

# The Midden



GREENHOUSE EFFECT: Plastic roof over excavation area at St.Mungo Cannery site is the only way workers can shelter from miserable weather, as they continue to dig throughout the winter. Old house at right is used as site office & lab.

K.Bernick - photo

## ST.MUNGO: A SPECIAL SECTION

SPECIAL  
**ST MUNGO**  
SECTION

# ST. MUNGO

## WHAT YOU'LL FIND THERE

What will you find, if you go out to the St. Mungo Cannery dig, to visit or to volunteer, this Winter? What - come to that - will Queen Elizabeth II find, if she goes there, as she may, early next year?

The midden is spread across several bare but much abused lots on the boggy banks of the south arm of the Fraser River in Delta, where the south end of the proposed Annacis Island bridge will land. The site - DgRr2 - is less than 1 km. downstream from the important Glenrose Cannery site, and though the bridge itself now is on "hold", according to highway officials, the half-million dollar archaeological project is pushing ahead to thoroughly analyze the site before it is destroyed. (For its archaeological importance, see accompanying article.).

Provenance Research Inc. won the contract to excavate and report on the site, a project funded jointly by the B.C. Heritage Conservation Branch (HCB), the Heritage Trust and the Highways Department. Work was originally scheduled by director Dr. Leonard Ham to begin in Spring 1982, but because of the economic slowdown, the funds - the most ever spent on a single site in one season, according to Provincial Archaeologist Art Charlton - were not released until Fall. (Provenance people were reluctant to be interviewed, so this report relies on a variety of other sources.)

Long  
Trenches  
Started

Initial work involved back-hoeing several trenches, transecting the entire site, but ASBC members who visited St. Mungo in October and November got only brief glimpses of stratigraphy, as trench walls were largely reinforced with plywood.

The archaeologists then identified a small excavation area in the centre of the highway right-of-way, and between the old road and the one remaining old house (now serving as site office and lab). A plastic-covered greenhouse was erected there to protect workers from the elements (5° below zero C., as I write this!). Inside, a narrow trench was dug round the perimeter, to define the 2m x 5m block excavation area and to identify the contours of the various layers.

The matrix is taken in buckets to the nearby screening shed where it is washed through screens and bagged: Everything intercepted in the screens is kept, for later sorting in the lab. The water is pumped through an elaborate hose system from and back

Cont. on Page 12

# CANNERY

"All archaeological sites are important, but some are more important than others." How do you tell? Take the St. Mungo Cannery site, for example:

WHY IT'S  
IMPORTANT

- it was excavated in 1968 - 69 by the Vancouver Centennial Museum;

- a preliminary report on the findings was published in B.C. Studies (No. 6 - 7, Fall - Winter 1970, pp. 54-76), and a shorter version in The Midden (Vol. 2:1:2-3, Feb. 1970);

- Gay Calvert Boehm wrote an analysis of the artifacts and the faunal remains for her M.A. thesis (U. Vic. 1973);

- the A.S.B.C., in 1976, recommended to the Archaeological Sites Advisory Board that the site be officially designated by the Province;

- and now, in 1982, the Government is spending half a million dollars on it.

Obviously somebody has decided that the St. Mungo Cannery site is one of the more important ones. Here is a summary of what we already know about the site from previous investigations, and how that fits into our present knowledge of Fraser Delta prehistory.

## INVESTIGATIONS IN 1968-69

Gay Calvert, who was then the Vancouver City Archaeologist, spent several months in 1968 and 1969 excavating at the St. Mungo Cannery site (many of her crew were volunteers from the A.S.B.C.). She thought, from her examination of the surface collection, that she would find material from what was then a rather large gap between the Marpole Phase and the recent Stselax Phase. While she did find evidence of these two periods, most of the material came from a much earlier period - in fact, 1,000 years earlier than anything else known at that time from the Fraser Delta.

The three components, predictably referred to as lower, middle and upper, are described below, in order of their deposition at the site.

### Lower Component

This forms the bulk of the cultural deposit and is found on top of sterile river-deposited clay. It consists of thin layers of dark soil, finely crushed shell, hearth clusters, and ash spreads: in other

words, alternating dump deposit and living areas. There are three radiocarbon dates, the two earlier ones from the very bottom of the deposit: 2020 B.C.  $\pm$  105, 2360 B.C.  $\pm$  110, and 2290 B.C.  $\pm$  105. There are 1,203 artifacts from this component: 40% are stone, and 60% bone and antler. Almost 90% of the stone artifacts are chipped stone.

#### Middle Component

This component consists of a large (about 15 x 18 ft.) irregular pit, dug into the lower component. The pit filled with an orange-black sandy matrix yielded a radiocarbon date estimate of A.D. 830  $\pm$  95; four burials; 233 artifacts, three quarters of which are small slate disc beads; and assorted faunal remains.

#### Upper Component

The matrix is dark brown soil with finely crushed shell, ash spreads, scattered hearth areas, and fire cracked rocks. Two radiocarbon date estimates were obtained: A.D. 1560  $\pm$  95 and A.D. 1150  $\pm$  95. Only 217 artifacts were recovered from this component, half of them of ground stone.

The artifact assemblage for the site as a whole includes items made from stone, bone, antler and shell. The more numerous types include chipped stone points, pebble tools, slate disc beads, bone awls, antler wedges, bone wedges and various types of bone points. It is notable that a lot of woodworking tools were found, even in the earliest levels (107 antler wedges in the lower component!) Also found was an antler carving of a "Killer whale effigy". The fauna represented includes a lot of fish (esp. salmon and sturgeon), a lot of shellfish (esp. blue mussel), land mammals (elk, deer, beaver and others), and a lot of birds.

#### Interpretation

Calvert recognized the upper component as belonging to the Stselax Phase (which is also known as the Gulf of Georgia culture type and now is thought to have begun about 400 A.D. and lasted until the time of contact). The artifacts from the middle component, especially the beads, suggest affiliation with the Marpole culture type, known from the delta between about 400 B.C. and A.D. 400. The lower component is older than anything else then known from the delta. Calvert saw similarities with the Eayem Phase from the Esilao site in the lower Fraser Canyon and called it accordingly an "early Eayem-like phase".

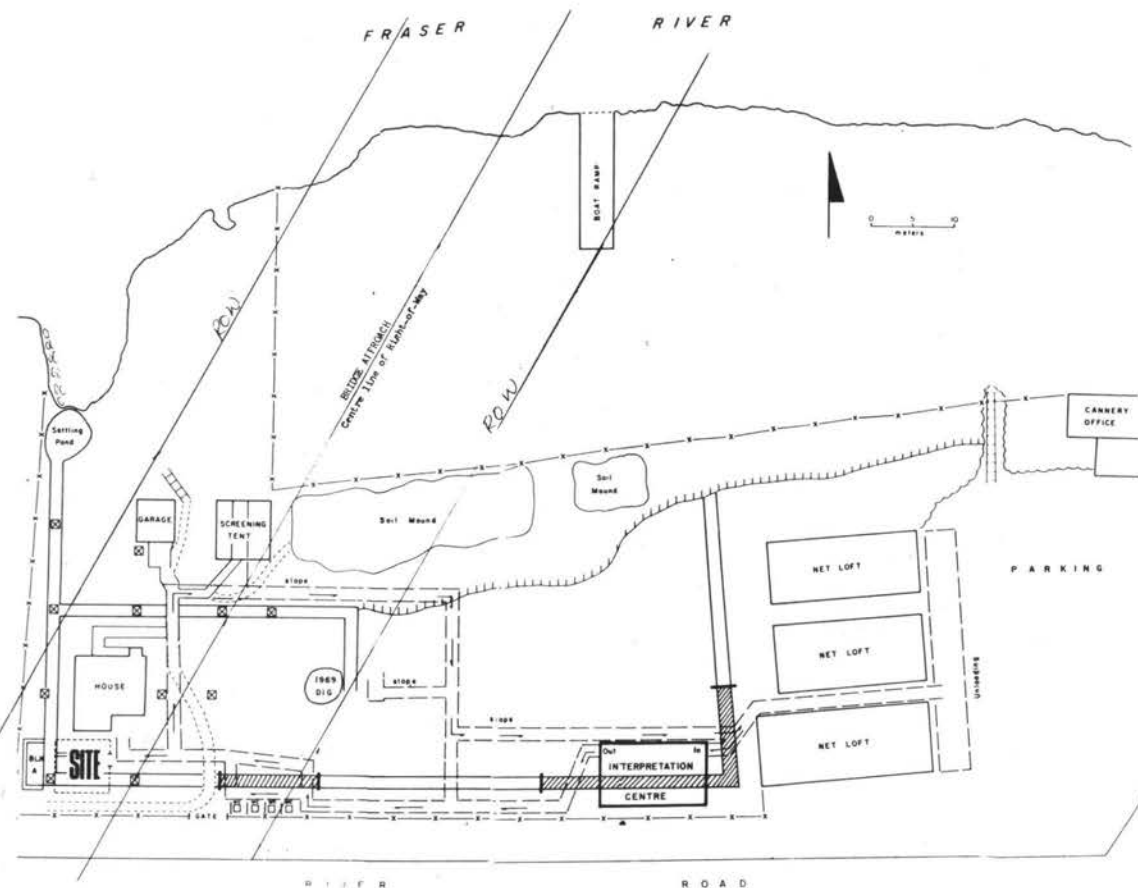
Analysis of the material did not reveal very many changes over time. Correcting for the differences in sample sizes from the three components, Calvert did note a few patterns, such as a decrease over

time in chipped stone points, and in pebble tools and large cores; a marked increase in ground slate knives in the recent Stselax component; consistency in the remains of elk, deer, ducks and grouse but an increase in dog and hair seal and a decrease in swans, geese, and loons. As for fish, the indication is that salmon became more and more important relative to other fish. Shellfish were not included in the analysis. The faunal remains indicated that the site was occupied in the summer, as well as in the spring and/or fall.

In general, the 1968 - 69 excavations at St. Mungo indicate that reliance on fish and shellfish for subsistence, and woodworking as a major aspect of the technology, have been characteristic of the Northwest Coast for more than 4,000 years; that there has been no radical economic change during that time; and that the people living in the delta may have been related to those inhabiting the lower Fraser Canyon - 4,000 years ago and perhaps at other times as well.

THE 'ST. MUNGO PHASE'

In the early 1970's archaeologists from U.B.C. excavated the nearby Glenrose Cannery site (DgRr 6). The results of that project



were published in 1976 in a volume edited by R.G. Matson (Arch. Survey of Canada Mercury Series Paper 52), and a brief version by Matson appears in the B.C. Studies special issue on archaeology (No. 48: Winter, 1980-81, pp. 64-85).

Excavations at Glenrose revealed three cultural components; the lower one, dating between 5700 and 8150 years ago, Matson called "Old Cordilleran." The middle component, dating from 4300 to 3300 years ago, contains material identical to that from the lowest component at the St. Mungo site. Matson named this the "St. Mungo Phase" after the first site where it had been observed. The upper component was of Marpole type.

Matson's conclusion regarding the St. Mungo Phase, based on the Glenrose material, supports that made by Calvert: the ethnographic Northwest Coast subsistence pattern, including a major reliance on shellfish, was "well on its way" by at least 4,300 years ago. Matson does, however, note that no evidence was found of large plank houses which he believes should have been in use if the site was occupied year round.

#### THE "CHARLES PHASE"

(I never claimed this would be simple: I only hope it will be clear).

In 1975 the National Museum of Man published a paper by Charles Borden entitled "Origins and development of early Northwest Coast culture to about 3000 B.C." (Arch. Survey of Canada Mercury Series Paper No. 45). Borden, in this publication, proposes the term "Charles Phase" for components from the lower Fraser-Strait of Georgia region dating between 5500 and 3000+ years ago. (He named it after Andy Charles from Musqueam, who discovered the St. Mungo Cannery site and was the first to test it). The Charles Phase is defined to include the lower component at the St. Mungo site, the middle component at Glenrose, Eayem at the Esilao site in the canyon -- and components from several other sites in the region.

#### THE 1981 TEST EXCAVATIONS AT ST. MUNGO

When the Department of Highways proposed construction of a bridge that would cut through a large portion of what remains of the St. Mungo Cannery site, the B.C. Heritage Conservation Branch responded by testing the site to determine whether it is worth salvaging. Shovel tests in the Summer of 1980 revealed the presence of prehistoric deposits on the proposed right-of-way, which includes almost the entire lot at #10173 River Road, as well as portions of the adjacent lot. The following Summer, 1981, the H.C.B. hired David Archer and Al Mackie to conduct extensive testing on the right-of-way,



in order to evaluate whether there are undisturbed prehistoric deposits whose demise would constitute a permanent loss to our knowledge of local prehistory. With the assistance of the VCC-Langara field school, they spent two months excavating the site.

In their report, Archer and Mackie present the following interpretation: Before the house was built the lot was levelled by bulldozing the top of the front yard onto the back yard. The result is that the upper components, in the area between the road and the house have been removed and immediately below the surface in between the waterpipes, etc. are undisturbed St. Mungo Phase deposits. These cultural layers are relatively level and extend down about 1 m from the present ground surface. At the back of the lot (closer to the river) there are up to 2 m of disturbed overburden on top of a complete sequence of the prehistoric occupations - at least Marpole and St. Mungo phases, and probably Stselax as well. One excavation unit, which was not completed, had cultural material extending down below the water table, strongly suggesting the presence of a waterlogged component.

Archer and Mackie recommended salvage work if this portion of the site was likely to be destroyed.

#### CONCLUSIONS

If you've read this far, you have undoubtedly already conceded that the St. Mungo Cannery site is important: it contains information from an early period in the Fraser Delta, about which we know very little. A reasonably large amount of that early component is sitting there, right at the surface, waiting for a trowel: not the kind of situation normally present at a site. Despite the disturbance, there is the promise of good stratigraphic control, necessary for understanding the relationship of this early "St. Mungo Phase" component to succeeding occupations. Perhaps, like at Glenrose, even earlier material is to be found at the bottom. The possibility of waterlogged artifacts adds an exciting - but also archaeologically important - dimension.

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Kathryn Bernick

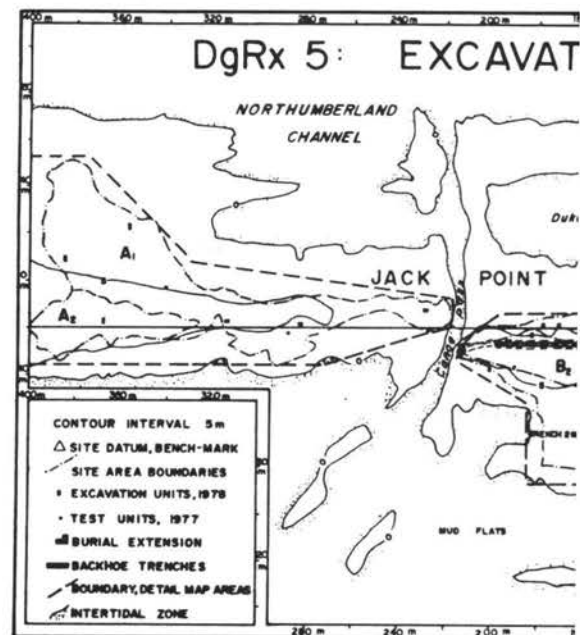
An article on the Duke Point excavations may seem long overdue and terribly outdated, given that the sites at Duke Point ceased to exist in 1979 with the development of a deep-sea port facility in the Nanaimo area. However, as with most theses, the analysis has taken considerably longer than anticipated. The following brief is intended to serve as a summary, with the added note that considerably more detail is available in the thesis manuscript itself (University of Victoria, Department of Anthropology 1981 -- in press, National Museum of Man Mercury Series).

Prior to construction in the Duke Point area, there were two peninsulas: Duke Point, bordered by Northumberland Channel and Gabriola Island to the east and by a lagoon to the west; and Jack Point situated between the lagoon and the Nanaimo River estuary.

Ethnographically the area was exploited by the Nanaimo, of the Coast Salish cultural group, whose winter villages were within what is now the modern city of Nanaimo.

The Duke Point area was surveyed and tested in 1977, and four sites, DgRx 5, DgRx 11, DgRx 29, and DgRx 36 were further excavated in 1978. Other sites in the area which had been identified for testing had already been destroyed by construction operations.

The largest and most interesting site proved to be DgRx 5, (see map), with three major stratigraphic zones and cultural horizons. Radiocarbon age estimates from the uppermost component ranged from A.D. 590 - A.D. 1260. A middle horizon produced age estimates of A.D. 100 - 600 B.C. The lowest horizon was associated with a corrected



DgRx 5 Site ar

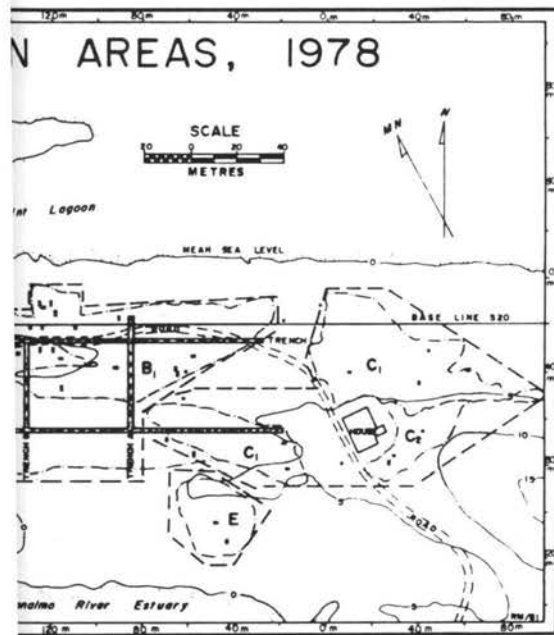
radiocarbon age estimat

On the basis of st: estimates, and artifact components were delineated, chipped stone w: ity of which was quartz flake detritus. Ground what more abundant than II, the largest of the an equivalent number and ground stone artifacts, and obsidian flakes and



Duke Point Area, B. C.

Murray



excavated in 1978

of 2760 B.C.

graphy, radiocarbon age  
nities, three cultural  
For the earliest com-  
most abundant, the major-  
stal, obsidian, and chert  
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e artifacts. Component  
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centage of chipped and  
erous quartz crystal  
nd stone disc beads

inflated the chipped and ground stone categories, respectively. Shell artifacts were quite numerous due to the large number of disc beads excavated in association with a mass burial of 10 individuals. Within the third component were more ground stone artifacts, more than half of these being disc beads. Microblades, present throughout the three site components, were most abundant in the most recent third component.

One might ask why artifact types were not used as the major criteria for component delineation. My contention is that there are too many overlapping artifact categories from component to component to use this as a strong foundation for comparison. Rather, the differences are to be found in the relative variation of artifact quantities and frequencies from component to component.

In short, what are considered to be significant (not in any statistical sense) variations in artifact types from components at other southern Gulf of Georgia sites, do not seem to apply to the Duke Point material. Instead, component variation stems from similarities and differences in the relative frequencies and percentages of artifact types.

Perhaps what have been perceived to be major differences in components, especially on a presence/absence basis, may not be as important if greater emphasis is placed on numbers and similarities in artifact types. Relatively minor cultural changes, which could be attributable to seasonal variability, support the case for cultural continuity. In the absence of obvious discontinuity, and of prominent differences in artifact classes, changes in the proportions of artifact types from component to component may signify cultural continuity.

## KITSELAS RESEARCH YIELDS MICROBLADE TECHNOLOGY

Three cultural components spanning at least 3,000 years have been tentatively identified at a prehistoric site along the middle Skeena River.

The Paul Mason site (GdTc 16) is located in the middle of the Kitselas Canyon near Terrace, on the left bank of the Skeena River. The site is on the first bench above the river, at the steepest part of the canyon. It extends some 200m along the river and perhaps as much as 150 or 200m back. The front part of the site slopes down toward the riverbank. Cut into the surface are 11 rectangular house platforms arranged in two rows, one behind the other, with their long axes perpendicular to the river. Behind these features on a higher flat bench is another similar depression which may or may not be associated with the others.

The house platforms vary in size, the largest being about 10 m long and 5 m wide. Those at the ends of the rows are shorter than those in the centre. They have been cut into the sloping surface and are level - the back row being at a higher elevation than the front.

The site was tested in the Summer of 1981 and found to span a relatively long period of occupation. Four C<sup>14</sup> date estimates were obtained:

890 ± 160 years ago

3130 ± 100 years ago

3230 ± 160 years ago

3780 ± 120 years ago

The most recent date may be associated with the house platforms, while the other three are from underlying cultural deposit. At the very bottom, a microblade-bearing matrix was observed.

These findings were used to formulate the research objectives of the 1982 excavation project: to identify the number of discrete occupations; to determine whether or not the site was occupied continuously; and to look for indicators of the kinds of changes that occurred over time - in technology, demography, subsistence strategy, settlement pattern and social organization.

Excavation concentrated on the house platforms. One metre wide trenches were dug along the central axis and across the width of two of them. Also excavated were two pits in what was presumed to be a dump area to the side of the platforms, and one unit on the upper bench.

The excavating was done with trowels, in natural layers with 10 cm arbitrary controls. All matrix was "dry" screened through ¼" mesh. About 1,000 artifacts were recovered. Only a small amount of chipping detritus was found and organic material is limited to a few calcined (burnt) bones. Features include three hearths along the central axis of one of the houses, a possible pit, and assorted post molds. Eleven wood charcoal samples from the 1982 excavations have been submitted for radiocarbon dating.

Preliminary interpretation of the stratigraphy indicates the presence of three cultural components. At the bottom, on top of sterile water-laid clay and in places bedrock, is a 10-20 cm thick layer of reddish brown clayey soil containing microblades. The middle component ranges up to 1.5 m in thickness. It consists of very fine layers of dark brown silt, burnt soil, ash lenses and fire cracked rocks. Most of the artifacts were found in this matrix. The upper and most recent component comprises the house platforms. Their relationship to the underlying deposit is not clear: no distinct boundary in the natural stratigraphy was observed, and preliminary assessment of the artifacts does not indicate a difference in types. Both the middle and upper components are characterized by large chunky tools - modified cobbles, cortex spalls, large flake tools; ground slate and abrasive stones.

The material recovered from the middle and upper components resembles a "typical" north coast lithic industry, and suggests a coastal orientation spanning the past 3,000 years. If the microblades were also left by coastal people, they may be very old. On the North Coast microblades have been recovered on the Queen Charlotte Islands from deposits dating from about 5,000 to 8,000 years ago. On the other hand, microblades are associated with the interior plateau cultures. Previous research in the Kitselas Canyon area, at the Gitaus site, led Louis Allaire to postulate that the earlier occupants of the region were interior peoples and that they were gradually influenced by the coastal groups downriver.

Clearly, more information is needed on the lower component, including radiocarbon dates, before any conclusions can be drawn. Excavations next season, in the Summer of 1983, will probably focus on the lower component, and on the relationship between the middle and upper components.

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The 1981 excavations at GdTc 16 were funded by Parks Canada. Funding for the three month project in 1982 was from the National Museum of Man and from a B.C. Heritage Trust grant to the Kitselas Band. About half of the 1982 crew of 20 were members of the Kitselas Band. Gary Coupland was project director both seasons, and is analysing the material at U.B.C. where he is a graduate student. Dr. George MacDonald of the National Museum of Man is principal investigator.

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By Kathryn Bernick  
based on an interview with Gary Coupland.

Cont. from Page 2

into a reservoir dug near the river at the corner of the lot.

Report  
Due in  
One Year

The contract calls for six months of fieldwork - finishing at the end of April - plus analysis and interpretation. (But B.C. Highways Department officials told The Midden no contract is even near for building the bridge piers at St. Mungo.) The final report is due a year from now and - said B.C. chief archaeologist Art Charlton - a popular version will be produced in addition to the technical report.

After analysis, all artifacts and other material will join the 1968-69 material in the Vancouver City Museum.

A portion of the site will remain after excavation, some of it not on the right-of-way, although most has now been heavily disturbed. (The cannery and bunkhouses, built in 1899, were followed by a road, a railway and several homes.) There is a possibility that some of the site extends under the old netlofts, thus remaining relatively intact.

Extensive public involvement is required by the research contract, and members of the public, in addition to ASBC members, will be able to help with screening. Backfill from the back-hoed trenches has been piled up at the front of the site, for screening in the shed. Since it is from disturbed contexts, material recovered here will not be part of the major research program, but may lend itself to teaching and display purposes.

When Sharon Johnson, responsible for the public involvement at DgRr2, announced school tours would be possible, she was swamped with requests for 40 classes in just two days; another 47 classes are on a waiting list. Johnson will also be providing intensive orientation for the teachers before they visit the site.

Queen  
Invited  
To Visit

Meanwhile, despite the crowds, HCB officials have asked provincial protocol officers if the Queen - during her visit to B.C. around early March - can fit in a tour of St. Mungo. (Excavations will be in full swing by then, and both she and Prince Charles have shown some modest interest in archaeology in the past. She has visited several sites in the U.K. and the Prince took some archaeology in College, and has closely followed the raising of the Mary Rose.)

Such a visit will certainly put St. Mungo on the map - shortly before it is permanently destroyed.

Questions  
for  
Everyone

Visitors to the site will be asked to complete questionnaires, so the HCB can draw a profile of interested people: Who they are, why they are interested, and what they got out of it.

Volunteers wanting to work at St. Mungo can call either ASBC president Helmi Braches, 985-0825, or Ron Murphy, 435-3949 (evenings, both).

#### MANY SITES IDENTIFIED ON MEARES ISLAND

Al Mackie, with a crew of three, is back on Meares Island, near Tofino, to locate, map and record sites.

During the first couple of months of work, the team has recorded an unusually high density of sites - 188 sites on 170 km of shoreline, mostly middens, but also fishtraps, bark-stripped trees, at least one water-logged midden and assorted canoe-skids.

The survey has been spurred by a MacMillan Bloedel application to log the island, and one important historic site, which is threatened by the logging is Fort Defiance, a provincially designated site. (See B.C. Studies, #4, Spring 1970).

Provincial archaeologist Art Charlton told The Midden that this, and the recent Pacific Rim survey, have identified a "much higher density of sites on the West Coast than any of us anticipated".

Decision on the nature and location of the logging is pending, but Charlton hopes the work will be modified to protect sites.

The Meares Island Project has been funded jointly by the Nuu-chah-nulth Tribal Council, and the B.C. Heritage Conservation Branch, with assistance from the B.C. Provincial Museum.

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#### MUSEUM SURVEYS PRINCE RUPERT HARBOR

The Museum of Northern British Columbia in Prince Rupert has been conducting a survey for the past two months in the Prince Rupert Harbor area. Project Director David Archer and two assistants are locating and recording sites on Federal lands. Funding is by contract from the National Museum of Man, Ottawa.

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## LALONDE MAKE-WORK PLANS THREATEN CANYON SITES

It now appears that double-tracking of the Canadian National railway tracks through British Columbia is inevitable and (if and when it goes through) vast numbers of important archaeological sites are likely to be affected.

Huge railroad-building projects were among items listed by Finance Minister Lalonde in his October make-work programme. However, how that money will be distributed has still (to The Midden at press time) not been announced.

But even in the unlikely event that none of those millions of dollars filter down to the B.C. region of CN, the government-owned railway will probably go ahead with double-tracking anyway.

Indeed, informed sources told The Midden recently that public hearings by the Federal Ministry of the Environment are to start in Vancouver early in the New Year to determine how, when and where a second set of tracks would be built. (The Archaeological Society will present a brief to any such hearing, to point out archaeological ramifications.).

In a sense, double-tracking is already in progress, in that CN has been constructing two-mile "sidings" on a variety of stretches of its existing right-of-way. To "double-track" in effect would simply involve joining up those sidings. Such track-laying has already resulted in some survey work by the B.C. Heritage Conservation Branch, including one excavation (Paul Sneed, 1977, at Siska Flat), and HCB chief archaeologist Art Charlton says negotiations on CN underwriting such work have been going on for some time.

Even if public hearings are held, believes Charlton, the double-tracking will go ahead.

"There's no doubt this project is happening" he said in a recent interview. "We should not be under any illusion that at some point somebody will say it won't happen".

Charlton said some construction is already in progress on the North Thompson stretch of the CN trackage, but it has not yet got into the Fraser Canyon, and he doubted that CN would get into the Canyon until perhaps 1990.

Some observers think that dozens of important sites - many still unknown - will be destroyed if that happens, and certainly key sites such as Millikin and Esilao will be affected, if not wiped off the map.

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NR



## **The Society**

Forthcoming A.S.B.C. meetings:

(8pm; Vancouver Museum Auditorium)

Jan.12: Mrs.Mary Bentley, "The Gabriola Petroglyphs."

Feb.9: Dr.James Russell, "More Anatolian Adventures."

Topics for later meetings in the spring include Beach Grove  
and Java.

Next A.I.A. meeting:

Jan.10: Thomas Palaima will speak on Mycenaean writing.  
(8pm, U.B.C.Museum of Anthropology)

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## **The Midden**

Subscriptions (\$8.00 a year) should be addressed to Ms.Lesley  
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The next issue of THE MIDDEN will appear mid-February, 1983.

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### W A T C H   F O R

- \* Thoughts on the uses of Seated Bowl Figures;
- \* Report of excavations at a pioneer ranch near Kitimat.

Both in the February issue of The Midden.

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