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EDITORIAL

It has been estimated by some experts that there is more money made (in the U.S.) from illegally dealing in ancient Indian artifacts than there is in heroin smuggling.

So said Charles McKinney, antiquities coordinator of the U.S. government office responsible for archaeology and historic preservation, heritage conservation and recreation.

McKinney was quoted in a *Maclean's* magazine article about the increasing theft of artifacts on this continent--an activity which we had previously tended to think was peculiar to Central America and the northern Mediterranean.

But it now seems that the three-pronged combination of dwindling resources, more careful protection, and increasing numbers of unscrupulous collectors, is putting pressure on U.S. and Canadian archaeological sites...the pressure of the surreptitious shovel and even the midnight bulldozer.

There's only one answer: harsher laws, enforced. The U.S. is expected to toughen up its legislation, with punishment for professional artifact thieves and dealers of up to five years' jail and \$100,000 fine. Canada should do the same. Sure, education remains the constructive approach to preservation. But there are some rip-off artists who will never be educated: let's nail the bastards!

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TOOL-MAKING SITE FOUND

A new obsidian work-station has been recorded by A.S.B.C. member Don Bunyan.

The heavily-used site is located on Diamond Head, behind Squamish, at an elevation of about 4,700 ft., and near a well-used trail.

Samples of detritus have been submitted to the obsidian laboratory at Simon Fraser University. Early reports suggest that the material may have been mined close by.

BOARD ENCOURAGES AMATEUR HELP

The B.C. Heritage Advisory Board has put a word in for concerned amateurs!

The board's archaeological sub-committee recently recommended that non-professionals be encouraged to participate in publicly-funded archaeological excavations.

The board now has unreservedly endorsed that recommendation, which should mean that A.S.B.C. members will be increasingly welcome to help at future digs.

THE MIDDEN is produced by the Publications Committee of the Archaeological Society of B.C. five times a year. Gladys Groves, Chairman, 504 - 2005 Pendrell Street, Vancouver, B.C., V6G 1T8.

The next issue of THE MIDDEN will appear February 1980.

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FORTY PETROGLYPHS FOUND AT GABRIOLA ISLAND SITE

Excerpted by Mary Bentley from her forthcoming book.

The Gabriola Weldwood Petroglyph Site (DgRw192) was discovered in the fall of 1976 by my husband and me and my parents, Harold and Mabel Cliffe, charter members of the A.S.B.C. (see The Midden, report by Hilary Stewart, Vol. VIII, No. 5, Dec., 1976).

The site is located 1.6 km west of Degnen Bay at the United Church and 200 metres north along an abandoned logging road on tree farm property owned by Weldwood of Canada Ltd.

Although this section of the island was logged during the Second World War, more than 40 unique petroglyphs remained hidden under a thick grass and moss covering until Thanksgiving Day, 1976. Local residents including Ethel Gray, who played on the site in her childhood, were astounded by our discovery of the carvings.

With only a scant piece of second-hand information we chanced upon a large moss-covered clearing of sandstone bedrock. As if guided by the powerful spirits which petroglyphs represent, we immediately uncovered two of the largest, most deeply abraded and most beautifully designed carvings.



A10 72 cm x 114 cm

While my husband photographed the incredible moment of discovery, we carefully rolled back a 12-cm-thick moss carpet covering the carving of a large bird-like creature. A perfect reverse image of the petroglyph was embossed on the root-matted underside of the moss. We were startled and overwhelmed that an island so familiar now disclosed secrets long hidden.

Near the creature's tail we uncovered an enormous serpent reminiscent of carvings at the Nanaimo River Site (DgRx8). The serpent, with its huge mouth, frightening teeth and tongue, and long, snake-like body, bears a resemblance to the Clayoquot



A7 100cm x 255cm

Indians's mythical "Haietlik," the Lightning Snake.

Although the initial thrill of discovery can never be repeated, each visit to the site throughout 1977, 1978 and 1979 yielded exciting finds. With respect and awe, we carefully turned back centuries of moss and dirt to reveal an ancient carved design.

On the rock face containing the bird and serpent (Section A) we now have documented a pair of deeply carved eyes with brows and nostrils, a small salmon, a crab, a realistic foot with five toes, a large ribbed fish similar to the Jack Point boulder carvings (located at the Nanaimo Museum), a stick man, an 11-rayed sun and an eight-rayed sun, an ovoid shape with inner detail, a zoomorphic head and many curves, circles and lines.

In Section B, 20 metres southwest, we have recorded three salmon, a male anthropomorph in the frontal frog-like dance position, a glaring humanoid head with arms, a faint mythical quadruped with oval eyes and curved snout, an eight-rayed sun, a heart-shaped, toothed face with penetrating eyes and several lines and curves.

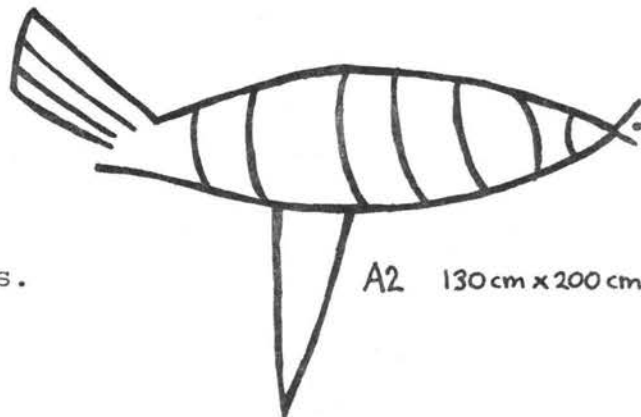
Section C contains a beautifully stylized, deeply carved quadruped with an X-ray style backbone, a small antlered head, a humanoid with X-ray



A12



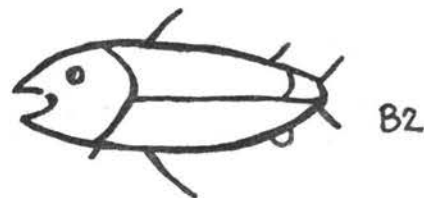
A18



A2 130cm x 200cm



B4



B2



B9

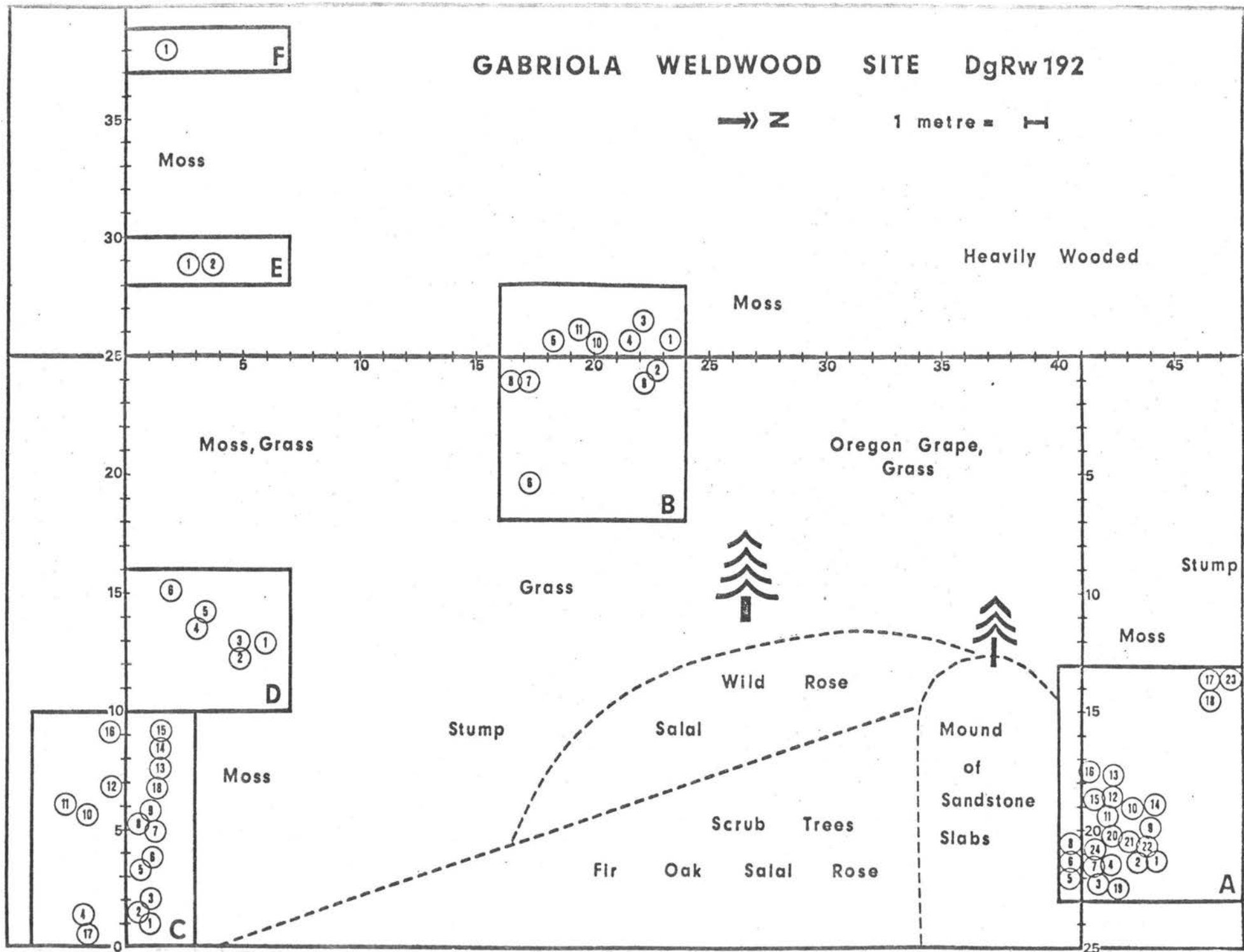


B7

GABRIOLA WELDWOOD SITE DgRw192

→ N

1 metre = 



ribs, a three-eyed head with large ears, and many curves and circles.

Several petroglyphs and eroded markings in this section were uncovered and recorded by Daniel Leen in April, 1979. His excellent photographs were invaluable help for the scale maps I compiled. Leen documented a large head with circular crest accompanied by a tiny face, a deeply carved quadruped with ears and tail, and a supernatural design with eyes and three-digit hands.

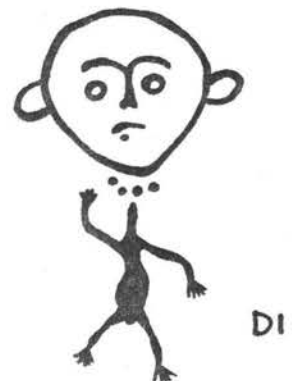
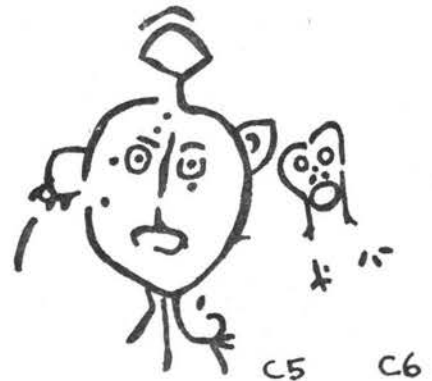
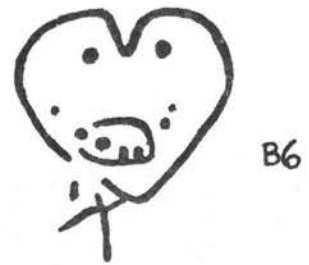
In Section D we recorded two humanoids, a heart-shaped mask face and a possible head with body. Nearby, Leen uncovered



a small, round face and necklaced humanoid with finely detailed fingers and toes.

Twelve metres west in Section E we unearthed a single eye and brow and an undetermined, eroded carving with eyes and three-digit appendages. A fish shape with accompanying circles and curves was recorded in Section F, the westernmost boundary of the documented glyphs.

By August 1979, more than 40 separate petroglyphs and many undefined markings had been recorded at the site. Eight unique faces and six humanoids make up the anthropomorphic images while two stylized birds, seven fish, three quadrupeds, one serpent and one crab comprise the zoomorphic representations. Geometric, symbolic or abstract designs such as the foot, eyes, suns, concentric circles, S-shapes, ovoids,

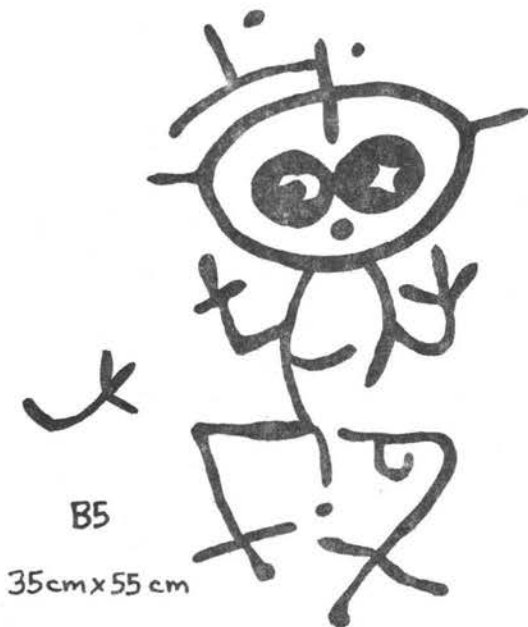


circles and lines comprise the third category of petroglyph types.

Most anthropomorphic figures are oriented in a western direction while most sea creatures face eastward.

Typical stylistic features of the carvings are shamanistic head crests or rays, three fingers or toes, emphasized eye and head size, X-ray ribs and animal ears.

In the fall of 1978, I approached the owners of the site, Weldwood of Canada, Ltd., to inform them of the important petroglyph discoveries on their land. Jack Crawford, assistant secretary, and Paul LaFontaine, public relations, were fascinated with the find and became immediate supporters of our wish to protect the area.



I then donated my scale maps and rubbings (as did Daniel Leen) to Bjorn Simonsen, Provincial Archaeologist. He later contacted Jack Crawford and asked for the company's cooperation in the protection of the site.

Weldwood's response was a generous donation of approximately six hectares (15 acres) taking in all the recorded petroglyphs as well as a buffer of trees and access road to the area. Weldwood felt the best way to preserve and protect the site was to deed the land to the Crown - a commendably positive and supportive action.

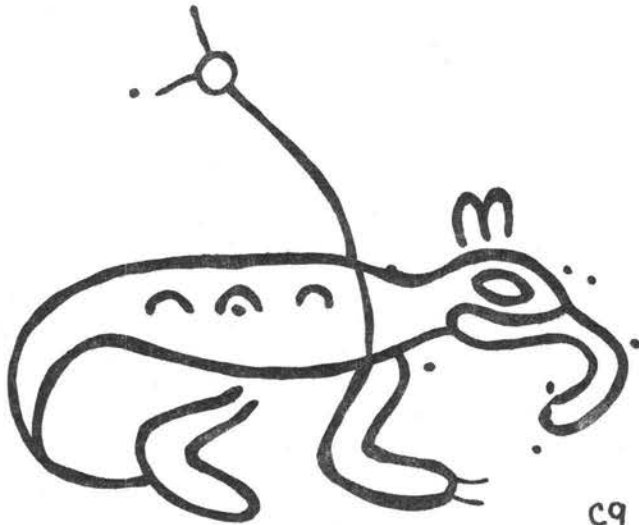
As knowledge of the rock art site becomes more widespread, we face the inevitable threat of the few careless visitors who walk or ride trail bikes over the glyphs, leave garbage behind, or unknowingly and knowingly mark the petroglyphs with crayon and paint while making rubbings.

If you wish to take rubbings at any rock art site in British Columbia please contact the Heritage Conservation Branch in Victoria for a permit.

Ever since the discovery day in 1976, I have felt torn between the two philosophies regarding rock art sites - full public disclosure of site locations versus total denial to the general public. While not completely comfortable with either extreme, I believe that by educating British Columbians

and particularly our school children, we can conserve as well as enjoy this priceless part of our native Indian heritage.

As a small contribution to the future I have enjoyed presenting petroglyph workshops to North Vancouver school children in Grades Four and Seven. The objectives of these workshops are threefold: to expose children to petroglyphs and pictographs, to teach them how to make rubbings properly, and to develop an awareness of our responsibility to respect and preserve British Columbia rock art sites.



C9 40cm x 60cm

A.S.B.C. SAYS THANKS

The executive of the Archaeological Society, at its November meeting, noted with enthusiasm Ms. Bentley's work in helping uncover this important petroglyph site. Ms. Bentley worked hard and long to ensure preservation of the site, bringing together Weldwood and the B.C. Government, and resulting in the property being donated to the province.

PALYNOLOGY AS A RESOURCE TOOL
IN ARCHAEOLOGY IN SOUTHWESTERN BRITISH COLUMBIA

By Joan Miller, Student of Botany and Zoology
U.B.C.

Introduction

Palynology, the study of fossil pollen, can help archaeologists to reconstruct the environments of the past, and so understand more about how prehistoric peoples lived and how they used - and sometimes changed - their environment. Several palynological studies have been conducted in British Columbia. While few of these have been carried out in conjunction with archaeological investigations, they can provide information of interest to archaeologists. Studies near archaeological sites have particular relevance. Figure 1 shows all palynological and archaeological sites.

Archaeology and Palynology in British Columbia

Some of the palynological studies in B.C. have particular relevance because they are located near archaeological sites. Pollen analysis has been done as a part of the archaeological investigations at Hat Creek (Hebda 1978). In the Yale region, where Borden has established an archaeological sequence dating to 9,000 \pm 150 years B.P., Mathewes and Rouse have proposed a palynological sequence dating to 11,500 years B.P. (Mathewes, Borden, and Rouse 1972). In the lower mainland, studies by Calvert (1970) at the St. Mungo Cannery site, and by Matson (1976) at the Glenrose Cannery site are backed up by palynology in Burns Bog (Hebda 1977) and in the University of British Columbia Research Forest near Haney (Mathewes 1973a).

Hebda (1978) has attempted to reconstruct the environment during post-glacial times in the Hat Creek Valley. Until about 6,600 years B.P., the area was a sagebrush (*Artemisia*)¹ grassland with a few nearby pines (*Pinus*) and with pine forests at higher elevations above the valley. Between 6,600 and 4,500 years B.P., the climate became cooler and moister, and grasses and sagebrush were partially replaced by Douglas fir (*Pseudotsuga mensiesii*), alder (*Alnus tenuifolia*, *A. crispa*). From 4,500 B.P. to the present, the climate and vegetation approached those of today, with Douglas fir becoming commoner and grasses and sagebrush becoming rarer. The archaeological report for Hat Creek has not yet been published but it will be interesting to see how this information is used in reconstructing the lives of the people of the Hat Creek Valley.

1 All scientific names are from Lyons (1952).

Near Yale, palynology has been used to establish that the area was ice-free before 11,430 B.P., and it is estimated that Indians could have lived in the lower Fraser Canyon region for several thousand years before 9,000 years B.P., when the first traces of occupation appear in the archaeological record (Mathewes, Borden, and Rouse 1972). As the glaciers melted, gravel and sand were deposited by glacial melt waters. These deposits were colonized by plants which grew from pollen carried by wind and water, and organic sediments began to build up, providing a base for more pioneer vegetation. The area was colonized by pine and alder during the cool moist period following the retreat of the ice. From 10,400 to 6,600 years B.P., the climate became drier, and Douglas Fir, western hemlock (*Tsuga heterophylla*), birch (*Betula*), western red cedar (*Thuja plicata*), and yellow cedar (*Chamaecyparis*) were common, along with sagebrush and members of several families of flowers (*Rhamaceae*, *Tubuliflorae*). It is interesting that Indian potato (*Sagittaria*), which is not found in the area today, was present during this period. In the cores from Yale, pollen from non-tree species is more diverse and commoner than it is today, indicating that the forest was more open than is the present-day forest near Yale.

The archaeological sites at St. Mungo Cannery (Calvert 1970) and Glenrose Cannery (Matson 1976) are located close together on the South Arm of the Fraser River. The earliest signs of occupation at the St. Mungo site are 4,000 B.P., and at Glenrose, 8,150 years B.P., but these may not be the dates of the first occupation at either site, because the area was probably ice-free by 11,000 years B.P. Both sites show a culture with an economic reliance on fish (especially salmon and sturgeon), shellfish (including mussels and clams), land mammals (such as wapiti, deer, and bear), and waterfowl. Generally the two sites show a trend towards increased use of marine resources, probably because the buildup of the Fraser River delta made the area unsuitable for land mammals (Calvert 1970). Although some palynological work was done on the Glenrose site, preservation was very poor and it was difficult to interpret the few microfossils² obtained. Pollen of skunk cabbage (*Lysichitum americanum*), which has edible roots, suggest that these plants were collected in Burn's Bog and were carried to the site. Other species found were ferns, hemlock, pine, spruce (*Picea*), alder, grasses, and mosses, indicating a moist coastal forest (Matson 1976).

An interesting addition to these studies is provided by palynological investigations in Burn's Bog (Hebda 1977). In fact, Hebda mentions that the palaeo-environmental and ecological data he obtained will be useful in interpreting the archaeological information from the St. Mungo and Glenrose Cannery sites. In the Burn's Bog area, the Fraser River built up deltaic sediments

2 Fossil pollen grains and spores are collectively called microfossils.

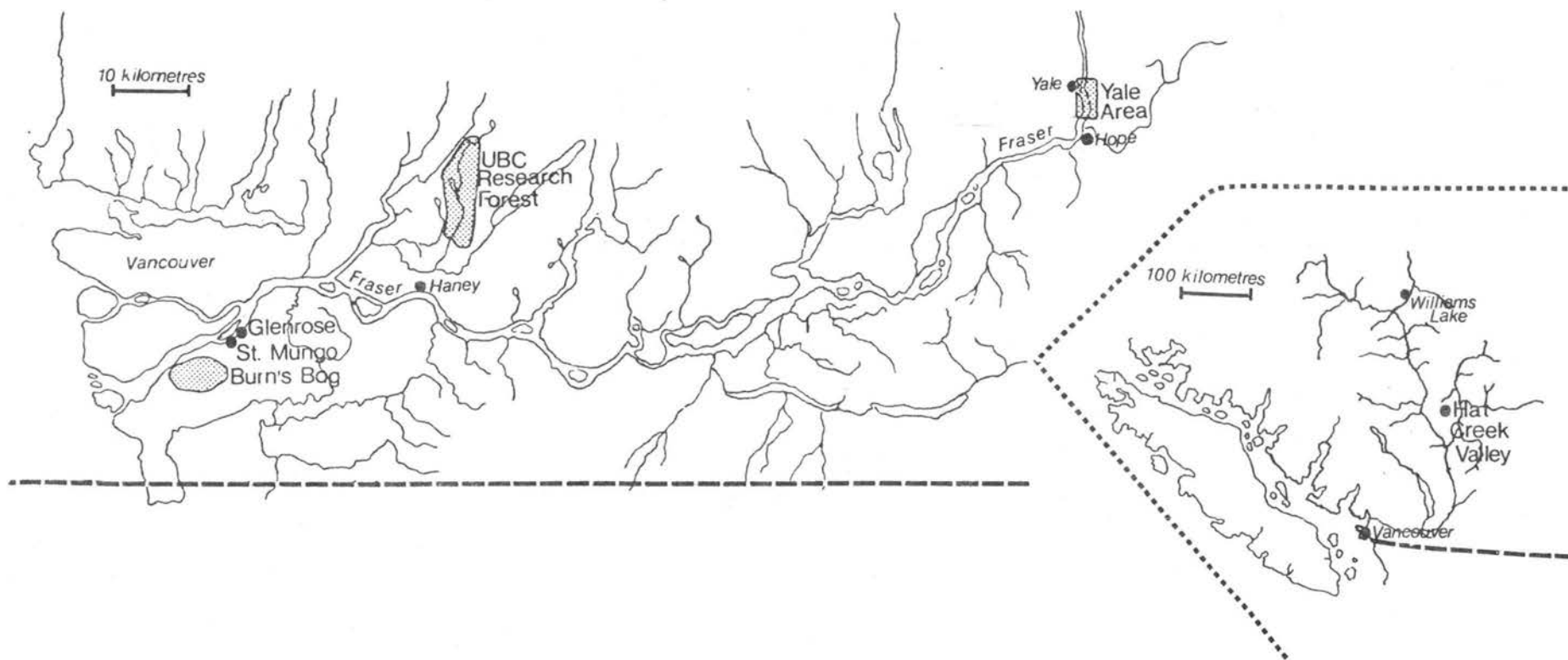


Figure 1. Map showing all the locations mentioned in the text. Archaeological and palynological sites are indicated in bold face, cities and towns in italics.

which first appeared above sea level about 5,000 B.P. The first plants to colonize the deltaic sediments were rushes (*Scirpus*) and other emergent aquatic plants. At about 4,000 years B.P., sedges (*Carex*) became dominant, and the region was probably a low wetland with shallow ponds. Shrubby vegetation replaced the sedge swamps as sweet-gale (*Myrica*), hardhack (*Spirea*), and skunk cabbage became common. At about 3,000 B.P., the area became a sphagnum bog, with moorwort (*Andromeda polifolia*), swamp laurel (*Kalmia polifolia*), and blueberry (*Vaccinium myrtilloides*, *V. oxycoccus*, *V. uliginosum*), and lodgepole pine (*Pinus contorta*) as the commonest species.

Information from the U.B.C. Research Forest near Haney (Mathewes 1973a) may also prove useful in understanding this area, although Haney is some distance from the St. Mungo and Glenrose sites. Here the pattern of plant succession is similar to that found at Yale (Mathewes 1973b), although in Haney the ice retreated much earlier (13,000 years B.P.) than it did near Yale. The first vegetation near Haney appeared at 12,690 years B.P., and until 10,500 years B.P., lodgepole pine dominated the plant cover, while fir (*Albies*), spruce, and alder were common. At 10,500 years B.P., Douglas fir appeared suddenly and increased rapidly, while pine, fir, and spruce decreased. During this period, hazelnut (*Corylus*) and oak (*Quercus*) appeared for the first time, and hemlock (*Tsuga mertensiana*, *T. heterophylla*), alder, and ferns were common. From 6,600 years B.P. to the present, climax species such as western hemlock, western red cedar, and yellow cedar decreased, while secondary vegetation, including alder and birch, increased slightly.

The Influence of Prehistoric Peoples on their Environment

The pollen record can help us see how prehistoric peoples lived; it can also show how they altered their environment. In parts of Britain and Japan, for example, palynological evidence indicates that prehistoric peoples altered their surroundings by clearing and burning. Evans (1975) suggests that sudden changes in the pollen records of the British Isles were caused by clearing or fires set by humans, particularly when changes in climate can be ruled out as causes of change. Pennington (1969) also notes a change in pollen profiles, which she attributes to human influence on the environment. For example, birch shows up in the pollen record soon after disturbance because it seeds quickly and is tolerant of soils damaged by fire. Butzer (1971) mentions the use of palynology in detecting prehistoric settlements, which are characterized by sudden increase in amounts of non-tree pollen and the appearance of cereal and weed pollen. In Japan, Pearson (1977) found that the settlements of the Jomon people are indicated by secondary vegetation, and that the Yayoi people, who followed the Jomon, had an even greater impact on local vegetation.

As Dimbleby points out, "the extent to which man exploits the animal or the plant resources of his environment will

determine the degree of ecological influence that he will exert on his habitat" (Dimbleby, 1977, page 2). Thus, Hebda (1977) found that the arrival of Europeans in the Burn's Bog area produced a marked change in the pollen record: as the settlers cleared the land, tree pollen decreased, while that of grasses, alder and other colonizing vegetation increased. Did prehistoric people also change their environment in British Columbia?

We know that the Indians of North America frequently used fire as a means of clearing areas to make them suitable for habitation or to improve the environment for certain plants and animals. Lewis observed that California Indians often used fire to increase yields of seeds or herbaceous plants, and to clear brush and deadfalls. In Alberta, he found that Indians set fires for reasons similar to those given by California Indians: fire produced better habitat for grouse, hares, deer, and moose, and increased berry harvest. Stewart (1955) mentions that the Kwakiutl Indians of British Columbia set fire to the woods in order to improve the yield of berries. Stewart also claims that more than 50 Indian groups from western States used fire in similar ways, and it seems probable that British Columbia Indian groups other than the Kwakiutl did so as well. Do we see any signs of such fires in the pollen record?

Throughout the post-Pleistocene pollen record, especially in the most recent periods, there are constant indications of disturbed vegetation and fire. In Yale, vegetational disturbance, indicated by the presence of pine, alder, willow, birch, hazel, and certain ferns, has been common (Mathewes 1973b). Mathewes and Rouse (1975) feel that "fire has always been an important ecological factor during post-glacial times" in the Yale district. Again, this is suggested by secondary vegetation and also by charcoal horizons or layers in the cores of sediment.

At the Glenrose Cannery site, evidence suggests that the site was burned or otherwise cleared, since fireweed (*Epilobium*), which is found today in burned-over areas and along roadsides, is present in the pollen record (Matson 1976). In the U.B.C. Research Forest there is a decrease in climax vegetation and a corresponding increase in grasses, birch, alder, and ferns, all of which are successional species. This trend began "about 500 years ago, well before commercial logging in the area" (Mathewes 1973b). Fire has also played an important role in the development of Burn's Bog. A particularly interesting example is *Vaccinium myrtilloides*, a blueberry which has a disjunct distribution: other than Burn's Bog, the nearest area in which it can be found is in Interior pine forests. Hebda (pers. comm.) reports hearsay evidence that elderly Indians claim that these blueberries were brought from the Interior and grown in Burn's Bog because they taste better than the local species. If this is true, it could indicate that at least some of the fires in Burn's Bog were set by Indians, since *V. myrtilloides*, like other blueberries, grows best in burned-over areas.

Conclusion

As we have seen, palynology can provide useful information about the environment in which prehistoric peoples lived. This can be difficult unless archaeological and palynological studies are carried out at the same time, because the aims of the two fields are quite different, making it difficult for us to apply the information from one to the other. For example, most archaeological studies concentrate on artifacts, usually stone, since organic materials, such as bone, wood, and cloth, decay. This often means that such artifacts as baskets used for food gathering are lost, while knives, scrapers, harpoons, and fish hooks are recovered. By analogy, we may know that the plants we see represented in the fossil record have been used in other places or in other times, but, without the archaeological evidence, we can only suggest that these plants may have been used at a particular site. If palynology were done as part of the initial investigation of a site, the archaeologist would know what plants were present, and so know the types of artifacts or remains to look for in the archaeological record.

Palynology can also help us to understand the ways in which prehistoric peoples changed their environment. This, too, can be difficult because such changes can be hard to detect. People of historical times cleared the land in order to plant or build, and the fossil record shows a dramatic change from forest to agricultural land. On the other hand, Indian fires would be followed by normal successional stages, such as those which would occur after a fire set by a lightning strike. From the fossil evidence alone, then, we would not be able to distinguish a fire set by Indians from one caused by lightning. Again, analogy can be of some help: evidence from ethnography, from archaeology, and from palynology from other parts of the world indicates that prehistoric peoples could and did change their environments by clearing and burning.

As palynology becomes better understood, it becomes an increasingly useful tool for the archaeologist. Where a site is suitable for pollen preservation, palynology should be done before or during an archaeological investigation. Where preservation is poor, studies of pollen from nearby areas may be helpful. Comparisons between inhabited and uninhabited sites will be useful because they will help us to see how humans altered their surroundings. It is hoped that palynology will continue to be more frequently used as a routine procedure by archaeologists in British Columbia and elsewhere.

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Describing Artifacts, No. 19

(Part of a continuing series on artifact description, reproduced from the handbook for archaeological staff working on the National Inventory Project in B.C. The Midden extends thanks to Tom Loy of the Provincial Museum for permission to reprint.)

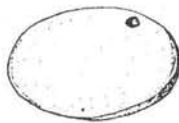
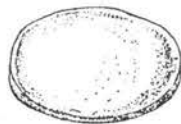
LABRET:

Synonymous with lip-plug, a labret is an ornament worn through a perforation below the lower lip or near the corners of the mouth.

Because of labrets' distinctive shape, special precautions must be taken to make their measurements consistent, and a sketch showing how measurements were taken may be useful.

Three elements should be described:

1. Flange (circular or lateral).
2. Body length (short or extended).
3. Type (simple or composite).



circular flange, short body,
simple



lateral flange, short body,
simple



circular flange, extended body,
simple



lateral flange, extended body,
simple

DIAGRAM 20: Examples of labret terminology

JAMES TEIT

[Fourth in a series]

Text by Don Bunyan

Sketch by Hilary Stewart

Students of British Columbia archaeology, seeking relief from academic verbosity, will appreciate finding among their compulsory reading the works of James Teit, plainest and clearest of writers.

Jimmy Teit was, of course, not an academic. Farmer, shopkeeper, big-game hunter, guide, linguist, defender of native rights, ethnobotanist, socialist propagandist, clairvoyant, and the definitive ethnographer of the Interior Salish peoples, he completed his formal education at the age of 16. It is true that his school was nineteenth-century Scottish and therefore, arguably, among the best then available, but nonetheless Teit was largely self-taught. His success in that process is measured by the pleasure we can derive from reading his works today. It is a joy to read the words of one who knew exactly what he wanted to say, and set it down clearly and concisely.

James Alexander Tait (sic) was born on Friday, the 15th of April, 1864, in the town of Lerwick on the Island of Mainland (sic!!) in the Shetland Islands of Scotland. James was the oldest of 12 children - eight of whom survived beyond childhood - of a successful shopkeeper and his wife (née Murray). That the family were reasonably well off and that James was a good student are both attested by his remaining in school until he was 16.

Afterwards, James worked first in his father's store, then in a bank and possibly as a North Sea fisherman. His earliest philosophical interest was an almost mystical fascination with the Norse origins of himself and other Shetlanders. A later expression of this was his eventually changing his surname from "Tait" to the presumably more Nordic "Teit." He and his brothers sailed as young men a number of times to Norway, and in later years he included that country in a return visit to his homeland. When James was 19, his mother's brother, John Murray, who had emigrated to British Columbia during the 1858 gold rush and finally settled at Spence's Bridge as a storekeeper and farmer, and who had remained a bachelor, wrote to the Tait family offering to take in one of the Tait boys and name him heir. (In the event, when John Murray died, he had been too generous a man, and there was little to leave.)



JAMES TAIT

James accepted the offer, formally surrendered his birthright to inherit from his father, emigrated, changed his name from "Tait a Teit" (pun by courtesy of Banks, 1970, p. 44), sailed around the Horn - probably working his passage - to Victoria, and arrived at Spence's Bridge in March 1884. He may have worked at other jobs around the province before settling at Spence's Bridge, but this is not certain.

James Teit developed a keen interest in and a deep sympathy with the native people of his area. He studied their activities, customs, beliefs and languages. On Monday, September 12, 1892 he married a Thompson Indian woman, Lucy, whose maiden name appears variously as Artko, Atello or Antco. The couple lived on a small farm near Spence's Bridge. Teit worked the farm, learned the ways of the Indians, became a skillful hunter, and derived much of his income from guiding parties of big-game hunters.

The crystallization of Teit as anthropologist began in September 1894. In a letter dated September 21, the anthropologist Franz Boas, on a visit to British Columbia, described to his wife his first meeting with Teit: "I left the train at Spences Bridge, which is a little dump of three or four houses and a hotel... I took a ferry across the river because the bridge had been washed away in the spring... [I went to see a farmer who] sent me to another young man who lives three miles away up the mountain and is married to an Indian... [I] finally found the house, where he lives with a number of Indians...after an hour he came. The young man, James Teit, is a treasure! He knows a great deal about the tribes. I engaged him right away." In a letter to his parents, Boas described Teit as a "red-headed Scotsman" and "especially kind." (Banks 1970, pp. 85 & 86)

Teit's knowledge of the Indians so impressed Boas at this first meeting that he encouraged Teit to organize his knowledge and start writing. Teit's first published paper, "A Rock Painting of the Thompson Indians, British Columbia," appeared in the Bulletin of the American Museum of Natural History in 1896 (Vol. VIII, pp. 227-230), and his "Traditions of the Thompson Indians of British Columbia," with an introduction by Franz Boas, was published as a Memoir of the American Folklore Society in 1898.

In June 1897 Boas returned to British Columbia as organizer of the "Jesup North Pacific Expedition" of the American Museum of Natural History. This was never an actual expedition in the proper sense of the word, but rather a series of field trips funded by the American philanthropist Morris K. Jesup and co-ordinated by Boas, the results being published from time to time as Memoirs of the Museum. Boas recruited Teit as a member of his party. Teit outfitted the group and worked with Boas, travelling with him as far as Bella Coola before returning to Spence's Bridge. Part of what Teit subsequently published about the Thompson Indians, although it appeared under the Jesup title, was based on work done before the "expedition" was formed.

James's first wife, Lucy, died of pneumonia or tuberculosis in March 1899. They had no children. In 1902 James courted and proposed to Leonie Josephine Morens, daughter of a local stock-owner and dairyman: she refused the offer. Teit then made a return journey, by sea around Cape Horn, to England, Scotland and Norway.

In 1904 Leonie relented and the couple were married on March 15. Leonie was a Catholic. James had not at any time expressed sectarian ideas but, as a Shetlander, was almost certainly a Protestant and more than likely a Presbyterian. He became a convert, although still without displaying much churchmanship. The naming of the five children reflects James's interest in his Norse roots: Eric, born in 1905; Inga, 1907; Magnus, 1909; Sigurd, 1915; and Thor, 1919. From the reminiscences of the children (Banks 1970, pp. 56-59; Howes and Lean 1979), the marriage seems to have been one of happy opposites.

Teit continued his work and studied among the Indians, mostly but not solely among the Interior Salish, publishing some 20 papers during his life. Another eight, including an ethnobotany of the Thompson Indians based on his field notes (Steedman 1928), were published posthumously. The writings cover most aspects of the people's lives: crafts, arts, use of resources, beliefs, legends, folk-tales, mythology. Bibliographies of his work are to be found in the publication by Howes and Lean (1979) and in Banks's regrettably unpublished thesis (1970), and of course references to his work are scattered through the literature. In our own bibliography we have listed only the works which are of particular interest to archaeologists, namely the posthumous ethnobotany and the ethnographies, carrying the Jesup imprint, of the Thompsons, the Lillooets and the Shuswaps.

The three ethnographies contain fascinating detail about the way of life that was dying out at the turn of the century and the older ways remembered by Teit's informants. Having read the books, a quick learner could live as an Indian: build a house, preserve salmon, bake balsam-root, weave a basket, make war, cure a cold...in ways well adapted to our climate and resources. In addition, the author's sympathy for his subjects and his concern for their fate are clear, throughout his work.

Teit was also a linguist, fluent in the languages of the Thompsons and three or four other tribes. According to his daughter, he also had a working knowledge of Norwegian, German, Dutch, French and Spanish (Howes and Lean 1979, p.4). Teit was a keen botanist and an amateur entomologist. He was a good photographer, of both plants and people. He also left behind some rare "records" in physical form: "From 1915 to 1921, Teit kept an Edison wax-cylinder recording machine in his office in Spences Bridge and spent many an hour there recording the local singers. Fortunately he carefully documented the songs. He also took photographs of all the singers. He mailed these to Ottawa where they are presently held by the National Museum of Man." (Wickwire 1979) Copies of the recordings are obtainable.

Teit gave his sympathy for the Indians very direct and practical form. He undertook the organization of the tribes into an association for the protection of their rights. He became secretary-treasurer of the organization, collected money for it and contributed to it himself. He interpreted at local court trials and for delegations which he accompanied to meetings on Indian rights in Kamloops, Victoria, Vancouver and Ottawa. At such meetings, he was at one with the Indians and accepted as one of them. "Unceasingly he laboured for their welfare and subordinated all other interests, scientific as well as personal, to this work, which he came to consider the most important task of his life." (Boas 1923)

This kindly, modest, well-loved man of diverse talents left his work uncompleted. His health was poor in his last few years, and he died, after a long and painful illness, of a bladder infection on October 30, 1922, aged only 58. He left no fortune for wife and family. However, some of his better-placed friends, big-game hunters, ethnologists and others, established a trust fund from which a small pension was paid to his widow until her death in 1948. His contributions to the good of the Indians and to the understanding of Indian culture were immense and should not be forgotten. Read his works!

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Teit, James A. In Publications of the Jesup North Pacific Expedition, ed. Franz Boas, reprinted in 1975 by AMS Press, New York:

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Wickwire, Wendy, 1979. Jimmie Teit: Anthropologist of the People. Nicola Valley Historical Quarterly, Vol. 2, No. 2, p.3, Merritt, B. C.

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ARCHAEOLOGY DIVISION IS BORN AGAIN

Whatever happened to the Archaeology Division of the Heritage Conservation Branch in Victoria? Nothing - it just changed its name. Now called the Resource Management Division, it's still under the capable leadership of Bjorn Simonsen. Phones still 387-5030/5038/5039.

Department has been re-organized into three sections: Inventory and Evaluation; Impact Assessment and Protection; and Research.

Separated from this Division is the Planning and Interpretation Division, headed by Art Charlton.

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ARTIFACTS DISCOVERED

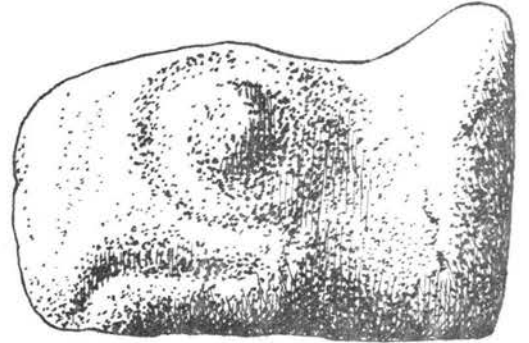
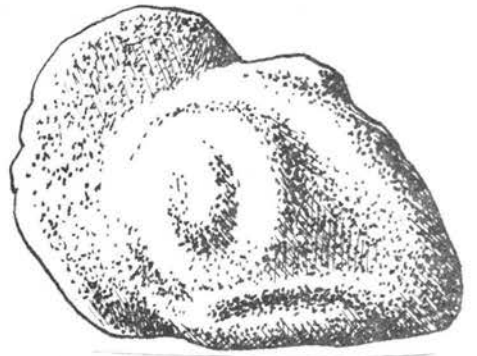
By Hilary Stewart
 Courtesy Kit Gifford

Sharp eyes and a stroll along a beach in the Queen Charlotte Islands recently led to the discovery of two rather unusual grooved mauls. The finders brought the artifacts to the attention of the Archaeological Society of B. C., supplying photographs and pertinent details.

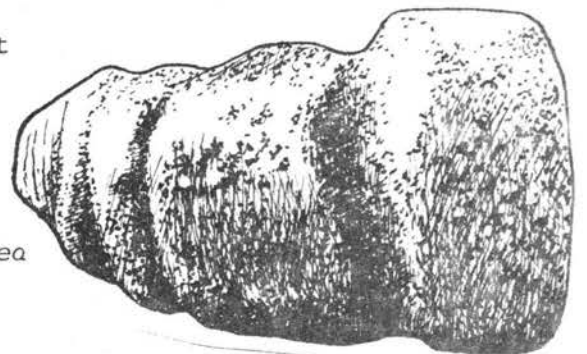
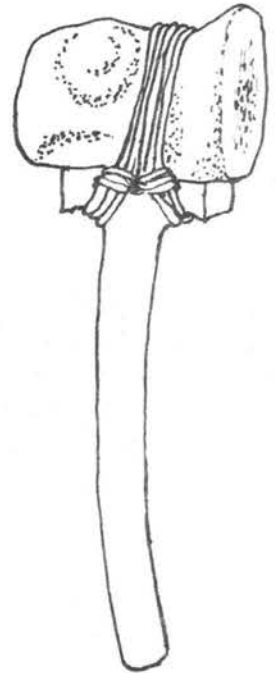
Bruce and Kit Gifford, with their daughter Janet, live in a remote part of the Queen Charlotte Islands. Exploring their wilderness environment with friends one day this summer, they went by boat to a small island in Masset Inlet. As they walked the beach, Bruce noticed an odd looking stone at the base of an uprooted tree. Retrieving the all-white rock, he realized it was a grooved maul made of quartzite, carved to represent an eagle. Bruce again looked at the tree base and discovered a second maul, this one of an unidentified stone having striations running diagonally across its form. Although not zomorphic, the end was decorated with two narrow grooves, with the tip having a slight curve to one side.

Had the mauls been cached for some future use, then forgotten? Or had they been inadvertently left behind on the island? The answer has perished along with the hafts and lashings that made the mauls useful tools of the early Haida woodworker.

Diagram shows method of attaching grooved maul to wooden haft. Lashing was most likely cedar withe or spruce root.



length 12.5 cm.



length 14 cm.

A.S.B.C. DIARYA.S.B.C. Monthly Meetings - 8 p.m. Centennial Museum

- Jan. 9 Cypriot Broadcasting Corp. film on the Kyrenia shipwreck and its excavations, "With Captain and Sailors Three", introduced by Dr. Hector Williams, U.B.C.
- Feb. 13 Dr. Roy Carlson - topic to be announced.

Archaeological Institute of America

- Jan. 21 Opening of travelling exhibition entitled "Archaeology - Past, Present and Future", marking the centennial of the A.I.A. All A.S.B.C. members are invited. There will be three short lectures by Dr. James Russell, Dr. Hanna Kassis and Dr. Hector Williams entitled "Dazzling Discoveries of the '70s." A reception will follow. Centennial Museum - 8 p.m.
- Feb. 7 and three following Thursdays - at the Centre for Continuing Education, University of B. C. "Armchair Archaeology" with illustrated lectures on Greece, Turkey, Roman France and Germany, and Egypt. Speakers will be Drs. Russell, Kassis, Hector Williams and Caroline Williams. Discount to A.S.B.C. members. For further information call 228-2181.
- Feb. 26 A.I.A. meeting - Museum of Anthropology - 8 p.m. Dr. Ingrid Edlund of the University of Texas will lecture on Greek and Etruscan Cities in Italy.

LOOK FOR...

Archaeology in Alberta, 1978. This 192-page paperback published by the Historical Resources Division of Alberta's Culture Dept. comprises 22 papers on Albertan sites and research.

The oil-rich province issued 92 archaeological permits last year, the vast majority to cope with proposed developments, a stunning leap forward in research work compared to just five years ago. (Of those projects, 61 were entirely funded by the developers, in most cases power transmission or pipeline companies). Also significant is the growth of archaeological research "contractors"--companies of archaeologists who contract with the government to undertake specific projects; more than half of Alberta's 1978 projects were attributed to two such companies.

Reports include several on work close to the B.C. border--in the Upper Peace River area, on the eastern flank of the Rocky Mountains, and in the Crowsnest Pass.

Most of the papers are site-oriented, but one, "Approaches to Fur Trade Archaeology," offers an overview, suggesting statistical techniques for identifying artifact occurrence patterns.

N.R.

WORTH LOOKING FOR....

The June 1979 issue of Scientific American includes a stunning article simply titled A Neolithic Flint Mine.

The seven-page item describes how a disciplined team of Dutch amateurs spent eight years excavating an incredible flint mine in the southeast corner of the Netherlands.

The 20 men--including geologists, students, miners and a teacher--worked from 7 p.m. Friday to 3 a.m. Saturday so that they wouldn't miss weekends with their families. Starting from an adit in a sidehill, they excavated 150 meters horizontally in chalk and flint, eventually clearing about 3,000 square meters of back-filled mine tunnel and recovering more than 10,000 flint implements.

Among their conclusions: that the mines, carbon-dated up to 5,000 years old, may have yielded enough flint to make 150-million axeheads; that the galleries were originally only about 60 centimeters (two feet) high; and that the miners worked in almost total darkness, as there is no evidence of any form of lamps or torches underground.

The entire project has now been taken over by the Dutch government, the tunnels excavated to a person's height, and the whole complex opened up to tourists and scholars.



MINERS' TOOLS
Axeheads from
the Rijkholt
galleries.

