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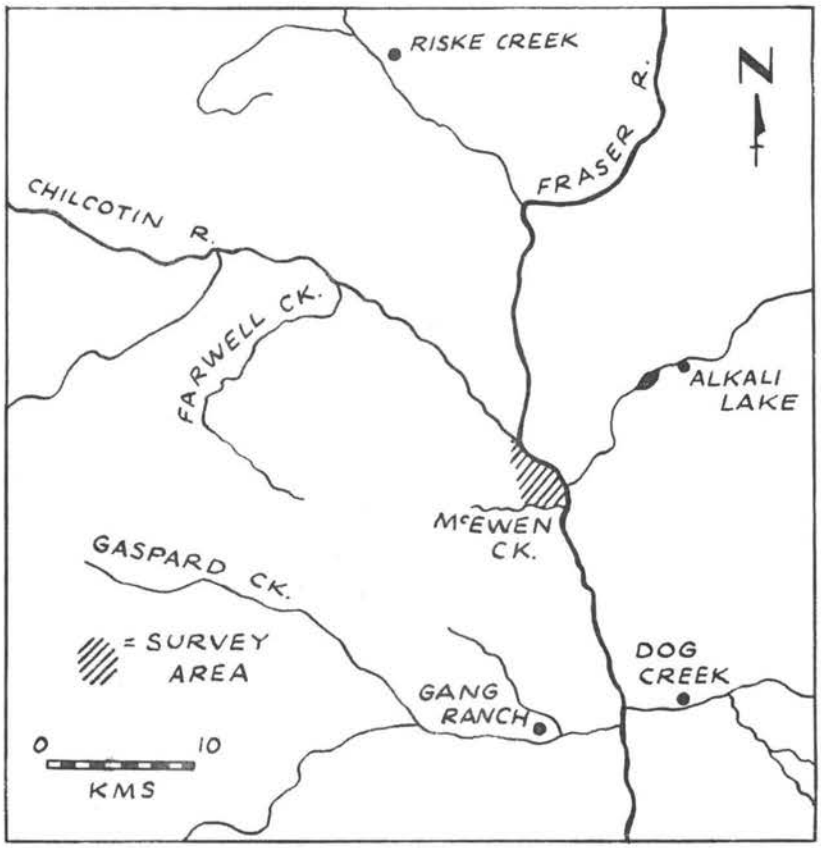
SHUSWAP SETTLEMENT PATTERNS: PRELIMINARY FIELD REPORT

By Leonard C. Ham,
Simon Fraser University

During the months of May and June, 1974, a regional sampling and a limited excavation were carried out in the Chilcotin region of British Columbia. This project was in conjunction with the University of British Columbia's "Summer Field Training in Archaeology", Anthropology 306, and was conducted by Dr. R. G. Matson. The author worked with the project as a field assistant and is presently involved in the analysis of the materials which were collected. Funding was obtained from the Humanities and Social Sciences Division of Canada Council.



The region where this study took place lies at the mouth of the Chilcotin River, on the west bank of the Fraser River between the Chilcotin and McEwen Creek. The survey area was from the Fraser River (approximately 1,160 feet above sea level) to the top of the Interior Plateau in the area (approximately 4,000 feet A.S.L.), and between the Chilcotin and McEwen Creek.

This region was initially surveyed in 1970 by Paul Sneed and Grant Keddie, and a more extensive archaeological and ecological survey was undertaken in 1972 (Keddie 1972). The 1974 U.B.C. project was planned in part to supplement this previous work and place it on a wider theoretical base for analysis. This part of the research objectives was met by applying regional sampling techniques similar to those developed

by Dr. Matson in the Cerbat Mountains of Arizona (Matson 1971), and further developed by Dr. Matson and Dr. Lipe in Cedar Mesa, Utah (Matson & Lipe 1973). A further aim of the project was to provide dates on some of the sites surveyed and collected by the 1972 project. This was met by limited excavations at three sites to obtain carbon samples for conventional Carbon 14 dating as well as for use in the development of a dendrochronology (tree ring dating sequence) for the interior of British Columbia. A test pit was also excavated in a cache pit in order to determine if excavations would yield information on the use of cache pits.

Regional Sampling

An important aspect of archaeological research is the reconstruction of past settlement patterns, that is, the way in which the past inhabitants of a region used their environment and its resources. This can be determined by carefully searching out the different types of sites representing human activity within the region in question. As it is often difficult and time-consuming to survey every square metre of the ground in the region, a sampling technique is employed by which a representative sample of the archaeological remains may be obtained, thus allowing statements to be made about the whole area.

The area in question was approximately 6 km. long and extended about 3 km. west of the Fraser River. The region was stratified on the basis of dominant vegetation type, that is, divided into two sampling populations, the lower grassland benches and the upper forested area. Grids representing 400-metre square quadrats* were placed over aerial photos of the sampling area and a number of quadrats was randomly selected. In the forested area six quadrats were surveyed, and as one quadrat was drawn twice, we have a total sample of seven quadrats. In the grassland area, 12 quadrats were surveyed.

* "A square area of vegetation marked off for study." - Chambers Dictionary of Science & Technology.

In the field, the area to be surveyed was drawn on the aerial photograph and a corner of the quadrat was established by locating features (such as bushes, groups of trees, gullies) from the photograph on the ground. Using 100-metre ropes and compasses, the boundary of the quadrat was staked out at 100-metre intervals. Teams of five or six crew members would then make several sweeps across the quadrat, collecting stray artifacts and flagging with orange survey tape any concentrations of artifacts or sites. Smaller collection grids would later be laid out to facilitate the collection and mapping of these sites. A botanical as well as a cultural, physiographic and faunal sheet was filled out for each quadrat and for each site within each quadrat. This will allow us to make statements about the relationships between different types of sites and the relief and vegetation with which it was associated.

Survey Results

Analysis of the data is presently at an early stage and no definite statements can be made, although there appear to be several important patterns. The grassland region was by far the most heavily utilized region, accounting for nearly all of the cultural data and material which were recorded or collected. A preliminary total of 4,117 artifacts of all classes was collected from the grassland region, and 171 house or cache pit features were mapped and recorded. The artifactual material from this region has been tabulated in Table I. Only a few sites were located in the forest region and analysis has not yet been completed on them.

Excavation

Excavations were carried out at three sites, EkRo48, EkRo18 and EkRo31. These sites were surveyed in 1972 and from the presence of characteristic artifacts found on the surface, they were determined as belonging to the late period, Kamloops Phase (as defined by Sanger 1968:146-147), and thus most likely to reflect the time element in our other surface-collected material. One-metre-square units were excavated in selected housepits which appeared to be well drained, and thus most likely to contain well preserved charcoal. In all, ten units were excavated, five at EkRo48, three at EkRo18 and two at EkRo31. Carbon 14 samples were obtained from all three housepits and good dendrochronology samples were obtained from two of the sites. Marion Parker of the Western Forest

Products Laboratory in Vancouver is presently analysing the dendrochronology samples. Penny Woods (S.F.U.) is doing the faunal analysis of the bird, mammal and fish remains recovered during excavation. Dr. Matson's Anthropology 420 class is also involved in the analysis of some of these materials. The cache pit excavation recovered wood and bark samples which have been submitted to Marion Parker for analysis.

Gratitude should be extended to the ten field school students comprising the 1974 U.B.C. crew, and to two students from the Alkali Lake Band who joined the project near the end.

TABLE I SURFACE COLLECTED MATERIALS: SURVEY AREA 1 (Based on counts)

Artifact Class	Number	% of all Classes	% Artifacts only
Anvil Stones	2	0.04	0.33
Bifaces	13	0.31	2.17
Biface Fragments	16	0.38	2.68
Cortex Spall Tools	61	1.48	10.21
Cortex Spall Cores	14	0.34	2.34
Chipped Slate Tool	1	0.02	0.16
Cores & Core Remnants	13	0.31	2.17
Hammerstones/Edge-Battered Cobbles	11	0.26	1.84
Heavy Duty Cutting/Scraping Tools	9	0.21	1.50
Heavy Duty Pebble Tool	1	0.02	0.16
Large Flake Knives	7	0.17	1.17
Narrow-Angled Formed Unifaces	4	0.09	0.67
Wide-Angled Formed Unifaces	7	0.17	1.17
Pebble Tools	11	0.26	1.84
Pièce esquillées *	53	1.28	8.87
Projectile Points	40	0.97	6.70
Utilized Flakes	175	4.25	29.31
Unformed Unifaces (edge angle greater than 45°)	93	2.30	15.57
Unformed Unifaces (edge angle less than 45°)	66	1.60	11.05
			99.91
Flakes (coarse grained basalt)	580	14.08	
(vitreous basalt)	368	8.90	
(cherts)	2,188	53.14	
(obsidian)	7	0.17	
(quartzite)	13	0.31	
(greywacky)	1	0.02	
Historic Artifacts (glass)	190	4.61	
(metal)	144	3.49	
(misc.)	29	0.70	
		99.89	

* Defined by George MacDonald in the Debert Report (1968-p.85) as wedge-like artifacts which exhibit bipolar flaking from paired crushed and battered surfaces.

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1973 Regional Sampling: A Case Study On Cedar Mesa, Utah. (Paper presented in the Archaeology Symposium of the S.A.A., San Francisco)

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1968 The Chase Burial Site EeQwl, British Columbia. National Museums of Canada, Bulletin 24, pp. 86-185.

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The "We-told-you-so Dept."

Dinosaur bones return to fashion

Dinosaur bones from southern Alberta, fashioned for the ears and fingers of discerning tourists, account for much of Oscar Green's success.

The 60-million-year-old bones—cut, polished and mounted—are also becoming popular gifts, says the founder of Green's Rock and Lapidary Ltd. which last year grossed $250,000.

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He said he knows the whereabouts of a hill of fossils. "I can go down there and get a trainload of bones but I'm not going to give anybody directions... I'm interested in those bones lasting a long time."

.....

In the beginning, Mr. Green cut and polished his own stones. Today the stone is diamond-saw cut into wafer-like slices, packaged and shipped to Hong Kong.

There the stone is cut to size, shaped and polished, then returned to Mr. Green who sells the finished product to hobbyists. The hobbyists, in turn, craft jewelry for retail sale.

It is not known how much jewelry is produced by this cottage industry, but more and more of the processed bone is ending up in foreign hands.

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To some the collectors are stone-age grave robbers, while the collectors mutter about those paleontologists who "think fossils were willed to them by God."

THE COLUMBIAN, WEDNESDAY, NOVEMBER 6, 1974

Antiquities Legislation and the Role of the Amateur Archaeologist

By T. DANIEL PLETSCH
Reprinted by permission from Archaeology, Oct.1974

Of 45 major archaeological occupation sites known to have existed on the Oregon coast between 1900 and 1950, today only one remains intact and only twenty percent of the others survive in part. Of the forty sites known in the Portland area in 1971, ten have been vandalized or entirely destroyed, four have been covered by industrial developments, three have been flooded or badly eroded, twelve others have been ruined by the work of inexpert amateurs, six have been paved over or built upon in a similar fashion, and two are presently scheduled for excavation by amateur groups; this leaves, on balance, only three sites undisturbed. In Arkansas, (the statistics are less grim, but similar) 25 percent of that state's known sites have been destroyed in the past ten years. I am sure that analogous figures would also apply to other parts of the country.

Anyone with the slightest knowledge of history or archaeology will see from such facts that a moment of crisis has been reached, and work to check the destruction of our archaeological heritage must begin now. Unlike plant and animal species threatened by extinction, archaeological sites cannot be restored to a natural balance by means of intelligent conservation measures; they are a nonrenewable resource, and once they are gone, they are gone forever.

What can be done to lessen and prohibit this increasing destruction of archaeological sites? And, further, what can we members of the general public do to ensure their preservation and help see to it that they are scientifically treated when excavations are undertaken? We have available to us several possible courses of action; these include litigation, education through the schools, public demonstrations and finally legislative action. Litigation is slow and expensive; besides it would not even be possible without effective laws. Education is an excellent and necessary means of making the public aware; but it too proceeds slowly and would require massive legislation to develop an ongoing program. Public demonstrations supporting archaeological preservation would, to my mind, be inappropriate and probably unproductive.

This leaves the legislative process itself as the best tool for accomplishing the task with any speed—and speed, at this point, is absolutely essential. Although there are federal laws to protect our native heritage, they cover only lands under federal control, and they deal with only limited aspects of the problem. Since local governments everywhere tend to be overburdened—and all too often ineffectual—the state governments must do the job. In fact, most states have some laws intended to protect archaeological sites and to regulate archaeological activities, but they are inadequate.

Better laws are needed, but state legislators, on the whole, know nothing, or at best very little, about archaeological matters, and there are far too few professional archaeologists to see that the statutes are properly enforced. In these circumstances, would not the amateur archaeologist be the best person to take up the cause? By "amateur" I mean not the casual pothunter but the informed nonprofessional who has at least as much interest in the preservation of sites and the collection of accurate data as he does in the recovery of objects. There are a number of vital services such a person can perform, and often he brings significant advantages to his tasks. For one thing, he is part of the general populace and as such can often communicate more easily with the public than the professional archaeologist. He can join with other amateurs in a coordinated effort—preferably, to my mind, through an organized society—to campaign for additional laws and effective regulatory agencies, for greater public education and for the funding required to support such undertakings. Indeed, if amateur archaeologists do not become involved in the effort to preserve our national heritage, they, like everyone else, are shortly going to lose this resource.

What sorts of legislation might an amateur group endorse? In the field of public education, it should press for the creation and expansion of museums, archaeological exhibits, publications and the like. Second, it should seek to establish a research program whose purpose is to gather all the information available from those sites that must, for various reasons, be destroyed. Third, all states need definite provisions for preserving and protecting sites and archaeological information, and for the regulatory mechanisms involved. The details of such a program are beyond the scope of this paper, and they will vary from state to state.

What is happening in Oregon may be of general interest. Two years ago, Charles R. McGimsey III published *Public Archaeology* (New York 1972), a book which several members of the Oregon Archaeological Society read. Many of us had already begun to recognize that the archaeological community within the state was not adequately organized, and McGimsey's ideas inspired us to act. It was the beginning of an effort that has had some useful results.

The Oregon Archaeological Society (OAS) was organized in 1951 with roughly thirty members; since then its total membership has grown to 650. Whereas the society started mainly as a group of interested collectors, it has evolved into a group more intent on preserving the past than on collecting artifacts. In 1960 the OAS began annual excavations, at which only inchoate attempts were made at disciplined stratigraphy. Subsequently, the society enlisted professional supervision, and it has now matured to the point where this year it assisted in the excavations of the Fort Vancouver National Historic Site. As is probably the case with most such societies the OAS comprises people from all walks of life and with many different personal kinds of interest in archaeology.

Two years ago a Legislative Committee was formed, and not without opposition from some of the members. This committee consisted entirely of interested citizens, only one of whom, an attorney, had any particular knowledge of the legislative process. One of the committee's first tasks was to establish the aims of the legislative program it intended to sponsor. It drafted a statement of goals, which had five points: (1) to encourage the preservation of Oregon's archaeological sites not threatened by destruction; (2) to salvage and preserve information and material from endangered sites; (3) to increase public awareness and interest in archaeology in Oregon; (4) to cooperate with and assist professional archaeologists by offering individual expertise not otherwise available to them; and (5) to encourage amateur participation in any state program of archaeological research.

Next, the committee determined its priorities. The first was to gain expertise in federal and Oregon laws pertaining to archaeological matters; the second, to draft a sound and feasible law for the state; the third, to organize a lobby that could go into operation any time an archaeological site might be threatened. The committee has achieved the first of these objectives; the second is presently being pursued, and the third has yet to be fulfilled.

Early in our endeavors, we decided that the initial legislative draft should be the work entirely of the OAS, except for the input of Charles H. Hibbs, a professional archaeologist with the National Parks Service at the Fort Vancouver site. We began with a thorough study of McGimsey's book, which became our principal guideline and which is mandatory reading for anyone interested in these matters. We also attended a workshop on environmental legislation being presented by a local law school. We became more familiar with pertinent Oregon law—of which there is very little—and the state's traditional governmental habits and procedures; we then consulted with a number of other states that have adequate laws or good drafts. After eighteen months of hard work, we succeeded in producing the initial draft we had envisioned. In the main, our proposal seeks to fill in the vacuum which exists in Oregon law; it recommends the passage of antiquities legislation such as exists in other states, the creation of the position of State Archaeologist and a regulatory body to oversee the state's archaeology, and finally the initiation of a good educational and research program.

When the initial draft was written, we began to consult members of our own society as well as professional archaeologists, museums, historians, Indian groups and other amateur archaeological groups within the state. Once these groups have gone over the draft, we plan to consult state government agencies and many of the major businesses that might be affected by the passage of such a law. We need as much constructive criticism and feedback as we can get. Our final draft will have to reflect a broad cross section of interests, for only by getting widespread backing and support can we have any reasonable hope of seeing our draft enacted as law.

There remains, in addition, the no doubt formidable proposition of persuading the state legislature that new laws are needed. If we have laid our groundwork well, we should have a chance of success.

How active are the amateur archaeological groups in other states? This I do not know; but it is my understanding that many such groups are significant local forces, and I hope that they, like the Oregon Archaeological Society, will take the lead in promoting needed legislative change. It is a job that needs to be done —and it is a job that *can* be done. To the amateur archaeologist it presents an especially inviting challenge, for it affords him the chance to make a genuine contribution to the welfare of the nation, to its future—and to himself. "The past belongs to the future, but only the present can preserve it." The challenge, let it be clear, demands a vigorous response.

FOR FURTHER READING: Thomas M. Newman, "The Crisis in Oregon Archaeology," *Tebiwa* 14 (1971) 1-3; University of Missouri, *Stewards of the Past* (Columbia, Missouri, 1970).

T. DANIEL PLETSCH, a physician at the Permanente Clinic in Portland, Oregon, received his B.A. and M.D. degrees from Stanford University in 1953 and 1956. Interested in archaeology for the past ten years, he served as president of the Oregon Archaeological Society and is at the present time chairman of its Legislative Committee.

FOOTNOTE

Since Dr. Pletsch's article in Archaeology, the Oregon Archaeological Society has completed its final draft proposal for a state law. Dr. Pletsch told The Midden that he hopes the Society will vote in January to sponsor bringing the measure to the State Legislature. He believes it could be law by mid-1975.

The final draft toned down one or two proposals, including dropping a proposed prohibition on surface collecting.

The proposal mirrors many aspects of the B. C. Archaeological and Historic Sites Protection Act...it would set up an Archaeological Commission and a State Archaeologist, and they would designate and protect sites, issue permits and be responsible for research and education in archaeology. But it would specifically encourage the use of amateurs, specifically demand the co-operation of all government agencies, and specifically condemn anybody making reproductions of artifacts or other archaeological material to deliberately deceive.

The ASBC will watch proposal's progress with interest.

Ed.

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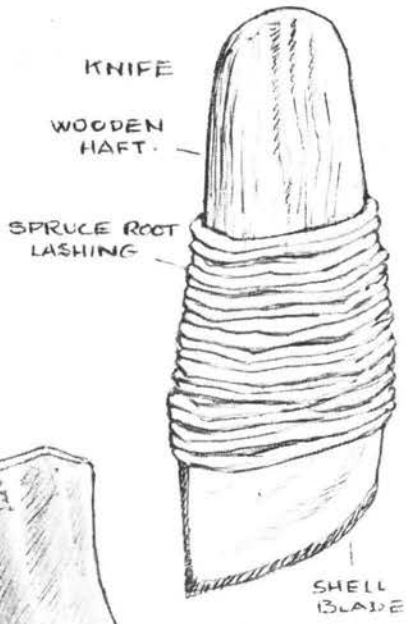
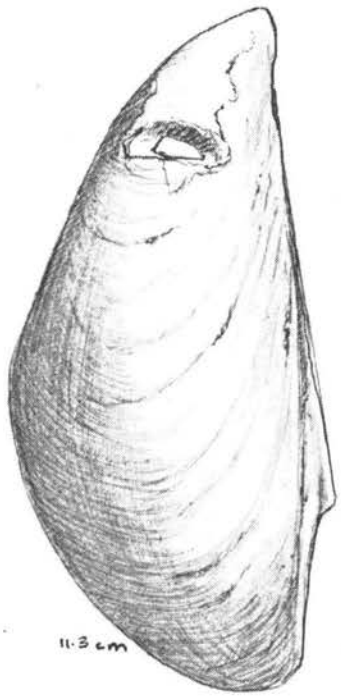
BOOK TO WATCH FOR:

Valley of the Spirits, by June M. Collins. The University of Washington Press promises the book (scheduled for publication at the end of November) will present a thorough study of the Upper Skagit Indians, with particular emphasis on their religious life. 264 pp., $9.50.

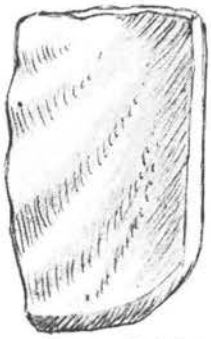
The California, or sea mussel, flourishing in the clean clear waters of a totally unpolluted coast, provided not only excellent food but abundant raw material for making sharp edged blades for tools and weapons. The thick heavy shell was ground on an abrader to produce a sharp bevelled edge. These blades made efficient chisels, adzes, knives and scrapers. The entire shell, with only a spruce root wrapping for a handle, was also used as a scraper.



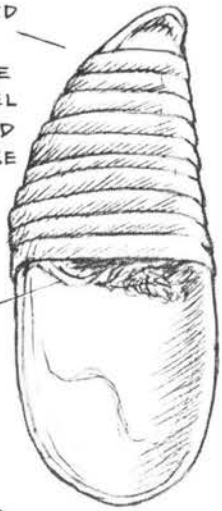


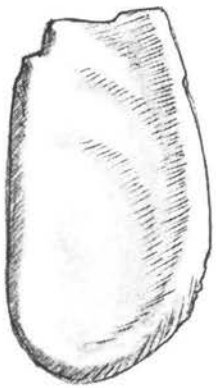
BEVELLED CUTTING & SCRAPING EDGES MADE BY GRINDING ON AN ABRASIVE STONE.

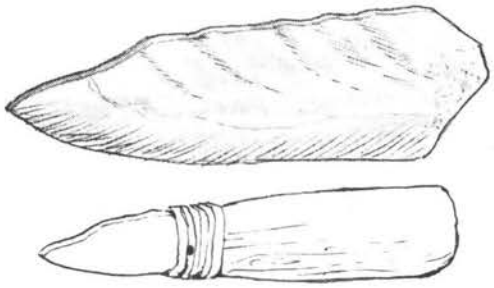
CHISEL BLADE



ADZE BLADE







TWO BLADES THAT WERE PROBABLY END HAFTED.

EXCERPT FROM :
"ARTIFACTS OF THE NORTHWEST COAST INDIANS" — by HILARY STEWART.

A.S.B.C. DIARY

Monthly Meetings

January 8, 1975 - 8 p.m. Centennial Museum Auditorium - Dr. Richard Pearson, U.B.C. - "Japanese Prehistory in World Perspective"

February 12 - 8 p.m. Centennial Museum Auditorium - Dr. Malcolm McGregor, U.B.C., speaking on Greek inscriptions.

Simon Fraser University

Continuing Studies Degree Program, Dept. of Archaeology

* ARC. 131-3: Human Origins. A non-technical survey of man's primate background, fossil primates and fossil man, and the associated cultural evidence of his development.

  Prerequisite: none
  Semester hour value: 3
  Instructor: J. Nance
  Time: Thursday 6:30 - 9:30 p.m.

* ARC. 301-2: Prehistoric and Primitive Art. Art styles and traditions of prehistoric and preliterate peoples.

  Prerequisite: none
  Semester hour value: 2
  Instructor: N. Feder
  Time: Monday 6:30 - 8:30 p.m.

Telephone Number: 291 - 4565

Vancouver Community College - Langara Campus

Daily Life in Ancient Times - 10 Mondays commencing Jan. 6, 7:30 - 9:30 p.m.
Fee: $15.00
Instructor: Wayne Davis

Artifacts Face to Face - 6 Tuesdays commencing Jan. 7, 7:30 - 9:30 p.m.
Fee: $10.00
Instructor: Bob Wilson, Anthropologist, Van. Community College

This is a repeat of the popular course held last semester.
For further details or pre-registration phone: 324-5324.

A HAIDA MUSEUM ON THE QUEEN CHARLOTTES

Report and drawings by
Trisha Gessler

The Masset Haida Museum is a unique museum and research facility. It is housed in the newly-renovated school building on the Masset Reserve and is directed by a committee of the Masset Band Council. One large classroom has become the museum display area. Another is a workshop, laboratory, and storage area for artifacts. In addition, there is a well equipped darkroom, and a library of books, tapes, archival material and photographs.

The core of the museum collection is the archaeological material from the Kiusta dig directed by Nick Gessler. Kiusta is an abandoned Haida village on the Northwest Coast of the Queen Charlotte Islands, where totem poles still stand. He and the Masset Band Council agreed before beginning his work that all excavated material from Kiusta would remain on the Masset Reserve. The only exceptions to this were to be samples sent out for identification, special analysis, or dating. But there remained the problem of finding adequate facilities to do the work locally. The Masset Band Council flew out to the site of the Kiusta dig in 1972 while work was in progress and offered Nick Gessler the use of the old school building precisely so the analysis of the Kiusta material could take place on the Reserve. The Band then proceeded to take an active part in remodelling the building.

In 1972 some kiusta artifacts were displayed in the Bank Council office in two specially prepared display cases. But this was not adequate in view of the considerable local interest shown in

Bear Pole from Yan

Human figure pole from Kiusta

the project. One of the first decisions made concerning the school building was that one whole room be devoted to displays and exhibits. Within two months of the initial move into the building (October 1973), the National Museum in Ottawa promised the Haida Museum a large totem pole fragment from Kiusta (a complete face), and the British Columbia Provincial Museum in Victoria promised a single carved human figure pole from Kiusta. Local Haida people arranged for two large poles from Yan, another abandoned Haida village site, to come to the Museum. They had been stored on the Reserve for three years, and it took considerable community effort to move the poles to the museum and to erect them inside. A pair of life-sized human figure poles were brought in from Kiusta as well. These impressive and massive sculptures from Yan and Kiusta encircle the display area and dominate the exhibits. As you enter the museum you are confronted with a perfect profile of one of the Yan totem poles. The back wall, opposite the entrance, has a 25'x12' Haida mural framed by the pair of Kiusta figures. A third wall has the small human figure carving, the large total pole face, and the other Yan pole, all against old cedar. Display cases contain almost totally Kiusta artifacts, such as argillite carvings, bone harpoons and implements, carved stone mauls, ivory or wooden labrets, palette stones, European trade goods, and much more. Enlargements of archives photographs back some of the displays. The basic display materials were old cedar and beach gravel, which covers much of the floor area. A whale skeleton is articulated on one of these "beaches". One of the original 800-pound cannons from a British ship is mounted on a reconstructed carriage in the centre of the display room.

The display design and installation were done by Trisha Gessler. The carpentry and remodelling were done by Wayne Bell, Haida crew foreman on the 1972 Kiusta dig. The building was painted by the 1973 Haida winter works crew. Materials were obtained by the Haida community. The old cedar boards were salvaged from old buildings and the thick cedar planks came from an old bridge. Gravel came from the nearby beach.

Active community involvement continues to be the key factor in the success of the museum. Kindergarten, Elementary and High School classes and Senior Citizens tour the museum, and the curators go out to the schools in Masset and in other communities on the islands with slides and artifacts. A Haida adult education class in photography has been taught using the museum darkroom facility. Documentary photographs have been taken of special events on the Reserve, and of Haida carvings. A collection of archives photographs and photographs of other museum collections is kept in the library. These are of special use to local carvers. Rare ships' journals and missionaries' accounts complement the library collection of books on Haida and other native groups. Most local people have never had access to rare books before.

Summer archaeology digs provide the museum with a good part of its collection. The crew for the digs consists mostly of local Haida students. In 1972 when lab work was done in the field, the Haida students showed great interest and ability in the technical work. In the 1973 field season some students alternated working at the museum and at the dig (50 miles by boat from Masset). Their work at the museum included organizing shipments of artifacts that came in from the dig for storage and analysis, displaying outstanding artifacts, and guiding tourists and visitors through the museum exhibits. Some students will again take part in processing and analyzing artifacts during the winter months. Students gained experience in surveying and mapping and photography as well as archaeology. They were paid by Opportunities for Youth and the Archaeological Sites Advisory Board in Victoria.

Visitors are always welcome at the museum. One thousand people came through the building in the summer of 1974. Donations enabled the museum to arrange charter flights for Haida village elders and councillors to see Kiusta, and insured purchases of much-needed equipment. The museum is constantly adding to its collection and expanding its activities. It is a unique small museum, created by and serving the Haida community, and is well worth seeing.

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E R R A T U M

In the October Midden the fee for Student membership was wrongly quoted as $3.00. It should have read $4.00. My apologies for any inconvenience this might have caused.

g. groves