

E78
B9A68a

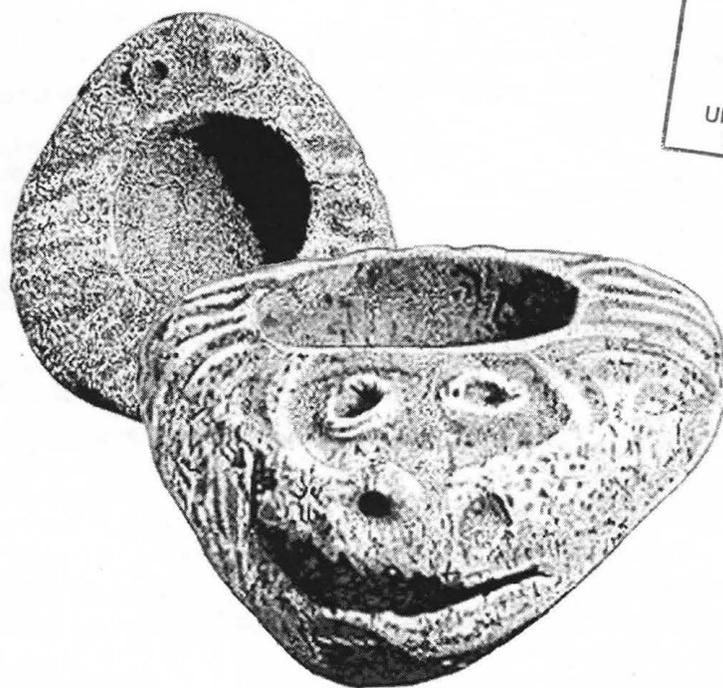


THE MIDDEN

Publication of the Archaeological Society of British Columbia

ISSN 0047-7222

Vol. 35, No. 1 — 2003



SERIALS SERVICES
RECEIVED
OCT - 6 2003
UNIVERSITY OF VICTORIA
McPHERSON LIBRARY

**STONE BOWLS OF SURREY
OREGON COAST IN THE LATE PLEISTOCENE
THE MIDDEN INDEX 2002
PERMITS 2003**



THE MIDDEN

Published four times a year by the
Archaeological Society of British Columbia

Editorial Committee

- Editor:** Heather Myles (604.274.4294)
heathermyles@shaw.ca
- Permit Lists:** Richard Brolly (604.689.1678)
rbrolly@arcas.net
- News Editor:** Vacant
- Field Editor:** Rudy Reimer (604) 254-2660
rudyreimer@telus.net
- Publications Editor:** Bill Angelbeck (604.875.9094)
angelbec@interchange.ubc.ca
- Production** Jack Fletcher (604.574.1392)
greatbear@shaw.ca
- Subscriptions** Sarah Ladd (604)737-7935
sarah_ladd@sfu.ca

SUBSCRIPTION is included with ASBC membership.
Non-members: \$14.50 per year (\$17.00 USA and overseas),
payable in Canadian funds to the ASBC. Remit to:

Midden Subscriptions, ASBC
P.O. Box 520, Bentall Station
Vancouver BC V6C 2N3

SUBMISSIONS: We welcome contributions on subjects germane to
BC archaeology. Guidelines are available on request. Submissions
should be directed to the appropriate editor at the ASBC address.

Copyright

Contents of *The Midden* are copyrighted by the ASBC.
It is unlawful to reproduce all or any part, by any means whatsoever,
without the Society's permission, which is usually gladly given.

The ASBC gratefully acknowledges the many years of
financial assistance to this project that was provided by
the former British Columbia Heritage Trust to support
conservation of our heritage resources, gain further
knowledge, and increase public understanding of the
complete history of British Columbia.

BRITISH COLUMBIA
Heritage
Trust

ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA

Dedicated to the protection of archaeological resources
and the spread of archaeological knowledge.

President

Patricia Ormerod (604.733.0571)
pormerod@interchange.ubc.ca

Membership

Sarah Ladd (604)737-7935
sarah_ladd@sfu.ca

Annual membership includes a year's subscription to
The Midden and the ASBC newsletter *SocNotes*.

Membership Fees

Individual: \$25 Family: \$30 Seniors/Students: \$18
Send cheque or money order payable to the ASBC to:

ASBC Memberships
P.O. Box 520, Bentall Station
Vancouver BC V6C 2N3

ASBC on Internet
<http://asbc.bc.ca>

Branches

Nanaimo Contact: Mary Perdios-Vassilopoulos
asbcnb@nisa.net. Lectures on the second Friday of every month,
7:00 to 9:00 P.M. at Malaspina University-College, Education/
Social Sciences Bldg. (356), Room 111.
Internet: www.nisa.com/~asbcnb

Victoria Contact: Shirley Cuthbertson (250.382.0288)
Internet: www.asbc.bc.ca/vicsite

ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA
meetings in Vancouver featuring illustrated
lectures are held on the second Wednesday of
each month from September to June at 8:00
P.M. in the H.R. MacMillan Space Centre
Auditorium (Planetarium) at 1100 Chestnut
Street. New members and visitors are
welcome. Admission is free.



MIDDEN

Volume 35 No. 1, 2003

In this issue

BC Archaeology News	2
Recent Publications	4
Late Pleistocene Site on Oregon's Southern Coast	5
<i>by Roberta L. Hall, Loren Davis, and Michele Punke</i>	
Ceremonial or Ritual Bowls of Surrey	9
<i>by Don Welsh</i>	
Annual Index to THE MIDDEN Vol. 34, 2002	14
Permits 2003 - 001 to 2003 - 101	16
Conferences 2003 - 2004	Inside/Outside Back Cover

Saying Goodbye

After eight years volunteering on **THE MIDDEN** in various capacities, it's time to take off my editorial hat.

I would like to thank all the volunteers who I've worked with on **THE MIDDEN** Editorial Committee over the past eight years. It has always been a team effort, and I could not have done it without their dedication, commitment, and numerous hours of hard work.

I also would like to express my heart-felt appreciation to all the contributors who've taken the time, energy, and effort to help fill these pages in order to tell the story of what's happening in BC archaeology. And thank you to all our readers, who've shown so much support and enthusiasm to **THE MIDDEN** over the years.

Heather Myles, Editor

*On behalf of the **THE MIDDEN** editorial committee, the ASBC Executive and all **THE MIDDEN** contributors, I sincerely thank Heather for her years of services and her efforts to produce a publication of which the ASBC can be proud. We wish her the best.*

**Jack Fletcher,
Production Coordinator**

Cover

The Murphy Bowl from the collection of the Surrey Muesum & Archives

Midden Subscriptions

Subscriptions to **THE MIDDEN** are included with ASBC memberships. For non-members in Canada subscriptions are available at \$14.50 per year—\$17.00 for addresses outside Canada.

Single copies of most previous issues are available at \$5.00 each.

Subscription forms and membership application forms are available on our Web site at asbc.bc.ca

BC ARCHAEOLOGY NEWS



Lecture: Lower Seymour Conservation Reserve, Evening Lecture Series

A series of evening lectures presented by the GVRD's Lower Seymour Conservation Reserve (LSCR) continues on September 17, 2003 when archaeologist and author Bob Muckle will speak on "The Seymour Valley Archaeology Project." Muckle is the project's director and head instructor of the Archaeology Field School at Capilano College.

The focus of the project is on an old logging camp and logging and settlement activities in the Seymour Valley that probably dates back to the early 1900s. For the past four years field school students directed by Muckle have documented the remains left by loggers and settlers in the LSCR in North Vancouver.

This illustrated lecture will focus on the results of excavations at an early twentieth century logging camp, and it will describe how people and nature have impacted its remains over the past decades. A variety of artifacts — such as Japanese beer bottles, rusty nails, and tarnished dishes — offer a fascinating glimpse into camp life. The lecture will also highlight an abandoned settlement along the banks of the Seymour River and describe how people and nature have left its mark over the past decades.

The lecture is on Wednesday, September 17th from 7 to 9 pm in the Learning Lodge in the LSCR. The program fee is \$5, and pre-registration is required. The LSCR is located at the north end of Lillooet Road in North Vancouver. Take Exit 22 on Highway 1, and follow Lillooet Road five kilometres to the parking lot.

For more information contact LSCR Education Programs: 604.987.1273 or e-mail: <lscr_ed@gvrd.bc.ca>.

Dr. Jack Nance

Faculty, staff and students of the Department of Archaeology at Simon Fraser University will greatly miss Dr. Jack Nance, who passed away Sunday, June 15th, 2003. A memorial service, followed by a reception, will be held at 2:00 pm, Saturday, September 27th, 2003, on the roof deck adjacent to room EDB (MPX) 9651 at Simon Fraser University. A memorial scholarship for graduate students in Archaeology will be established in tribute to Dr. Nance. Information on giving to this fund will be made available at the memorial. At the request of family, in lieu of flowers, please contribute to this fund.

ASBC Web Page Update

The ASBC welcomes James Dunlop as the new Web page coordinator of the ASBC's Web site. James is a new student member to the ASBC who has enthusiastic plans to update the Web page. Currently, the Web page receives 1,000 hits a month. If you haven't looked recently, check out the recent changes to the ASBC Web page: <www.asbc.bc.ca>.

University of Washington 2003 Archaeological Field School

During the months of June to August, Dr. Ben Fitzhugh and Dr. Jody Bourgeois are conducting an archaeological field school at the 7,500-6,000 year old Tanginak Spring Site (KOD 481), located on the southeast side of the Kodiak Archipelago in Alaska. The importance of the Tanginak Spring Site derives from its antiquity, large artifact assemblage, and several levels of stratification. Working at one of the oldest known sites on the Kodiak Archipelago, the excavation is generating important information about early human

colonization of this region and aspects of the lifestyles of its early inhabitants. To learn more about the 2003 University of Washington archaeological field school check out their Web site: <www.anthro.washington.edu/Archy/fieldschool/fieldindex.html>.

Search the Langley Centennial Museum's Artifact Collection

The Langley Centennial Museum currently maintains a collection of over 8,500 artifacts. The artifact collection was started in 1928-29 by a voluntary organization, the Native Sons, who purchased the last remaining building at the Hudson's Bay Company Fort Langley. Objects relating specifically to the Langley region, including historical and archaeological, are found in the collection. Visitors to the Museum's Web site can search the artifact database to gain catalogue information and view artifact images. To access the Langley Centennial Museum's searchable database see their Web site:

<www.langleymuseum.org>.

Discover Archaeology

The Nanaimo Branch of the Archaeological Society of BC is participating for the second year at the Nanaimo District Museum's "Discover Archaeology" event. The Society is hosting an Interactive Bone Display, designed to allow participants to get up close and personal with various skeletal remains. Learn how animal bones illuminate the archaeological record, telling archaeologists about the season of the kill, subsistence strategies, and social structure. There is also the opportunity to make stone and bone tools. Discover Archaeology takes place on Saturday August 23, 2003 from 11 am to 4 pm at the Nanaimo District Museum. For more information contact Colleen Parsley at <cparsley@telus.net>.

The following news release was authored by the Hul'qumi'num Treaty Group

Ancient Coast Salish Village Site Destroyed by Luxury Seaside Resort Expansion in Southern Gulf Islands

The expansion of a luxury seaside resort at Egeria Bay on South Pender Island adjacent to the new Gulf Island National Park, has resulted in the destruction of a large section of an ancient Coast Salish archaeological settlement (DeRt 4) estimated to date up to 4,000 to 5,000 years in antiquity.

On February 10, 2003, First Nation representatives from the Tseycum First Nation, Tsartlip First Nation, Cowichan Tribes, Lyackson First Nation, and Hul'qumi'num Treaty Group (HTG) met on-site with the resort developers, Poets Cove Seaside Resort at Bedwell Harbour Ltd., as well as a project officer from the Archaeological Planning and Assessment office of the Ministry of Sustainable Resource Management (MSRM), to inspect the development property and assess the site's condition.

The field inspection confirmed that massive piles of unearthed archaeological shell deposits from DeRt 4 had been dumped in the resort's tennis courts, parking lot area, and ditches, and was used as roadbed along the forested edge of the development property adjacent to the Hay Point Reserve. The unregulated construction of the resort's state-of-the-art geothermal energy plant atop the shoreline site is reported to have caused the majority of the site destruction. These unmonitored excavations were conducted at night over several weeks in January, reportedly to remove the deep, wet soils to bedrock during winter low tides. The developer has provided a conservative estimate of between 1,000 to 1,500 cubic meters of archaeological deposit – or 50 to 75 dump truck loads of destroyed archaeological site. In comparison, three years of large-scale excavations at the adjacent Pender Canal sites (DeRt 1 and DeRt 2) by Simon Fraser University in 1984-1986 removed only ca. 800 cubic meters of archaeological deposits – deposits that were carefully documented to contain over 5,400 artifacts and over 100

individual burials spanning the last 5,000 years. The Outer Gulf Island RCMP temporarily shut down the construction site at the Poets Cove resort at the request of the assembled First Nations.

In 1990, a comprehensive archaeological impact assessment study (AIA) was conducted on behalf of the previous property owners, Bedwell Harbour Hotel Ltd. The AIA study indicated that archaeological deposits at DeRt 4 extended up to a maximum 4.6 meters in depth, measured over 3,300 square meters in size, and up to 4,000 to 5,000 years in age. Due to DeRt 4's high level of scientific and cultural significance, it was recommended that a small-scale archaeological investigation of the site was warranted to mitigate the loss of any archaeological deposits by the proposed hotel redevelopment.

The new property owners, Poets Cove at Bedwell Harbour Ltd., have stated they were not aware of the recorded archaeological site and were not advised of any previous impact assessment study. In October 2002, the Archaeological Planning and Assessment office was first made aware of the resort's unregulated construction activity at DeRt 4. The developers agreed

to make expensive readjustments to the placement of the resort hotel to avoid disturbing any archaeological deposits, and a heritage site alteration permit was applied for to monitor the removal of the old pub's footings, a swimming pool, and the placement of new utility lines. However, there was no mention in the approved alteration permit for any large-scale excavations or any mention of constructing a geothermal energy plant atop of the archaeological site.

The Hul'qumi'num Treaty Group has filed an official complaint to the RCMP Outer Gulf Islands detachment to investigate the developer for committing an offence under the *Heritage Conservation Act (1996) Section 13 (2)*; specifically, that the excavation, removal, and destruction of the immense volume of the recorded archaeological site was clearly outside the scope of the developer's heritage site alteration permit. The President of Poets Cove at Bedwell Harbour Ltd. has publicly stated he believes the corporation has done nothing wrong and has received all the relevant government permits, including contracting an archaeological consulting firm to monitor development.

The resort developer publicly accused the RCMP of shutting them down without grounds, threatened charges, and resumed site construction the same week. A joint media release was made by the Hul'qumi'num Treaty Group and Saanich Tribes condemning the luxury resort for its destruction of the archaeological site and their disrespect of First Nations





heritage. However, the chiefs of the Tseycum and Tsawout First Nations, Vern Jacks Sr. and Allan Claxton, respectively, later met with the developers and made an undisclosed private agreement. In exchange for four of their community members to screen the back dirt for human remains and artifacts supervised by the developer's archaeological consultant, it is reported that no charges against the developer will be filed. The developer also agreed to sponsor a "spiritual healing" week at the luxury resort to placate the spirits of the ancestors who were disturbed. In a joint press release with the developers, Chief Allan Claxton sees the agreement as precedent-setting and hopes it is the beginning of a new relationship with developers. "I think we can turn this into a positive — working together," Claxton said. (Times Colonist, February 26, 2003). The Ministry later granted an amendment to the developer's site alteration permit for this salvage archaeological project to proceed.

The Hul'qumi'num Treaty Group were not party to this agreement and have been excluded by the developer to participate in the effort to recover their ancestor's unearthed human remains and artifacts. The HTG has demanded the RCMP lay charges against the developer and enforce the *Heritage Conservation Act* (1996). As stated by Robert Morales, Chief Negotiator, "We believe that a serious illegal offence has occurred by this development corporation under British Columbian law. We believe Crown Counsel must be forwarded the RCMP

investigative report to make their informed decision whether to lay charges. We condemn the developer for their attempts to influence the criminal justice system, divide our First Nations, and profit from the destruction of our Ancestors' remains."

Although the RCMP investigation of the incident has been completed, whether the RCMP will forward its report to Crown Counsel to make a decision on whether to file charges has not occurred. Although a clear violation of the *Heritage Conservation Act*, the Outer Gulf Islands RCMP would prefer to see "alternative solutions" for First Nations and the developer to mutually resolve this event. The HTG has written a formal request to Minister Stan Hagen to assist in upholding the very principles of British Columbia's own heritage legislation in this matter.

If you are concerned by this lack of enforcement of the *Heritage Conservation Act*, the Hul'qumi'num Treaty Group encourages you to write to the Honorable Minister Stan Hagen, MSRM, (PO Box 9054, Stn. Prov. Govt. Victoria, BC, V8W 9E2; fax: 250.356.8273), and the Royal Canadian Mounted Police - Outer Gulf Island Detachment (PO Box 122 Pender Island, V0N 2M0; fax: 250.629.3625), and request that the RCMP investigation report proceed to Crown Counsel. Huy'ch'qu (Thank You)

Hul'qumi'num Treaty Group

RECENT PUBLICATIONS

Hallett, D.J., D. Lepofsky, R.W. Mathewes, K.P. Lertzman. 2003 11,000 Years of Fire History and Climate in the Mountain Hemlock Rainforests of Southwestern British Columbia Based on Sedimentary Charcoal. *Canadian Journal of Forest Research* 33:292-312.

Huckleberry, G., J.K. Stein, and P. Goldberg. 2003 Determining the Provenience of Kennewick Man Skeletal Remains Through Sedimentological Analyses. *Journal of Archaeological Science* 30(6):651-665.

Lambert, Patricia M.. 2002 The Archaeology of War: A North American Perspective. *Journal of Archaeological Research* 10(3):207-41. [Northwest Coast is one of six regions covered]

Lepofsky, Dana. 2002 Plants and Pithouses: The Archaeobotany of Complex Hunter-Gatherers on the British Columbia Plateau. In *The Archaeobotany of Temperate-Zone Hunter-Gatherers*, edited by Sarah L.R. Mason and Jon G. Hather. Institute of Archaeology Occasional Publications, London.

Lepofsky, D. M. Blake, D. Brown, S. Morrison, N. Oakes, and N. Lyons. 2000 The Archaeology of the Scowlitz Site, Southwestern British Columbia. *Journal of Field Archaeology* 27(4):391-416. [released in 2002]

Lepofsky, D., E. Heyerdahl, K. Lertzman, D. Schaepe, and B. Mierendorf. 2003 Climate, Humans, and Fire in the History of Chittenden Meadow. *Conservation Ecology* 7:5. [online] URL:<<http://www.consecol.org/vol7/iss3/art5>>.

Lepofsky, D., M. Moss, and N. Lyons. 2001 The Unrealized Potential of Paleoethnobotany in the Archaeology of Northwestern North America: Perspectives from Cape Addington, Alaska. *Arctic Anthropology* 38(1):48-59.

Continued Page 9

A LATE PLEISTOCENE SITE ON OREGON'S SOUTHERN COAST

by Roberta L. Hall, Loren Davis, and Michele Punke

In November 2002, our research team received news from Beta Analytic that a charcoal sample we had submitted from the Indian Sands site (35CU67C) on the southern Oregon coast dated to 10,430 ± 150 radiocarbon years (cal. 12,930-11,690 BP). With this date, Indian Sands, which was first described by archaeologists in 1935, became the single site from coastal Oregon to join a small number of Late Pleistocene Pacific coast sites in Alaska (Dixon 1999; West 1996), British Columbia (Carlson and Dalla Bona 1996; Fedje and Josenhans 2000; Fedje et al. 2001), and California (Erlandson 1988; Meyer and Rosenthal 1997; Schwaderer 1992). The charcoal and the lithic artifacts associated with it were recovered in September 2002 from a 70 cm deep level in a test excavation.

We appreciate the opportunity to provide background on our project especially because we have learned much from the work of British Columbia coastal researchers such as (but not limited to) Roy Carlson, Daryl Fedje, and Rolf Mathews, and because of our personal experience in Canadian anthropology. We believe that coastal archaeological research has implications and applications not only for archaeologists and coastal tribal members but for everyone who is concerned about the history and sustainability of coastal ecosystems.

Our Late Pleistocene date came as the culmination of three years of geoarchaeological research along the southern Oregon coast designed to identify sediments, and archaeological sites within them, dating to the Pleistocene-Holocene transition (operationally, 15,000 to 8,000 cal. BP). Preceding this project was a quarter century of involvement with the Coquille Indian Tribe in anthropological research that includes archival studies, ethnology, and human biology research

as well as archaeology (Hall 1984, 1995). As in prior studies, the Coquille Indian Tribe was a research partner. Following tribal restoration in 1989, the tribe's cultural resource program embarked on an ambitious research and education program that involved study of landscape evolution as well as prehistory and recent culture history.

Background

The long-term objective of our project

is "to determine parameters affecting human occupation of the Late Pleistocene on the southern Oregon coast." We seek not only to discover archaeological sites of the appropriate antiquity but also to model landforms, climate, and the cultural and human ecology of the earliest coastal settlers, whether they arrived by land or sea. In this article, we emphasize geoarchaeological methods plus the findings at one specific site, but other

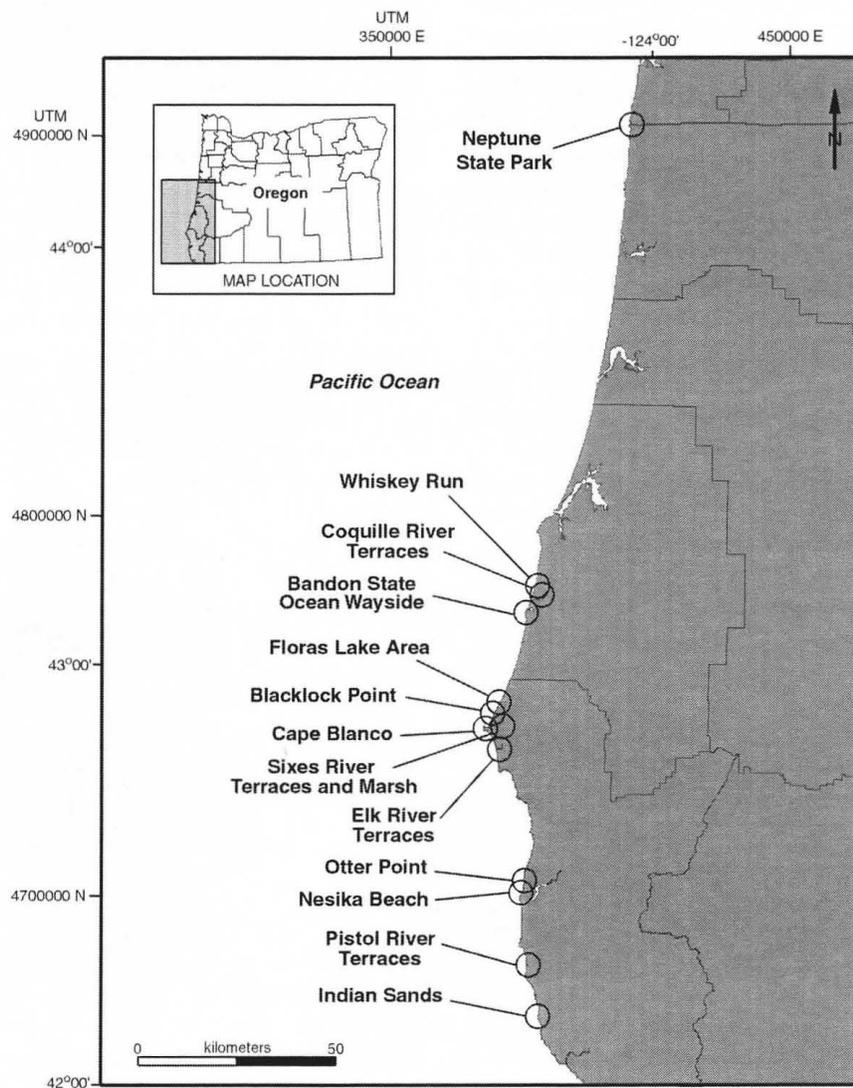


Figure 1: Locations from which samples for soil analyses or for radiocarbon or TL dating have been taken.

aspects of our research are described on our Web site: <http://www.osu.orst.edu/dept/anthropology/SeaGrantWeb/index.html>.

Among the issues our project addresses are the antiquity of maritime traditions on the North American Pacific coast, the possibility of an early coastal migration, explanations for the paucity of old sites on the Oregon coast, and methodologies used to locate sites of the Late Pleistocene or Early Holocene. Archaeological work in Alaska and British Columbia (for example, Dixon 1999, Mandryk et al. 2001, and Carlson and Dalla Bona 1996) has challenged the long-held premise that coastal people came from inland areas and only very slowly learned to use ocean-based resources. The paucity of sites more than 6,000 years old in coastal Oregon compared with the abundance of sites under 3,000 years old may be explained by the geologic dynamism that includes inundation due to rising sea level, burying by alluvial or dune deposits, and erosion, along with the possibility that such sites simply did not exist or were very few in number. Along the Oregon coast several major obstacles stand in

the way of finding old sediments and old archaeological sites. Whereas recent coastal sites tend to be identified by their shell middens (which change the pH from acidic to mildly alkaline and thus help to preserve faunal remains), older sites likely would have been associated with a shoreline now under the sea well west of Oregon's current coastline. Any sites on the current coast that date to more than 10,000 years ago are not likely to have any shell because they would have been too far from a source of shellfish. Because it is also unlikely that such sites would look like recent sites, we believe that there is a substantial risk that even though they exist they will not be discovered. Methods based simply on surface surveys do not take into account these landscape changes that reflect the coast's dynamic history in the Holocene; different methods of discovery are required to locate older sites (Hall et al. 2002).

Methods and Materials

To respond to these challenges, in 1999 we proposed and subsequently embarked upon an interdisciplinary approach emphasizing Geographic

Information Systems (GIS) data and analysis along with stratigraphic investigations in advance of archaeological fieldwork. This contrasts with the age-old approach that we can crudely characterize as "Wander around; find stuff, then interpret it." We developed maps integrating all available geologic and soils information and used these to prepare models based on known patterns of human settlement and resource use (Punke 2001). Data of interest include bathymetric observations as well as current and past locations of coastal river valleys. We reasoned that coastal foragers of the Late Pleistocene may have moved up rivers or streams and into river valleys. We followed the GIS studies by field surveys of the coast and river valleys and included soils analyses as well as dating of sediments, using radiocarbon and thermoluminescence tests, with the goal of understanding the stratigraphy in key areas and the dynamic forces responsible for them. While we primarily tested public lands managed by Oregon State Parks, the US Forest Service, US Fish and Wildlife, and the US Bureau of Land Management, we also were given access to several privately owned properties (Figure 1). Data from all of these investigations will be integrated in future analyses that we believe will suggest new understandings of site development processes on the Oregon coast.

As we sought early landform features we began to learn how much the Oregon coast had changed through time and what these changes might mean for our study. For example, we discovered relict, uplifted peats and remnants of now-dry stream channels that consistently dated younger than 2,000 years BP. During archaeological testing of a site near Bandon, Oregon (35CS9) our work revealed that the combined effects of dune migration and bedrock uplift could work in concert to shift the position of coastal streams and thus affect the sites available for settlement by hunter-gatherers in different time periods. Farther south, work at the Indian Sands site revealed that some coastal headlands still retained dunes and soils of the age that we sought. The decision

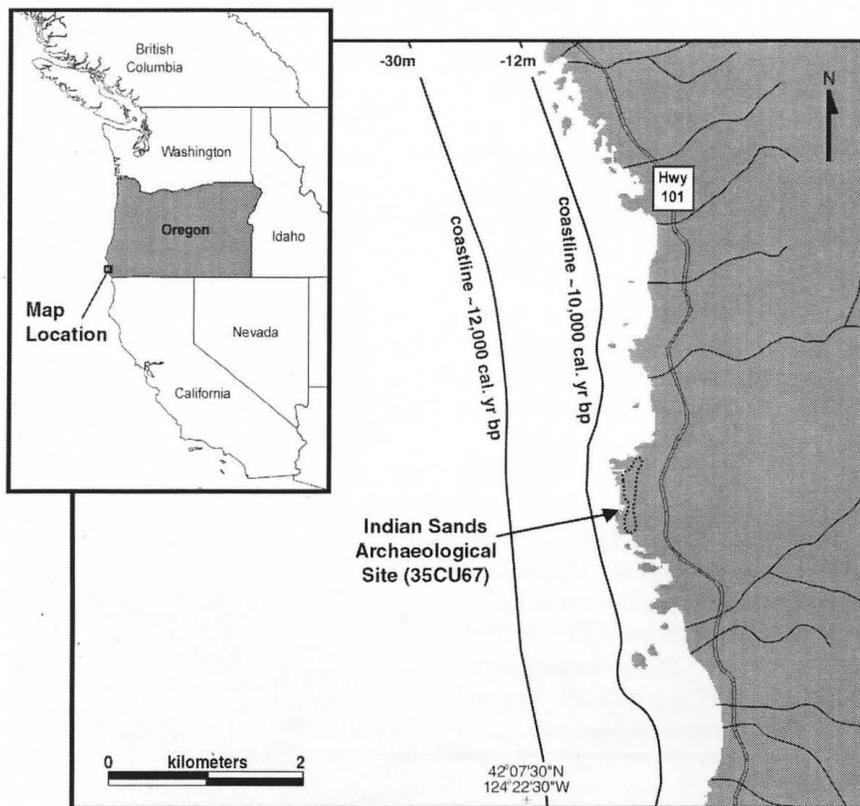


Figure 2: Shoreline near Indian Sands and reconstructions at 10,000 Cal. BP and 12,000 Cal. BP.

to test a soil horizon that was bounded above by Early Holocene dates and below by Late Pleistocene dates led to our discovery of a 10,430 BP occupation. The concordance of archaeological, geographic, geologic, and soils science methods directly resulted in success at Indian Sands.

Cultural Materials

Recovery of a small lithic assemblage from the 10,430 BP level at Indian Sands has offered a valuable perspective on an otherwise unknown period of prehistory of our region. Preliminary analysis by graduate student Sam Willis indicates that the tools are primarily in late stage reduction. Of the 136 lithic pieces from test units at Indian Sands, most are very small - less than 2 cm - and are made of chert (probably local chert as there are outcrops nearby). There also are significant numbers of obsidian pieces that originated from volcanic deposits northeast of Klamath Falls, Oregon, and the Medicine Lake basin in northeastern California (Craig Skinner, personal communication 2002). Both of these obsidian sources are well known to students of obsidian technology in the region and they suggest that the Late Pleistocene settlement of which we have found evidence had a long enough or secure enough occupation for its members to be involved in regional trade or resource-gathering traditions. Lithic studies will add to our understanding of how the site was used as well as information concerning the cultural ecology of the people who used Indian Sands.

Discussion

Our methods and goals are similar to those of some British Columbian projects. For example, Daryl Fedje and colleagues in Haida Gwaii have developed considerable data concerning sea-land relationships at the end of the Pleistocene, data that have allowed them to understand site formation and preservation processes of some known sites and to identify areas to seek other early sites (Fedje 1993; Fedje et al. 2001). While some methods and analyses overlap between the areas,

different approaches stem from differences in glaciation history. Some coastal sites in the Queen Charlotte Islands that were inundated in the Pleistocene have re-emerged due to isostatic rebound of land that had been depressed by the weight of glacial ice, but Oregon has no glacial history and Oregon beaches of the Late Pleistocene have remained under the sea. Whereas British Columbia's glacial-sculpted coastline features many protected, resource-rich inlets and estuaries that have fostered large populations and complex societies, the Oregon coastline is almost totally unsheltered from dynamic forces of sea and storm. Nonetheless, we believe it is important to map coastlines and river channels as they existed in the Late Pleistocene because these data can help us locate sites on the existing coast as well as understand better the coastal environment faced by earlier peoples.

Using bathymetric data from the National Oceanic and Atmospheric Administration (GEODAS 1998) and global sea level estimates at the time of the Pleistocene-Holocene transition (Fleming et al. 1998) we reconstructed paleoshoreline locations for the Indian Sands vicinity (Figure 2). At the time of the earliest known occupation at Indian Sands, the shoreline was between 1 and 1.5 km west of the site; 2,000 years later it was less than 0.5 km away. These reconstructions are congruent with the cultural assemblages at the site, for example, and suggest why the deepest level contains lithics but lacks shell, while culturally-altered shell provided the basis for dating deposits on the deflated surface to 2,000 years later (Moss and Erlandson 1999). (See Davis et al. for a detailed discussion of the geoarchaeological work and the excavation at the site.)

Future Work

Our project to find sites and understand the ecology of the earliest coastal settlers in Oregon has only completed its first phase. We propose to do additional test excavations at the Indian Sands site in June, 2003; further study of chert and obsidian artifacts and technology; application of existing

paleoecological data and environmental reconstructions based on ocean and fresh-water cores (Pisias et al. 2001; Grigg and Whitlock 1998); and collection and analysis of additional geological and paleoecological data on the southern Oregon coast. These approaches will help us understand the human and cultural ecology of Oregon's earliest coastal people. By integrating Oregon's earliest sites into the regional framework of the Pacific coast, we may also help to answer questions investigated by archaeologists in British Columbia concerning the chronology and patterns of early migrations and settlements in the Americas.

Acknowledgments

Many people have helped us with information and expertise. We cannot enumerate them all but especially want to thank Don Ivy, coordinator of the cultural resource program of the Coquille Indian Tribe, and Robert Kentta, Cultural Resources Coordinator of the Confederated Tribes of Siletz, for their research and support. We thank Oregon State University (OSU) colleagues Paul Komar, George Moore, Jon Kimerling, Dave Brauner, and Dick Ross for their advice and interest. Graduate student Sam Willis produced a preliminary analysis of lithic technology, and USDA soils scientist Matthew Fillmore helped with soils analysis. We are grateful to Craig Skinner of Northwest Research Obsidian Studies Lab for sourcing obsidian artifacts. Staff members of Oregon State Parks, the US Bureau of Land Management, the US Forest Service, and the US Fish and Wildlife Service have offered access and advice, as have several private landowners. This research was funded by the NOAA Office of Sea Grant and Extramural Programs, US Department of Commerce, under grant number NA76RG0476, and project number R/CC-04, and by appropriations made by the Oregon State legislature. We appreciate the support of staff of OSU Sea Grant. The US government is authorized to produce and distribute reprints for governmental purposes notwithstanding copyright notations.

References

- Carlson, Roy L. and Luke Dalla Bona (editors) 1996 *Early Human Occupation in British Columbia*. University of British Columbia Press, Vancouver.
- Davis, Loren G., Michele L. Punke, Roberta L. Hall, Matthew Fillmore, and Samuel C. Willis Evidence for a Late Pleistocene Occupation on the Southern Northwest Coast. *Journal of Field Archaeology*, in press.
- Dixon, E. James 1999 *Bones, Boats, and Bison*. University of New Mexico Press, Albuquerque.
- Erlandson, Jon M. 1988 Cultural Evolution and Paleogeography on the Santa Barbara Coast: A 9,600 Year Carbon 14 Record from Southern California. *Radiocarbon* 30(1):25-39.
- Fedje, Daryl W. 1993 *Sea Levels and Prehistory in Gwaii Haanas*. Unpublished MA thesis, University of Calgary, Calgary.
- Fedje, Daryl W. and Heiner Josenhans 2000 Drowned Forests and Archaeology on the Continental Shelf of British Columbia. *Geology* 28(2):99-102.
- Fedje, Daryl W., Rebecca J. Wigen, Quentin Mackie, Cynthia R. Lake, and Ian D. Sumpter 2001 Preliminary Results from Investigations at Kilgii Gwaay: An Early Holocene Archaeological Site on Ellen Island, Haida Gwaii, British Columbia. *Canadian Journal of Archaeology* 25:98-120.
- Fleming, Kevin, Paul Johnston, Dan Zwartzl, Yusuke Yokoyama, Kurt Lambeck, and John Chappell 1998 Revising the Eustatic Sea-Level Curve Since the Last Glacial Maximum Using Far-and-Intermediate-Field Sites. *Earth and Planetary Science Letters* 163:327-342.
- GEODAS 1998 *Geophysical Data System for Hydrographic Survey Data, National Ocean Service. Hydrographic Surveys Volume 1 and 2*. National Geophysical Data Center, National Oceanographic and Atmospheric Administration, Boulder.
- Grigg, Laurie D., and Cathy Whitlock 1998 Late-Glacial Vegetation and Climate Change in Western Oregon. *Quaternary Research* 49:287-298.
- Hall, Roberta L. (editor) 1995 *People of the Coquille Estuary*. Words and Pictures Unlimited, Corvallis.
- Hall, Roberta L. 1984 *The Coquille Indians: Yesterday, Today, and Tomorrow*. Smith, Smith, and Smith Publishing Co., Lake Oswego.
- Hall, Roberta L., Donna McCarthy, and Don Alan Hall 2002 How Were North American Sites of the Pleistocene-Holocene Transition Discovered? *North American Archaeologist* 23(2):145-156.
- Mandryk, Carole A.S., Heiner Josenhans, Daryl W. Fedje, and Rolf W. Mathewes 2001 Late Quaternary Paleoenvironments of Northwestern North America: Implications for Inland Versus Coastal Migration Routes. *Quaternary Science Reviews* 20:301-314.
- Meyer, Jack, and Jeffrey S. Rosenthal 1997 Archaeological and Geoarchaeological Investigations at Eight Prehistoric Sites in the Los Vaqueros Reservoir Area, Contra Costa County, California. Report Prepared for Contra Costa Water District.
- Moss, Madonna L., and Jon M. Erlandson 1999 Radiocarbon Dates from Native American Archaeological Sites on the Oregon Coast. *Current Archaeological Happenings in Oregon* 24(3):20-24.
- Pisias, N.G., A.C. Mix, and L. Heusser 2001 Millennial Scale Climate Variability of the Northeast Pacific Ocean and Northwest North America Based on Radiolaria and Pollen. *Quaternary Science Reviews* 20:1561-1576.
- Punke, Michele Leigh 2001 *Predictive Locational Modeling of Late Pleistocene Archaeological Sites on the Southern Oregon Coast Using a Geographic Information System*. MA thesis, Oregon State University, Corvallis.
- Schwaderer, Rae 1992 Archaeological Test Excavation at the Duncans Point Cave, CA-SON-348/H. In *Essays on the Prehistory of Maritime California*, edited by Terry L. Jones, pp.55-71. Center for Archaeological Research, Davis.
- West, Frederick Hadleigh (editor) 1996 *American Beginnings: The Prehistory and Paleoecology of Beringia*. University of Chicago Press, Chicago.
- Roberta Hall (PhD, University of Oregon, 1970) became involved in coastal prehistory when she taught in the Anthropology Department at the University of Victoria from 1970 to 1974. Her work at Oregon State University from 1974 to the present involves studies in human biological adaptation, medical anthropology, and southern Oregon coast prehistory.**
-
- Loren Davis earned a PhD from the University of Alberta in 2001. On the faculty at Oregon State University, he has research interests in the archaeology, geoarchaeology, and Quaternary geology of western North American and Baja California, with a special interest in the Pleistocene peopling of North America.**
-
- Michele Punke completed a master's degree emphasizing archaeology at Oregon State University (OSU) in 2001 and currently is a doctoral candidate in Geosciences at OSU. Her research involves physical landscape processes, digital modeling, archaeology, and GIS applications in anthropology.**
-
- Recent Publications Continued**

Lertzman, L., D. Gavin, D. Hallett, L. Brubaker, D. Lepofsky, and R. Mathewes. 2002 Long-Term Fire Regime Estimated From Soil Charcoal in Coastal Temperate Rainforests. *Conservation Ecology* 6(2):5. [online] URL: <<http://www.consecol.org/vol6/iss2/art5>>.

Losey, R.J., N. Stenholm, P. Whereat-Phillips, and H. Vallianatos. 2003 Exploring the Use of Red Elderberry (*Sambucus racemosa*) Fruit on the Southern Northwest Coast of North America. *Journal of Archaeological Science* 30(6):695-707.

Ostapkowicz, J., D. Lepofsky, R. Schulting, and S. McHalsie. 2002 The Use of Cattail (*Typha latifolia* L.) Down as a Sacred Substance by the Interior and Coast Salish. *Journal of Ethnobiology* 21:77-90.

Tveskov, Mark A., and Jon M. Erlandson. 2003 The Haynes Inlet Weirs: Estuarine Fishing and Archaeological Site Visibility on the Southern Cascadia Coast. *Journal of Archaeological Science* 30(8):1023-1035..

CEREMONIAL OR RITUAL BOWLS OF SURREY

by Don Welsh

The following study is an attempt to gather together information about a particular class of archaeological artifact within a limited geographical territory. Within the Fraser River / Gulf of Georgia area are found stone bowls decorated with anthropomorphic or zoomorphic images. The circumstances of their deposition and the subject matter depicted on them have led archaeologists to interpret them as ceremonial items - the possession of a ritualist or shaman. These bowls have been found within complex shell midden sites and conversely in remote locations.

Many of these bowls turned up when land was cleared for farming. Others surfaced when houses were constructed on shell middens. These artifacts often made their way to local museums, usually without good site provenience. If records did accompany the artifact, successive staff changes have often resulted in loss of information. The following study is an attempt to gather together such information as remains regarding bowls of this type, found in Surrey.

Surrey Museum and Archives

The majority of the bowls found in Surrey have found their way to the Surrey Museum and Archives in Cloverdale. I would like to thank Jim Whittolme and Lynn Saffery of the Surrey Museum and Jaquelyn O'Donnell and Janet Turner of the Archives for their assistance in the past. I would also like to thank Bev Somers and Lana Panko of the Museum and Peter Johnson of the Archives for more recent assistance. I would also like to thank Hellen Murphy and Jack Berry - both members of the Surrey Historical Society for their recollections and assistance.

All bowls currently in the Cloverdale Museum are on public display and may be observed during museum hours.

The Emil Asbeck Collection.

Emil Asbeck was an early resident of



*Bowl #95 [409-62]
Length: 18.0 cm Width: 14.5 cm
Height: 9.5 cm Bowl depth: 5.5 cm
Material: Basalt*

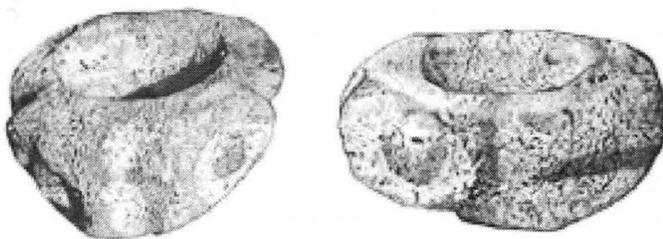
Crescent Beach, living on the second lot north of Beecher Street, [2743 Gordon Ave.]. What is now the alley between Gordon and McKenzie Avenues was known as Asbeck Street. Hellen Murphy recalled that, "He worked along the bluff." He also collected a large number of artifacts from the construction of Dr. King's medical clinic next door to his residence, [2781 Gordon Ave.]. Any records of these artifacts that were available, were organized by Grant Keddie, [now of the Provincial Museum], while he was employed in the Surrey Museum. We can be confident that the artifacts came from Crescent Beach but we have no exact locations currently available.

#95 [409-62] has two depressions for eyes, a third depression in the chin area as well as carved lips. All surfaces have

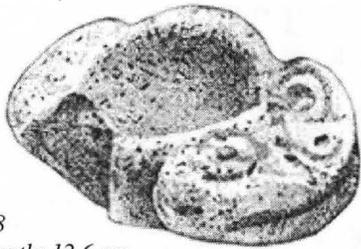
been extensively smoothed. The smoothing could be water wear.

#96 [410-62] is carved in a manner that makes it somewhat hard to define, [as well as photograph, taking 3 attempts]. A small oval cobble has been pecked into a bowl with 4 V-shaped notches roughly defining four quarters. Two contain eyes carved in the round. These eyes diverge in two planes approximately 120 degrees apart and angle downward approximately 30 degrees. The post-orbital constriction follows under the eyes making this end sit up from the basal surface. A horizontal line that ends slightly before the side notches marks the remaining quarters. From the side, this line appears to be a mouth in a rather longhead. From other angles, the eyes have a distinct owl-like quality, with this line defining the body. Because of lack of beak, I hesitate to commit myself to the owl interpretation, as it could look as much like a frog. My impression is that this is a clever carving representing all these things depending on the viewpoint of the observer.

#118 has a slightly different eye treatment. Depressions mark the pupil while the round eyes are marked by a carved depression. Depressions mark nostrils, also defined by a slight groove following from the eye. The mouth is straight and fairly large. Marked postorbital constrictions define a somewhat heart shaped head. Eyes are in



*#96 [410-62]
Length: 11.0 cm Width: 9.5 cm
Height: 5.0 cm Bowl depth: 1.5 cm
Material: Vesicular Lava*



#118

Length: 12.6 cm

Width: 12.3 cm Height: 8.1 cm

Bowl depth: 3.4 cm Material: vesicular basalt

the same plane, staring upward giving the head the appearance of a salamander or sculpin. Following the head is a round bowl depression followed by a broad tail. It could be argued that this represented a beaver.

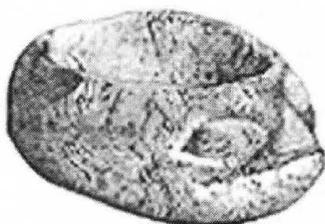
Mrs. Doubleday

Mrs. Doubleday is listed as donor and her address of 17948 Trans Canada Highway, Cloverdale. This is the old Trans Canada Highway now known as the Fraser Highway. Whether this is the location where the bowl was found was not included in the notation. This is not an unlikely example of a bowl from a remote location.

#147 [75.63] takes the idea previously presented, a little further. The eyes are carved in the round, in the manner of much Salish carving, the lower curve being flatter while the upper is more arched. The eyes form two planes 120 degrees apart. A straight mouth line lies below a somewhat pointed snout and above a prognathous lower jaw. This artifact could arguably represent a sockeye salmon.

Helen Murphy

Helen Murphy has been a long time member of the Surrey Historical Society and an active friend to all archaeologists working at Crescent Beach.



#147 [75.63] Doubleday Bowl

Length: 11.5 cm Width: 8.9 cm

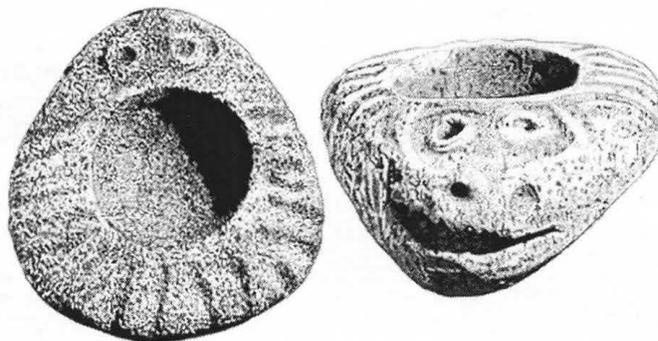
Height: 6.0 cm Bowl depth: 3.0 cm

Material: tuff stone

#165 [10-68], the Murphy Bowl, was published in the Surrey Leader in Sept. 5, 1968. It was uncovered by O'Connell Murphy, while operating a backhoe to dig a service trench to 2604 O'Hare Lane, a beach-side property at Crescent Beach. The artifact was approximately a foot down, 100 feet from high tidemark. This is consistent with a Marpole Culture level from Len Ham's nearby excavation. This artifact is obviously a flat fish of which starry flounder is common in Boundary Bay.

d. Doreen Hales

#260.73, donated by Mrs. Doreen Hales, [with no location], is the least modified natural cobble. Two naturally occurring bubbles in the lava provided eyes while the cobble is minimally modified to form a head framing these features. The effect is striking yet very minimalist in execution.



Bowl #165 [10-68] Murphy Bowl

Length: 19.5 cm Width: 17.0 cm

Height: 9.0 cm Bowl depth: 2.8 cm

Material: sandstone

University of British Columbia

Recorded as the McDonald Bowl, [U.B.C. book: A14], DgRq 2:1 is available for viewing by appointment at the U.B.C. Archaeology Laboratory. This artifact came from the farm of Mr. N.S. McDonald on Hall's Prairie Rd., east of Cloverdale. Heritage Branch crew recording the site were unable to relocate the exact location within the farm extending from 184th to 192nd St. along 32nd Ave. Once more this is typical of a provenience in a remote location. I would like to thank R.G. Matson and Mrs. Joyce Johnston of the U.B.C. Laboratory of Archaeology and Carol Shepstone, librarian for the M.O.A. ethnology library for their assistance in accessing this artifact.

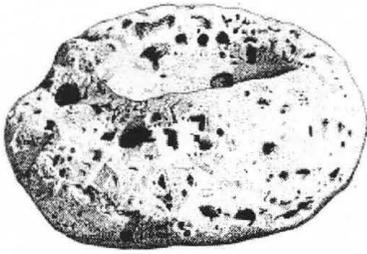
Vancouver Centennial Museum

This bowl is on permanent display in the Vancouver Centennial Museum. I would like to thank Lynn Miranda for her assistance in viewing this bowl.

This artifact has the largest publication history. Known as the Sullivan or Bear Creek bowl as well as the Eddy bowl, it was donated to the Vancouver Museum [acc.# QAA 1084] by Mr. and Mrs. David Eddy. Published in the Surrey Leader in Feb. 7, 1952, it was also published by Pearson in 1958 in Land of the Peace Arch, apparently from the same photo [Pearson 1958: plate 2, facing page 20]. This was also the mode used to produce the illustration by F. L. Beebe used by Wilson Duff [Duff 1956: p.144]. Duff later published a photo of this specimen in Images Stone, B.C. [Duff 1975: p.42, 170].

This pyrozone stone bowl was plowed up in 1950 by Mr. Eddy on his farm, the old Loney place, north of Sullivan. "It was pure chance that it was turned up," Mr. Eddy related, "as I plowed a dead furrow two furrows deep, and was returning up the furrow when the point of the plow dug into the earth and turned up this stone." Even then, the bowl's adventures were not over, for Mr. Eddy thought it was only a rock, one of the few on the farm. A few days later he and Mrs. Eddy were walking down to investigate some bulldozing being done on their place, and Mr. Eddy picked up the "rock" to heave into Bear Creek which runs only a few feet away. Mrs. Eddy noted the carving and rescued it from oblivion [Surrey Leader: Feb. 7th 1952].

The old Loney farm was located on either side of 152nd Street in the area east of 150th Street. Most of the Farm was on glacial deposits, but included Mahood Creek now known as Bear Creek. On the south side of 152nd is a portion of the old land, which is level, and includes an old



Bowl #260.73
 Length: 18.0 cm Width: 14.5 cm
 Height: 7.0 cm Bowl depth: 3.8 cm
 Material: Vesicular basalt

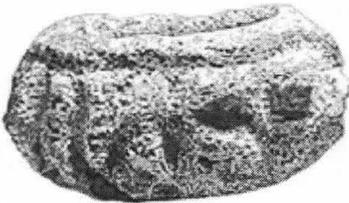
alluvial plain of the Serpentine River. This is the only area of the farm, which would not have been quite rocky due to its glacial till substrate. The exact location is not known, but it must have come from within throwing distance of the creek. This area is near the present location of Coyote Creek Golf Club and the artificial lake known as the Surrey Lake or by the tongue in cheek name, "Duck Lake". [You need to duck when the golfer shoots].

Private Collections

Ken McDonald

Ken McDonald found an isolated stone bowl while farming on a property on Mud Bay, between the Serpentine and Nicomekl Rivers. The bowl was found on the edge of an old slough scar, known as Snider Creek. This location is registered as site # DgRr 28 in the provincial site registry. This general area, between the rivers, was identified by Gibbs, as the location of the Simiáhmoo [Semiahmoo] camp in 1956 [Gibbs 1865]. The south bank of the Serpentine River was a good location for oyster gathering. In post contact times, the oysters were sold in the market at New Westminster [Suttles n.d.].

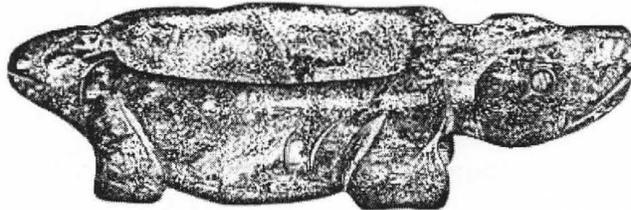
The bowl is asymmetric, slopping towards the left side. The bowl is



MacDonald Bowl, UBC
 Length: 12.6 cm Width: 8.4 cm
 Height: 6.8 cm Bowl Depth: 3.4 cm
 Material: Vesicular basalt

surrounded with a slight raised rim. McDonald supplied a photo of the bowl next to a tape measure along the length. All other measurements were estimated from this and two other photos of the bowl. Red ochre stains cover much of the artifact and is particularly noticeable in the dish of the bowl. It seems likely that this "bowl" is indeed a mortar that was used to grind ochre, further suggesting a ritual function. Although ochre was used ritually, it also was used for pragmatic purposes to prevent sunburn and to repel mosquitoes.

Given that this area was used at least seasonally, was close to Crescent Beach and close to the Nicomekl/Salmon River travel route, this location may not be remote. Conversely, there is no evidence that this was a large or complex site, or that at the time of the bowl's deposition, was a site at all. In conclusion, this appears to be a case of remote deposition rather than midden burial.



Zoomorphic Bowl QAA 1084
 Length: 30.5 cm Width: 11.4 cm
 Thickness: 7.6 cm Material: Nephrite

Wickham

The Wickham bowl was found in Crescent Beach in association with a conical topped hand maul and a nephrite adze blade. These were photographed and published in *The Surrey Story*, [Treleaven 1992: p 133]. The photographer was Jack Berry who provided the address where these artifacts were found. He was firm in his recollection that these were donated to the Surrey Museum [Jack Berry: pers. com.]. The Surrey Museum has no records of this bowl, so its current location is a bit of a mystery. These artifacts were unearthed at 2710 McBride Avenue, in the back yard.

The bowl is somewhat asymmetric, stopping towards the left. This feature is in common with the McDonald bowl.

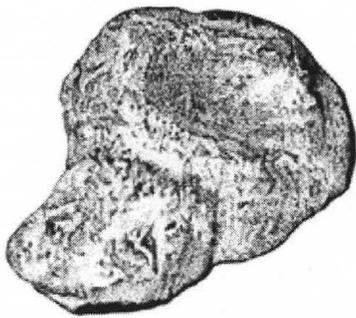
Discussion

The Loney or Sullivan Bowl was interpreted as a bear with a turtle tail, in the style of many early art interpretations, in which the animal or animals involved were identified. Compared with other examples of Salish art, the main head could easily be a wolf or fisher. The second head definitely looks reptilian, but could be a snake or lizard as easily as a turtle. The overall design is much like the top figure of the Skagit atlatl, which has been interpreted as a lightning snake [Borden 1969a].

The two mythological snakes of the Salish, the lightning snake and the two-headed snake are both depicted with legs. Among the Kwagulth, the double-headed snake is generally depicted with a large head with two snake like "wings" which are the two views [left and right] of the body and second head. If the bowl was cut and spread out in this manner, it would have a large central head flanked by snake-

like "wings" with two legs each [see also Borden 1969a]. The Salish, although sharing the belief in the double headed serpent do not represent it in the split representational manner of the Kwagulth.

Duff on the other hand points out that turtles are not found in the Fraser Valley and yet there are other bowls shaped as turtles or including turtle-like parts. Provincial Museum reports note the Green Pond turtle living in the White Rock district. At least one informant that grew up on the Fraser River on River Road in Delta, remembered painted turtles when he was growing up. The range of turtles was larger than today where painted turtles are limited to east of the Cascades. Ham and Percy report turtle bones from Crescent Beach and St. Mungo [Ham: pers. com. And see later]. It seems like many meanings may be read into this well made sculpture. Possibly this is another



Site # DgRr 28 Bowl
 Length: 23.1 cm Width: 14cm
 Height: 7 cm
 Material: Vesicular Basalt, Ochre Stained

case of all of the above. The author prefers the two-headed snake interpretation. This spirit was a dangerous and powerful medicine power that may have been the power of a shaman. This dangerous power may have motivated the bowl being left in a location remote from other artifacts.

The double-headed serpent was reported to live in swampy areas. Local ethnographies report its presence in Burn's Bog and at the head of California Creek [Suttles: n.d.].

The McDonald bowl and the Wickham bowl are both artifacts, which have features, which have led to their being termed "turtle bowls". Both have heads on elongated necks, which could look like turtles. The identification however is not complete as there is no depiction of legs or details of the shell. In the discussion regarding the Eddy bowl, the turtle image was questioned but data was presented that indicated a presence of turtles in this area. Other possible models such as lizards and salamanders were presented. Several other bowls were tentatively identified as various fish species. Len Ham points out that these are all species, which have multiple young and could therefore represent fertility [Ham: pers. com].

Rick Percy reported turtle shell from the Crescent Beach Site.

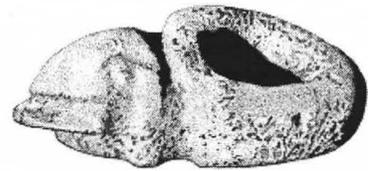
The only piece of turtleshell recovered during the project is an object that has been worked to an asymmetrical pentagonal shape. The item, catalogue no. 400, is probably an unfinished pendant and lacks only a suspension hole. The five edges have all been carefully ground but not polished. Viewed from the side, the piece is slightly curved and shows a

natural protuberance along what can be called the bottom edge. Possibly a start was made to remove the protuberance as witnessed by small grinding marks on its side. At some time in its past the object has been in contact with red ochre, some of which adheres to its surfaces and is detectable with the aid of a microscope [Percy 1974: p222].

Ham reported turtle shell from the St. Mungo Site as already noted.

Bone pendants manufactured from exotic materials have been recovered from Charles assemblages at the Crescent Beach and St. Mungo sites. The Crescent Beach artifact is an ochre stained blank ground from turtle plastron [Percy 1974: 222]. Those from St. Mungo are also ground from turtle plastron [4], a large sturgeon dermal plate [1], and a fragment of a beaver mandible, to form large pendants.

Only 2 of the turtle plastron artifacts have been drilled, while the holes in artifacts 4196 B2/PP [turtle] and 3568 A2/T6 [beaver mandible fragment] are very

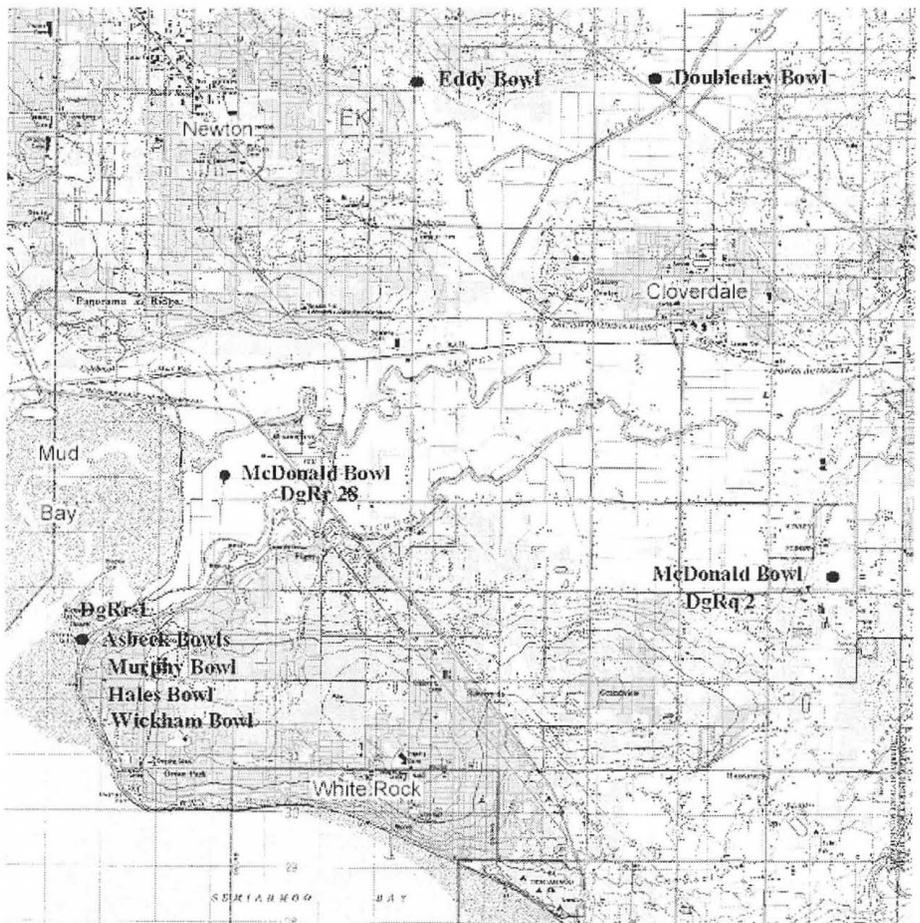


Wickham Bowl
 Estimated Length 27cm

well worn [Figure A4.4]. [Ham 1984: p81].

Both of these excavations recovered turtle shell, which was intended for decorative purposes. There is no direct evidence that this decorative function had ritual or ceremonial significance, but the ochre stain might suggest this conclusion. In summary, turtles were present in the Fraser Delta in the past, they may have had ritual significance and they could have been the models for sculptured bowls as some authors have suggested.

Although some images can be interpreted as specific animals, and most authors attempt to do just that, most of these images are rather vague and can be interpreted as other animals by other authors. Within the Salish culture, spirit



Reported location of Bowls

power is never spoken about too openly as it can be stolen by another. At spirit dances, the spirit may be hinted at, or it's general class known, but specifics are not discussed. If these bowls represented spirit helpers, then it would be in the advantage of the owner to keep the specific spirit represented secret [Mike Kew: pers. com.].

The spiritual initiations undertaken by the Coast Salish involve the use of specific pieces of equipment such as staffs. This equipment is only used for one initiation and is afterwards deposited in a remote location because it is believed to contain forces, which could be harmful to others. These locations include cliffs, islands and caves as well as inside hollow trees. As many of this class of artifacts are found in remote locations, it is likely that the same beliefs apply to prehistoric stone bowls.

Are there other potential explanations for these bowls? The assumption of spirit power is consistent with Salish ethnography but bowls could be utilitarian items used for anything. The relative scarcity of these artifacts and the circumstances of their deposition make this explanation unlikely. If they were however, in fact utilitarian, then their use probably involved social status - only the rich being able to afford their manufacture.

How long does it take to make this type of bowl? In practical terms, the time involved depends on the hardness of the stone and the amount of detail involved. The author made two similar bowls from vesicular lava and one from tuff stone. They took 5 minutes, 1 hour and 4 hours

respectively. The last one took four hours because it was the most detailed of the three. Although this is a small sample, they could potentially be made in less time than a wooden container, so social status does not seem to explain these artifacts.

What is the age of this type of bowl? This form of bowl, was first reported by Harlan Smith, in his excavations at the Marpole Site and other sites within the Fraser Valley [Smith 1903: p 158]. Over the years, quite a number have surfaced, but their dating remained elusive. The general archaeological assumption has been that they date from the late Marpole time period - around 500 A.D. Other archaeologists are not as comfortable with this date and hypothesize that they may have continued into and through the recent Gulf of Georgia Culture and into the Developed Coast Salish Culture initially contacted by Europeans. Recent excavations at Dionesio Point on Galiano Island have recovered two of these bowls in context. One was found in the lower C occupation layer while the other was in the uppermost B occupation layer. This site has 13 radiocarbon dates ranging from 1770 - 1440 radiocarbon years ago, two of which are from carbon in direct association with the bowls. One dated to 1570 ± 70 radiocarbon years [WSU 5W33] and the other to 1440 ± 60 radiocarbon years [Beta 130,056]. These dates confirm the general assumption of around 500 A.D. as the time period represented by these bowls, but the tight time range of the site occupation does little to answer if they were used at a later date.

Bibliography

- Borden, Charles 1969a The Skagit River Atlatl: a reappraisal. B.C. Studies No. 1:13-19.
- Duff, Wilson 1956a Anthropology in British Columbia Number 5, Prehistoric Stone Sculpture of the Fraser River and Gulf of Georgia. British Columbia Provincial Museum, Victoria, British Columbia pp 15-152.
- 1975 Images Stone B.C. Thirty Centuries of Northwest Coast Indian Sculpture. University of Washington Press. Seattle. 191 pp.
- Gibbs, George 1856 Map of the Western Part of Washington Territory.
- Grier, Colin 1999 Household Archaeology at Dionesio Point [DgRv 3]. Unpub. Rept. Conducted under Heritage Permit 1998-187.
- 2001 The Social Economy of the Prehistoric Northwest Coast Plankhouse. Unpub. Ph. D. dissertation. Arizona State University. Tempe, Arizona.
- Ham, Leonard C. 1983 The 1982/83 Archaeological Excavations At The St. Mungo Site [DgRr 2], North Delta, British Columbia. Report prep. for B.C. Ministry of Transportation and Highways, on file: Heritage Conservation Branch.
- Pearson, John 1958 Land of the Peace Arch. Surrey Centennial Committee, Cloverdale, B.C. 159 p.
- Percy, Rick 1974 The Prehistoric Culture Sequence of Crescent Beach. Unpub. M.A. Thesis, S.F.U. 278 pp.
- Smith, H. I. 1903 Shell-Heaps of the Lower Fraser River, British Columbia. Publications of the Jesup North Pacific Expedition 2[4]; Memoirs of the American Museum of Natural History 4[4]: 133-191. New York.
- Surrey Leader Feb. 7 1952 Eddy Bowl|Sept 5 1968 Evidence of Early Residents
- Suttles, Wayne n.d. Semiahmoo Place Names. Unpublished document provided by the author.
- Treleaven, G Fern 1992 The Surrey Story revised edition with update by Stan McKinnon. Surrey Historical Society, Surrey B.C. 232 pp.



ANNUAL INDEX TO THE MIDDEN VOL. 34, 2002

Compiled by Heather Myles, Editor

* indicates an illustrated article

Author

- Berkey, Marianne: *What Lies Beneath: Excavations at Dragon Lake. 34/2:2-5
- Chisholm, Brian: *What Can We Learn From Those Who Have Passed On? Book Review: Prehistoric Mortuary Variability on Gabriola Island, British Columbia. 34/3:14-15
- Franck, Ian: Future Management of Archaeological Resources. 34/3:6;13
- Grier, Colin and Bill Angelbeck: *Getting Out of the House: The 2002 UBC Field School at Dionisio Point. 34/3:2-5
- Jackman-Craig, Nicole: *The Jenyo Quarry: A Chalcedony Quarry Site on the Nechako Plateau. 34/2:6-7
- Marshall, Amanda L.: *Culturally Modified Trees of the Nechako Plateau: Cambium Utilization Amongst Traditional Carrier (Dakhel) Peoples. 34/1:2-11
- Myles, Heather: Annual Index to *The Midden* Vol. 33, 2001. 34/1:22-24
- Nicholas, George P. and Nola M. Markey: *Notes From The Underground: Some Thoughts on the "Future Management of Archaeological Resources." 34/3:7-13
- Petkau, Karen: *Carrying A Culture: The Distinctive Regional Styles of Some Basket Making Nations in the Pacific Northwest. 34/4:6-9
- Spurgeon, Terry: *A Critical Look at the History, Ethnography, and Linguistics of Wapato. 34/1:12-21
- Stumper, Ian, Denis St. Claire, and Stella Peters: *Mid-Holocene Cultural Occupation of Barkley Sound, West Vancouver Island. 34/4:10-11
- Trost, Teresa: Book Review: The Archaeology Education Handbook: Sharing the Past With Kids, edited by Karolyn Smardz and Shelley J. Smith. 34/2:8-9
- Whiting, Faith: *What A Basket Holds: Basketry in British Columbia. 34/4:3-5
- Antiquus Archaeological Consulting Ltd. 34/4:12
- *Archaeology News. 34/4:2
- BC Archaeology Forum. 34/1:26
- BC Heritage Trust (letter). 34/4:21
- Book Review: Prehistoric Mortuary Variability on Gabriola Island, British Columbia. 34/3:14-15
- Book Review: The Archaeology Education Handbook: Sharing the Past With Kids, edited by Karolyn Smardz and Shelley J. Smith. 34/2:8-9
- Cariboo Heritage. 34/4:12
- *Carrying A Culture: The Distinctive Regional Styles of Some Basket Making Nations in the Pacific Northwest. 34/4:6-9
- Conferences 2002. 34/1:25-26
- Conferences 2003 - USA. 34/2:21
- Conferences 2003 - Canada. 34/2:22
- Conferences 2003 USA. 34/3:21
- Conferences 2003 Canada. 34/3:22
- Conferences 2003-2004. 34/4:22
- *Culturally Modified Trees of the Nechako Plateau: Cambium Utilization Amongst Traditional Carrier (Dakhel) Peoples. 34/1:2-11
- Debitage. 34/1:11; Debitage. 34/1:21; Debitage. 34/2:9; Debitage. 34/4:9
- *Ecofor Consulting. 34/4:12
- End of an Era. 34/2:1
- Exhibits. 34/1:24; Exhibits. 34/2:20
- Future Management of Archaeological Resources. 34/3:6;13
- *Getting Out of the House: The 2002 UBC Field School at Dionisio Point. 34/3:2-5
- Lectures. 34/3:21
- Matrix Research Ltd. 34/4:12-13
- *Mid-Holocene Cultural Occupation of Barkley Sound, West Vancouver Island. 34/4:10-11
- News Items. 34/2:20
- Norcan Consulting Ltd. 34/4:13
- *Notes From The Underground: Some Thoughts on the "Future Management of Archaeological Resources." 34/3:7-13
- Okanagan University College. 34/4:13
- Parks Canada Haida Gwaii Investigations 2002. 34/4:13-14
- Permits Issued by Archaeology Planning and Assessment: January - July 2002. 34/2:10-19
- Permits Issued by Archaeology and Registry Services Branch: July - September 2002. 34/3:17-20
- Permits Issued by Archaeology and Registry Services Branch: September - December 2002. 34/4:16-20
- Recent Publications. 34/3:16
- Simon Fraser University-Secwepemc Education Institute Field School. 34/4:14
- So Long! 34/2:9
- Terra Archaeological Limited. 34/4:14
- The Archaeology Branch is Moving. 34/4:5
- *The Jenyo Quarry: A Chalcedony Quarry Site on the Nechako Plateau. 34/2:6-7
- Traces Archaeological Research & Consulting Ltd. 34/1:21
- University of British Columbia. 34/4:14-15
- University of Northern British Columbia/Cariboo Tribal Council Archaeology Field School. 34/4:15
- University of Victoria. 34/4:15
- *What A Basket Holds: Basketry in British Columbia. 34/4:3-5
- *What Lies Beneath: Excavations at Dragon Lake. 34/2:2-5

Subject

Archaeology Branch

News Items. 34/2:20

The Archaeology Branch is Moving. 34/4:5

Archaeology Permits

Debitage. 34/1:11

News Items. 34/2:20

Permits Issued by Archaeology Planning and Assessment: January - July 2002. 34/2:10-19

Permits Issued by Archaeology and Registry Services Branch: July - September 2002. 34/3:17-20

Permits Issued by Archaeology and Registry Services Branch: September - December 2002. 34/4:16-20

Archaeological Society of British Columbia

BC Heritage Trust (letter). 34/4:21

End of an Era. 34/2:1

So Long! 34/2:9

Basketry

- *Carrying A Culture: The Distinctive Regional Styles of Some Basket Making Nations in the Pacific Northwest. 34/4:6-9
- *What A Basket Holds: Basketry in British Columbia. 34/4:3-5

BC Archaeology Forum

- BC Archaeology Forum. 34/1:26
- Future Management of Archaeological Resources. 34/3:6;13
- *Notes From The Underground: Some Thoughts on the "Future Management of Archaeological Resources." 34/3:7-13

Book Reviews

- The Archaeology Education Handbook: Sharing the Past With Kids, edited by Karolyn Smardz and Shelley J. Smith. 34/2:8-9
- *Prehistoric Mortuary Variability on Gabriola Island, British Columbia. 34/3:14-15

British Columbia Heritage Trust

BC Heritage Trust (letter). 34/4:21

Canadian Archaeological Association

Debitage. 34/1:11

Debitage. 34/1:21

Culturally Modified Trees

- *Culturally Modified Trees of the Nechako Plateau: Cambium Utilization Amongst Traditional Carrier (Dakhel) Peoples. 34/1:2-11

Cultural Resource Management

- *Archaeology News. 34/4:2
- BC Archaeology Forum. 34/1:26
- Debitage. 34/1:11
- Future Management of Archaeological Resources. 34/3:6;13
- *Notes From The Underground: Some Thoughts on the "Future Management of Archaeological Resources." 34/3:7-13

Education

- Book Review: The Archaeology Education Handbook: Sharing the Past With Kids, edited by Karolyn Smardz and Shelley J. Smith. 34/2:8-9

Ethnobotany

- *A Critical Look at the History, Ethnography, and Linguistics of Wapato. 34/1:12-21

Excavations

- *Getting Out of the House: The 2002 UBC Field School at Dionisio Point. 34/3:2-5
- *What Lies Beneath: Excavations at Dragon Lake. 34/2:2-5

Field Notes

- Antiquus Archaeological Consulting Ltd. 34/4:12
- Cariboo Heritage. 34/4:12
- *Ecofor Consulting. 34/4:12
- Matrix Research Ltd. 34/4:12-13
- Norcan Consulting Ltd. 34/4:13
- Okanagan University College. 34/4:13
- Parks Canada Haida Gwaii Investigations 2002. 34/4:13-14
- Simon Fraser University-Secwepemc Education Institute Field School. 34/4:14
- Terra Archaeological Limited. 34/4:14
- Traces Archaeological Research & Consulting Ltd. 34/1:21
- University of British Columbia. 34/4:14-15
- University of Northern British Columbia/Cariboo Tribal Council Archaeology Field School. 34/4:15
- University of Victoria. 34/4:15

Field Schools

- *Getting Out of the House: The 2002 UBC Field School at Dionisio Point. 34/3:2-5

First Nations

- *Archaeology News. 34/4:2
- *Carrying A Culture: The Distinctive Regional Styles of Some Basket Making Nations in the Pacific Northwest. 34/4:6-9
- *Culturally Modified Trees of the Nechako Plateau: Cambium Utilization Amongst Traditional Carrier (Dakhel) Peoples. 34/1:2-11

Debitage. 34/4:9

Exhibits. 34/2:20

- *Notes From The Underground: Some Thoughts on the "Future Management of Archaeological Resources." 34/3:7-13
- *What A Basket Holds: Basketry in British Columbia. 34/4:3-5

Historical Archaeology

Debitage. 34/4:9

Human Osteology

- *What Can We Learn From Those Who Have Passed On? Book Review: Prehistoric Mortuary Variability on Gabriola Island, British Columbia. 34/3:14-15

Linguistics

- *A Critical Look at the History, Ethnography, and Linguistics of Wapato. 34/1:12-21

Mid-Holocene

- *Mid-Holocene Cultural Occupation of Barkley Sound, West Vancouver Island.

34/4:10-11

Museums

- Debitage. 34/1:11; Debitage. 34/2:9; Debitage. 34/4:9
- Exhibits. 34/1:24; Exhibits. 34/2:20
- News Items. 34/2:20

Notices

- Conferenes 2002. 34/1:25-26
- Conferences 2003 - Canada. 34/2:22
- Conferences 2003 Canada. 34/3:22
- Conferences 2003 - USA. 34/2:21
- Conferences 2003 USA. 34/3:21
- Conferences 2003-2004. 34/4:22
- Lectures. 34/3:21
- The Archaeology Branch is Moving. 34/4:5
- Ontario Archaeological Society
- *Archaeology News. 34/4:2

Publications

- Debitage. 34/1:21; Debitage. 34/2:9
- Recent Publications. 34/3:16

Rock Quarry

- *The Jenyo Quarry: A Chalcedony Quarry Site on the Nechako Plateau. 34/2:6-7

Simon Fraser University

- *Archaeology News. 34/4:2
- Debitage. 34/2:9
- Simon Fraser University-Secwepemc Education Institute Field School. 34/4:14

Sites

- *Culturally Modified Trees of the Nechako Plateau: Cambium Utilization Amongst Traditional Carrier (Dakhel) Peoples. 34/1:2-11
- *Getting Out of the House: The 2002 UBC Field School at Dionisio Point. 34/3:2-5
- *The Jenyo Quarry: A Chalcedony Quarry Site on the Nechako Plateau. 34/2:6-7
- *What Lies Beneath: Excavations at Dragon Lake. 34/2:2-5

The Midden

- Annual Index to *The Midden* Vol. 33, 2001. 34/1:22-24
- End of an Era. 34/2:1
- So Long! 34/2:9

Underwater Archaeological Society of British Columbia

Lectures. 34/3:21

University of British Columbia

- Debitage. 34/4:9
- *Getting Out of the House: The 2002 UBC Field School at Dionisio Point. 34/3:2-5
- University of British Columbia. 34/4:14-15

PERMITS ISSUED BY THE ARCHAEOLOGY AND REGISTRY SERVICES BRANCH, JANUARY–APRIL 2003

Permitted project descriptions as provided by the Archaeology & Registry Services Branch have been edited for brevity and clarity. The assistance of Ray Kenny (Manager, Archaeological Planning & Assessment) and Alan Riches (Administrative Clerk) in providing this information is gratefully acknowledged.

Glossary of Abbreviations

A number of recurrent abbreviations may not be familiar to many readers of *The Midden*, and the most common of these are explained here.

Permit types: ALT = Alteration; INS = Inspection; INV = Investigation.

Archaeological project types: AIA = Archaeological Impact Assessment; AIS = Archaeological Inventory Study; SDR = Systematic Data Recovery.

Forest industry terms: CMT = Culturally Modified Tree; CP = Cutting Permit; FD = Forest District, FL = Forest License; MoF = Ministry of Forests; SBFEP = Small Business Forest Enterprise Program; TFL = Tree Farm License; TL = Timber License; TSA = Timber Sales Area.

Other government agencies: FOC = Fisheries and Oceans Canada; DIAND = Department of Indian Affairs and Northern Development; MEM = Ministry of Energy and Mines; MoT = Ministry of Transportation.

First Nations abbreviations: ATT = asserted traditional territory; FN = First Nation.

Legal title descriptions: DL = District Lot; Rge = Range; R/W = right-of-way; P/L = pipeline; Sec = Section, T/L = transmission line; Tp = Township.

<u>Permit</u>	<u>Applicant</u>	<u>Type</u>	<u>Description</u>
2003-001	Mark Thom	ALT	Alteration of archaeological sites HbSs 4 and HcSs 2 (Caribou Hide Trail) by proposed logging related activities north of the Sustut River near the confluence of Birdflat Creek to facilitate Amendment #1 to the 2000 to 2005 Canadian Forest Products Ltd. consolidated Forest Development Plan for Forest Licenses A18165, A18167, A27823 and A33801, Fort St. James FD
2003-002	Joel Kinzie	INS	AIA of BC Hydro's proposed Cache Creek transmission corridor relocation project, located approximately 35 km west of Fort St. John
2003-003	Peter Merchant	INS	Archaeological inventory and AIA in support of proposed residential construction in Block 14, DL 1392, Plan 5388, NWD, located at 12625 Spicer Road on Bargain Harbour on the Sunshine Coast
2003-004	Derrick Curtis	ALT	Alteration of archaeological site GcTc 13 from logging related activities proposed by Skeena Cellulose Inc. for CB 711231, south-southwest of the Skeena River and 1.0 to 1.5 kilometres southwest of the south bank of the Lakelse River, Kalum FD
2003-005	Derrick Curtis	ALT	Alteration of archaeological site GdTc 63 from logging related activities proposed by Skeena Cellulose Inc. for CB S83126, 2.1 kilometres east of the Usk Ferry crossing on the Skeena River, Kalum FD
2003-006	Rudy Wortelboer	ALT	Alterations to CMT site EeRr 4 resulting from proposed timber harvesting by Ainsworth Lumber Company Ltd. in CP 189, Block 11, F.L. A18700, in the Green Mountain area, southwest of Gold Bridge, Lillooet FD
2003-007	Kevin E. Robinson	INS	Archaeological inventory exclusively within Namgis FN's asserted traditional territory
2003-008	Ian Wilson	INS	Archaeological inventory and AIA of the City of Courtenay's proposed regional watermain project in the vicinity of the 5th Street crossing of the Courtenay River and Beckensell and Anderton Avenues, City of Courtenay, Vancouver Island
2003-009	James Mitchell	ALT	Possible alterations to archaeological sites DIPw 23, DIPw 24, DIPw 25, DIPw 35, and DIPw 36 during proposed timber harvest and brush clearing within Wolf Creek TSL A65734, Block 1, located in the Invermere FD
2003-010	Derrick Curtis	ALT	Alteration of CMTs comprising part of archaeological site GdTc 56 by proposed logging related activities, located within CB S83203, east of the Skeena River, about 2.5 km southwest of Chimdemash Creek, Kalum FD
2003-011	Rudy Wortelboer	ALT	Alterations to sites EeRk 63, EFRk 99, and EFRk 101 resulting from proposed timber harvesting by Ainsworth Lumber Company Ltd. and Ts'kw'aylaxw Forest Company in CP 999, Block 44 in the Tiffin Creek area, south of Pavilion, Lillooet FD
2003-012	Bob Brash	ALT	Alterations to CMT site FIUd 5 resulting from proposed timber harvesting by Husby Forest Products in Block PER011, F.L. A16869, in the vicinity of Naden Harbour on the north coast of Graham Island, Queen Charlotte Islands FD
2003-013	Bob Brash	ALT	Alterations to CMT sites FIUd 31-33, FIUd 35, FIUd 37, FIUd 40-43, FIUd 47, FIUd 50,

			FIUd 51, FIUd 53, FIUd 54, FIUd 56, FIUd 57, FIUd 59, FIUd 60, FIUd 61, and FIUd 63-65 resulting from proposed timber harvesting by Husby Forest Products in Blocks LIG011 and LIG012, F.L. A16869, on the south side of Naden Harbour on the north coast of Graham Island, Queen Charlotte Islands FD
2003-014	Derrick Curtis	ALT	Alteration of CMTs comprising part of archaeological site GdTe 57 by proposed logging related activities, located within Unit B of Cut Block S83114 east of the Skeena River, about 2.5 km southwest of Chimdemash Creek, Kalum FD
2003-015	Rob McFarlane	ALT	Alterations to that part of archaeological site DgRs 7 located at 1406 Beach Grove Road, Municipality of Delta, within Lot 26, Blk 1, Sec 11, TP 5, NWD, Plan 4746, from proposed removal of existing carport, shed and ancillary structures, and construction of a garage and additions to an existing residence
2003-016	Peter Dady	INS	AIA of the Colwood Trunk Sewer Project extending along Lagoon Road from the intersection of Heatherbell Road, linking with the Ocean Boulevard Pump Station at the southern end of Esquimalt Lagoon, and southwest to the end of Ocean Boulevard, City of Colwood
2003-017	Heather Pratt	INS	AIA of forestry developments proposed by TFL Forest Limited, Johnstone Strait Operations, Middlepoint/North Island Region, within portions of TFL 47, FL A29159 and Timber Operations TO883, located on Vancouver Island and associated other islands, all within the Campbell River FD
2003-018	Kevin Megale	INS	Alteration of archaeological site DhQj 35 with the installation of a single pole and metal anchor for a 230 kV transmission line to replace eight existing 63 kV transmission lines by TeckCominco Ltd. within that Part of Sublot 15, DL 4598, Kootenay District Plan X34 included in Plan RW 29, located 3 km southeast of Castlegar
2003-019	Morely Eldridge	INS	AIA for a proposed Weyerhaeuser Canada gravel pit, located along the Breakwater Access Road near the Ferguson Bay Dryland Sort, on Graham Island within TFL 39, Block VI, Queen Charlotte FD
2003-020	Gary Bertrand	ALT	Alterations to a provincial heritage site from proposed logging, landing and trail construction on Block 5, DL 4836, "Plan B-67" Kootenay District, excepting a 2.38 ha. area intended to surround the known extent of the Cranbrook Petroglyph site, DiPw 1
2003-021	Morely Eldridge	INS	AIA for a proposed Timber Sales BC access road from Highway 16 to TSL A67653 as well as portions of TSL A67653, near Jungle Creek south of Lawnhill on Graham Island, Queen Charlotte FD
2003-022	Morely Eldridge	INS	Archaeological inventory and AIA of proposed forestry operations for Weyerhaeuser Canada Ltd.'s Block 9220 and other operations that may be proposed, all part of Doc Creek Operations within TFL 39, Mid-Coast FD
2003-023	Normand Canuel	INS	AIA of proposed forestry development by Canadian Forest Products Ltd., and possible other licensees within the Prince George FD
2003-024	Normand Canuel	INS	AIA of proposed forestry developments by Babine Forest Products Ltd. and possible other licensees within the Lakes FD
2003-025	Heather Pratt	INS	AIA of forestry developments proposed by Western Forest Products Ltd., Gold River and Zeballos Operations, within portions of TFL 19 and FL A19231, located on Vancouver Island and Nootka Island within the Campbell River FD
2003-026	Stephen Smith	ALT	Alterations to CMT's within sites EkSq 4 and EkSq 12 and EkSp 26, EkSp 27, and EkSp 37-40 from logging activities by Western Forest Products within Blocks P600, P608, S810, Owikeno Lake, Mid Coast FD
2003-027	Normand Canuel	INS	AIA of proposed forestry developments by Canadian Forest Products Ltd., and possible other licensees within the Morice FD
2003-028	Veronica Cadden	INS	AIA of proposed forestry developments by Plateau Forest Products Ltd., and possible other licensees within the Vanderhoof District
2003-029	Morley Eldridge	INS	AIA of proposed and recently completed developments on DL 801, Range 3, Coast LD, on Denny Island
2003-030	Michael Audain	ALT	Alterations of archaeological site DjSa 58 resulting from construction of a proposed residential dwelling within Block 14, DL 1392, Plan 5388, NWD, located at 12625 Spicer Road at Bargain Harbour on the Sunshine Coast
2003-031	Andrew Ashford	ALT	Alterations of archaeological site DiSo 39 resulting from logging related activities by the MoF for Cut Block HE-840 within the Arrowsmith Supply Area, Barkley Timber Supply Block, TFL 54, located on Hesquiat Harbour, South Island FD.
2003-032	Peter Merchant	INS	Archaeological inventory and AIA in support of proposed construction of a 31 unit co-housing project on Emery Road on the West side of Roberts Creek, in Lot 3, DL 809, 810 & 1506, Group 1, New Westminster District, Plan BCP916, Roberts Creek
2003-033	Steve C. Chambers	ALT	Alteration of archaeological sites DkSr 41-47 from proposed logging operations by Weyerhaeuser Company Ltd., West Island Timberlands, for Cut Blocks 8602 and 8603, FL A19225 / TO866, on Nootka Island, Campbell River FD
2003-034	Hartley Odwak	INS	AIA of Port McNeill FD's proposed Keman Forest Service Road realignment, Wakeman Sound

2003-035	George Richardson	ALT	Possible alterations to archaeological sites DkPw 12 and DkPw 13 during proposed timber harvest and brush clearing within FL A18978, CP 176, Blocks 4 and 5, north of Ta Ta Creek in the Invermere FD
2003-036	Keary Walde	INS	Pre- and post-AIAs of proposed and existing oil and gas developments by Devon Canada Corporation, Canadian Natural Resources, Dominion Exploration Canada Ltd., Suncor Energy Inc., Imperial Resources Ltd., Taurus Exploration Ltd., and possible other petrochemical companies or their agents, within the Fort St. John FD, NE BC
2003-037	Normand Canuel	INS	AIA of proposed forestry developments by Stuart Lake Lumber Ltd. and possible other licensees within the Fort St James FD
2003-038	Gunter Siegmund	ALT	Alterations to site DgRs 7 resulting from removal of an existing single family dwelling and detached carport and construction of a new single family dwelling and detached garage on the property at 1312 Beach Grove Road, Delta
2003-039	Keary Walde	INS	Pre- and post- AIAs of proposed and existing oil and gas developments by Devon Canada Corporation, Canadian Natural Resources, Dominion Exploration Canada Ltd., Suncor Energy Inc., Imperial Oil Resources Ltd., Taurus Exploration Ltd., and possible other petrochemical companies or their agents, within the Fort Nelson FD, NE BC
2003-040	Brian Hayden	INV	Archaeological evacuation at EeR1 7, Keatley Creek near Lillooet
2003-041	Dwayne Clegg	ALT	Possible alterations to archaeological site DjRw 1 from proposed residential construction within Lot 26, DL 1558, Plan 18696, NWD, located on the east side of Porpoise Bay, Sunshine Coast
2003-042	Frank Liddell	ALT	Alterations to site DjRw 1 from the proposed construction of a single family residence within Lot 16, Plan 18696, DL 1558 NWD, located on the east side of Porpoise Bay, north of Sechelt
2003-043	Vicki Feddema	INS	AIA of forestry developments proposed by International Forest Products Limited, within portions of TFL 54 and FL A19235 located on the west coast of Vancouver Island from Mooyah Bay to Alberni Inlet, within the South Island FD
2003-044	Keary Walde	INS	Pre- and post-AIAs of proposed and existing oil and gas developments by Devon Canada Corporation, Canadian Natural Resources, Dominion Exploration Canada Ltd., Suncor Energy Inc., Unoeruk Resources Ltd., Taurus Exploration Ltd., and possible other petrochemical companies and their agents, within the Dawson Creek FD, NE BC
2003-045	Pat Bredin	ALT	Cutting, felling, yarding, moving, milling, and other alterations, by Canadian Forest Products Ltd., of CMTs consisting of cambium stripped and/or blazed pine trees from recorded sites GcSa 4-7, and located within CP 015, Block NEC 30, (Fort St. James FD) north of Nahounli Lake, approximately 10.5 km east of Fort St. James
2003-046	Pat Bredin	ALT	Cutting, felling, yarding, moving, milling, and other alterations, by Canadian Forest Products Ltd., of CMTs consisting of cambium stripped and/or blazed pine trees from recorded sites GcSa 8,-11, and located within CP 015, Block NEC 31, (Fort St. James FD) northeast of Nahounli Lake, approximately 13 km east of Fort St. James
2003-047	Carol Lamont	ALT	Alterations to site HbRh 22 and HbRh 87 resulting from BC Hydro's proposed Cache Creek transmission corridor relocation project, located approximately 35 km west of Fort St. John
2003-048	Hartley Odwak	INS	AIA of Western Forest Products Ltd.'s proposed timber harvesting in Area 65-102, located at Edge Point on the north side of the bay at Port McNeill, northern Vancouver Island
2003-049	Don Johnson	ALT	Alterations to CMT site EcSn 5 resulting from proposed timber harvesting by Weyerhaeuser in Opening 49500 TFL 39 southwest of Eve River, Campbell River FD
2003-050	Ian Wilson	INS	AIA of three proposed Weyerhaeuser forestry operations within TFL 39 of the Port McNeill FD, Cut Blocks 9601, 9602 and 9606. Block 9602 is located on Watson Island and Blocks 9601 and 9606 are situated immediately south on the mainland coast in the vicinity of Mt. Calvert
2003-051	Ian Wilson	INS	AIA of proposed Interfor forestry operations within FL A19238 of the Campbell River FD, in the areas of Broughton Island, Simoon Sound, Belleisle Sound, Wakeman Sound, and Kingcome Inlet
2003-052	Ken Schwab	INS	AIA of proposed and existing oil and gas developments by Duke Energy Gas Transmission within the Fort Nelson, Fort St John, and Dawson Creek FDs
2003-053	Owen Grant	INS	AIA of proposed forestry developments on behalf of International Forest Products Ltd. within the asserted traditional territory of the Gwa'Sala-Nakwaxda'xw Nation and the Gwawaenuk Tribe in the Port McNeil FD
2003-054	Ken Schwab	INS	AIA of proposed and existing oil and gas developments by Andarko Canada Corp., Cougar Hydrocarbons Inc., Impact Energy Inc., and other proponents within NE BC
2003-055	Melanie Hill	INS	AIA of proposed and existing oil and gas developments by Penn West Exploration Ltd. within the Fort Nelson, Fort St. John and Dawson Creek FDs
2003-056	Heather Pratt	INS	AIA of proposed forestry operations by Weyerhaeuser Company Limited, West Island Timberlands Division, Franklin Operation within Timber Operations TO853, TO859, TO862, & TO866, on Nootka Island, Campbell River FD

2003-057	Hill, Melanie	INS	AIA of proposed and existing oil and gas developments, by Petro-Canada Oil & Gas, Ltd.; Talisman Energy Inc.; and other, yet-to-be specified proponents, all within the Mackenzie FD
2003-058	David Hall	INS	AIA of the proposed development by Triumph Timber Ltd. of the Fraser Reach #2 log dump and associated access road, located within FL A16820 on the Fraser Reach portion of Princess Louisa Inlet, North Coast FD
2003-059	Ryan Bichon	ALT	Cutting, felling, yarding, moving, milling, and other alterations by the McLeod Lake Indian Band of seven bark stripped Lodgepole Pine CMTs and other trees from archaeological site GeRs 3 (Formerly temporary site number 02-WC 205-CMT-1) located in Cut Block WC-205, approximately 20 km south of Fort McLeod Provincial Historic Park, and 13 km northeast of Till Bay on Carp Lake, within the Prince George FD
2003-060	Wayne French	ALT	Forest harvest operations including cutting, falling, yarding, removing, milling, and other alterations to CMTs from within archaeological site DhSf 46 by Weyerhaeuser Company Ltd., West Island Timberlands, Opening 164414 within TFL 44, South Island FD
2003-061	Kevin E. Robinson	INS	AIA of development sites within the Bamfield/Huu-ay-aht Community Forest
2003-062	Cam Bentley	ALT	Alterations to archaeological site FkSr 1 from Canadian Forest Products Ltd.'s proposed forestry operations for CP 712, Cut Block 005, FL A16828, located northwest of the mouth of Andrews Creek on Short Portage Lake, Morice FD
2003-063	Doris Zibauer	INS	AIA of proposed forestry developments by West Fraser Mills and possible other licensees within the Williams Lake, Horsefly, 100 Mile House, and Chilcotin FDs
2003-064	Ian Wilson	INS	AIA of as-yet-unidentified residential and/or commercial gas service line development and/or upgrades that may be proposed by Centra Gas Ltd. in the greater Victoria area
2003-065	Doris Zibauer	INS	AIA of proposed and existing oil and gas developments for Eagle Valley Research Ltd., and possibly other companies or agents, operating within the Fort Nelson-Liard and Peace River Regional Districts, Northeastern BC
2003-066	Richard Krupop	ALT	Alterations of archaeological site GcTd 30 from logging related activities planned by the MoF for the Thunderbird Development Area TSL A65308 Block 1, A65309 Block 1 and A65310 Block 1 located south of Terrace and west of Lakelse Lake, Kalum FD
2003-067	Jim Stafford	INS	AIA of forestry developments proposed by the MoF, including construction of Evelyn Forest Service Road and harvesting within two Blocks of TS A64292 all on Hawkesbury Island in the Verney Passage area of Douglas Channel, Kalum FD
2003-068	Robert Field	INS	AIA of proposed forestry operations for the MoF SBFEP, and possibly other licensees, operating within the Lakes FD
2003-069	Geordie Howe	INS	AIA of forestry developments proposed by Apollo Forest Products Ltd., and possibly other proponents, to be identified, in the Fort St. James FD
2003-070	Marianne Berkey	INS	AIA of forestry developments proposed by West Fraser Mills Ltd., and possibly other proponents, to be identified, in the Quesnel and Prince George FDs
2003-071	John Lauder	ALT	Alteration of archaeological site DiSe 7 for the purpose of recovering cultural and human remains from disturbed deposits, and re-depositing these remains, following unauthorized excavations previously conducted to expand an existing boat launching facility at Deep Bay on the east coast of Vancouver Island
2003-072	Mauro Calabrese	ALT	Alterations of archaeological sites FfRs 44, FfRs 49, and FfRs 50 by West Fraser Mills Ltd. from proposed forestry activities within Block A42998S, Quesnel FD
2003-073	Vicki Feddema	INS	AIA of proposed forestry operations by International Forest Products Ltd. and the Ucluelet Economic Development Corporation within BCTS Licence TSL A64035, east/northeast of Ucluelet, South Vancouver Island FD
2003-074	William Fearon	ALT	Alteration of archaeological site EeRf 1 with the proposed construction of a temporary movie set by Unfinished Films Ltd. within Steelhead Provincial Park, west of Savona.
2003-075	Heather Pratt	INS	AIA of forestry developments proposed by Weyerhaeuser West Island Timberlands Division, Franklin Operations in Sections 34, 38, 40, 41, 84, 85, 86, 87, 90 and DLs 33, 35, 36, and 659, located on Vancouver Island within the South Island FD
2003-076	Ralph Elke	ALT	Alterations to site DgRs 7 as a result of proposed additions to an existing residence, removal of an existing driveway, construction of an automobile parking enclosure and connecting sidewalk, associated landscaping, and possible associated service installations, at 1558 Beach Grove Road, Delta
2003-077	Robert Brand	ALT	Cutting, felling, yarding, moving, dating, and other alterations by Iisaak Forest Resources Ltd. to CMTs from sites DiSl 36 to DiSl 54 and DiSl 61 to DiSl 68, all situated in proposed Block H001, and CMTs from sites DiSl 55 to DiSl 60, and DiSl 69, all situated in Block H002, both blocks being located in Herbert Inlet, South Island FD
2003-078	Ian Wilson	INS	AIA of forestry operations proposed by Weyerhaeuser Forest Products Limited for TFL 39, FL A19225, 19244 and 49542, Timber Licenses TO216, 274, 293, 306, 309, 318, 344, 355, 382, 405, 425, 433, 444, 458, 465, 487, 516, 563, 583, 592, 596, 611, 615, 682, 685, 688, 701, 715, 718, 872, 875, 906, and Private Lands MFU 19 and MFU 21, Port McNeill FD

2003-079	Anthony Pulchny	ALT	Alterations to that part of archaeological site DgRs 7 located at 1359 Beach Grove Road, Municipality of Delta, within Lot 2, Blk 5, Sec 11, TP 5, NWD, Plan 4746, from proposed removal and upgrade of part of existing foundation for additions to an existing residence
2003-080	Joel Kinzie	INS	AIA of proposed forestry developments by the MoF in an un-numbered Cut Block located between the Lakelse River and the Skeena River within DLs 4466, 5343, 5974, 5971, and 5972, Range 5, Coast LD, Kalum FD
2003-081	Karen Brady	INS	AIA of a portion of DL 4455, Lillooet LD, near 100 Mile House
2003-082	David Blower	INS	AIA of Ekwan Pipeline Inc.'s proposed pipeline from EnCana Sierra's gas plant east of Fort Nelson, BC to the Alberta border
2003-083	Mike Crane	ALT	Cutting, felling, hauling, yarding, and milling of CMTs from site DkRi 87 as a result of forestry operations proposed by Teal Cedar Products Ltd. Fraser TSA-FL A19201, Block E-22, Uztilius Creek drainage, Chilliwack FD
2003-084	Brian Taylor	ALT	Cutting, felling, hauling, yarding, and milling of CMTs from site DIRi 55 and alterations to CMT site DIRi 59 as a result of forestry operations proposed by Teal Cedar Products Ltd. Fraser TSA - FL A19201, Block E-11, Anderson River drainage, east of Boston Bar, Chilliwack FD
2003-085	Amanda Marshall	INS	AIA of proposed forestry operations for Canadian Forest Products Ltd. Fort St. James operating areas within FLs A18165, A40873, and TFL 42 within the Fort St. James FD
2003-086	Cameron Simpson	ALT	Cutting, felling, hauling, yarding, and milling of CMTs from site GgSn 60 as a result of timber harvest and road construction within Houston Forest Products Company's developments within CP 920, Blocks 400, 401, 402, and 403, FL A16827, Morice FD, and located approximately 12 km north of the Old Fort settlement on Babine Lake
2003-087	Cameron Simpson	ALT	Cutting, felling, hauling, yarding, and milling of CMTs (CMTs) from sites GgSn 61 and GgSn 62 as a result of timber harvest and road construction within Houston Forest Products Company's developments within CP 920, Blocks 345, 375, 376 and CP 930, Block 15, FL A16827, Morrison IRM Unit, Morice FD, and located north of the Old Fort FN settlement
2003-088	Ken Schwab	INS	AIA of proposed and existing oil and gas developments by Petro-Canada Oil & Gas Ltd. within the Fort Nelson, Fort St John, and Dawson Creek FDs
2003-089	Melanie Hill	INS	AIA of proposed and existing oil and gas developments by Talisman Energy Inc. within the Fort Nelson, Fort St John, and Dawson Creek FDs
2003-090	Byron Ross	ALT	Cutting, felling, yarding, moving, and other alterations by Bare Feat Ventures Ltd. within culturally modified tree archaeological sites GjSw 3 (temporary number GcSw-1867-2) and GjSw 4 (temporary number GcSw-1867-1), during developments associated with Woodlot 1867-Block 1A, situated south of McCutcheon Creek, on the east bank of the Skeena River, north of Hazelton, BC, and within the Kispiox FD
2003-091	Amanda Marshall	INS	AIA of proposed forestry operations for Canadian Forest Products Ltd. and possibly other licencees, operating within the Vanderhoof FD
2003-092	Chris Engisch	INV	Systematic data recovery for Koers and Associates Engineering Ltd. from those intact portions of archaeological shell midden DkSf 29 in conflict with a proposed water and sanitary sewer system northeast of the Town of Comox along Lazo Road at Point Holmes
2003-093	Marianne Berkey	INS	AIA of proposed forestry developments proposed by West Fraser Mills Ltd., and possible other forestry licencees, within the Kamloops, Clearwater, and Salmon Arm FDs
2003-094	Amanda Marshall	INS	AIA of proposed forestry operations, for various licencees, operating within the Fort St. James FD
2003-095	Doug Brown	INV	Systematic recovery of perishable artifacts from site DhRi 16 at risk of destruction due to rising water levels, exposure to atmosphere, or unauthorized collection
2003-096	Matthew Begg	INS	AIA of proposed forestry developments by Pacific Inland Resources and possible other licencees within the Bulkley/Cassiar FD
2003-097	Michael Rousseau	INS	Archaeological inventory and post-impact assessment within Mount Thurston (53033 Chilliwack Lake Road; DL's 523, 524, 525, Group 1, Yale Div, Yale District), and Centre Creek (60555 Chilliwack Lake Road; DL 528, Group 1, Yale Div, Yale District). Corrections properties owned by the BC Buildings Corporation and located along the Chilliwack River
2003-098	Joel Kinzie	INV	Systematic data recovery at site HbRh 87, located approximately 3 km northwest of the confluence of Cache Creek and the Peace River, southwest of Fort St. John, BC
2003-099	Amanda Marshall	INS	AIA of proposed forestry operations for Canadian Forest Products Ltd. and possibly other licencees, operating within the Lakes FD
2003-100	Chris Engisch	INS	AIA of a 1628 Murdoch Road, Nanaimo Regional District, Cedar, in the vicinity of DgRw 34
2003-101	Shawn Kenmuir	ALT	Alteration of archaeological site GfTm 6 from forestry operations proposed by Triumph Timber Ltd. for Block C7B - Unit C7F located within the Chambers Creek operating area approximately 85 km north of Prince Rupert, North Coast District

2003 CONFERENCES

- September 18-20** **6th Biennial Rocky Mountain Anthropological Conference**
Estes Park, Colorado, USA
Conference sessions include: Athapascan Material Culture and Migrations; Game Drives, Trails, and Passes; and High Country Ethnohistory. A fieldtrip is planned in the Rocky Mountain National Park to the Trail Ridge Game Drive and the Gore Range Overlook.
Contact: D. Robert Brunswig, Department of Anthropology, University of Northern Colorado, Greeley, Colorado, USA, 80639; e-mail: <Robert.Brunswig@unco.edu>.
- September 26-27** **Heritage Society of British Columbia Regional Heritage Meeting,**
Kamloops, BC
Contact: The Heritage Society of BC (Main Office), Rick Goodacre, 914 Garthland Place West, Victoria, BC, V9A 4J5; tel./fax 250.384.4840; e-mail: <hsbc@islandnet.com>.
- October 17-19** **2003 BC Archaeology Forum**
The 2003 BC Archaeology Forum will be co-hosted by the Lheidli T'enneh First Nation and the Anthropology Program at UNBC. The meeting will take place on the Prince George campus of UNBC.
Contact farid@unbc.ca
- October 19-23** **The British Columbia Museums Association (BCMA) and Western Museums Association Joint Annual Meeting**
Reno, Nevada, USA
Registration forms can be downloaded off the BCMA Web site.
Contact: BCMA office, suite 204 - 26 Bastion Square, Victoria, BC, V8W 1H9; tel. 250.356.5700; fax 250.387.1251; e-mail: <BCMA@museumsassn.bc.ca>; Web site: <www.MuseumsAssn.bc.ca/>.
- November 12-16** **37th Annual Chacmool Conference, "Flowing Through Time: Exploring Archaeology Through Humans and Their Aquatic Environment"**
University of Calgary, Calgary, Alberta
The 2003 Chacmool Conference will give archaeologists, geographers, engineers, and urban planners a forum to discuss water issues from the distant past through to the present day. Some of the confirmed sessions include: Flowing Through Time, Wading Through Muck: Turgid Topics in Alluvial Geoarchaeology; The Fish Creek Archaeological Project; The Social and Subsistence Dimensions of Hunter-Gatherer Lifeways in Wetland Environments: Archaeological and Ethnographic Insights; Maritime Interregional Interaction: Examining Island to Island Contacts in Oceania; The Semiotics of Fish, Fishing, and Fisherman in Greco-Roman Culture and Society; Rivers and Lakes and Dams, Oh My: Archaeological Investigations in Alberta; Subsistence and Coastal Adaptations. Additional suggestions and papers relating to other topics are welcome.
Deadline for abstract submissions (for presenting participants): August 31, 2003. Deadline for advance registration (for non-presenting participants): October 15, 2003
Contact: 2003 Chacmool Conference Proceedings, Department of Archaeology, University of Calgary, 2500 University Drive NW, Calgary AB, T2N 1N4; tel. 403.220.7120; fax 403.282.9567; e-mail: <chacmool@ucalgary.ca>; Web site: <www.arky.ucalgary.ca/arky1/conferencemainpage.htm>.

2004 CONFERENCES

January 2-5

Archaeological Institute of America (AIA), 105th Annual Meeting

San Francisco, California, USA

Non-members whose abstracts have been accepted by the Program Committee must join the AIA or request a one-time waiver of membership requirement by September 30, 2003.

Contact: AIA Headquarters, Boston University, 656 Beacon Street, Boston, MA, 02215-2006, USA; tel. 617.353-8704; fax 617.353-6550; e-mail: <meetings@aia.bu.edu>; Web site: <www.aia.org>.

March 25-27

57th Annual Northwest Anthropological Conference

Eugene, Oregon, USA

The University of Oregon Museum of Natural History and the Bureau of Land Management are hosting the 57th Annual Meeting of the Northwest Anthropological Conference (NWAC) in Eugene, Oregon. Individual papers, symposia, and poster sessions covering all geographical areas and sub-fields within anthropology and related fields are welcome. Presentations addressing advances in the field, projects that have made some social impact, educational programs, cooperative projects that brought anthropologists together with public and governmental agencies and organizations are encouraged.

Call for papers: paper, symposia, and poster session abstracts are due February 1, 2004. Deadline for student papers submitted for the competition is February 1, 2004. Meeting abstracts will be published in the *Journal of Northwest Anthropology*.

Contact: Abstracts, registration forms, and student competition papers should be addressed to the Northwest Anthropological Conference, Museum of Natural History, 1224 University of Oregon, Eugene, Oregon, USA, 97403-1223; fax 1.541.346.5122. Requests for information (other than exhibitor) contact Richard Hanes, NWAC Conference Organizer, PO Box 10226, Eugene, Oregon, USA, 97440; tel. 541.683.6669; Web site: <<http://oregon.uoregon.edu/~osma/nwac04.htm>>.

March 31-April 4

Society for American Archaeology (SAA), 69th Annual Meeting

Montreal, Québec

Online submission forms for symposium organizers and individual participants are now available on the SAA Web site.

Contact: SAA Headquarters, 900 Second Street NE #12, Washington DC, 20002-3557, USA; tel. 202.789.8200; fax 202.789.0284; e-mail: <meetings@saa.org>; Web site: <www.saa.org>.



THE MIDDEN

P.O.Box 520
Bentall Station
Vancouver BC
V6C 2N3
