

THE MIDDEN

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HIGHLIGHTS OF THIS ISSUE B.C. midden being reconstructed in Ottawa Burials disturbed in Delta New discoveries in the Kootenays Indians catch out professors Reports from Belcarra and Pigeon Cove

EDITORIAL COMMENT

Two magnificent examples of what may be achieved with government help have occurred in recent days.

From Delta comes the infuriating news (see reverse of this page) that the municipal government has apparently planned a new building on top of a well-known midden, and is just going ahead and building it. And from Williams Lake (see last page) comes word that the Provincial Highways Department has gone out of its way to relocate a road which would have disturbed an archaeological site, and even funded an emergency excavation.

The juxtaposition is both ironic and salutary.

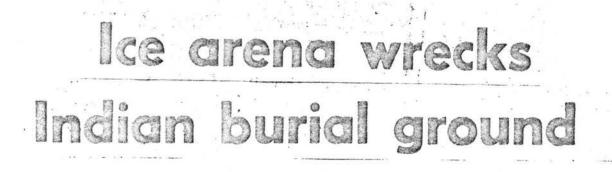
It is an irony that the Archaeological Sites Advisory Board has so little power and the Sites Protection Act has so few teeth that there has never been a single prosecution under the Act.

So if the Board now institutes proceedings against Delta--as it should if it can get the evidence, especially as a burial has been disturbed--it will be a B.C. municipality that is sued, instead of some marauding rock-hound. Much use blaming American tourists!

It is salutary because it proves that much can be done in a spirit of co-operation without having to threaten legal proceedings.

In fact Provincial Archaeologist Bjorn Simonsen told The Midden that "We are getting very good co-operation from the Highways Department, and indeed from several government departments."

But not, it seems, from the Delta Council, who may escape unscathed because the Act says one must not "knowingly destroy a burial. And how do you prove that?



The municipality of Delta i has allowed an Indian burial ground to be dug up in order to begin construction on an ice arena in South Delta.

The ice arena and recreational complex is part of a federal government capital works loan program, under which work on the project must be completed by March 1972 to be eligible for the special loan.

Rod Taylor of Phillips, Barratt, Hillier, Jones and Partners, architects for the project, said construction on the complex is presently about one-quarter of the way through.

The ground has been excavated, filled and the foundations and framework have been completed.

. Provincial archaeologist in Victoria, Bjorne Simondson, said he first heard about it from a radio nightline program and added, "We're quite disturbed about it."

"I contacted the construction people and they said the damage has already been done.

"We've known for years that there is a site there. It extends right along the ridge to the Beach Grove Golf Course.

"Some work was done there In the 1950s by the government and by the provincial museum, and they found some things then."

Under the Archaeological and Historic Sites Protection Act, the municipality could be prosecuted.

Section five, subsection two. of the acts says, "No person shall knowingly destroy, desecrate, or alter any burial place in the province or remove any skeletal remains, except to the extent that they have obtained a valid and subsisting permit under the act."

Simondson said he was looking into prosecuting the municipality, but would have to contact the Attorney-General's Department first.

He is going to visit the municipality today regarding the matter.

He noted that he was sure there would still be areas around the construction site with some graves and artifacts.

Some bones and artifacts taken from the site have been identified by an archaeologist from Vancouver City College as "very old Indian pieces".

By Wednesday afternoon and Thursday morning, construction workers, municipal employees, and others concerned with the project denied having seen any bones.



PRINCE RUPERT MIDDEN REBUILT IN OTTAWA MUSEUM

Report of Activities on the Northern Coast of British Columbia 1971

Dr. George F. MacDonald

Three staff and two contract projects in archaeology were conducted for the Archaeology Division of the National Museum of Man by Dr. G. F. MacDonald during the summer of 1971.

Dr. MacDonald and one assistant devoted three weeks to a site survey of the lower Skeena River, between the Kitselas Canyon just above Terrace and the Khyex River in the Skeena Estuary. Primary attention was devoted to the Terrace area where urban development is considerable and provides large new exposures for examination, and where terrace features are particularly well developed.

Three sites yielding only cobble tools were discovered at elevations of up to three hundred feet above the Skeena and Kitsumkalum Rivers. None of the localities showed occupation features, but rather a scattering of massive cobble tools that appear to be related to forest exploitation (cutting wood, stripping bark, digging roots, etc.). The range of cobble tool forms is virtually identical to those found throughout the four thousand year sequence at the Git-aus site (GdTc-2) excavated by MacDonald in 1968 at the Kitselas Canyon (Allaire 1970 ms.). It is now assumed that cobble tools on the Skeena represent an alternative industry to those of chipped or polished stone with which they occur in habitation sites.

Many occupation sites along the Skeena and its tributaries were examined and recorded. Most coincided with Indian Reserves of which there are 38 in the area surveyed. One deeply stratified site just below the mouth of the Kitsumkalum River was pointed out to us by Mr. Ben Bolton of Kallum village to whom we are also indebted for boat transportation to other village sites. Extremely dense vegetation on many sites made testing of the deposits very difficult and in some cases impossible. Consequently, the number of artifacts recovered on the survey was quite small in relation to the number of sites examined.

2 Major excavations continued at a large shell midden in the Prince Rupert Harbour at GbTo-2, near Metlakatla. This was a winter village of the Gitando tribe of Coast Tsimshian occupied until just after 1830 when all tribes in the Rupert Harbour relocated around the Hudson Bay Company fort at Port Simpson. A crew of fourteen spent three months on this site under the supervision of Richard Inglis of the University of Toronto. The major feature excavated was the village chief's house, the largest structure in the village measuring 45' by 45'. The retaining walls of the interior pit, as well as the stumps of the support posts and floor planks, were preserved by filling and levelling operations to make a garden, some thirty years after the house was abandoned, when Metlakatla was reinhabited. Both early historic trade items and prehistoric artifacts occurred within the house which was probably constructed in the late 1700's. Indications of earlier habitations under this structure are many and excavation at this particular house site will be continued next summer.

7 The reconstruction of an archaeological excavation at a typical Prince Rupert midden site was undertaken for a new

gallery in the National Museum of Man, Ottawa. Approximately 300 feet of wall of a stratified site up to 13 feet in height have been completed under the direction of Sheila Coulson of Simon Fraser University. A complete plantscape to cover the site display was collected from a site in the Prince Rupert Harbour this summer and shipped to Ottawa for installation. When completed the gallery will display several thousand artifacts from the Boardwalk site (GbTo-31) excavated by Dr. MacDonald between 1967 and 1970.

4 Two fortress sites on the Skeena River were examined by MacDonald and Allaire. The first, called Tawdzep or

"man-made hill" near Kitwanga, showed traces of four small houses on the summit and yielded several crude stone tools from the surface. Evidence from a field below the hill indicates that a prehistoric village was located there prior to the establishment of Kitwanga.

The second, and much larger fortified village examined is at the head of the Kitselas Canyon, on the railroad side. A much more extensive project cleared and mapped ten houses in a fortified village atop a bedrock mesa several acres in extent. Excavations in a number of houses uncovered a five foot maximum cultural deposit consisting mostly of fire-cracked rock and ash. Carbon samples were collected from all levels which are anticipated to yield a sequence approximating two millenia of occupation of this defensive site. Within several inches of the site surface a sizeable collection of historic goods was recovered, almost exclusively of Hudson Bay Company origin. Prehistoric artifacts from the lower deposits relate directly to the sequence recovered in 1968 from the Git-aus site.

An extensive collection of ethnohistoric documents of the fort site was assembled prior to field work including more than 100 photographs of the site, the earliest of which was taken by Horetzsky in 1878. Eleven carved posts, restored by Harlan Smith of the National Museum in 1926 are still to be found on the site including free standing columns, corner posts, interior posts and mortuary posts. The houses were all mapped, construction details recorded, and ownership determined. A report on this project including the traditions associated with each house has been prepared and should be available shortly in a National Museum of Man publication. It is hoped that all historic villages on the Nass and Skeena Rivers and the coast will be mapped and documented archaeologically and ethnohistorically within the next two years as part of a study of Tsimshian settlement patterns. A similar study of 19 Haida villages is nearing completion.

5 A site survey of the Upper Skeena from Kitselas to Kispiox was conducted by Mr. Ken Ames of the Washington State University, who last summer excavated the Carrier village site at the Hagwilget Canyon. Prehistoric materials were again found at most reserve areas including the presently inhabited villages and cobble tools were found on elevated strand lines along the river. Unfortunately, no deeply stratified sites, such as those found below the canyon, were encountered.

BOOKS FOR YOU

Do you use your local library: the A.S.B.C. library? Some members may not be aware that Hilary Stewart runs a travelling library (i.e. it travels with her to meetings) for general membership use. Ask her about it during the coffee hour following the monthly meetings.

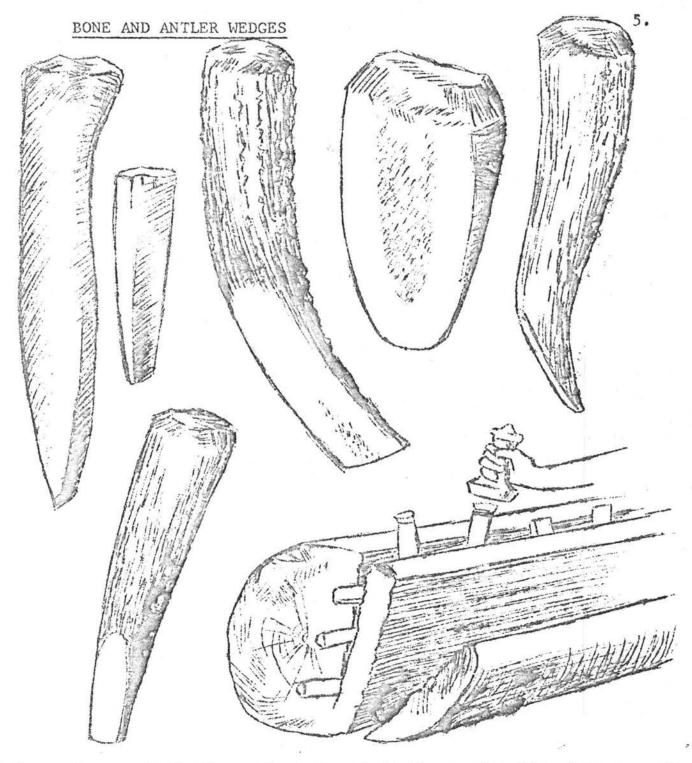
CELEBRATE! CELEBRATE!

The Archaeological Society of B. C. marked its fifth anniversary this fall. It all started with a handful of people attending a U.B.C. extension course in archaeology - has now burgeoned to a membership of some 150.

ARTIFACT-OF-THE-MONTH

We're sorry that Mr. Bjorn Simonsen, because of his new job as Provincial Archaeologist, is unable to carry on his series of useful Artifact features for The Midden.

However, we are happy to thank Hilary Stewart, who is taking over and contributing some of her excellent drawings.



The wedge, a vital piece of equipment in the woodworking industry of the Northwest Coast Indians, facilitated the splitting of wood, particularly the much used cedar with its clean, straight grain. In splitting a plank from a log, the lead wedges would be of tough Wapiti antler, with additional wedges of hardwood, all driven in with the hand maul. (See <u>The Midden</u>, Vol. 3, No. 2, June 1971, page 4.) The many differences in the size and shape of bone and antler wedges indicate the wide variety of uses to which they were put, from heavyduty plank or beam splitting to smaller, more refined woodworking. The two wedges shown at the top left are of bone, the others of antler. All are on display in the Centennial Museum.

H. Stewart

EXCAVATION AT PICEON COVE, DhRr 9, SUMMER 1971

Alan McMillan, Instructor of Anthropology, Douglas College

This excavation was carried out by five students and one instructor as part of a six-week archaeological field school at Douglas College. The site, commonly called "Pigeon Cove", is located at the southeastern edge of Burrard Inlet, in the City of Port Moody. It extends along a strip of waterfront, from Rocky Point Park in Port Moody to a small inlet at the extreme southeast of Burrard Inlet. Across this small inlet is the site of Noons Creek (DhRq 1), the scene of another excavation this summer, by a Simon Fraser University crew under the leadership of graduate student Art Charlton.

The length of the Pigeon Cove site is about 1200 yards. However, cultural deposit is not continuous for this length, but generally occurs only where small streams or rivulets run out to the Inlet. A total of thirty-one 5' x 5' trenches was dug, revealing a very shallow deposit, with a maximum depth of just over two feet. The crushed shell which makes up most of the cultural deposit consists mainly of several types of clam, blue mussel and the native Pacific oyster. The barren mud flats onto which the site now faces must have at one time been a good beach, supporting a variety of shellfish and other marine life.

Ethnographically, eastern Burrard Inlet and Indian Arm were summer camping grounds for the Musqueam and Squamish divisions of the Coast Salish (Barnett 1955: map 1). These groups were moving in family units during the summer months and were occupied in such subsistence activities as gathering shellfish, picking berries, and land mammal hunting. The faunal remains from Pigeon Cove have not yet been analyzed, but appear to be mainly land mammal, particularly wapiti.

One burial was excavated at this site. The skeleton was that of a young adult female who had been buried in a shallow pit dug into the sand below the shell layers. She was lying on her left side in the typical flexed position. The bones, including the skull with all its teeth, are in an excellent state of preservation. An interesting feature of this burial is that the skull has been artificially deformed by binding. Both the practices of midden burial and frontal-occipital skull deformation are suggestive of Borden's Marpole phase, but it must be noted that skull deformation also occurs in Stselax, the prehistoric Salish phase in the Fraser Delta region (Borden 1970:96). The

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difference in burial practices between this site and Stselax may simply be one of the differences between a campsite and a permanent village.

The 50 artifacts from Pigeon Cove form a somewhat meagre assemblage, which has not yet been analyzed. One of the disappointing features is the scarcity of diagnostic artifacts. Thus it is difficult to correlate the implements from this site with any of the established phases for the Fraser delta (Borden 1968, 1970).

Bone and antler artifacts dominate the assemblage. The most common artifacts are wedges of wapiti antler. Several small hafts and a flaker of this material were also found. The most common bone artifacts are points of several types, most presumably being barbs for fish-hooks. One bird bone tube was found. This resembles the bone drinking tube used by the Coast Salish during periods of ritual prohibitions, such as at puberty and during induction into the dancing societies (Barnett 1955:151,164,281).

The stone artifacts from Pigeon Cove include items produced by both the grinding and chipping technologies. Ground stone includes fragments of slate fish knives, nephrite adze blades, two complete ground slate projectile points and a basalt core. One hammerstone indicates that the pecking and grinding technology is also present. Two stone artifacts from the humus above the shell deposit are considered separately. One is a small broken bowl, appearing to have been produced by the traditional technique of pecking and grinding. The other is a steatite carving of a Plains-type Indian in full feather headdress, making a rather novel, though recent, addition to the cultural inventory.

In general, there is little in the artifactual assemblage to contradict Barnett in showing the area as a summer campsite of the Coast Salish. The shallow and scattered nature of the cultural deposit also supports this view. However, a few traits, such as midden burial and chipped stone projectile points, are suggestive of the earlier Marpole phase. A larger sample is needed for any definite statements.

References cited: Barnett, H.G. 1955	The Coast Salish of British Columbia. University of Oregon Press.
Borden, C.E. 1968	Prehistory of the Lower Mainland. Lower Fraser Valley: Evolution of a Cultural Landscape (A.H. Siemens, ed.). Tantalus Research Ltd., Vancouver.
1970	Culture History of the Fraser Delta Region: An Outline. B.C. Studies 6-7: 95-112.

INDIANS NOW CATCHING OUT

'INACCURATE' WORKS OF PROFS

By Ann Dunsmuir

Reprinted with permission from the Victoria Times, Aug. 18, 1971

and cultures are in "a very critical state", according to the chairman of a linguistics conference that ended in Victoria, August 18.

Randy Bouchard, 30, who headed the sixth annual three-day conference on Salish languages, warned that 20 of the region's 30 languages have "less than two generations of speakers left.

"This means that, in most cases, hardly any Indian people under the age of 30 have a thorough knowledge older people speak first. of their native language", Bouchard tradition was followed at the consaid.

The conference was held at the Provincial Museum.

Bouchard, a researcher from Victoria whose field is anthropological linguistics, has been working full-time with B.C. Indians since 1968.

Recording Myths

Bouchard is the only non-Indian receiving support from the First Citizens' Fund set up by the provincial government three years ago. The fund, allocated largely by Indians themselves, aids projects in the arts and other cultural areas.

His main project involves the development of a writing system that would enable Indian people to record their own languages and myths for the first time.

So far, working mainly in the Interior and on Vancouver Island, Fouchard has trained 10 native

BRITISH COLUMBIA'S Indian languages Indian specialists working with 11 languages.

> This is the first time that more than a few Indians have attended the conference on their languages. On Wednesday morning, almost as many Indians as linguists listened to native Indians describe efforts to preserve their languages and cultures.

> Thirty linguists, some from as far away as Holland and Hawaii, attended the conference.

It's traditional among Indians that And this ference.

The first speaker, in order of age, was Louis Miranda, 79, from the B.C. coast. Speaking first in the Squamish dialect and then in English, he addressed the audience as "You, my dear friends. My poor heart feels very sad that what happens today did not happen 25 to 40 years ago", Miranda said. "At that time many of our old people still lived who knew the old traditions. It is very bad that their words were not recorded as we are doing today." Miranda said that of the 1,200 Squamish Indians in the province "no more than I can count on my two hands" can speak the language.

Taping Old Stories

In the past three months Miranda has transcribed in longhand some 4,000 words. Miranda is now taping the old stories of his people.

Sam Mitchell, 77, from the B.C.

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interior, speaking in the Lillooet dialect, said his people had asked him to record their language. Members of his tribe came to him 15 years ago and said: "When you are gone there will be no one left who speaks our language." "I am 77," Mitchell said. "In those days, when I was a child, there was no schooling for Indians. That is why I speak my language so well."

In the last three years Mitchell has learned to write his language and produced a 2,000word dictionary.

The last surviving storyteller in the Lillooet area, Charlie Mac, 75, spoke through an interpreter. He said it "has been 100 years that we have struggled until now to preserve our language."

'You Lift Me Up'

He thanked linguists for showing his people "the road to preserve our language and culture. "It is a great pleasure and honor that we have found this means to go along in our own way," Mac said. "Thank you. You take me and lift me up. You are here for the uplift of my people," Mac said.

Mrs. Ellen White, of the Nanaimo tribe, said she had been criticized in the past by her own people for "giving away our culture." She said her people feel that when whites translated one of the ancient stories they changed it and "destroyed it." She has been teaching a course in Indian language and culture at Malaspina College in Nanaimo and on the reserve. Mrs. White refused to co-operate with linguists unless they first taught her to write her own language.

'Chicken Scratches'

"Now we have found an alphabet to do away with "chicken scratches" (phonetics) and the children can learn to read and speak their language," she said.

James Charles King, 72, a chief of the Kwakiutl tribe, which can be found along the B.C. coast, is against French as a second language for Canadian school children. "Indian, yes, French, no," he said. "We are Indians. We have been for a long time and we are going to keep our identify for an even longer time," he said.

In an interview after the conference, Eouchard described the recent interest of linguists in Northwest Indian languages as "almost too late.

"I felt the best thing I could do would be to train the older people who are fluent in their language," he said. "I'm training Indians to do work that is considered the exclusive preserve of academics," he said. Bouchard criticized academics "who get their degrees and 20,000-ayear jobs by writing up things that belong to the Indians and then give them no feedback."

Few academics even have the courtesy to send a copy of their paper to the Indian who supplied the necessary information, Bouchard said. "The point is that the time has come when results must be given and discussed, to preserve the Indian languages," Bouchard said. He feels that academics are afraid to have their work evaluated by knowledgable Indians.

"Now that I've taught the Indians they can read a dissertation and spot all the mistakes," Bouchard said.

"I took some of these dissertations into the field and with a few exceptions they are grossly inaccurate," he said.

* * * *

NEW DISCOVERIES IN THE KOOTENAYS

A report by Wayne Choquette

Archaeological investigations in the lower Rocky Mountain Trench, southeastern British Columbia, commenced in May 1971 under the directorship of Wayne Choquette.

A site survey of the Kootenay River drainage between Canal Flats and the International Boundary located 115 sites. The large majority of these are campsites; a number of work-

Mr. Choquette, a graduate student at U. of Calgary, was working for the Archaeological Sites Advisory Board this summer. He also received a grant from the B.C. Dept. of Lands and Forests. shops, cairns, and pictographs were also recorded. Artifacts collected indicate continuous occupation in parts of the valley from at least 7,000 B.C. to the present. Definite affinities with the Northern Plains are evident, with the McKean, Oxbow, Duncan, Hanna, and Pelican Lake complexes represented. Other artifacts evince Intermontane (Agate Basin) as well as Plateau influences.

In August, investigations were centred in the southern area with the commencement of salvage excavation of sites to be flooded by the Libby Reservoir. The most intensive excavation has been undertaken at DhPt-9, north of Waldo, where at least six components have been delineated, dating from the Historic well into the Middle Prehistoric Period, and including a Protohistoric component with White trade goods, and a

Pelican Lake component. Test excavations, plus extensive surface collection from sites numbered DhPt-3 to DhPt-7, situated on a terrace on the east bank of the Kootenay River north of DhPt-9, indicate a complex pattern of occupation dating to the Early Middle Prehistoric Period. Here also the Pelican Lake complex is well in evidence.

Field research terminated October 31 and will recommence in the spring of 1972, with further excavation of DhPt-3 to 7, and of DhPt-10, an extensive campsite opposite the mouth of the elk River.



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NEW RADIOCARBON DATES MAY PUSH BACK HISTORY IN QUEEN CHARLOTTE ISLANDS

by K. R. Fladmark, Archaeology Dept., University of Calgary

Archaeological research conducted on the Queen Charlotte Islands of British Columbia in the summers of 1969 and 1970 resulted in the partial excavation of five sites and the accumulation of major surface collections from ten others. Pre-

BACK- Iminary analyses suggested a tentative relative chronology BACK- of some 8,000 years' duration based on the then available evidence of artifact typology and site locations above sea-

level. This chronology has since been largely reinforced by a series of radiocarbon returns which provides radiometric control on the culture sequence from over 7,000 B.P. to 3,000 B.P. Other components as yet undated will fill in the later portion of the sequence up to the historic period. Five dates are also available on geological deposits which are of importance to the culture history of the area.

Discussed in order from earliest to latest, the following radiocarbon dates are now available:

32,200 + 2600, - 1900: 30,350 B.C. (GaK-3273)

This date was received on a sample of semi-silicified wood obtained near the base of the highest glacial till unit exposed at Lawn Point, on the central east coast of Graham Island. Although not associated with any cultural materials, this date, if valid, is significant for a number of reasons:

- (1) It apparently indicates that the latest major glaciation on the Charlottes began far earlier than final glaciations on the southern mainland. This lends some support to the theory that, due to climatic conditions, the western margins of continental ice sheets may have fluctuated well in advance of equivalent fluctuations in the central regions.
- (2) According to a recent geological report on the islands (Sutherland-Brown 1968:31-3) the last major Charlottes glaciation did not cover all of the islands, but instead left the northeastern portion of Graham Island ice free since the previous advance. The earlier advance probably did not end
 - . later than 40-50,000 years ago. Thus the evidence of this date supports the contentions of numerous zoologists and botanists who have felt that at least a portion of the islands provided an ice-free faunal and floral refugium during part of the Wisconsinan glaciation.

It is, of course, always dangerous to place too much trust in a single radiocarbon determination and as work progresses on the Pleistocene chronology of the Northwest Coast the views expressed here may have to be radically revised. However it is usual scientific procedure to base one's hypotheses on the presently available data and to replace or alter them as they are tested by newer information. With these qualifications in mind I would like to suggest a further and even more tenuous possibility raised by this date.

(3) To my knowledge this is the first radiocarbon date directly on a deposit of Pleistocene glacial origin so far received for the whole length of coast between southeastern Vancouver Island and South-Central Alaska. Other dates averaging 10-11,000 B.P. have been obtained from the base of several peat sections along the coast and have traditionally been assumed to mark the advent of post-glacial climatic conditions. This may be so, but they do not firmly tie down the date of final ice retreat in these regions. It is significant to note that it is now relatively well established that the coast of Southeastern Alaska between Cape St. Elias and Icy Straits had less ice cover during the Wisconsinan glaciation than it has today. (Pewe, Hopkins and Giddings 1965;359 Ackerman, written communication.) Perhaps we would not be too far astray to suggest that considerable portions of the western limits of the Northwest Coast may have been ice free and open for human habitation at a time when most of the rest of North America at similar latitudes was covered by massive continental ice sheets. Scholars searching for possible routes of migration for early man have tended to shy away from the Northwest Coast, perhaps because of its apparent ruggedness. However if man did enter southern North America sometime during the Wisconsin glacial period, the Northwest Coast has several factors in its favour as a route. First, as pointed out by Heusser (1960;209), unglaciated regions along the coast at times when major ice sheets existed in the interior of the continent would have presented a far less harsh climate than, for example, the hypothetical Cordilleran-Laurentian "corridor". Second, and very import is the probability that sea levels along at least parts of the Northwest Coast were considerably lower than at present at some time during the Late Wisconsin (viz. Nasmith 1970;7). Increasing evidence suggests that the dominant factor controlling Pleistocene land-sea relationships along the coast was ice-loading, with the eustatic factor* being delayed and secondary (Mathews, Fyles and Nasmith, 1970;700). This supports the possibility that interglacial or immediately post-glacial climatic conditions synchronized with lower sea levels, thus exposing far more of the continental shelf and facilitating early population movements by reducing the overall irregularity of the coastline.

Admittedly the firm material evidence for early man along the Northwest Coast has yet to be found. However it must be borne in mind that both archaeological research and Pleistocene geological

* (the rise and fall of land)

studies in this area are both in their infancy, and if early man campsites still exist anywhere above sea level along the coast they will be extremely difficult to find. As the search for early man in the Cordilleran-Laurentian corridor continues to produce no definite results, perhaps attention should be paid to alternative routes. The Northwest Coast does represent a possible alternative.

 $\frac{8620 \pm 150}{8060 \pm 140}$: 6670 B.C. (GSC-242) 8060 \pm 140: 6110 B.C. (GAC-292)

Dates on shell-fish remains imbedded in marine sediments at elevations of 10-20 feet above present sea level at Cape Ball on the northeast coast of Graham Island and Tasu Inlet on the west coast of Moresby Island, respectively. Collected and reported by Athell Sutherland-Brown (1968;35-6) as part of a geological study of the Charlottes. These samples indicate sea levels approximately 30-40 feet higher at 8,000 B.P.

7050 ⁺ 110: 5100 B.C. (GaK-3272)

Date on a sample of wood charcoal from the lowest cultural level (component 6) of the Lawn Point site (FiTx 3) located on the central east coast of Graham Island. It is associated with a small artifact assemblage consisting of flake cores; retouched and utilized flakes; one microblade; and one notched pebble tentatively identified as a crude line or net sinker. This is the earliest date so far received for any cultural component on the islands and represents an occupation on tidal beach at an elevation approximately 35 feet higher than present maximum sea level. For further information on this site see Fladmark (1971).

5750 ⁺ 110: 3800 B.C. (GaK-3271)

Date on a sample of wood charcoal from the second lowest cultural level (component 5) of the Lawn Point site. It is associated with a large artifact assemblage including microblades; microblade cores; various types of pebble flake cores, including some variants reminiscent of choppers; utilized and retouched flakes of various sizes and configurations; and pebble hammerstones.

5420 ± 100: 3470 B.C. (GaK-3511)

Date on a sample of wood charcoal from level 3 of the Kasta site (FgTw 4), located approximately 1/2 mile inland from Copper Bay on the east coast of Moresby Island. This was associated with an assemblage of microblades and cores; retouched and utilized flakes; abrasive stones; and occasional pebble choppers. This date is near the top of a succession of 9 occupation levels separated by esturine sands at an elevation of approximately 35 feet above present high tide.

4290 [±] 130: 2340 B.C. (GSC-1554)

Sample of wood charcoal from level 7 (1 ft. above base) of the Bluejacket shell midden (FlUa 4), located about 1 mile south of Masset on Graham Island. It is associated with an assemblage of pebble cortical spalls; bi-polarly percussed spalls; retouched and

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utilized flakes; problematical battered chert objects (perhaps simple adze or chisel bits); and very occasional specimens of worked bone and pecked and ground stone. The base of the midden interdigitates with raised beach strata at an elevation of 30-40 feet above present high tide.

4165 [±] 80: 2215 B.C. (GX-1696)

Sample of wood charcoal from the principal cultural level (Zone II) of the Skoglund's Landing site (FlUa 1), located about 4 miles south of Masset on Graham Island. It is associated with a large assemblage of retouched flakes; bi-polarly percussed forms, including classic pièces esquille; a few pebble choppers; flake cores; and two pieces of ground stone. The top of this site is approximately 30 feet above present high tide.

3040 ± 100: 1090 B.C. (GaK-1870)

3300 ± 100: 1350 B.C. (GaK-1871)

These dates were obtained from near the base of the deep Honna River shell midden (FhUa 1) located a few miles west of Queen Charlotte City. They were collected and reported by George MacDonald (1969;18). This site produced an assemblage of artifacts typical of other shell midden sites from the northern Northwest Coast.

1930 ± 140: 20 A.D. (GSC-1290)

1145 ⁺ 80: 805 A.D. (GX-1628)

These dates were received on samples of wood and wood charcoal respectively, incorporated in Zone I deposits at the Skoglund's Landing site. No cultural remains were associated in this deposit which apparently represents a down-slope movement of unconsolidated sediments which covered the site 2-3000 years after it was occupied. Stratigraphic features suggest that the movement occurred while the sediments were in a semi-plastic state as a result of water saturation.

Summary

Six more carbon samples are in the process of being analyzed including another sample of wood from the upper till and cultural samples from the Lawn Point, Kasta, Skoglund's Landing and Bluejacket sites. These should serve to validate dates presently known as well as to fill in partial gaps in the sequence. On the basis of accepting for the time being the validity of the presently known dates, the following tentative conclusions can be drawn:

- The northeastern portion of Graham Island has been ice free for about 40-50,000 years.
- (2) Since at least 8,000 years ago until 4,000 years ago sea levels around the Charlottes have generally been 30-40 feet higher than at present. Human occupation throughout this period, and later, has tended to be close to the shoreline and beaches.
- (3) The cultural dates provide us with a relatively unbroken succession of culture change from 7-8,000 B.P. to 3,000 B.P. Other assemblages, presently undated, will fill in the gap

between 3,000 B.P. and the historic Haida. For the first time we will be able to trace the development of the northern Northwest Coast cultural pattern from early antecedents.

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A.S.B.C. DIARY

SPECIAL EVENT

Tour of Simon Fraser University Archaeology Lab. Artifacts from Bella Coola excavations and summer salvage digs will be on display. Monday, November 29 at 8 p.m. Room 3145. Park in Northeast corner of the campus. Entrance to building is close by.

Monthly Meetings Centennial Museum Auditorium 8 p.m.

- Dec. 8 Dr. Richard J. Pearson, U.B.C. on "Archaeological Excavations in the East China Sea"
- Jan. 12 Gordon Hanson, graduate student, U.B.C. speaking on the Katz Dig.
- Feb. 9 Dr. Alfred Siemens, Professor of Geography, U.B.C. on Mexico.

"Legacy", display of contemporary Indian arts and crafts continues at the Provincial Museum, Victoria, until the end of 1971.

EXCAVATIONS AT THE BELCARRA PARK SITE (DhRr-6)

A. S. Charlton

Controlled archaeological investigations were carried out at a prehistoric Coast Salish village on the eastern shore of Indian Arm during the summer and autumn of 1971. Financial aid for the project was provided by an Opportunities for Youth grant, under the auspices of the Simon Fraser University Salvage Archaeology Program.

The Belcarra Park site has long been known for its archaeological potential. The land has been under private ownership for years and permission to conduct archaeological excavations was always denied. The Vancouver-Fraser Regional Parks Authority recently purchased the land and permission to excavate was granted shortly thereafter.

The site has been disturbed by the construction of buildings and roads. Relic hunters have played a part in eroding the cultural deposits at the high tide level. For the most part though, the site is relatively intact; rare indeed for a prehistoric site in an urban environment.

The site extends 200 meters along the shore (approx. 600 feet) and is 40 meters (approx. 120 feet) in width. Cultural deposits in the areas tested ranged from 240 cm. (approx. 8 feet) to 100 c.m. (approx. 3 feet) in depth.

During the summer excavations, a total of ten test pits (each 2 meters by 2 meters) were excavated. These pits were located on the front edge of the midden near the shore, in the area which showed the deepest cultural deposits. In the fall excavations, a cross trenth measuring 10 meters by 2 meters (approx. 30 feet by 6 feet) was excavated.

So far nearly 1,700 artifacts of stone, bone, antler and shell have been excavated. Bone and antler artifacts comprise 50% of the assemblage. Stone artifacts comprise 48% while the remaining 2% have been manufactured from miscellaneous materials.

The excavations yielded nephrite adze blades, antler wedges and stone hand mauls and hammerstones, which reflect a long tradition of woodworking at the site. Other artifacts; bone and antler harpoons (both fixed and detached), ground slate knives, fish hook barbs, ground slate and bone points for composite harpoons, reflect economic patterns in which fishing played a dominant role through time. Small chipped stone projectile points reflect the increasing importance of land mammal hunting in the latter sequence at the site. In comparing the artifact assemblage with other assemblages from the Fraser Delta sites, it would appear that the cultural sequence at Belcarra Park may have begun as early as 1,000 B.C. Four carbon samples have been submitted for dating and will hopefully ascertain this.

A preliminary report on the summer excavations is currently in press and will be available shortly.

I would like to take this opportunity to thank members of the Archaeology Society who volunteered during the summer excavations. Special thanks go to Gladys Groves, and Brian and Isabel Byrnes for their able assistance throughout the summer.

REMINDER

Have you renewed your 1971-72 membership? If not, we are sorry we will be unable to send you further copies of The Midden.

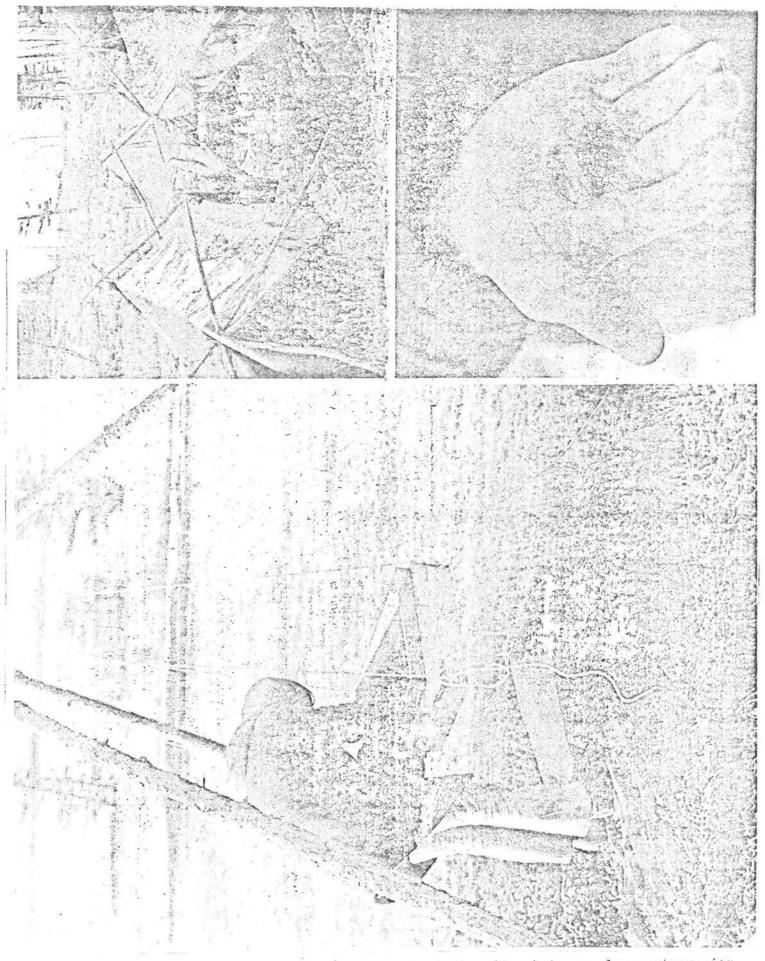
MAYAN TRAIL II

CP Air flight and guided (by our President Bill Lane) tour to Mexico from December 17 to January 7. For further information call Henry Rosenthal, Director of Social Sciences, UBC Centre for Continuing Education. Phone: 228-2181.

LATE NEWS

Mr. Wayne Choquette has asked us to add the following to his article which appears on page 10 of this issue under the title, 'New Discoveries in the Kootenays":

> A late season development at DhPt-9 was the uncovering of a component with Plateau affinities below the occupations bearing Plains culture diagnostic artifacts.



The provincial highways department has provided \$7,000 for an emergency dig on the Chilcotin Highway, eight miles west of Williams Lake. The dept-

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help protect the site, but may also postpone its work there, to help salvaging of several house pits which must be disturbed. Project leader is Alan Carl (son of late Clifford Carl) working for Sites

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