

Publication of the Archaeological Society of British CHRYMUES

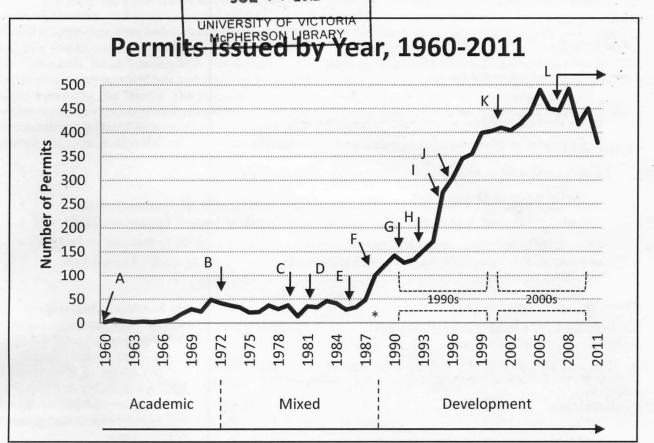
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ASBC SURVEY

MARPOLE IN THE MEDIA

JUNIPER BEACH PARK MITIGATION BONE BODY ARMOUR

THE BUSINESS OF ARCHAEOLOGY



Volume 44, No. 2 2012

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THE MIDDEN Subscriptions

Subscriptions to THE MIDDEN are included with ASBC memberships. For non-members, subscriptions for 2012 are available at \$23 per year for Canadian addresses—\$30 for addresses in the United States and \$45 overseas.

Single copies of most previous issues are available for \$5.00 each, plus postage.

Subscription forms and membership application forms are available on our website (www.asbc.bc.ca).

Please note we are only able to accept Canadian funds.

Cover:

Archaeology permits issued by year since 1960, details on page 9.

Events & Conferences Back Cover



The ASBC Pages

Results of the 2011 ASBC Survey

In the Fall 2011, we conducted a survey of the ASBC's past and present membership through an online questionnaire. Our goal was to get feedback and suggestions on a few key issues. These included: (1) present and potential constitutional mandates, (2) diminished membership and participation; and (3) the Society's publication, *The Midden*.

We had 153 responses, from both current and previous members, who took time to give us their thoughts and suggestions. To all of our respondents, we say a tremendous, *Thank you!*

The brief summary provided here addresses the results that are directly relevant to *The Midden*. The publication has been the attention of some discussion recently, as some members have suggested transforming *The Midden* into an online resource. This could result in lower production and mailing costs and increased

accessibility to a wider public audience. The latter may better serve the ASBC's mandate of public education.

Other comments from ASBC members stressed the importance of lectures and field events like walking tours as sellingpoints for membership. While, at this time, it seems prudent for the ASBC to shore up its strengths prior to building others, we look forward to pursuing such events in the near future.

The below summary begins with a short list of the key findings, details the relevant questions and results, includes some comments by the membership, and concludes with some discussion on the future of *The Midden*.

The survey results can be found on the ASBC website:

http://asbc.bc.ca/content/asbc-membership-survey-2011

Key Findings

- The Midden represents the main reason why members have maintained Society membership.
- The Midden is ranked highest in satisfaction among ASBC services.
- Sixty-three percent of *Midden* subscribers read it in its entirety.
- The Midden and public lectures rank highest for future Society activities.

Results

What are the main reasons you have maintained membership? (check all that apply)

78%
68%
56%
53%

How satisfied have you been with ASBC services?

The Midden Satisfied 79% Indifferent 15% Unsatisfied 7% Public lectures Satisfied 63% Indifferent 33% Unsatisfied 4% Public archaeology events Satisfied 20% Indifferent 52% Unsatisfied 30%

Which parts of *The Midden* do you regularly read? (check all that apply)

I read all of *The Midden*Articles
Artifact features
Book reviews
I do not read *The Midden*5%

Looking to the future, what services would you like to see the ASBC focus on? (check all that apply)

Public lectures 67%

The Midden 66%

Field trips/interpretive walks

Public arch. days at museums 51%

Semi-annual local conferences 40%

Comments from Membership

What features or topics would you like to see more of in The Midden?

"I love The Midden as it is!"

"A broader scope of archaeology in B.C.; there seems to be repetition from the same contributors."

"The Midden should continue with the good balance of informed public policy debate (this is such an essential issue and a key purpose of the ASBC itself) and reports from field projects and collaborations with First Nations that are ongoing."

"More to do with archaeological discoveries in B.C.—
a great deal less to do with poorly formed opinions of
often largely ignorant students and fewer book reviews
about books that are no practical interest to archaeologists, except a handful of academics."

"Current issues in B.C. and NWC archaeology, including controversies generated by CRM."

"The problem with *The Midden*—and I know that's not what you're asking!—is it's become too academic. There are other media where scholars and wannabe scholars and those seeking tenure can write. But there's nowhere else where we can read accessible articles about B.C. archaeology."

"Technical reports, microscopic analyses (phytoliths, pollen, starch, protein, ancient DNA, animal tissues, lithic usewear, etc.), paleoethnobotany, faunal analysis, taphonomy, museum studies."

"ONLINE ACCESS—members and the executive in Victoria have suggested this for years but communication is so poor across the gulf."

"The Midden is getting to be a little bit 'inside baseball' with a lot of professional practice issues and grievances being aired out there. I see it as first and foremost a venue to publicize amazing B.C. Archaeology. Perhaps there should be an e-newsletter or a discussion forum for the other issues."

"More input from students and the public."

"Provide digital copies of *The Midden* and forego hard copies."

"More of the good debate and thought in *The Midden* should trickle into the mainstream media."

"Archaeology is political, thus more politics."

Some Concluding Remarks...

Clearly, there is a wide range of opinion regarding the present and future of *The Midden*. For some, the opinions expressed in articles are "too political," while others have challenged us to more overtly engage in discussions regarding politics and controversy in archaeology. Some people would like to see more technical reports and articles featuring scientific analyses of sites and artifacts, yet others suggest that the tone of *The Midden* is "too academic."

The Midden is the product of those who are interested and involved in B.C. archaeology and, like any group, diversity in approach and opinion is both to be expected and encouraged. In our 2011 issues, we tried to highlight media reporting of archaeology, First Nations' perspectives on heritage, and the policy and practice of cultural resource management, as well as artifact biographies, new site reports and reviews of recent books of inter-

est to ASBC members. Our 2012 issues will continue all of these themes. We encourage contributions that address controversial aspects of archaeology as *The Midden* represents one of the only places where these topics are regularly discussed. We especially invite students, First Nations and members of the interested public to contribute by submitting letters, articles and features, and we will be liaising with various communities to welcome their participation.

One issue that has been on the table for some time is taking *The Midden* online. We agree in principle that offering a digital version may result in lower costs and increased public visibility for the ASBC. We must also be cautious not to rush toward this goal, as *The Midden* is presently the Society's core undertaking, as illustrated by this recent survey. We will be looking into this idea further and will keep you all posted.

With Thanks again to all who contributed, The ASBC Executive

Craig Rust (President), Rich Hutchings (Vice-President), Jim Pound (Treasurer), Sarah Smith (Membership), Kristy Whitehurst (Secretary), Marina La Salle (Midden)

ARCHAEOLOGY IN THE MEDIA: the Site C Dam

In our last issue, we featured an editorial and reprinted article concerning archaeology, heritage and BC Hydro's Site C dam. In response to these, David Conway, BC Hydro's Community Relations Manager, wrote to us with corrections and clarifications. I have included his comments in full here, along with my own response below.

Dear Editor:

Re: Site C & Dam Archaeology (Volume 44, No. 1 – 2012)

A recent article on the Site C Clean Energy Project (Site C) requires three points of clarification.

First, the 200 hectares identified as having archaeological potential refers only to areas in which systematic survey with shovel testing was completed before September 2011. Crews also inspected other areas using different methodologies, including more than 2,000 hectares of systematic surface inspections and judgmental survey in areas of high, moderate and low potential. In 2012, we are planning to complete more than 150 hectares of systematic survey, providing that crews can access all areas. Additional systematic surface inspections and judgmental surveys will also occur.

Second, contrary to what was stated in the article, the findings of the heritage program will be publicly available as part of the environmental assessment process. The Environmental Impact Statement, the application for the environmental assessment, will include the results of the field inventory and an effects assessment on heritage resources. Consistent with the province's approach to managing and protecting sensitive archaeological information, archaeological site locations will be redacted from the public version of the report. However, the full results will be available to First Nations, some stakeholders and the professional archaeology community.

Third, with respect to Rocky Mountain Fort and Rocky Mountain Portage House, the current heritage program includes visits to both locations to document their present condition. Where the project is likely to have an effect, an effects assessment will be completed and mitigation recommendations will be made. As both sites pre-date 1846, they are automatically protected under the *Heritage Conservation Act*. The BC Archaeology Branch will review the assessment and any proposed mitigation.

More information about Site C is available at www. bchydro.com/sitec.

Dave Conway Community Relations Manager, Site C BC Hydro My response to David:

Site potential and survey:

This is an important point of clarification. Of course, "surface inspections" are extremely limited if the goal is to actually find *buried* sites. But, given the sheer size and scale of the Site C dam, it would take a lot more time and money to conduct more subsurface investigations, such as shovel testing, over such an expansive area...

Public reporting:

As stated in my editorial, information on archaeology undertaken for the Site C dam is being controlled by BC Hydro. The project results are written up in a by-request-only report that is filed with the Archaeology Branch; the report is confidential and the results inaccessible to the interested public or media for critical review. To compound matters, the individual archaeologists who are involved with the project are not themselves able to independently write or speak about it, in the media or even with each other: they are legally sworn to silence. This means that the project proponent is in control of all information concerning heritage impacts resulting from their development. This is a conflict of interest, as it is in BC Hydro's, and thus the provincial government's and Archaeology Branch's interests to downplay any "bad press" concerning what has for decades now been a controversial and much criticized dam construction project. Legally-binding non-disclosure agreements remove one of the only means by which to produce independent evaluations or critique of the project for public consideration.

Rocky Mountain Fort and Portage House:

I know everyone will be glad to hear that the impact of the dam on this important site will be assessed and "mitigation recommendations" will be considered. What exactly this means remains to be seen; however, short of moving or reducing the size of the dam, it is unlikely that these or any other heritage sites encountered will be protected or conserved in situ. These places will be gone and no amount of research will change that.

Marina La Salle, Editor

ARCHAEOLOGY IN THE MEDIA: the Marpole Site

As many of our readers will be aware, there has been controversy surrounding a proposed construction project due to take place at the Marpole site, located near the mouth of the Fraser River. This sparked an ongoing protest by members of the Musqueam community. Rather than reiterate the now well-reported story here, we have compiled a series of perspectives to serve as both an archive of the events and a snapshot of heritage conservation and contestation in the province today.

ASBC's Statement on Marpole

Over the past 40 years, the Archaeological Society of British Columbia (ASBC) has advocated for the care of archaeological heritage and encouraged public awareness concerning heritage conservation issues. The Society's constitutional aims are to:

- 1. Encourage the protection of archaeological sites and materials.
- 2. Promote the spread of knowledge about archaeology.

In March 2012, members of the Musqueam community organized a demonstration at the ancient village site of Marpole in Vancouver, where construction of a condominium is being undertaken.

For archaeologists, the site of Marpole has played an important role in developing an understanding of human history in the area. There is a long legacy of excavation and study of the site, dating back to the province's first archaeologists. Since that time, Marpole has been significantly damaged by road and building construction and development, and what remains of the site is therefore even more critical to care for, yet it continues to be at risk.

For Musqueam, Marpole is a site of special significance: it is a place that connects them to their land, ancestors, history and culture. It is an important part of their identity as a people. Musqueam have condemned the damage to the village over many decades, and have gone so far as to purchase private property overlaying the area in an effort to prevent further destruction. The village site is also a cemetery, as it is home to the remains of their ancestors, whose peace continues to be disturbed unnecessarily.

The ASBC supports the protection and conservation of this historically important village and cemetery. We also support Musqueam's inherent right "to maintain, control, protect and develop their cultural heritage," as recognized in Article 31 of the United Nations Declaration on the Rights of Indigenous Peoples 2007.

We call on the Province of B.C. to likewise recognize this right and take action in support of this and of the British Columbia *Heritage Conservation Act*, the purpose of which is to "conserve" the places that matter. Marpole is a place that matters.

For more information about the ASBC please visit our website: http://www.asbc.bc.ca/

ASBC Executive

ćəsna?m (Marpole Midden)

Susan Roy

Recent efforts by the Musqueam First Nation to protect the village and burial ground known to community members as cosna?m has lately been the subject of a great deal of public commentary. Many people support Musqueam's proposal to make a land swap with the current owners and to transform this site into an interpretive park. Individuals such as AFN chief Shawn Atleo, BC regional chief Jody Wilson-Raybould, UBCIC chief Stewart Phillip, and Vancouver's mayor, Gregor Robertson, have visited the site and signed the Musqueam's petition.

Some observers, however, tend to downplay the connection that Musqueam people have to this place. A recent article appeared in the Vancouver Courier newspaper, which suggested that Musqueam's claims to the Marpole midden were based solely on context and history books. The author wrote in relation to the burials found there, "Even the bones remain shrouded in mystery." This notion of "mystery"1-something obscure or unknowable-has been used to describe British Columbia's archaeological heritage for many years. In my book, These Mysterious People, I argue that public discourses of "mystery" have also served to discount Indigenous oral traditions that describe long histories of residency and mobility throughout their territories2. The Musqueam First Nation, like other Indigenous communities in the province, have complex oral histories describing their relationships to the lands and waters, to deceased ancestors and to the unborn generations of the future. These oral traditions are not simple adjuncts to the research methods of radiocarbon dating or lab testing. Today many archaeologists have developed important research partnerships with First Nations based on respect, collaboration and keen attention to both oral tradition and science.

Archaeologists of the past stressed the midden's archaeological significance. In the 1940s and 1950s, when renewed urban development threatened portions of ćəsna?m containing intact archaeological deposits, Professor Charles Borden of the University of British Columbia conducted salvage excavations at the site. Borden was a vocal advocate of the importance of the province's archaeological heritage and he lamented the midden's destruction: "The recent history of this site is tragic and not a credit to Canada and the citizens of this Province." According to Borden, "The cultural remains that lie buried in the ancient sites of this Province are part of the cultural heritage of all mankind and...it is our duty not to let these archaeological resources go to waste through apathy and negligence." Many local Marpole residents hold memories of assisting Borden on the digs; as children they shifted soil on weekends and after school.

Today, tucked under the ramp of the Arthur Laing Bridge leading to Vancouver's airport, Musqueam community mem-

ARCHAEOLOGY IN THE MEDIA: the Marpole Site

bers—supported by First Nations leaders and Indigenous and non-Indigenous people from the community and across Canada—are holding a 24-hour vigil in an effort to prevent further destruction to the burials located there. Community members hold signs reading, "Musqueam History is BC History," attesting to Musqueam's commitment to preserve this heritage site for all, Musqueam and non-Musqueam alike.

Susan Roy is a post-doctoral research fellow in the Department of History at York University. She is the author of *These Mysterious People: Shaping History and Archaeology in a Northwest Coast Community* (Montreal and Kingston: McGill-Queen's University Press, 2010), which examines the history of the Musqueam First Nation's relationship to the Marpole Midden.

Notes

- "Musqueam protest in Vancouver covers same old ground," May 28, 2012, Vancouver Courier.
- Susan Roy, These Mysterious People: Shaping History and Archaeology in a Northwest Coast Community (Montreal: McGill-Queen's University Press, 2010).
- Charles E. Borden, "An Ancient Coast Indian Village in Southern British Columbia," reprint from *Indian Time*, 2, no. 15 (December 1955): 9-19. Copy from the Laboratory of Archaeology, UBC.

The Musqueam Protest

Craig Rust

Development of the heritage site of ćəsna?m, also known as the Great Fraser Midden, the Eburn Mound and the Marpole Site (DhRs-001), has been the subject of an ongoing protest. Initiated and led by Musqueam community members, the protest strives to protect Musqueam ancestors and heritage. Protest was sparked by spreading word of discovery and disturbance of archaeological materials and human remains at the site during the construction of a 5 story mixed-use structure.

My visit to the protest was during the afternoon of March 12th. It was cold and raining, but it seemed to do little to dampen the spirits of the protesters. I was presented with a variety of posters and signs, stating "protect our ancestors" and "protect our heritage." Passing motorists were quite willing to reminded us of their presence, and that of the protest. I spoke with Aaron Wilson, the group's spokesperson, who was quick to identify this as a "grass-roots, community protest to protect our ancestors." Aaron also noted that permits were being issued for excavations based on the assumption that there would be no intact archaeological material. There was a clear dissatisfaction with the bureaucracy of archaeological resource management, and this sentiment was echoed casually by other protesters.

While seeking shelter under the on-ramp to the Arthur Land Bridge, I was introduced to Rose Point. After exchanging pleasantries, Rose spoke of the protests and direct action taken by the Musqueam community. The transfer of property to the University Endowment Lands was emphasised, along with the presence of the Musqueam Warrior Dancers. Despite a strong Musqueam presence, the public did not echo the support being demonstrated for the ongoing protest. However, this was not the case this day. Public support for this protest was strong. This sentiment echoed by Cecilia Point, making special note of support she received from residents of the Marpole neighbourhood.

The protest I visited in early March was short lived. A land was swap proposed by Musqueam to the developers which would exchange ćəsna?m for land of equal development value elsewhere. Proposal of this swap stopped activities impacting heritage material at ćəsna?m.

The hiatus in action ended on May 3rd with a march and protest, highlighted by speeches given by First Nations Chiefs. On May 8th the land owner began activities at the ćəsna?m, which Musqueam community members feared would directly disturb heritage material. As a result, Musqueam members reassembled at ćəsna?m. Negotiation between Musqueam Chief Campbell and the land owner, in the presence of the Vancouver Police Department, has temporarily halted any digging at the site. This action resulted in a continuous occupation of ćəsna?m, up to publication of this piece.

So why care about the development of the Marpole Midden and this ongoing protest? Beyond issues of Indigenous self determination, which this protest is obviously mired in, this is also an import site for archaeologists. The likes of Harlan Smith, Charles Hill-Tout, Charles Borden, and Andrew Charles have all been involved in the collection and analysis of artefacts from Marpole. Despite controversy in Marpole's archaeological past, it is important to recognize that the material identity of archaeology of the Gulf of Georgia region includes artifacts which have been taken from casna?m.

Marpole is a namesake in Northwest Coast archaeology. The importance of Marpole was recognised by archaeologists in the 1920's, resulting in the 1933 designation of the Marpole Midden as a National Heritage Site.

Development in the Lower Mainland is increasing the threat to many other heritage places, such as Locarno, Glenrose, and St Mungo sites. Support for the conservation of a significant heritage site, such as ćəsna?m, should be an instinct, not the object of debate.

Craig Rust is a PhD Candidate in the Archaeology Department at Simon Fraser University. His doctoral research uses new data modelling techniques for archaeological resource management. He is also President of the ASBC.

For news on the Marpole situation and related information:

http://www.asbc.bc.ca/marpole http://www.musqueam.bc.ca/

ARCHAEOLOGY IN THE MEDIA: the Marpole Site

Open letter from Musqueam Indian Band regarding treatment of Musqueam Heritage and the 'Marpole Midden'

n open letter was sent on April 18th, 2012 by the Musqueam Indian Band to Premier Christy Clark and Mayor Gregor Robertson regarding treatment of the 'Marpole Midden' specifically and Musqueam heritage broadly. Copies were also sent to: (1) Aboriginal Groups, Nations, and Councils; (2) The United Nations: Secretary General; Secretariat of the Permanent Forum on Indigenous Issues; (3) Federal Government: Prime Minister, Minister Indian and Northern Affairs; Minister of Heritage; (4) Musqueam/Marpole Vancouver MP(s); (5) Provincial Government: Premier; Minister Forestry (where the BC Archaeology Branch resides); Minister Aboriginal Affairs; Musqueam/Marpole Vancouver MLA(s); and (5) City of Vancouver: Mayor and Council; City Manager. Provided here are excerpts; a complete copy of the letter can be accessed on Musqueam's website (http:// www.musqueam.bc.ca/sites/default/files/open ltr premier mayor marpole april 18 2012 final 1.pdf).

The letter's introduction states that it is

written to clearly set out the position of the Musqueam regarding the Marpole Midden. It is intended to make unequivocally clear what has been stated for over 25 years and restated to both City and Provincial elected officials and their senior staff. It will create certainty where others misinterpreted the meaning of our communications or, indeed, through a lack of understanding, misrepresent them. We copy this communication to the Developers who persist in developing a condominium project on the site of our ancient village and burial areas and thereby place their commercial interest above the just and right assertion of the Musqueam that this site not be developed.

Regarding Ancestral Remains:

The site is an ancient Musqueam Village containing intact ancestral remains (as well many remains that have been disturbed by the previous activities over the past 100 years).

a. We have also consistently stated that the 'redisturbance' of these disturbed ancestral remains should not now be permissible simply because they have been previously disturbed, broken up, and pushed aside and otherwise desecrated to make way for the buildings on the site. Note that one of the 'disturbances' was to build a body shop on the site that has caused environmental damage to the midden (another indignity to these remains with oil and other petro-contaminants leaked onto their burial site.)

b. That the intact remains must remain where they are and not be further disturbed. They are the final rest-

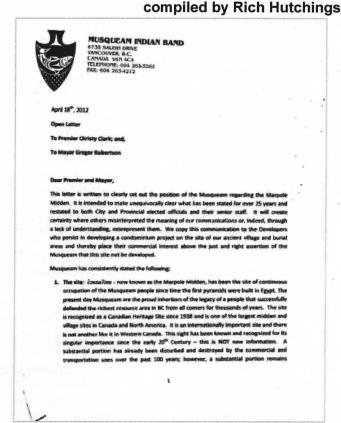


Figure 1. Page one of an open letter sent to government officials from Chief Ernest Campbell of the Musqueam Indian Band.

ing places of our ancestors, not something to be dug up, moved, and stored.

Regarding Archaeology:

The site contains priceless artifacts dating back over 4,000 years. These artifacts should not be disturbed for commercial purposes or to satisfy the curiosity of archeologists and scholars. If and when Musqueam is ready to investigate the archeology of the midden it will be when we are in charge of the investigation and in control of our ancestral heritage—not to have our heritage shipped off to some academic institution outside of our control as has happened so often before. For example, artifacts and human remains from the Marpole Village Site have been sent to Vancouver, Victoria and New York museums as well as the Royal College of Surgeons in London where they were destroyed in a bombing raid. Musqueam has stated that investigation of the site, even by competent archeologists, is still desecration of the site. As stated above, it can and must only happen under a plan approved by Musqueam, at the time and pace of Musqueam, under our control and in accordance with our cultural protocols. The current development plans would destroy and remove a large portion of the site. Little meaningful data will be collected and stored, leaving the site destroyed.

Regarding the BC Heritage Act:

The Province of B.C. continues to state they 'have no part in this discussion' under the rationale that they are following the legal requirements of the Provincial Heritage Conservation Act. The purpose of this Act is "to encourage and facilitate the protection and conservation of heritage property in British Columbia" (section 2) and not, as the Province appears to believe, to oversee its destruction in incremental steps. The Act also provides for the Province to enter into an agreement with a First Nation with respect to the conservation and protection of the cultural heritage of the Aboriginal people who are represented by the First Nation. However, the Province has refused to consider such an agreement with Musqueam.

Setting legalities aside, the solution lies with Doing the Right Thing. The fact is, at least as currently implemented by the Province; the Heritage Conservation Act is a dated piece of legislation—a post-colonial remnant—that does not serve the Province, its people or this situation well. It is being implemented so as to destroy historical First Nation sites so development can take place. It places little value on pre-colonial history or First Nations wishes. To the best of our knowledge, it has never prevented a commercial development despite generations of First Nation protest. Now it is being used to legalize the destruction and desecration of one of the largest and most significant remaining archeological sites or Middens in Canada for a few condominiums that could be built elsewhere. This is despite . . . provisions under the Act for partnering with First Nations to preserve this and other sites. The Province willfully ignores this provision and has issued permits over the protest of the Musqueam elected leadership who have been supported by organizations representing the Aboriginal peoples of the Province. A narrow legal interpretation is being used to justify this destruction. The Province maintains it has legally issued the permits and now has no other role except to try and be helpful and to assist the Band, City, and developer to solve the problem that their legislation and blind adherence to narrow legal interpretations has created. Does the Province not have responsibilities to its citizens and future citizens and to the Aboriginal citizens now and in the future, to preserve this singular historic site? The governments of Europe, Asia and Africa are working hard to preserve their pre-history, why not B.C.?"

Regarding the Developers:

The developers have proceeded with their project, while being fully aware that the midden is a historical site and of great significance to Musqueam. Their disclosure statements for prospective purchasers did not mention the midden and they did not consult with Musqueam prior to starting their work. They earlier agreed to a fourweek cessation of the most provocative of their site work but are now re-engaged in their work and seeking to have the one intact ancestral remain so far discovered, removed from the site. Further, they wish to continue this development despite the evidence that the site contains undisturbed remains as cited by Musqueam. Note there is a new development: the developers are calling in their archeologist to investigate and apply to the Archeology Branch of the Province of B.C. to remove the intact burial remains.

Regarding the Role of Canada:

to date the Federal Government has wished us well but has not engaged in any substantive way. We believe they have a duty to act to protect Aboriginal interests on this site. In November 2010, the Government of Canada endorsed the United Nations Declaration on the Rights of Indigenous Peoples. Article 8 requires Canada to provide an effective mechanism for prevention of, and redress for any action which has the aim or effect of depriving Indigenous People (Musqueam) of their cultural values. Articles 11 and 12 recognize Musqueam's right to protect their culture, including cultural, archaeological and historical sites, human remains and artifacts. Canada has a duty to provide redress through effective mechanism developed in conjunction with Musqueam. Under section 38, Canada has a duty, in consultation and cooperation with Musqueam, to take appropriate measures to achieve the ends of the Declaration.

In Summary:

For more than a generation, the Musqueam have a stated history of a preference to negotiate and have a long history of working towards successful and collaborative solutions. We believe that governments have failed to deal with this critical issue, and this lack of clarity has resulted in unintended consequences. We have expressed our determination to see the site preserved and we will continue that effort with all that it takes to succeed. This site is one of the last and certainly the most significant Musqueam site that connects to our past and to our identity: an identity that was almost destroyed by the Indian Act, residential schools, and other colonial indignities. It is surrounded by a sea of pavement and development that has obliterated almost all of the traces of our past life on our territory.

We have been told to hold this site close to our hearts and to protect it by those that have passed on before us. Our ancestors protected the site for millennia and we will honor the remains of that ancestor located by the current work by continuing that fight. We find it troubling that the City and the Province and associated interest groups will preserve an old falling down cedar tree in Stanley Park, old buildings in the city and throughout the province and indeed, that the Federal Government will preserve the "ancient Viking village site in Newfoundland" that is an infant by comparison with the age and significance of Musqueam's Marpole Village site.

Commercial Archaeology in British Columbia

Marina La Salle and Rich Hutchings

It is often said that cultural resource management (CRM) comprises the vast majority of archaeology done in North America today. Certainly, just by comparing the number of archaeologists we know personally who are involved in academic archaeology with those employed in CRM, this statement also holds true for British Columbia.

Yet, for all of the academic articles, books and conferences that publicize archaeological projects, there is comparatively little written about CRM archaeology. This is particularly true concerning the "business" side of this practice. For example, how many CRM archaeologists are there? How many CRM firms? How many CRM projects are undertaken each year, and by whom? How much money is involved? Ultimately, what is the "business" of archaeology and how big is it?

After failing to find clear answers to these questions in published material, we went digging around for information ourselves, and herein present a snapshot of what commercial archaeology in B.C. looks like.

Process of CRM

The term cultural resource management was "invented by archaeologists in the 1970s to equate what they did with natural resource management" (King 1998:6-7). While one might expect the term to mean the management of cultural resources, it is commonly used-primarily by archaeologists-in a much narrower sense to refer to "managing historic places of archeological, architectural, and historical interest and to considering such places in compliance with environmental and historic preservation laws" (1998:7). In B.C., the practice of CRM is defined in relation to the B.C. Heritage Conservation Act and the B.C. Archaeology Branch.

The role of the Branch, currently housed within the Ministry of Forests, Lands and Natural Resource Operations, is "not to prohibit or impede land use and development, but rather to assist the development industry, the province, regional authorities, and municipalities in making decisions leading to rational land use and development" (B.C. Archaeology Branch 2012). The Branch authorizes archaeological work throughout the province by means of a permit system and maintains a provincial heritage registry of all known archaeological sites, heritage sites and objects, heritage wrecks and other types of sites. The current legislation in B.C., enacted in 1996, is called the Heritage Conservation Act (HCA). The CRM process has been previously outlined in The Midden (43[2]:1) as follows:

Those seeking to develop an area that either contains a recorded archaeological site or has not been assessed for archaeological remains are responsible for the logistical and financial planning of this process. Depending on the scale of the proposed development, archaeological sites are subject to varying levels of assessments known as Archaeological Overview, Impact and Alteration. In this system, landowners hire qualified archaeologists to determine the levels of investigation required and undertake this work under provinciallyissued permits.

This is commonly known as a "userpay model," where the project proponent is responsible for paying for the archaeological permitting and mitigation process.

The CRM process, quite simply, involves 1) proposing a construction project, 2) finding out whether the project will impact archaeological sites, 3) hiring an archaeologist to apply for permits to alter or impact sites, 4) undertaking necessary archaeological excavation or monitoring construction, and 5) submitting a report to the Archaeology Branch.

The Archaeology Branch summarizes the site evaluation process as such: "When the benefits of a project outweigh

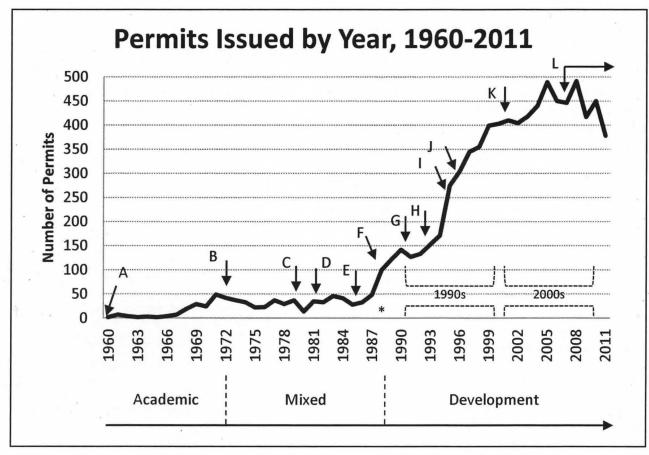
the benefits of archaeological preservation, the branch will work with the proponent to determine how the project can go ahead with minimal archaeological resource loss. Where the loss of significant archaeological values cannot be avoided, the branch ensures that appropriate compensatory measures are implemented" (B.C. Archaeology Branch 2012). Archaeological investigations conducted for pay, usually in the context of "development," is referred to as "contract archaeology" (Stapp and Longenecker 2009:155).

...over the last 30 years (1980-2008) the number of permits increased by an astonishing 3500 percent.

Permitting Archaeology

Little quantitative data exists regarding the historic growth and current size of contract or for-profit archaeology in British Columbia. While the issue has been the subject of recent discussion in Ontario (Birch 2007; Ferris 2002) and Quebec (Zorzin 2011), the emergence of CRM appears to remain mostly unexplored for B.C. (see however Spurling 1986). While thorough inspection of the B.C. literature allows a general, if not scattered overview of its history (see References and Further Reading), this view may be enhanced by quantifying the number of permits issued through time. We have done so here, charting permits issued between 1960, the first year the province issued permits, and 2011. As illustrated in Figure 1, the number of permits issued grew from two in 1960 to nearly five-hundred per year at the close of the last decade.

While the overall trend is clearly onwards and upwards, the question remains: What does it actually mean? Apart from illuminating the "rise" of archaeological permits in B.C., we suggest it reflects the



growth of the for-profit CRM industry. To begin with, the correlation between economic cycles and permits issued appears strong, especially the mid-1980s boom, the 1990-91 recession, the 2001 recession, and most recently the 2007-09 recession and 2007-present global financial crisis. This economy—archaeology link, what Zorzin describes as a "capitalist configuration," is well described for Ontario and Quebec.

The story of CRM in British Columbia begins in 1960 with the first issuance of provincial archaeology permits, at that time granted by the Archaeological Sites Advisory Board (ASAB). Up until 1972, when the Provincial Archaeologist Office (PAO) was established, these permits were largely academic or "research" oriented (Apland 1993:10-11). Throughout the 1970s, permits reflected a mix of government-initiated research and inventory projects and development-driven archaeology, or CRM (also ARM [archaeological resource management]). By the end of the 1980s, permits were primarily issued for commercial archaeology.

Between 1972 and the late-1980s, the number of issued permits fluctuated significantly but remained below 50 permits per year. Neither the establishment of the

Figure 1. Number of archaeology permits issued per year by the B.C. government, 1960-2011. Points A–L highlight major economic and legislative events, however this list is in no way complete.

- A. 1960—First permits issued by the Archaeological Sites Advisory Board (ASAB), this made possible by passage of the Archaeological and Historic Sites Protection Act (AHSPA)
- B. 1972—Provincial Archaeologist Office (PAO) established
- C. 1979—Heritage Conservation Act (HCA) established
- D. 1981-82-Recession (U.S.)
- E. Mid-1980s—Economic recovery or 'boom'; Canada's economic growth rate was among the highest of Organisation for Economic Co-operation and Development (OECD) countries in the period 1984-86
- F. 1988*—Archaeology Branch established
- G. 1990-91—Recession (U.S.)
- H. 1993—Heritage Conservation Statutes Amendment Act
- 1995—British Columbia Association of Professional Consulting Archaeologists (BCAPCA) established, now the BCAPA
- J. 1996—Heritage Conservation Act (HCA) consolidated amendments, including "site alteration permits" (see McLay 2011)
- K. 2001—Recession (U.S.)
- L. 2007-09—Recession (U.S.); 2008-present Global financial crisis

PAO in 1972 nor the B.C. *HCA* in 1979 affected a rise in the number of permits issued; however, both were followed by periods of significant decline.

It would not be until the effects of the mid-1980s economic boom were realized that the 50 permits per year threshold would be broken, better *shattered*. During the period 1987 to 2005, the number of permits issued skyrocketed from nearly fifty to nearly five-hundred. To reiterate: During the 18 year period between 1987 and 2005, the number of permits rose by a scale of ten, or 1000 percent.

In the period 1980-90, there was a ten-fold growth in the number of permits, jumping from 14 to 142. The 1980s was unquestionably a decade of significant change in B.C. archaeology (Apland 1993; Fladmark 1993). However, in the ten years between 1990 and 2000, the number of permits—thus archaeological work done—almost tripled, rising from 142 to 403. As such, the 1990s might be considered to represent the true rise of B.C.'s heritage industry. Ultimately, over the last 30 years (1980-2008) the number of permits increased by an astonishing 3500 percent.

The economic basis of CRM, thus archaeology, is perhaps most clearly illustrated in the post-2007 period of Figure 1. The 2007-09 recession and 2008-present global financial crisis had a significant impact on archaeology, especially in the United Kingdom, which saw an 8.6% loss of jobs in commercial archaeology in 2008 (Zorzin 2011:120).

While macro-economic phenomena provide a broad framework for understanding the post-2007 period, as well earlier ones, they provide little insight into how they might be manifested on the "micro" level, in this case British Columbia. One way to approach this is by comparing residential housing starts in the province with number of permits issued, as we have done in Figure 2. The correlation is striking, especially in light of the 2008 boom (peak at 491/year), the 2009 bust (trough at 417/year), and the short-lived 2010 recovery.

We suggest the rapid growth of CRM archaeology in B.C. is self-evident in these figures. Key questions remain, however, concerning the link between for-profit archaeology and provincial permitting.

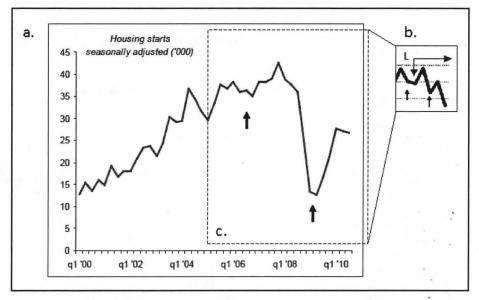


Figure 2. Correlation between (a) residential housing starts in B.C., 2000-10 (BC Stats 2010:4) and (b) archaeology permits issued, 2005-11 (Fig. 1, this paper). Dashed box (c) shows 2005-11 overlap; the years 2006 and 2009 are denoted by up-arrows.

The Clients

In 1987, forty-eight archaeology permits were issued in B.C.—"75% of them to consultants, mainly for small-scale impact assessment and evaluative testing" (Bernick 1988a:2). The following year this number doubled (100/year). It more than doubled again in 1995 (275/year), and surpassed four-hundred in 2000 (403/year). In 2005 and 2008 this number reached 489 and 491, respectively.

In 1988, the same year the doubling trend began, the Archaeology Branch was established "to encourage and promote the protection, conservation, development and public appreciation of archaeological resources throughout the province" (Ap-

land 1990:3-4). After 1988, permits issued for forestry and residential development began to dominate (for discussion of the forestry–CRM link, see Klassen *et al.* 2009).

In contrast to 1987, where 25% of permits were issued to non-consultants, in 2011 less than 3% of the total 383 permits issued were for research purposes. Just to be clear: 97% of archaeology undertaken in B.C. today is non-research related—is, in other words, commercial archaeology.

Using the 2011 permit lists available through the ASBC website (http://www.asbc.bc.ca/publications), we compiled permits by the client sector they represent to create Figure 3.

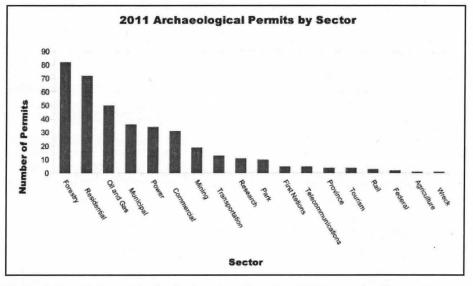


Figure 3. Permits issued by the Archaeology Branch in 2011, organized by sector.

Permit Clients	# of Permits	
BC Hydro	22	
BC Timber Sales	10	
Westcoast Energy Inc. / Spectra Energy Corp.	8	
NOVA Gas Transmission Ltd. / TransCanada Pipelines Ltd.	7	
Ministry of Transportation	6	
Western Forest Products	6	
Teck Coal Limited	5	
TDB Forestry Consultants	4	
Canadian Dehua International Mines Group Inc.	3	
Canadian Forest Products Ltd.	3	

Table 1. Top ten clients by number of archaeological permits issued in 2011.

In sum:

- •resource extraction activities (forestry, mining, oil and gas, power) account for 48% of all archaeology permits (n=184)
- government (municipal, provincial, federal) activities account for 11% of all permits (n=42)
- •nearly 19% of archaeology permits (n=73) were held by residents doing home construction
- 8% of permits (n=31) were issued for commercial development
- of the 3% of permits (n=11) issued for research purposes, 3 are for field schools.

In terms of specific clients, the top ten companies represented by number of permits issued in 2011 are shown in Table 1. Of these, BC Hydro far exceeds any other client (n=22), followed by BC Timber Sales, which comprises less than half of that number (n=10). Not surprisingly perhaps, archaeology's top clients represent two of the largest industries in the province—power and forestry.

The Archaeologists

Who are CRM archaeologists? No archaeology would happen without them and yet there is little understanding of this community (Zorzin 2010:1). To explore this question, we consulted the membership database for the British Columbia Association of Professional Archaeologists (BCAPA, formerly BCAPCA [the dropped "C" was for "Consulting"]).

BCAPA membership is hierarchical, ranked from Students, Affiliates, Interns, Associates, to Professionals. While BCAPA membership is not *required* in order to undertake CRM archaeology

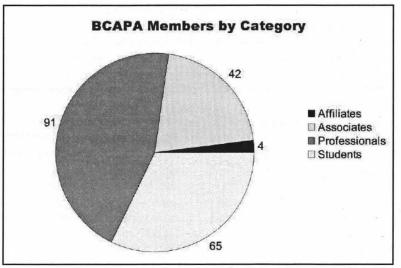


Figure 4. BCAPA members organized by category. Data accessed on 12 April 2012, http://http://www.bcapa.ca/members/current-members/

in the province or to hold a permit, the organization's efforts towards "increasing professionalization" have made it attractive as a qualification to achieve; as a Professional, one can also put letters after their name (RPCA). The Archaeology Branch (2012) estimates that 60% of consulting archaeologists are BCAPA members; as such, BCAPA membership numbers can be considered a baseline for the *minimum* number of archaeologists operating in CRM in the province.

Whereas the number of working archaeologists in B.C. was around 25 in the late-1970s, as shown in Figure 4 this number had grown to 202 BCAPA members at the time of this publication, 45% of whom are Professionals (n=91), followed closely by 32% Students (n=65), and 20% Associates (n=42), this category meaning,

almost but not quite qualifying for Professional status. Based anecdotally on the CRM archaeologists we know personally, the male to female ratio is roughly equal, the age-range leans towards the mid-30s, and most are white or of European descent. Similar results were found in the BCAPA's Safety Survey (http://www.bcapa.ca/wpcontent/uploads/BCAPASafetysurveyresults.pdf), which also highlights that the majority of archaeologists work full-time (78%, n=39) and have worked for their present company for less than five years (66%, n=33).

In short, CRM archaeologists are a young and growing body of workers; the question of where they come from, however, or who "produces" CRM archaeologists, will be addressed later on.



Figure 5. BCAPA members organized by company.

The Firms

As an indirect measure of which CRM companies employ the most archaeologists, and thus undertake most archaeology in the province, we broke the BCAPA membership figures down by firm, as shown in Figure 5.

As two of the largest firms in B.C. that employ archaeologists, Golder and AMEC are transnational corporations with roots in all sectors of construction, development and assessment processes. Indeed, there has been a trend lately towards conglomeration, of little firms being bought up and incorporated into larger ones (e.g., I.R. Wilson is now part of Stantec), who thus increase their client base in one fell swoop. In turn, clients are able to hire a "one stop shop" company to see all aspects of projects through from start to finish, representing an integrated approach to development that, in theory anyway, is more efficient and hassle-free.

To give a sense of the scale of these larger firms, and the industries they support, we consulted the companies themselves. Golder Associates has over 160 offices on six continents and employs about 8000 people. Golder's Client Sectors include Infrastructure, Mining, Power, Manufacturing, Oil & Gas and Real Estate. Big projects currently underway in British Columbia include the Gateway road expansion in Vancouver and the Site C dam project. On the Golder website for Canada (http://www.golder.ca/), archaeology is classified under Cultural Sciences within the Environmental & Social Assessment division of services. Golder's company slogan is "Engineering Earth's Development, Preserving Earth's Integrity."

AMEC has offices and projects in about 40 countries worldwide and employs over 27,000 people. AMEC's Client Sectors include Oil & Gas, Minerals & Metals, Renewables/Bioprocess, Transmission & Distribution, Transportation/ Infrastructure, Industrial/Commercial, Unconventional Gas, Nuclear, Power, Water/Municipal and Government Services. AMEC is also assisting with the Site C project. On their website (http:// www.amec.com/), archaeology is difficult to find; a search reveals it to be under Cultural Resources, hidden in the Environmental Services section. AMEC's company slogan is "Customers, people, growth-delivering The AMEC Way."

These top two employers of archaeologists in British Columbia are primarily hired to *facilitate* development; yet "conservation" is archaeology's core value. The paradox herein is visualized on the company websites, where photographs under "Sectors" are primarily of large, metallic structures (power plants, oil rigs) or landscapes of construction, while images under "Services" feature the natural environment: blue lakes, green fields, mountains untouched by development. A mixed message is certainly the result, but what is clear is that archaeology is *big* business.

The Money

It seems strange that, in a culture predicated on capitalism and consumerism, asking someone how much money they make is often awkward, at times insulting and usually considered a taboo topic. This seems to be the case not only for individuals, but for companies and even government ministries, as we found while researching for this article.

From informal sources, we learned that a consulting archaeologist in British Columbia, working as a contractor, not an employee, can expect to make between \$20 to \$40 per hour depending on education, experience and specialized qualifications. Working conditions are often difficult and even hazardous, as the BCAPA's recent survey on safety in the workplace can attest to, and usually involve being on-call, long work days, and extended periods away from home. In many ways,

the work is "boom and bust," reminiscent of the gold rush: unpredictable, intensive, highly mobile and with a constant turnover in labour.

We were largely unable to get even estimated revenue figures for consulting firms, beyond those that are too broad to be useful. For example, of AMEC's annual revenues of about \$7 billion, it is unclear how much derives from Canada, let alone British Columbia. Of Golder's intake of \$8.7 million from BC Hydro in 2010/11 (BC Hydro 2011:17), we cannot discern how much was related specifically to archaeology.

We focused on one client—BC Hydro—in the hopes of eliciting more information, given that this is a Crown corporation and thus some of these details are public information. We contacted one of the three archaeologists employed at BC Hydro, Rick McDougall, the Senior Environmental Coordinator (Archaeology), Environmental Risk Management (pers. comm. 18 April 2012). We specifically asked how much money BC Hydro spends annually on archaeology. Unfortunately, we were told that:

There is no single reference where total expenditures on BC Hydro archaeology can be found as these types of costs are reported through different operating programs, capital projects and other activities. In addition, expenditures of funds obtained through customer rates (what customers pay for electricity) may be reported separately from funds obtained from other

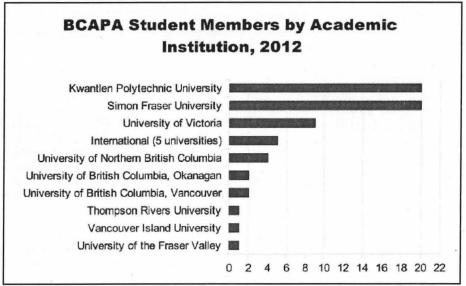


Figure 6. BCAPA student members organized by institution.

sources such as from water license fee remissions (e.g. archaeology projects related to water use planning commitments).

Therefore, we contacted the Project Team for Site C requesting the same information, and received the following response:

- Golder, AMEC and Millennia are doing the archaeology
- more than 125 archaeologists have participated
- at least 100 Aboriginal field assistants have been employed.

We did not, however, receive a response to our repeated question of how much money BC Hydro has spent so far on archaeology for the Site C project.

Similarly, an enquiry with the provincial government concerning expenditures on archaeology was referred to the Archaeology Branch, who responded that they had no such figures. They referred us to the Ministry of Transportation and Infrastructure, who—like BC Hydro—said that such costs are wrapped up in the overall budget for specific projects.

The financial details of commercial archaeology appear inaccessible, shrouded in a fragmented system of accounting. It is clear, however, that large sums of money are being devoted to the industry.

The Training

Like any business, archaeology is made possible by training new generations to be competent in the skills required by the field; it likewise entails students learning to think about archaeological practice in a certain way. We were thus particularly interested in the relatively high proportion of BCAPA Student members, accounting for 32% of all members (n=65), and so took a closer look.

Figure 6 illustrates which universities BCAPA students are affiliated with. As shown, Kwantlen and SFU account for the majority of student members (62%, n=40), followed by UViC (n=9), UNBC (n=4) and UBC Vancouver and Okanagan (n=4). Curious about these results, we investigated the programs offered by these institutions, particularly focusing on courses and field schools with a CRM focus.

SFU offers both a CRM course and a Certificate, the latter of which is comprised of material culture, CRM, regional and First Nations courses. However, the SFU

Institution	CRM Course	CRM Program	Field School	
Kwantlen	Archaeological Methods for Cultural Resource Management	none offered	Applied Archaeology Field School; focus on CRM-methods, survey, some excavation	
SFU	Archaeological Resource Management	Certificate in Cultural Resource Management	Local field school described as "archaeology and heritage stewardship"; focus is on excavation and mapping	
UVic	none offered	none offered	Local field school described as having a "cultural resource management focus"	
UNBC	Archaeological Heritage Management	none offered	Field school focus split between TEK, survey and excavation	
UBC, Okanagan	none offered	none offered	200- and 300-level field schools offered; focus is on historic archaeology, excavation	
UBC, Vancouver	Applied Archaeology	none offered	Local field school described as "field instruction and research"; focus is on a range of skills, little excavation	

Table 2. Courses, programs and field schools relating to CRM offered by the institutions representing 86% of all BCAPA Student members. Local field schools examined were: Kwantlen 2012, UVic 2011*, UNBC 2012, SFU 2011, UBC Vancouver 2010, UBC Okanagan 2009.

*UVic has a "Culture, Heritage and Museum Studies" department offering "cultural resource management" courses, but the program does not include archaeology. As such, it was excluded from this study: http://www.uvcs.uvic.ca/cultural/

field school, advertised as "archaeology and heritage stewardship," is not explicitly CRM in focus. Conversely, Kwantlen's field school is geared towards "Applied Archaeology" and the university also offers a CRM course. UVic has no CRM courses*, however their local field school has been CRM-focused in collaboration with Parks Canada (Benson 2012).

In general, then, archaeology courses at all institutions in B.C. remain "academic" in focus and breadth, despite that most archaeology in practice is CRM. Students who are exposed to and trained in CRM archaeology through courses and in the field are more prepared for this employment reality, and may be more likely to pursue CRM careers because of this. It seems, from the BCAPA membership figures, that students increasingly see the BCAPA as an important "professional" credential to achieve in order to ensure a successfully-employed future. How many of these students actually stay in CRM remains to be seen.

Conversely, of all BCAPA's 202 members, only two are university professors. This suggests that the perceived divide between academic and CRM archaeology remains wide. It is noteworthy, however, that both of these professors have had close ties with the SFU or Kwantlen

field schools, perhaps in part accounting for the higher involvement in the BCAPA by students from these institutions.

The Public

In the permitting process, applicants must specify where the materials-bags of artifacts, fauna, soil samples, notes and photographs-produced through archaeology will be housed. The Royal B.C. Museum in Victoria has traditionally been the repository for these materials, which means that most of the artifacts and accompanying materials are actually destined for warehouses. There is simply no room to either have these artifacts on display or even house them in the museum itself. This means that, in large part, once everything has been filed away, the materials become largely inaccessible to the wider public.

CRM reports are typically provided to the client(s) and the Archaeology Branch in Victoria, and sometimes copied to the relevant First Nation(s). This has produced a vast amount of information known simply as "the grey literature." This means the report is held in a public repository, but it is not publicly available except by request, which is reviewed and approved (or not) by the Archaeology Branch. The result is that, unless you are

an archaeologist, researcher or are otherwise "approved" to access to the Branch library, information regarding CRM archaeology—which comprises 97% of all archaeology in B.C.—is inaccessible.

To further complicate matters, it has become standard practice for archaeologists to sign non-disclosure agreements (NDAs) for either the CRM firm or the client, which means they are restricted in what they, as individuals, can write or say regarding the projects they are involved in. We know of some cases where the NDA signed legally binds the individual to this silence for ten years, stalling any potential "knowledge building" about B.C.'s ancient past.

Historically, *The Midden* has been one venue often used by CRM archaeologists to publish shorter, newsy articles relating recent work and new finds. Longer, in-depth articles and reports resulting from CRM archaeology remain sparse in formal publications. The BCAPA recently announced that they are pursuing the creation of a peer-reviewed journal explicitly for B.C. archaeology. However, even without the legal hindrance of NDAs, it remains to be seen whether CRM archaeologists will find the time and energy to write up a second article after long physical workdays and subsequent technical report writing.

Discussion and Conclusions

At college and in university, students typically learn four basic tropes about archaeology that are likely carried with them throughout their lives as practicing archaeologists:

- 1) Archaeology is about the preservation of sites and materials.
- Archaeology is undertaken in the name of research to learn about the past.
- Archaeologists have a responsibility to disseminate their results.
- 4) Archaeology is for the public "good."

Our investigation into the "business" of archaeology has demonstrated that this "theory" bears little resemblance to the "practice" in B.C. today. Indeed, we believe that the complete opposite is true.

Our snapshot view of commercial archaeology in British Columbia offers a few key points: 1) Archaeology has grown exponentially in the last thirty

years; 2) Industry and development drive the majority of commercial archaeology; 3) CRM archaeologists are young and increasing in number; 4) Large transnational corporations are the biggest employer of archaeologists; 5) While the figures are shrouded in secrecy, archaeology is "big business"; 6) CRM is a minor component of training in most archaeology programs; 7) The public is largely uninvolved in contemporary archaeology.

Given that most CRM is either industry-driven or residential, archaeology often takes place in remote areas and on

that increased development was actually a "boon" for the practice—indeed, it has created and sustained many careers in archaeology since the beginning.

Reflecting back on the decade that was the 1970s, Knut Fladmark had this to say in 1981: "Without doubt, the last ten years have been a decade of tremendous growth and change in B.C. archaeology—change which has profoundly affected the amount, type and results of archaeological research, and which in itself may not always have been uniformly productive in furthering the fundamental goals of

[T]he granting of permission to build factories or other structures at places where [archaeological] sites are located...should be made contingent on the provision by the interested parties of funds for the investigation of such sites before construction commences. We cannot prevent urban expansion and industrial development, but by intelligent legislation they could be turned from a bane to a boon to archaeology.

C. E. Borden, 1950

private property. With so little information published in venues that are publicly available, rare if ever chances to visit sites and observe archaeology in action, and archaeological materials stored in warehouses somewhere, there is almost no opportunity for public engagement. It is little wonder, then, that when newspapers publish articles on archaeology, there is limited public understanding of how archaeology works or, even more critically, why heritage sites matter (Angelbeck 2010). CRM is a privatized practice that takes place behind closed doors.

CRM is a privatized practice that takes place behind closed doors.

Meanwhile, it remains unclear the extent to which permits granted reflect the destruction of sites (see Bryce 2008 and McLay 2011 for more discussion). The reality is that ancient heritage sites are a "non-renewable resource," and archaeology is an inherently destructive process: as Flannery (1982:285) said, "Archeology is the only branch of anthropology where we kill our informants in the process of studying them." In this sense, simple exploratory shovel tests constitute site destruction. In 1950, Charles Borden saw

the discipline" (1981:11). As The Midden editor Nick Russell commented at the time (13[2]:1-2), Fladmark's remarks revealed that the issue of scale had become one of great import: "Archaeology has exploded in B.C. in the last decade, so where Carl Borden was the only practising professional in the province, there are now more than 25. ... Despite all this growth, knowledge of B.C. prehistory has not substantively increased." Also in 1981, Bjorn Simonsen quit his position as Provincial Archaeologist, noting upon exit that "It was a very frustrating job: The legislation was totally inadequate, and we were not given the resources to enforce the legislation. ... I saw so many sites go under, it was a farce" (B. Simonsen, quoted in N. Russell, 1981:3). By the dawn of the 1980s then—and nearly a decade before the real 'rise' of B.C. archaeology—it appears the industry had already entered treacherous

In 1986, two years before the proverbial rocket ship was to launch, Brian Spurling completed an exhaustive policy science study of "Archaeological Resource Management in Western Canada." He found evidence for the existence of "serious problems" (1986:464). Viewing CRM as a policy area, insofar as it represents "the legislated conservation and preservation activities of the archaeological profession" (1986:11, 19), Spurling

The current political economy of Western archaeology has ignited a series of new discussions and debates which call into question archaeology's capitalist influences and its materialisation as a profession.

Nicolas Zorzin, 2011:119

had this to say about the rise of commercial archaeology: "The transformation of archaeology into a business is a very recent phenomenon, one which occurred entirely within the last decade as a response to the passage of provincial heritage legislation" (1986:291, emphasis added). Initially viewed with "trepidation and suspicion" by the archaeological establishment, forprofit consulting "proved to be [one of] the only areas of disciplinary expansion through the later 1970s and early 1980s. As the ranks of universities, museums and government agencies were filled, students graduating with Masters and Ph.Ds perforce gravitated towards private sector employment" (1986:292):

Currently, the market for archaeological consulting services is saturated. The last few years of economic decline and regulatory reform have led to a slump in industry's demand for heritage consulting services. (1986:293)

This "economic decline" and "slump" is clearly visible in Figure 1 from 1985-86.

Spurling, from his vantage in 1986, identified four "gaps and problems" for archaeology: (1) "academic archaeologists can still argue that [CRM] studies make few theoretical or methodological contributions to the discipline"; (2) the interested public, including avocational archaeologists, are "mostly excluded from meaningful involvement"; (3) the wider public remains basically unaware of the "results of and need for archaeological activity"; and (4) archaeological heritage "is still being lost at uncontrolled and unknown rates" (1986:464). Additionally, CRM "cannot be defended" against allegations of "resourcism" (1986:500)—in this case, transforming history and places that matter into "a source of supply" for the CRM industry.

After Spurling, then, and in light of the information we have compiled for this article, we advocate for throwing out the four old tropes of archaeology that bear little resemblance to its reality. We suggest replacing them with four new ones that more honestly and unfortunately represent what archaeology is about in B.C. today:

- Archaeology is about facilitating the destruction of heritage landscapes.
- Archaeology is undertaken to fulfill legal and regulatory obligations.
- Archaeologists have a responsibility only to their clients and the Archaeology Branch.
- Archaeology is a private, "forprofit" enterprise.

Virtually all archaeology in B.C. after 1960 can be defined as "commercial" insofar as archaeologists were/are specialists working for money, with the hope of more money. Without this economic drive, little archaeological work would ever have been undertaken. In this light, academic archaeologists conducting "pure" research are no different than their "applied" colleagues; what differs is only in who pays, the "public" institution or the "private" developer. In both cases, practices are tied to and motivated by a philosophy of socioeconomic growth/development/ progress, an ideological path that leads straight to heritage destruction (Hutchings 2011). In a cruel twist of fate, without this "development"-the very process that destroys archaeological sites-commerical archaeology would not be.

The difference between 1960 and today, then, is one of scale, not kind. Archaeology has become big business, and as it continues to grow, the "resource" will decline (Spurling 1986). In 1981, Bjorn Simonsen called the cultural resource management system a "farce." Nearly thirty years later, Tom King described CRM as "a sham" (King 2009:7). To paraphrase Joe Flatman (2009:6): The future is at once both very bright for the employment of archaeologists but very gloomy for cultural heritage.

Call for Responses

In this article, we have raised what we see as serious issues regarding archaeology today. While specific to B.C., we have encountered similar concerns expressed by archaeologists practising worldwide (e.g., King 2009; Smith 2006). We expect, however, that many readers will disagree with some of our conclusions, particularly those that challenge archaeology's ideals.

As such, we invite people to respond to our observations with their own evidence and interpretations. Our article provides only a sketch of issues that beg for more focused critical attention.

For example, how is the "success" of heritage protection measured? Is it the preservation of sites as dots-on-maps? As artifacts in a box? As "data" in reports? Or as landscapes, reflecting both natural and cultural dimensions? If a condominium is built on top of a shell midden without disturbing it, has that site been "saved?"

How is the increasing involvement of First Nations in commercial archaeology affecting the industry? Is it changing in response to their interests? Or are they changing in response to its? Can meaningful on-the-ground relationships transform the structure of CRM?

What roles *should* "the public" play in heritage today? Do commercial archaeologists have a responsibility to make the process and products of research transparant and accessible? Does the Archaeology Branch? By keeping sites "secret," are they also kept "safe?" Or is this policy limiting awareness of heritage in B.C.?

This important conversation needs participation from all who are affected. Please consider adding your voice.

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References and Further Reading

Angelbeck, Bill. 2010. The Signs of a Push Back Against Heritage Conservation. *The Midden* 42(1-2):2-3, 5-6. Apland, Brian. 1990. The Archaeology Branch. *The Midden* 22(5):3-4. 1992. B.C.'s Heritage Legislation: Ar-

chaeological Site Protection. *The Midden* 24(3):5-7.

- 1993. The Role of the Provincial Government in British Columbia Archaeology. *BC Studies* 99:7-24.
- B.C. Archaeology Branch. 2012. The Archaeological Preservation Process in British Columbia. Accessed online, http://www.for.gov.bc.ca/archaeology/preservation_process/index.htm, 19 May 2012.
- BC Hydro. 2011. Financial Information Act Return. Financial Statements Year Ended March 31, 2011. Electronic document, accessed online, www.bchydro.com/ etc/medialib/internet/documents/about/ openness/financial_information_act_return_2011.Par.0001.File.GDS11%20 353%20Financial%20Information%20 Act%20WEB.pdf, 19 March 2012
- Benson, Emily. 2012. University of Victoria 2011 Field School in the Gulf Islands. *The Midden* 44(1):3-5.
- Bernick, Kathryn. 1983. Congress Message—Archaeology Must Go Public. *The Midden* 15(4):4-5.

1987. British Columbia's Heritage is *Not* for Sale. *The Midden* 19(2):2.

1988a. HCB Report Long Overdue. *The Midden* 20(1):2.

1988b. Confidentiality Clause Must Go. *The Midden* 20(5):1.

1990. Fraser Valley Archaeology Headed toward Oblivion. *The Midden* 22(5):1.

- Birch, Jennifer. 2007. Public Archaeology and the Cultural Resource Management Industry in Ontario. In Partners to the Past: Proceedings of the 2005 Ontario Archaeological Society Symposium, edited by J.S. Molnar, pp. 120-127. The Ottawa Chapter of the OAS: Ottawa.
- Borden, Charles E. 1950. Letter to Dr. Harry B. Hawthorn, Nov. 10, 1950. Copy sent to Wilson Duff, B.C. Provincial Museum. Royal British Columbia Museum. Victoria.
- British Columbia. 1987. Stewardship and Opportunity: Report of the Ministerial Task Force on Heritage Conservation. Project Pride Task Force, Province of British Columbia: Victoria, BC.
- Bryce, Cheryl. 2008. Heritage Conservation Act or Heritage Destruction Act? *The Midden* 40(1):9-10.
- De Paoli, Maria Luisa. 1999. Beyond Tokenism: Aboriginal Involvement in Archaeological Resource Management in British Columbia. M.A. thesis, School of Community and Regional Planning,

- University of British Columbia.
- Ferris, Neal. 2002. When the Air Thins: The Rapid Rise of the Archaeological Consulting Industry in Ontario. *Journal* of American Archaeology 21:53-88.
- Fladmark, Knut R. 1981. British Columbia Archaeology in the 1970s. BC Studies 48:11-20 [Special Issue: Fragments of the Past: British Columbia Archaeology in the 1970s].
 - 1993. Introduction. *BC Studies* 99:3-6 [Special Issue: *Changing Times: British Columbia Archaeology in the 1980s*].
- Flannery, Kent V. 1982. The Golden Marshalltown. *American Anthropologist* 84:275.
- Flatman, Joe. 2009. Conserving Marine Cultural Heritage: Threats, Risks and Future Priorities. Conservation and Management of Archaeological Sites 11(1):5-8.
- Hamilakis, Yannis and Philip Duke. 2007. Archaeology and Capitalism: From Ethics to Politics. Left Coast Press: Walnut Creek, CA.
- Hutchings, Rich. 2010. Landscapes as Standpoints—Important Lessons from Coastal Washington State: A Review of Mapes' *Breaking Ground* and Stapp and Longenecker's *Archaeological Disasters*. *The Midden* 42(1-2):24-27.

2011. A Response to *The Midden*'s Forum on Media Representation and Cultural Resource Management in British Columbia. *The Midden* 43(3):4-5.

- Kehoe, Alice B. 2007. Archaeology within Marketing Capitalism. In Archaeology and Capitalism—From Ethics to Politics, edited by Y. Hamilakis and P. and Duke, pp. 169–178. Left Coast Press: Walnut Creek, CA.
- King, Amanda, Dana Lepofsky and David Pokotylo. 2011. Archaeology and Local Governments: The Perspectives of First Nations and Municipal Councillors in the Fraser Valley, B.C. Canadian Journal of Archaeology 35(2):258-291.
- King, Thomas F. 1998. Cultural Resource Laws and Practices. AltaMira: Walnut Creek, CA.
 - 2009. Our Unprotected Heritage: Whitewashing the Destruction of Our Cultural and Natural Environment. Left Coast Press: Walnut Creek, CA.
- Klassen, Michael A., Rick Budhwa, and Rudy Reimer/Yumks. 2009. First Nations, Forestry, and the Transformation of Archaeological Practice in British Columbia, Canada. Heritage Management 2:199-238.
- McLay, Eric. 2011. "Site Alteration": The Demolition of British Columbia's Archaeological Heritage. *The Midden*

- 43(4):3-7.
- Mclay, Eric, Kelly Bannister, Lea Joe,
 Brian Thom and George Nicholas.
 2008. 'A'lhut tu tet Sulhweenst [Respecting the Ancestors]: Understanding
 Hul'qumi'num Heritage Laws and Concerns for the Protection for the Protection
 of Archaeological Heritage. In First Nations Cultural Heritage and Law: Case
 Studies, Voices, and Perspectives, edited
 by C. Bell and V. Napoleon, pp. 150-202.
 UBC Press, Vancouver, BC.
- Nicholas, George P. 2006. Decolonizing the Archaeological Landscape: The Practice and Politics of Archaeology in British Columbia. *American Indian Quarterly* 30(3/4):350-380.
- Russell, Nick. 1981. Former Provincial Archaeologist Explains Why He Quit. *The Midden* 13(5):3.
- Smith, Laurajane. 2006. *Uses of Heritage*. Routledge, New York, NY.
- Spurling, Brian E. 1986. Archaeological Resource Management in Western Canada: A Policy Science Approach. PhD dissertation, Department of Archaeology, Simon Fraser University, Burnaby.
- Stapp, Darby and Julia G. Longenecker. 2009. Avoiding Archaeological Disasters: A Risk Management Approach. Left Coast Press: Walnut Creek, CA.
- Simonsen, Bjorn O. 1979a. Activities for the Provincial Archaeologist's Office for the 1976 Calendar Year. In Annual Report for the Year 1976: Activities of the Provincial Archaeologist Office of British Columbia and Selected Research Reports, edited by B.O. Simonsen, pp. 3-13. Government of British Columbia, Victoria, BC.
 - 1979b. Activities for the Provincial Archaeologist's Office for 1977. In Annual Report for the Year 1977: Activities of the Provincial Archaeologist Office of British Columbia and Selected Research Reports, edited by B.O. Simonsen, pp. 3-14. Government of British Columbia, Victoria, BC.
- Welch, John R., Eric McLay, Michael Klassen, Fred Foster and Robert Muir. 2011. A Database of Unauthorized Heritage Site Alterations. *The Midden* 43(1):2-3.
- Zorzin, Nicolas. 2010. Archéologie au Québec: Portrait d'une Profession. *Archéologiques* 23:1-15.
 - 2011. Contextualising Contract Archaeology in Quebec: Political-Economy and Economic Dependencies. *Archaeological Review from Cambridge* 26(1):119-135.

Juniper Beach Provincial Park—Mitigation of Archaeological Site EeRg-13

Sarah K. Smith

In August 2011 AMEC Archaeology and Cultural Heritage Resources—Environment & Infrastructure (AMEC, formerly Arcas) was retained by the Ministry of Environment (BC Parks) to mitigate impacts to archaeological site EeRg-13 by the proposed Juniper Beach Provincial Park Water System Upgrades project. The Juniper Beach Provincial campground is located on the north bank of the Thompson River, east of Cache Creek, BC. Assessment and monitoring of the Juniper Beach sites was conducted in collaboration with community members from Bonaparte, Skeetchetsn, and Ashcroft Indian Bands.

Background

The Thompson River valley is inhabited by First Nations people speaking either the Shuswap (Secwepemc) or Thompson (Nlaka'pamux) languages, which belong to the Interior Salish branch of the Salishan linguistic family (Ignace 1998; Wyatt 1998). The best-known descriptions of Secwepemc and Nlaka'pamux culture and language were published by pioneer B.C. ethnographer James Teit (1900, 1909) with additional accounts published by geologist George Dawson (1892).

EeRg-13 was originally recorded by George Ferguson in 1973 and John McMurdo in 1974 on behalf of the Archaeological Sites Advisory Board. Ferguson recorded a total of 144 prehistoric artifacts collected during a surface survey, including debitage, retouched flakes, and biface-preform fragments (McMurdo 1974). A total of 20 tools and a variety of debitage were collected including a hammerstone, corner-notched projectile points, a shell bead, and birchbark rolls (traditional torches for night-fishing). Buried cultural strata, interpreted as filled-in housepit remnants, were encountered in three of the test units (McMurdo 1974).

In 1985, Arnoud Stryd and Mike Rousseau (Arcas 1985) re-recorded EeRg-13 during an archaeological site inventory for the CN Rail Twin-Tracking Project (non-permit). Their survey primarily focused on lands south of the existing track. Localized concentrations of dense artifact

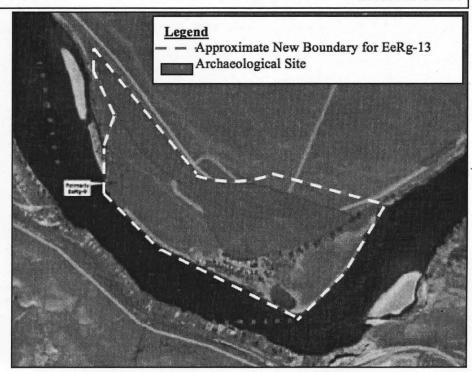


Figure 1. Location of EeRg-13 showing newly defined site boundary.

surface scatter were observed, and several cultural depressions (a few housepit-sized and several cache pits) and some boulder cairns were identified. The site boundary was extended a considerable distance to the west, along the southern side of the CN right-of-way. No cultural materials observed in 1985 were collected (Arcas 1985).

In 1989 Richard Brolly (Arcas) conducted an archaeological impact assessment for proposed realignment of the Juniper Beach access road at the CN Rail level crossing. The site boundary was extended slightly south and north from the 1985 boundary based on the observation of dense lithic scatters and five evaluative units (Arcas 1989). Over 100 utilized and retouched flakes, various debitage, a graver, a concave endscraper, and a corner-notched projectile point were observed, but only the latter two artifacts were collected in 1989.

Landscape

The Juniper Beach site is located on an alluvial fan at a wide bend in the Thompson River between Savona and Cache Creek.

General landscape is typified by rolling grassland terraced up from the Thompson River with protruding bedrock outcrops and steep gullies. The southern extent of the campground is on the bank of the Thompson River and is elevated 3-4m above the current water level, which is higher than average for this time of year. Moving northward, the terrain is gently terraced and elevated approximately 0.5m above the river bank. The northern extent of the campground is elevated approximately 3m above the lower bench and is comprised of large grass field and two parking lots.

Historical changes to the landscape of the park prior to 1950 appear to have been modest, and largely restricted to construction and maintenance of the CN Rail track.

Assessment

An archaeological impact assessment (AIA) was conducted in August 2011 under Heritage Inspection Permit #2011-0265 by Peter Vigneault, B.A., RPCA and Nova Pierson, M.A. (AMEC). The AIA consisted of systematic subsurface

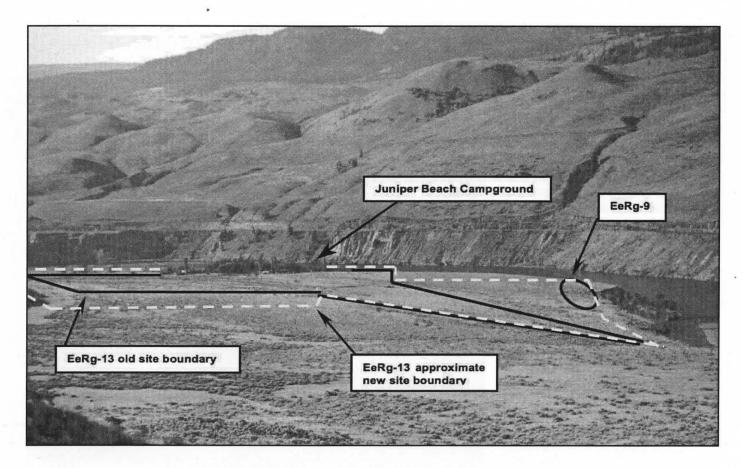


Figure 2. Location of Juniper Beach Campground, EeRg-13 and adjacent EeRg-9.

testing of the proposed development area to confirm the extent and density of the site deposits. Based on the results of testing it was determined that the entire development area is situated within the boundary of archaeological site EeRg-13. Archaeological materials were found in varying densities across the development area, with the highest density of materials recovered from an elevated terrace. The AIA indicated that additional archaeological remains attributable to EeRg-13 were present within the development impact zone. Therefore, it was recommended that all ground-altering activities associated with construction of the water system upgrade project be monitored and screened for cultural material by qualified archaeologists, in accordance with the conditions of a SAP.

Monitoring

From September to November 2011 Peter Vigneault, Sarah K. Smith, B.A., RPCA, Marlowe Kennedy, B.A. and Michael Fox, B.A. (AMEC) monitored ground disturbance activities associated with the water system upgrade at Juniper Beach.

Monitoring involved visual inspection during land altering activities, with screening and raking of disturbed material to collect archaeological lithic and faunal remains. Impacts consisted of the excavation of a series of trenches to replace and improve an existing water delivery system within the campsite. Much of the newly installed water system is located beneath gravel roads and camping plots, while the remainder was installed through a grass field on the upper terrace that divides the campground.

During the archaeological monitoring significant numbers of artifacts (over 11,000) and animal remains (almost 10,000) were recovered from archaeological deposits throughout the campground. Seven archaeological features were identified during the construction monitoring.

Interior Pleateau Cultural Horizons

The Late Prehistoric period on the Interior Plateau has been divided into three successive cultural horizons, each with its own artifact styles, technological attributes, and settlement characteristics (Richards and Rousseau 1987, Pokotylo and Mitchell 1998; see Figure 3). The three horizons are the Shuswap Horizon (3500 to 2400 BP), Plateau Horizon (2400 to 1200 BP), and Kamloops Horizon (1200 to 200 BP). All three horizons of the Late Prehistoric period, as well as early historic remains, are the most common cultural materials recovered from archaeological excavations in the Thompson River region (Bussey 1995; Richards and Rousseau 1987).

Lithic Analysis

A significant number of formed stone tools (n=573) were identified during surface survey, subsurface testing and monitoring at EeRg-13. This included projectile points (n=100), utilized flakes (n=148), unifacially retouched flakes (n=105), bifaciallly retouched flakes (n=83), bifaces (n=77), preforms (n=22), cores (n=14), gravers (n=11), scrapers (n=9), hand-maul (n=1) and a fragmented steatite pipe (n=3). A high density of lithic debitage (n=10,539) was also collected, indicating the use of the site for lithic manufacturing activities.

The raw material composition of the lithic assemblage is dominated by coarse to fine-grained basalt (more properly,

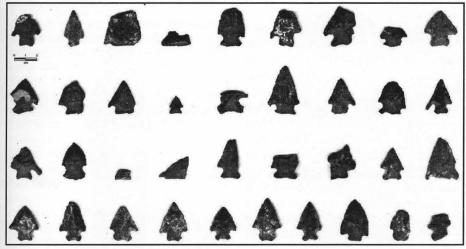


Figure 3. Plateau and Shushwap Horizon projectile points collected from EeRg-13.

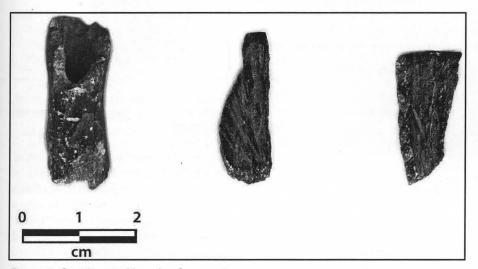


Figure 4. Steatite smoking pipe fragments.

trachyandesite). Trachyandesite is the most abundant lithic raw material in the Thompson Plateau region, with several sources documented from the Ashcroft-Cache Creek area, most notably in the Arrowstone Hills north of the Juniper Beach project locality. Other materials, such as quartzite, chalcedony, jasper, agate and chert (cryptocrystalline silicates) are present, in lower frequencies. Several types of chert are represented in the assemblage, including a reddish-brown, fine-grained chert identified by Rousseau (2008) at a source in the Hat Creek valley, approximately 30km west of EeRg-13.

From the projectile point assemblage (Table 1), 80 demonstrate temporally diagnostic characteristics that can be classified into cultural traditions within the Late and Middle Prehistoric cultural periods of the Thompson Plateau (Rousseau 2008; Stryd and Rousseau 1996). Twenty additional projectile points are too fragmented to

classify to a cultural horizon. There is considerable diversity in the projectile point assemblage, that ranges from Early Nesikep (7500 to 4500 BP) to Kamloops Horizon (1200 to 200 BP). However, there is a clear predominance of Late Prehistoric horizons (79%), and of these most are attributable to the Plateau (n=34) and Shuswap (n=29) horizons. This corresponds to population density data from the Thompson Plateau region (Teit 1909).

All but four of the points are made of medium to fine-grained trachyandesite with the remaining specimens made from chalcedony (n=1) and chert (n=3). All of the lithic raw materials represented in the assemblage are available locally.

One of the unique artifacts collected from EeRg-13 is a steatite (stone) smoking pipe fragmented into three pieces. The artifact would have measured approximately 60cm in length when complete (Figure 4).

The Middle Prehistoric Nesikep

Phase (7000 to 6000 BP) is potentially represented in the EeRg-13 assemblage by a single, finely flaked projectile point (Figure 5) manufactured from fine-grained trachyandesite. This point displays laterally recurvent margins with V-shaped corner notches that appear hook-like - a distinctive attribute of Nesikep projectile points (Rousseau 2008). The thinness of this projectile point is another characteristic of the manufacturing technique. While the presence of a Middle Prehistoric projectile point amongst the otherwise Late Prehistoric occupation at EeRg-13 is unusual, it is possible that this point was found and curated by the people who resided at Juniper Beach in later times.

Bone Tools

Five artifacts recovered from EeRg-13 were manufactured from bone, which is not uncommon in Thompson Plateau sites where soil conditions are conducive to their preservation (Richards and Rousseau 1987). A variety of tools were manufactured from bone and antler in the region, including composite toggling harpoons made from multiple worked bone pieces lashed together (Smith 1900).

The assemblage consists of: (1) a finely worked point, possibly part of a composite harpoon (Figure 6); (2) a bone fragment with a ground tip, suspected to be a self-arming harpoon valve; (3) a finely worked rectangular artifact with flattened distal and proximal ends, of indeterminate use, but potentially a composite toggling harpoon foreshaft, blanket or clothing clasp, or a net gauge; (4) an unfinished bone point displaying whittle-marks and grinding at its apex, and likely part of a composite harpoon; and (5) a polished antler tine, showing possible evidence of use-wear, potentially resulting from its use as a pressure flaking tool for finishing stone tools.

Faunal

A total of 9842 bones, bone fragments, mollusc shells and shell fragments, representing a broad pre-contact subsistence spectrum were recovered during the AIA field survey and the monitoring at EeRg-13. The presence of European domesticates (i.e., cattle) and sawn bones indicates that at least some of the faunal remains recovered from Juniper Beach are post-contact.

The majority of faunal material identified is mammal, predominantly deer (n=63) but fish and molluscs are also represented in the assemblage; salmon in particular (n=421). Freshwater mussel shell fragments are also abundant (n=100), and likely represent one of three species native to the region. The presence of beaver and gopher or ground squirrel are also consistent with ethnographic subsistence practices, while the presence of dog is consistent with their use in hunting (e.g., Ignace 1998; Wyatt 1998).

Most of the recovered bone was so fragmented that it could not be identified to species. These include 7686 (78.1%) identified as mammal and a further 572 which could not be confidently identified to class. The concentration of deer and salmon bones is consistent with ethnographic subsistence strategies for both Secwepemc and Nlaka'pamux (Ignace 1998; Teit 1900, 1909; Wyatt 1998).



Figure 5. Early Nesikep Point. Photo by Sarah K. Smith

Cultural Period	Horizon	Total
	Kamloops	16
Late	Plateau	34
	Shuswap	29
- 1	Lochnore	0
Middle	Lehman	0
	Early Nesikep	1
Unknown	Indeterminate	20
	Total	100

Table 1. Projectile Point Horizon Distribution. Sources: Rousseau 2008; Stryd and Rousseau 1996.

Features

During the AIA and the monitoring program a total of eight archaeological features were identified within EeRg-13. The features consist of five roasting pits and three hearths; both feature types consisted of a compact layer of heated sediment and an abundance of FAR but are distinguished from one another by their size. The roasting pit features are typically >50cm in diameter and the hearths are <50cm, measurements which are consistent with relative feature sizes from subsistence sites in the Interior Plateau Region such as Keatley Creek: EeRl-7 (Prentiss and Kuijt 2004).

One large roasting pit (RP#5) was identified in the northwestern corner of the campground within a gravel parking lot, 4.0m west of the high terrace. RPF#5 measures 1.0m in diameter east-west and extends to a maximum depth of 28cm. The pit feature consisted of 10 to 28cm of dark grey to black silty sand with 70% FAR. Basal sediments underlying the feature were brown silty sand with dense river cobbles.

Conclusions

Archaeological materials were identified throughout the entire extent of the new water system facilities, with both intact and disturbed settings. Based on the results of the AIA and SAP, the site boundary for EeRg-13 was extended to the north and west to encompass the extent of surface and subsurface site deposits. To the west of the Juniper Beach Campground, as a result of the surface inspection, lithic material was identified for several hundred meters to the west up to and including archaeological site EeRg-9. EeRg-9 consists of approximately 25 cultural depressions including cache pits and house pits as well as a dense surface lithic scatter (Arcas 1989). It was concluded that the two sites were in fact portions of one larger habitation site and have been combined under the Borden Number EeRg-13.

With the addition of the 25 housepit and cache pit features associated with EeRg-9 a total of 36 subsistence and habitation features are located within the newly defined boundaries of EeRg-13. The high density of artifacts and features at Juniper Beach indicates intensive use of the site for habitation and subsistence over a long period of time.

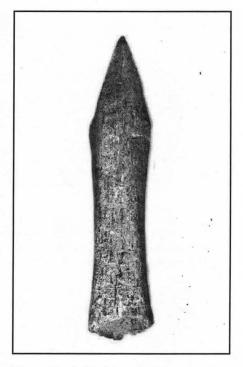


Figure 6. A finely-worked bone point, possible part of a composite harpoon tip (Artifact #11417).

BC Parks has always played a crucial role in the protection and mitigation of impacts to archaeological sites. The lands preserved as parks in our Province are a haven to cultural heritage sites and spiritually significant localities. The variety and quantity of artifacts and data collected from EeRg-13 provide insight into the lives of the people that have inhabited The Thompson River Valley for thousands of years. Positive working relationships between consulting archaeologists, First Nation communities and proponents such as BC Parks are pivotal to ensuring the preservation and systematic documentation of cultural heritage resources in our Province. Based on the density of archaeological material and the presence of intact features land-altering developments in Juniper Beach Provincial Park should be minimized as far as possible to protect what remains of this highly sensitive archaeological site.

Sarah K. Smith has worked as a consulting archaeologist in BC since 2006 and has been at AMEC (formerly Arcas) since September 2008. She is the current membership secretary for the Archaeological Society of British Columbia and a graduate of the University of British Columbia. Sarah lives in (East) Vancouver, B.C.

Acknowledgements

I would like to thank all the crew that worked hard on this project in gradually colder and colder conditions: John Bell Jr. and Sr., Wynona Britten, Marshall Gonzales, Avon Isnardy, Fred "Moose" Jules, Gabe Jules, Kevin Lamb, Lea McNabb, Darrell Peters, Jeremy Peters, Jordan Wolfe, Joe Thomas (Skeetchestn Indian Band), Tasia Pittman (Aschroft Indian Band), Bert William, Clarence (JR) William Jr. and Floyd William (Bonaparte Indian Band)

References

- Arcas Associates. 1985. Excavations at the Rattlesnake Hill Site (EeRh 61), Ashcroft, B.C. Consultants' report on file, Archaeology Branch, Victoria. HIP #1984-2
- 1989. Archaeological Impact Assessment on New Grade Crossing and Campground Expansion at Juniper Beach Provincial Park, B.C. Consultant's report on file, Archaeology Branch, Victoria. Permit # 1989-113.
- 1995. An Inventory and Assessment of Heritage Resources on Hat Creek Ranch Property, near Cache Creek, South-Central B.C. Consultant's report on file, Archaeology Branch, Victoria. Permit # 1994-073.
- Bussey, Jean. 1995. Systematic Data Recovery at EeRf 1, Savona, B.C. [2 volumes]. Consultant's report on file, Archaeology Branch, Victoria. Permit #1994-035.
- Dawson, G.M. 1892. Notes on the Shuswap People of British Columbia. *Proceedings* and *Transactions of the Royal Society of* Canada. 9(2): 3-44.
- Ignace, M. B. 1998. Shuswap. In *The Hand-book of North American Indians, Vol-ume 12, Plateau*, edited by D.E. Walker Jr., pp. 203-219. Smithsonian Institution, Washington.
- Mallory-Greenough, L., Baker, J., and J.D. Greenough. 2002. Preliminary geochemical fingerprinting of dacite lithic artifacts from the British Columbia Interior Plateau. *Canadian Journal of Archaeology* 26: 41-61.
- McMurdo, J. 1974. A preliminary Report on Excavations at the Juniper Beach Site EeRg-013. Consultants' report on file, Archaeology Branch, Victoria. Permit 1974-1
- Pokotylo, D.L. and D.H. Mitchell. 1998. Prehistory of the Northern Plateau. In



Figure 7. Tasia Pittman (Ashcroft Indian Band) holding 28 projectile points, gravers and preforms recovered from a single cache on the upper terrace of EeRg-13. Photo by Sarah K. Smith.

Handbook of North American Indians, Volume 12, Plateau, edited by D.E. Walker Jr., pp. 81-102. Smithsonian Institution, Washington.

- Prentiss, W.C. and I. Kuijt [editors]. 2004.
 Complex Hunter-Gatherers: Evolution
 and Organization of Prehistoric Communities on the Plateau of Northwestern
 North America. University of Utah Press,
 Salt Lake City.
- Richards, T.H. and M.K. Rousseau. 1987.

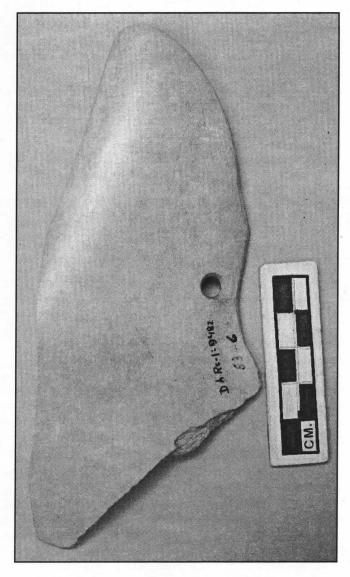
 Late Prehistoric Cultural Horizons on the Canadian Plateau. Simon Fraser University, Department of Archaeology Publication No. 16, Simon Fraser University, Burnaby, B.C.
- Rousseau, M.K. 2008. Chipped stone bifaces as cultural, behavioural, and temporal indices on the Central Canadian Plateau. In *Projectile Point Sequences in Northwestern North America*, edited by R.L. Carlson and M.P.R. Magne, pp. 221-250. Archaeology Press, Simon Fraser University, Burnaby, B.C.
- Smith, H.I. 1900. Archaeology of the Thompson River Region, British Columbia. American Museum of Natural History,

- Jesup North Pacific Expedition Memoirs, Part 4: 401-442. New York.
- Stryd, A.H. and M.K. Rousseau. 1996. The Early Prehistory of the Mid Fraser-Thompson River area. In *Early Human Occupation in British Columbia*, edited by R.L. Carlson and L. Dalla Bona, pp. 177-204. UBC Press, Vancouver.
- Teit, James. 1900. The Thompson Indians of British Columbia. Publications of the Jesup North Pacific Expedition 1(4), edited by Franz Boas. American Museum of Natural History, New York. New York [Reprinted: Nicola Valley Museum and Archives, Merritt, B.C.].
- 1909. The Shuswap. Publications of the Jesup North Pacific Expedition 2(7), edited by Franz Boas. American Museum of Natural History, New York [Reprinted: AMS Press, New York, 1975].
- Wyatt, D. 1998. Thompson. In *The Hand-book of North American Indians: Volume 12, Plateau*, edited by W. Sturtevant, pp. 191-202. Smithsonian Institution, Washington.

BONE BODY ARMOUR?

Grant Keddie





A unique artifact from the collection of the Royal British Columbia Museum (RBCM), DhRs-1:9482, is made from a ground and shaped piece of whale scapula (Figures 1 and 2 above). It was part of a collection originally donated in 1950 to the Saskatchewan Museum of Natural History by P.T.O. Menzies. Menzies had collected these artifacts from the Eburne or Marpole site in 1931.

I suggest that this is another example of the unique pair of whale bone armlets (DgRw-4:3012) found at the False Narrows site on Gabriola Island. These armlets were extremely fragmented when uncovered but were meticulously reconstructed by the conservation unit at the RBCM (Figure 4). Before reburial, they were on display in the old archaeology exhibit at the museum where they were described as whale bone armour. The drawing provided in

Figure 3 suggests how they were worn.

David Burley (1988) assigned the armlets to the False Narrows I period dated around 100 BC to 150 AD. The dating was based on "diagnostic similarities" of the assemblage with the Marpole type site. At the very least, it is believed to predate a component II date of 240 ± 90 AD.

The margins of artifact DgRw-4:3012 are perforated at 20-30mm intervals. Burley suggested that these perforations "may have been associated with either lashing or a means by which other decoration was attached," and noted that the armlets were "believed to be part of a dancing costume."

Figures 1 (above left) and 2 (above right). Front and back sides of the upper portions of a left armlet. DgRs-1:9482.

That artifact was found in an adolescent male burial with an elaborate group of artifacts that included a lignite coal beetle pendant, two incised elk antler tines, 2506 shell beads, three dentalia and three teredo worm caste beads.

The outer edges of the Marpole site artifact is only complete above the 6mm diameter hole. Although the bone fragment is just 148mm by 60mm, it closely resembles the upper narrow portions of the left armlet from False Narrows. It also has a similar inwardly curved edge. The latter may have been a result of scapula sections being steamed and bent—similar to the process for shaping mountain sheep horn.



Figure 3. Model of how the armlets would be worn.

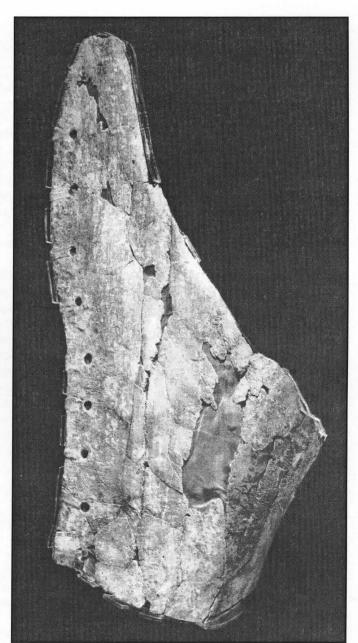


Figure 4. Reconstructed right armlet. DgRw-4:3012

We cannot rule out that these armlets were part of a ceremonial costume. The Marpole piece, however, has a fairly tough 3mm thickness. It could have served the purpose of body armour if, for example, it was placed between two layers of elk hide—the preferred upper body armour in the early 19th century.

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References

Burley, David, V. 1988. Senewelets. Culture History of the Nanaimo Coast Salish and The False Narrows Midden. Royal British Columbia Museum. Memoir No. 2.

ARCHAEOLOGY NEWS

Parks Canada Budget Cuts called "Draconian"

The Canadian Archaeological Associa-The Canadian Archaeological tion issued a letter of protest concerning what its President William Ross called "draconian cuts" to the Parks Canada budget as part of Bill C-38.

As reported by The Star's journalist Josh Tapper, the Conservatives announced in April that at least "1,600 Parks Canada employees could lose their jobs as part of the federal government's ongoing belttightening measures."1

In the CAA letter, Ross explained that the cuts would mean there would be "only 12 archaeologists and 8 conservators to support 218 national parks, historic sites and marine conservation areas, many of these being UNESCO World Heritage Sites":

These sweeping reductions severely undermine Parks Canada's ability to contribute to the economy and to fulfill its mandate to protect and present nationally significant examples of Canada's natural and cultural heritage and foster public understanding, appreciation and enjoyment to ensure the ecological and commemorative integrity of these places for present and future generations.2

CAA's Ross commented on the irony that such

a government that spotlights the war of 1812, restores the Royal to the navy and air force doesn't seem to care about anything else in the history of this country.

Letters were sent to the government by various other organizations, including The Society for American Archaeology who stated that the intended cuts "are drastic enough to amount to a de facto shutdown of Parks Canada archaeology":

These reductions in funding will

have a severely negative impact on archaeological research, and seriously undermine the preservation of Canada's extensive cultural and historic resources.

Response to the CAA's letter has so far been brief:

Please know that your e-mail message has been received in the Prime Minister's Office and that your comments have been noted. Our office always welcomes hearing from correspondents and being made aware of their views. Thank you for writing.

Web Sources

- 1. http://www.thestar.com/news/canada/politics/ article/1180275--job-cuts-will-hurt-preservationof-canada-s-past-say-experts
- 2. http://canadianarchaeology.com/caa/draconiancuts-parks-canada?
- 3. http://www.saa.org/ForthePress/SAANews/ tabid/139/Default.aspx

Looting as TV Entertainment: the Digging continues...

In February of this year, The Society for American Archaeology issued two letters opposing television shows featuring "amateur archaeology"-or, what many have described upon watching the shows simply as looting.

The shows included "Diggers," produced by the National Geographic Society, and "American Digger," produced by Spike TV. Spike TV describes "American Digger" as follows:

This new unscripted original series follows former professional wrestler turned modern day relic hunter Ric Savage, as he and his team from American Savage target areas such as battlefields and historic sites in the hopes of striking it rich and capitalizing on unearthing and selling bits of American history. The only thing standing in their way are the homeowners themselves, who Savage must convince to allow them to dig up their property using state-of-the-art metal detectors and heavy-duty excavation equipment. What artifacts they find, they sell for a substantial profit, but not before negotiating a deal to divide the revenue with the property owners. 1

Ric Savage explained his motivation (beyond making a quick buck) to New York Times' Bill Carter as being about "touching history":

When you find something of value and hold it in your hands, that's what it's all about for me...It's about touching history. You can read or watch history, but the only way you can touch or feel it is to dig it out of the ground.2

As Carter points out, "That's about what the anthropologists and archaeologists would say as well. They just argue that this sort of entrepreneurial artifact hunting is antithetical to the more straightforward goal of preserving the past."

In response to the various protestations made by the professional community, Savage said:

I understand where the archaeologists are coming from...You've got two groups of people who want to be part of history, to dig it up

and hold it in their hand. The only difference is I'm doing it to make a living. They're doing it to write papers and make it to associate professor and get tenure.

The SAA's letters raised the questionable ethics and legality of the practices observed in both shows:

We ask in the strongest possible terms that you take steps to alter the message of the show, which, based on our review of the material on the program's website, is contrary to the ethics of American archaeological practice, highly destructive, and possibly illegal.3

It remains to be seen how the shows' producers will respond, besides a disclaimer about heritage protection laws added by National Geographic. For now, the American Diggers keep on digging...

Web Sources

- 1. http://www.spike.com/shows/american-digger 2. http://www.nytimes.com/2012/03/21/arts/televi-
- sion/spikes-american-digger-draws-concernfrom-scholars.html
- 3. http://www.saa.org/ForthePress/SAANews/ tabid/139/Default.aspx



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Submissions

We welcome contributions on subjects germane to B.C. archaeology. Guidelines are available upon request, and from the website. Submissions should be directed to the editor by email or through the ASBC address. It is the author's responsibility to obtain permission from relevant parties, particularly First Nations communities, regarding the publication of photographs or archaeological information.

Conferences & Events

Association of Critical Heritage Studies Inaugural Conference

Gothenburg, Sweden Dates: June 5-8, 2012

Info: http://www.science.gu.se/

ARCHAEOLOGY AND ECONOMIC DEVELOPMENT CONFERENCE 2012

UCL, London, United Kingdom Dates: September 21-22, 2012 Info: http://www.ucl.ac.uk/aed2012/

CONFLICT AND RESOLUTION IN ARCHAEOLOGY: 45TH ANNUAL CHACMOOL CONFERENCE

Calgary, Alberta

Dates: November 8-11, 2012

Info: http://arky.ucalgary.ca/chacmool2012/

BORDERS AND CROSSINGS: 111TH AMERICAN ANTHROPOLOGICAL ASSOCIATION MEETING

San Francisco, California Dates: November 14-18, 2012

Info: http://www.aaanet.org/meetings/index.cfm

ARCHAEOLOGICAL INSTITUTE OF AMERICA AND AMERICAN PHILOLOGICAL ASSOCIATION

Seattle, Washington Dates: January 3-6, 2013

Info: http://aia.archaeological.org/webinfo.php?page=10453

Globalization, immigration, transformation: Society for Historical Archaeology Annual Conference 2013, 46^{th} Annual Conference on Historical and

UNDERWATER ARCHAEOLOGY

Leicester, U.K.

Dates: January 9-12, 2013

Info: http://www.sha.org/about/conferences/2013.cfm



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