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THE MIDDEN

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In this issue: Field school at X̲á:ytem; Settlement patterns in the southern Gulf Islands; Field Notes; Permits

THE MIDDEN

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ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA meetings in Vancouver featuring illustrated lectures are usually held on the second Wednesday of each month (except July and August) at 8:00 P.M. in the Auditorium of the Vancouver Museum at 1100 Chestnut Street. New members and visitors are welcome. Admission is free.

Next meeting: Wednesday 12 April 2000

THE MIDDEN

Contributors to *The Midden*

The production of each issue of *The Midden* is dependent on contributors from the BC archaeological community. Without their time, commitment, and effort, the pages of *The Midden* would be blank. I'd like to sincerely thank all the people who have contributed to *The Midden* over the years, and in particular, I want to thank the contributors for this issue.

At the same time, I urge everyone engaged in archaeological research or fieldwork to take the time and share some of the results of their work with the *Midden* readers. *The Midden* is a unique publication for disseminating information about BC archaeology, not only among the archaeological community, but also among interested lay people all over BC, Canada and the US; it even has subscribers in Germany and New Zealand. We are committed to keeping *The Midden* going, but we can't do it without your input.

For those interested in contributing articles, book reviews, or field notes, telephone numbers and email addresses of *The Midden* editors are listed on the inside front cover. We look forward to hearing from you.

Heather Myles, editor

Table of Contents

The 1999 UBC Field School at X̱á:ytem (DgRn 23) — 2
by Christine Berney

Northwest Coast Settlement Patterns, Shell Midden Sites, and Coastal Resources in the Southern Gulf Islands BC — 5
by Eric McLay

Look For — 8

Field Notes — 9

Debitage — 10

The Tides of Change — 11
Review by Steven Acheson

Dead Dogs Tell Tales — 12
Review by Marianne Berkey

Pithouse Studies Come in from the Cold — 13
Review by Brian C. Vivian

Permits — 14

Exhibits — 18

Lectures — 19

Conferences — 20

Cover Page

This carved antler tablet, 60mm long, was recovered from a small shell midden, DcRt 71, at Eagles' Nest Estate near Cadoboro Bay, Victoria. See Field Notes: Morley Eldrige (Millennium Research Limited) on page 9.

THE 1999 UBC FIELD SCHOOL AT XÁ:YTEM (DgRn 23)

By Christine Berney

Introduction

During the wet and chilly May of 1999, eight UBC archaeology students supervised by Professor R.G. Matson and teaching assistant Patricia Ormerod, arrived just east of Mission intending to learn how to do archaeology, and to learn a little more about the prehistory of the Fraser Valley. This was not the first time that archaeologists and students had descended on the Xá:ytem site (also known as Hatzic Rock) – there has been a lot of archaeological activity at the site since its identification in 1990. The site was originally intended for a housing subdivision; however, while the initial clearing and bulldozing was taking place, Stó:lo Nation archaeologist Gordon Mohs recognized it as an important "transformer stone" site. There are a number of these transformer stones in the Fraser Valley that are spiritually important to the Stó:lo; they embody the spirits of ancestors who have been turned to stone, and have meaningful stories associated with them. About a metre of soil had already been removed from the surface, but much of the site was still intact. Excavations in 1991 uncovered structural remains, including those of a semi-subterranean house of the Charles Culture period (circa 4500 – 3500 BP). The site is on an ancient river terrace that slopes down to the south, so the rear part of the house was cut into the hillside. This was a significant find, as there are few other sites with evidence of houses from this period.

In 1994, a trench excavation to the west of the semi-subterranean house revealed a number of post molds, lithics, and what appeared to be a house floor at its eastern end. Professor David Pokotylo and the 1997 UBC field school arrived at Xá:ytem to investigate the possibility that there was more than one house structure from the Charles Culture period at the site (see *The Midden* 29/3); if there were a number of contemporaneous houses at the site, it would affect the present picture of Charles Culture people as highly mobile hunters and gatherers. The work done in 1997 was not intended to completely excavate the possible house structure, but instead to sample the area to the east of the trench excavation for house remains and radiocarbon samples. With this purpose in mind, Professor Pokotylo and his students excavated 12 1-x-1 metre units, set up in a kind of checkerboard design over a 7-x-7 metre area. Therefore, as they dug downwards, units of the equivalent size were left standing in between. The excavators expected to find cultural material directly below the humic layer as they were working in an area previously cleared by the bulldozer. However, they found that over the six previous years a great deal of silt had washed down the hillside and been deposited over the site in a thick laminated layer. This was realized when the impressions of the bulldozer's treads were found in the surface of the actual cultural layer. They found a number of lithics and features over their field season including post and stake molds, hearths, and pits. One pit of particular interest was very large: it covered two units, and went to nearly a metre in depth.

The 1999 Season

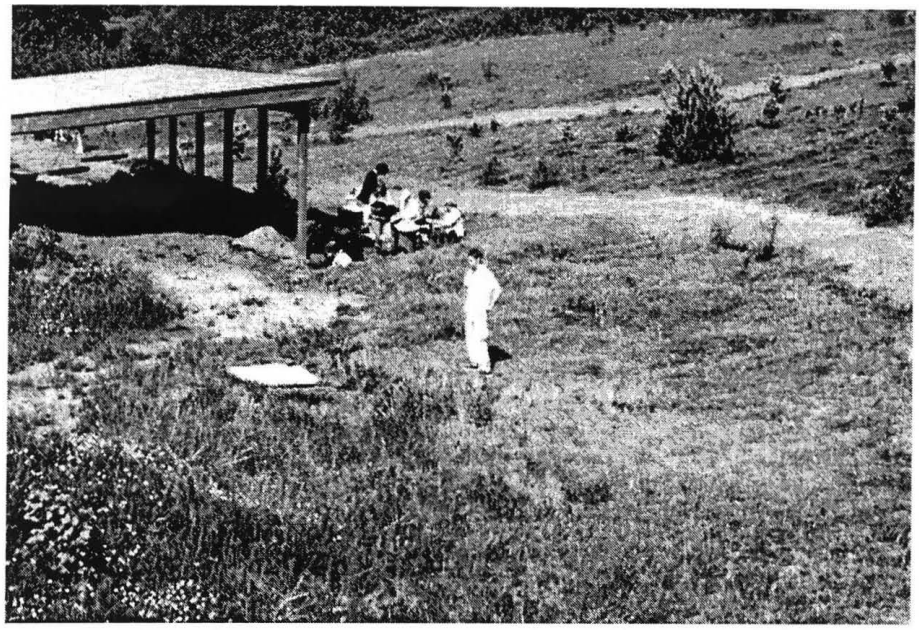
Our investigations focused on three main objectives: to further explore the floor surface uncovered in the trench excavation of 1994; to excavate the remainder of the large pit feature found in 1997; and to find evidence of subsistence. To this end, we dug seven of the 1-x-1 metre units remaining in the 7-x-7 metre area set up in 1997, and one on the western edge of it (adjacent to the 1994 trench excavation). The first week was spent re-excavating the units from 1997 since they had been lined with plastic and then back filled. Our job was made considerably easier by the previous work; rather than digging blind, we had between one and four stratigraphic profiles exposed on each unit giving us an excellent preview. The natural layers at Xá:ytem are quite distinct, and once identified in the profile, could be peeled off in quadrants across the unit. The thicker cultural layers were further subdivided into ten centimetre levels. The knowledge that the upper layer of laminated silts had been recently deposited was also helpful; this allowed us to quickly move down to the layers that we knew contained cultural materials in situ. The silts were still removed with care and screened because of the possibility that artifacts could have washed down the slope with them.

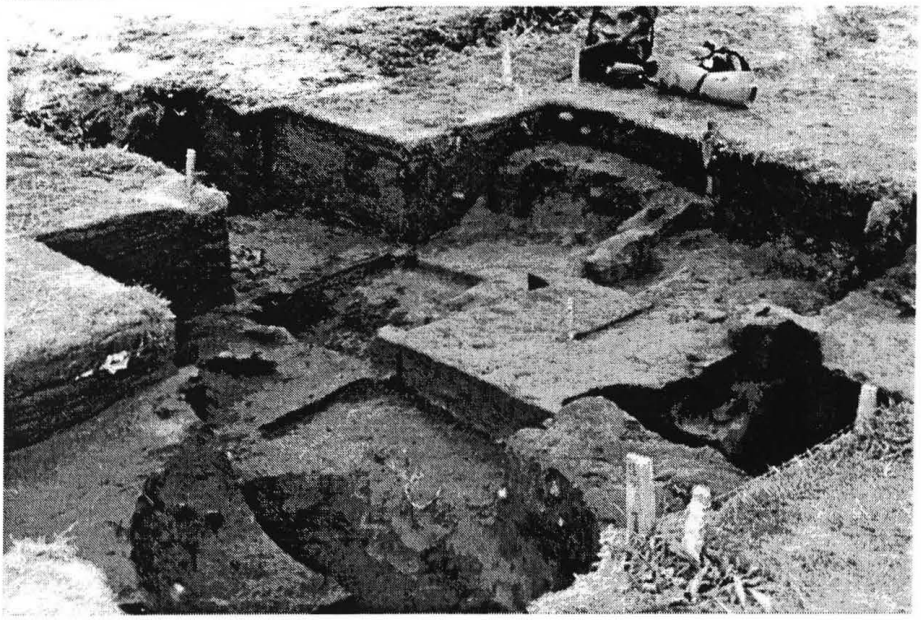
Many utilized and retouched flakes, and one contracting stemmed point were found. The base of a notched point more common to the Plateau (referred to by the crew as the "Milgrom Point" after the student who found it) was also uncovered. And in the vicinity of the large pit feature an obsidian "tinkler" was found. It is believed that these objects were used to decorate clothing. A great deal of the lithics collected were tiny waste flakes, and to find them we had to screen diligently.

We screened 80% of the material excavated – every fifth bucket was bagged unscreened as a matrix sample. Initially, we were dry screening; however, with the continuing damp weather, dry screening proved extremely inefficient. The students discovered that dry screening in damp conditions produces many little mud pills that have to be broken by hand, and contain very few artifacts. By the end of the second week we had set up water screens, and proceeded to screen the rest of the material that way. As a great deal of the lithic remains from the site consisted of debitage, water screening with 1/8 inch mesh proved very effective at both saving time, and recovering the most artifactual material.

Features

Excavations at the west end of the site focused on the possible house floor un-





covered in 1994. As the three units adjacent to it were pulled down, what appeared to be two more living surfaces were uncovered above the initial one. Apparently the site was repeatedly and intensively used. Several large post molds and what appeared to be the remains of a shallow bench cut into the hillside were found in the northernmost units in both 1997 and 1999. It appears then that the structure (or consecutive structures) extended to the north and east of the 1994 trench excavation.

The two units that contained the remainder of the large pit feature were not fully excavated. Instead, the material within the pit was removed, leaving the shape of the feature intact for public archaeology purposes. The size of the pit, combined with the quantity of large fire altered rocks found in it, led us to speculate that at one time it was used as a roasting pit. However, there were four distinct use layers in the pit, and it appears that at other times it was used for refuse; a discarded cobble tool was found in 1997.

Subsistence

The soil at X̲á:ytem is highly acidic, and very little bone or shell has been preserved. Although small pieces of bone were collected, they often crumbled in the excavators' hands. When two significant pieces were found, special care was taken in their removal. A small piece of the matrix was cut out around the samples, leaving the bones in place. The entire "bone-in-matrix" was carefully wrapped in foil for the lab, where it will be examined and removed.

The bulk of our subsistence research relied on flotation to collect floral remains. Many of the matrix samples were floated on site using the Apple Creek method. This is a straightforward and in-

Photo 1 Before. Student Jeff Wyndham standing at the centre of the proposed excavation.
Photo 2 During. Students in the foreground: David Milgram, Randi Drevland, Christine Berney, Craig Sellars. In the background: Dominique Bruno, Lilian Chau, Jeff Wyndham, Patricia Ormerod. Missing: Mike Pearson.
Photo 3 After. In the foreground: the large pit feature. In the background: Evidence of a structure.

expensive way to collect flotation samples. A washtub was filled with water, and a bucket with a 2 mm mesh bottom was inserted into it. While one student agitated the bucket, a second student poured a three-litre matrix sample into it. The first student continued agitating while the second student used a tea strainer to skim off the light fraction that floated to the top. The heavy fraction was left behind in the mesh at the bottom of the bucket, and was tapped out onto a paper towel. The samples were then tied up in fabric "sachet" bundles and hung to dry. This prevented the sample material from blowing away, which can be an issue when it is laid out flat to dry on a paper towel. It also provided some interesting decoration for our rain shelter.

When collecting matrix samples, special attention was given to the large pit feature and any hearth features. Although 20% of all the excavated material at the site was bagged, at least 50% from large features and 100% from small ones were collected and saved for later flotation. The data collected this past summer in the field is still being processed and analysed. Presently, two UBC undergraduate students, Elizabeth Radomski and Jeff Wyndham, who participated in the field school, are working on the flotation samples in the UBC archaeology lab. They are sorting through the samples and removing and identifying any carbonized seeds or other plant remains.

Public Archaeology

The UBC field school at Xá:ytem was a unique experience as it gave us an opportunity to participate in public education at a British Columbia Heritage Site. The Longhouse Interpretive Centre is open to the public: Stó:lo guides share the prehistory of the Stó:lo people through stories and workshops. Our friendly hosts from the Longhouse were always interested in our work at the site, and took time to share with us some of the stories associated with transformer sites. Busloads of students arrived daily, and some were treated to a sleepover in the Longhouse and a barbecue. A tour included the opportunity to try activities such as stone pecking and grinding or working with cedar bark, and a visit to the archaeological dig in progress. UBC students gave short presentations to the visitors, and fielded often-insightful questions (such as, "who do the artifacts belong to after you dig them up?").

There were several important visitors to the site, including Xá:ytem alumni Gordon Mohs and David Pokotylo. Many Stó:lo people including some elders came by the site, also very interested in our work. In addition, we received a visit from Jim Jamieson of *The Province* newspaper and our field school became news (Wednesday, June 9, 1999: A8).

Xá:ytem is a rich and significant site that has supported many years of archaeological research, and there is still work that can be done. A replica of a pithouse is planned in conjunction with the Interpretive Centre, and when R.G. Matson sunk a test pit into its proposed site he found cultural material and a feature right below the surface. It is probable that 1999 will not be that last time that Xá:ytem welcomes archaeologists and archaeology students, for there is much that this site can still tell us about the prehistory of the Fraser Valley.

1999 UBC Field School Crew: R.G. Matson, Patricia Ormerod, Christine Berney, Dominique Bruno, Lillian Chau, Randi Drevland, David Milgrom, Mike Pearson, Craig Sellars, Jeff Wyndham, and Elizabeth Radomski (volunteer).

Christine Berney is a fourth year undergraduate student at UBC, graduating this May with a BA (Honours) in Anthropology, with an Archaeology concentration. Her honours thesis is on the social status of women in Northwest Coast societies. She is interested in how their production for and participation in trade affected their overall status.

This photograph appeared in the previous issue of The Midden, *illustrating Peter Ord's article Archaeology as Teaching Tool. Unfortunately the names of the "Links to the Past" team at Dionisio Point, Galiano Island were not available at press time.*
Shown here from left to right on the front are Jaclyn Small, Angela Alphonse, Tyrone Wilson and Colin Grier.
Behind are Eric McLay, Stacey Jack, Bob Lang, Glen Tooshley and David Sillseemult.
The person shown on the front cover of the previous issue of The Midden *is Glen Tooshley, holding a lucky find in his hand at the Xá:ytem Interpretive Centre.*

NORTHWEST COAST SETTLEMENT PATTERNS

SHELL MIDDEN SITES, AND COASTAL RESOURCES IN THE SOUTHERN GULF ISLANDS BC

by Eric McLay

The archetype of Northwest Coast prehistory, shell midden sites have significantly helped archaeologists shape our understanding of regional culture history. Yet, archaeologists have only recently begun to study the cultural formation processes of shell middens, investigating how sites have formed and changed over time, what types of cultural activities they represent, and how the distribution of sites related to the social, economic, and political life of past cultures. In this article, I introduce the results of a settlement pattern study on Valdes Island, a large southern Gulf Island, which explored how shell midden sites related to the environment in the Gulf of Georgia region, southwest British Columbia. The study demonstrates how late pre-contact Coast Salish settlement patterns in the southern Gulf Islands correspond to what archaeologists refer to as a "collector strategy" (after Binford 1980), organized to maximize the production of coastal resources in the marine ecosystem.

Northwest Coast settlement patterns

Settlement pattern research - the study of how sites are distributed across a landscape - offers archaeologists a broad perspective to observe the past. Settlement pattern research is critical to basic archaeological explanation, used to address many important questions, such as how past societies were organized, how societies interacted, and how societies changed over time. This research is of particular significance to the study of hunter-gatherer societies such as those of the Northwest Coast, since understanding how past populations settled a landscape offers important insights into the relationships between past human behaviour and the environment. Perhaps the most basic concern that influenced choice of settlement location was access to subsistence resources. How subsistence resources were distributed in the environment and how populations chose to organize their labour to collect these resources are understood to be key factors that strongly affected the nature of regional settlement patterns.

The First Nation cultures of the Northwest Coast have long been assumed to practice a system of settlement organization known as a "collector strategy", where centralized populations use small task-groups to collect specific, seasonal resources in the environment. Characteristic of a collector strategy, permanent villages, storage technology, and the intensive seasonal exploitation of resources with specialized equipment are hallmarks of the Northwest Coast culture area. Yet beyond this classification, we currently understand few specifics, such as what particular resources were important influences for settlement location, and how did different populations schedule their regional settlement activity to exploit these resources.

In the Gulf of Georgia region, the Central Coast Salish Hul'qumi'num First Nations (formerly, Island Halkomelem) are traditionally perceived as riverine-oriented cultures principally settled in the region's major watersheds to exploit Pacific salmon. Yet, ten Hul'qumi'num permanent winter villages are recorded to have existed on several southern Gulf Islands, including Valdes, Kuper, Thetis and Galiano islands, affiliated with the Lyackson, Penelakut, Chemainus, and Halalt First Nations (Rozen 1978; 1985). Few anthropologists have worked among these Gulf Island communities, known collectively as the Chemainus group, which has helped contribute to the general assumption that traditional land and resource use patterns in the Gulf Islands were exclusively seasonal in use. The historical awareness that smallpox epidemics may have resulted in massive depopulation, inter-regional conflict and settlement reorganization among the Coast Salish prior to European contact must also temper our reliance upon ethnographic data to interpret the late pre-contact era (Harris 1997). Further, colonial settlement had already largely alienated the Hul'qumi'num First Nations from their traditional lands in the Gulf Islands before the arrival of anthropologists (Arnett 1999). Therefore, important questions exist about the nature of pre-contact land and resource use in the Gulf of Georgia region where regional archaeological settlement pattern research can significantly contribute.

Valdes Island archaeological survey

Valdes Island is the fourth largest of the southern Gulf Islands in the Strait of Georgia, BC. It is the ancestral territory of the Lyackson First Nation, a small, Hul'qumi'num community who settled the three permanent winter villages on Valdes Island at Shingle Point, Cardale Point and Porlier Pass (*Figure 1*). Chief Richard Thomas of the Lyackson First Nation first proposed the idea of an archaeological survey of the island in 1995 during his discussions with UBC Professor R.G. Matson regarding plans for household excavations at Shingle Point, Lyackson IR4. In collaboration, the concept of the survey eventually developed into a settlement pattern study that would place the

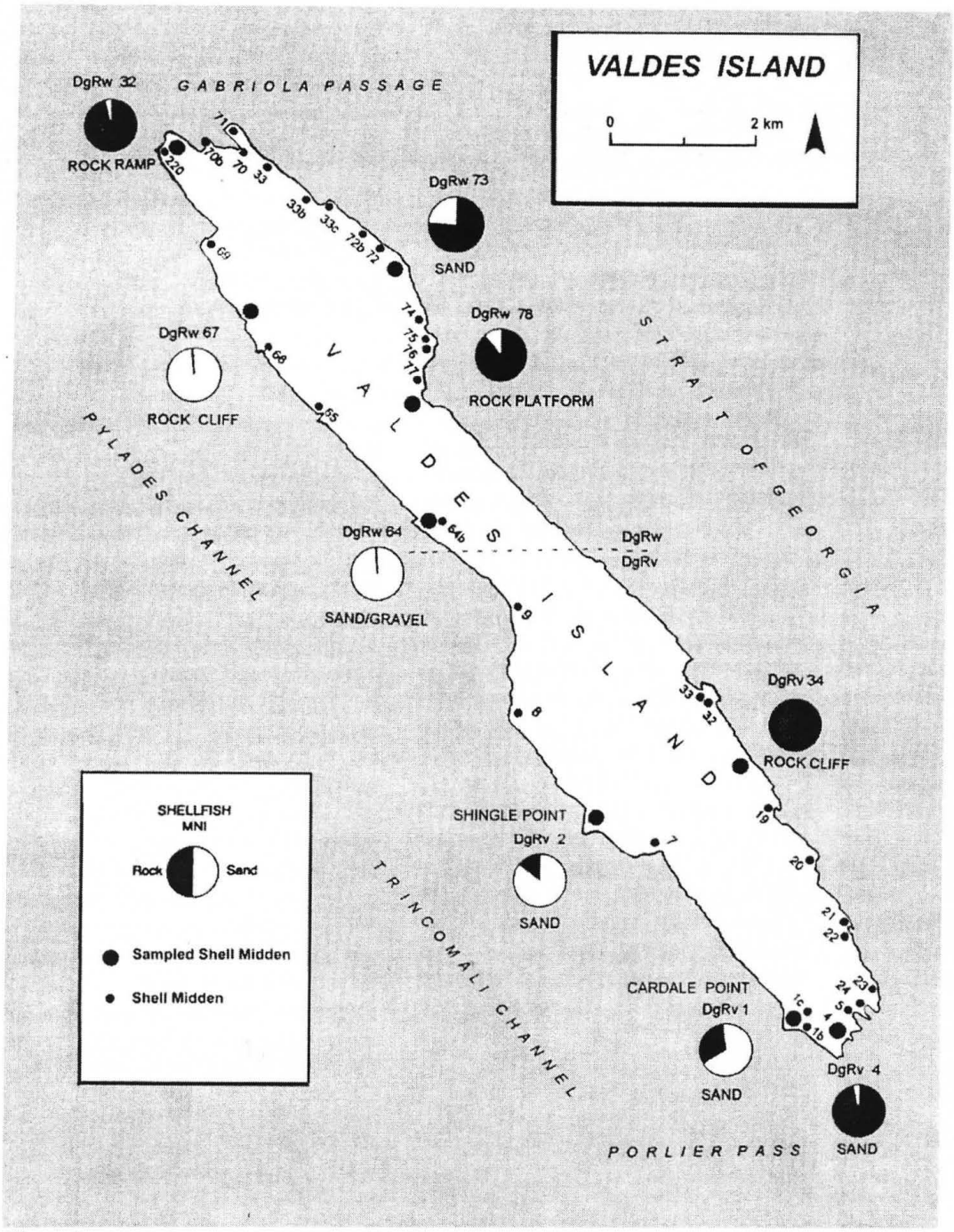


Figure 1

use of the island landscape and its resources within the context of its regional ecology.

In the summer of 1996, the survey of Valdes Island was completed with the assistance of four Lyackson First Nation members and many volunteers from UBC's excavations at Shingle Point. Exploring the distribution of archaeological sites across the island landscape, 56 precontact archaeological sites were recorded in total, which included house depressions, shell deposits, burial caves, rockshelter habitations, cultural depressions, isolated lithic scatters, a petroglyph boulder and a defensive earthwork. The survey data indicated past settlement activities were strongly oriented toward the coastal environment, where 95% of sites were located. Of the coastal sites, 80% included shell deposits, which broadly varied in their size, location and content. Although some of the largest shell midden sites on Valdes Island range upwards of a kilometer and a half in length and 15,000 m² in size, most shell middens on the island are very small in size, having a median area of only 500 m². The geographic location of shell middens on Valdes Island were relatively homogenous: all sites were located more or less directly on the shoreline, at low elevation within 5m of the high-tide line, on relatively flat ground, and within close distance to fresh-water. In order too examine the relationships between site locations and the distribution of coastal resources, several comparative lines of environmental data were collected, which included a coastal resource survey, an inventory of archaeological shellfish from sites, and small-scale test excavations at nine shell middens to sample archaeological faunal material.

Suttles (1960) has aptly described the environment of the Gulf of Georgia region as a highly seasonal, locally diverse, variable environment. Marine biodiversity in the region distinctly concentrates at discrete coastal ecotones, or micro-environments, such as intertidal zones, river estuaries, and tidal channels (or tidal streams), where the sea blends with the land. On Valdes Island, the most productive of these coastal zones are the sandy intertidal environments of the southwestern coast and the tidal stream environments of Porlier Pass and Gabriola Passage. At sandy intertidal environments, eelgrass beds, a perennial species of marine plant, provides a stable, meadow-like substrate. It attracts a large, diverse community of marine invertebrates such as burrowing clams, as well as spawning marine fish and soft bottom-dwelling groundfish such as starry flounder and sole. The late winter/early spring spawning of Pacific herring - a marine fish considered one of the most important prey species in the ecosystems of the northeast Pacific - creates an early resource pulse

in the region. Marine mammals, fish, birds and even invertebrates congregate at intertidal zones to prey upon spawning herring and their roe (Monks 1987). In contrast, rocky intertidal environments provide habitat for large, sedentary shellfish communities, such as the Pacific blue mussel, as well as a variety of less productive, more dispersed, mobile shellfish, including limpets, dogwinkle, chiton and sea urchin. Near-shore reefs and kelp forests bordering rocky coasts attract a variety of spawning and reef-dwelling groundfish, such as rockfish, sculpin and greenling. The rocky foreshores and extreme tidal currents of Porlier and Gabriola passages framing Valdes Island strongly resemble the more productive, wave-exposed outer Pacific coasts of Vancouver Island, sustaining extensive kelp forests and dense rocky intertidal shellfish populations of blue mussel, sea urchin and large barnacles. The affluence of these tidal stream environments seasonally attracts large predatory marine mammals, including Stellar sea lions, seals, porpoise, and less commonly, species of toothed whale. Thus, in the ebb and flow of these rich, dense coastal environments, a regional diversity of perennial and seasonal marine resources aggregate, from Pacific herring to orca whales.

Sandy intertidal and tidal stream environments were discovered to have strongly influenced past decisions concerning shell midden site locations on Valdes Island. Sandy intertidal and tidal stream environments represent only small portions of the island's coastline, yet archaeological site locations significantly occur in these environments more often than expected. Most importantly, these environments exhibit the largest shell midden sites on Valdes Island. Past settlement activity on Valdes Island clearly concentrated at these productive coastal resource zones, which is indicative of the intensive, repetitive exploitation of resources in these environments through pre-contact times.

Correspondingly, the faunal remains excavated from the nine shell midden sites on Valdes Island demonstrate very close associations with local coastal resources, particularly shellfish (*see Figure 1*). In the sandy intertidal sites tested on Valdes Island, shallow-burrowing species of bivalve shellfish, such as butter clam and littleneck clam, dominate shellfish samples. At rocky intertidal sites, Pacific blue mussel represents the most common shellfish type, although limpets and sea urchins are more important at several rocky intertidal environments on the east coast. Making common sense, shell midden sites closely relate to local shellfish beds.

More broadly, however, shell midden sites are demonstrated to be closely related to locally available intertidal and near-shore coastal fish resources. At sandy coast sites, Pacific herring dominate fish remains, and at rocky shore sites reef-dwelling rockfish and perch outnumber all other fish species. Several of the most abundant and richness fish remains, however, derive from sites located at the tidal streams environments. Of the tidal stream sites tested, a high frequency of marine mammal remains were also recovered from the Cardale Point site, including remains of Stellar sea lion and a False Killer whale - the first such whale specimen recovered from an archaeological site in British Columbia (Susan Crockford, personal communication 1997). Marine mammals are generally uncommon for Late Phase sites in the Gulf of Georgia, and are indicative of a greater maritime subsistence orientation relative to other pre-contact sites in the region (Suttles 1952). Interestingly, Pacific salmon does not represent a significant resource at any of the sites tested on Valdes Island.

An analysis of the faunal diversity of shell midden sites on Valdes Island has tentatively distinguished between residential bases and more limited-activity sites, corresponding to expectations of a collector strategy. The majority of shell middens on Valdes Island represent very small, shallow, featureless deposits, indicative of a limited set of cultural activities. These small, low-diversity sites have been interpreted as shellfish resource-processing locations and/or temporary field camps, where highly specific, local resources were exploited, processed and returned to larger settlements. In contrast, several of the very large shell midden sites on Valdes Island, such as Cardale Point and Shingle Point, exhibit house depressions and deep, highly-stratified, highly-diverse deposits indicative of substantial, long-term settlements. Cardale Point, in particular, is centrally located in relation to several coastal resource zones, including the extensive sand flats of the southwest coast and the tidal stream environment of Porlier Pass, where the greatest richness and abundance of resources could be efficiently harvested. It is argued that such settlement locations on Valdes Island were strategically positioned in relation to these productive coastal resource locations to maximize access to the spectrum of regional resources in the marine ecosystem. This settlement organization is also suggested to have been one effective strategy used to engage the highly variable, locally diverse nature of subsistence resources in the Gulf of Georgia region. This study has demonstrated a greater permanence and diversity of settlement-subsistence patterns among the Central Coast Salish in the southern Gulf Islands than general ethnographic accounts describe. Settlement patterns on Valdes Island fit expectations of a collector strategy, oriented to the exploitation of predictable, localized and abundant coastal resources in the Gulf Island environment, specifically Pacific herring and sandy intertidal shellfish.

Conclusion

Understanding variability in regional settlement patterns on the Northwest Coast offers many new directions to address questions of the past. On Valdes Island, we will continue our collaborative research with the Lyackson First Nation this upcoming summer and renew our archaeological inventory of the island. Although this opportunity will primarily be used to help develop a heritage resource management plan for the Lyackson First Nation on Valdes Island, several of our research objectives this season will include further exploring the past use of the island's interior landscape; investigating the range of archaeological site types discovered on the island; directing larger, deeper test excavations at several shell midden sites; and collecting enough chronological material to date the initial colonization of the island environment as well as document the changes in land and resource use patterns through time. Yet, to ultimately broaden our regional perspective of late pre-contact settlement patterns in the Gulf of Georgia and the Northwest Coast, comparative information from other types of archaeological sites and other aspects of regional environments requires necessary exploration and development. This re-

search is expected to discover many different relationships existing between archaeological site locations and resource distributions in different regional environments. As the most common type of archaeological sites on the Northwest Coast, shell middens can be expected to play a primary role in this archaeological research. Archaeologists, however, must begin to contextualize shell middens as not simply the refuse of past habitation, but as the components of dynamic regional settlement systems.

Acknowledgments

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Eric McLay (MA 1999) is a recent graduate of the University of British Columbia. He is now a partner in Coast Research, an archaeological research company which collaborates with coastal First Nation organizations in British Columbia.

LOOK FOR

HuupuKʷanum: The Art, Culture and History of the Nuu-chah-nulth People, edited by Alan L. Hoover.
1999 Royal British Columbia Museum, distributed by Raincoast Books. 400 pages.

This book is a compilation of ethnographic and First Nations perspectives on the relationships between Nuu-chah-nulth culture, history and art. Edited by Alan Hoover of the Royal BC Museum, the book's contributors include E.Y. Arima, Robert Galois, Yvonne Marshall, Alan McMillan and Peter L. Macnair, as well as interviews with four prominent Nuu-chah-nulth artists: Joe David, Ron Hamilton, Tim Paul and Arthur Thomas.

Exploring Native North America, by David Hurst Thomas.
2000 (June) Oxford University Press. 240 pages.

This is the latest volume in the Places in Time series. The book concentrates on twenty archaeological sites in the United States, Canada, and Mexico. David Hurst Thomas' narrative, supplemented by photographs, maps, reconstructions, and site plans, tells the story of each site individually as well as how these sites contribute to an understanding of the early history of North America.

Paleoethnobotony: A Handbook of Procedures, Second Edition, by Deborah M. Pearsall.
2000 (April) Academic Press.

Paleoethnobotany, Second Edition presents the diverse approaches and techniques that anthropologists and botanists use to study human-plant interactions, illustrating the importance of identifying plant remains and understanding the ecology of human-plant interactions. In addition, the book demonstrates why botanists need to view the plant world from a cultural perspective and understand the strengths and weaknesses of the archaeological record.

FIELD NOTES

Stan Copp (Vancouver City College – Langara) writes that the 1999 Langara Archaeology Field School was held in two locations: (1) at DkRn 5 on the lower Lillooet River, in association with the In-SHUCK-ch First Services Society, under the direction of Dr. Douglas Hudson (University College of the Fraser Valley), and (2) in the upper Similkameen Valley in association with the Upper Similkameen Indian Band, directed by Stan Copp.

For the Similkameen Valley portion of the field school, 32 students conducted archaeological site reconnaissance of several areas within the traditional territories of the Upper Similkameen Indian Band. This resulted in the recording and/or re-recording of 13 pictographs, two culturally-modified trees and one petroform site. All of these sites were found on Upper Similkameen Band reserve lands.

Fifteen of the students conducted test excavations at the Chuchuwayha Village site (DiRa 20) on IR#2 near Hedley, BC. Excavations confirmed the results of earlier testing, which suggested that four shallow, saucer-shaped depressions are the remains of mat-lodge structures. One depression was tested and revealed a mid-19th century occupation overlying an earlier occupation (ca. 2000 years BP). Test units in parts of the site where no features were present indicate occupations dating ca. 200 - 4000 years BP, based upon diagnostic artifact types.

Stan reports that the 2000 field school will be held in the same area and will continue with the reconnaissance surveys and excavations at DiRa 20.

Morley Eldridge writes that Millennia Research Limited had an interesting year in 1999, with several projects standing out of the 70 or so undertaken. Millennia subcontracted to the Council of Haida Nations to provide direction on two substantial site inventories on Graham Island, the northern main island of Haida Gwaii. For one project, Millennia provided an assistant director to Sean Young, Haida archaeologist, and a crew consisting of Haida and non-Native archaeology students from the islands. Morley Eldridge, D'Ann Owens, and John Maxwell shared this position. Approximately 70 mostly newly-discovered archaeological sites were recorded on the Begbie Peninsula and nearby parts of Masset Inlet. Several extensive intertidal lithic sites, extending below the minus-tide level, probably represent drowned terrestrial sites dating to 9000 BP or earlier. Shoreline middens, inland lithic sites probably associated with stranded shorelines about 8900 - 5000 BP, and extensive CMT sites complete this inventory.

For the second project on Haida Gwaii, the shoreline of Naden Harbour and much of the Dixon Entrance shoreline (between Naden Harbour and Masset) was surveyed by a crew co-directed by Tina Christensen and Jim Stafford. Remarkably, almost the entire shoreline of Naden Harbour was found to consist of shell midden but also associated with successive terraces representing stranded shorelines. A site count is not yet available, as site-boundary definition will be based on the results of many thousands of subsurface auger tests. Obvious breaks between sites were seldom obvious. Naden Harbour may represent the most extensive archaeological remains on the Northwest Coast. When added to the huge number of CMTs extending inland from the shore, the area is eminently suitable for a study of "landscape archaeology".

A third noteworthy project was an excavation of a small shell midden, DcRt 71, at Eagles' Nest Estate near Cadboro Bay, Victoria. A large block—about 12 H 3 m—was opened with total excavation of the shallow (<50 cm) deposits. A number of features were discovered, including roasting pits (believed to be the first excavated on the central Northwest Coast), and associated ash spreads. A posthole in one corner of the block suggested the presence of a habitation. A single blue glass trade-bead recovered near the surface is considered to have been lost during incidental use in the post-Contact period. Otherwise, the artifact assemblage is consistent with a Locarno Beach-aged (about 2400 - 3500 BP) site. Chipped lithic artifacts were very rare, but ground stone tools included a labret and a number of shaped abrasive stones. Two facetted beach pebbles are suspected to be basketry-smoothing stones. Bone and antler artifacts were plentiful, and included several decorated or decorative items. These included an encircled bird bone tube that may be a gaming piece, a bone or antler bar with a bas-relief linear-and-serpentine pattern, and a remarkable carved antler tablet (see cover). The latter object exhibits a number of stylistic elements common to classic Northwest Coast art, and is believed to show bird motifs.

The faunal analysis suggests a winter (late-fall to early-spring) occupation. Archaeobotanical analysis is incomplete, but if the roasting pits were used to process traditional root crops such as camas or clover, then a spring occupation is likely.

Millennia continued a project begun in 1998 with an inventory of Department of National Defence lands in the Strait of Georgia/Juan de Fuca Strait region, and Haida Gwaii. Fifteen new sites were found in the Strait this year by crews led by Peter Dady, which when combined with the 42 found last year and about 20 revisited sites, results in a substantial site inventory. Many burial cairns were found, along with shell middens, inland shell middens, and CMTs. Near Masset, a crew led by Tina Christensen found five new sites and revisited two. Of particular interest was an apparent caribou tooth recovered from an inland midden, representing distinctive archaeological evidence for the presence of the elusive Dawson's caribou on the islands.

Millennia also completed many projects for the forest industry, mostly in coastal BC. The areas surveyed varied enormously in archaeological content. Some blocks contained no sites at all, but one block had nearly 500 CMTs, with evidence of aboriginal logging (including the use of stone tools on several features), harvesting of over 50 rectangular bark boards, removal of taper strips from red cedar and yellow cedar, and the harvesting of rectangular sheets of hemlock bark for food.

Karen Preckel reports that her firm, Cariboo Heritage Archaeological Consulting completed a number of forestry-based AIAs in the Chilcotin and 100 Mile House forest districts in 1999, as well as an impact assessment for the District Municipality of 100 Mile House.

The bulk of the work was conducted in the Chilcotin Forest District, where approximately 5000 ha of forestry development areas and nearly 90 km of proposed roads were assessed on behalf of Riverside Forest Products Ltd., Lignum Ltd., Jackpine Forest Products Ltd., and Tsi Del Del Enterprises. A total of 22 sites were found in this forest district, representing the usual suite of site types: house pits, cache pits, lithic scatters, isolated finds and CMTs. Notable sites include one with five housepit-sized depressions, and an extensive lithic scatter with artifacts manufactured from a wide variety of raw materials (basalt; cryptocrystalline silicates in grey, red and "honey" colours). Only two finished tools were found over the course of the summer: a basalt biface and one small triangular side-notched point. Twelve representatives from the Tsi Del Del, Yunesit'in, and Xeni Gwet'in First Nations were employed as field assistants in the Chilcotin Forest District.

Less work was undertaken in the 100 Mile House Forest District. Two small woodlot cutblocks were assessed, but no sites were found. An AIA was conducted for a proposed District Municipality of 100 Mile House museum and interpretive centre at the Bridge Creek Campground. A small lithic scatter at the north end of the project area and a low density (but extensive) lithic scatter across the south half of the property were identified during the assessment. Two field assistants from the Canim Lake Band participated in fieldwork undertaken in the 100 Mile House Forest District.

Rudy Reimer reports that he is currently synthesizing various authorities' research on High Country Archaeology of the North American Cordillera.His focus is on the greater Pacific Northwest and his thesis work is nearing completion.

Rudy's own surveys in selected areas of Garibaldi and Cathedral provincial parks has resulted in the identification of over 30 sites in sub-alpine and alpine settings. Additional sites would doubtless have been found, but the very deep snow-pack from the winter of 1998/1999 delayed or even halted work that had been planned last year. Preliminary analysis of landscape and technological features of high country sites indicate that alpine and subalpine use-strategies are similar for the coast and interior of the province. Analysis of this material is ongoing (e.g., see his web page at www.sfu.ca/archaeology/museum/survey/toc.html), and it is intended that this work will be published in the near future.Anyone with articles or reports relevant to this topic is urged to contact Reimer at rreimer@sfu.ca or via snail mail at the SFU Archaeology Department.Watch for future details on alpine archaeology and other projects on the web page and in articles.

At various times in the past year or so, Rudy has been associated with the following archaeological consultants: Arcas Consulting Archeologists, Golder Associates, Rick Howard Consulting, Diana Alexander, Antiquuis and Sheila Minni.In addition, he has worked with Stan Copp (VCC – Langara), Dr.John Driver (Simon Fraser University), and Dr.Cathy Hickson (Geological Survey of Canada).He has also been involved with representatives of the following First Nations: Squamish Nation, the Tsleil-Waututh (Burrard) First Nation, Lil'wat Mt.Currie Band, Stó:lo Nation, Upper and Lower Similkameen Bands, Nicola Tribal Association, and the Haida Nation.

Ian Wilson writes that in 1999, I.R. Wilson Consultants Ltd. conducted 84 projects, fewer than in the previous year. Continuing a recent trend, the majority (38) were forestry related. Assessments of subdivisions accounted for 20 of our projects, with 6 highway developments and 5 oil/gas pipeline assessments being the next most frequent. Other work included a variety of overview/consultation/training projects as well as single hydro, parks, and mining studies. In 1999, I.R. Wilson Consultants employed 25 archaeologists and office staff and employed 51 First Nation assistants.

Of the sites discovered throughout the province in the past year, the majority were CMT sites. What were perhaps the most notable sites concerned CMTs as well. Two almost-intact canoes were found in a subdivision property near Chemainus on Vancouver Island, and a number of very large CMT sites were found in several different areas. North of the Babine River, a site with an estimated 7,000 modified trees was found, encompassing six discrete cut blocks. In the Morice Forest District, a site previously recorded by Arne Carlson was revisited and its boundary redefined. The site is presently estimated to be 800 ha in area and contain up to 20,000 CMTs. In the Williams Lake area, several CMT sites much larger than had been previously reported for this region were recorded in 1999; the largest of these was estimated to contain over 2,000 modified trees.

Finally, in a locality that had yielded few sites over the past few years of forestry-driven archaeological studies, a moderately-dense lithic site was found in association with a beetle-kill control area, justifying the commitment to examine such micro-forestry developments in the future.

DEBITAGE

The Department of Archaeology at Simon Fraser University has initiated a long-term archaeological programme in and around the historical town of Levuka, located in the Fiji Islands. The project, run in partnership with the Fiji Museum, the National Trust of Fiji, and the Levuka Heritage Committee, is six weeks long and begins in May 2000. The South Pacific Archaeological Field School will be held in conjunction with the project, and supervised by David Burley. Robbin Chatan, SFU PhD graduate student, will direct the field school component at Levuka.

An expanded list of the job announcements advertised in the *SAA Bulletin* can now be found on their web page, located at www.saa.org. It provides a list of current openings in the field of archaeology, with new job advertisements added on a regular basis.

Abstracts of papers presented at the annual meetings of the Canadian Archaeological Association are now available on the CAA's web site, located at www.canadianarchaeology.com. The abstracts are found in the CAA's searchable Conference Abstract Archive.

BOOK REVIEWS

The Tides of Change

Since the Time of the Transformers

By Alan McMILLAN

UBC Press, University of British Columbia, 1999: xii + 252 pp., illus., index. Price: ISBN 0-7748-0700-8 (Hc) $85.00.

Since the Time of the Transformers by Alan McMillan is the most recent volume in a welcomed new collaborative publication series with an interest in Pacific Rim archaeology from the UBC Laboratory of Archaeology and UBC Press. The author's doctoral dissertation, rewritten and updated for this series, forms the basis of this volume and doesn't disappoint as the first comprehensive account of the archaeology and history of the Nuu-chah-nulth and closely related Ditidaht and Makah of the Northwest Coast.

The author marshals an enormous amount of data on these archaeological cultures, in this very readable volume. And if that isn't enough, the book also includes a discussion on present day conditions and some of the issues confronting West Coast communities in the concluding chapter *Recent History and the Modern Communities*. Included in this chapter is a brief discussion of the highly publicized and hoary issue concerning the recent resumption of whaling by the Makah. Conflicting visions as to what the future (and past) holds for these communities - whaling or whale watching - prevail. The same can be said for our understanding of Nuu-chah-nulth prehistory.

A lengthy introductory chapter, *Setting the Stage*, sets out the author's approach to the question of whether or not significant cultural change occurred at any time over the 4200 years of established Nuu-chah-nulth history prior to European contact. With the stated aim of achieving socially meaningful insight into archaeological cultures, or in the author's own words, "meet the needs of the people it [archaeology] studies," the author queries the utility of a number of methodological approaches. Being in part a denunciation of the already discredited "processual" approach in archaeology, the author discounts in the same breath the utility of ethnographic analogue in archaeology and argues for what he describes as the new "holistic" school of archaeology after Trigger.

What is often presented as "new" in archaeology is of doubtful validity and what is valid is often not new. The debate over the utility of ethnographic analogy in archaeology should have been put to rest over a decade ago if Alison Wylie's thorough treatment of the topic is anything to go by. As Wylie put it, archaeological enquiry is fundamentally analogical in form and foundation. Aside from breathing life into these ancient cultures, when used rigorously, analogy is capable of bringing out, in the words of Wylie, "unfamiliar and otherwise inaccessible aspects of the past into view." This ability lies in the fact that it deals with discontinuity, as much as with continuity between the ethnographic pattern and the archaeological record. What can be the most telling about past cultural forms and practices is when we are confronted with discontinuity in the record, something not fully appreciated and effectively applied in McMillan's work. And despite what McMillan may say, his approach is analogical, if not rigorous, for he makes extensive use of ethnographic data in both direct historical and 'general comparative' forms.

Chapter 2, *Differing Approaches to the Nuu-chah-nulth Past*, comes closest to capturing this with the book's coverage of the conflicting world views, as well as competing archaeological constructs concerning the origins and evolution of Nuu-chah-nulth culture. At issue for the author is the "outdated stereotype of the unchanging Native," a conservative view supposedly epitomised by Donald Mitchell's "West Coast Culture Type." According to this model, the essential elements of Nuu-chah-nulth life were in place more than 4000 years ago, and changed very little after that. McMillan argues for something else again, a kind of 'progressivism' citing evidence for ingenious technological innovation and changes in settlement pattern over time. But how such developments are quantified and measured, and whether it's a matter of change in scale rather than change in form, is not as clear as one would like. As the author notes, many of the restraints that commonly plague archaeological studies, particularly cultural re-constructions, insufficient geographical coverage; differing or incompatible sampling and field methodologies, which hinder the comparison of data collected over the years; and the persistent problem of differential preservation - are at work here.

The author is on much firmer ground when it comes to the review of the existing literature on the region's archaeology and history. For reasons not yet understood, the period around 2000 BP does emerge as a pivotal developmental period, not only for the West Coast but for other Northwest Coast groups as well. Evidence is offered for the widespread expansion of maritime-adapted populations and the exploitation of open-ocean resources (e.g., large toggling valves for composite harpoons) around this time.

Particular attention is given over to the continuing debate on the antiquity and role of whaling in Nuu-chah-nulth culture. Whaling is seen as a key resource activity allowing for the effective occupation of the outer coast, and may have been the economic incentive behind the southward expansion of the Nuu-chah-nulth, Ditidaht and Makah between 2000-1200 BP. As part of this discussion, is the question concerning the relationship of outer to inner coast habitation sites and whether a generalized subsistence pattern preceded the ethnographic pattern consisting of seasonally specialized resource pursuits. Most would now agree that the shift from year-round to a seasonal settlement pattern was an historical phenomenon due to depopulation.

Rich in descriptive detail, *Since the Time of the Transformers* will serve as a very useful source book. But while enriching our appreciation of ancient Nuu-chah-nulth culture, and articulating some of the issues relating to this culture area, the book

charts very little new ground. A more thorough and critical treatment of how the data supported the stated objectives of the research would have solidified the book's foundation. Nevertheless, *Since the Time of the Transformers* is a well-written, engaging book and, while not answering the question, will serve as a catalyst for the continuing debate on West Coast maritime origins and culture change.

Steven Acheson

ASBC member Steven Acheson received his doctorate from the University of Oxford in 1991 for his research on Haida settlement archaeology. He works with the Archaeology Branch in Victoria and teaches occasionally at both Malaspina University-College and the University of Victoria.

Dead Dogs Tell Tales

Osteometry of Makah and Coast Salish Dogs

by SUSAN J. CROCKFORD

Archaeology Press, Simon Fraser University, 1997: xiii + 133 pp., illus., app., refs. Price: ISBN 0-86491-165-3, (Sc) $30.00.

Those familiar with the ethnographic history of the Northwest Coast likely remember Paul Kane's sketches and paintings of West Coast families going about their business while an implausibly fluffy little white dog lounges in the foreground. These small dogs don't fit well with the notion of a hunter's companion, a brave family protector, or even a village scrounge. They appear too small and delicate to be of any practical use as we think of canines today. Did these dogs exist? How and why did they come into being and how did they survive in what must have been a harsh and competitive world? Where did they live then and, finally, where are they now? Archaeologists often encounter dog remains during investigations of Northwest Coast archaeological sites without knowing if the bones may represent the ubiquitous, mixed breed village dog or the little white "wool" dogs noted by ethnographers.

Susan Crockford explores these questions from a biological perspective. Her aim is to provide a comparative manual that, by looking at size differences, allows researchers to classify dog bones into two types. The main body of the book is comprised of osteometric tables and statistics derived from her examination of 1163 skeletal elements of dogs from 20 Northwest Coast archaeological sites. Her brief introduction and conclusion place the numerous tables and statistics into a larger context. The origin of all *Canis familiaris* is in their wolf ancestors. The different dog breeds in existence today are a result of generations of both deliberate animal husbandry and the natural adaptive behaviour of the dogs themselves. For two types of dog to survive as distinct breeds while occupying the same location, such as a village, they must have been deliberately kept apart to avoid mixing and blurring their characteristics. Keeping special dogs in isolation to preserve their breed would have been a demanding, ongoing job for members of the human community.

Crockford employs simple, straightforward statistics to prove her thesis. She provides all her osteometric data in raw form in the body of the book as well as summary tables showing the range, mean and standard deviation to allow future researchers to compare new data easily and accurately. Each group of elements has a separate chapter providing a description of each element sample, osteometric tables, photographs and, when appropriate, a discussion regarding sex determination. To avoid problems encountered in other studies focused on pre-contact dog remains, Crockford takes into account the possible size differences that may occur due to sexual dimorphism and also acknowledges that comparisons can only be made between adult dogs. She ensures that all the dogs included in her study date to pre-contact times to eliminate accidental mixing with modern European breeds. Because only a small sample of dog bones meeting these criteria were available from most individual archaeological sites, Crockford compares the dog remains between several major sites in the Coast Salish and Makah regions. In spite of the small sample size, Crockford puts confidence in her results, suggesting that two distinct sizes of pre-contact dogs co-existed on the Northwest Coast. Crockford estimates that the smaller "wool" dog would have stood about 10 cm shorter than the larger "village" dog at shoulder height.

I recently had the opportunity to use Crockford's book while assisting on a faunal analysis of some sites in Squamish traditional territory. I found that assigning single bones into one of the two types described by Crockford was often simple and quick. Some bones damaged through taphonomic processes fell through the cracks and could not be assigned to a particular type with any confidence. Some elements proved to be more useful diagnostically than others. Our confidence in the types proposed by Crockford increased when all the measurable bones from one articulated dog burial fit neatly within the range of a single type.

Having taken this book on a test run, some thoughts regarding possible improvements occurred to me. First, a table showing the most reliable measurements by element would have been helpful for determining whether or not it was worthwhile to measure those bones which were broken, making some measurements impossible. This information can be found by plodding through the osteometric tables but it would have saved time to have this stated outright somewhere in the chapter referring to each element.

Secondly, I would have been very interested in reading more about the ethnographic data regarding dogs on the Northwest Coast. Crockford devotes only one page to this side of the question and the reader is left to explore the referenced material. Ethnography obviously isn't the focus of the book but a more detailed treatment would have put some meat on the bones, so to speak.

My final comment has more to do with form than content. Our copy of this hands-on manual was literally falling apart after a day of heavy use and I had to photocopy various sections and put the book away on the shelf to avoid destroying the book completely. If the Archaeology Press reprints this book they should consider alternate bindings.

I am heartened by the connection Crockford makes between the ethnographic story of the " wool" dog and the archaeological reality. The topic is quite

specific, but it adds to a larger picture of the complex social relations between humans and animals during the pre-contact past on the coast. Here the focus is on dogs but also, by extension, on the people in the background going about their business and the effect they have on the origin, life and extinction of the animals that live with them. As Crockford points out, each dog burial should be studied as carefully and thoughtfully as a human burial because of what it can tell us about the thoughts and beliefs of those who supported its life and acknowledged its death.

Marianne Berkey

Marianne Berkey BA, RPCA, completed her Archaeology/Anthropology degree at Simon Fraser University in 1995 with an honours thesis in zooarchaeology. Since 1995 she has been employed as an archaeologist on staff at Arcas Consulting Archeologists and is the current Secretary of the BC Association of Professional Consulting Archaeologists. She has a strong interest in Northwest Coast archaeology and ethnography.

Pithouse Studies Come in from the Cold

The Pithouses of Keatley Creek

by BRIAN HAYDEN

Harcourt Brace College Publishers, Orlando, 1997: 140 pp., illus., figs., maps. Price ISBN: 0-15-503837-0, (Pb) $29.95.

The Pithouses of Keatley Creek presents a summation of ten years of research Dr. Brian Hayden has undertaken into the complex hunter-gatherer societies of the Fraser Plateau. In particular, this book focuses on work conducted by Hayden, and other researchers and graduate students under his supervision, at the Keatley Creek Site. The introductory tone of the volume indicates that it is aimed at a wider general audience that is not readily familiar with the precontact cultures and archaeology of the Interior Plateau region. Nonetheless, this style does not detract from the overall work, but rather serves to make it accessible for readers of all levels. Understanding of the region and culture of the area is rounded out by the inclusion of several fine photos and well produced maps.

The book moves from a general discussion on the Plateau peoples of the Fraser River to a more detailed discussion of pithouses and site formation processes, to specific chapters on the Keatley Creek site. The greater emphasis is placed on the distribution analysis of cultural materials inside the Keatley Creek pithouses. In Chapter five, for example, the distribution of the formed tools, lithic debitage and fire cracked rock across the floor of Housepit 7 is discussed. With the aid of numerous contour and floor plan-view maps, the distribution of these materials is discussed and given meaning.

Chapter six reports on the distribution of macro-botanical remains found across the house floors. Here the author does an excellent job of illustrating the contribution that analysis of plant remains can make in interpretations. The distribution of the different types of seeds recovered is discussed and cited as evidence of food preparation and sleeping activities within the housepit. From single house floors, comparisons are made between larger and smaller housepits across the site. In a similar way other sections go on to highlight the distribution of specialized status goods, faunal materials, pit features and postholes across the floors of specific houses. Again, comparisons are made between several housepits from across the site.

Despite the technical orientation of the varied analyses, the human inhabitants who created these patterns in times past are not forgotten. In the resulting discussions the author does an admirable job of giving the reader a realistic sense of what life must have been like in a pithouse at the Keatley Creek 'village'. In the final chapters, Hayden pulls the many threads from the analyses together to argue that the Keatley Creek Site is marked by some sharp status differences. Here he covers some now familiar ground in arguing that the site was the scene of a growing elite in a society that was becoming increasingly hierarchical.

My only complaint is that little attempt is made to place these results within a wider regional context. While other studies of several important sites including the Bell Site, Berrian's Island and Strawberry Island are touched upon, a more complete discussion is lacking. And where Keatley Creek presents the first detailed analysis of housepit floors in British Columbia, several similar studies that have been carried out on sites on the Columbia Plateau were overlooked. Even though these studies are well published and readily available no attempt is made to incorporate them into discussions in this book.

Overlooking these comparative sources lessens the greater understanding of pithouses that may have been achieved between sites on a wider regional scale. And without such a regional comparison it is difficult to unquestioningly accept arguments that the Keatley Creek Site is particularly more significant than other large housepit sites across the Plateau.

Overall, this volume is professionally produced with excellent illustrations and drawings. In 140 pages the volume presents 48 figures and 7 tables. While several minor typographical errors can be found these do not detract from the presentation. However the publication is seriously marred by the apparent carelessness in proof reading the referenced sources. At least six main references including one by the author are mentioned in the text but not found in the bibliography. An unpublished manuscript by Teit is incidentally named in the text but no reference is provided as to what this is about or where it can be found. Although this shortcoming certainly does impair the presentation, it should not diminish the publication's overall value. This publication is certainly long overdue, and is a welcome addition to the archaeological literature on the Interior Plateau region. In sum, Brian Hayden should be commended for producing such a readily accessible and informative account on the pithouses of Keatley Creek.

Brian C. Vivian

Brian Vivian is a PhD Candidate SUNY, Binghamton and is a Sessional Instructor in Archaeology at the University of Calgary. He has 15 years of archaeological experience, especially in the Plateau region and Rocky Mountains of BC and Alberta.

PERMITS Issued by the Archaeology Branch, August - December 1999

As always, the assistance of Ray Kenny (Manager, Assessment and Planning Section) and Alan Riches (Branch Secretary) in providing the following information is gratefully acknowledged. A number of recurrent abbreviations appear in this list, and are described herein. The most commonly used abbreviations are "AIA" (Archaeological Impact Assessment), "MoF" (Ministry of Forests), and "CMT" (Culturally Modified Tree). Many forest industry-specific abbreviations occur throughout, including "CP" (Cutting Permit), "FD" (Forest District), "FL" (Forest License), "TSA" (Timber Sales Area), "TFL" (Tree Farm License), and "TL" is (Timber License). Terms often used in legal descriptions also appear: "DL" (District Lot), "Sec" (Section), "Tp" (Township), "Rge" (Range), and "r/w" (right-of-way). Lastly, the following abbreviations refer to the different types of Permits issued by the Archaeology Branch: ALT = Alteration; INS = Inspection; INV = Investigation.

1999-301	Monty Mitchell	INS	AIA of MoF/SBFEP forestry operations within Heiltsuk Nation, Oweekeno Nation, and Nuxalk Band asserted traditional territories within the Mid-Coast FD
1999-302	Mary De Paoli	INS	AIA of MoTH Hwy 97 upgrading at Hwy 99 intersection N of Cache Creek, near the confluence of Hat Creek and Bonaparte River and vicinity of sites EfRt-69 to -73
1999-303	Gary Hackett	ALT	Alterations to the Marpole site (DhRs-1) by construction, excavation and installation of a billboard sign at 1342 SW Marine Drive, Vancouver
1999-304	Remi Farvacque	INS	AIA of J.S. Jones Timber Ltd.'s forestry operations in the asserted traditional territory of the Oregon Jack Indian Band, within the Chilliwack FD
1999-305	Andrew Mason	INS	AIA of MacMillan Bloedel (Stillwater Woodlands Division) forestry operations within Block 1, TFL 39
1999-306	Vicki Feddema	INS	AIA of Encal Energy, Petrocanada Oil and Gas, and other petrochemical companies' oil/gas developments within the asserted traditional territory of the Prophet River First Nation, NE BC
1999-307	John Gibbs	ALT	Alterations to HdRe-11 by ground disturbance associated with construction of a gas-well within 10-13-87-18, W6M, NTS 94A/10 by Numac Energy, near Fort St. John
1999-308	Wayne French	ALT	Alterations to a potential CMT in DeSt-100 by forestry operations within Cutblock 7775 in the vicinity of Nitinaht Lake (Mt. Rosander) on the W coast of Vancouver Island
1999-309	Martin Handly	INS	AIA for proposed 18-hole golfcourse in that part of Lot 1, DL 4596, Kootenay District, Plan 4023, except for that part located in Plan NEP 22509, 7 km N of Fairmont Hot Springs on the E side of Hwy 93/95
1999-310	Monty Mitchell	INS	AIA of Premier Power Corporation's proposed hydroelectric project, including all related land altering activities, on Long Lake and S to Cascade Creek, N of Stewart
1999-311	Doris Zibauer	INS	AIA of Ainsworth Lumber Company Ltd.'s forestry operations in C 100, in the vicinity of Mckay and Slok creeks, Lillooet FD
1999-312	Renee Carriere	INS	AIA of MoF, Fraser Lake Sawmills, and other licensees' forestry operations within the Lakes FD
1999-313	Renee Carriere	INS	AIA of Plateau Forest Products, West Fraser Mills (Fraser Lake Division), Canadian Forest Products, MoF/SBFEP, and other licensees' forestry operations within the Vanderhoof FD
1999-314	Ian Wilson	INS	Site inventory of selected portions of the Morrison Landscape Unit, Morice FD
1999-315	Bonnie Campbell	INS	AIA for Suncor Energy Inc.'s proposed natural gas wellsite located on the E side of the Fording River within DL 6739, NE of Elkford
1999-316	Brian Taylor	ALT	Alterations to DkRj-3 (CMTs 3-5) in Block S-84, DkRj-4 (CMTs 1-2) in Block S-87, DkRj-5 (CMT A) in Block S-87, and DkRj-6 (CMTs B-D) in Block S-87 by J.S. Jones Timber Ltd.'s forestry operations within FL A19201, Chilliwack FD
1999-317	Ian Franck	INS	AIA of MoF and other licensees' forestry operations and developments within the Vernon FD
1999-318	Kevin Twohig	INS	AIA for proposed 4-lot residential subdivision within Part of Fractional SW¼ and NE¼ of DL 9115, Cariboo LD, on Whiskey Creek near Williams Lake
1999-319	Morley Eldridge	INS	Site inventory and AIA for proposed redevelopment of Queen Charlotte City High School, within: Lots 1 to 24, Block 16, DL 16, Plan 943, and Lots 1 to 21, Block 21, DL 16, Plan 943, Queen Charlotte LD, in the vicinity of FhUa-52
1999-320	Tina Christensen	INS	AIA for proposed industrial park development, selected portions of DL 420, Queen

			Charlotte LD, near Port Clements, QCI
1999-321	Scott Lawrie	INS	AIA of MoF forestry operations and developments within TSL A34818, Block AH3 (Aston Creek) and TSL A34814, Block JH1 (Jacklah River), Campbell River FD
1999-322	Brenda Clark	INV	Assessment and possible recovery of reported found human remains (file 1999-34B) from a locality fronting 10973 Inwood Road, North Saanich, between Canoe Bay and Curteis Point in the vicinity of Kolb Island; near DeRu-163
1999-323	Shauna McRanor	INS	AIA of Canfor's forestry operations within Blocks 1839, 3554, 3580, 4373, 4375, 4377, 4455, 4457, 4883, and 4884, located near Dickson Lake, along Snowcap Creek, and along the Lillooet River within the Chilliwack and Squamish FDs
1999-324	Gail Wada	INS	AIA for proposed residential subdivision in the vicinity of Big Pine Mountain (Burnt Hill) and Little Pine Mountain, E of Fox Reach, Pitt River, in Pitt Meadows
1999-325	Ian Franck	INS	AIA for Sumas Energy 2's proposed transmission line from the CPR r/w to the Clayburn substation, City of Abbotsford
1999-326	William Gillespie	ALT	Alterations to part of DgRs-9 by geotechnical testing and subgrade excavations for house construction at 782 Tsawwassen Beach Road, Lot 1048, Sec 9, Tp 5, NWD, Plan 47966, Municipality of Delta
1999-327	Heather Pratt	ALT	Remove or otherwise alter artifacts present at EgSt-002, located on the S shore of Seymour Inlet between Harriet Point and Frederick Bay, Port McNeill FD
1999-328	Tanja Hoffmann	INS	AIA for GVRD's proposed forcemain across Nicomekl River, near Crescent Beach
1999-329	Anthony Hewer	INS	AIA for McLean Projects Corporation's potential redevelopment at 8665 - 8675 Barnard Street in Vancouver, legally described as Lots B and C, Block 1, DL 317 and 318, Plan Remainder DL 79 and Lot 2, Plan 14849; S of SW Marine Drive near DhRs-19 (Liquid Air Site)
1999-330	Andrew Mason	INS	AIA for City of Vancouver's proposed Dedicated Fire Protection System (DFPS) crossing of False Creek
1999-331	Geordie Howe	INS	AIA of Pacific Inland Resources' forestry operations within CP 616, Blocks 1 and 2, and CP 614, Blocks 10 and 11, on the E side of Nilkitkwa Lake, Bulkley/Cassiar FD
1999-332	Dan Weinburger	INS	AIA for proposed upgrading of an approximately 8 km-long section of Hwy 5 in the vicinity of Corbett and Tinmilsk lakes S of Merritt; locality contains sites EaRd-15, -16, and -17 and DlRd-4 and -5 are within study corridor
1999-333	Bruce Ball	INS	AIA of Cariboo Forest Consultants Ltd.'s forestry operations, including those within WL 561 and WL 1642 CPA Block 1, Quesnel FD
1999-334	Robert Lackowicz	INS	AIA for proposed MoTH LSB Pit #0872, located SE of Creston
1999-335	Geordie Howe	INS	AIA for DL 253 and part of DL 2254, Cassiar District, located on Atlin Lake
1999-336	Rod DeBoice	ALT	Remove or other alter artifacts present at EbRf-003, located near Skuhun Creek, Nicola Valley, Merritt FD
1999-337	Renee Carriere	INS	AIA of MoF/SBFEP and Lignum Ltd.'s forestry operations within the Chilcotin and Williams Lake FDs
1999-338	Robbin Chatan	INS	AIA of InterFor Ltd.'s forestry operations within FL A19238 on NW Vancouver Island, Port McNeill FD
1999-339	Remi Farvacque	INS	Pre- and post-construction AIA of proposed and/or existing Berkley Petroleum, Husky Oil, Petro Canada Oil and Gas, and Union Pacific Resources Inc.'s developments within NTS mapsheets 94H/14 -16, 94I/1-16, 94J/9-16, 94N/1-16, 94O/1-16 and 94P/1-16, as they coincide with Fort Nelson First Nation non-overlapping asserting traditional territories
1999-340	Remi Farvacque	INS	AIA of Boston Bar, Boothroyd, Spuzzum First Nations and J.S. Jones Timber Ltd.'s forestry operations within the Chilliwack FD
1999-341	Kathy McDonald	ALT	Alterations to HdRm-5, -6, and -7 by Petro-Canada Oil & Gas Ltd.'s pipeline construction 50 km N of Hudson's Hope and 80 km WNW of Fort St. John, near the Halfway River
1999-342	Dan Weinberger	INS	AIA for a 40-acre cattle feedlot within Lot 1291, Cariboo District, near Pelican Lake; sites FiRv-1, -2, -3, -9, and FhRv-1 recorded within or adjacent to the study area
1999-343	Rick Howard & Kevin Robinson	INS	AIA of MoF/SBFEP forestry operations within TSL 6750, on the W coast of Vancouver Island SW of Nitinat Lake, along the Rosander Mainline Road, approximately 3 km from the Carmanah Park parking lot, South Island FD
1999-344	Kevin Twohig	INS	AIA for various MoTH gravel pits, including specified pits and those that may be proposed within a study corridor between Kamloops and Revelstoke

1999-345	Robert Wondrasek	INS	AIA for TransCanada Transmission's proposed 200 km Liard Pipeline Project in NE BC, vicinity of Beaver River to Shekilie at Alberta border; project includes a 20-inch gas pipeline r/w, re-routes and alternatives, and ancillary facilities to connect the Maxhamish Gas Plant with the Alberta TCPL Alberta System
1999-346	Heather Pratt	INS	AIA of MacMillan Bloedel (West Island Woodlands Division, Franklin Operations) forestry operations within TO853, TO859, TO862, and TO866, adjacent to Esperanza Inlet and Nutchatlitz Inlet, Nootka Island, Campbell River FD
1999-347	Kevin Twohig	INS	AIA of Nicola (Guichon) Woodlot forestry operations north of Nicola Lake, Merritt FD
1999-348	Jeff Bailey	INS	AIA of Skeena Cellulose (Terrace Operations) forestry operations within CBs 312966 and 572009, Kalum FD
1999-349	Bruce Ball	INS	AIA of Thompson River Woodlands Inc.'s forestry operations located N of Kamloops, Kamloops FD
1999-350	Marty Locker	ALT	Alterations to CMT B1 (LS 13) within temporary site #LS-13B-RF1 (DgSj-058) and CMTs A1, A2, and A3 (LS 19) and 1,2,3, and 4 (LS 20) within temporary site #LS-19/20-RF1 (DfSj-086), by InterFor forestry operations within the Losr Shoe CB area of TFL 54, Kennedy Lake, South Island FD
1999-351	Paul McIntosh	ALT	Alterations to EdSh-54 by Palmer Bay Logging Ltd.'s forestry operations within DL 1876 on the N side of Chatham Channel, Vancouver Island, Coast LD
1999-352	Michael Klassen	INS	Site inventory of portions of EeRl-7, -72, -76, and Cutblock 179-8, within the asserted traditional territories of the Ts'kw'aylaxw, Sedw'elw'as, and Tl'itil'kit First Nations communities, Lillooet FD
1999-353	Kevin Aitchison	ALT	Alterations to HcRe-156 by Encal Energy Ltd.'s development of wellsite Encal et al Oak 5-35-85-18, NTS map 94-A-7, NE BC
1999-354	Martin Handly	INS	AIA for MoTH proposed realignment of Hwy 3 E of Johnstone Creek Park, W of Rock Creek
1999-355	John Bergman	ALT	Alterations to CMTs #5 and #13 within FlTn-002 by forestry operations in WL 1854, Oona River area, Porcher Island, North Coast FD
1999-356	Remi Farvacque	INS	AIA of proposed forestry operations within NTS mapsheets 94J/2, 94J/10, 94O/1, and 94O/2, Fort Nelson FD
1999-357	Jeff Bailey	INS	AIA of MoF/SBFEP forestry operations within A35514, A60602, and A51812/3, as well as those by other licensees in the Kispiox FD
1999-358	Peter Merchant	INS	Site inventory and AIA for proposed residential development of portion of Lot 16, Block 9 of DL 304, Plan 12056, LD 37, located at Porpoise Bay, Municipality of Sechelt
1999-359	Scott Lawrie	INS	AIA for proposed Brandywine Creek Hydroelectric Project, on Brandywine Creek approximately 3 km N of Daisy Lake Dam near Garibaldi
1999-360	Robert Lackowicz	INS	AIA for proposed installation of an underground powerline in SL 9, DL 1239, Kootenay LD, located S of Glade Creek on E side of the Kootenay River, approximately 5 km SW of the Slocan River mouth
1999-361	Tom Head	INS	AIA for proposed TransCanada Transmission East Kootenay Exchange, Meter Station upgrades and looping of approximately 750 m of Alberta Natural Gas (ANG) Mainline from DL 9104 to DL 8744, Kootenay LD, on the E side of the Moyie River S of the community of Curzon; DgQa-4, -5, and -6 located in project vicinity
1999-362	Robert Lackowicz	INS	AIA for Bella Vista Properties' proposed single family residential subdivision of that part of SL 19, DL 4596, Kootenay LD, Plan X32, except parts included in Plans 7339, 8490, 16995 lying E of Hwy 93/95, and a 300 m access road, approximately 6 km S of Fairmont Hot Springs
1999-363	Walt Kowal	INS	Site inventory and AIA of Weyerhauser Canada's forestry operations in the Hyas Lake area, Kamloops FD
1999-364	Eric McLay	INS	Site inventory of selected traditional use sites within Chemainus, Halalt, Lyackson, and Penalakut First Nations and Cowichan Tribes asserted traditional territories, southern Vancouver Island and Gulf Islands
1999-365	Beth Hrychuk	INS	AIA of Amoco Canada Petroleum, Pioneer Natural Resources Canada, Suncor Energy, Petro-Canada Oil and Gas and other licensees' oil and gas developments within the asserted traditional territories of the Doig River, Blueberry River, and Prophet River First Nations, in the areas covered by NTS maps 94 H/1-16, 94 A/8-10+14-16,

			and those portions of 94 A/1,2,7,11,13 lying N of the Peace River and E of the Blueberry River
1999-366	Karen Preckel	INS	AIA for proposed swale and culvert construction by MoTH at Siwash Bridge, Chilko River
1999-367	Beth Hrychuk	INS	AIA of forestry operations within FL A18162, Block gg-14, Vanderhoof FD
1999-368	Anthony Hewer	INS	AIA for BC Parks' D'Arcy Island marine campground, E coast of D'Arcy Island, Gulf of Georgia
1999-369	Ingrid Russel	ALT	Alterations to CMTs in GeSn-1 by MoF/SBFEP forestry operations within TSL A36404, on the SW side of Babine Lake, Morice FD
1999-370	Morley Eldridge	INS	AIA of Hecate Logging Ltd.'s forestry operations within Block EH4, FL A19236 near Zeballos, Campbell River FD
1999-371	Paul Anderson	ALT	Alterations to HbRe-39, -46, and -47, HcRg-3 and -19, and HeRl-3 and -5, by construction of Alliance Pipeline Ltd.'s proposed Aitken Creek Lateral
1999-372	Jeff Bailey	INS	AIA of Bell Pole Co.'s forestry operations in Cutblocks 145505, 145508, C16103, T88121, and T88203, and Skeena Cellulose Inc.'s forestry operations in Cutblocks Q73606, Kispiox FD
1999-373	Sandra Witt	INS	AIA of forestry operations within TSL A36903, A38993, A51098, A47451, and A60160, Squamish FD
1999-374	Frank Kernik	ALT	Alterations to EcQa-5 by construction of a picnic area, washrooms, trail upgrading, and slope rehabilitation
1999-375	Michael Graup	ALT	Alterations to CMTs within GiTt-7 by Skeena Cellulose (Terrace Operations) forestry operations in Setting No.315001, TFL 1, NW of Dragon Lake, Kalum FD
1999-376	Marianne Berkey	INS	AIA of Weldwood of Canada Ltd.'s forestry operations within FL A18172, near Punchaw Lake, Prince George FD
1999-377	Monty Mitchell	INS	AIA of MoF/SBFEP forestry operations on the W side of Yeo Island near Yeo Lake, Mid-Coast FD
1999-378	Stan Copp	INS	AIA of MoF/SBFEP forestry operations within TSL A62340-05, on the Placer Creek FSR approximately 38 km S of Princeton
1999-379	Sheila Minni	INS	AIA for the MoTH Rayonier Gravel Pit, 3 km NE of Squamish and MoTH Brunswick Beach Gravel Pit, 1.5 km N of Lions Bay, South Coast Highway Region
1999-380	Martin Handly	INS	AIA for a 8 km-long four-laning project on Hwy 97 N of Vernon, from the N end of Swan Lake to Crozier Road SW of Armstrong
1999-381	Brian Hayden	INV	Excavation at EeRl-7, Keatley Creek, near Lillooet
1999-382	Geordie Howe	INS	Systematic data recovery (research excavations) within the Elaho Rockshelter Site, EaRu-005, in the lower Elaho River valley near Squamish
1999-383	Sheila Minni	INS	AIA for six MoTH gravel pits (Strong, Bulgar, Agassiz/McCallum, Othello, Silver Skagit Ford) in the Fraser Valley, South Coast Highway Region
1999-384	Gordon Mohs	INS	AIA of Canadian Forest Products Ltd.'s forestry operations in FL A19208, blocks F005, F006, and F013, within the Chehalis River watershed, Fraser TSA, Chilliwack FD
1999-385	Monty Mitchell	INS	AIA of MoF/SBFEP forestry operations within TSL A42460, Nordschow Valley, Mid-Coast FD
1999-386	Tom Head	INS	AIA for proposed looping of Westcoast Energy's existing Fort Nelson pipeline extending from MP 159.1 to MP 176.5, located just N of Davies Lake S to L2911 in the northern Peace River district
1999-387	Ian Wison	INS	AIA for a proposed fishing camp on DL3059, QCD, near Port Louis, Graham Island
1999-388	Sheila Minni	INS	AIA for proposed extensions to the Florence gravel pit, on the W side of Hwy 1 4 km N of Boston Bar
1999-389	Rick Bell	ALT	Alterations to HhRs-6, -7, -8, -9, -10, and -15 by construction of Murphy Oil Company Ltd.'s Chicken Creek pipeline from wellsite b-32-B, 94-G-06 to wellsite d-54-A, 94-G-08, N of the Sikanni Chief River
1999-390	Jim McCormack	ALT	Alterations to CMTs within FiSj-13 by Northwood Inc. (Houston Region) forestry operations within FL A16824, CP 491, Block 4, on the N shore of Cheslaslie Arm, Nechako Reservoir, Lake FD
1999-391	Doug Whiteside	ALT	Alterations to HcRg-036 and -037 by construction of Anderson Exploration Ltd.'s pipeline from wellsite 8-23-85-20 to tie into r/w Plan 29947, map sheet 94-A-5, located in the West Stoddart area, NE of Charlie Lake

1999-392	Scott Lawrie	INS	AIA for proposed shake/shingle mill E of Hwy 19, near Menzies Bay approximately 25 km N of Campbell River
1999-393	Terrance Gibson	INS	AIA of MoF/SBFEP forestry operations within TSL A43577 CP G, Block AD, located between and within about 2 km of the Necoslie and Stuart rivers, Fort St. James FD
1999-394	Art Van Klier	ALT	Alterations to DgRl-10 from proposed developments within a portion of Plan LMP 2316A, 2316B, and 2316C, at 5353/5361/5375 Teskey Road, Chilliwack
1999-395	Robert Howie	ALT	Alterations to CMTs in DlSr-39, -40, and 41 (Block EH1) and DlSr-42 (Block EH4) by Hecate Logging Ltd.'s forestry operations within FL A19236, W side of Zeballos Inlet, Campbell River FD
1999-396	Vicki Feddema	INS	AIA of Hecate Logging Ltd.'s forestry operations within Blocks LE1, LE2, J135, P31, P10-1, PU1, PU2, PU3, and other units, in FL A19236, Espinosa/Port Eliza/ Chum Creek operating area, Strathcona TSA, Campbell River FD
1999-397	Morley Eldridge	INS	AIA of Skeena Sawmills and other licensees' forestry operations in the Kalum FD, excluding those operations within the asserted traditional territories of the Heiltsuk First Nation
1999-398	Rob Field	INS	AIA of Coulson Forest Products Ltd.'s forestry operations in FL A19234, Toquart Bay/Upper Effingham Operation, located N and E of Toquart Bay within the Arrowhead TSA, South Vancouver Island FD
1999-399	Hartley Odwak	INS	AIA of Weyerhauser Canada Ltd.'s forestry operations within FL A19244, blocks T0956, T0611, T0626, and T0629, located in Klaskino Inlet, Klaskish Basin and River, Jims Creek and Kinney Creek drainages, NW Vancouver Island, Port McNeill FD
1999-400	Anthony Hewer	INS	AIA for Centra Gas BC Inc.'s proposed installation of a gas pipeline within the remainder of Block 564, Nanoose LD, except part in Plans 31833, 39893, 42873, 3132RW and VIP66068, located near Kaye Road SE of Parksville

EXHIBITS

ROYAL BRITISH COLUMBIA MUSEUM

Out of the Mist, HuupuKwanum Tupaat: Treasures of the Nuu-chah-nulth Chiefs

Through 30 April 2000

Co-produced with the Nuu-chah-nulth people, this exhibition contains 241 artifacts and historical photographs and documents on the art and culture of the Nuu-chah-nulth. Some of the artifacts date from the 18th century while others are contemporary pieces. Many of the objects included in this exhibition are from collections and museums from around the world.

For further information contact the Royal British Columbia Museum at 1 888 447-7977 or check out the museum's web site at http://rbcm1.gov.bc.ca.

LECTURES

ASBC NANAIMO BRANCH

THE NANAIMO BRANCH OF THE ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA has monthly lectures on Friday evening at 7:00 pm. They are held at Malaspina University College in Building 356, Room 111. Lectures are free to members and cost $5 for non-members. For more information contact Pat Knowles at dgveng2@island.net.

14 April - The Birds Eye Cove Rockshelter (Don Abbot)

DeRv 15, a large rockshelter on Mount Tzuhalem, was formed by the fall of a massive conglomerate slab. It is located at the base of a cliff 1 km uphill from the end of Birds Eye Cove, Cowichan District, on Vancouver Island. During two periods of intensive occupation, ca. 1900-2000 years ago and ca. 1200-1300 years ago, it was used as a hunting station. Manufacturing was carried out on-site and there may have been some secondary use for ceremonial purposes. A strong possibility exists that the primary motivation for its occupation may have been as a refuge during periods of intensified warfare.

Don Abbot is Curator Emeritus of the Royal British Columbia Museum, where he worked for over 30 years. His name is readily associated with archaeology, ethnology, and museums in British Columbia, as well as in countries as far away as England and Denmark. Mr. Abbot was one of Carl Borden's students and the first person in British Columbia to be employed primarily as an archaeologist.

12 May - The Role of Culture and Heritage in BC Treaty Negotiations (Richard Inglis)

Richard Inglis is an archaeologist and ethnologist who has been working as a treaty negotiator for the past seven years. Prior to his work with the Ministry of Aboriginal Affairs, he was an anthropologist for the Museum of Civilization, and a curator of Anthropology at the Royal British Columbia Museum. Mr. Inglis is known in particular for his ethnological research among the Nuu-chah-nulth First Nation of West Coast Vancouver island, and for his archaeological work in the Prince Rupert area.

UNDERWATER ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA

THE UNDERWATER ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA (UASBC) is a non-profit society for people interested in BC's underwater heritage. The society meets on the last Wednesday of every month (except December and July) at 7:30 pm at the Vancouver Maritime Museum, 1905 Ogden Avenue. Admission is free and non-members are welcome.

29 March - Seafloor Modelling and Archaeology (Daryl Fedje)

Using a computer simulation of sea shore levels in the ice age, this Parks Canada archaeologist recently predicted with amazing accuracy the location of an inundated native site deep beneath the waters of Haida Gwai.

26 April - Re-Creation of the St. Roch's Voyage Around North America (Ken Burton)

The RCMP's Ken Burton plans to pilot the *St. Roch II* through the Northwest Passage and around North America in a re-creation of the *St. Roch's* historic voyages.

31 May - Across the Top of the World: A Quest for the Northwest Passage (Jim Delgado)

The Vancouver Maritime Museum's Executive Director will lead us on a history of the quest for the Northwest Passage through the lens of his new best-seller. Come hear about Franklin, Frobisher, the Inuit, Henry Larson, and other explorers of this vast and fascinating land.

28 June - UASBC Explorations: The Year in Review (Jacques Marc)

Our Explorations Director will review the many UASBC expeditions, ventures, and accomplishments below and above the water over the last year, including new discoveries and tales from the latest regional survey on the Sunshine Coast.

CONFERENCES

2000

5 – 9 April

Society for American Archaeology (SAA),
65th Annual Meeting
Philadelphia, Pennsylvania, USA

The programme is available on the SAA web page located at www.saa.org.

Contact: *SAA Headquarters, 900 Second St. NE #12, Washington, DC, 20002, USA, tel. (202) 789-8200; email: meetings@saa.org; web site: www.saa.org*

6 – 8 April

Northwest Anthropological Conference,
53rd Annual Meeting
Spokane, Washington, USA

The Department of Anthropology and Geography at Eastern Washington University will host the 53rd Annual Northwest Anthropological Conference, Northwest Anthropology in the 21st Century. The banquet speaker is Clyde Snow from the University of Oklahoma. His talk is entitled "Bones of Contention: Forensic Anthropology in the Investigation of Human Rights Violations."

Contact: *Sarah Keller, Program Chair, Department of Anthropology and Geography, Eastern Washington University MS#52, Cheney, WA, 99004; tel. (509) 359-7039; fax (509) 359-2472; email: skeller@ewu.edu. Jerry Galm, General Chair, Department of Anthropology and Geography, Eastern Washington University MS#52, Cheney, WA, 99004; tel. (509) 359-2477; fax (509) 359-2472; email: jgalm@ewu.edu; web site: www.class.ewu.edu/class/anthro/nwac/home.html*

3 – 7 May

Canadian Archaeological Association (CAA),
33rd Annual Meeting, "Transitions"
Ottawa, Ontario

Proposed symposium themes include: The Dorest Culture, 75 Years After Jenness; Prehistoric Archaeology in Quebec; Physical Anthropology; International Archaeological Organizations; Transitions in Zooarchaeology: New Methods and New Results; "Cultural Transition Zones" (Interaction and Ethnicity); Households and Communities on the NW Coast, Recent Research Results; Neo-Eskimo Archaeology; The Last 25 Years of Canadian Archaeology; Historicizing Subarctic Peoples; Archaeometry: New Insights into the Protohistoric Period in the East; Ceramic Studies; Archaeometry and Geoarchaeology; Who's Asking the Questions? New Directions and Uses for Canadian Archaeology; Technological Traditions in Eastern Beringia.

Contact: *Dr. David Morrison, Chair, Canadian Museum of Civilization, PO Box 3100, Station B, Hull, Quebec, J8X 4H2; tel. (819) 776-8198; fax (819) 776-8300; email: david.morrison@civilization.ca. Dr. Jean-Luc Pilon, Programme Chair, Canadian Museum of Civilization, PO Box 3100, Station B, Hull, Quebec, J8X 4H2; tel. (819) 776-8192; fax (819) 776-8300; email: jean-luc.pilon@civilization.ca; web site: www.canadianarchaeology.com*

11 – 13 May

Heritage Society of British Columbia,
22nd Annual Conference, "Victoria's Secrets"
Victoria, BC

Hosted by the Victoria Civic Heritage Trust (VCHT) on behalf of the City of Victoria, the conference will take you behind the scenes to learn "Victoria's Secrets".

Contact: *The Heritage Society of British Columbia, 660 Michigan Street, Victoria, BC, V8V 4Y7; tel./fax (250) 384-4840; email: hsbc@islandnet.com; web site: www.islandnet.com/~hsbc/*

11 – 14 October **British Columbia Museums Association (BCMA) and the Western Museums Association (WMA),**
Conference 2000: Designing the Future Together
Victoria, British Columbia

Contact: *BCMA office, suite 523 409 Granville Street, Vancouver, BC, V6C 1T2; tel. (604) 660-0749; email: bmca@museumsassn.bc.ca; web site: www.museumsassn.bc.ca/~bcma/*

8 – 12 November **33rd Annual Chacmool Conference**
"Art for Archaeology's Sake: Material Culture and Style Across the Disciplines"
Calgary, Alberta

The next Chacmool Conference will bridge the gap between archaeology, art history, and material culture studies, considering shared as well as divergent ways in which objects and visual imagery are used to infer behaviour and ideology. Potential topics include: Style Grammars and Material Culture; Archaeology and the Art Market; Empire and Style; Conservation vs. Preservation: Whose Aesthetics?; Regional Studies; Rock Art; Text and Image Among the Classic Maya.

Contact: *University of Calgary, Department of Archaeology, 2500 University Drive N.W., Calgary, Alberta, T2N 1N4; tel. (403) 220-7120; email: chacmool@ucalgary.ca; web site: www.ucalgary.ca/UofC/faculties/SS/ARKY/chacmool.html*

THE MIDDEN

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