

An Overview of the North Coast Prehistory Project (1966-1980)

GEORGE F. MACDONALD and RICHARD I. INGLIS

Archaeological investigations of the North Coast area began with survey and brief excavations by Harlan I. Smith of the National Museum of Canada in the first decades of the 1900s (Smith, 1909, n.d.). Philip Drucker of the Smithsonian Institution followed in 1938 with survey and testing of sites on the north and central coast. Preliminary evaluations of the archaeological potential of the area by Drucker did little to encourage future research. He cautioned (Drucker, 1943: 112):

The moderate yield even at the better sites indicates that the middens require a fairly large investment of manhours before really definitive results can be obtained. While there are well preserved artifactual and skeletal remains in the middens, one must be prepared to move a fairly large yardage of dirt to get them.

The only work undertaken in the area over the next thirty years was in June of 1954 when C. E. Borden of the University of British Columbia, assisted by James Baldwin, a local high school student, tested the Co-op site (GbTo 10) on the outskirts of Prince Rupert. Baldwin carried on the work on his own during October and November of the same year and added several new sites to the inventory of the harbour area. All materials were turned over to the Archaeology Laboratory, University of British Columbia, and were analyzed by Gay Calvert in 1968.

HISTORY OF THE NORTH COAST PREHISTORY PROJECT

In 1966 the North Coast Prehistory Project was initiated by George F. MacDonald following his appointment as West Coast Archaeologist at the National Museum of Canada. The north coast area of British Columbia was chosen, after consultation with Wilson Duff of the University of British Columbia, in the belief that there must be sites with sufficient time depth to detail the development of the elaborate and highly integrated cultural pattern known historically.

The project began with a broad land and air reconnaissance limited to one month and three people. Its primary aim was to assess the north coast area across the traditional territories of the Tsimshian and Haida peoples, from Kisgegas village, near the junction of the upper Skeena and Babine Rivers, to Kiusta village, at the northwest corner of the Queen Charlotte Islands. Test excavations occurred at two sites: Hagwilget (GhSv 2), in the upper Skeena River area, and Garden Island (GbTo 23) in Prince Rupert Harbour. Previously located and reported sites were re-examined and local collections were recorded. After the initial project, Turnbull (1966) surveyed and tested along the Babine River system for one week to try to establish the archaeological boundary between the Gitksan and the Carrier.

This first year provided the information needed to make a basic evaluation of the variety of sites and the kinds of samples that would be required to provide a meaningful outline of the area. This led to the development of a five-year excavation plan.

From the initial reconnaissance it was evident that the Prince Rupert area was a key focus for future activities due to the size and diversity of sites in that locality. However, it was recognized that historic settlement pattern data were not available from the Prince Rupert area because of general abandonment of sites ca. 1830 when the population shifted to Fort Simpson (Figure 8). The decision was made to document settlement and community patterns on the Queen Charlotte Islands, where historical communities had survived more clearly. This began the research aspect known as "The Haida Village Mapping Project." A detailed map and photographic coverage of the Haida village of Kiusta was the first step of this project.

In 1967 excavations continued at Garden Island (GbTo 23), and further excavations were undertaken at Dodge Island (GbTo 18) in Prince Rupert Harbour; Ishkheenickh River (GfTj 1) near the mouth of the Nass River; and Honna River (FhUa 1), Gust Island (FhUb 1) and Tanu (FeTv 1) on the Queen Charlotte Islands.

In 1968 excavation was concentrated in the Prince Rupert area, at Parizeau Point (GbTo 30) and the Boardwalk site (GbTo 31), both winter villages. Two smaller excavations were conducted at the Grassy Bay site (GbTn 1), a seasonal camp in the sheltered harbour area, and the Lucy Island site (GbTp 1), on one of the offshore islands. It was hoped to better define the seasonal pattern of resource exploitation by investigating a winter village, an inner harbour camp and an offshore camp of the Coast Tsimshian in prehistoric times. Gitaus (GdTc 2), at

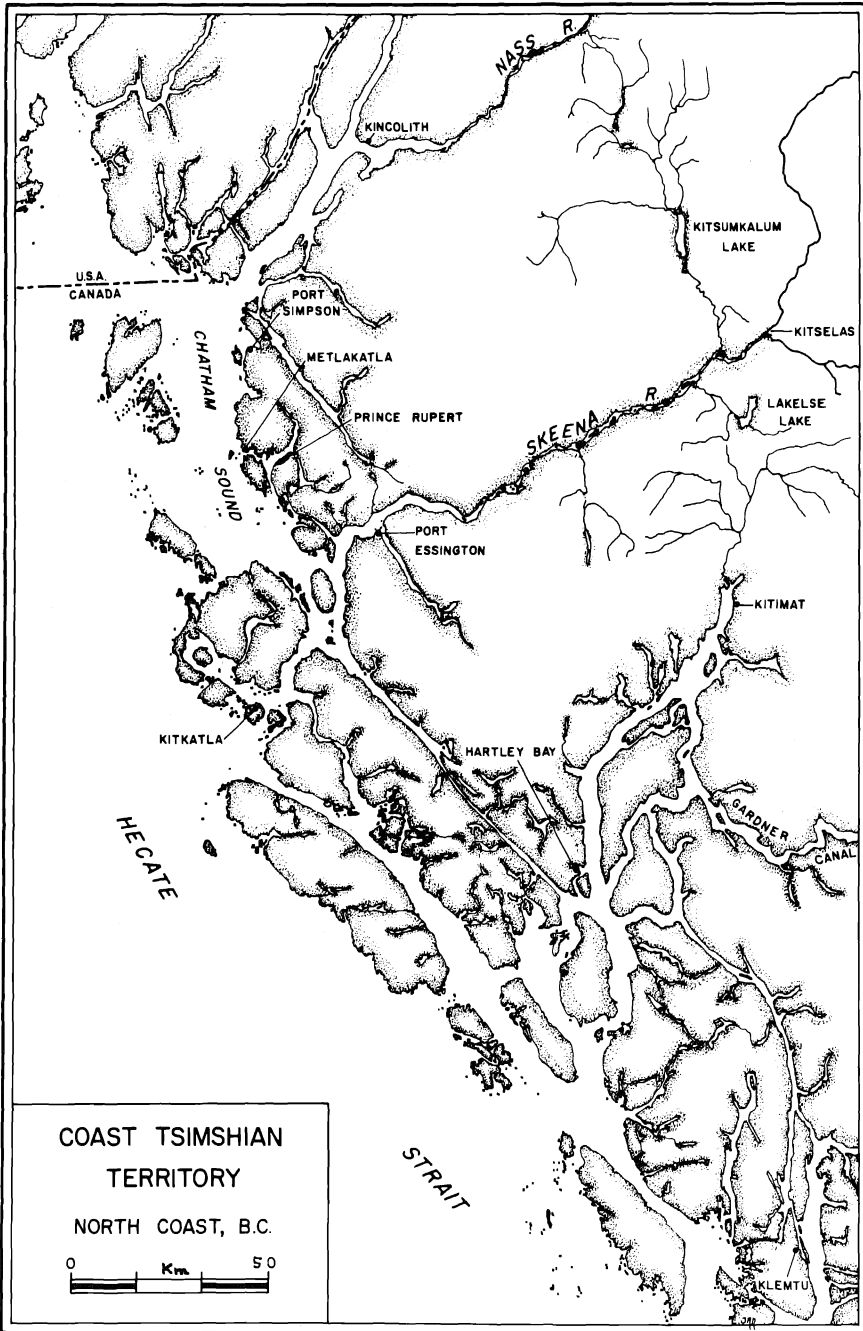


FIGURE 8. Map of the Coast Tsimshian area and adjacent regions of the north coast of British Columbia, with major communities located.

the inland extent of the Coast Tsimshian area, was also excavated, at the request of a group of enthusiastic local amateurs. Gitaus was being eroded away by the Skeena River, and was recognized as an important stratified site. Approximately 2,800 artifacts were recovered from clearly defined stratigraphic units spanning more than 4,000 years (Allaire, 1978).

At this stage of the project there was a need to broaden investigations to include specialists in related fields such as linguistics and physical anthropology. Dr. Bruce Rigsby, an authority on Tsimshian linguistics, was supported by contract to collect material on prehistoric economy, site names and material culture at Metlakatla, Kitkatla and Kincolith, and to evaluate whether there was any point in pursuing further linguistic/ethnographic studies in the area. Jerome Cybulski, a physical anthropologist, was supported by contract to supervise the recovery of burials during excavations at Prince Rupert sites.

In 1969 extensive excavations were undertaken at the Boardwalk site, including sluicing a waterlogged area at the centre of the site. The work of Bjorn Simonsen in the Hecate Strait-Milbanke Sound area of the southern Tsimshian was also supported under contract (Simonsen, 1973).

In 1970, excavation continued at the Boardwalk site, concentrating on the waterlogged deposit. Collection of midden deposits and floral samples was undertaken as the first phase of interpretation for a display gallery in the National Museum of Man in Ottawa (Inglis and MacDonald, 1975). A contract was issued to Ken Ames to excavate at Hagwilget (GhSv 2), near Hazelton (Ames, 1979). This project was a continuation of the brief 1966 testing and survey aimed at establishing the prehistoric boundary between the Carrier and Gitksan.

Excavation in 1971, around Prince Rupert, shifted from the Boardwalk site to the Venn Passage area, where a partially destroyed house feature was discovered at the Kitandach site (GbTo 34). The aim of excavation was to define the nature of historic Coast Tsimshian house features in the Prince Rupert area (Inglis, 1971, 1973a). The Skeena River work continued with a project to map and conduct test excavations at the historic village of Gitlaxdzawk (GdTc 1), a fortified village located at the Coast Tsimshian/Gitksan boundary (Allaire, MacDonald and Inglis, 1979); a survey of middle Skeena River terraces for early cobble tool localities (MacDonald, 1971a); and a general survey of the upper Skeena River (Ames, 1971).

Excavations in 1972 continued at GbTo 34 and at another site with a preserved house feature, K'nu (GcTo 1) (Inglis, 1972). This was to end the first stage of the North Coast Prehistory Project, with complete

analysis and assessment of finds following. Events intervened, however, with the expansion of industrial and commercial developments at Prince Rupert.

In 1973 an urgent rescue operation was conducted for five months at two large winter village middens on Kaien Island — the Lachane site (GbTo 33) and the Baldwin site (GbTo 36) — soon to be destroyed by construction of new port facilities (Inglis, 1973a). Further industrial developments planned for the North Coast necessitated participation in a major environmental impact study of the Tsimshian Peninsula in 1974. This work was conducted in conjunction with the Archaeological Sites Advisory Board of British Columbia, and helped define the regional pattern of site distribution and economic resources (Inglis, 1974b).

An air survey in 1975 of Dundas and Zayas Islands, followed by a one-day visit to Zayas Island in January 1978, broadened the perspective on the seasonal resource pattern of the region. Late in 1978, Joyce May received two contracts to investigate GbTn 19 at the north end of Ridley Island, an area slated for destruction by new harbour construction (May, 1979).

MacDonald supervised test excavations of the Kitwanga Fortress (GgTa 1) during the summer of 1979 for the National Historic Sites and Parks Service. The work defined the late prehistoric and early historic occupation in the area and the nature of trade and warfare during this period (MacDonald, 1979, 1980).

ARCHAEOLOGICAL STUDIES

Archaeological survey has covered the area from Kiskeyas on the Babine River to Kiusta on the northwest end of the Queen Charlotte Islands, with major emphasis placed on the 1,800 square kilometre area of the Tsimpsean Peninsula. Twenty-five sites have been recorded along the Skeena, forty on the Queen Charlotte Islands, and nearly 200 sites in the Tsimpsean Peninsula region, with over fifty occurring in Prince Rupert Harbour (Figure 9).

Excavations have been undertaken at eighteen sites: eleven in the Prince Rupert area, four on the upper Skeena, and three on the Queen Charlotte Islands. A total of 21,750 artifacts of bone, stone, shell and wood, as well as historic items, have been catalogued (Table 2). One hundred and twenty-seven radiocarbon samples have been processed, 121 from the Prince Rupert sites, four from the Skeena River sites and two from the Queen Charlotte Islands sites (Figure 10).

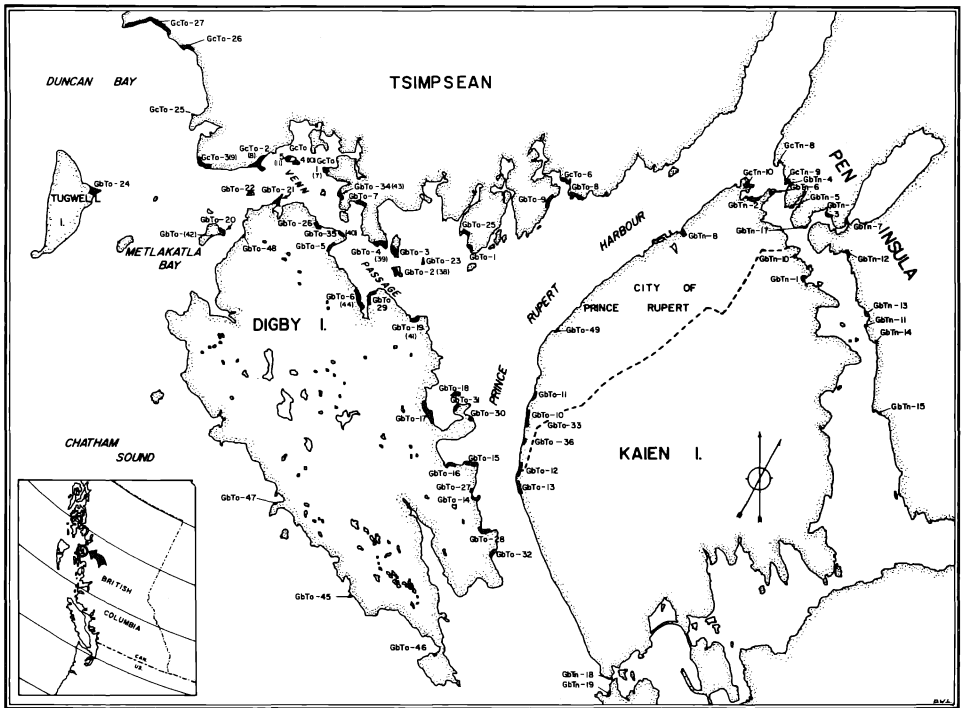


FIGURE 9. Map of the Prince Rupert Harbour region, with prehistoric site locations.

Regional histories have been outlined for the Queen Charlotte Islands by Fladmark (1970, 1975a), for the Skeena by Allaire (1978, 1979) and Ames (1979), and for Prince Rupert by MacDonald (1969) and MacDonald and Inglis (1976), both of which are revised in this paper.

PRINCE RUPERT HARBOUR PREHISTORY

The archaeological sequence from the Prince Rupert Harbour area spans at least 5,000 years. It is seen as a series of developing technological traditions which have an accumulative effect through time (Figure 11). New elements are appended to a basic pattern but do not significantly alter it. Changes that do occur are quantitative and likely reflect elaborations in the social and economic organization. Three periods are defined, the temporal span of each being based on radiocarbon dates.

Period III (3000 B.C.-1500 B.C.):

The earliest occupation of the Prince Rupert area so far known is characterized by shallow midden accumulations and restricted site areas.

TABLE 2
North Coast Prehistory Project
*Site Excavations, Total Artifacts Recovered**
and Carbon Samples Submitted

<i>Region</i>	<i>Borden Designation</i>	<i>Name</i>	<i>Year Excavated</i>	<i>Status</i>	<i>No. of Artifacts</i>	<i>C₁₄ Samples</i>
Prince	GbTn-1	Grassy Bay	1968		150	4
Rupert	GbTn-19	Ridley Island	1978		150	5
Sites	GbTo-10‡	Co-Op	1954	D		1
	GbTo-18	Dodge Island	1967		2100	15
	GbTo-23	Garden Island	1966, 1967		2400	13
	GbTo-30	Parizeau Point	1968, 1972		400	0
	GbTo-31	Boardwalk	1968, 1969, 1970		3200	35
	GbTo-33‡	Lachane	1970, 1973	D	5100	31
	GbTo-34	Kitandach	1971, 1972		2200†	4
	GbTo-36	Baldwin	1973	D	1000	11
	GbTp-1	Lucy Island	1968		6	2
	GcTo-1	K'nu	1972		1500†	0
Skeena	GdTc-1	Gitlaxdzawk	1971		300†	—
River	GdTc-2	Gitaus	1968		2800	3
Sites	GgTa-1	Kitwanga Fort	1979		200	—
	GhSv-2	Hagwilget	1967, 1970		150	1
Queen	FeTv-1	Tanu	1967		6†	—
Charlotte	FhUa-1	Honna River	1967		50	2
Islands	FhUb-1	Gust Island	1967		50	—
TOTALS					21,750	127

* Figures are rounded out to nearest 50 and are based on catalogue entries of artifacts.

† Including Historic artifacts.

‡ Evidence suggests that these two sites were one.

D Site has been totally destroyed.

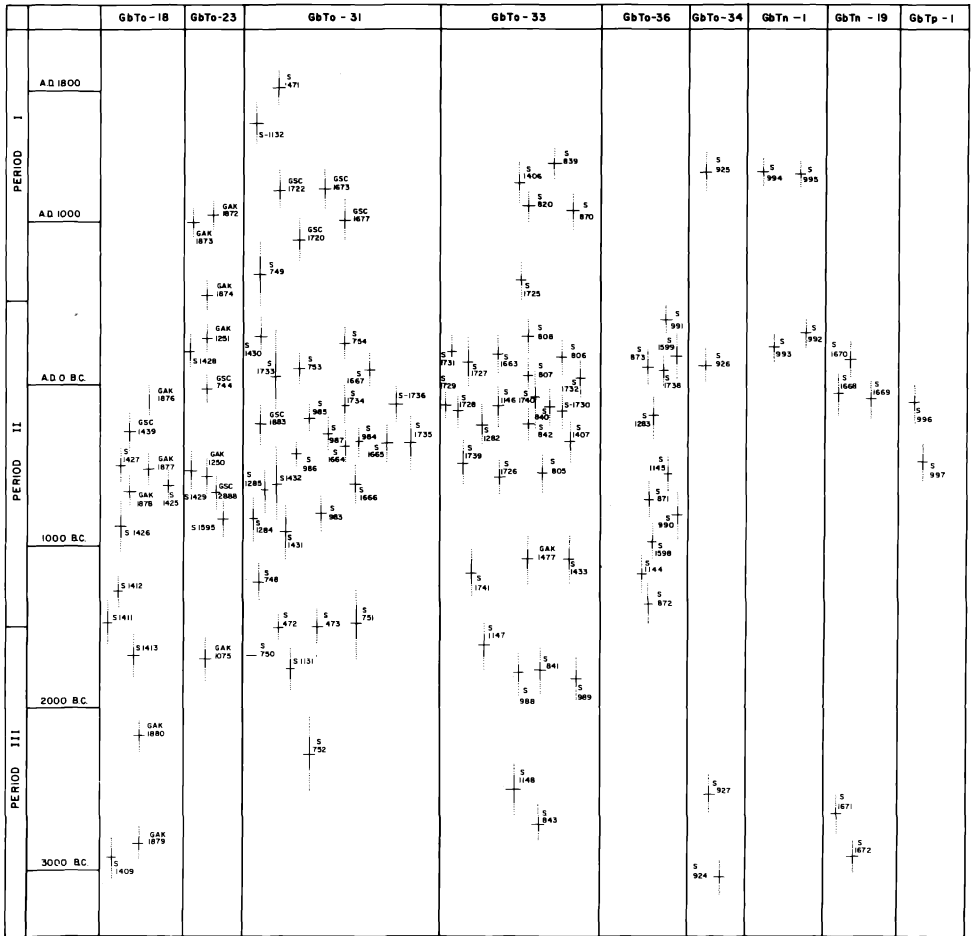


FIGURE 10. Radiocarbon dates from Prince Rupert, B.C.

Surface species of shellfish, especially blue mussel, and a lack of variety in intertidal bivalve species characterize the matrix.

Faunal and artifact inventories are small, and all tool forms are relatively few in number. Cobble tools, although present throughout the sequence, are in higher proportion to other stone forms than is the case in upper levels. Other chipped stone is present late into the period (Figure 12). Bilaterally barbed bone harpoons with line-holes or bilateral line-guards and unilaterally barbed harpoons with single unilateral line-guards are characteristic of this period (Figure 13). Geometric decorative motifs, including zoned lines and patterns of dots, are first applied to utilitarian objects such as harpoons. Also present are *Mytilus californianus* (giant mussel) adze-blades and points, bone wedges/chisels, canine tooth pendants, beaver incisors, bird-bone tubes and beads, and a variety of bone awls and points, all of which continue in the sequence.

There are few structural features in Period III components, but indications are that houses were considerably smaller than later in the sequence; post moulds are 13.5 to 18 cm in diameter and no house-pit structures have been recognized. However, slab-lined pits filled with fire-decomposed rocks (hearths?) are present.

Period II (1500 B.C.-A.D. 500):

About 1500 B.C. there is a rapid midden build-up, reflecting larger village occupations and larger house construction, and probably a substantial population increase. The subsurface bivalves of the intertidal zone are heavily exploited, as evidenced in the extensive shell deposits.

The basic tool kit continues. Chipped stone peaks in frequency in this period, and a new unilaterally barbed bone harpoon appears, with a multiply notched unilateral line-guard (Figure 14). Ground-slate points (Figure 15) and "pencils" now occur in abundance and several new artifact forms are found, including labrets and novice lip-pins; nephrite adze/chisel blades; pecked and ground stone tools; sea-mammal bone rods; socketed points; red-ochre pigment balls; and shaman mirrors. The first trade items are in evidence, including obsidian, amber and dentalia. Art objects become common. More elaborate geometric motifs are applied to bone pendants and the first zoomorphic bone and siltstone items (clubs and handles) occur (Figures 16, 17).

A large sample of burials dates to the last millenium of this period. Burial is generally in a tightly flexed position either in a shallow pit or a

CHIPPED STONE	III	II	I
Pebble tools	P	P	P
Cortical spall tools	P	P	P
Flaking detritus and cores	P	P	P
Square based lanceolate bifaces	R	R	R
Leaf shaped bifaces	R	R	R
End scrapers	R	R	
GROUND AND/OR PECKED STONE			
Ground slate points	R	P	P
Ground slate daggers		R	
Hexagonal ground slate pencils	R	P	P
Irregular abrasive stones	P	P	P
Shaped abrasive stones	P	P	P
Nephrite adze/chisel blades		P	P
Perforated pebble net sinkers		P	P
Notched pebble net sinkers		P	P
Grooved splitting adzes			P
Plain hafted mauls			R
Plain bark shredders			R
Stone bowls			R
Stone clubs		R	R
Facetted pigment stones		P	P
BONE			
Bevelled and tapered base points	P	P	P
Socketed points		P	P
Fish hook barbs	P	P	P
Splinter awls	P	P	P
Sectioned awls	P	P	P
Needles	R	P	P
Metapodial and ulna tools	P	P	P
Drills	P	P	P
Bilaterally barbed harpoons	P	P	
Unilaterally barbed harpoons with line guard	P	P	
Unilaterally barbed harpoons with line hole		P	P
Harpoon valves			R
Sea mammal bone rods		P	P
Wedges/chisels	P	P	P
Scrapers			P
Bark shredders		R	R
Bark peelers		R	R

FIGURE 11. Preliminary list of relative frequencies of artifacts from Prince Rupert Harbour sites (R=rare, P=present).

BONE	III	II	I
Ground incisor chisels	P	P	P
Bird bone tubes	P	P	P
Bird bone beads	P	P	P
Bird bone whistles		P	P
SHELL			
Mussel shell adzes	R	P	P
Mussel shell knives		P	P
Mussel shell points	R	R	R
Pecten shell rattle			R
WOOD			
Kerfed boxes		P	
Bowls		R	
Wedges		P	
Shafts		P	
Baskets		P	
Cordage		P	
Labrets		R	
EXOTIC ITEMS			
Amber		R	R
Obsidian	R	R	R
Copper		R	R
Unfaceted pigments	P	P	P
Dentalium		R	R
ITEMS OF PERSONAL ADORNMENT			
Canine tooth pendants	P	P	P
Stone labrets/bone labret pins		P	P
Bone pendants		P	P
Beads (shell, amber, copper)		R	R
Bracelets		P	P
Combs			R
Pins			R
DECORATED BONE ITEMS			
Handles for beaver tooth chisels		R	R
Clubs		R	R
DECORATED STONE ITEMS			
Incised zoomorphic concretions		R	R
Segmented tablets (ribbed stones)		R	R
Zoomorphic bark shredders		R	R
Decorated stone clubs		R	R
Zoomorphic splitting adzes			R
Zoomorphic mauls			R
Mirrors			R

FIGURE 11 (Cont'd). Preliminary list of relative frequencies of artifacts from Prince Rupert Harbour sites (R=rare, P=present).

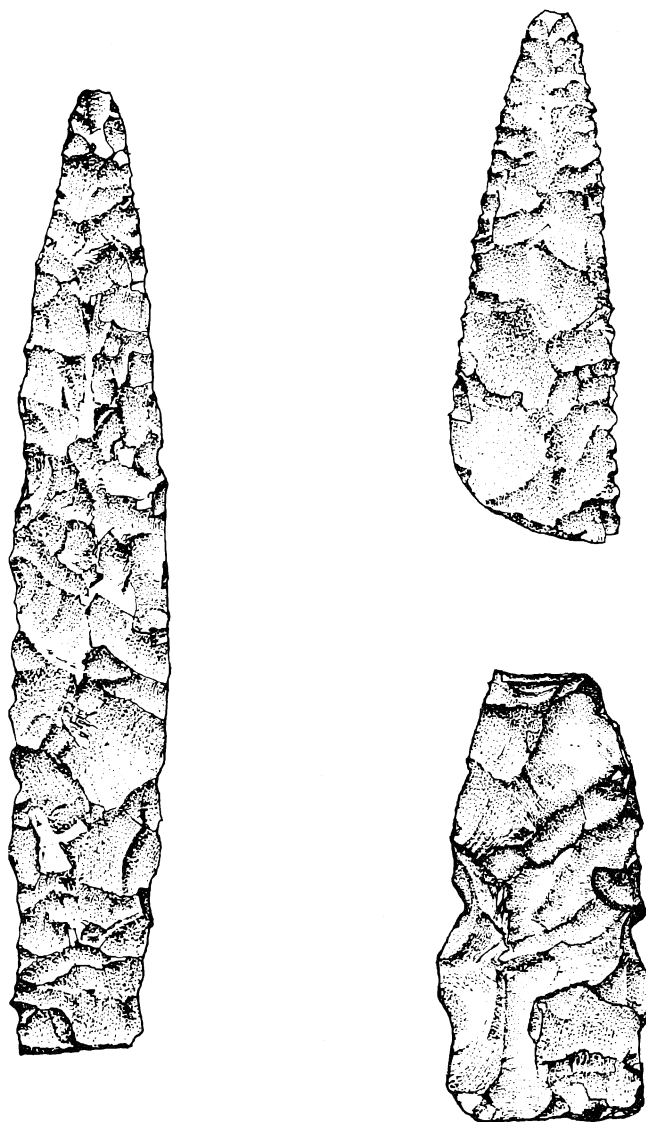


FIGURE 12. Basalt bifaces from Prince Rupert. Typical of bifaces that occur infrequently throughout the sequence.

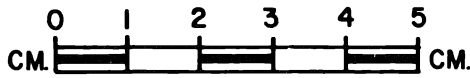
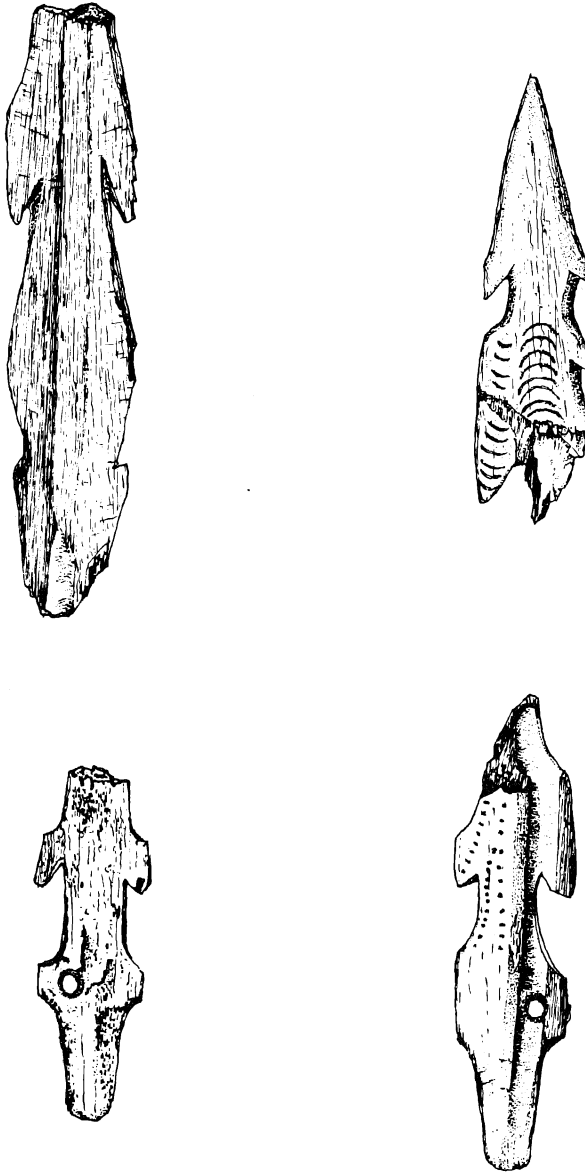


FIGURE 13. Bilaterally barbed bone harpoons, Period III, Prince Rupert.

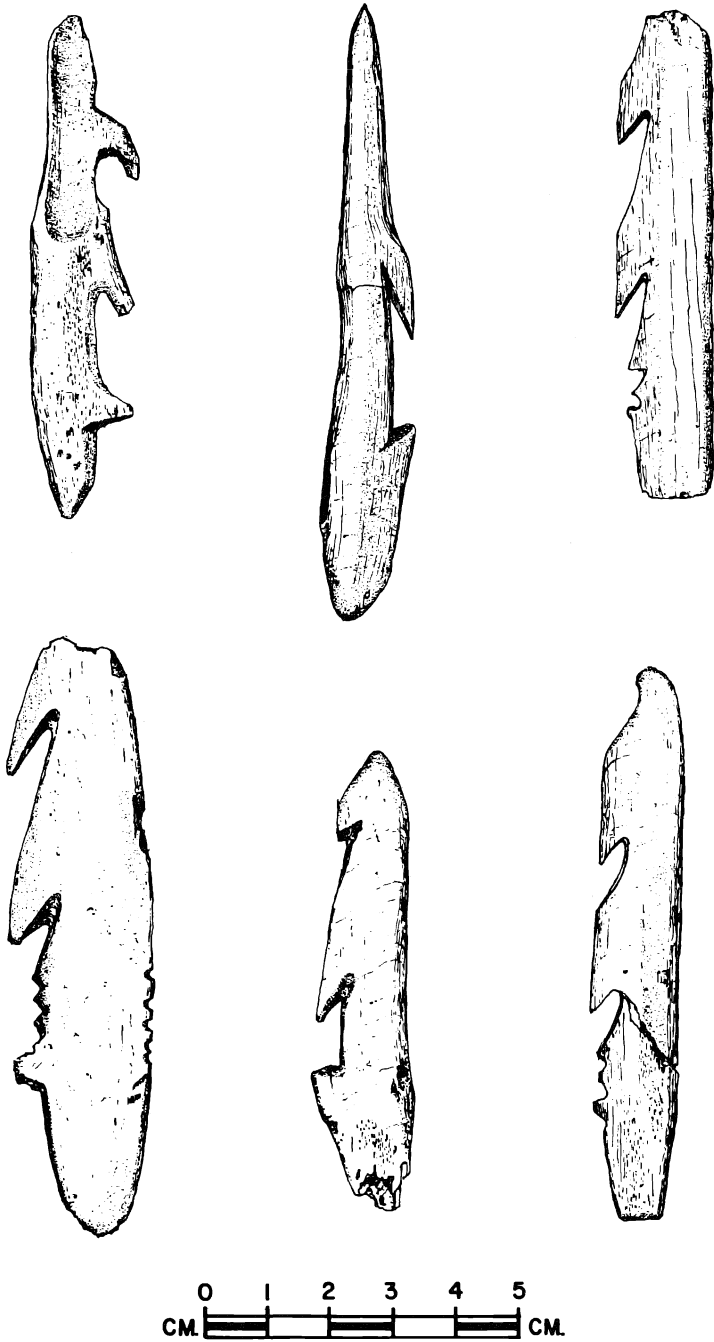


FIGURE 14. Unilaterally barbed bone harpoons, Period II, Prince Rupert.

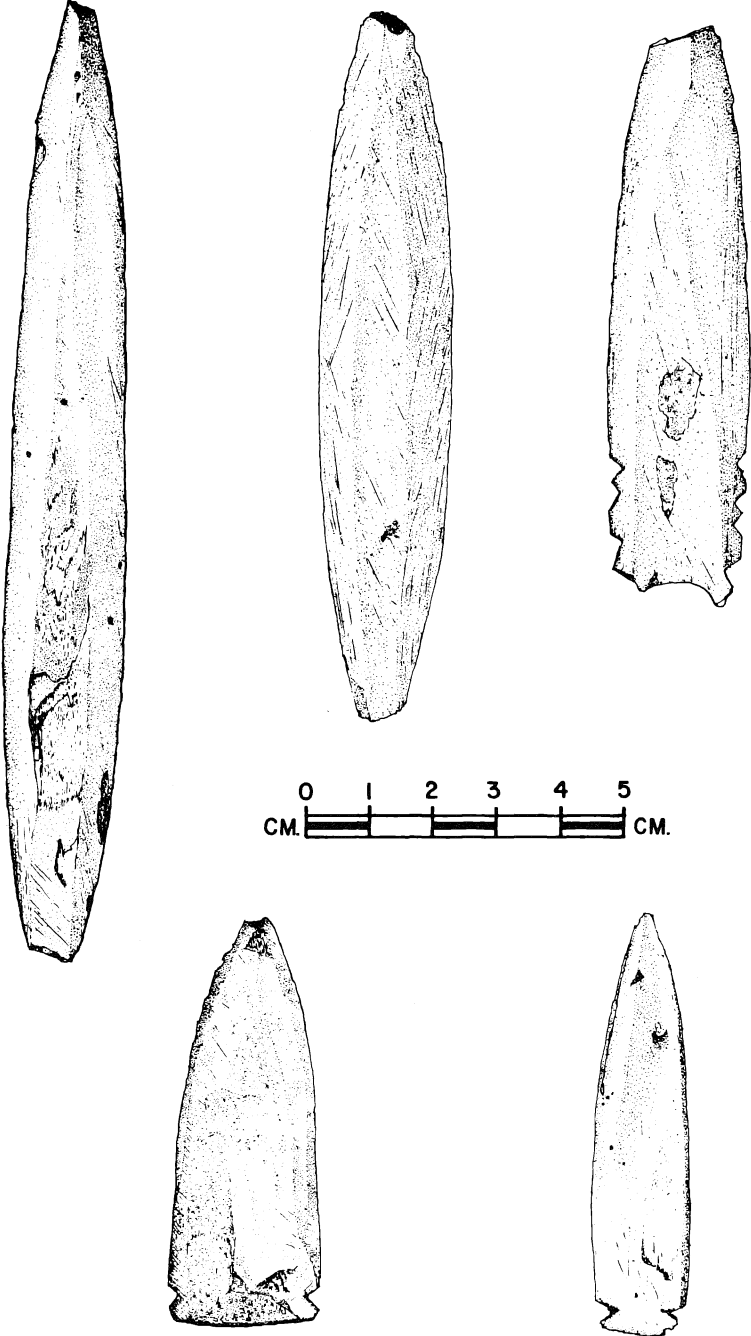


FIGURE 15. Ground-slate points from Prince Rupert, Period II.

rectangular box. Grave goods, copper ornaments, amber beads, shell beads, shell gorgets and quantities of sea-otter teeth which are included with some burials reflect status differentiation in the community. Probable ritual use of skeletons (Cybulski, 1978b) and physical injuries that may be attributed to intergroup hostility (Cybulski, 1979) are encountered.

House features are considerably larger, with extensive areas of superimposed burned shell hearths and floors of beach sand and gravel. Small concentrations of "egg-shaped" stones, probably boiling stones, are found along with the normal fire-decomposed rock features. Patterns of post moulds, 4.5 to 9.0 cm in diameter, probably representing drying racks, are common.

Period I (A.D. 500-A.D. 1830):

The Northwest Coast pattern is in full stride by this period, which contains the majority of non-perishable elements of the ethnographic culture. Massive and elaborate pecked and ground stone artifacts occur. Zoomorphic art flourishes, being applied to a wide range of bone and stone tools and personal objects such as combs and pins. Features from different areas of the site, such as house pit size and associated materials, reflect ranked village structure.

Cobble choppers and other chipped stone tools are still present. Unilaterally barbed bone harpoons with gouged or drilled line-holes are predominant (Figure 18). New artifact forms include bone scrapers, rare composite toggling-harpoon valves with point beds, and stone splitting-adzes, mauls, clubs and bowls, many of which are zoomorphic.

The upper layers are marked by the introduction of European trade goods, but the prehistoric pattern remains basically unchanged. Trade items are mostly decorative, including glass beads, buttons, and sheet copper locally manufactured into tinklers. Also found are glazed ceramic sherds and a few gun-parts and gunflints. No iron adzes, chisels or picks were recovered, although trader's journals of the period indicate that such items were traded in quantity to other northern groups (Inglis, 1973b).

The early 1830s saw the end of the Prince Rupert Harbour area as a centre of Coast Tsimshian occupation. With the building of Fort Simpson 40 km to the north in 1834, the focus of Tsimshian life shifted and was only briefly revived in the area with the reoccupation of Metlakatla in the 1860s. Today, Port Simpson is still the major centre of Coast Tsimshian occupation.

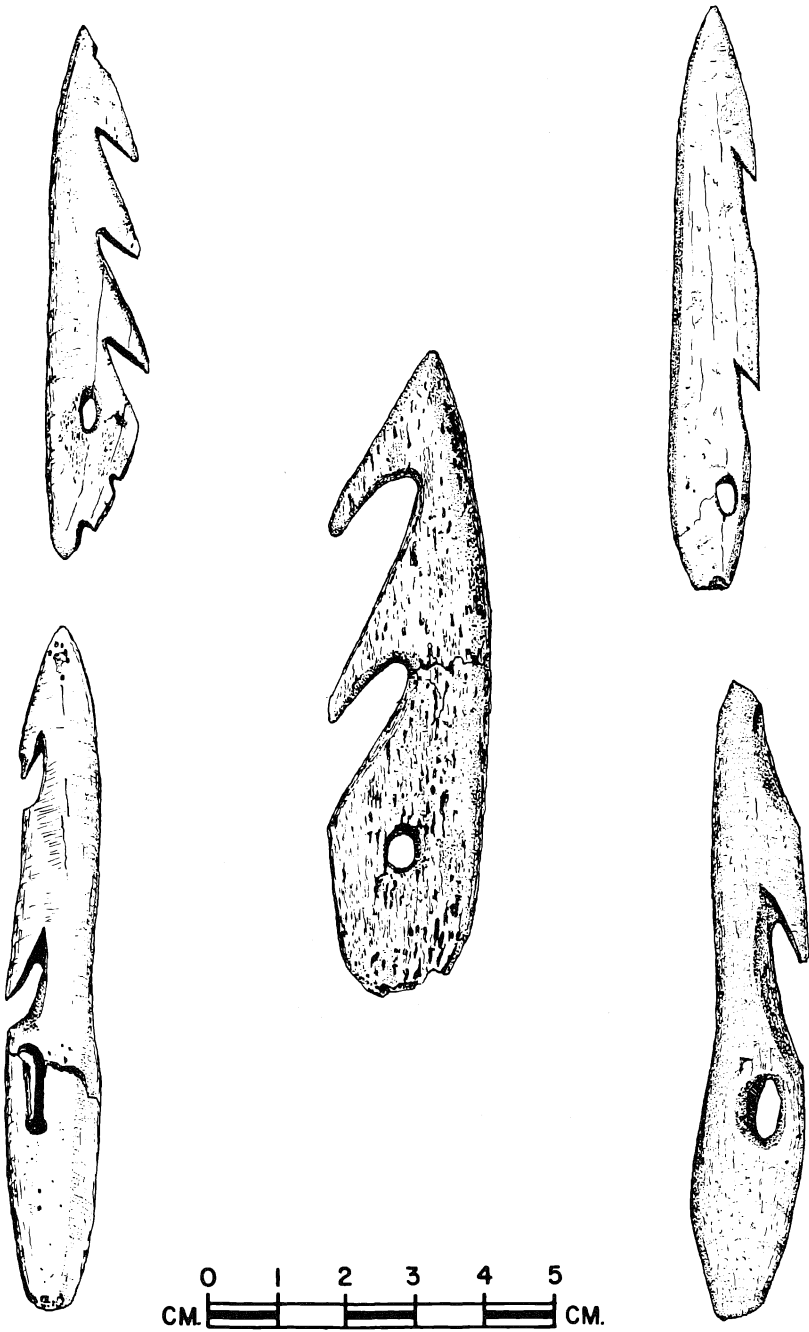


FIGURE 18. Unilaterally barbed bone harpoons with line-holes, Prince Rupert, Period I.

ECOLOGICAL STUDIES

Ecological studies have been a prime area of focus of the North Coast Prehistory Project. At the outset the immediate need was to build background collections to facilitate ecological research. The first step was a contract issued to Howard Savage in 1968 to collect and prepare an extensive comparative faunal osteological collection for both the National Museum of Man and the Royal Ontario Museum. The primary emphasis was on bird and mammal specimens not available in either institution. These ranged in size from hummingbirds to a 12 m fin-back whale. In the same year, Savage received a small contract to list all faunal specimens related to west coast archaeology held in Canadian institutions and in the Smithsonian Institution in Washington, D.C. Another contract was issued to Savage to undertake analysis of the faunal material excavated from the Boardwalk site. He completed a brief preliminary analysis (Savage, 1972), the bulk of this work being done by Frances Stewart (1973, 1974, 1975a, n.d.). The methodology utilized in faunal analysis included the identification of all specimens down to the smallest zoological taxa. For the Boardwalk site, this entailed identification of nearly 20,000 faunal elements and quantification of results based on minimum number of individuals. The total number of each identifiable skeletal element for each species was counted, then the elements were separated into right and left, and into age groups of "immature," "young adult" and "adult." Features recorded included pathology and evidence of butchering and burning. Sorting and retrieval by computer aided greatly in the analysis (Stewart, n.d.).

Faunal samples recovered from all Prince Rupert excavations total over 110,000 elements. Analysis by Stewart (n.d.) and May (1979) have identified thirty-three mammal species, fifty-seven bird species and twenty-nine fish species to date (Tables 3, 4, and 5). There is basic continuity in the use of faunal resources based on hunting of birds, land and sea mammals, fishing and shellfish gathering. The faunal remains are characterized by areal diversity and temporal uniformity.

Microscopic analyses of shellfish samples recovered from excavations have verified the ethnographic pattern of heavy harvesting of bivalves in winter and spring and have added a small summer-fall harvest. Most shells have been subjected to heat. Species identified include butter-clam, little-neck clam, basket cockle, horse clam, common and giant mussel, barnacle, limpets, whelks and sea-urchin (Ferguson, 1975; May, 1979).

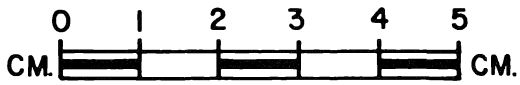
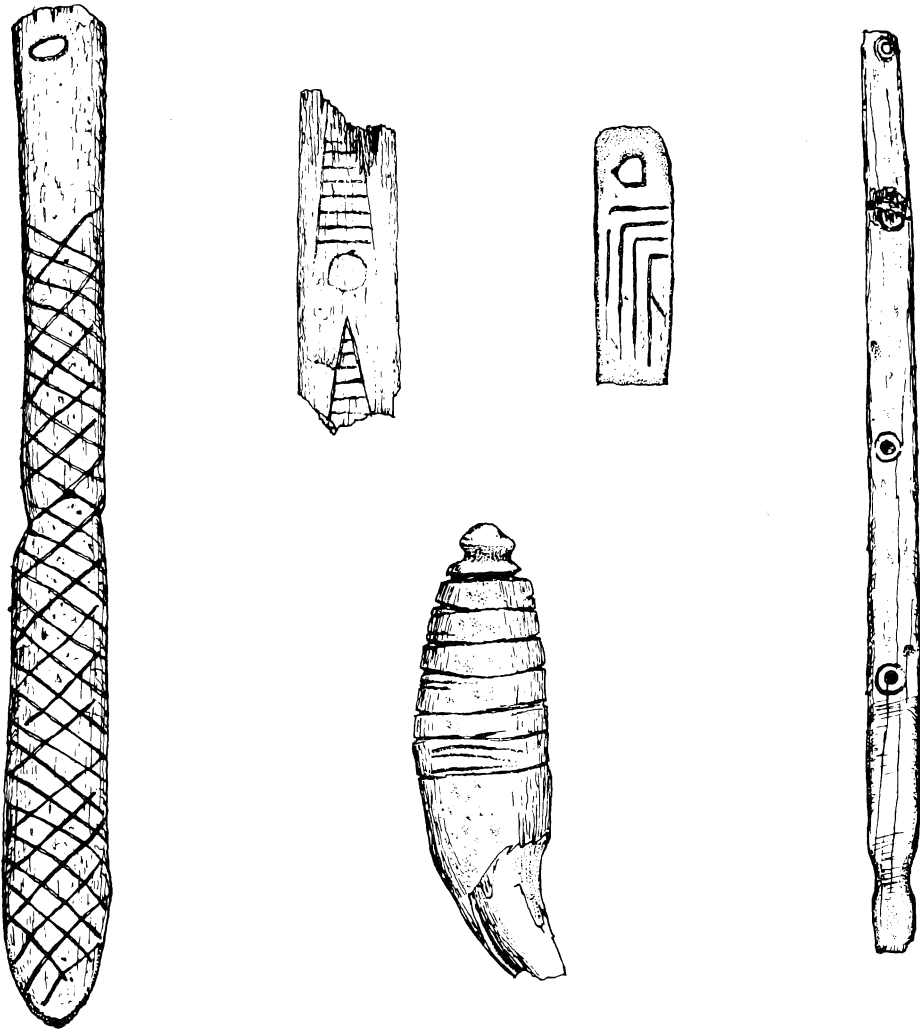


FIGURE 16. Sample of geometric design motifs on bone and teeth, Prince Rupert, Period II.

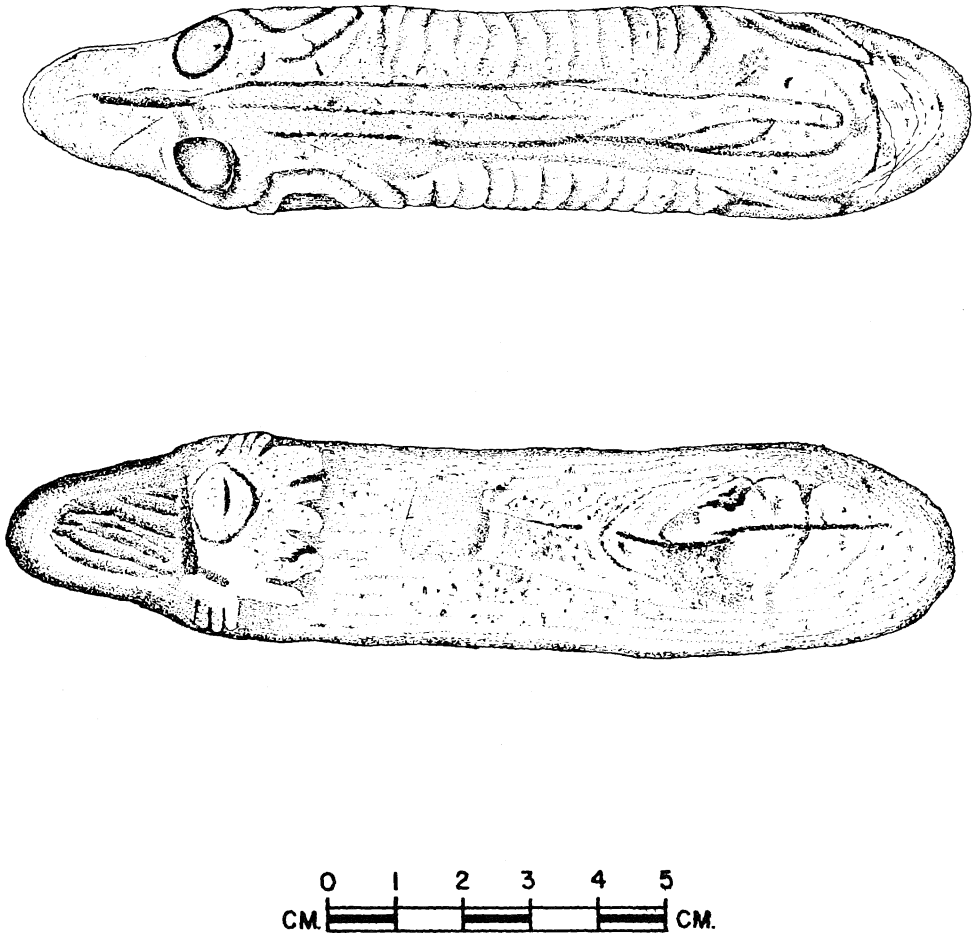


FIGURE 17. Carved siltstone concretion; one of the earliest examples of zoomorphic art in the Prince Rupert area, early Period II.

TABLE 3

*Mammals Represented in Faunal Material from Prince Rupert
Listed in Phylogenetic Order* (Banfield, 1974)*

<i>Land</i>		
Woodchuck	Dog	Skunk
Hoary Marmot	Red Fox	River Otter
White-footed or Deer Mouse	Black Bear	Blacktail Deer
Beaver	Grizzly Bear	Mule Deer
Boreal red-backed Vole	Raccoon	Stika Deer
Muskrat	Marten	Caribou
Porcupine	Mink	Mountain Goat
Coyote	Wolverine	Dall Sheep
Wolf		
<i>Historic</i>	<i>Sea</i>	
Rat	Whale sp.	Northern Sea Lion
Pig	Sea Otter	Harbour Seal
Cow	Northern Fur Seal	

* Land and sea mammals are separated, as are animals from the historic period.

TABLE 4

*Fish Represented in Faunal Material from Prince Rupert
Listed in Phylogenetic Order (Hart, 1973)*

Shark	Codfish	Arrowtooth Flounder
Spiny Dogfish	Pacific Cod	Petrale Sole
Skate	Pollock	Flathead Sole
Ratfish	Rockfish	Pacific Halibut
Sturgeon	Copper Rockfish	Butter Sole
Herring	Sablefish	Rock Sole
Salmon	Greenlings	Slender Sole
Trout	Sculpins	English Sole
Smelt	Cabazon	Starry Flounder
Eulachon	Flounder	

TABLE 5

*Birds Represented in Faunal Material from Prince Rupert
Listed in Phylogenetic Order (Godfrey, 1966)*

Common Loon	Shoveler	Rock Ptarmigan
Yellow-billed Loon	Canvasback	Whimbrel
Arctic Loon	Greater Scaup	Glaucous Gull
Red-throated Loon	Lesser Scaup	Glaucous-winged Gull
Red-necked Grebe	Common Goldeneye	Herring Gull
Horned Grebe	Barrow's Goldeneye	Ring-billed Gull
Western Grebe	Bufflehead	Mew Gull
Albatross	Oldsquaw	Common Murre
Double-crested Cormorant	Common Eider	Thick-billed Murre
Brandt's Cormorant	White-winged Scoter	Pigeon Guillemot
Great Blue Heron	Surf Scoter	Marbled Murrelet
Trumpeter Swan	Common Scoter	Rhinoceros Auklet
Canada Goose	Common Merganser	Tufted Puffin
Brant	Red-breasted Merganser	Great Horned Owl
Mallard	Red-tailed Hawk	Belted Kingfisher
Pintail	Bald Eagle	Steller's Jay
Green-winged Teal	Spruce Grouse	Common Raven
American Widgeon	Ruffed Grouse	Common Crow
	Willow Ptarmigan	Robin

Soil samples are being analyzed to determine the depositional history of the strata. This entails standard chemical tests and microscopic study of sieved samples to determine volumetrically the makeup and origin of different strata.

Botanical studies have included the collection of on-site and off-site vegetation for identification by botanists at the National Museum of Natural Sciences. Wood artifacts, nearly 2,000 years old, recovered from the waterlogged excavation on the Lachane site have been analyzed by E. Perem and R. Hayward, at the Eastern Forest Products Laboratory, Environment Canada. Twelve species have been identified from 332 samples. In order of abundance they include red cedar (37%), western fir (26%), hemlock (17%), yellow cedar (8%), yew (2%), spruce (2%), birch (2%), juniper, alder and pine (1% each), and crabapple and maple.

The Barbeau/Beynon mapping of the Coast Tsimshian economic territory has been expanded by field survey and archival research. Combined with the results of the major 1974 environmental study of the region, detailed information on the distribution of faunal and floral resources is now available, and a more complete picture is emerging of the prehistoric exploitation pattern and seasonal cycle.

OSTEOLOGICAL STUDIES

Over 200 burials in varying states of completeness were recovered from seven sites in Prince Rupert harbour, and twenty-four individuals were excavated at Gust Island, Queen Charlotte Islands. The latter sample, dating to the early historic period, has been published in its entirety (Cybulski, 1973b; MacDonald, 1973a). The sample from Prince Rupert spans 3,000 years of occupation at several sites. Although large, it is mainly from the middle of the time scale (Period II), making it difficult to delineate populations through time. Two general areas of research are being covered by Cybulski: (1) study of the biological features and physical characteristics of the population; (2) investigation of paleopathology (disease, injury and developmental disorders) in the Prince Rupert region.

Preliminary indications are that the people represented by the skeletons were of short and stocky build. Average adult males were 163 cm (5' 4") tall, while females were 12 cm (5") shorter. The data of some sites suggest high infant mortality with men outliving women by about two to three years. At other sites there was a paucity of young female skeletons while male skeletons were well represented in all age groups.

Osteoarthritis appears to have been common in adults. The most frequently and most severely affected joint surfaces were in the neck, lower back, shoulder, elbow and wrist. Several skeletons suggest infections of unknown origin, bone tumours, and in two instances spinal curvature. At least three instances of decapitation were present at the Lachane site (GbPo 33). These data, together with relatively frequent occurrences of healed trauma at all sites, including depressed skull fractures, facial fractures and forearm "parry" fractures, suggest frequent inter-group hostility in the region (Cybulski, 1977 and 1979).

Unique tooth wear patterns and their cultural implications have been reported in a number of Prince Rupert individuals (Cybulski, 1974). Skill in the art of basketweaving, as seen in baskets recovered from the waterlogged deposit, is reflected by grooves in the grinding surfaces of the

front teeth of females. These were likely formed by pulling root fibre or cedar bark between the teeth in order to prepare fine strands for weaving. A different type of tooth wear resulted from wearing stone labrets in the lower lip. The labial surfaces of the lower front teeth were worn flat by the abrasive action of the stone. Although early European explorers to the Northwest Coast reported that only women wore labrets, both male and female skeletons in the prehistoric Prince Rupert sites show the plausibly related distinctive tooth wear pattern.

Studies of population affinities based on the skeletal remains have not yet been completed because of a paucity of published comparative data from prehistoric sites elsewhere on the British Columbia coast. Preliminary comparisons with early historic samples, based on the frequencies of non-metric morphological variance, suggest similarities with people living farther south along the coast.

ARCHIVAL RESOURCE FILE

In the past very little had been done to draw together the voluminous collections of Northwest Coast resource materials, especially from eastern institutions. Because ethnohistory, ethnography and archaeology are so closely linked in the Northwest Coast area it was an integral part of the North Coast Prehistory Project to assemble in one place all relevant historical and ethnological documentation. To date, over 10,000 historical photographs together with indexes of holdings and field collector's notes have been gathered from nearly thirty institutions in Canada, the United States and Europe. The historic photograph collection has been standardized to 8" x 10" prints dry mounted on cardboard stock. Village views and house structures have been emphasized in the selection, but items relating to economic activities, which were often not noted by the ethnographers, have also been gathered together. The unbiased nature of photographs provides a bridge between the ethnographies of the area, which emphasize linguistics, social traditions and mythologies, and archaeology and the study of material culture. The ethnographers as eyewitnesses tended to stress the typical. By analyzing photographs one can check for variability within a community and make detailed statements about village plan, structures and material culture items.

The photographs also provide an excellent field tool for locating features and were used extensively at the Kitselas fortress and the Hagwilget excavations. They provided an excellent check for the village plans of the Haida Village Mapping Project. Also, much of this material is being used

to prepare the submission of the Haida village of Ninstints for consideration by the World Heritage Site Committee of UNESCO.

BEYOND THE ARCHAEOLOGY

A current concern of all archaeological research projects in Canada is the maintenance of good relationships with local people in the area in which they work. Archaeological remains are viewed as local resources, which in the past have been exploited by archaeologists with little useful feedback to the community. Reciprocity between researcher and community is not simply desirable, it is essential in view of the authority over land access vested in local individuals or groups. This is particularly evident in northern British Columbia where native groups control the land on which many sites occur and their permission is required for a provincial permit. Nor is there a single approach to reciprocity. Local educators require clear summaries of the prehistory that can be used in school programs; native people want summaries that relate to their own historical traditions; and the lay public, both resident and visitor, want displays that interpret local prehistory.

This obligation for reciprocity was a major concern of the North Coast Prehistory Project since its beginnings over a decade ago. Feedback began at the end of the first summer's survey in 1966, with radio reports and newspaper accounts in the local media that continued throughout the project. Talks were given to local clubs, and by 1969 the demand was sufficient to conduct a three-day seminar at a Prince Rupert high school. More than 100 local people registered for the seminar, which provided a detailed review of regional prehistory, as well as a general survey of Canadian prehistory for perspective.

In 1969 a project was also fielded to make permanent records of carved poles on the Skeena River using latex moulds and fibreglass copies. Written agreements with the native owners of the poles stipulated that casts be returned to the Skeena, with the idea that they could be erected. The next spring the casts were delivered to the Kitwanga and Kitselas bands.

In 1970, twenty tons of site material, including shell-midden and plant-scape, were collected for the new archaeology hall in the National Museum of Man in Ottawa, which opened to the public in 1974 (Inglis and MacDonald, 1976). Materials for regional museum exhibits were sent to Terrace in 1970 for the new Terrace Museum-Library Complex, and to Kitimat in 1973. In 1972, two large-scale exhibits depicting the archaeological work to date were installed in the Metlakatla Cultural Centre and the Museum of Northern British Columbia in Prince Rupert.

By 1972 we had determined that the greatest demand on the north coast was for material that would bring museum resources, particularly historical photographic resources, to local attention. A travelling exhibition of over 150 enlargement prints and transparencies of carefully selected historical images was circulated by the National Museum of Man and the Department of Indian and Northern Affairs to a dozen native communities on the north coast, complete with a free illustrated catalogue (Garner and MacDonald, 1972). A second exhibit dealing with native people of the central and south coast circulated simultaneously in that area (Jackson, 1972). The next spring the exhibits were exchanged between the two areas, and were later circulated throughout Canada by the National Museum of Man. To date many thousands of Canadians have seen these displays from Masset, British Columbia, to Yarmouth, Nova Scotia.

Prompt feedback to the public of our research results is more difficult to achieve due to the length of time required for analysis of a project of this magnitude. A model has been provided in the excellent three-volume work of Frederica de Laguna entitled *Under Mount Saint Elias: The History and Culture of the Yakutat Tlingit* (1972), which skilfully and thoroughly interweaves the ethnohistory and archaeology of the Tlingit. Nevertheless, a start has been made with one popular article (Inglis and MacDonald, 1975) and a handbook (MacDonald and Inglis, 1976) to the reconstructed Prince Rupert Harbour "dig" in the National Museum of Man, Ottawa, and with a major illustrated work on the southern Haida villages of the historic period (MacDonald, 1972a, and in press). Several other books for lay readers are in the planning stage.

PRESENT WORK AND FUTURE PROSPECTS

At this stage the Boardwalk site (GbTo 31) is the key site in the analysis of Coast Tsimshian prehistory. However, with large samples available from other excavations in the harbour area, analysis cannot occur without reference to other sites. Analysis of all aspects of the North Coast Prehistory Project is ongoing and a major series of publications has been initiated with Allaire (1978) and Inglis and MacDonald (1979). Other reports are projected for the near future.

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