SHEMYA ISLAND PREHISTORY

by

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Abstract

The 752 artifacts described in this paper are from 5 sites on Shemya Island. Artifactual evidence suggests the island had a small resident population and was occupied for around 2000 years. The islands sites have been wholly or partially destroyed by military construction. Available site locations and descriptions have been included in the paper and comprise the most complete cultural resource inventory to date.

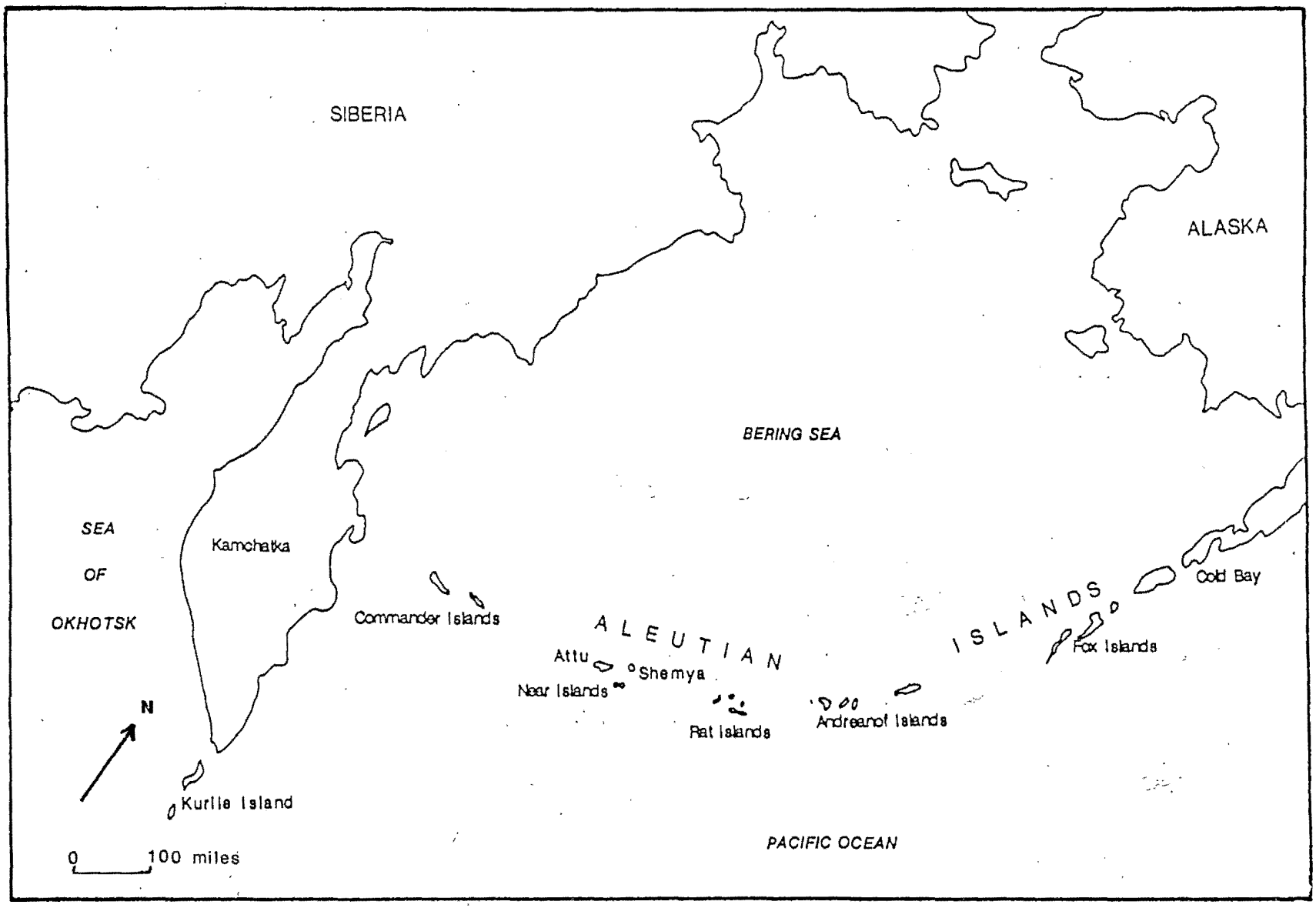
Introduction

This paper describes a collection of 752 artifacts from Shemya Island in the western Aleutian Island chain. I examined these artifacts with two goals in mind: The first was to describe them using functional categories based on the work of McCartney (1967) at Amaknak Island and of Desautels(1970) on Amchitka. From this descriptive work I extracted information on Aleut economic adaptations and chronology. The second goal was to pull together all available information on site locations and descriptions. A brief visit to the island in 1987 indicated most of the sites on the island had been destroyed since World War II. Since the artifacts had been collected by site the collections represented the only information available for most of the sites.

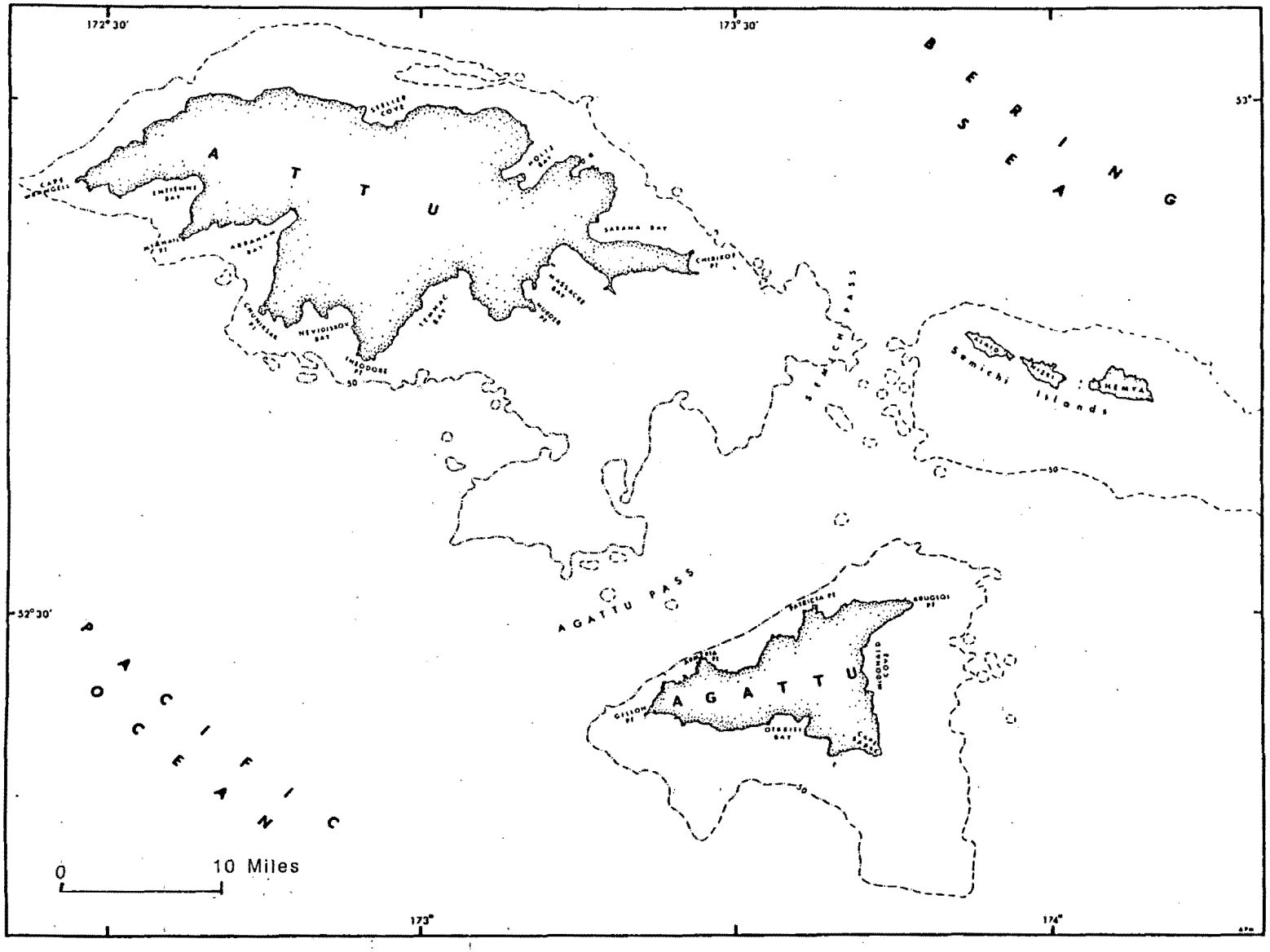
Background

Shemya Island is located at the eastern end of the Near Islands; the westernmost and most isolated group of islands in the Aleutian chain. The Near Islands, are comprised of Attu, Agattu, and the Semichi Islands, which include Alaid, Nizki and Shemya. The islands are 1300 miles west of Anchorage, Alaska and 500 miles east of Petropavlovsk, Kamchatka, USSR (Maps 1 and 2).

At four miles long and one and a half miles wide Shemya is the largest of the Semichi Islands. The island was uplifted early in the Quaternary, tilting the surface to the south and west. Steep sea cliffs, 200-275 feet high, back a narrow coastal shelf on the north and east coasts (Gates et.al. 1971:775,782), The interior of the island is a rolling, lake dotted plateau that slopes gently south to a rocky coast punctuated by sandy beaches. Rocky reefs, wave cut platforms covered by



Map 1 - The Aleutian Islands



Map 2 – The Near Island Group McCartney 1971

water at high tide, surround the island making boat landings tricky but providing habitats for a wide variety of marine plants and animals.

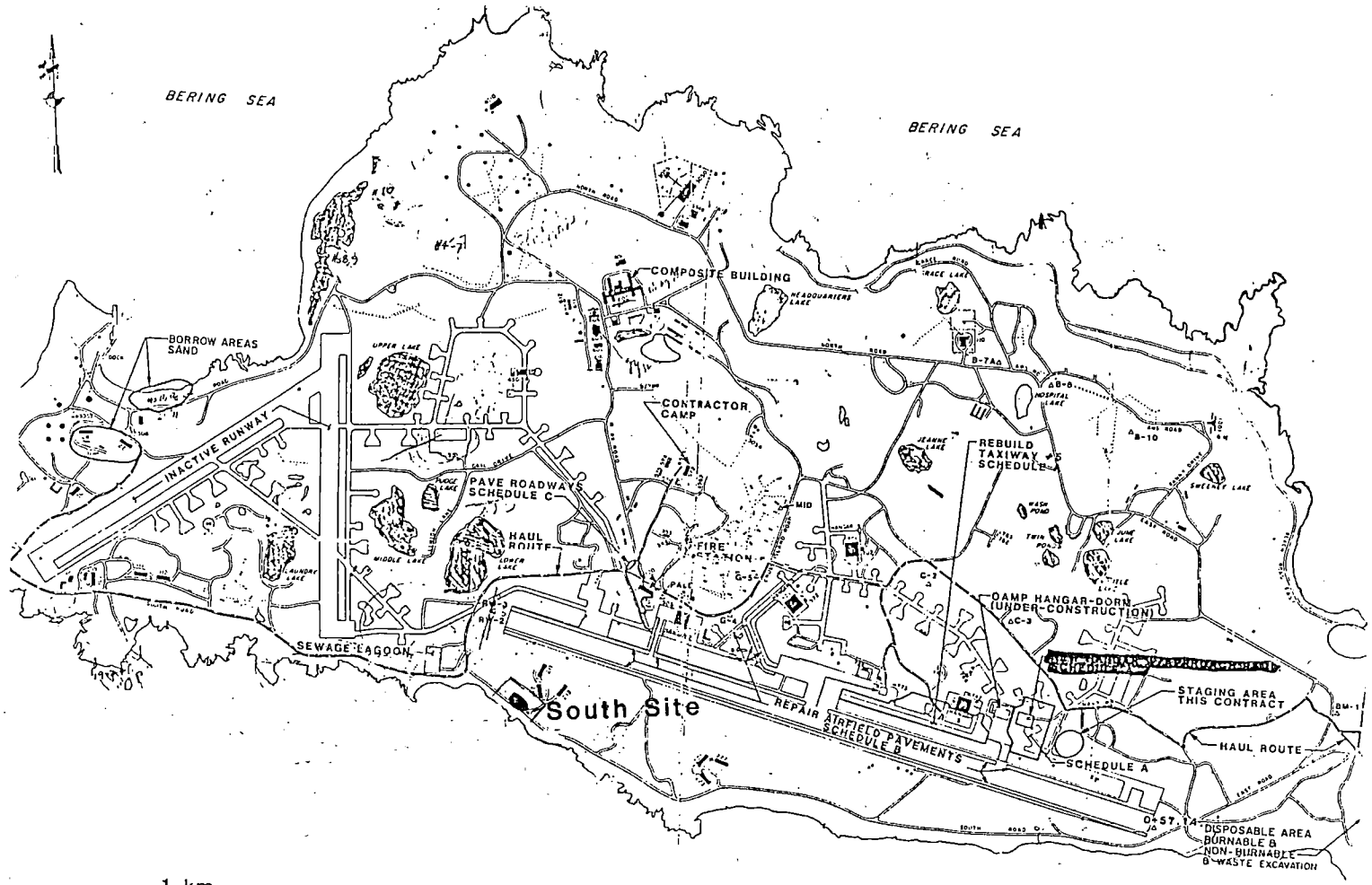
Terrestrial animal life is limited to foxes introduced in the 1920's and birds. Nesting species include cormorants, gulls, kittiwakes, tufted and horned puffins, terns, pigeon guillemots, eiders and other ducks (US Fish and Wildlife Service 1975). Emperor geese winter on the island. Marine mammals include approximately 650 sea lions in two rookeries at the east end of the island and seals on the rocks between Shemya and Nizki Island to the west. Whales and porpoises feed in the ocean surrounding the island and sea otters once occupied the near shore waters. Sea urchins, chitons, blue mussels, barnacles, limpets and snails are abundant on the reefs and in the remaining site midden. One stream may have supported small runs of red salmon but these would not have been a major resource. Halibut, cod, rockfish and pogies are common offshore (US Fish and Wildlife Service 1973).

Since World War II the island has been the site of an Air Force base and has undergone drastic surface changes (Map 3). Construction of roads, runways, buildings, storage facilities, and bunkers, and excavation of quarries has virtually obliterated the original surface of the island. Roads and quarries along the coast are primarily responsible for the damage to archaeological sites. At the northeast end of the island, large earthen walled bunkers were built to store bombs and other munitions. Construction of docks and fill operations on the north and west coasts have also altered the shoreline. The main east-west runway completely eliminated four creeks including the largest stream system on the island. Over 50 years of unbridled military development has devastated the islands cultural resources. In 1986 and 1987 surveys by Corps of Engineers (COE) and Bureau of Indian Affairs (BIA) archeologists located only a fraction of one of 6 sites then reported for the island (US Bureau of Indian Affairs 1987).

The Near Islands are critical to our understanding of the development of Aleut culture. Most scholars now agree the Aleutians were settled from the east. However whether the islands were a corridor for contact between Asia and North America is still debated. Most American scholars assume the chain was a cul-de-sac, and once settled the population developed in isolation (McCartney 1984:135; Black 1984:26). Soviet scholars believe the Aleuts had intercontinental contacts throughout their history, and that Aleut material culture has close parallels to the Southern Okhotsk Sea culture (Black 1984:40).

Despite the obvious importance of research in the Near Islands very little scientific work has been done. Dall (1877), Jochelson (1925) and Hrdlicka (1945) all excavated at a site in Chichagof Harbor on Attu Island and published photos and drawings of artifacts found. During World War II servicemen made collections on Attu and Shemya, which have remained largely unpublished. The only completely reported excavation is that of Spaulding (1962) from Agattu Island.

Spaulding (1962:43) dated his site to 600 B.C. and felt this was the best estimate available for the earliest occupation of the Near Islands. The poor bone tool



Map 3 – Military Development On Shemya Reynolds, 1986

inventory led him to conclude the Near Islands were characterized by an impoverished and archaic material culture, which he attributed to the isolation of these islands from the rest of the Aleutian chain (Spaulding 1962:45).

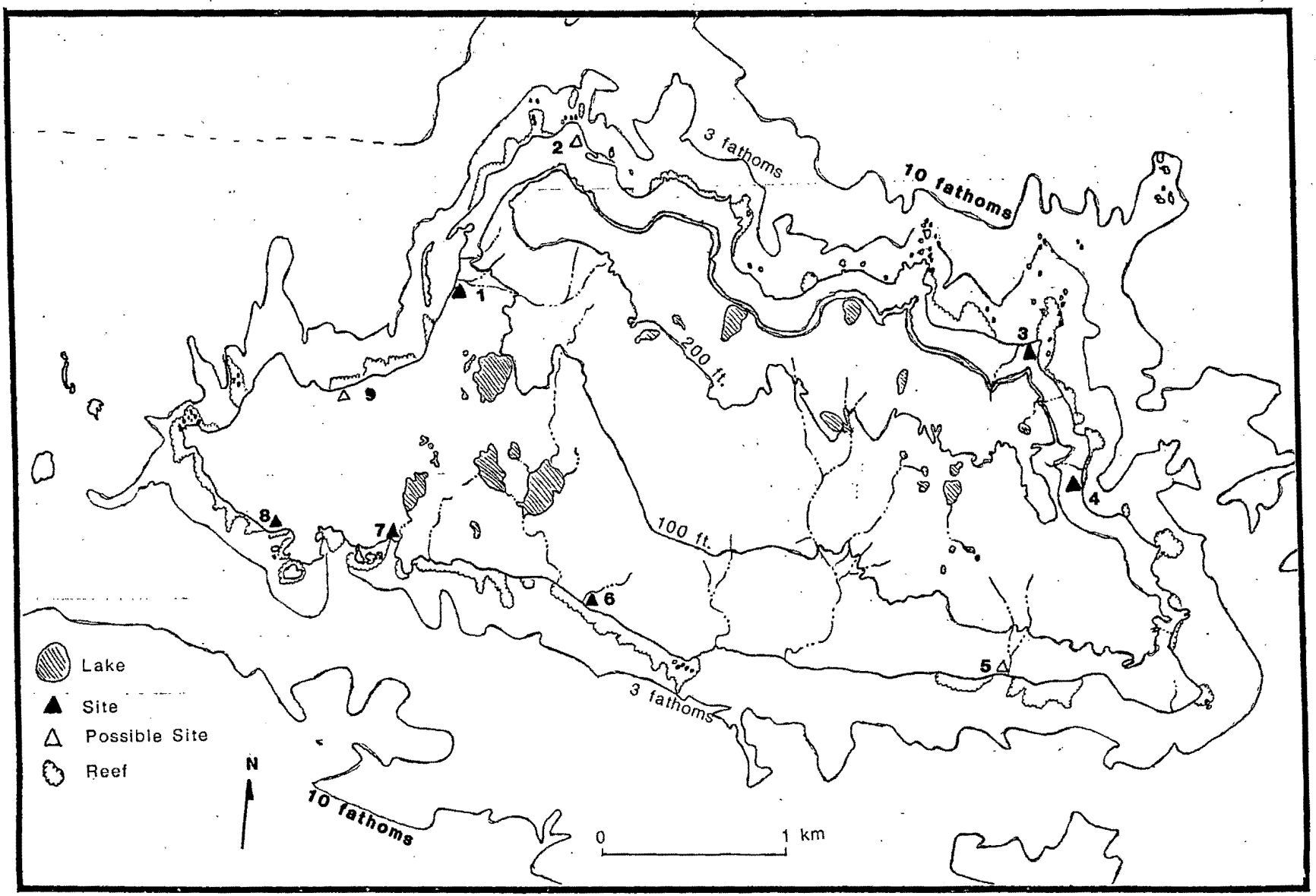
McCartney (1971) examined four published and six unpublished collections from Attu, Agattu and Shemya. In contrast to Spauldings report more than half of this collection consisted of bone artifacts (McCartney 1971:104). McCartney proposed a Western Aleutian phase to describe the distinctive assemblage found in the Near Islands. Characteristic artifacts include fluted toggle harpoon heads, large barbless fishhook points, shouldered projectile points with contracting stems, and flaked semilunar knives. Stylistic and artistic devices include intensive circle and dot decoration, regular serrations on points and incising on flaked points (McCartney 1971:136).

The only site surveys on Shemya postdate World War II when many sites had already been damaged. Bank (McCartney 1972:26) reported four sites on the island which McCartney felt were probably all destroyed by 1972. A brief survey by COE archeologist Georgeanne Reynolds (1986) failed to locate any sites on the island, but in 1987 Bureau Of Indian Affairs archeologists found a remnant of one. Surveys in 1990 have since located portions of 4 others.

The 752 artifacts I examined at came from three collections. The largest, 671 artifacts, was collected by Mike Aamodt in the summer of 1965. Aamodt, a student at the University of Alaska-Fairbanks (UAF), was working construction for the summer and, noting the destruction of the sites, made an effort to collect exposed artifacts. He separated his collection by site, providing the only (minimally) provenienced collection from the island. Aamodt also cataloged the collection, drawing and providing basic measurements of each (Aamodt 1989). Francis Broderick, also a student at UAF, collected 41 artifacts in 1964. Provenience of this collection is unknown. The third collection was confiscated, by the US Fish and Wildlife Service in 1986, from a construction contractor on Shemya. Provenience is again unknown but the date of collection suggests the South Site as a source. By 1986 the other sites on the island are believed to have been destroyed.

Description of the Sites

Information on the locations of sites on Shemya came from a variety of sources. The best information is from Mike Aamodt (1965) who provided a map showing the five sites he collected from, along with brief descriptions of a couple of them. He also mentioned the existence of other sites not on the map. T.P. Banks (McCartney 1972:26) notes confirmed three of Aamodts sites, and mentioned another on the north coast. Reynolds (1986) reported two additional sites mentioned to her by island personnel. She was, however, unable to locate any sites during her brief 1986 survey. Possible sites locations are shown in Map 4 with available information summarized below:



Map 4 - Reconstruction of Original Island Surface With Sites

Site 1, North Site, is actually on the west coast facing Alcan Harbor. The site, adjacent to a small stream, faced a sheltered lagoon. Aamodt reports this site was in a garbage dump and had been bulldozed repeatedly for 10-15 years. In 1987 BIA archeologists found the lagoon filled in and the dump gone. This section of the shore has been bulldozed to bedrock. This may have been the site of a 20th century trapping camp. The only remains in the area are two Orthodox crosses on a pair of graves.

Site 2, reported by T.P. Bank was located on a point of land at the northwestern end of Shemya. This section of coastline has also been bulldozed to bedrock.

Site 3, Northeast Site, on a tip of land at the northeast end of the island. Topographic maps indicate a stream once flowed past the site. Bank called this a small site. Aamodt reported heavy disturbance by a road and piles of notched stone net sinkers. In 1987 BIA archeologists found the area had been bulldozed.

Site 4, North-northeast Site, is actually on the east coast facing a halfmoon bay. A small stream once flowed into the bay near the site. Bank reported this as a small site but Aamodt estimated its size at 100 meters long and 15 wide, and between 1.5 and 5 meters in depth. Nearly 53% of his collection is from this site. In 1987 no trace of this site could be found.

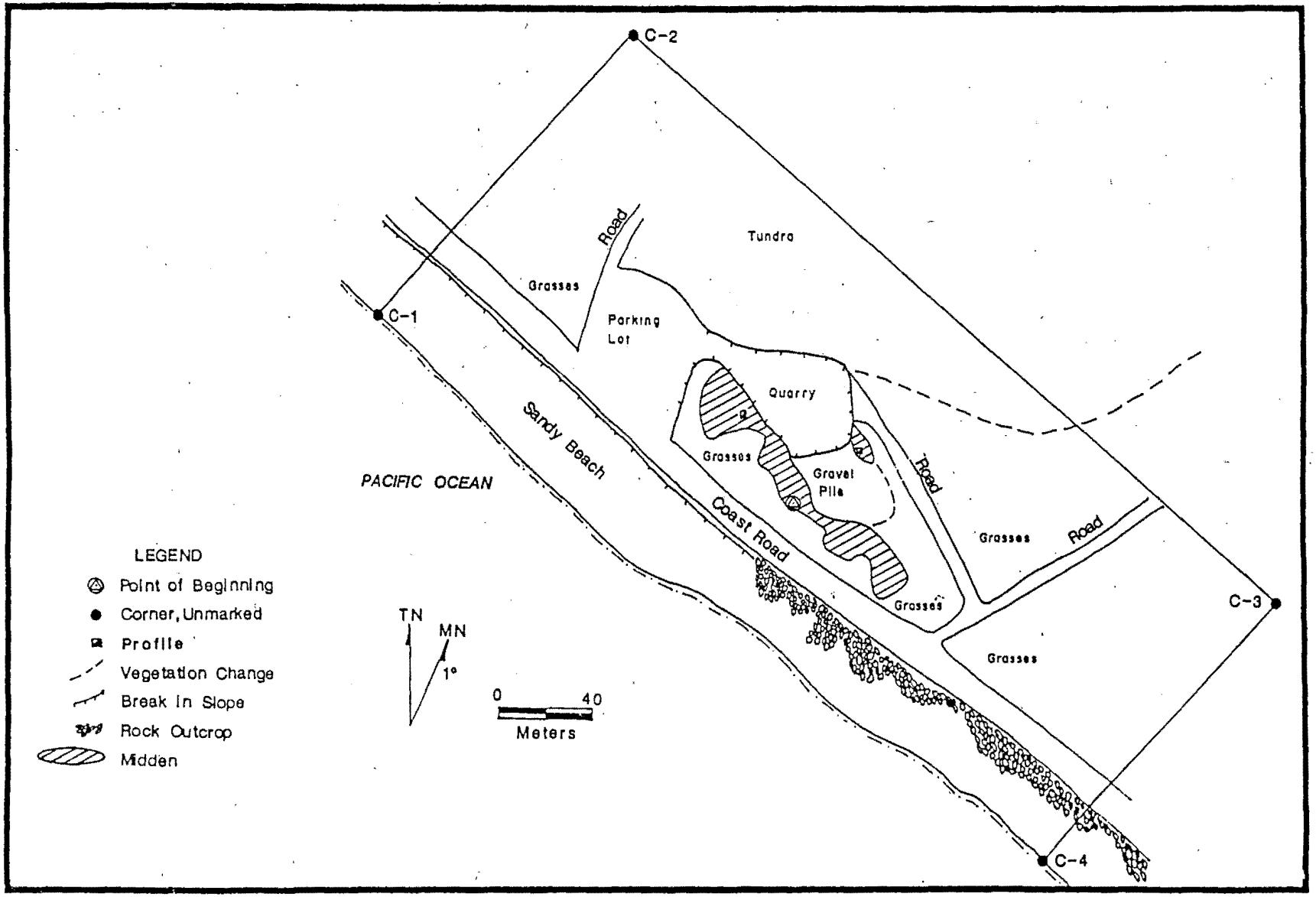
Site 5, was reported to Reynolds by Air Force personnel in 1986. The site was located on a relatively large stream. A road and the runway converge at this point and have probably obliterated the site.

Site 6, South Site, in the approximate center of the south coast still existed in 1987 (Map 5). The stream which flowed past the site has been destroyed by construction of the runway. Bank reports this as a large site and Aamodt calls it particularly large. BIA measured a midden remnant 120 meters long, with an average width of 11 meters. A second remnant measured 18 by 6 meters. The larger remnant was slightly over 1 meter in depth. The site probably covered about 1.6 acres, of which less than 20% remains (US Bureau of Indian Affairs 1988).

Site 7, Southwest Site, faces a small rocky cove at the mouth of a stream draining a lake. Aamodt found a flexed burial at this site. The area was developed by 1987.

Site 8, was also reported to Reynolds in 1986 by island personnel.

Site 9? a site reported by Aamodt as one with over 100 burials that was entirely bulldozed into a bay. The location is unknown and the site is not included in the following discussion.



Map 5 - South Site Remnant

This site distribution yields data on Aleut settlement patterns which can be compared to other islands in the chain. All of the sites are located near reefs.With two exceptions, every site was located next to a stream. Sites 3, 4 and 5 are situated near the sea lion rookeries at the east end of the island, while sites 1, 7 and 8 are near the seal rocks between Shemya and Nizki. The amount of shallow waters in the near shore zones is a potential measure of the richness of the environment (McCartney 1977:67). These shallow waters are considerably wider off Shemya than around Attu or Agattu Islands, and undoubtedly contributed to the maintenance of a resident population.

McCartney (1977:65-74) analyzed several factors influencing site placement in the Aleutian Islands. He noticed for instance, islands with indented coastlines had more sites than those with smooth coasts. He calculated an Index of Irregularity (II), a ratio of perimeter to area, to evaluate the relative roughness of each island. The larger the ratio the more irregular and, supposedly, more suitable an island is for occupation (McCartney 1977:66). Calculating II values for the Rat Islands, McCartney found they ranged between 3.94 for Buldir to 11.27 for Amchitka. The value for Shemya is 4.9, suggesting low suitability for occupation.

Another measure of suitability for occupation is the ratio of low coast, below 30 meters, to total coast length. Using Amchitka Island and its relatively complete site inventory, McCartney calculated a ratio of .63 sites per kilometer of low coast. Applied to Shemya this formula predicts a total of 11 sites for the island. The ratio for Shemya using 9 sites for estimation, gives .44 sites per kilometer of low coast.

There are three possible interpretations of this data. One is that the model is wrong. Data from neighboring islands, particularly Nizki and Alaid should be used to check McCartneys model. The second is that a couple of sites are missing from the inventory. Given the disturbance of the islands surface there is a strong possibility a few sites remain unrecorded. The third is that the island supported fewer settlements than might be expected. Site distribution on Nizki and Alaid need to be analyzed and combined with the Shemya data to arrive at a better idea of which interpretation is more accurate.

Available evidence suggests the island supported two "large" sites and six smaller ones. At 6,870 square meters, Site 6 was one of the largest sites on Shemya. Though considerably smaller than the largest sites on Amchitka (14,000 sq. m.), or Adak (14,600 sq. m.), Site 6 is larger than 97% of the sites on Amchitka and 81% of those on Adak (Corbett 1986). One site is hardly a base for comparison, but this does suggest sites on Shemya were not appreciably smaller than elsewhere. In early historic times Shemya was the center for an Aleut political unit (Black 1984:49,196); at least one of the sites on the island should represent a permanent settlement. One or both of the large sites may have filled this role. The smaller sites were probably seasonal camps associated with the larger sites.

The Collections

The collections I examined, because they were not systematically excavated, present a number of problems. The most obvious, lack of provenience except by site, precludes any discussion of spatial relationships of artifacts within a site. Secondly, several classes of artifacts are missing from the collections. These include toggle harpoon points, harpoon socket pieces and foreshafts and stone abraders. This problem may be related to the third; most of the artifacts are broken, few are over 5 cm long. I am confident the collector, Mike Aamodt, picked up everything recognized as artifactual, however he was collecting from areas where others had already taken the larger, more recognizable pieces.

Besides indicating one of the sources for bias in the collection, broken artifacts pose another problem. Many of the diagnostic elements are missing on the broken specimens. This problem is most acute on the bone projectile points where less than five of the specimens in this collection were complete enough for accurate identification. As these are the artifacts most used for inter- and intrasite comparisons this bias was a serious handicap.

A final point is that the latest collection from Shemya, the Fish and Wildlife collection is made up mostly of bone wedges, utilized flakes and flake tools, generally items less likely to be collected by pothunters. This suggests the source for "goodies" on the island is drying up, the last site really is the last.

I examined 752 artifacts, 300 bone and 452 stone. Site 4, the North-northeast, supplied 53% of the entire collection. Bone artifacts were divided into 7 functional categories. Most of the bone, 209 pieces could be identified and assigned to an artifact category, The remaining 91 pieces were unworked teeth, natural bone, or unidentifiable worked fragments (Table 1).

The first category, **Fishing**, contains composite fishhook pieces, both shanks and hook points. The hook points are primarily unbarbed with a "handle" haft end, a type characteristic of the Near Islands (McCartney 1967:286). A variety of barbed types were also collected, these have analogs in the central and eastern parts of the chain (Figure 1). The shanks are primarily of the nubbin line-end variety with nub-like bumps on the shafts. Only three of 28 shanks had notched line-ends (Figure 2).

The enormous variation in hook and shank form has been commented on by other researchers but not closely examined. The range of variablity could prove of great value for delineating temporal change in sites and cultural boundaries between islands and island groups. McCartney proposes an elaborate, but not systematic, typology of hook points but merely notes two types of shanks concluding the difference did not appear to mean anything (McCartney 1967:284). He correlated some of his point types with levels in the Amaknak D site and points out some hook points are distinctive of the Near Islands. Desautels (1971:210-214) elaborated hook shank descriptions and points out they have potential for dating sites. He lumped his points into 4 categories, glossing their variations. Figures 1 and 2 list the attributes McCartney and

Desautels used in their typologies. The sketches help to elaborate a consistent typology and allow meaningful analysis of these potentially valuable artifacts.

Hunting was represented by 64 bone points. Virtually all of the projectile points from the collections were broken, but could be divided into unbarbed, unilaterally barbed and bilaterally barbed. Point cross-sections helped in the division, unbarbed are generally round, and unilaterals are teardrop shaped. As the diagnostic element on a point is the base, these specimens were disappointingly useless. Half (27) of the identifiable fragments were of the unbarbed variety. Their preponderance suggests sampling bias; they don't stand out as artifacts and were missed by other collectors. Only two points were bilaterally barbed and both these specimens were essentially whole. A fourth type of projectile point was represented by a single "blunt" (Figure 7, stone points). Some types of blunts are characteristic of the Near Islands, but this one is a type common throughout the chain. Blunts and unbarbed points were used for hunting birds, barbing was necessary to catch and hold sea mammals.

Woodworking was represented by a variety of wedges including a round variety characteristic of the Near Islands (McCartney 1967:309). A single adze haft of whalebone represents a composite tool which consisted of a stone adze mounted on the haft and that lashed to a handle (Figure 3). Artifacts commonly identified as cormorant humerus awls have also been included in woodworking tools. These awls have wide, usually blunt, edges that show signs of hard wear with flake scars and broken tips. Jochelson (1925:92) identifies them as chisels used to groove thin pieces of wood such as throwing boards. Nelson (1899:86-87, Fig. 24, Plate XXXVIII) described similar bone chisels from the Yukon and Kuskokwim River deltas in southwest Alaska; "A flat pointed chisel-like implement of bone is in common use for making incised grooves in wood preparatory to splitting it for use in the manufacture of various articles".

Sewing, hide working and basketry were represented by needles, a variety of awls and bone scrapers. All of the complete needles were of the eyed variety, having a small hole in the butt end. Awls include hollow bird bone and split bone types. The hollow bone specimens are generally pointed at both ends and several have rounded notches ground into the shaft (Figure 4). The split bone specimens are cruder; often only polish at the working end suggests their function. Jochelson (1925:92) describes one type with a hole through it as sinew or grass splitters with thongs attached to hold them to the owners wrist for ready use. No mammal bone awls were found in this collection. Bone scrapers, while not confined to the Near Islands , are more common there than elsewhere. They are generally small, but one of the specimens in this collection is palm sized.

Flakers for finishing stone tools are represented by 7 specimens. They are an unremarkable category but a few have chevron designs carved on the working end. **Diggers and Pryers** are a miscellaneous category of large whale or sea lion ribs, shaped at one or both ends to a flat working edge. They were variously used for picks, digging roots and prying shellfish out of cracks in rocks (McCartney 1967:427,434). These and flakers are not common in the collection, probably because they are not readily identifiable as artifacts.

TABLE 1 - BONE ARTIFACTS FROM SHEMYA ISLAND, ALASKA

	North	Northeast	North-Northeast	South	Southwest	Unknown	Total
Fish hook points							
Unbarbed	1	0	8	5	0	0	14
Barbed	0	0	5	1	2	0	8
Blank	0	0	2	1	1	0	4
Fish hook shanks							
Notched end	0	0	1	2	0	0	3
Nubbin end	0	0	23	2	2	0	27
Blank	0	1	5	0	0	0	6
Projectile Points							
Unbarbed	0	0	24	1	2	0	27
Unilateral barb	0	0	14	4	5	2	25
Bilateral barb	0	0	1	0	1	0	2
Unknown	0	0	5	2	2	0	9
Blunt	0	0	0	0	0	1	1
Woodworking Tools							
Wedges	0	0	13	7	6	0	26
Adze Handles	0	0	1	0	0	0	1
Chisels	0	0	1	1	2	0	4
Sewing and Skin-working							
Needles	0	0	5	2	0	0	7
Split bone awls	0	1	7	0	0	1	9
Bird bone awls	0	0	8	1	0	2	11
Scrapers	0	0	1	1	0	0	2
Flakers	1	0	6	0	0	0	7
Diggers	0	0	5	3	2	0	10
Ornaments							
Teeth	0	1	2	0	0	0	3
Labrets	0	0	0	1	0	0	1
Bone tubes	0	0	1	0	0	0	1
"Ear spoons"	0	0	0	0	1	0	1
Unidentified	0	0	0	75	14	2	91
Total	2	3	138	109	40	8	300
Percent by Site	1%	1%	46%	36%	13%	3%	

Figure 1: Fishhook Points

I. **Large or small**

II. **Barbed or Unbarbed**

III. **A Haft-end attributes**

1. Tanged, bilateral or unilateral notches cut to form a handle like end. These are characteristic of the Near Islands.
2. Grooved, a groove is cut all the way around the haft end of the hook.
3. Bevelled, the hooks are ground flat on the side seated next to the shank.
4. Projection, the base is wider than the body of the point.
5. Notched bases have three variants:

a. Bilateral, one notch on each side of the point
b. Unilateral Paired, two notches on the same side of the hook point.
c. Asymmetrical, multiple notches on both sides of the point. Usually one and two, two and three or one and three notches but other configurations also appear.

IV. **B Barb-end attributes**

6. Location, on the interior, concave portion of the hook, or the exterior, convex edge.
7. Number of barbs. Written like a fraction with the number of interior barbs on the top and exterior on the bottom.

8. Type of barbing, broken into four categories:

a. Regular, examples have 1/0 and 2/0 barb configurations respectively.
b. False, though there is some barb projection, the shaft of the hook is carved to make the barbs appear longer.
c. Ridged, a ridge, narrower than the hook shaft is carved along the edge of the hook and this is barbed.
d. Marginal, the barbs do not project beyond the main portion of the hook.

9. Barb grooves present or absent. These are grooves carved along the longitudinal axis of the hook point.

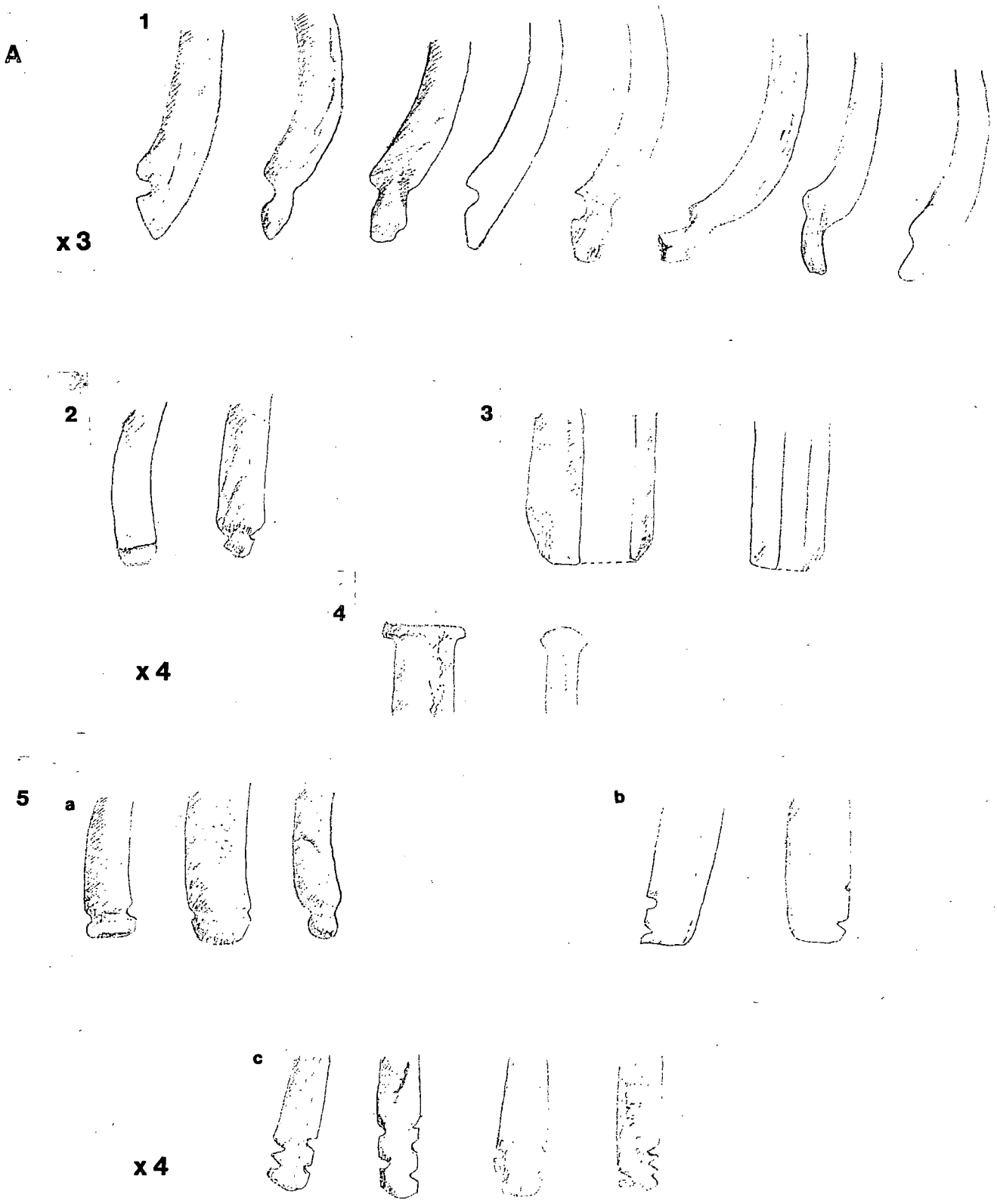


Figure 1 Fishhook Points – Proximal End

Figure 1 Fishhook Points

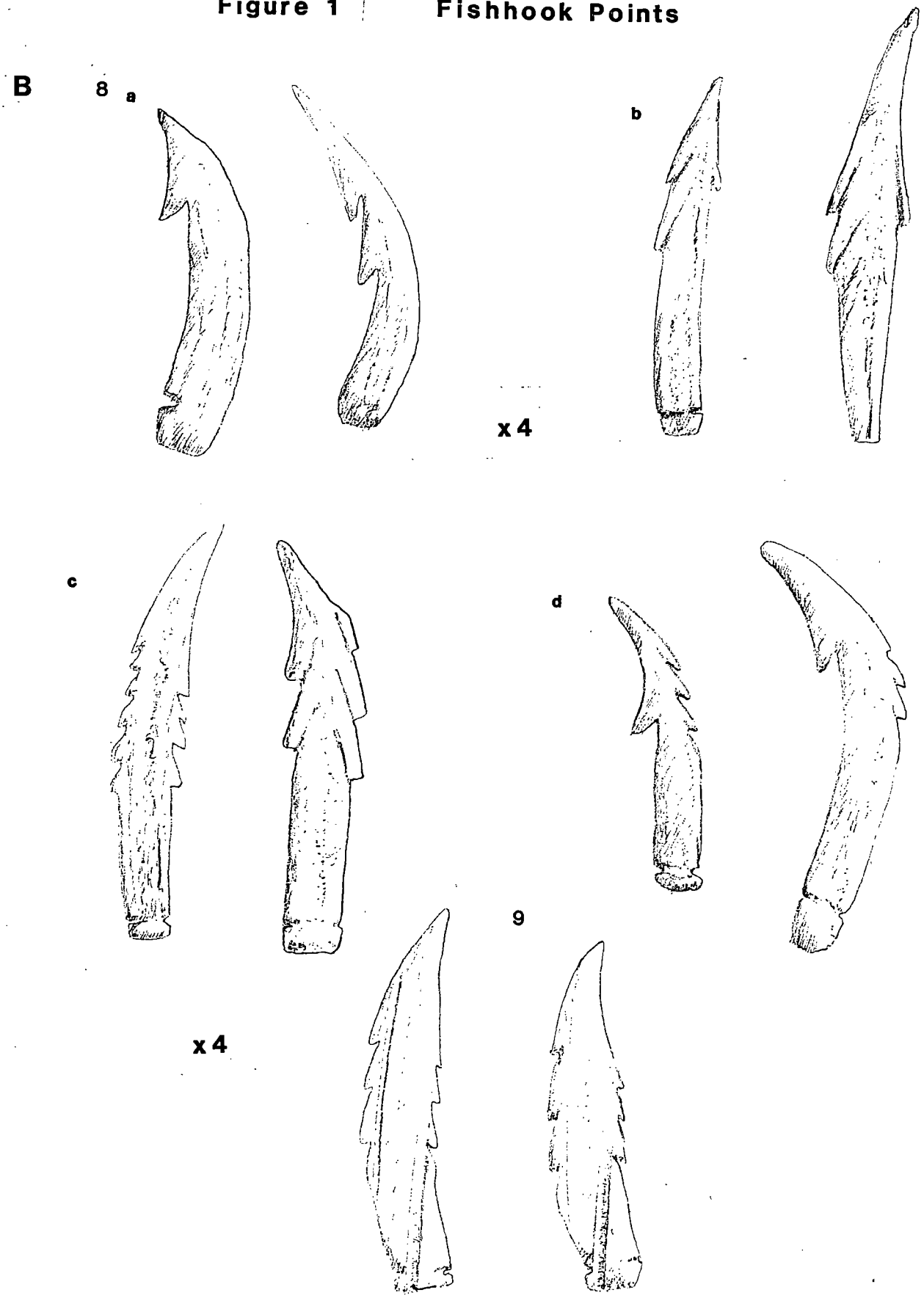


Figure 2: Fishhook Shanks

A. Line-End Attributes

1. Notched or Grooved Line-ends. These are bilaterally cut to produce a squared, rounded or trapezoidal nubbin. There are two types:

    a. unilaterally notched on the inner curved edge. There can be 1-8 notches on this edge in addition to the line-end notches.
    b. Bilateral notching on the inner and outer edges

2. Line-End Projections. There are several types:

    c. Unilateral Projection at the outer edge.
    d. Paired unilateral projections on the outer edge.
    e. Bilateral projections at the side of the shank.
    f. A single projection to either the right or left of the shank.

B. Shaft Modification

1. No modification, most are unmodified (not shown)
2. Shaft notched, shallow grooves are cut into one side.
3. Shaft with nubs, rounded bumps ground into the edge.

C. Point Haft End

1. The right side is always a ground bevel.
2. Notching on left, does not connect with the bevel.
3. Grooving, like the notch but it runs into the bevel (not shown).
4. Lipped, projections at the base of the shank.

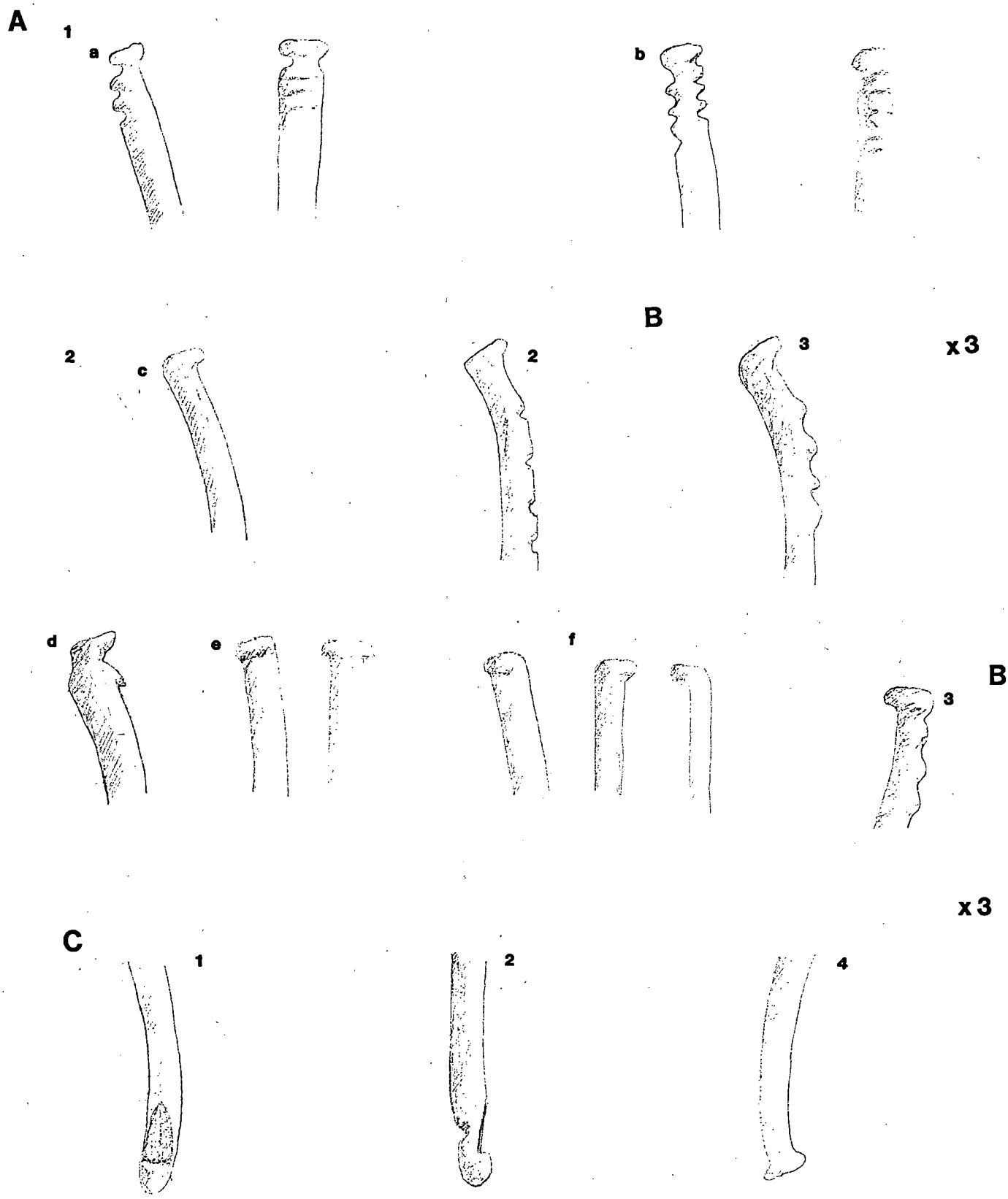


Figure 2 - Fishhook Shanks

Figure 3. Whalebone Adze

Figure 4. Bone awls

Ornaments are a small miscellaneous category that includes grooved sea lion teeth, an undecorated bone tube and a labret (Figure 5). None of these are particularly diagnostic, the labret is a simple type found all along the Aleutians. The final artifact in this category was carved at one end, with a smooth shaft that terminated in a spoon like appendage (Figure 6). The closest analog is an "ear spoon" pictured in Aleut Art (Black 1982:102). Merck, a doctor for the Billings expedition to the Aleutians in 1790-92, described some women wearing "ear spoons" suspended from the fronts of their festive parkas. From this description Black (1982:10) postulates these women were shamans and that the ear spoons may have been used to measure tobacco or other ritual substances. Unfortunately, the carving, which may have provided additional clues to the function of this object is unrecognizably eroded.

Stone tools comprise 60% of the artifacts with 452 pieces. An additional 6 natural rocks found their way into the collection. The artifacts have not been identified as to their material type as yet, but impressionistically about half the artifacts are a dark laminated siliceous graywacke, a rock with thin bands of fine sand and chert. Another third may be a dark siliceous argillite; tuffs and andesites make up a majority of the rest. These materials are common on the boulder beaches of Shemya and Agattu Islands. One point, site unknown, is chipped from slate which may have come from Buldir Island, about 80 miles east of Shemya.

Stone tools were divided into three categories before being subdivided into morphological groups. The three categories were chipped stone, ground stone, including tools chipped then ground into final shape, and cobble tools, objects that required little modification (Table 2). The fine parallel flaking on many of the points and knives, is a characteristic feature of Near Island stone technology. Unilateral serrations and regular spacing of serrations are also diagnostic of Near Island assemblages (McCartney 1971: 100-101). The feature McCartney (1971:101) calls decorative incising, I believe to be incisions for hafting.

The largest group of chipped stone artifacts were the projectile points. These were divided into two subgroups (Table 3). Unstemmed points include lanceolate points and the long parallel sided blades favored in the Near Islands. Stemmed points were further divided into asymmetrically and symmetrically stemmed (Figure 7). Then, as flat vs. round bottoms were believed to indicate time ranges at Chaluka (Laughlin and Marsh 1956) I also looked at that attribute. Desautels (1971:112,122) commented this difference was not statistically significant on Amchitka so the status of this attribute as a time marker is ambiguous.

Chipped stone also included bifacial and unifacial knives and scrapers (Figure 8). Often the knives are difficult to separate from points and the two classes may have been interchangeable. Knives include a semilunar type characteristic of the Near Islands (McCartney 1971:101). Scrapers seem to fall into three broad categories, a thick blocky style, a very thin type on flakes and an intermediate thickness. Flake tools are unmodified flakes with use wear and flakes are unmodified, unused flakes.

Figure 5. Ornaments: grooved teeth and labret

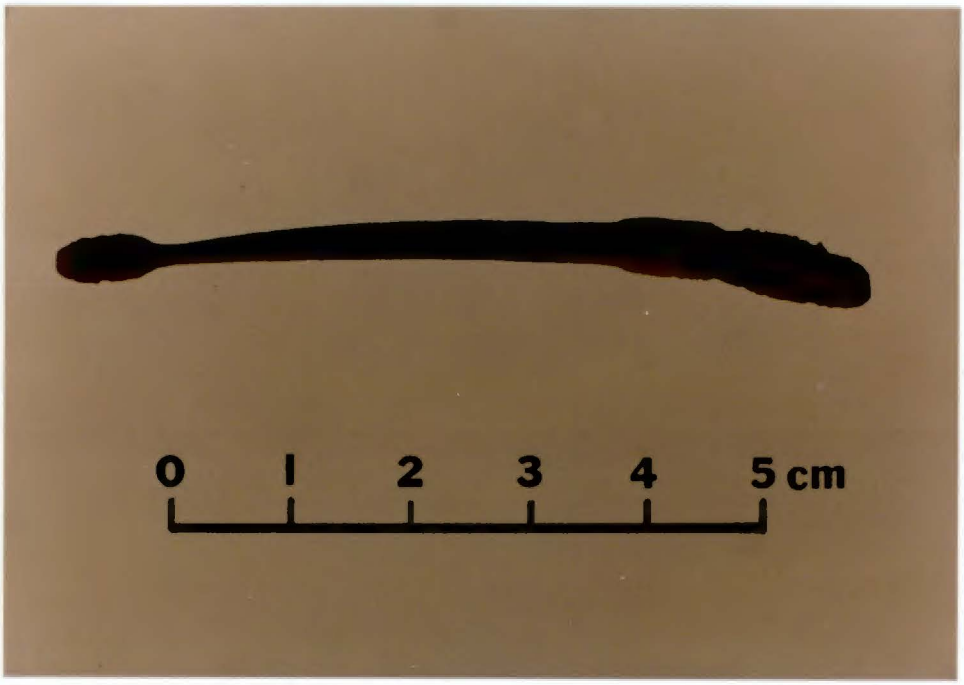


Figure 6. Ornament: ear spoon

TABLE 2 - STONE ARTIFACTS FROM SHEMYA ISLAND, ALASKA

	North	Northeast	North-Northeast	South	Southwest	Unknown	Total
Chipped stone	5 100%	5 100%	261 89%	85 99%	30 88%	31 94%	391 92%
Ground stone			20 8%		4 12%	2 6%	26 6%
Cobble tools			8 3%	1 1%			9 2%
Total	5	5	289	86	34	33	452
Unworked rocks			2	4			6
Chipped Stone							
Projectile points	4 80%	2 40%	164 62%	22 26%	9 26%	16 49%	217 51%
Gravers, drills			13 3%	2 2%	2 6%		13 3%
Biface knives			20 1%	2 2%	2 6%	9 27%	16 4%
Biface scrapers		1 20%	27 8%	10 12%	1 3%	4 12%	38 9%
Adzes			3 1%	1 1%	1 3%		5 1%
Unifacial knife			7 3%	3 4%	1 3%	1 3%	12 3%
Unifacial scraper	1 20%	2 40%	20 8%	32 37%	9 26%	1 3%	65 16%
Flake tools			7 3%	8 9%			15 4%
Flakes				5 6%	5 15%		10 2%
Ground Tools							
Ulus			1 .4%		3 9%	1 3%	5 1%
Adzes			7 3%		1 3%	1 3%	9 2%
Scrapers			12 5%				12 3%
Cobble Tools							
Choppers				1 1%			1 .2%
Handstones			1 .4%				1 .2%
Notch stones			6 2%	2 2%			8 2%
Lamps			1 .4%	1 1%			2 .4%

TABLE 3 - PROJECTILE POINTS FROM SHEMYA ISLAND, ALASKA

	North	Northeast	North-Northeast	South	Southwest	Unknown	Total	
Stemmed	**0**	**1**	**50**	**0**	**0**	**5**	**56**	**26%**
Symmetrical								
Flat Bottomed	0	0	11	0	0	1	12	5%
Round Bottomed	0	0	5	0	0	0	5	2%
Indeterminate	0	0	2	0	0	0	2	1%
Asymmetrical								
Flat Bottomed	0	0	18	0	0	3	21	10%
Round Bottomed	0	0	11	0	0	1	12	6%
Indeterminate	0	1	3	0	0	0	4	2%
Unstemmed	**4**	**0**	**84**	**13**	**2**	**8**	**111**	**51%**
Lanceolate/Pointed	0	0	37	0	2	1	40	18%
Lanceolate/Flat	0	0	29	7	0	2	38	17%
Parallel Sided	4	0	18	6	0	5	33	15%
Indented Base	**0**	**0**	**7**	**0**	**2**	**1**	**10**	**5%**
Unidentified	0	1	23	9	5	3	41	19%
Totals	**4**	**2**	**164**	**22**	**9**	**17**	**218**	
Percent by Site	**2%**	**1%**	**75%**	**10%**	**4%**	**8%**		

Figure 7: Stone Points with Bone Blunt in upper right

One type of adze and one type of scraper are morphologically very similar. They are an elongated teardrop shape about 1 centimeter thick. They may be chipped all over or chipped then ground on the ventral surface. The working end of the scraper is convex while the adzes are concave or dish-shaped. The pattern of flaking then grinding is characteristic of several Near Island scraper types, but in the Central and Eastern Aleutians is limited to one type of scraper end blade (McCartney 1971:101).

Ground artifacts also include another type of adze blade, wide, flat and rectangular in shape with a ground bit (Figure 8). A few ground ulu-like knives were also present. Though all these were broken they seemed to be rectangular rather than crescent shaped. According to McCartney (1971:102) this is typical of the Near Island collections, while ovoid ulus were used in the east.

Cobble tools included a few notched stone net sinkers. Aamodt commented that large numbers of these were piled up at Site 3, the Northeast Site. Two unimpressive lamp specimens are also represented. These are basically unmodified cobbles with a hollow pecked out of one side. One handstone, possibly a paint grinder, and one square slab chopper round out the stone tool inventory.

Given the limitations already discussed for this collection it still provides some clues to Aleut life on Shemya. First of all the range of artifacts for hunting and domestic tasks demonstrates the island was home to a resident population, rather than a base for small groups on short trips. Hunting and fishing were the major subsistence activities and were attested to in every site. Fishhook sizes suggest the main prey were small, near shore species such as pogies, cod and rockfish, rather than deep water fish like halibut. If the relative numbers of unbarbed vs. barbed harpoon points is not totally a result of sampling bias it may emphasize the importance of birds to the local population. The mysterious ear spoon may suggest elements of Aleut ritual practices.

Intersite artifact comparisons are plagued by the same limitations already discussed for this collection. Styles and types of artifacts are similar in all sites, though frequencies may vary. Whether this variation is due to sampling problems or is "real" is indeterminable. Stone material types do seem to vary somewhat; South Site (Site 6), has a larger percentage of tools made from a coarse greenstone. This site collection also lacks ground stone, possibly indicating an age greater than 1000 AD for the site. In spite of the sampling bias these two pieces of information suggest South Site is 'different' than other Shemya sites.

Figure 8: Stone knives with chipped and ground adze in lower right

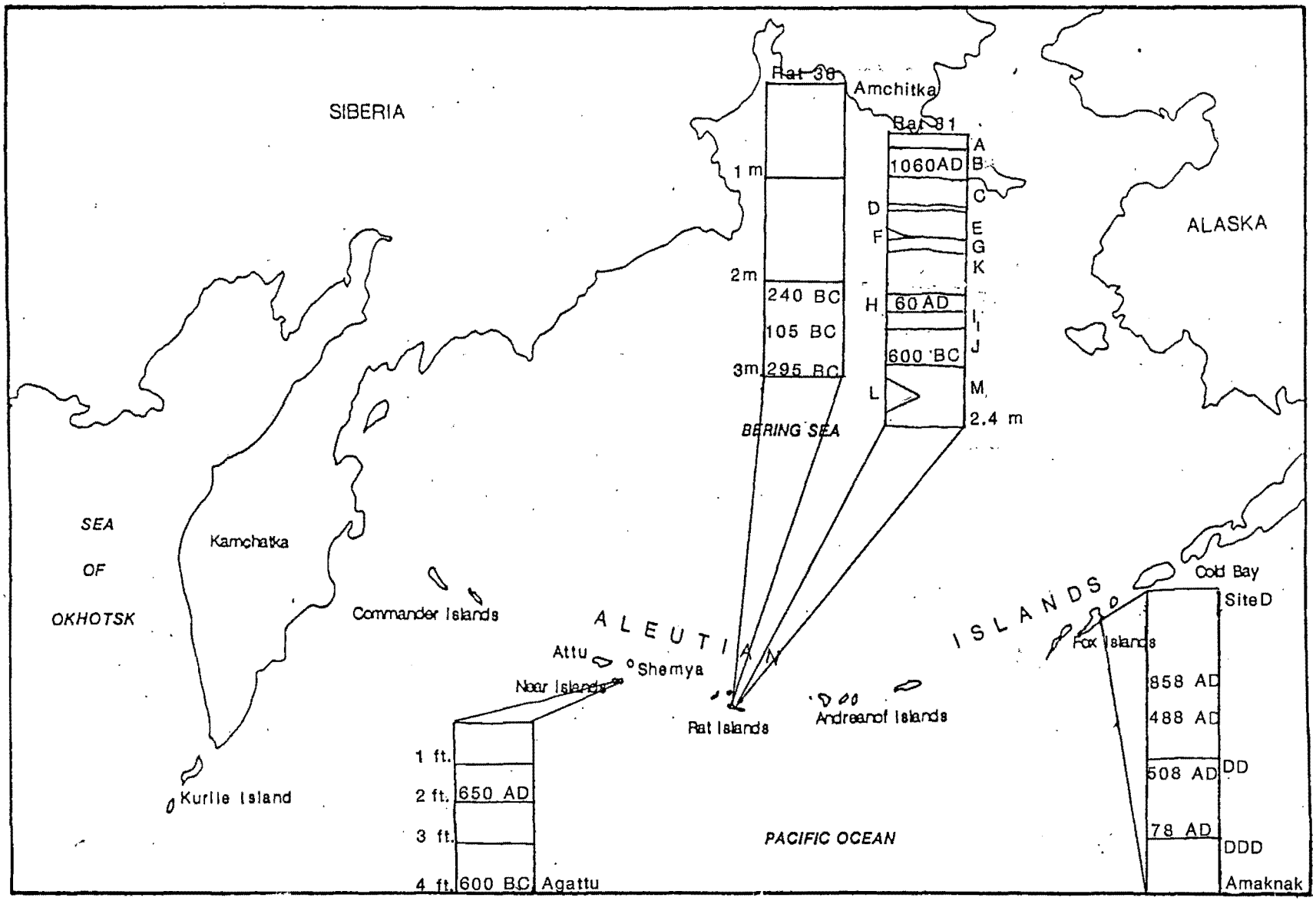
The Southwest Site (Site 7) artifact inventory lacks cobble tools and sewing equipment, needles and awls. Sample bias is the most likely explanation for these gaps. Two other sites, (1 and 3) have very limited inventories, probably due to destruction before the collection was made. The artifacts suggest limited use for these sites, especially at site 1. The other three sites possess, within the limitations mentioned, a full range of Aleut domestic and economic tools. The North-northeast Site in particular seems to have been a large permanent settlement.

One of my goals was to attempt to extract temporal information from these materials. I compared the artifacts in this collection with materials from other dated sites (Map 6). The effort was hampered by broken artifacts in the Shemya collection and poor chronology in the other sites. McCartneys Amaknak sequence for instance, consists of three zones in one site with three radiocarbon dates. Desautels dated two sites on Amchitka, submitting three dates for each of the sites. Two of the dates from one of these sites are on whalebone and appear reversed relative to the stratigraphy. The reliability of these dates is suspect but they do suggest levels below 200 cm. deep are dated BC. Chaluka is amply dated but artifact descriptions are meager, and so it is not included here. The Agattu site is dated by three radiocarbon dates; two from the bottom of the excavations and one from the 1-2 foot level. Spaulding notes no artifactual changes over the 1300 year occupation of the site (Spaulding 1962:12-13, 43-45). With all this in mind, artifacts having some temporal value included some of the stemmed, contracting-based projectile points, composite fishhook shanks, eyed needles, and ground stone knives.

The stone points and nubbin line-end fishhook shanks were found exclusively below level H at Rat 31 and 200 cm at Rat 36 on Amchitka Island . Level H is dated to 60 AD and dates below 200 cm. cluster a few hundred years BC. (Desautels 1971:38,48). Above these levels on Amchitka, notched line-end fishhook shanks replace the earlier form. Around 1000 AD above Level C on Amchitka, ground stone ulus and notched or nipple ended needles appear all along the Aleutian chain (Desautels 1971:349; McCartney 1967:358-359). The new needle style replaced the earlier eyed variety over most of the chain; however, Black (1990, personal communication) states eyed needles were in use in the Near Islands at the time of Russian contact. Based on this admittedly slender evidence, the sites on Shemya were occupied for over 2000 years. The island was abandoned as a permanent residence within decades of contact with Russians. Given the historic importance of the island the lack of historic artifacts is interesting. One artifact in this collection, a stone knife may have been patterned on a European model. The ear spoon may also be a post contact artifact used for dipping snuff.

Conclusions

While I can make no definite statements about the prehistory of Shemya I believe looking at this collection has been valuable. The bits of information extracted from this collection can be added to bits derived from other Near Island



Map 6 - Stratigraphy and Dates of Aleutian Sites

collections to increase, ever so slightly what we know. Though scientific excavations are the only way to truly answer any questions about Near Island prehistory, these unprovenienced collections can help to formulate questions for research.

Since most of the sites on Shemya have been destroyed archeologists will never have a chance to adequately investigate this island. The one site remaining on the island should certainly be examined, particularly for dateable materials and artifacts to compare with known collections. This type of investigation would provide an anchor for these other collections and possibly increase their value. The collections can and should be used but the investigator must always be aware of the limitations and that going beyond the raw artifacts to make conclusions is at best speculation.

Perhaps the most valuable information in this paper is that locating the sites. This information allows Shemya to be included in the framework for analyzing settlement patterns used elsewhere in the Aleutians. Questions raised, were there other sites on Shemya? if so, where? if not, why? may not be answerable for this island but study of other small islands may provide clues.

Finally, the question is where to go from here. Aerial photos of Shemya before and during the war may be able to answer questions about site placement and even provide some descriptive information. A few good photos could show size, and layout of the sites and even features on the middens.

We probably know as much about the Near Islands as we will learn from unprovenienced collections. Excavation is a necessary step. Possibly the most important first step is a chronology and series of artifacts for comparisons. With a chronology established, questions of intercontinental contacts, movements of people and ideas along the chain and change within the island group can be approached.

Shemya is obviously not the place to mount a major research program but the remaining midden on the island should be examined carefully by an archeologist before it is completely destroyed. At the very least exposed midden faces should be profiled and some test pits excavated. The single BIA test pit indicated undisturbed deposits do remain in the site. Goals for testing on Shemya should be kept modest until the potential of the site is known. With luck undisturbed features within the site could provide more detailed and specific information about Aleut life in the Near Islands.

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