |
| Celt (Fig. 32j) | 1 | .75 |
| *Packed and Ground Stone* | [ 9] | [ 6.77] |
| Hammerstones | 6 | 4.51 |
| Abrasive stones | 1 | .75 |
| Sandstone saw (Fig. 32l) | 1 | .75 |
| Drilled graphite pendant (Fig. 32i) | 1 | .75 |
| *Mineral* | [ 3] | [ 2.25] |
| Red ochre | 3 | 2.25 |
| BONE | [59] | [44.36] |
| Barbed bone points (Fig. 33a, b) | 2 | 1.50 |
| Composite toggling harpoon valves (Fig. 33r-t) | 3 | 2.25 |
| Spindle whorl (Fig. 33m) | 1 | .75 |
| Bipoints (Fig. 33g-j) | 5 | 3.75 |
| Single points (Fig. 33c, e) | 2 | 1.50 |
| Fragments of bone points (Fig. 33d, f, k, l, n) | 12 | 9.02 |
| Bone splinter awls (Fig. 33u-x) | 13 | 9.77 |
| Ulna tool | 1 | .75 |
| Worked mammal canines (Fig. 33o) | 5 | 3.75 |
| Worked mammal incisors | 2 | 1.50 |
| Beaver tooth tools (Fig. 33p, q) | 2 | 1.50 |
| Miscellaneous worked bone (Fig. 33y) | 12 | 9.02 |
| ANTLER | [ 1] | [ .75] |
| Worked antler tine | 1 | .75 |
| SHELL | [16] | [12.03] |
| Sea mussel shell celts (Fig. 33aa-cc) | 7 | 5.26 |
| Sea mussel shell knives | 2 | 1.50 |
| Worked sea mussel shell | 6 | 4.51 |
| Olivella shell bead (Fig. 33z) | 1 | .75 |
| TRADE GOODS | [ 1] | [ .75] |
| Blue bead | 1 | .75 |
| Total | 133 | 100% |

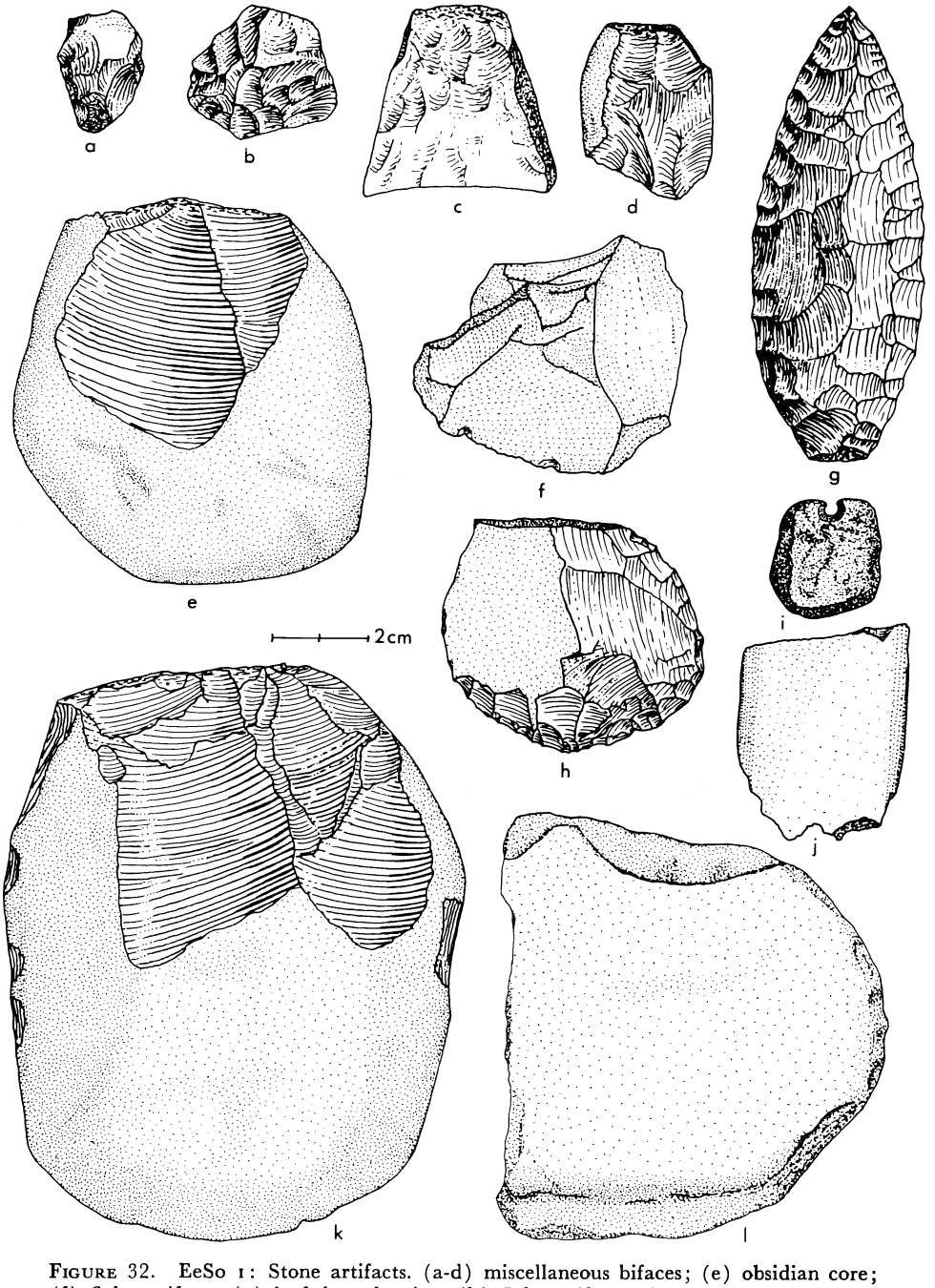


FIGURE 32. EeSo 1: Stone artifacts. (a-d) miscellaneous bifaces; (e) obsidian core; (f) flake uniface; (g) leaf-shaped point; (h) flake uniface; (i) drilled graphite pendant; (j) celt fragment; (k) basalt core; (l) sandstone saw.

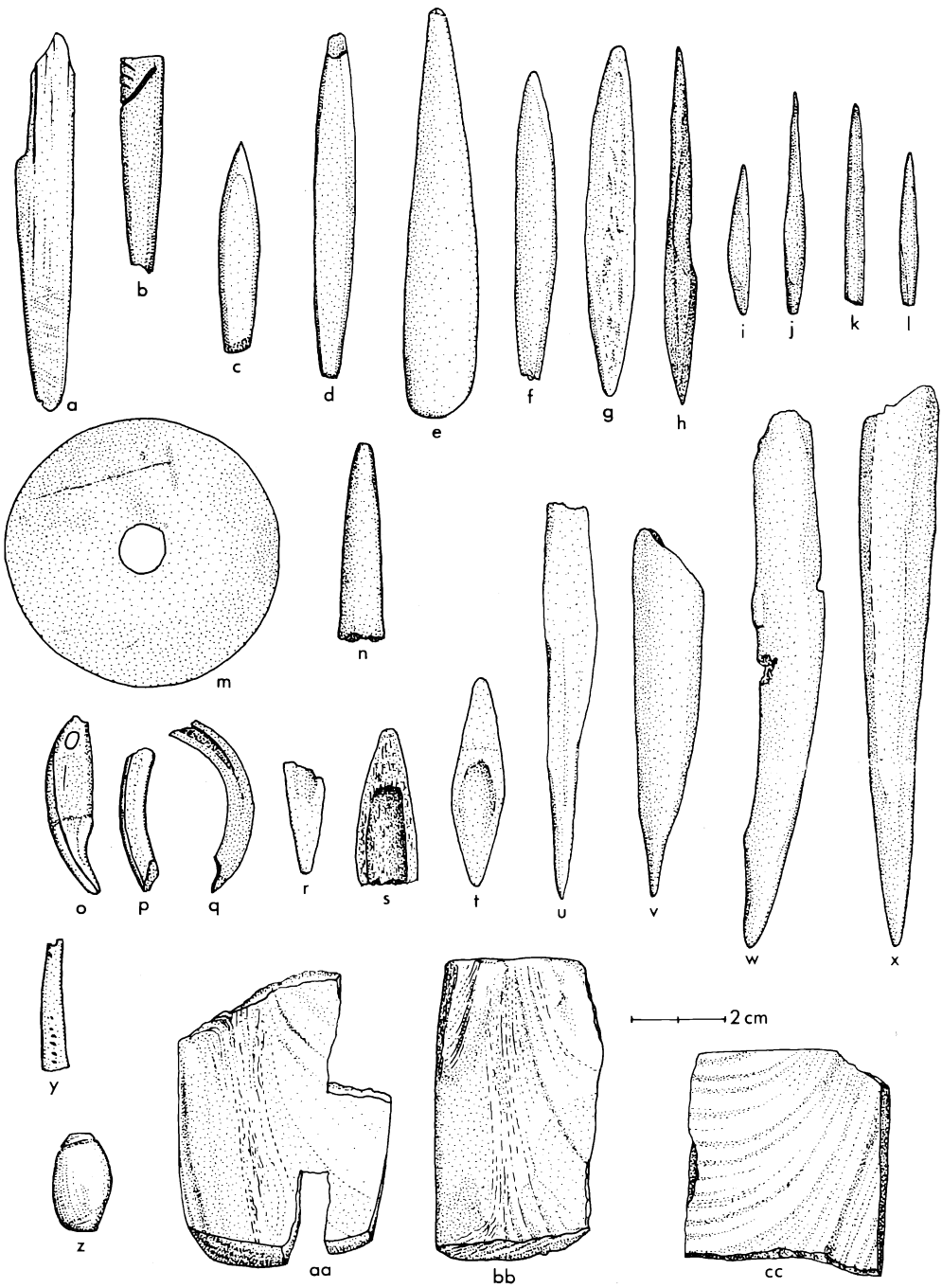


FIGURE 33. EeSo 1: Bone, antler and shell artifacts. (a, b) fragments of barbed bone points; (c, e) bone singlepoints; (d, f, k, l, n) fragments of bone points; (g-j) bone bipoints; (m) bone spindle whorl; (o) worked mammal canine (p, q) beaver tooth tools; (r-t) bone composite toggling harpoon valves; (u-x) bone splinter awls; (y) miscellaneous drilled and incised bone; (z) olivella shell bead; (aa-cc) sea mussel shell celt fragments.

can be said to represent only the northern portion of the site — a segment that is about 14 x 65 m.

The two 1 x 3 m test cuts sampled a deep (2.2 m) and a fairly shallow (1.2 m) part of the midden and yielded a very few artifacts. The eleven included: one basalt biface (Figure 34i); one obsidian (type B) pebble spall of *pièce esquillée* form (Figure 34h); one hammerstone (Figure 34g); two bone composite toggling-harpoon valves (Figure 34l); one long sea-mammal bone shaft (Figure 34j); one sea-lion canine pendant (Figure 34); three miscellaneous fragments of worked bone; and one worked antler tine tip (Figure 34m).

## SHELL-MIDDENS WITHOUT HOUSE PLATFORMS

### EeSo 19

This extensive but generally quite shallow site is situated on the inside slope of a rocky peninsula forming a small cove on the north shore of Denham Island in the Burdwood Group. Separated from it by a substantial rocky bluff at the base of the peninsula is EeSo 18, a deeply buried patch of shell-midden stretching an unknown distance across the lowland at the head of the cove. A homestead was situated at the head of the cove prior to World War I and both this area and the portion occupied by EeSo 19 were logged in the decade after the war, but there seems to have been little disturbance of either site.

Three 1 x 3 m test units were randomly selected from the approximately 200 x 35 m site area. In addition, a 2 x 2 m unit was positioned to sample a fairly level and possibly deep area. This part of the site did indeed prove to be deep, as the test cut reached 3.3 m before encountering basal gravels.

The artifacts recovered (Figure 34) (almost all from the deep excavation unit) are listed in Table 9. The small fragment of sheet copper was found on the beach and may not relate to the Indian occupancy of the site. Two pieces of obsidian submitted for analysis were of Type A and Type B.

### EeSp 17

Situated at the head of Retreat Passage on the west side of Gilford Island, EeSp 16 and EeSp 17 were neighbouring small sites drawn in the random selection. In the closing days of the project, time was found to examine only one of these and the toss of a coin selected the more easterly midden — EeSp 17.

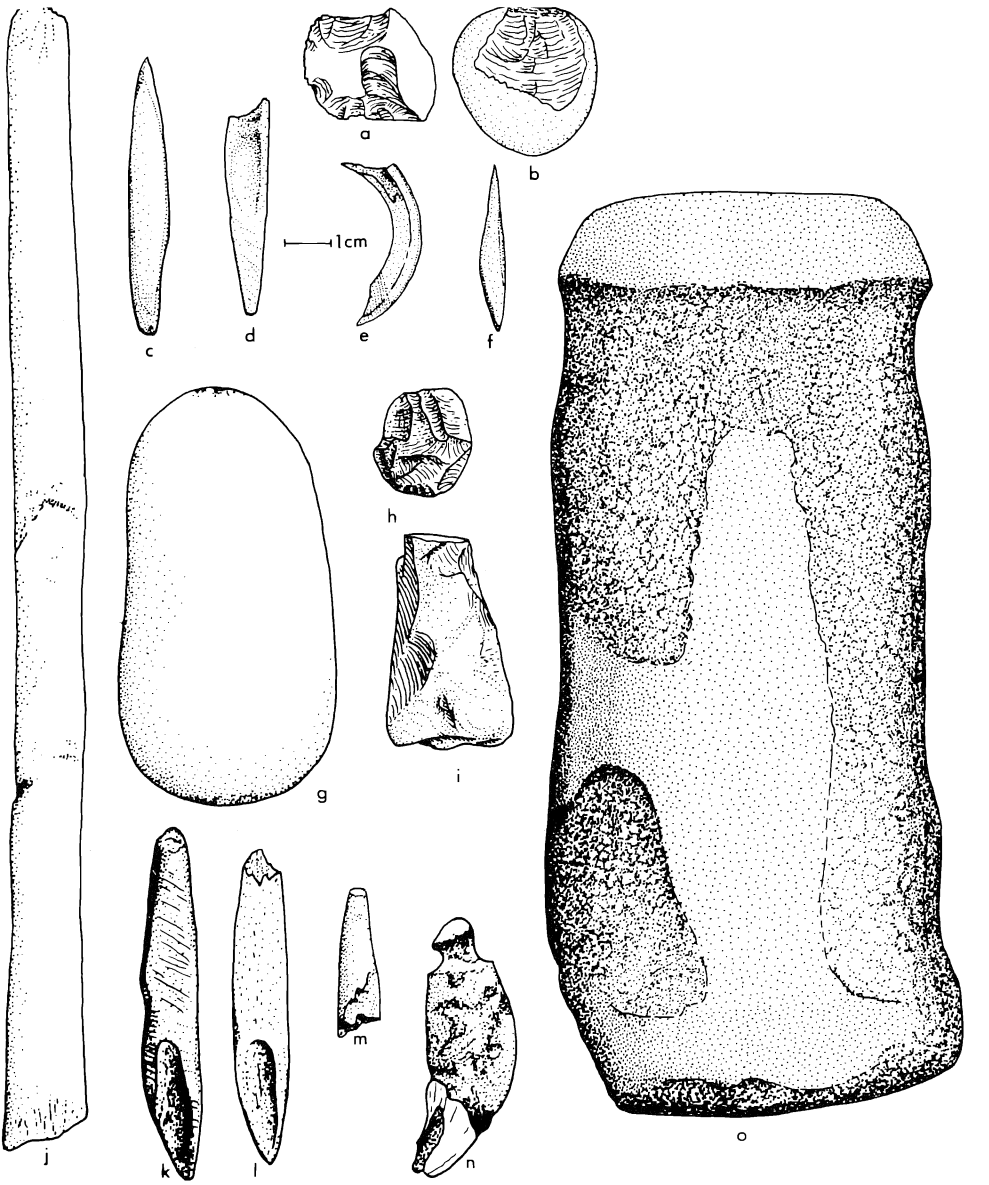


FIGURE 34. Artifacts: EeSp 17 (a-f); EeSp 48 (g-n) and EsSp 95 (o). (a) obsidian pebble spall of *pièces esquillées* form; (b) small obsidian pebble with flake detached from one end; (c) bone singlepoint; (d) antler composite toggling harpoon valve; (e) beaver tooth tool; (f) bone bipoint; (g) hammerstone; (h) obsidian pebble spall of *pièces esquillées* form; (i) basalt biface; (j) long sea-mammal bone shaft; (k, l) bone composite toggling harpoon valves; (m) worked antler tine tip; (n) sea-lion canine pendant; (o) hand-maul in process of manufacture.

TABLE 9

*Artifacts from EeSo 19*

| *Class* | *Number* | *Percent* |
|---|---|---|
| STONE | | |
| *Chipped Stone* | [ 2] | [ 6.25] |
| Flake unifaces (Fig. 35a, b) | 2 | 6.25 |
| *Pecked and Ground Stone* | [ 6] | [18.75] |
| Hammerstones (Fig. 35d) | 3 | 9.38 |
| Edge-battered cobble | 1 | 3.13 |
| Abrasive stones | 2 | 6.25 |
| BONE | [15] | [46.88] |
| Composite toggling harpoon valve (Fig. 35i) | 1 | 3.13 |
| Bone splinter awls (Fig. 35j, k) | 3 | 9.38 |
| Ulna tools (Fig. 35l) | 6 | 18.75 |
| Beaver tooth tool (Fig. 35g) | 1 | 3.13 |
| Miscellaneous worked bone (Fig. 35c) | 4 | 12.50 |
| ANTLER | [ 1] | [ 3.13] |
| Worked antler tine | 1 | 3.13 |
| SHELL | [ 7] | [21.88] |
| Sea mussel shell celts (Fig. 35f) | 3 | 9.38 |
| Sea mussel shell knives (Fig. 35e) | 2 | 6.25 |
| Worked sea mussel shell | 1 | 3.13 |
| Worked rock scallop shell (Fig. 35h) | 1 | 3.13 |
| TRADE GOODS | [ 1] | [ 3.13] |
| Sheet copper | 1 | 3.13 |
| Total | 32 | 100% |

Limits of the deposit were determined with difficulty as the small bench on which the site was situated was covered with a dense and lively growth of salal. The site was eventually determined to be about 14 x 10 m. The two randomly chosen 2 x 2 m test units were adjacent and the deposits reached a maximum of 1.2 m depth. They contained the following small assemblage of artifacts: one small obsidian pebble with a flake detached from one end (Figure 34b); one obsidian (type B) pebble spall of *pièce esquillée* form (Figure 34a); one bone bipoint (Figure 34f); one bone singlepoint (Figure 34c); one beaver-tooth tool (Figure 34e), and one antler composite toggling-harpoon valve (Figure 34d).

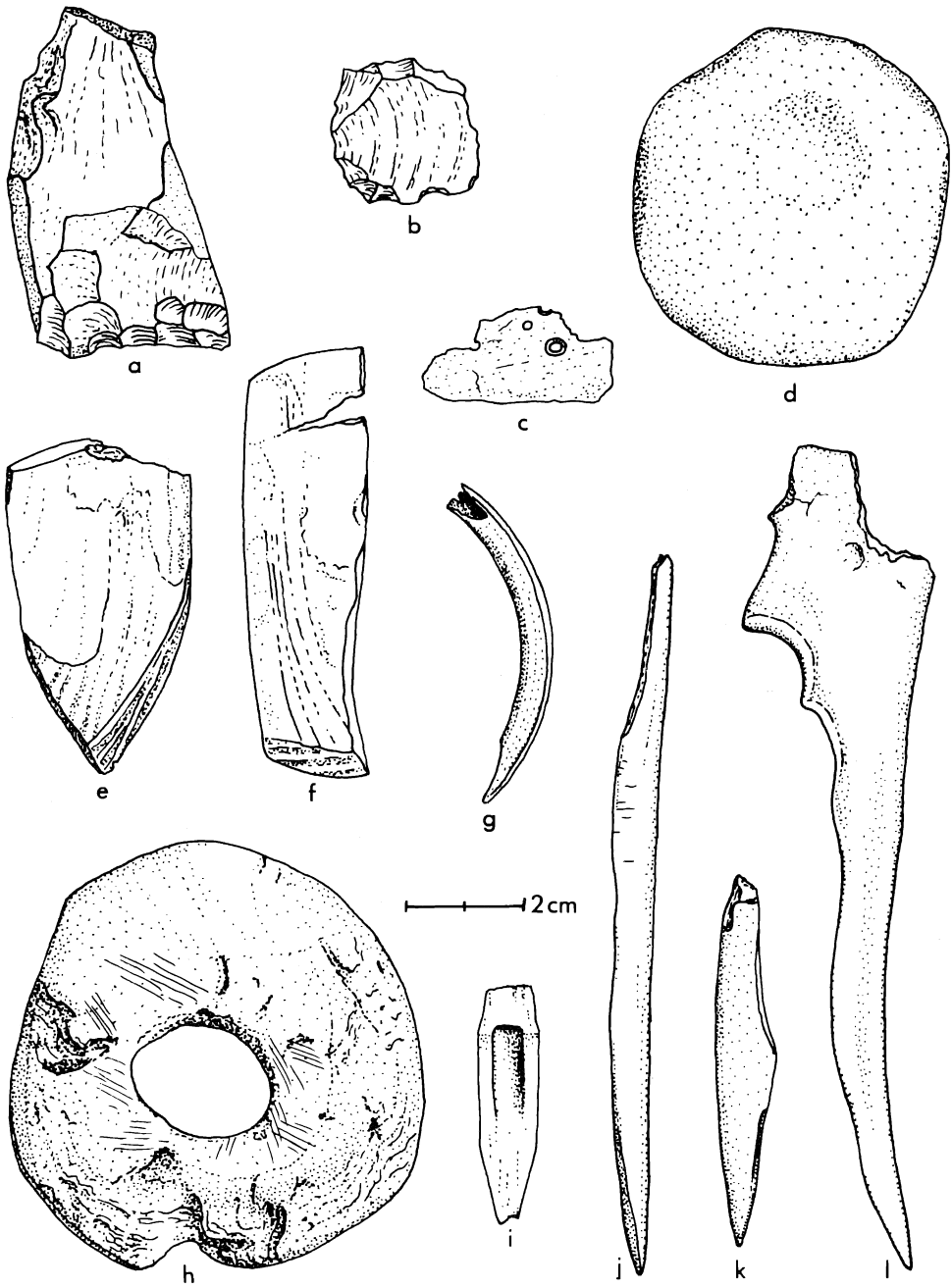


FIGURE 35. Artifacts, EeSo 19. (a, b) flake unifaces; (c) thin, drilled bone platelet; (d) hammerstone; (e) sea mussel shell knife; (f) sea mussel shell celt; (g) beaver tooth tool; (h) worked rock scallop shell; (i) bone composite toggling harpoon valve; (j, k) bone splinter awls; (l) deer ulna tool.

## EeSp 66

This very small patch of shell-midden lies at the head of a small cove on the north shore of Baker Island. The two randomly selected 2 x 2 m test cuts disclosed that the deposits were very shallow — a maximum of 25 cm. No pre-contact artifacts were recovered, the only objects discovered being a broken Eno's Fruit Salts bottle and its glass stopper.

### REFUGE SITES

## EsSo 14c

When the eastern Queen Charlotte Strait area was surveyed, three shell-middens on three closely situated islets in the eastern part of the Burdwood Islands were recorded as site EeSo 14. The outer of these site segments (EeSo 14c) is a "defensive" islet or refuge bearing several house platforms and a distinct house outline at one end. Parts of it are heavily wooded with cedar.

For purposes of sampling, three areas were distinguished: an elevated central portion (the major part of the site); a lower bench at the western end; and a bench at the east end bearing the very distinct outline of a house. Two 2 x 2 m units were randomly selected from the central area, and a 2 x 2 m test cut was similarly chosen from the western bench. Another 2 x 2 m and a 1 x 3 m cut were located at the northwest corner and just inside the northern edge of the house outline.

In some parts of the site, the deposits proved to be unexpectedly deep (to nearly 2 m) as it had been thought the rocky islet was only lightly capped with shell-midden. Work in the house outline area was not carried to any great depth.

Table 10 presents a summary of the artifact classes recovered from the site. All five units contained trade goods in their upper layers (Figure 36). The test cuts in the house outline disclosed a 10 cm diameter post hole near the northwest corner and remains of two substantial planks set on edge at the north and west margins of the outline.

## EeSp 95a

Two of three small, rocky islets off the west coast of Davies Island, Fife Sound, are capped with the shell-midden deposits that refuge site EeSo 95 comprises. The islets, joined by a ridge of shell beach at low tide, are both steep-sided, moderately wooded with cedar, and bear several clear house platforms — five on the more northerly, slightly lower islet, and seven on the southern islet.

TABLE 10

*Artifacts from EeSo 14c*

| *Class* | *Number* | *Percent* |
|---|---|---|
| STONE | | |
| *Chipped Stone* | [ 1] | [ 1.67] |
| Flake uniface (Fig. 36b) | 1 | 1.67 |
| *Ground Stone* | [ 1] | [ 1.67] |
| Celt (Fig. 36a) | 1 | 1.67 |
| *Pecked and Ground Stone* | [ 4] | [ 6.67] |
| Hammerstones (Fig. 36c) | 4 | 6.67 |
| *Mineral* | | |
| Red ochre | [ 7] | [11.67] |
| | 7 | 11.67 |
| BONE | [31] | [51.67] |
| Foreshafts (Fig. 36t) | 2 | 3.33 |
| Punch (Fig. 36m) | 1 | 1.67 |
| Bone splinter drill (Fig. 36f) | 1 | 1.67 |
| Ulna tools | 5 | 8.33 |
| Bone bipoints (Fig. 36g, n) | 2 | 3.33 |
| Bone single points (Fig. 36h-l) | 5 | 8.33 |
| Fragments of bone points | 2 | 3.33 |
| Worked mammal canines | 3 | 5.00 |
| Beaver tooth tools (Fig. 36d, e) | 2 | 3.33 |
| Miscellaneous worked bone | 8 | 13.33 |
| ANTLER | [ 6] | [10.00] |
| Composite toggling harpoon valves (Fig. 36r, s) | 2 | 3.33 |
| Miscellaneous worked antler | 4 | 6.67 |
| SHELL | [ 4] | [ 6.67] |
| Sea mussel shell knife | 1 | 1.67 |
| Worked sea mussel shell | 1 | 1.67 |
| Olivella shell | 1 | 1.67 |
| Fragment of perforated barnacle | 1 | 1.67 |
| TRADE GOODS | [ 6] | [10.00] |
| Gun flint (Fig. 36q) | 1 | 1.67 |
| Thin glass fragment | 1 | 1.67 |
| Iron adze or chisel blade | 1 | 1.67 |
| Iron fragment | 1 | 1.67 |
| Chinese coin (Fig. 36p) | 1 | 1.67 |
| Rolled copper "tinkler" (Fig. 36o) | 1 | 1.67 |
| Total | 60 | 100% |

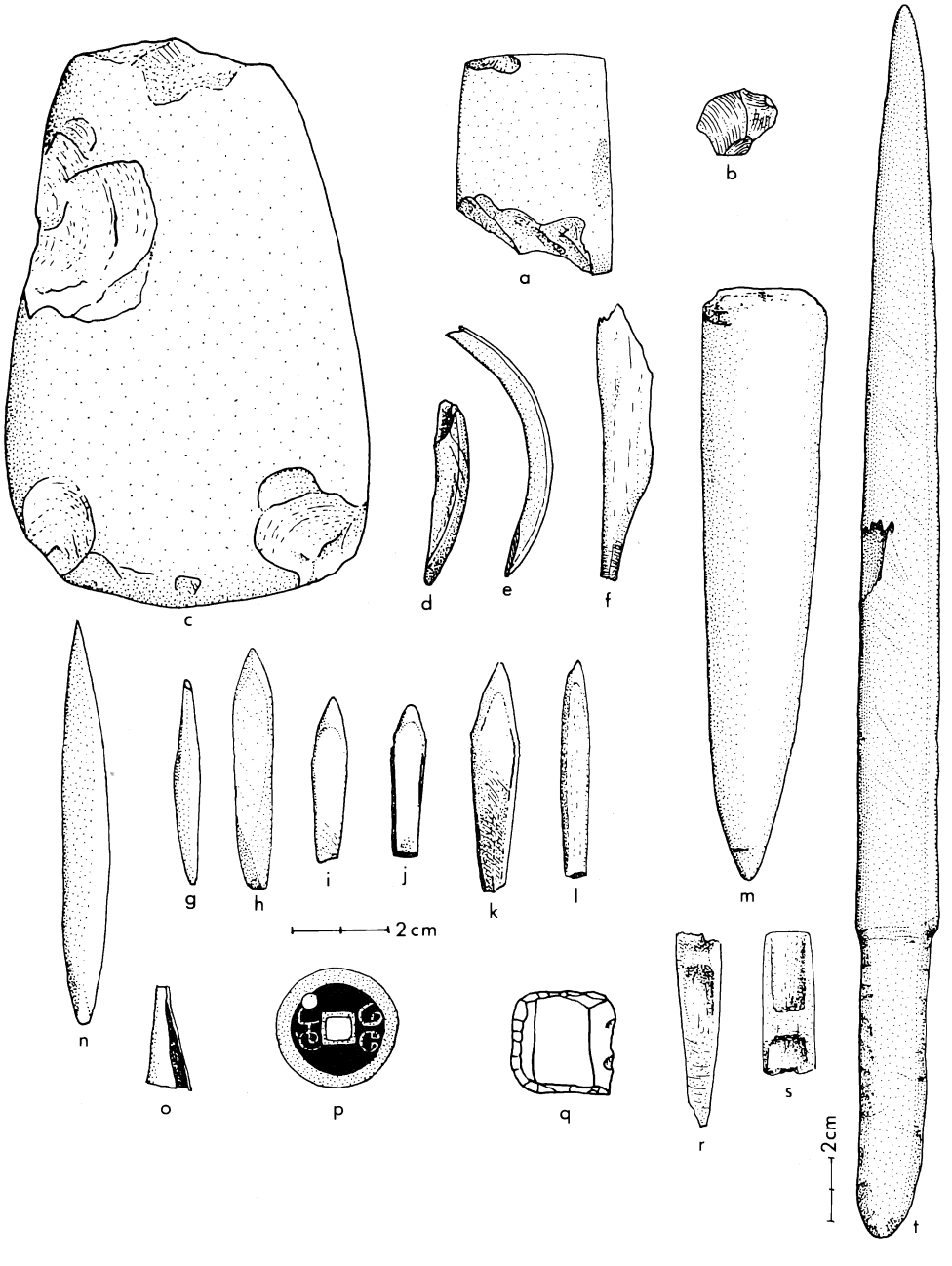


FIGURE 36. Artifacts, EeSo 14c. (a) celt; (b) flake uniface; (c) hammerstone; (d, e) beaver tooth tools; (f) bone splinter drill; (g, n) bone bipoints; (h-l) bone single-points; (m) bone punch; (o) rolled copper "tinkler"; (p) Chinese coin; (q) gun-flint; (r, s) antler composite toggling harpoon valves; (t) foreshaft.

A stratified random sample was selected from the two groups of house platforms and within each sampling unit thus chosen a 1 x 3 m test cut was laid out. Travel time to the most distant site proved to be longer than expected and the midden deeper than originally thought, with the result that only those excavation units on the south islet (EeSp 95a) could be completed within one month. These reached depths of 2.4 and 3.1 m before rock was encountered.

Comparatively few artifacts were found, although the small assemblage includes a number of interesting items. Table 11 lists the classes represented and Figures 34 and 37 provide some illustrations. The large bone bipoint (Figure 37k) has what appears to be a single-shouldered stem. The smaller spindle-whorl (Figure 37p) is fashioned from a mammal vertebra. As with the other sites, randomly chosen column samples were collected for later analysis.

TABLE 11

*Artifacts from EeSp 95a*

| *Class* | *Number* | *Percent* |
|---|---|---|
| STONE | | |
| *Pecked and Ground Stone* | [ 3] | [10.71] |
| Hammerstone | 2 | 7.14 |
| Hand maul (Fig. 34o) | 1 | 3.57 |
| *Mineral* | [ 4] | [14.29] |
| Red ochre | 4 | 14.29 |
| BONE | [18] | [64.29] |
| Barbed bone point (Fig. 37l) | 1 | 3.57 |
| Spindle whorls (Fig. 37p, q) | 2 | 7.14 |
| Bone single points (Fig. 37b-e, h) | 7 | 25.00 |
| Large bone bipoint (Fig. 37k) | 1 | 3.57 |
| Fragments of bone points (Fig. 37j, n) | 2 | 7.14 |
| Splinter awls (Fig. 37i, m, o) | 3 | 10.71 |
| Ulna tool (Fig. 37a) | 1 | 3.57 |
| Miscellaneous worked bone | 1 | 3.57 |
| ANTLER | [ 3] | [10.71] |
| Composite toggling harpoon valves (Fig. 37f, g) | 2 | 7.14 |
| Worked antler tine | 1 | 3.57 |
| Total | 28 | 100% |

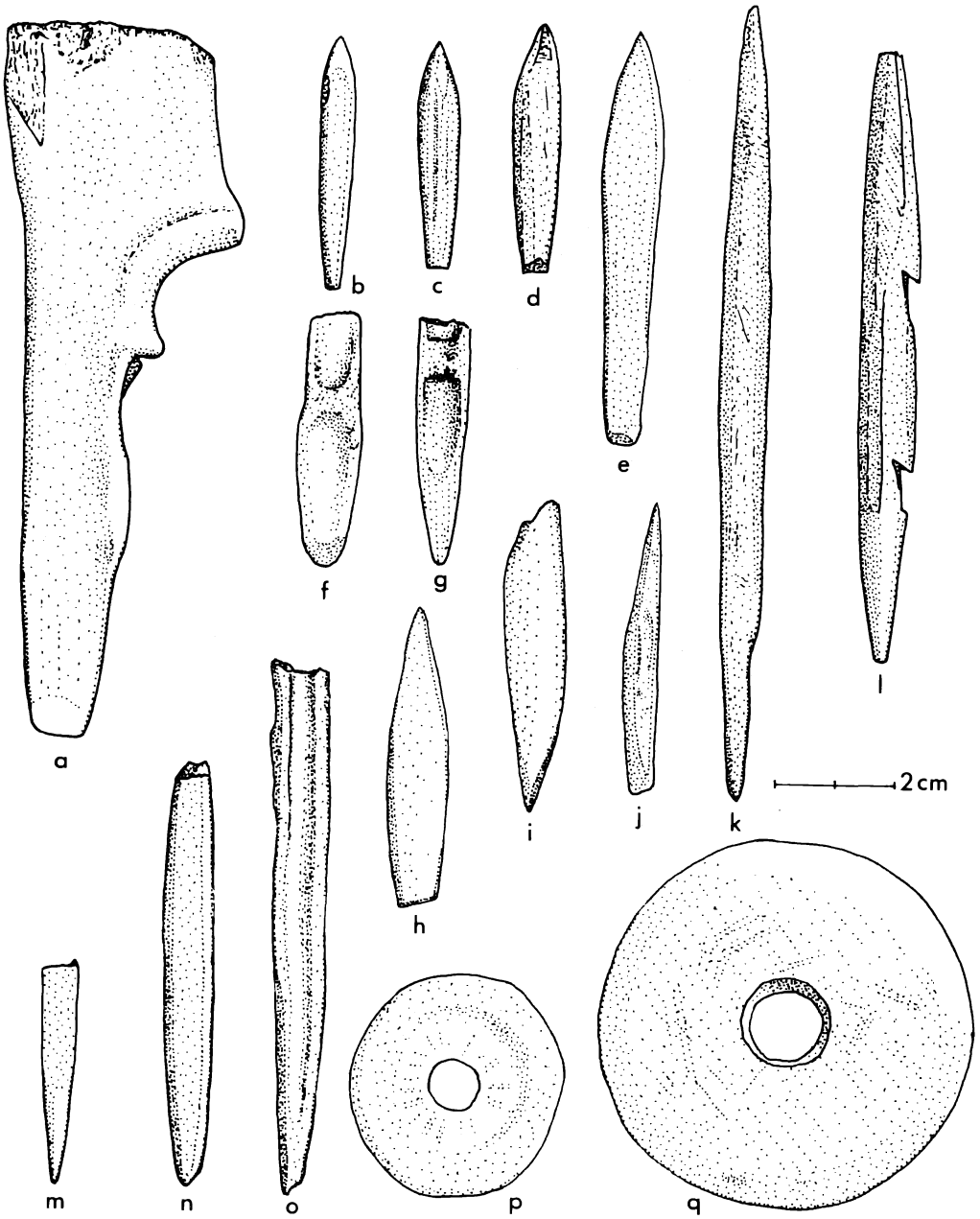


FIGURE 37. Artifacts, EeSp 95a. (a) ulna tool; (b-e, h) bone singlepoints; (f, g) antler composite toggling harpoon valves; (i, m, o) splinter awls; (j, n) fragments of bone points; (k) large bone bipoint; (l) barbed bone point; (p, q) bone spindle whorls.

## EeSp 12

EeSp 12 is a refuge site that was selected for examination primarily because it was close to the project base camp at Echo Bay. It is an islet consisting of two steep-sided rocky hillocks joined by a low salal-covered isthmus of gravel and shell. The hill portions are both clad with a dense growth of cedar. There are two long house-platforms on the southern part of the islet, forming two northward-facing benches, and there appear to be about seven smaller dwelling areas to the north and east of a rocky knoll that surmounts the northern part of the islet.

Two test cuts were placed to sample the large house-platforms. One 1 x 3 m unit was situated so it would cut the ridge at the back of the upper house platform. Another 1 x 2 m unit was placed in line with the first at the front of the platform and on the slope down to the lower bench.

The midden deposits were of moderate depth (to a maximum of 2.1 m) and the stratigraphy clearly indicated that the back of the lower platform area had been at least partly dug into existing midden material. The artifacts recovered are listed in Table 11 and a selection illustrated in Figure 38. The large ground-slate point (Figure 38i) is in a poor state of preservation but is sufficiently complete to show the facetting.

## DISCUSSION OF RESULTS

With the stratified random sample of sites only partly examined, it is not possible to advance confident generalizations about archaeological materials in the sampling area. What is offered now are a few observations concerning the data so far recovered, but they must be viewed in much the same light as are speculations based on the earliest of election returns — they may reflect the eventual pattern but at this point there can be no certainty they will do so.

1. At EeSo 1, the most deeply stratified and probably longest occupied site, there is an indication that chipped stone material is more common in earlier than in later deposits, both proportionately and in absolute numbers. Although it does not seem possible to make a separation of the site into components on the basis of chipped stone forms, the overall distribution reflects a pattern noted elsewhere in the Southern Kwakiutl area — chipped stone is, generally speaking, a characteristic of early rather than late sites.

2. The three refuge sites examined (EeSo 14c, EeSp 12, and EeSp 95a) yield artifact and faunal assemblages much like those of other sites

TABLE 12

*Artifacts from EeSp 12*

| *Class* | *Number* | *Percent* |
|---|---|---|
| STONE | | |
| *Chipped Stone* | [ 1] | [ 3.45] |
| Core | 1 | 3.45 |
| *Ground Stone* | [ 1] | [ 3.45] |
| Facetted ground slate point (Fig. 38i) | 1 | 3.45 |
| *Pecked and Ground Stone* | [ 3] | [10.35] |
| Hammerstone | 1 | 3.45 |
| Abrasive stones (Fig. 38d) | 2 | 6.90 |
| *Mineral* | [ 2] | [ 6.90] |
| Red ochre | 2 | 6.90 |
| BONE | [17] | [58.62] |
| Single points (Fig. 38a-c, g) | 4 | 13.79 |
| Fragments of bone points (Fig. 38e) | 4 | 13.79 |
| Bone splinter awls (Fig. 38n, o) | 2 | 6.90 |
| Small mammal femur awl (Fig. 38m) | 1 | 3.45 |
| Beaver tooth tool (Fig. 38f) | 1 | 3.45 |
| Miscellaneous worked bone (Fig. 38p) | 4 | 17.24 |
| ANTLER | [ 3] | [10.35] |
| Composite toggling harpoon valve (Fig. 38k) | 1 | 3.45 |
| Long single point (Fig. 38j) | 1 | 3.45 |
| Miscellaneous worked antler (Fig. 38h) | 1 | 3.45 |
| SHELL | [ 1] | [ 3.45] |
| Sea mussel shell knife (Fig. 38l) | 1 | 3.45 |
| TRADE GOODS | [ 1] | [ 3.45] |
| Iron fragment | 1 | 3.45 |
| Total | 29 | 100% |

in the sample. It seems unlikely, then, that a distinctive refuge or defensive site assemblage will be identifiable, except possibly by certain characteristics of site selection and settlement layout. Whatever the reasons may have been for choosing some extraordinary site locations, quite ordinary sorts of activities seem to have been conducted at those sites.

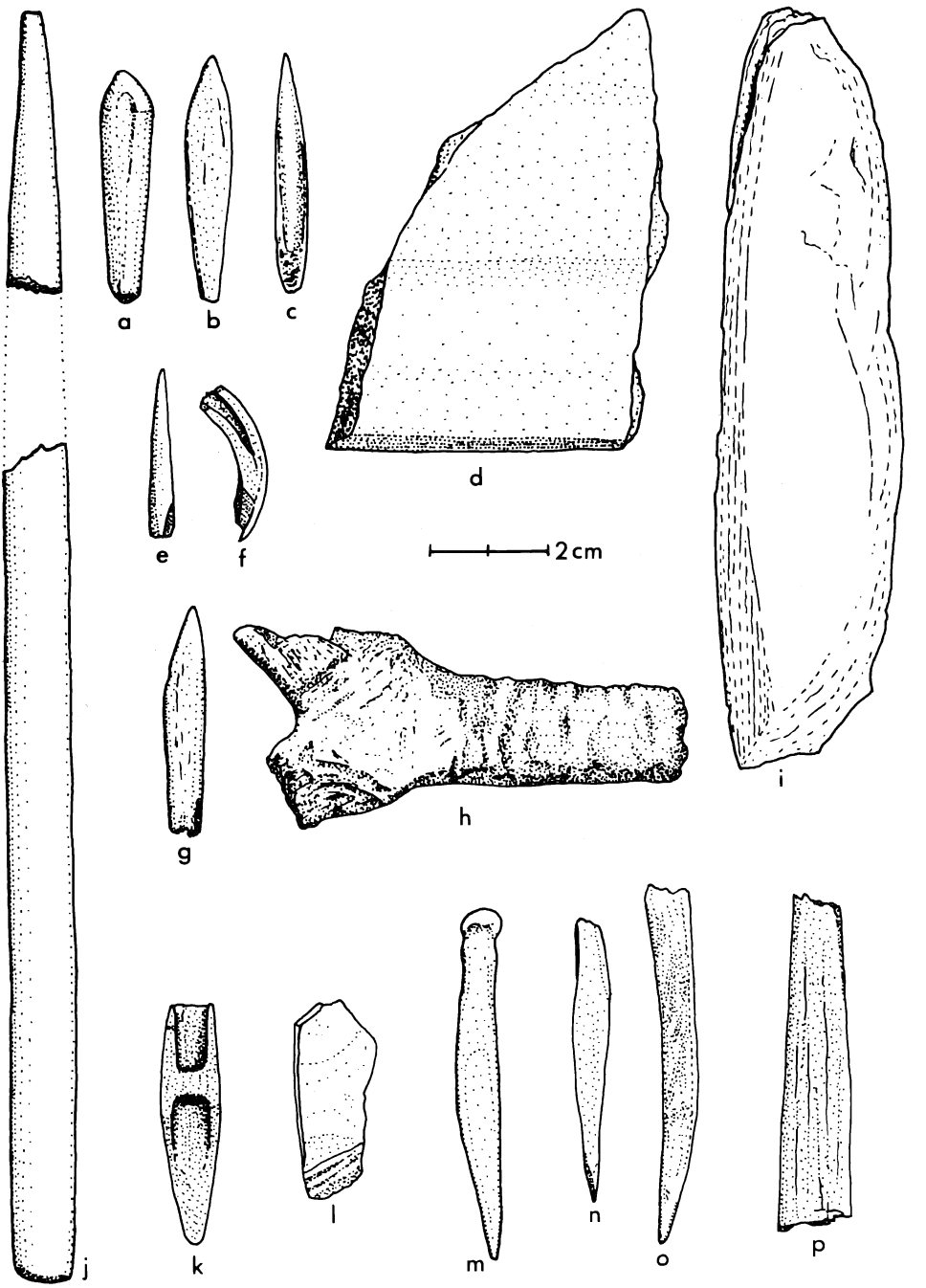


FIGURE 38. Artifacts, EeSp 12. (a-c, g) bone singlepoints; (d) abrasive stone; (e) fragment of bone point; (f) beaver tooth tool; (h) worked antler; (i) facetted ground slate point; (j) long antler singlepoint; (k) antler composite toggling harpoon valve; (l) sea mussel shell knife; (m) small mammal femur awl; (n, o) bone splinter awls; (p) miscellaneous worked bone.

3. With the notable exception of the chipped stone items from EeSo 1, artifacts from the test excavations are very much like what one would expect to find associated with Southern Kwakiutl culture as described ethnographically. However, until some historically occupied sites have been sampled and we have a more complete picture of Southern Kwakiutl technology, we will not know the extent to which ethnographic models may be invoked to reconstruct the precontact way of life.

In addition to generating the kinds of observations presented above, the test excavations also permit examination of sampling procedures and excavation strategies. Even at this early stage in the investigation, it is clear that fairly substantial excavations will be required at each site if artifact classes are to be adequately represented in the sample assemblages. With some classes of archaeological materials it is difficult to determine what is an adequate sample, but a rough rule of thumb might express a minimal level of adequacy in terms of the law of diminishing returns. Generally speaking, one would have an adequate assemblage sample when the recovery of additional artifacts is not adding new classes of artifacts. (Such a sample would not, of course, likely be considered adequate for intraclass variability.) By this standard, no site assemblage reported here is adequate. As Figure 39 indicates, the number of artifact categories reported is largely a function of the number of artifacts re-

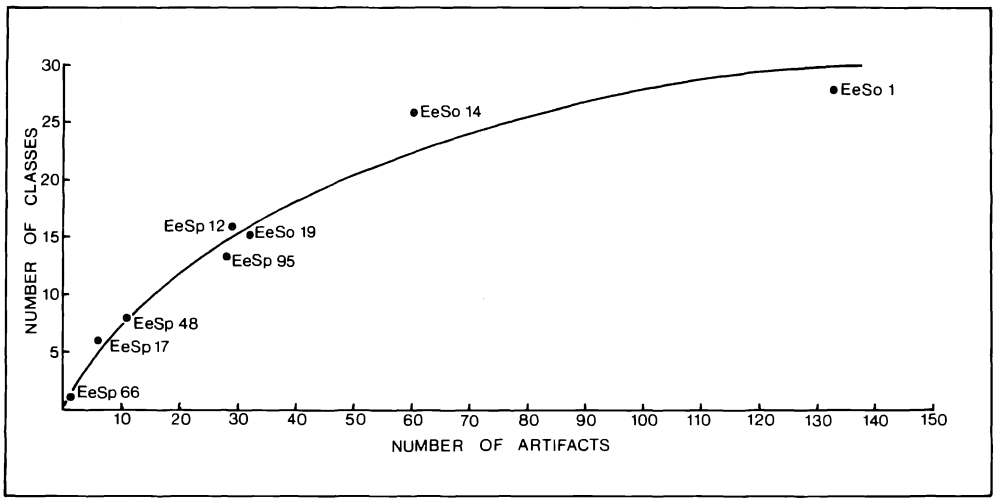


FIGURE 39. Graph relating number of artifact classes and number of artifacts in sample for eight sites in the southern Queen Charlotte Strait area. The trend line is fitted by inspection.

covered, although flattening of the roughly fitted trend line suggests that the EeSo 1 assemblage, at least, may be approaching adequacy.

It is trite to conclude that more work is needed. But, clearly, more work is needed.

ACKNOWLEDGEMENTS

The final report on the sampling projects will undoubtedly include a long list of persons and institutions to whom I have become indebted for various kinds of assistance. But in this preliminary accounting it is appropriate that I should acknowledge even in a general way the help that has been received. The project was large, the area remote, and the time short, and the fact that so much was accomplished can be attributed to the enthusiasm of those taking part. The project involved primarily the men and officers of C Company, 3rd Battalion Princess Patricia's Canadian Light Infantry, with additional personnel from D Company, and with very competent supervisory and technical assistance from members of the B.C. Provincial Museum's Archaeology and Conservation Divisions and the Archaeological Sites Advisory Board.