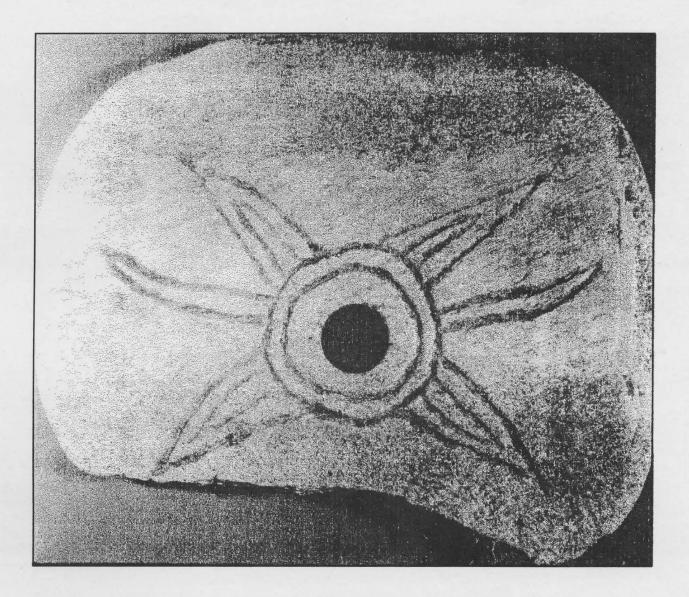


Publication of the Archaeological Society of British Columbia

ISSN 0047-7222

Vol. 25, No. 1

February1993



WHALEBONE SPINDLE WHORL

THE MIDDEN

Published five times a year by the Archaeological Society of British Columbia. The next issue will appear in April 1993.

> EDITOR Joyce Johnson

CONTRIBUTORS THIS ISSUE

Grant Keddie, Andrew Mason, Michael Blake, Gary Coupland, and Brian Thom

CREW Andrew Barton, Vicki Feddema, Margaret Holm

> PRODUCTION THIS ISSUE Alison Biely

> > SUBSCRIPTIONS Helmi Braches

Subscription is included with membership in the Archaeological Society of British Columbia. Non-member rates are \$14.50 per year (\$17.00 U.S.A. and overseas) payable in Canadian funds to the A.S.B.C. Send to:

> Midden Subscriptions, A.S.B.C. P.O. Box 520, Station A Vancouver, B.C. Canada V6C 2N3

Submissions and exchange publications should be directed to:

Joyce Johnson, Editor, The Midden, c/o UBC Archaeology, 6303 N.W. Marine Dr. Vancouver, B.C. V6T 1Z1.

We welcome contributions on subjects germane to B.C. archaeology: maximum length 1500 words, no footnotes, and only a brief bibliography (if required at all). Guidelines are available.

Copyright

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

Publication of *The Midden* is financially assisted by the province of B.C. through the Heritage Trust.

FRONT COVER:

Whalebone spindle whorl from Cadboro Bay near Victoria. "It is in the same layers [containing some of the earliest dog burials in the area] that we find the first antler combs...spindle whorls and antler blanket pins. Might there be a correlation between the introduction of weaving industry and wool dogs?" (see article on p.3) Photo courtesy RBCM.

A.S.B.C.

The Archaeological Society of British Columbia is dedicated to the protection of archaeological resources and the spread of archaeological knowledge.

Meetings featuring illustrated lectures are held on the second Wednesday of each month (except July and August) at 8:00 pm in the Vancouver Museum Auditorium. Visitors and new members are welcome!

> PRESIDENT Reet Kana (263-8987)

MEMBERSHIP Marie Michaud (222-4655)

Annual Membership Fees Single \$25.00; Family \$30.00; Seniors & Students \$18.00

Membership includes subscription to The Midden and the A.S.B.C. newsletter, SocNotes.

Make cheque or postal money order payable to the A.S.B.C. Send to: ASBC Membership P.O. Box 520, Station A Vancouver, B.C. V6C 2N3

AFFILIATED CHAPTERS

Fraser Valley

Meetings featuring illustrated lectures are held on the third Tuesday of each month, September to May, at 7:30 pm at 2615 Montrose Avenue, Abbottsford, B.C.

> President: Shirley Cooke (859-5757) Publicity: Thelma McIntyre (853-1495)

> > Nanaimo

ASBC Nanaimo Branch, c/o Dept. of Social Sciences, Malaspina University College, 900 Fifth St., Nanaimo, B.C. V9R 5S5

Acting President: Wendy Farmer-O'Neil

Meetings every second Monday of the month at Malaspina University College.

A.S.B.C. DIARY

All meetings are held at 8:00 pm in the auditorium of the Vancouver Museum, unless indicated otherwise.

1993 (joint meeting with A.I.A.)

Mar.10	Sandy Sauer
	The O'Keefe Ranch Project
Apr. 14	David Pokotylo
	The Thunder River Quarry Site, Lower
	Mackenzie Valley, NWT, summer 1990
May 12	T.B.A.
June 9	Roy Carlson
	- more on the Pender Island project



The Library is Open!

The ASBC Library is back in business. After a considerable period of dormancy the holdings are again active. The need to retrieve, unpack, sort, repair, shelve and catalogue the surprisingly numerous holdings has taken considerable time and effort to bring about. As the process was underway, even more material was being added from various sources. At last count more than 840 items had been catalogued.

The biggest changes are that the books, papers, periodicals and visual material are now on shelves in appropriate containers; and the entire collection is entered into a computerized catalogue system. Locating of the material is easier as a result of the shelving. Search and retrieval of specific items of interest is extended through the computerized catalogue.

Our library contains an eclectic mix of items related to archaeology around the world. Understandably there is considerable emphasis placed on British Columbia and the Northwest Coast, nevertheless, there is much material from North America and the Old World. The holdings should be of interest to avocational and professional researchers alike. I have already taken advantage of the body of works to meet a number of my needs. Perhaps this is the librarian's reward?

The computer catalogue can be searched using either the title, author, subject or indexnumber entries. Index numbers and subject headings are based on an arbitrarily organised index structured to fit the rather specialized topic of the ASBC library. Combined entry searches are also possible. The listings can then be printed out.

The programme is capable of the production of a complete listing which will be made up into a package including index structure information, and the rules for using the library. This listing package will be provided to SFU, UBC and the Archaeology Branch in Victoria. In addition, one copy will be on hand for reference use at each of our monthly lectures at the Vancouver Museum. Persons wishing their own copy will be able to purchase one at cost.

What are the library loan rules?

To access the collection you must be an ASBC member in good standing, or make special arrangements (usually for institutions/researchers only) which will likely include paying a modest security deposit for loan privileges. You can pick up books from the librarian by prior arrangement, or they can be delivered to the monthly meeting at the Museum for pick-up there. The normal loan period will be one month-in other words, from pick-up at one meeting to return at the next meeting. Defaulters will be burned at the stake following summary hearing and conviction. The editor of The Midden may be prevailed upon to publish names of offenders.

The ASBC library has an impressive variety of material. In the future, short articles will be regularly provided to *The Midden* describing a particular item, or subject holdings of interest (e.g., rock art).

The ASBC library has benefitted from donations of books and papers in the past. We encourage members with items of archaeological interest, and researchers producing papers to continue to contribute copies of their work to the library in the future.

Watch "SocNotes" for future announcements about the ASBC library, and the phone number of the librarian, who will answer any questions you might have. Please phone only in the by evenings.

Terry Spurgeon

Terry Spurgeon is a Past-President of the ASBC, and for the past few years has been involved in setting up its library. Terry works in the avlation industry as a pilot and aviation safety inspector.

TABLE OF CONTENTS

ASBC Library	p. 1
Debitage	p. 2
Prehistoric Dogs	p. 3
Book Review	p. 6
Dating Scowlitz	p. 7
New Publications	p. 9
Annual Index	p.10
Permits	p.12
Lectures	p.12
Conferences	p.13

DEBITAGE

Dr Michael Blake of UBC has left for Mexico this month on the first part of a three-year project supported by SSHRC to explore further his excavations at Paso de la Amada in Chiapas. Vicki Feddema and Warren Hill, two grad students from UBC, have accompanied him. They all return in April....Replacing Blake, Dr R.G. Matson will conduct another UBC archaeological field school at the Scowlitz site this summer. ... As a result of the relationship established during the past two years between the field schools and band members, the Sto:lo Tribal Council has invited the anthropology department at UBC to conduct an ethnographic field school at Scowlitz to complement the archaeology field school this summer. This field school will be supervised by Dr Julie Cruikshank and Dr Bruce Miller. The 1993 field school at SFU will be held at Barkerville under the direction of Dr Phil Hobler. The project will concentrate on excavations in the Chinese section of Barkerville, specifically excavation of the refuse areas located under the Chee Kong Tong house which has been recently relocated. Associated with the field school will be a site survey that will attempt to locate all Chinese sites associated with the mining period within a 100 kilometre radius around Barkerville. The survey will be conducted as part of her thesis research by Ying-Ying Chen, a PhD student in archaeology at SFU.... Archaeologists and geologists get

together. At an applied research meeting of CANQUA 1993 at the RBCM in April, Andrew Mason and Dave Schneider will present a paper on public interpretation at Montague Harbour. Norm Easton will speak on his underwater excavations at another session. Morley Eldridge of Millennia Research will be involved too. During the conference he will conduct tours of archaeological features and prehistoric defensive sites in the area. . . . This year the Department of Archaeology at SFU will be sponsoring the B.C. Archaeology Forum sometime in November of 1993. Mike Rousseau (Antiquus Archaeology Consultants) and Geordie Howe (Arcas Consulting Archaeologists) will work together to organize the Forum.... The second award from the Moira Irvine Archaeological Research Fund for UBC undergraduate archaeological research has been granted to John Maxwell to enable him to plot Native habitation sites along the Fraser as far as the Matsqui area. The MIARF was set up by Moira's colleagues as a memorial in 1990 and is now ready to support small student research projects.... Marjorie Smith has received the Ingrid Nystrom Undergraduate Research Award from the Department of Archaeology at SFU. The award is given annually to an undergraduate student in the department to help cover travel expenses to pursue research. Marjorie will be doing a chemical analysis of the pigments from

some ceramics from Jordan which are housed at Seaton Hall in Newark, N.J.... Dr Jack Nance will be stepping down as Chair of the Department of Archaeology at SFU after four years in the position. He plans, with some relief, to return to teaching and research in the department. The department will appoint a new Head sometime in the spring. . . . A couple of recent graduates from Archaeology at SFU: In December, Catherine Purss defended her Master's thesis, "Continuity of Replacement: The Origin of Modern Humans in Southeast Asia and Australia." Catherine is currently teaching in the Department of Archaeology at SFU as a sessional instructor.... And Yvonne's gone. In December Yvonne Marshall successfully defended her PhD thesis, "A Political History of the Nuu-chah-nulth People," in December. The thesis was partially based on a three-year site survey that Yvonne conducted in Nootka Sound from 1989-91 with financial support from the Moachaht/Muchalaht band, the B.C. Heritage Trust, and the department of archaeology at SFU [The Midden, Feb/Mar '92]. Yvonne has returned to New Zealand (where it's summer at the moment) and is conducting another site survey, this time on Matakana Island off the North Island of New Zealand. She is also planning a threeyear project to investigate the Sigatoka Sand Dune site in Fiji, and is in the process of trying to raise funding for the project.

ARTIFACT IDENTIFICATION CLINIC

APRIL 27, 1993 - 7:00-8:30 PM

U.B.C. Museum of Anthropology 6939 N.W. Marine Drive Vancouver, B.C.

The final artifact identification clinic before the summer will be held in March. On the last Tuesday of the month professional staff from the Museum of Anthropology at UBC gather to help identify objects brought in by the public, and to offer conservation advice. Take in the artifacts that you have any questions about. Tuesdays are free during the winter, but check with the admissions desk anyway to find out where the clinic is taking place.

PREHISTORIC DOGS OF B.C.

WOLVES IN SHEEPS' CLOTHING?

by Grant Keddie

Throughout the history of North America we see many varieties of native dogs. In British Colombia we find the Bear Dog of the northern Interior and parts of the northern Coast used for hunting and packing; and a coyote-resembling dog of the southern Interior and Coast used mostly for hunting. On the southern Coast we also find what has become known as the Salish Wool Dog, kept mainly for the production of wool from its thick soft inner coat.

With the use of their hair to make blankets and capes high in trade value, these dogs made an important contribution to the status of their owners. The origin of the dogs is particularly interesting. Where did they come from, and how long ago?

In many parts of the world dogs have undoubtedly played a key role in the development of human hunting strategy and technology over the last 12,000 years. Based on anatomical and genetic studies modern domestic dogs stemmed from ancestors that also gave rise to wolves, coyotes, jackals and foxes. Dogs can interbreed with all but foxes and produce fertile offspring.

The Asiatic wolf may be the best candidate as ancestor of the earliest domestic dogs; and other wolf sub-species (especially the northern grey wolf) must have been involved in genetic interchange with domestic dogs in a long-term intermittent process. How do we tell the difference between a wolf and a dog? Early domestic dogs are characterized by an overall reduction in size relative to wolves. Skeletons of dogs indicate shortening of the snout, proportionally wider palates of both the top and bottom of the mouth, the larger inner volume of the cranium of the skull, and some closely spaced or absent teeth.

Remains that have been identified as domestic dogs occur in the Middle East from Israel to Iran dating between 12,000 and 9000 years ago. In North America the oldest domestic dog remains have been found in Danger Cave, Utah dating from 9000 to 10,000 years ago. Others include complete skeletons of dogs, obviously intentionally buried, in a hunting camp at the Koster site in Illinois 8500 years ago. Measurements of dog components from the Koster site fall between the norms of modern dogs and coyotes.

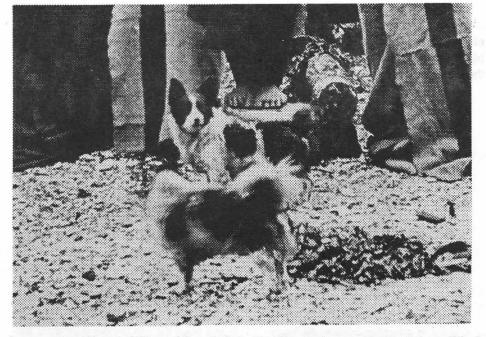
One early variety of domestic dogs is the spitz breed. Large spitz dogs ranging across the Arctic include the Samoyed of northern Europe and the Siberian Husky, and Alaskan Malamutes and Canadian Eskimo Dogs to the east. These northern working-dogs have contributed to the genetic make-up of, not only many modern breeds in Europe and Asia, but also now-extinct dogs of British Columbia. One characteristic genetic trait of spitz breeds is the tail which curves over its back. This trait is regularly noted in early historic descriptions of the Bear Dog and Salish Wool Dog in British Columbia.

Native Dogs of the Gulf of Georgia/Puget Sound Region

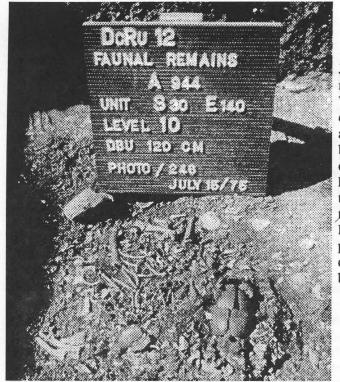
Of the two distinct types of native dogs found on parts of the southern coast of British Columbia and Washington state, one is clearly described as resembling a coyote. The other is the Wool Dog which resembles a cross between a small dog and a version of a northern spitz. Avrom Digance, a grad student at S.F.U., has demonstrated that dog burials from Pender Island dating back about 2500-4300 years represent a single breed of domestic dog similar in bone structure to both dogs and coyotes today.

The first recorded observations of Wool Dogs on the southern coast appear in 1792. Captain George Vancouver, while anchored near Restoration Point in Puget Sound, described the numerous dogs:

...much resembled those of Pomerania, though in general somewhat larger....were



Dogs seen in 1873 at the Village of Quasela in Smiths Inlet closely resemble descriptions of Wool Dogs. They also strongly resemble the Papillon breed which was popular in Spain in the 18th century and were probably traded to B.C. natives by the Spaniards. The Papillon, possibly like the Wool Dog, is a mixture of a northern spitz and a southern variety of dog. (Close-up of R.B.C.M.'s PN 10,074 by Richard Maynard)



Burial in Esquimalt Harbour midden of what is possibly a small Wool Dog dating to about 1200 years ago.

all shorn as close to the skin as sheep...and so compact were their fleeces, that large portions could be lifted up by a corner without causing any separation....composed of a mixture of a coarse kind of wool, with very fine long hair, capable of being spun into yarn.

In the Gulf of Georgia other early explorers, Galiano and Valdez concluded that blankets they received from inhabitants of the north end of Gabriola Island

...were of dog's hair, partly because when the Woven hair was compared with that of those animals there was no apparent difference, and partly from the great number of dogs they keep in those villages, most of them being shorn. These animals are of moderate size, resembling those of English breed, with very thick coats, and usually white...

In the 1840s, Alexander Anderson, passing the many palisaded villages on the lower Fraser River, also observed

...whole hosts of white quadrupeds, some shorn like sheep, others sweltering under a crop of flowing fleece....The dogs in question are of a breed peculiar to the lower parts of Fraser's River, and the southern portion of Vancouver's Island and the Gulf of Georgia. White with long woolly hair and bushy tail, they differ materially in

aspect from the common Indian cur, possessing however the same vulpine cast of countenance. John Keast Lord, the naturalist, suggested that these Wool Dogs, "differing in every specific detail from all the other breeds of dogs belonging to either coast or inland Indians," were kept on islands to prevent their escaping. He recorded that the Chinook of the Columbia River were the "first possessors of these white dogs...as far as it is possible to trace it."

Besides the dog ...used by the Skagit, Klallam, and others of the lower part of the Sound and Gulf of Georgia, which is shorn for its fleece....pretty good size, and generally white, with much longer and softer

hair...but having the same sharp muzzle and curling tail....

Historian George Gibbs referred to a second type of dog which resembled a coyote and was used for hunting. In 1833, among the Nusqually in Puget Sound William Tolmie had purchased a "large woolly dog" which his party killed and ate, as well as a "short-haired Indian wolf dog breed." Gibbs provided the native names sko-mai and skaha for the two types of dogs. Approximations of these names were also given to ethnographer James Teit by Cowlitz elders who described the kaha as a "sort of grey woolly or thick haired dog straight ears, tail curled slightly used for hunting," and the kimia as "about same size various colors browns and spotted whites they had finer longer hair and were sheared".

In Spuzzum the woolly dogs, altogether different from the common dog of the Thompsons, were called by the special name of *x lit selken*. An elderly weaver told James Teit that the pure breed of Wool Dogs was totally extinct around Spuzzum from before she could remember, but that she had heard from the old people they were medium-sized dogs with long, very fine, thick hair. Though mostly white, some were black and their hair was also used for making blankets. Paul Kane had also described the Wool Dog as a peculiar breed of small dog with long brownish-black and pure white hair.

A distinct species, Wool Dogs were introduced from the Lower Fraser according to tradition, and found nearly as far east as Lytton. They were favoured around Spuzzum and were kept from interbreeding with the "real" Interior hunting dog. The *skaxaoe* (*viz* "real" dog), resembled the Husky and also bore some similarity to coyotes and wolves with which they occasionally interbred.

There was a distinction in most central Coast Salish languages of at least two types of dogs—the common hunting dog and the woolly dog. In some areas the Wool Dog may also have been used for hunting, but such information was usually collected well after the extinction of the Wool Dog. The names most commonly used for the two types are variations on *sko-mai* and *ki-mia* for the woolly dog; and *ska-ha* or *ka-ha* [or *skaxaoe*] for the common dog.

Uses of Dog Hair

Out on Vancouver Island Diamond Jenness recorded in the mid-1930s that

...Dog's wool was not mixed with cedar bark or with goat's wool; it was used for clothing—the women's underskirt, and...a cape for a man. Not mixed with goat's wool because this wool was not procurable until mainland Indians got guns and could shoot many goats.

Yet Makah elders informed Erna Gunther at about the same time that mountain goat wool was bought in Victoria through the Klallam, but that finished blankets were bought more often than the raw wool. James Teit, after the turn of the century, explained that at Spuzzum dog hair used in blanketweaving was

...generally mixed with the wool of the goat. People who did not have any of these dogs used only goat's wool. The using of dog's hair it is said made the blankets of a softer texture and further more they supplied a source of wool right at hand, whereas the goats had to be hunted and their wool thus cost considerable labor.

Historical documentation notes that dog's "wool" was mixed with many different materials for weaving. Along the coast in Bellingham Bay in 1857 E.C. Fitzhugh refered to people dressing in blankets made of dogs' hair and feathers. John K. Lord noted that the long white hair of the dogs

was annually shorn and then mixed with mountain goat wool, duck feathers or hemp. At a Qualicum village on Vancouver Island Aylmer mentioned winter garments consisting of blankets woven from various things, among them bark and dog's hair.

The Quinault and Skokomish also mixed duck feathers and seed fluff to make blankets. Ethnobotanist Nancy Turner and ethnohistorian Randy Bouchard have recorded that the seed fluff of the Fireweed (Epilobium angustifolium) was mixed with dog hair by the Saanich, and with both dog and goat wool by the Squamish and most Puget Sound groups.

In 1847 Paul Kane described the procedure among peoples on the south end of Vancouver Island where in winter the men wear a blanket

...made either of dog's hair alone, or dog's hair and goose down mixed, frayed cedar bark, or wild goose skin...dogs are bred for clothing purposes. The hair is cut off with a knife and mixed with goosedown and a little white earth, with a view to curing the feathers. This is then beaten together with sticks, and twisted into threads by rubbing it down the thigh with the palm of the hand...after which it undergoes a second twisting on a distaff to increase its firmness. The cedar bark is frayed and twisted into thread in a similar manner. These threads are then woven into blankets by a very simple loom of their own contrivance.

Bernard Stern, an ethnographer in the 1930's among the Lummi, also recorded that the down of the swan and the eagle

... is worked into the coarse dog wool while it is being spun serving as a fleece. The finished blankets there are of three kinds: the common blanket generally used as a garment, called *sweqetl*, measuring about one fathom wide and one and one-quarter long, the second used for bedding, called *xwlaqas*, measuring about one fathom wide and two or three fathoms long, and the third, *qetsenang* which is very long and made especially to be used as a medium of exchange or to serve as gifts during festivals, at which time also the other two types are sometimes distributed.

A pioneer in Washington in 1849, Samuel Hancock noted "a great many" dogs at Neah Bay, which the Klallam "regularly shear and weave the hair into blankets in a way peculiar to themselves, quite heavy; and very coarse."

Not only John Lord and Charles Bayley

refer to the dying of the dog hair. Other reports as well indicate colouring of the wool. In 1825 John Scouler observed among the Makah on the Olympic Peninsula that the people

...of Tatooch show much ingenuity in manufacturing blankets from the hair of their dogs. On a little island a few miles from the coast they have a great number of white dogs which they feed regularly every day. From the wool of their dogs and the fibres of the Cypress [cedar] they make a very strong blanket. They have also some method of making red and blue stripes in their blankets in imitation of European ones.

Near Agassiz on the Fraser River, early in the 1800s Simon Fraser observed newly shorn dogs from whose hair were made "rugs with stripes of different colours, crossing at right angles and resembling at a distance, Highland plaid."

As late as 1862 the Makah were making "blankets from dogs hair and cedar bark," but by 1846 we begin to see the demise of the use of dogs' wool. At Port Townsend, Washington, Berthold Seemann observed:

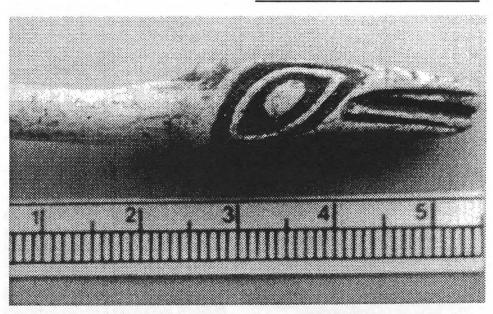
...They keep dogs, the hair of which is manufactured into a kind of coverlet or blanket, which in addition to the skins of bears, wolves, and deer, afford them abundance of clothing. Since the Hudson's Bay Company have established themselves...English blankets have been so much in request that the dog's hair manufacture has been rather at a discount, eight or ten blankets being given for one sea-otter skin. James Anderson noted that Wool Dogs ...were regularly bred for the hair they furnished and were quite numerous even as late as 1849. With the increasing facilities for obtaining blankets & materials of European manufacture...the necessity for keeping up the breed disappeared resulting in the course of time in its total extinction.

Conclusions

Much evidence exists in the historic record for the breeding of large numbers of wool dogs and their role in the weaving industry. But what about the prehistoric record? On southern Vancouver Island I have dated midden layers containing what I think are small Wool Dogs to a period beginning after 1500 years ago. In the same layers we find the first antler combs that may have been used as weaving tools, and the first spindle whorls and antler blanket pins. Is there a correlation between the introduction of the weaving industry and Wool Dogs?

This is just one of the questions that the fascinating study of the archaeological remains of native dogs might help answer. Undoubtedly the work of several researchers who are currently studying dog remains in British Columbia will help direct us.

Grant Keddie, Curator of Archaeology at the R.B.C.M., is interested in the prehistory of B.C. and cultures of the Pacific Rim. His main focus is the archaeology of the Victoria area.



Part of carved bone blanket pin (Victoria site DcRu 75) that may have held a doghair blanket in place.

BOOK REVIEW

A Complex Culture of the British Columbia Plateau: Traditional Stl'atl'imx Resource Use

BRIAN HAYDEN, editor

University of British Columbia Press: Vancouver. 584 pages, maps, photographs. \$75.00 (hardcover)

Andrew Mason

ASBC member Andrew Mason is an MA candidiate in the Department of Anthropology and Sociology at UBC and a Curatorial Assistant (Archaeology) at the UBC Museum of Anthropology.

THE EMERGENCE OF HUNTER-GATHERER SOCIAL INEQUALITY

After reading this large and comprehensive volume concerning the environment, resources and traditional resourceuse of the Stl'atl'imx people (the Fraser River Lillooet), one cannot help but be impressed by the quality and scope of the research. A Complex Culture of the British Columbia Plateau was edited by Dr Brian Hayden of Simon Fraser University, with chapters contributed by well-known scholars from the B.C. anthropological community.

Hayden's archaeological research into the rise of socioeconomic inequality at the Keatley Creek site provided the impetus for this collection of research. Hayden recognized the need for accurate baseline information concerning Stl'atl'imx resources and resource-use prior to any attempt on his part to explain the development of socioeconomic inequality in the Keatley Creek area. Hayden also looked beyond his own research interests and recognized how the publication of this information would benefit researchers interested in exploring other questions involving the relationship between ecology and culture among complex hunter-gatherer societies.

In chapter 1 Hayden introduces the reader to the framework and goals of the volume, and discusses important concepts such as the culture ecology approach. Diana Alexander authored the next two chapters which describe environmental zones in the study area, traditional resource-use, and seasonal population movements.

Michael Kew's often-cited paper, "Salmon Availability, Technology, and Cultural Adaptation in the Fraser River Watershed," in an updated form, provides the basis of chapter 4. This chapter examines the nature of salmon runs and the evolution of fishing technology in the Fraser River drainage.

Chapter 5, by Steven Romanoff, and chapter 6, by Dorothy Kennedy and Randy Bouchard, examine the role of salmon resources among the Stl'atl'imx and explore aspects of fishing technology, access, and the use of identified fishing locations. The last of the "salmon chapters" is chapter 7 by Robert Tyhurst which closes the remaining gaps in the inventory of fishing sites, and examines resource exploitation and ownership in the Alpine and Montane Parkland zones. 0

Well-known ethnobotanist, Nancy Turner, authored chapter 8 which examines the nature of Stl'atl'imx plant resources. In this chapter Turner looks at how plant resources deemed to have high cultural significance were harvested, processed and used by the Stl'atl'imx.

The last three chapters utilize the extensive body of data provided in the preceding chapters to address theoretical questions. In chapter 9, Steven Romanoff examines the role specialized hunters have among the Lillooet. In chapter 10, Aubrey Cannon uses the cultural ecological approach to discuss the characteristics of warfare and slavery throughout the Interior region.

Hayden concludes with chapter 11 and draws upon data presented throughout the volume, as well as other comparative data, to formulate a model for the emergence of socioeconomic inequality, private ownership of resources, and large residential corporate groups.

The strengths of this well-edited volume are obvious and the shortcomings are easily downplayed. I would strongly recommend this book for anthropologists and archaeologists who work in British Columbia, as well as those who are interested in complex hunter-gatherer societies or the culture ecology approach. The general reader in B.C. anthropology or archaeology should not be intimidated by this book. The concepts are well explained and relatively straightforward. This is not a coffee-table book nor one for bedtime reading, however it is worth adding to your library.

UP-DATE ON SCOWLITZ

DATING THE SCOWLITZ SITE

by Michael Blake, Gary Coupland, and Brian Thom

One of the central aims of the 1992 Scowlitz Project [see The Midden, Oct 1992] was to establish the age of the burial mounds and cairns at the site. This is extremely important because so few burial mounds and cairn sites have been securely dated in the Northwest Coast Culture Area. Two or three sites with burial mounds or cairns on Vancouver Island have been dated (K. Capes, 1964; G. Keddie, 1984, B. Smart, pers.comm, 1992), but as far as we know, none from the B.C. mainland have ever been dated. As a result, we could only speculate about the chronological place of such important burial mound sites as the one at Hatzic, excavated by Charles Hill-Tout 100 years ago. We know little of their importance in Coast Salish prehistory and their relationship to the Vancouver Island mortuary complex.

The 1992 excavations at the Scowlitz Site (DhRI 16), at the mouth of the Harrison River near Chilliwack, produced a number of radiocarbon samples that have now been dated and may help to answer some of these questions. Although analysis is still far from complete, we present the dates obtained so far from the 1992 fieldwork. At present, we have several dates from three distinct contexts at the Scowlitz Site: Mound 1, Mound 23, and water-logged artifacts from the beach.

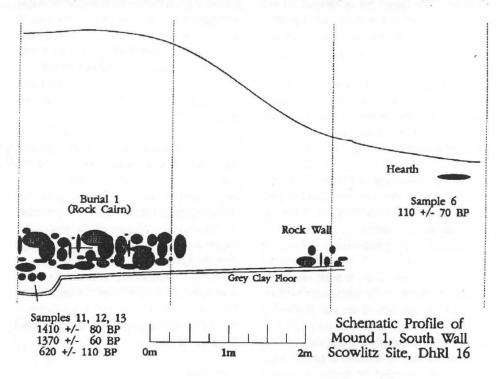
Mound 1.

Four dates have been obtained from Mound 1, the largest mound at the site. Charcoal from a hearth that was found just below the surface at the base of the mound dated to 110 ± 70 BP and must represent an Historic Period occupation at the site. The other three samples are from the burial located deep within the core of the mound. The most important date is an accelerator date of a fragment of human bone. Its age is 1370 ± 60 BP. In addition, a piece of charcoal found next to the cranium dated to 1410 ± 80 years of age. These two dates, taken together, provide a strong indication that the individual in Mound 1 died and was buried sometime between AD 460 and AD 640. Mound 1's construction could be placed somewhere in the transition between the Skamel Culture Type (500 BC-AD 500) and the Canyon Culture Type (AD 500-1800) of the Fraser Canyon, or between the Marpole Culture type (400 BC-AD 400) and the Gulf of Georgia Culture type (AD 400-1800) of the Coast.

We also obtained a date from material that appeared to be some sort of cedar bark matting or container surrounding the burial.

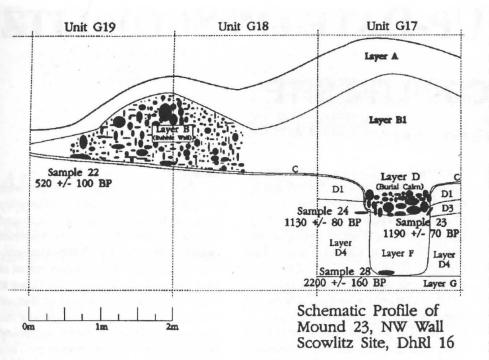
Mound 23

The dating of Mound 23 is somewhat more difficult because the human skeleton buried in the cairn in the heart of the mound did not preserve. We took several samples of carbon associated with distinctive construction features of the mound instead of the burial. One of these samples, dating to 520 ± 100 BP, was from a piece of charcoal resting on a yellowish sandy-clay floor that had been laid down just before the mound was built. Since this floor was incorporated into the burial pit and the cairn, it was likely



A sample of this material dated to 620 ± 110 BP making it several centuries more recent than the burial. If the dating is correct, then this sample must have been from rootlet matting that accumulated later in the cairn surrounding the skeleton. Dates from a small sample of leather and a sample of abalone shell included in the burial offering should eventually help to pinpoint the date of burial. part of the mortuary construction and contemporary with the burial itself. The sample was covered by a rubble retaining wall that outlined the square-shaped mound. Though it could date the actual mound construction, because of its closeness to the edge of the mound from which it was taken, this sample is likely an intrusion from a later time.

Two other dates obtained may be more



relevant. The burial pit in Mound 23 cut through one layer of charcoal that appeared to be associated with an occupation surface that pre-dated the burial mound construction. This charcoal, clearly underlying the yellow sand-clay layer, dated to 1190 ± 70 BP. A third sample, dated to 1130 ± 80 BP, was from a charcoal concentration that appeared directly associated with the rocks of the burial cairn and may date the actual burial. Together, these last two dates give an age-range from about AD 690 to AD 900 for the occupation that immediately preceded the construction of the burial mound, and may actually date the burial as well.

A more deeply buried charcoal sample was recovered from a layer well below the bottom of the burial pit in what may have been one of the earliest house or midden deposits on that part of the site. It dated to 2200 ± 160 BP, or approximately 250 BC. Since this occupation predates the first mound, we may have found an earlier occupation that preceded the mortuary moundbuilding complex.

Water-logged deposits

In March 1992, prior to the burial mound excavations, we discovered some water-logged artifacts on the beach of the Harrison River (DhR1 16w) just upstream from the burial mound complex. One of these, a wooden-hafted slate knife, was extremely well-preserved (see cover of *The Midden*, June 1992). A minute sample of the wood from the handle radiocarbon dated using the AMS method, produced a date of 1180 ± 70 BP (AD 770). This would make it contemporary with the charcoal in the floors underlying Mound 23, and provides a nice chronological link between the main habitation/burial site and the waterlogged deposits.

Another sample of waterlogged wood found in direct association with a basket on the beach several meters away from the hafted stone knife, dated to 580±70 BP, or approximately AD 1370. This suggests that the waterlogged deposits were accumulating for several centuries and the associated basket may be considerably younger in age than the hafted stone knife.

Some preliminary assessment work was carried out at the wet site in October 1992 under the direction of Kitty Bernick, with more investigations tentatively planned for the near future.

Conclusions

The dating of the features and deposits at the Scowlitz Site is beginning to provide some fascinating insights into the time period and extent of the burial mound/cairn complex in B.C. It appears that there was an occupation of the site spanning at least the past 2200 years. However, the two burial mounds that have been excavated so far fall within the past 1500 years. If the dating is correct, this means that the burial mound/ cairn complex developed at about the transition from the Marpole phase of the Coast (or Skamel phase for the Fraser Canyon region), and continued until about 500 years ago. Mound burial practices seem to have died out throughout the Fraser River region before the Historic Period since mound burials were never reported ethnographically, and a range of other mortuary techniques were commonly used.

Capes' work in the Comox Valley seems to suggest the mortuary mound-building complex began earlier on Vancouver Island. If so, perhaps its origins could be associated with the social and political developments of the Marpole Phase. Questions concerning the antiquity, geographic extent, and range of variation in this mortuary complex remain to be fully answered although work at Scowlitz has provided a footing from which to proceed. It is an important part of the past of the Salish peoples; a part that we must try to conserve and understand before any more of these sites are destroyed.

Computer generated profiles by Brian Thom.

Dr Michael Blake is a professor at U.B.C. and led investigations at the 1992 field school at Scowlitz, along with Dr Gary Coupland from the University of Toronto. Brian Thom was part of the research team gathering data for his MA at U.B.C.

Radiocarbon dates from the Scowlitz Site (DhRI 16).

Samples were dated by Beta Analytic, Inc. Samples with a CAMS number were sent by Beta to Cambridge University for accelerator dating (AMS). All dates are uncalibrated.

1000000	DhRl carbor sample no.		C-14 age P ± one sigma	Radiocarbo BC/AD	on years Material and context
Beta-56198	6 N	Jound 1, K17,	110 <u>+</u> 70	AD 1840	charcoal from a hearth located at the base of the mound
Beta-56199	11 N	found 1, Burial 1	1410 <u>+</u> 80	AD 540	charcoal sitting beside cranium of Burial 1
Beta-56200 CAMS-383		Yound 1, Burial 1	1370 <u>+</u> 60	AD 580	human bone sample from individual in Burial 1
Beta-56201	13 N	found 1, Burial 1	620 <u>+</u> 110	AD 1330	bark or root fibres underlying Burial 1
Beta-56202	22 N	found 23, G19	520 <u>+</u> 100	AD 1430	charcoal sample under rubble wall and resting on top of yellow sand C-layer floor
Beta-56204		found 23, Burial 1, evel 2	1130 <u>+</u> 80	AD 820	charcoal below yellow sand C-layer floor and resting beside cairn boulders
Beta-56217	23 N	Jound 23, G17	1190 <u>+</u> 70	AD 760	charcoal below yellow sand C-layer floor
Beta-57218	28 N	found 23, G17	2200 <u>+</u> 160	250 BC	charcoal from layer F, a floor below the burial
Beta-56206 CAMS-383		Vater-logged deposi each	t, 1180 <u>+</u> 70	AD 770	wooden knife handle (DhRl 16w:1).
Beta-57219		Vater-logged deposi each	t, 580 <u>+</u> 70	AD 1370	cedar wood fragments in direct association with a large basket fragment (DhRl 16w:2)

NEW PUBLICATIONS

Archaeology: The Science of Once and Future Things by BRIAN HAYDEN

W.H. Freeman and Co: New York, 1992. approx 469 pp, 193 illus.

Described by Marvin Harris as, "The best introductory archaeology book I have ever read."

Nemiah: The Unconquered Country

by TERRY GLAVIN and the People of the Nemiah Valley

New Star Books: Vancouver, 1992. 153 pp, 64 photos. \$24.95 (paper).

The history and culture of the Nemiah Chilcotin told against the backdrop of the Chilcotin War and ongoing struggle to maintain control of their valley.

Themes in Southwest Prehistory

GEORGE GUMERMAN, editor

School of American Research Press, 1993 370 pp, illus, maps. \$22.50 (paper)

Twenty-five authors present current thinking on environment, demography, nutrition, aggregation, abandonment and other issues in Southwest prehistory.

ANNUAL INDEX TO THE MIDDEN

Journal of the Archaeological Society of British Columbia Volume 24, 1992 (published February, April, June, October, December)

> **Compiled by Kathryn Bernick** (* indicated illustrated article)

AUTHOR

- Acheson, Steven. Construction Unearths Renewed Interest in Nuu-chah-nulth Cultural Origins. 24/1:1 F'92. Apland, Brian. B.C.'s Heritage Legislation: Archaeological Site Protection.
- 24/3:5-7 J'92.
- Brolly, Richard P. Little Beach Site, Ucluelet, B.C.: 1991 Archaeological Investigations.* 24/1:2-4 F'92.
- Capes, Catherine [Katherine]. Letter to the Editor. 24/5:1 D'92.
- Chatan, Robbin. Book Review: A Basic Field and Lab Manual. 24/4:5 O'92. Curtin, Joanne. Book Review: Lavishly Illustrated. 24/1:9 F'92. Easton, N. Alexander. The Waters of Montague Harbour: More Findings from Down Under. * 24/3:9-12 J'92.
- Hudson, Douglas. Book Review: Not a Concise Cultural Chronology. 24/5:10 D'92.

- Johnson, Joyce. Note from the Editor. 24/1:1 F'92. Note from the Editor. 24/4:1 O'92. Keddie, Grant. Cultural Change in the Gulf of Georgia: Asking the Right Questions.* 24/3:3-4 J'92.
- Mackie, Richard. Letter to the Editor. 24/2:1 A'92.
- Marshall, Yvonne. Surveying in Nootka Sound: The Man in the Sun and Other Stories.* 24/2:7-10 A'92.
- Mason, Phyllis, comp. Annual Index to The Midden, Publication of the Archaeological Society of British Columbia, Volume 23, 1991. 24/1:10-11 F'92.
- McMillan, Alan D. Recent Research in Barkley Sound: The Toquaht Archaeological Project.* 24/2:3-5 A'92. Morrison, Sandra. UBC Archaeology Field School: The Sacred Mounds of
- Scowlitz. 24:4/2-4 O'92.
- Muckle, Bob. Book Review: Focus on Shell Midden Site Formation Processes. 24/5:11 D'92.
- Myles, Heather. UBC Archaeology Field School: The Sacred Mounds of Scowlitz.* 24/4:2-4 O'92.
- Spurgeon, Terry. The Park Farm Site: Obsidian without Volcanoes. 24/5:9 D'92.
- St. Claire, Denis E. An Interface of Ethnography and Archaeology on Vancouver Island.* 24/1:6-8 F'92. Stevenson, Ann. Book Review: Only in Britain You Say? 24/2:11 A'92.

Sumpler, Ian. Gitaus Revisited: River Erosion along the Skeena.* 24/4:6-8 O'92. Thom, Brian. Summer Field Research with the A.S.B.C. 24/2:1 A'92. ———. Whalen Farm Revisited: 40 Years Later.* 24/5:3-6 D'92.

- Wooten, Kimberly. From the Scowlitz Site: A Basket Case.* 24/4:10-11 O'92.

TITLE

- Another Hatzic? 24/2:2 A'92. Annual Index to The Midden, Publication of the Archaeological Society of British Columbia, Volume 23, 1991. 24/1:10-11 F'92. Archaeological Impact Assessment Consultants. 24/3:13 J'92.

A.S.B.C. Charter Member. 24/5:1 D'92. B.C.'s Heritage Legislation: Archaeological Site Protection. 24/3:5-7 J'92. Canoe Rests. 24/5:2 D'92.

Construction Unearths Renewed Interest in Nuu-chah-nulth Cultural Origins. 24/1:1 F'92

- Cultural Change in the Gulf of Georgia: Asking the Right Questions.* 24/3:3-4 J'92.

Debitage. 24/1 9 F'92. Debitage. 24/2:6 A'92. Debitage. 24/3:8 J'92. Debitage. 24/3:8 G'92.

- Debitage. 24/5:8 D'92.
- Don't Forget. 24/5:1 D'92. Excavation Opportunities Beckon. 24/1:13 F'92.
- For Aspiring Archaeologists. 24/3:12 J92. From the Scowlitz Site: A Basket Case.* 24/4:10-11 O'92.
- Gitaus Revisited: River Erosion along the Skeena.* 24/4:6-8 O'92.

The Gwaii-Haanas Archaeology Project. 24/4:9 O'92. Harlan Smith Revisited. 24/3:1 J'92.

Ingrid's Bash. 24/3:1 J'92.

- An Interface of Ethnography and Archaeology on Vancouver Island.* 24/1:6-8 F'92.
- Last-Minute Gifts for the Archaeologist: Inexpensive, Creative, Educational. 24/5:12 D'92.
- Letter to the Editor. 24/2:1 A'92. Letter to the Editor. 24/5:1 D'92.
- Listen, The Trees Are Speaking, 24/4:9 O'92. Little Beach Site, Ucluelet, B.C.: 1991 Archaeological Investigations.*
- 24/1:2-4 F'92.
- Monte Creek Revisited. 24/2:2 A'92.
- The Mystery Goes On. 24/1:8 F'92. No Shell Here. 24/3:1 J'92.

Note from the Editor. 24/1:1 F'92. Note from the Editor. 24/4:1 O'92.

- On the Creek. 24/4:9 0'92
- On the Waterfront. 24/4:9 O'92.
- The Park Farm Site: Obsidian without Volcanoes.* 24/5:9 D'92.

- Passports to Archaeology. 24/1:8 F'92. Possible Barge Landing Sites. 24/3:9-11 O'92. The Problem with Wet Sites. 24/3:2 J'92. Recent Research in Barkley Sound: The Toquaht Archaeological Project.* 24/2:3-5 A'92.
- Residential Subdivision—Then and Now. 24/4:9 O'92. Summer Field Research with the A.S.B.C. 24/2:1 A'92.
- Surveying in Nootka Sound: The Man in the Sun and Other Stories.* 24/2:7-10 A'92.

The Toquaht Revisited. 24/4:11 O'92.

- UBC Archaeology Field School: The Sacred Mounds of Scowlitz.* 24/4:2-4 O'92.
- The Waters of Montague Harbour: More Findings from Down Under.* 24/9-12 J'92.
- Whalen Farm Revisited: 40 Years Later. * 24/5:3-6 D'92.

SUBJECT

ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA ASBC 1992/93 Executive. 24/4:13 O'92. Thom, Brian. Summer Field Research with the A.S.B.C. 24/2:1 A'92.

ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA, VICTORIA CHAPTER

More Fun than a Thesis? 24/3:1 J'92.

- ARCHAEOLOGICAL SURVEYS Marshall, Yvonne. Surveying in Nootka Sound: The Man in the Sun and Other Stories.* 24/2:7-10 A'92.
 - McMillan, Alan D. Recent Research in Barkley Sound: The Toquaht Archaeological Project.* 24/2:3-5 A'92.
- ARCHAEOLOGISTS CONSULTANTS Archaeological Impact Assessment Consultants. 24/3:13 J'92.

BOOK (Etc) NOTICES Articles to Look For. 24/3:2 J'92. New. 24/5:2 D'92. New Publications. 24/1:5 F'92. New Publications. 24/2:12 A'92. New Publications. 24/3:7 J'92. New Publications. 24/4:11 O'92. New Publications. 24/5:7-8 D'92.

BURIALS Brolly, Richard P. Little Beach Site, Ucluelet, B.C.: 1991 Archaeological Investigations.* 24/1:2-4 F'92. The Mystery Goes On. 24/1:8 F'92. CONFERENCES Canadian Archaeologists to Meet. 24/2:2 A'92. Chacmool. 24/4:13 O'92. Conferences. 24/2:13 A'92 Dates to Remember. 24/5:13 D'92. NWAC [Northwest Anthropological Conference]. 24/5:2 D'92. SHA [Society for Historic Archaeology]. 24/5:2 D'92. SPNHC [Society for the Preservation of Natural History Collections]. 24/ 5:2 D'92. **COWICHAN INDIAN RESERVE** No Shell Here. 24/3:1 J'92 On the Creek. 24/4:9 0'92. **CULTURE CHANGE** Reddie, Grant. Cultural Change in the Gulf of Georgia: Asking the Right Questions.* 24/3:3-4 J'92. ETHNO-ARCHAEOLOGY St. Claire, Denis E. An Interface of Ethnography and Archaeology on Vancouver Island.* 24/1:6-8 F'92. **EXHIBITIONS** Dates to Remember. 24/5:13 D'92. Exhibitions. 24/4:13 O'92. UBC Museum of Anthropology. 24/1:5 F'92. UBC Museum of Anthropology. 24/2:13 A'92. **GITAUS SITE** Sumpter, Ian. Gitaus Revisited: River Erosion along the Skeena.* 24/4:6-8 O'92. HERITAGE LEGISLATION Apland, Brian. B.C.'s Heritage Legislation: Archaeological Site Protection. 24/3:5-7 J'92. LECTURES Dates to Remember. 24/5:13 D'92. RBCM Newcombe Program. 24/4:13 O'92. UBC Museum of Anthropology: Hatzic Rock. 24/2:13 A'92. THE MIDDEN Don't Forget. 24/5:1 D'92. Mackie, Richard. Letter to the Editor. 24/2:1 A'92. Johnson, Joyce. Note from the Editor. 24/1:1 F'92. Note from the Editor. 24/4:1 O'92. MONTAGUE HARBOUR SITE Easton, N. Alexander. The Waters of Montague Harbour: More Findings from Down Under.* 24/3:9-12 J'92. MONTE CREEK SITE Monte Creek Revisited. 24/2:2 A'92. MOUNDS Capes, Catherine [Katherine]. Letter to the Editor. 24/5:1 D'92. Morrison, Sandra and Heather Myles. UBC Archaeology Field School: The Sacred Mounds of Scowlitz.* 24/4:2-4 O'92. NORTH SAANICH SITES Harlan Smith Revisited. 24/3:1 J'92. On the Waterfront. 24/4:9 O'92. WHALEN FARM SITE NUU-CHAH-NULTH ARCHAEOLOGY Acheson, Steven. Construction Unearths Renewed Interest in Nuu chah-nulth Cultural Origins. 24/1:1 F'92. Brolly, Richard P. Little Beach Site, Ucluelet, B.C.: 1991 Archaeo logical Investigations.* 24/1:2-4 F'92. Marshall, Yvonne. Surveying in Nootka Sound: The Man in the Sun and Other Stories.* 24/2:7-10 A'92. McMillan, Alan D. Recent Research in Barkley Sound: The Toquaht Archaeological Project.* 24/2:3-5 A'92. Possible Barge Landing Sites. 24/4:9,11 O'92.

St. Claire, Denis E. An Interface of Ethnography and Archaeology on Vancouver Island.* 24/1:6-8 F'92. The Toquaht Revisited. 24/4:11 O'92. NYSTROM, INGRID Ingrid's Bash. 24/3:1 J'92. **OBITUARIES** A.S.B.C. Charter Member [Aileen Winskill]. 24/5:1 D'92. PALAEOENVIRONMENT Listen, The Trees Are Speaking. 24/4:9 O'92. PARK FARM SITE Spurgeon, Terry. The Park Farm Site: Obsidian without Volca noes.* 24/5:9 D'92. QUEEN CHARLOTTE ISLANDS The Gwaii-Haanas Archaeology Project. 24/4:9 O'92. PROJECTS Excavation Opportunities Beckon. 24/1:13 F'92. Permits Issued by the BC Archaeology Branch, October through December 1991. 24/1:12 F'92. Permits Issued by the BC Archaeology Branch, January-February 1992. 24/2:12 A'92. Permits Issued by the BC Archaeology Branch, March-April 1992. 24/3:4 J'92. Permits Issued by the BC Archaeology Branch, May to August 1992. 24/4:12 O'92. Permits Issued by the BC Archaeology Branch, September October, 1992. 24/5:12 D'92. Residential Subdivision-Then and Now. 24/4:9 O'92. PUBLIC ARCHAEOLOGY Archaeology Adventure Day. 24/2:6 A'92. Artifact Identification Clinics. 24/4:4 O'92. For Aspiring Archaeologists. 24/3:2 J'92. Passports to Archaeology. 24/1:8 F'92. REVIEWS Ives, John. A Theory of Northern Athapaskan Prehistory. Re viewed by Douglas Hudson. 24/5:10 D'92. Pearce, Susan. Archaeological Curatorship. Reviewed by Ann Stevenson. 24/2:11 A'92. Stein, Julie K. Deciphering a Shell Midden. Reviewed by Bob Muckle. 24/5:11 D'92. Wheeler, Alwyne and Andrew K.G. Jones. Fishes. Reviewed by Robbin Chatan. 24/4:5 O'92. White, Tim. Human Osteology. Reviewed by Joanne Curtin. 24 1:9 F'92. SCOWLITZ SITE Morrison, Sandra and Heather Myles. UBC Archaeology Field School: The Sacred Mounds of Scowlitz.* 24/4:2-4 O'92. Wooten, Kimberly. From the Scowlitz Site: A Basket Case.* 24 4:10-11 0'92. **STONE BOWLS** Another Hatzic? 24/2:2 A'92. UNDERWATER ARCHAEOLOGY Canoe Rests. 24/5:2 D'92. Easton, N. Alexander. The Waters of Montague Harbour: More Findings from Down Under.* 24/3:9-12 J'92.

Brian, Thom. Whalen Farm Revisited: 40 Years Later.* 24/5:3-6 D'92.

WET SITES The Problem with Wet Sites. 24/3:2 J'92.

Wooten, Kimberly. From the Scowlitz Site: A Basket Case.* 24:4:10-11 O'92

LECTURES

February 15 8:00 pm	Professor Naomi Norman , University of Georgia AIA meeting, UBC Museum of Anthropology Lecture Theatre CURSES AND CAVEAE: ENTERTAINMENT IN ROMAN CARTHAGE
February 26 8:00 pm	Birgitta Linderoth Wallace, Archaeologist, Canadian Parks Service RBCM, Newcombe Theatre, 675 Belleville St., Victoria (ticket information 387-5822) L'ANSE AUX MEADOWS: GATEWAY TO VINLAND
March 10 8:00 pm	Professor Susan Caine , Oberlin College AIA meeting, UBC Museum of Anthropology Lecture Theatre THE SANCTUARY OF DEMETER AND KORE/PERSEPHONE AT CYRENE, LIBYA
March 29 8:00 pm	Professor Stephen Miller, University of California at Berkeley AIA/Pharos meeting, Helenic Centre,4500 Arbutus Street, Vancouver
April 16 8:00 pm	Professor John Luce RBCM's Super Series (ticket information 386-6121) University Centre Auditorium, University of Victoria (about THE TROJAN WAR and THE SITE OF LEGENDARY TROY)

PERMITS

Issued by the B.C. Archaeological Branch, November-December 1992 and January 1993

1992-124	Ian Wilson: impact assessment, Pacific Northern Gas pipeline loop, Zymoetz River, northeast of Terrace.
1992-125	Ian Wilson: impact assessment, proposed logging cut blocks and haul roads, Princess Royal Island.
1992-126	Ian Wilson: impact assessment, sewer pump stations, Ten Mile Point, Municipality of Saanich.
1992-127	Ian Wilson: impact assessment, two segments of the Nanaimo Highway bypass route.
1992-128	Leonard Ham: monitoring, construction near DhRt 22, Vancouver International Airport.
1992-129	Bjorn Simonsen: impact assessment, proposed upgrade of the Birkenhead River Crossing (EcRq 1).
1992-130	Geordie Howe: impact assessment, property near Kawkawa Lake, east of Hope.
1992-131	Alison Landals: impact assessment, Starcom Fibre Optics route from Vancouver to the U.S.A. border.
1992-132	Geordie Howe: impact assessment, proposed subdivision near Hatzic Lake.
1992-133	Bjorn Simonsen: inventory, Degnen Bay, Gabriola Island.
1993-1	Lindsay Oliver: recovery of human skeletal material and associated artifacts.
1993-2	Arnoud Stryd: impact assessment, West Kootenay Power South Okanagan substation, Vaseux Lake.
1993-3	Ian Wilson: impact assessment, North Saltspring Island.
1993-4	Jean Bussey: impact assessment, Canadian Hunter Exploration Ltd. gas and oil developments, northern B.C.
1993-5	Richard Brolly: monitoring, construction of retaining wall, Jellicoe Park, Vancouver.

CONFERENCES

[NWAC STUDENT PAPER COMPETITION
April 18-24	S.A.A. Society for American Archaeologists, 59th Annual Meeting. DISNEYLAND Hotel, Anheim, California.
1994 January 5-9	S.H.A. The Society for Historic Archaeology, Annual meeting. Hotel Vancouver, VANCOUVER. ACUA Program Chair: Charles Moore, Tel. (604) 275-5427 SHA Program Chair: David Burley, Dept of Archaeology, S.F.U. Burnaby, B.C., V5A 1S6. Tel. (604) 291-4196
November (TBA)	B.C. ARCHAEOLOGY FORUM Department of Archaeology, SIMON FRASER UNIVERSITY, Burnaby, B.C. Organizers: Geordie Howe, Mike Rousseau
November 11-14	CHACMOOL. "Cultural Complexity in Archaeology" University of CALGARY, Alberta Abstract Deadlines: sessions, Feb 1/93; papers, May 1/93 Contact: Chacmool, The 1993 Conference Committee, Dept of Archaeology, University of Calgary, Alta T2N 1N4. Tel (403) 282-9567
June 7-12	S.P.N.H.C. Society for the Preservation of Natural History Collections, 7th Annual Meeting. Royal British Columbia Museum, VICTORIA. Contact: Grant Hughes, Local Conference Committee, RBCM, Parliament Buildings, Victoria, B.C. V8V 1X4. Tel (604) 378-5706.
May 5-9	C.A.A. Canadian Archaeological Association, 26th Annual Meeting. Holiday Inn-Crown Plaza, Metro Centre, MONTREAL, Quebec. Coordinator: Francoise Duguay, Association des archeologues du Quebec, 4061 rue Saint- Hubert, Montreal, Quebec H2L 4A7
April 1-8	 S.A.A. Society of American Archaeologists, 58th Annual Meeting. ST. LOUIS, Missouri. Program Chair: Jay Custer, Dept. of Anthropology, University of Delaware, Newark, DE 19716
1993 March 26-28	N.W.A.C. 46th Northwest Anthropological Conference WESTERN WASHINGTON UNIVERSITY, Bellingham, WA. Contact: NWAS Program Coordinator, Dept. Of Anthropology MS-9083, Western Washington University, Bellingham, WA 98225 USA

The 1993 Northwest Anthropology Conference has announced a Student Paper Competition. Both undergrad and graduate students are eligible. Entries should be typed, double-spaced, and 15 to 25 pages in length. Submissions should conform to *American Anthropology* style. Deadline for receipt of submissions is March 19, 1993. Send to:

> Student Paper Competition - NWAC Department of Anthropology, MS-9083 Western Washington University Bellingham, WA 98225



P.O. Box 520 Station A Vancouver, B.C. V6C 2N3