Canadian Archaeological Association
Association Canadienne d'Archéologie

NEWSLETTER

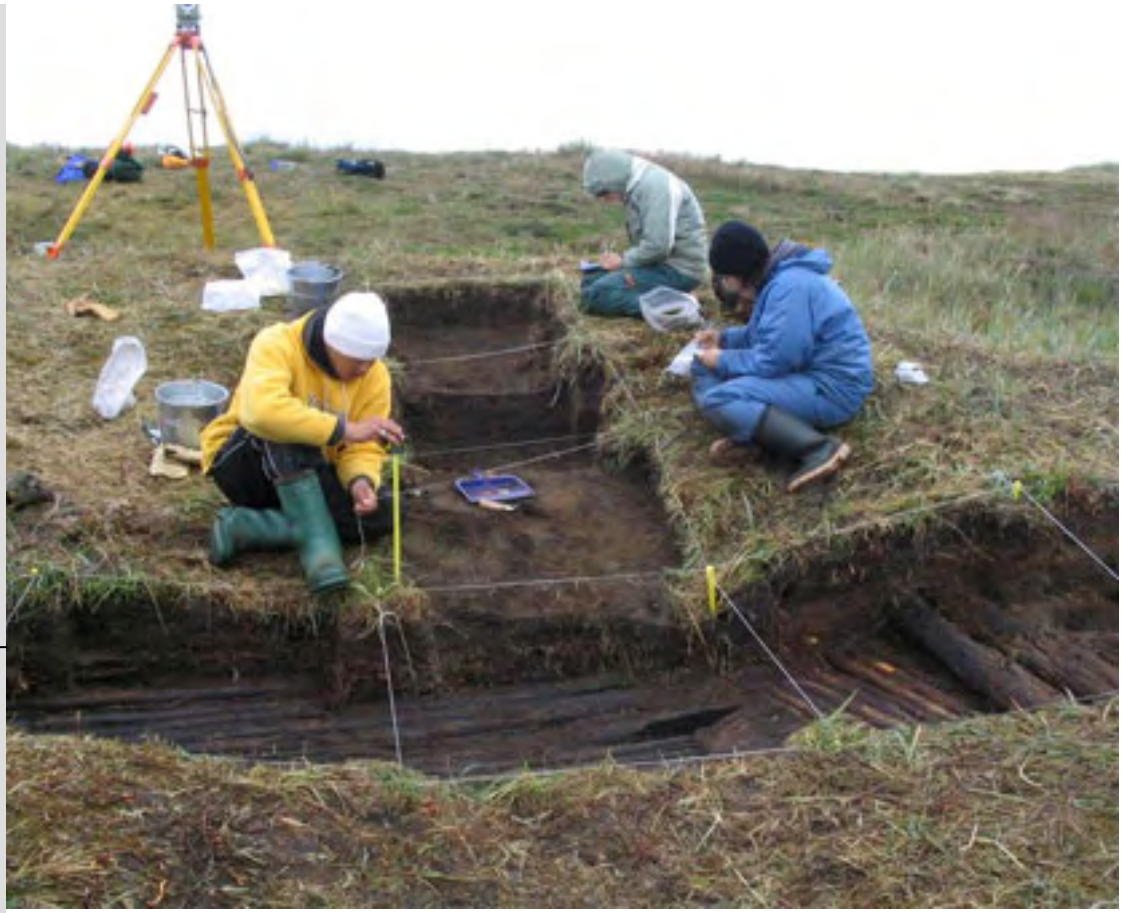
Volume 25 (1) 2005
Spring Issue

In this issue….

Editor:
Holly Martelle
Timmins Martelle
Heritage Consultants Inc.
203A-205 Oxford St. E
London, Ontario
N6A 5G6

(519)641-7222
fax: (519)641-7220
hmartelle@tmhc.ca

ISSN 1711-876X
Published by the Canadian Archaeological Association



Excavation of a semi-subterranean house structure at the McKinley Bay (OaTi-1) site on the outer Tuktoyaktuk Peninsula, Northwest Territories

CAA ACA

Canadian Archaeological Association
Association Canadienne d'Archéologie

Executive/Conseil d'administration, 2005-2006

President/Président
Gary Coupland
Department of Anthropology, University of Toronto, 100 St. George St., Toronto, Ontario M5S 3G3
tel: 416-978-4805; fax: 416-978-3217 email: president@canadianarchaeology.com

Vice President/
Vice président
Farid Rahemtulla
Anthropology Program, University of Northern British Columbia, 3333 University Way,
Prince George, British Columbia V2N 4Z9 tel: 250-960-6691; fax: 250-960-5545
email: vicepresident@canadianarchaeology.com

Secretary-Treasurer/
Secrétaire-trésorier
Jeff Hunston
4 Salter Place, Whitehorse, Yukon Y1A 5R2 tel: 867-668-7131; fax: 867-667-8023
email: secretary-treasurer@canadianarchaeology.com

President-Elect/
Président-élu
Margaret G. Hanna
Royal Saskatchewan Museum, 2445 Albert Street, Regina, Saskatchewan S4P 3V7
tel: 306-787-2815; fax: 306-787-2820 email: presidentelect@canadianarchaeology.com

CAA Appointments/Responsables de comitée de l'ACA

Canadian Journal of Archaeology, Editor/Rédacteur du Journal canadien d'archéologie
George Nicholas
Simon Fraser University, Secwepemc Education Institute, 365 Yellowhead Highway
Kamploops, British Columbia V2H 1H1 tel: 250-828-9799; fax: 250-828-9864
Email: cjaeditor@canadianarchaeology.com

Canadian Archaeological Association Bulletin, Editor/Rédacteur du bulletin de l'Association Canadienne d'archéologie
Holly Martelle
Timmins Martelle Heritage Consultants Inc. 203A-205 Oxford Street E., London, Ontario N6A 5G6
tel: 519-641-7222; fax: 519-641-7220 email: hmartelle@tmhc.ca

World Wide Web Editor
Jean-Luc Pilon
50 Oak, Aylmer, Quebec J9H 3Z3 tel: 819-776-8192 fax: 819-776-8300
Email: webeditor@canadianarchaeology.com

Heritage and Legislation Policy Committee/Politique sur le patrimoine et la législation
Greg Monks
Chair/président
Department of Anthropology, University of Manitoba, Winnipeg, Manitoba R3T 5V5
tel: 204-474-6327 email: monks@cc.umanitoba.ca

Aboriginal Heritage Committee/Patrimoine autochtone:
Eldon Yellowhorn
Chair/président
Department of Archaeology, Simon Fraser University, Burnaby, British Columbia V5A 1S6
tel: 604-268-6669; fax 604-291-5666 email: ecy@sfu.ca

Public Communications Awards Committee/Prix en communication publique
David Denton
Chair/président
Cree Regional Authority, 174 Boul. Dennison, Val D'or, Québec J9P 2K5
tel: 819-825-9603; fax: 819-825-6892 email: ddenton@lino.com

Weetaluktuk Award Committee/Comité du Prix Weetaluktuk
Caroline Phillips
Chair/président
Project Archaeologist, Ontario Service Centre, Parks Canada, 111 Water Street East,
Cornwall, Ontario K6H 6S3 tel: 613-938-5905; fax: 613-938-6363 email: caroline_phillips@pch.gc.ca

Cultural Resource Management Committee/Comié de gestion des resources patrimoniales
Ron Williamson
Chair/président
Archaeological Services Inc., 528 Bathurst Street, Toronto, Ontario M5S 2P9
tel: 416-966-1069; fax: 416-966-9723 email: rwilliamson@archaeologicalservices.on.ca

---

Cover photo: From left to right, Charlton Wolki (Tuktoyaktuk), Maggie Pebbles (Toronto), and Linsday Swinarton (Toronto).

A Message from the President

Time flies. I am now a little more than half way through my two-year term as CAA President, and it seems like only yesterday that Gerry Oetelaar and Dean Knight invited me to my first Executive meeting (Hamilton, 2003). Listening to Gerry (an experience in itself) at that meeting, I began to comprehend the responsibility and work involved in serving the CAA. I wondered what I had gotten myself into. Two years later, having served as President-Elect and one year as President, I can honestly say I have no regrets. In fact, it has been a great experience so far. Much to my surprise, I have found that archaeologists, at least some of them, are really nice people. And the task of serving the national organization for archaeology and for cultural heritage in Canada has been an enriching one. Since I last wrote in these pages, a little over a year ago, I think we have made some accomplishments of which we can be proud, moving archaeology in Canada forward at least a little bit. But there is still much to do. Let me bring you up to speed on some of the things that have happened in the past year.

We had a conference in Nanaimo (May 2005) that was hugely successful. I can't say enough about the tireless work that Imogene Lim and her team did in bringing the conference together. From the site tours and workshops that kicked off the conference on Wednesday to the banquet at the Snuneymuxw First Nation's longhouse, everything came off without a hitch. And best of all, roughly 400 conference registrants were there to enjoy it. Nanaimo was one of our best attended conferences ever. In fact, I think you would have to go all the way back to the meetings in Victoria (1998) to find a better attended CAA conference. Why is it that the conference does so well when held on the west coast? Maybe it's the air, or the "liquid sunshine", or the enthusiasm that B.C. archaeologists have for the CAA -- an enthusiasm that archaeologists in the rest of the country are challenged to match.

Highlights of Nanaimo for me included R.G. Matson's receipt of the Smith-Wintemberg award (should I mention that he was my PhD supervisor at UBC?; no, maybe I'd better not). R.G. enjoyed a distinguished career as teacher and researcher at UBC for over 30 years. He made many significant contributions to the archaeology of British Columbia during that period, and as the rogue's gallery of former students who stood behind him in the longhouse as he received his award attests, his stamp on Canadian archaeology is indelible. Congratulations R.G.!

"Since I last wrote in these pages, a little over a year ago, I think we have made some accomplishments of which we can be proud, moving archaeology in Canada forward…"

Another Nanaimo highlight was the attendance and participation in the conference by members of the B.C. Archaeological Society, especially the Nanaimo branch. This group organized an excellent symposium on the role of avocational archaeologists in Canadian archaeology. Too often the CAA is perceived as an elite organization for academics. It should not be so. The CAA should represent all archaeological interests in Canada. We welcome avocational archaeologists; we need your voice; and we encourage you to join the CAA. *No archaeologist left behind*!

And lastly, did you catch Maureen Carlson's talk at Nanaimo on C.E. Borden? What a wonderful trip down memory lane, delivered in Maureen's own inimitable style. All I can say is I'm glad I gave my talk before Maureen, and not after her. What a tough act to follow!

The past year was an election year, and therefore a year of changeover in the CAA Executive. Dean Knight, our immediate Past-President, has now completed his term on the Executive. As President, Dean guided the organization through some trying periods and difficult issues. He always spoke with the voice of reason and fair compromise and his primary concern was always the well being of the CAA. Thank you, Dean, for your service.

And welcome to the Executive as President-Elect, Margaret Hanna. In a closely contested election, Margaret won by the narrowest of margins over Scott Hamilton. I won't tell you how I voted, but I will say that it was great feeling knowing that however I voted, I knew the CAA would be in good hands. Thanks to both candidates for their efforts, and congratulations Margaret!

Margaret Hanna is the new President-Elect

Welcome also, Holly Martelle, our new Newsletter Editor. Holly takes over from Pat Julig, who edited the Newsletter for the past two years. I know Holly will do an excellent job, if her recent terse email to me -- "where is your President's message for the newsletter?" -- is any indication.

Speaking of changeover, both Jeff Hunston (Secretary-Treasurer) and George Nicholas (*Canadian Journal of Archaeology* editor) have served notice that they intend to step down in the near future from their respective positions, and return to sane and normal lives. They will leave big shoes to fill. Any Past President will tell you that the Secretary-Treasurer has the most difficult and most time-consuming job on the Executive. Jeff Hunston has filled the position superbly. He has found a way to keep members and auditors happy; not an easy task. And he has moved us into the 21st century. No more fumbling with personal cheques. Thanks to Jeff, you can now renew your CAA membership online at our website, and pay with your credit card. What a thoroughly modern organization we have!

George Nicholas inherited a journal in trouble in 2001. We had lost our SSHRC (Social Sciences and Humanities Research Council of Canada) journal grant, and were it not for a financial rescue from Simon Fraser University we might have lost our journal. George turned all that around. He brought the journal back from the brink, raising its standards to the point where now the *Canadian Journal of Archaeology* is truly a top level periodical. And I am delighted to note that this turn around was recently recognized by SSHRC, who not only approved our 2004 journal grant application, but gave us full funding for the next three years. Jeff and George, the CAA is deeply in your debt.

I should also add here that Jeff and George arranged the donation of fifty copies of the *CJA* CD-ROM in support of the World Archaeology Congress' initiative to provide heritage management agencies and educational institutions in developing countries with important archaeological resources. Through efforts like this, the CAA provides leadership on the world archaeology stage.

And while I'm handing out thank yous, Jean-Luc Pilon has served as our Web Master for the past several years, and during that time he and Luke Dalla Bona, have built a superb website for the CAA. In the past year Jean-Luc has added a privacy statement to the website that gives us a greater degree of security. For that and for the many hours of work that you have given to the website, thank you, Jean-Luc.

And last but not least, I wrap up this message with an invitation to come to Toronto for the CAA's 39th annual conference in 2006. Max Friesen, Andrew Stewart and I will be your conference co-organizers. Please take note of the dates, May 24-27, a few weeks later than usual, owing to venue availability. But I think you will find the wait worthwhile. We have an excellent conference and residence facility lined up through University of Toronto, at very affordable rates, and right in the heart of downtown Toronto! Look for conference web pages on the CAA website. We promise a great conference. See you there!

CANADIAN ARCHAEOLOGICAL ASSOCIATION

39th Annual Meeting
University of Toronto
Toronto, Ontario

Watch the web site for details!

A Note from the *Newsletter* Editor….

Still have fieldwork news from 2004? We will gladly accept it for the fall issue of the *Newsletter*. Anyone who has information to pass along or is interested in acting as a regional news coordinator should contact the newsletter editor as soon as possible. Send submissions to:

Holly Martelle
hmartelle@tmhc.ca
Timmins Martelle Hertiage Consultants Inc.
203A-205 Oxford Street East
London, Ontario N6A 5G6

SCAPE Fieldwork News

Editor: Alwynne B. Beaudoin

SCAPE: Study of Cultural Adaptations in the Prairie Ecozone
Report of Activities 2004

SCAPE (Study of Cultural Adaptations in the Prairie Ecozone) is a five-year project, funded by SSHRC through its Major Collaborative Research Initiatives program (Grant #412-99-1000). The project began in May 2000 and is scheduled to end in May 2005. The project is headquartered at Brandon University. This report outlines the activities of the fifth and final field season (2004).

The SCAPE project focuses on the Northern Plains, roughly the Prairie Ecozone and its periphery in the Prairie Provinces. The primary objectives of the project are to reconstruct landscapes at five specific time intervals in the postglacial (9,000, 6,000, 3,000, 1,500 and 500 yr BP). Within this larger region, work is being concentrated in three areas: the Cypress Hills in southeast Alberta, the Saskatchewan River Forks area of central Saskatchewan, and localities in southwest Manitoba, including the Glacial Lake Hind Basin and the Tiger Hills. These areas highlight the range of ecological complexity within the prairies and exhibit a diversity of landscape types and resources.

The project's progress can be followed through its website at http://scape.brandonu.ca. Anyone interested in learning more about SCAPE may contact the Principal Investigator, Bev Nicholson, or any of the project team. Contact addresses and e-mail addresses appear on the website.

Southeastern Alberta, the Cypress Hills area

Achaeological fieldwork: the 2004 field season at the Stampede Site in the Cypress Hills
Gerald Oetelaar

The primary objective of the 2004 field season was to increase the depth of the pit by concentrating our efforts on the deepest part of the main excavation. At present, our pit measures nine metres north-south by eight metres east-west and extends some six metres below surface. Within this pit, we have exposed a minimum of thirty-one buried soils, eighteen of which contain evidence of human occupation extending back some 8,000 years. Unfortunately, inclement weather and a high water table prohibited the achievement of this goal. As a result, we spent most of the summer exposing and defining the coarse gravel layer uncovered during 2003 and preparing the south wall of the main excavation for the removal of a sediment peel. This sediment peel will be the centre piece in the exhibit room of the new visitor centre to be constructed in Cypress Hills Interprovincial Park. The design for the new building is almost complete and the results of our archaeological excavations will be a significant component of the interpretive displays. Most of the work was conducted by graduate and undergraduate students from the University of Calgary including **Kirsten Anderson**, **Kyle Belanger**, **Michael Cowtan**, **Alyssa Faubert**, and **Andrea DeGagne**. However, our crew this summer also included four students (**Rosie Fuller**, **Christina Copland**, **Laura Killick**, and **James Sutton**) from various universities in the United Kingdom. These students, who spent from four to six weeks working with us this summer, applied this practical experience toward their degree requirements.

This summer, we managed to expose more of the coarse gravel layer encountered during the 2003 field season and to determine that this stratum was the result of colluvial processes, not alluvial deposition. In fact, this stratum provides corroborative evidence for the models of head ward erosion in small streams scattered throughout the Cypress Hills. Elsewhere, our excavations have continued to expose a variety of fireplaces, most of which were located at essentially the same location in successive occupations. Thus, people seem to have returned to this site and set up camp at the same location as their ancestors despite the introduction of a thick layer of slump debris, the deposition of a volcanic ash, and the introduction of sediment through a sequence of substantial flood events. This remarkable continuity in the use of place was the topic of a paper presented at a conference in Lyon, France this past September.

Our archaeological investigations this summer yielded more than hearths. In an occupation level dating to approximately 7,300 BP, for example, we uncovered a series of post moulds arranged in a circle some 3 metres in diameter. The size and placement of the posts suggests the presence of a domestic structure. If correctly identified, these post moulds could represent one of the oldest structures identified in western Canada. In addition, our excavations have yielded some very interesting tools including several notched projectile points, a beautiful bone awl, and a bone needle. The latter artifact, an almost complete eyed needle, was discovered in an occupation layer dating to 8,000 BP.

Our Program for Public Archaeology continues to attract a large number of students from the local schools and summer camps. These children spend an average of two hours participating in a variety of activities which are designed to introduce the practice of archaeology. This summer, we were particularly pleased to have attracted students, teachers and Elders from the Peigan Institute, the only school on the Blackfeet Reserve in Montana where all instruction is conducted in the Blackfoot language. We also continued to offer weekly lectures and guided tours of the site to individuals of all ages who come to the Cypress Hills as tourists or as regular visitors. Of particular interest this summer was a visit by students from Red Crow Community College on the Blood Reserve in southern Alberta. Together with the Miywasin Society of Alberta and the First Nations, Metis and Inuit Education Program, we helped host "History in the Hills", a four-day extravaganza featuring past and present lifestyles of First Nations as well as the history of Euro-Canadian exploration and settlement in the area. This year, some 1,100 students, teachers, and parents attended the event. Even though our excavation work is now complete, we hope to be able to continue these public programs for one more summer.

Geoarchaeological investigations in the Cypress Hills
Elizabeth Robertson

As part of an ongoing doctoral research project designed to determine if the Cypress Hills contain multiple deeply stratified archaeological deposits similar to those at the Stampede Site, **Liz Robertson** spent the 2004 season continuing laboratory analysis of sediment samples taken from localities that, like the Stampede Site, sit in the meltwater channels that skirt the bases of the Cypress Hills. These samples are, for the most part, cores recovered during SCAPE's 2001 and 2002 field seasons, using the project's Geoprobe, a truck-mounted hydraulic coring system.

Descriptive logging of these cores has revealed that extended packages containing multiple buried soils like those at the Stampede Site occur throughout the meltwater channels running around and through the Alberta portion of the West Block of the Cypress Hills. Radiocarbon dating of buried soil samples from these cores demonstrates that they represent deposition starting in the Early Holocene, with the prospect of Late Pleistocene deposits at greater depth. Furthermore, fine screening of sediment samples recovered by shovel and auger testing at the study locations has yielded small quantities of cultural material in association with many of these

buried soils. These results suggest that the meltwater channels ringing the Cypress Hills share a depositional history that makes them excellent contexts for the formation and preservation of deeply stratified archaeological sites.

Additionally, ongoing efforts to extract paleoenvironmental data from the buried soils identified in the cores has indicated that stable isotope analysis and phytolith analysis have great potential to provide insights on the changing conditions at these sites over the course of the Holocene. This finding suggests that these sites may not only yield information on past human activity in the Cypress Hills, but could also provide insights on the impact of changing environmental and climatic conditions on such activity.

"… paleoenvironmental data from the buried soils identified in the cores has indicated that stable isotope analysis and phytolith analysis have great potential to provide insights on the changing conditions at these sites over the course of the Holocene."

Central Saskatchewan, the Forks area

Saskatchewan 2004 Field Archaeology
David Meyer

Intake Site

In 2004, the SCAPE archaeological field work in Saskatchewan was carried out at the Intake site (FhNj-15), July 5-24. This site is located on the banks of the North Saskatchewan River, some nine km east of the city of Prince Albert. Excavations were first conducted at this site in 1980 and 1981 when 18 full and 11 partial m^2 were opened.

Because of ongoing bank erosion, almost all of this previous excavation area had been washed away by 2004. However, portions of three previously excavated units were relocated and excavated to a greater depth, while excavations were undertaken at an additional five m^2.

There are two occupation levels at this site, the upper is in the contemporary A horizon while the deeper is buried at 60-80 cm below the surface. The upper occupation is of an unknown archaeological culture which is characterized by net-impressed pottery and small side-notched arrow points. It has been dated to 1205±80 rcybp (S-2185). The lower occupation has not been dated, but in 1981 a side-notched projectile point was recovered which appears to be of a Mummy Cave period style. Therefore, this lower occupation can be expected to date to about 6,000 B.P.

The 2004 excavations proved to be on the fringe of the upper occupation habitation area, and only a few potsherds and pieces of debitage were recovered. Recoveries from the lower occupation were more numerous, including a good deal of debitage, some stone tools and a small amount of animal bone.

Analysis of molluscs from the Below Forks Site
Alec Aitken and Jennifer Murray

The Below Forks site is located a few kilometres east of the confluence of the North and South Sas-

katchewan Rivers, along the north bank of the Saskatchewan River. This site is situated on a high, south facing cutbank formed on a well elevated alluvial terrace along the north side of the river. Deep stratification, approximately three meters, is visible on the exposed cut-bank, with numerous paleosols being evident. The Below Forks site contains many proxies which can provided a cornucopia of palaeoenvironmental information. **Laura Roskowski** investigated the site's geomorphology and stratigraphy, focusing on the paleosols, to determine vegetation stability and variation through time. **Alwynne Beaudoin** sampled organic-rich sediments exposed at the Below Forks site as part of an effort to assess its palaeoenvironmental record via its plant fossils. **Alec Aitken** sampled the same section as Alwynne with a focus on collecting molluscan remains. Comparison of these data sets should provide some interesting perspectives on the site's developmental and palaeoenvironmental history.

It is the mollusc samples that are still in the works today. Approximately one liter of sediment within each naturally occurring stratum was collected by Alec Aitken. Back at the University of Saskatchewan these samples were processed and all molluscan remains removed by archaeology graduate student **Jennifer Murray**. The Below Forks mollusc samples produced a fairly rich fauna of over ten terrestrial gastropod species and at least four freshwater snail species. The individual counts, as well as species diversity, do show significant fluctuation through out the stratigraphic column and provides a strong qualitative paleoenvironmental signal.

The next step involving the gastropods is to do some stable isotope studies using the terrestrial gastropod shells. The point of this is to potentially provide information on palaeoclimatic conditions such as seasonality, temperature, humidity, and precipitation, as well as ecological information on the snail species themselves. There are two different ways in which this will be done. The first way consists of whole shell samples. This means an entire shell is ground to produce one sample. Since most of the snail species present live for approximately one year, the isotope data produced from this method will provide an annual average temperature etc. The other method is to serially sample a single shell along its growth axis. This will produce numerous samples from a single shell. This method allows for the determination of annual seasonal variation in the above parameters.

Serially sampling has already been started on a few individuals. This method has been tried on gastropods before, but never before with such small delicate shells. It is therefore proving difficult to derive the desired resolution. Yet, it is still worth the twenty or so usable carbonate samples that can be extracted from one five millimeter snail. The five snails that have been micromilled (i.e., serially sampled) show very exciting within shell variation indicating an excellent signal of seasonality.

All of the molluscan data, including stable isotopes, and palaeoenvironmental interpretations are the focus of University of Saskatchewan archaeology graduate student Jennifer Murray's Master's Thesis.

Palaeoenvironmental fieldwork in central Saskatchewan
Alwynne B. Beaudoin

Winter fieldwork

Coring at Wakaw Lake and Candle Lake, Saskatchewan, took place in the week of February 16 - 20, 2004. The field party consisted of **Alwynne Beaudoin** (Provincial Museum of Alberta) accompanied by **Jason Gillespie** (Anthropology Department, University of Alberta) and **David Keller** (SCAPE laboratory assistant) as field assistants. **Dr. David Meyer** (Archaeology Department, University of Saskatchewan) assisted with coring, and **Patrick Young**, **Steve Kassten** and **Jenna Johnstone** (all from Saskatoon) participated for part of the work. All coring was done with a Reasoner corer so as to obtain larger sediment samples at each level. These lakes are situated south of the present boreal forest margin. They are expected to document changes in

the extent and character of parkland vegetation. With Candle Lake, these cores form a transect from the southern boreal forest to the parkland/grassland transition. Since returning from the field, cores from Wakaw and Rhona lakes have been split, described, and subsampled. These cores form the basis of thesis research by Jason Gillespie.

Summer fieldwork

The main objective of summer fieldwork in Saskatchewan in 2004 (undertaken July 11 – July 17) was to complete the surface sampling program begun in previous years. Surface samples are used as analogues for the subfossil core samples and to help calibrate assemblage characteristics to document critical vegetation boundaries. The field party consisted of **Alwynne Beaudoin** (Provincial Museum of Alberta) accompanied by **Jason Gillespie** (Anthropology Department, University of Alberta) as field assistant.

We visited the Intake Site and excavated, photographed and sampled the lower paleosol (7 pollen and 2 bulk and 4 surface samples). The next three days were spent collecting surface samples for pollen in three long transects running north/south from the boreal forest into the mixed grass prairie. In total 68 surface samples and 9 pollen reference samples were collected. This completes the surface collection program for this area.

Southwestern Manitoba

Manitoba 2004 Field Archaeology
Bev Nicholson and Scott Hamilton

Glacial Lake Hind Basin

Archaeological and geoarchaeological field investigations during the summer of 2004 took place at the Atkinson, Crepeele and the Sarah Sites located in the Lauder Sand Hills of the Glacial Lake Hind Basin Research area. Ongoing research in the Lauder Sand Hills has outlined the basic parameters of the ecology and geomorphology of the Glacial lake Hind Basin (GLHB), including a generalized environmental context.

Atkinson Site - A 6,000 Year Old Mummy Cave Occupation near Lauder, Manitoba

The Atkinson site has been dated to 6,225 calibrated years in age, based on a charcoal sample collected from a hearth. The 2004 excavations at the Atkinson site, supervised by **Tomasin Playford,** have increased our knowledge of the Gowen occupation there and contributed towards an understanding of its relationship to the overall Mummy Cave complex, first defined on the high plains in Wyoming (Frison 1991: 79-111). The Gowen variant was first described by Walker (1992) from two sites near Saskatoon, that are located close to the Saskatchewan River channel. Our inventory of stone tools has been increased with the addition of two projectile points and four bifaces ranging from a hafted specimen to a large asymmetric specimen, together with two fragments from other biface types. The faunal sample has been increased and Tomasin Playford has analyzed the 2003 recoveries that were funded by the Manitoba Heritage Grants Advisory Council (MHGAC). This analysis has given tentative support to the idea that the Atkinson site is a warm weather occupation.

Crepeele Site

It was originally thought that a second Gowen occupation has been identified, based on projectile point morphology, at the Crepeele site six km south of the Atkinson site. This site is located in the northern lee of a small sand dune outlier and, based on similarly located sites in the area, it is likely a winter occupation. A sample of ungulate bone was submitted for radiocarbon analysis. However the results (TO-11881: 1610±120 BP cal 425 AD) would be consistent with a Besant Occupation. Other occupations at the Crepeele sites include Blackduck/ Duck Bay and Mortlach materials

Sarah Site

The Brandon University Archaeological Field School, under the direction of **Denise Ens**, was conducted at the Sarah site. The upper bone bed, dated to 1500 BP (calibrated) produced an abundance of butchered bone, several large prairie/plains side-notched points and other lithic tools and debitage.

Ceramics were absent. The lower occupation, dated to 3500 BP (calibrated), had sparsely distributed butchered bone and a scatter of lithic debitage. No diagnostics were recovered. These materials have been catalogued into the Archwizard data manager.

Geoarchaeological fieldwork
Garry Running and Karen Havholm

Glacial Lake Hind Basin
Atkinson Site

Field work in 2003 indicated that the multi-component Atkinson site, including a cut-bank exposure on the Souris River, has the potential to reveal the relationship between mid-Holocene human activity and the dune-stream ecotone. Work this summer focused on tracing stratigraphic horizons across the cut-bank exposure. Twenty-six complete or partial stratigraphic profiles were excavated, described, and mapped along the cutbank exposure using a total station.

We report some tantalizing preliminary results from this effort here. First, we were able to delineate progressively eastward interfingering of the dune and alluvial environment during the late mid-Holocene (this deposit is the local unit B equivalent). Evidence suggests dune encroachment into the river valley occurred episodically. Second, the partially-excavated hearth, which has diagnostic material consistent with the Mummy Cave complex and a radiocarbon age of 5250 ± 60 BP, resides in alluvial sediment at a point that marks the easternmost position of the mid-Holocene dune advance. Third, careful tracing of the eolian units exposed in the cutbank at the Atkinson site revealed two pulses of late Holocene dune activity. Previous work at nearby Flintstone Hill site (and elsewhere in the GLHB) revealed only one main pulse of dune activity occurred around 3000 BP (with evidence of more recent comparatively minor dune reactivation). **Jessica Lopez** is working this winter on combining total station survey data with stratigraphic descriptions from the cut-bank profiles to generate a two-dimensional cross-section of the cut-bank exposure, its stratigraphic units and archaeological data. In addition to this work, **Sarah Buss** (graduate student, Appalachian State) directed collection of Geoprobe cores across the Atkinson site that includes the Souris River cutbank discussed previously, nearby late Holocene dunes and an abandoned meander swale on the modern floodplain. Correlation of Sarah's Geoprobe data with Jessica's cut-bank stratigraphy is expected to produce a 3-dimensional picture of landscape development as it occurred across the entire Atkinson archaeological site throughout the mid and late-Holocene.

"Fieldwork in 2003 indicated that the multi-component Atkinson site, including a cut-bank exposure on the Souris River, has the potential to reveal the relationship between mid-Holocene human activity and the dune-stream ecotone."

Crepeele Site

Archaeological investigations in the Crepeele dune field (CDF) have revealed a comparatively greater density of archaeological sites than in surrounding non-dune landscapes. This supports our hypothesis that geomorphically and ecologically complex landscapes such as dune fields (that include parabolic dunes and associated sandsheets and interdunal wetlands) were particularly important places to precontact people. In 2003 buried soil profiles with A-E-B horizonation were observed in association with archaeological materials recovered from close proximity to parabolic dunes. The A-E-B soil horizonation is indicative of podzolization, a soil forming process linked to soil genesis in the presence of forest, rather than grassland, vegetation. The archaeological significance of ecological complexity in the CDF including forest vegetation (and related resources) throughout the late-Holocene is

worthy of further investigation. Hence, in conjunction with more archaeological excavation units, additional buried soil profiles were investigated in an effort to determine the extent to which podzolic soil morphology, and hence, forest communities (oak savanna and aspen parkland) that dominate the CDF today, were present in the CDF throughout the late-Holocene.

More buried soil profiles associated with archaeological material need to be described but the results to date are intriguing. In total, the walls of 10 excavation units were described in detail and mapped using GPS. Seven buried soil profiles observed in these excavation walls, representing a soil-forming period from ~ 1500- 3200 RCYBP, exhibit podzolic morphology. Apparently, podzolic soils were widespread in the CDF during this period. In turn, this suggests some forest community(ies) was widespread in the CDF during this period. Moreover, a spatial pattern of soil profiles exhibiting podzol morphology is emerging. Soil profiles that exhibit podzolic morphology are not found everywhere. Rather, buried soil profiles with POD indexes (a proxy for degree of podzolization) of 2-4 are clustered near parabolic dunes. Such profiles are usually observed on the downwind side of a dune crest or northern dune wing. Conversely, non-podzol soils are found in lower landscape positions near the water table or high on dune crests and wings where wind erosion is more frequent. This winter UWEC student **Mark Nelson** will be mapping parabolic dune and archaeological excavation unit locations. He will be determining the POD indexes for buried soil profiles described in 2004 to test whether the apparent spatial pattern is real. If so, the widespread presence (and predictable landscape position) of buried soil profiles that exhibit podzolic morphology strongly suggests forest communities were present within the CDF throughout the late-Holocene and that forest-related resources associated with the dune environment were the likely attractors of human activity.

Digital Video

A slim budget this year slowed production of additional digital videos. At the request of **Andrea Freeman**, **David Harkness** did acquire additional "footage" of the Geoprobe in action. Accordingly, we will expand our efforts to produce a series of ''how to'' Geoprobe videos. These videos will highlight OUR experience and expertise WE gained and geared to inform others how WE used it in the context of OUR interdisciplinary geoarchaeological investigations. We intend them to be used by future users of the SCAPE Geoprobe. Our goal is to present the SCAPE model of interdisciplinary research at the same time we teach viewers how to use our Geoprobe effectively in their own research. Other digital video projects were put on hold because we were short on crew. Much of David's field time was taken up volunteering to fill in when additional crew were needed. Though almost all raw footage needs have been met, several topical digital videos remain ''in the works'' post-production-wise. Additional footage is needed only to support a digital video on fencerow dunes.

"Our goal is to present the SCAPE model of interdisciplinary research at the same time we teach viewers how to use our Geoprobe effectively in their own research."

Personnel

The following people were involved in the geoarchaeological fieldwork in southwestern Manitoba in 2004: **Karen Havholm** (Department of Geology, University of Wisconsin - Eau Claire [UWEC]), **Garry Running** (Department of Geography and Anthropology, UWEC), **Dion Wiseman** (Department of Geography, Brandon University), **David Harkness** (Department of Humanities, Nelson MacIntyre Collegiate), with students **Mark Nelson** (Department of Geography and Anthropology, UWEC), **Jessica Lopez** (Department of Geology,

UWEC) , and graduate students **Sarah Buss** (Department of Geography and Planning, Appalachian State University, North Carolina) and **Liz Robertson** (Department of Archaeology, University of Calgary).

2004 SCAPE Paleoenvironmental Activities in Manitoba
Matt Boyd

Throughout 2004, **Matt Boyd** and several Lakehead University students (**L. Hill**, **C. Surette**, and **B. Almqvist**) have been involved in full-time lab research for the SCAPE project. Much of this time has been spent describing, sub-sampling, and processing cores from the Assiniboine Delta (collected in July 2003). Emphasis has been placed on the analysis of early Holocene organic units for macrofossils, mineralogy (using x-ray diffraction), and other key parameters. At the time of writing, the analysis of cores from the Assiniboine Delta cores is approximately 60% completed. As anticipated, the material collected from this region is providing important insight into the geomorphic, and vegetative, history of this major meltwater delta. These data, in turn, will provide the only context for the rich, regional, Paleoindian record on the western margins of glacial Lake Agassiz, in addition to being an important source of comparative data for earlier SCAPE work in the Lake Hind basin.

In June 2003, fieldwork was briefly conducted in the glacial Lake Hind basin with **Garry Running**, **Karen Havholm** and students. During this time, additional early and middle Holocene organic samples from the glacial Lake Hind basin were collected in order to refine, and build upon, geoarchaeological models developed during an earlier phase of the SCAPE project (e.g., Boyd *et al.*, 2003). These new samples are currently being processed in the laboratory.

References Cited

Boyd, M., Running IV, G. L., Havholm, K. G. 2003 Paleoecology and geochronology of glacial Lake Hind during the Pleistocene-Holocene transition: context for Folsom surface finds on the Canadian Prairies. *Geoarchaeology* 18(6):583-607

Frison, George C. 1991 *Prehistoric hunters of the High Plains*. Academic Press, San Diego.

Walker, Ernest G. 1992 *The Gowen Sites: Cultural responses to Climatic Warming on the Northern Plains (7500-5000 BP)*. Mercury Series, paper number 145. Canadian Museum of Civilization, Ottawa.

Fieldwork report compiled by Alwynne Beaudoin, from contributions by Alec Aitken, Matt Boyd, Scott Hamilton, Karen Havholm, David Meyer, Jennifer Murray, Bev Nicholson, Gerry Oetelaar, Liz Robertson, and Garry Running.

Alberta Fieldwork News

Editor: Alwynne B. Beaudoin

In total, 505 archaeological permits were issued for archaeological work in Alberta in 2004. This is the greatest number of permits issued in any one year so far. Work under permit resulted in the discovery of 1,329 new sites, and 412 sites were revisited. The inventory of archaeological sites in Alberta now (March 2005) totals 31,839.

Lifeways of Canada Limited

Permit holders for Lifeways carried out numerous archaeological investigations in Alberta during the 2004 field season. The majority of these studies were Historical Resource Impact Assessments for resource companies (forestry, oil and gas, oil sands, and power generation) and residential and light industrial land developers. Mitigative excavations were completed prior to the following development projects: oil sands mine development and expansion, residential subdivision and light industrial land development, and oil and gas pipeline installation. Some of the activities of the 2004 field season are highlighted below.

Fort Hills, Fort McMurray Area (Permit 04-192)
Submitted by Brad Somer

This spring saw the continuation of the HRIA and mitigation studies for Syncrude's Aurora Mine North. A total of 28 previously unrecorded archaeological sites were located along the southern slopes of the Fort Hills, in the Fort Hills Uplands and in a portion of the lowlands east of the Athabasca River. In addition to this, eight sites in the area were subject to mitigation.

Fox Creek Area (Permit 04-313)
Submitted by Brad Somer

Late summer brought an HRIA for Alberta Newsprint Company's planned forestry developments. Many areas in the Alberta Newsprint Forestry Management Area, south of Fox Creek, as well as portions of the W-6 Quota, south of Edson, were examined. A total of 24 Precontact archaeological sites and two historic sites were located.

Muskeg River Valley, Fort McMurray Area
(Permit 04-235)
Submitted by Nancy Saxberg

In the 2004 season, mitigative excavations were conducted at selected sites recorded during the Muskeg Valley Limestone Quarry Project in 2003. This project is located in the oil sands region and the study area contains two outcrops of fine-grained Beaver River Sandstone and a series of large, contiguous early Precontact stone workshops and other smaller sites. The settlement pattern is evidence of a period of intensive resource use. Excavations were conducted at 24 sites, including a large quarry complex, the Bertha Ganter site (HhOv-305), and HhOv-323, which produced a lanceolate projectile point that tested positive for mammoth protein residue, and another quarry complex, HhOv-319, which is partially stratified, containing at least two occupations. A survey of the Hammerstone Project area to the south, also completed in 2004, revealed a more dispersed pattern of small occupations, concentrated along a high ridge running down the east side of the study area. Thirty-nine new sites were recorded.

Hinton/Edson Area
(Permits 04-213, 04-0344, and 04-381)
Submitted by Dan Meyer

In the foothills, apart from a brief stint in the Crowsnest Pass, **Dr. Dan Meyer** continued his primary HRIA work with forestry companies in the west-central part of the province. This year marked the first year of HRIA work in the Sundance Forestry Management Agreement area. Working in

conjunction with Sundance planners, Dr. Meyer and assistant **Jason Roe** surveyed in a number of different parts of the FMA, which covers an area bound roughly by the Pembina River in the north, the Blackstone and Brazeau Rivers in the south, the Coal Branch area to the west, and the Brazeau Reservoir to the east. During the HRIA, a total of 25 archaeological sites were recorded including five campsites, one workshop, nine artifact scatters, eight isolated finds, and two historic cabins. Ten of the sites were considered to be worthy of additional investigation, but were avoided by redesign of harvest areas. One of the highlights of this year's program was the recovery of a mid-shaft fragment of a Clovis point from a site in the uplands around the Brazeau River.

In the Weldwood Forestry Management Agreement area, Dr. Meyer continued the successful HRIA work of the past few years. In this area centered around Hinton, Meyer and Roe recorded a total of 117 archaeological sites, in addition to revisiting and/or re-recording eight others. Of the new sites, a total of 14 campsites, 13 workshops or quarries, 37 artifact scatters, 41 isolated finds, and 12 historic sites were observed. Thirty-nine of these sites were recommended for additional investigation, and all of them were avoided in forestry planning. With the strong support and participation of Weldwood, Dr. Meyer and the Lifeways staff have recorded over 350 previously unrecorded sites in the last four years through the direct application of their historical resources potential model to forestry developments in the Weldwood FMA, indicating the strength of the potential model and commitment of Weldwood to the protection of historical resources. The data sets created by the HRIA work have provided valuable settlement data, have led to the creation of new tool typologies, and are currently being manipulated for presentation and publication. These data will be augmented by excavation data from an important site in the region in the upcoming field season.

Rossdale Site, Edmonton
Submitted by Nancy Saxberg

Ongoing monitoring of construction and maintenance projects at the Rossdale site (FjPi-63) in the City of Edmonton did not yield any new information regarding the fur trade or Precontact occupations of the site.

Genesee Area (Permits 03-307 and 04-206)
Submitted by Brian Vivian

Over the course of the past year extensive field studies associated with the Luscar Genesee Coal Mine continued. Several field inventories have been conducted and another 55 Precontact sites have been found in a previously unexamined portion of the mine lease permit area. A radiocarbon date of 9910±10 (Beta -186173) was reported for a wood sample retrieved from a deep backhoe test in a peat bog, and research is now progressing on a full pollen analysis of a sediment core collected from this same location, with the intent of reworking the regional cultural/climatic model. A second radiocarbon date, of 9640±90 (Beta -201162) has been recovered from the same area.

Calgary Area Projects
Submitted by Brian Vivian

Over the last eighteen months a number of small surveys and various excavations in and around the City of Calgary were undertaken. Principal sites excavated included a regionally significant large multi-component campsite on Jumpingpound Creek and a historic ring site near Balzac where a complete iron projectile point was found in context with a hearth in the centre of one of the rings. Faunal analysis of a historic kill site excavated in the summer/fall of 2003 at a subdivision in Bearspaw north of Highway 1A was completed. Excavations at the Crestmont subdivision in N.W. Calgary revealed an assortment of stone, iron and copper projectile points, a glass trade bead, a brass button, iron file and an elk tooth pendant found in association with an extensively butchered bone bed. Analysis of

the bone under the supervision of **Amanda Dow** indicates that over 86 bison of a mixed cow/calf herd were killed and butchered sometime during the summer to early fall. The number and type of historic trade items found here suggests this kill event most likely dates to sometime between 1820 and 1840.

Wind Farm Project, Fort Macleod, Alberta (Permit 2004-196)
Submitted by Brian Reeves

A HRIA was undertaken for a proposed wind farm located in the MD of Willow Creek, south of the town of Fort Macleod. Field studies focused on unbroken lands that had not previously been the subject of archaeological studies. Five archaeological sites were recorded, four of which were Precontact sites and one historic site. Of the Precontact sites, two were regionally significant trail segments of the Old North Trail network with associated cairns and tipi rings, also recorded were an isolated tipi ring, and a buried campsite. Measures to avoid vehicular impacts to the Old North Trail and associated features have been recommended.

Waterton Southeast 3D Project (Permit 2004-195)
Submitted by Brian Reeves

A HRIA was undertaken for Shell Canada Limited's Waterton South 3D Seismic Program in June and July, 2004. Field studies focused on the location and recording of stone features and other archaeological sites. Thirteen recent archaeological sites of presumed post-contact/historic age were recorded and 54 Precontact and post-contact Native sites were recorded. The historic sites include: three ranch/homesteads, a 1930s oil well drill camp, five Alberta-British Columbia Boundary Commission survey cairns, three other cairn/stone structures and segments of the old Waterton Lakes National Park Boundary Patrol Trail. Recorded Native sites consist of isolated tipi rings, a complex of tipi ring and cairn sites associated with the Old North Trial, surface and buried artifact scatters, and the great majority of the sites are stone features (n=47). Many of the stone feature sites associate with the Old North Trail or vision questing (n=21).

The 2003 and 2004 Shell Waterton 3D archaeological programs have further contributed to the understanding of Precontact Native activities in the foothills and mountains in this district. Little evidence was found for occupancy and resource harvesting in the foothills and mountain valleys. Piikáni elders who were interviewed believed that during the summer for those bands who stayed in the foothills and mountains rather than following the buffalo eastward camped in the Waterton and St. Mary areas. Similarly during cold weather the winter camps were on the Oldman, Waterton, Belly and St. Mary river valleys at/or below the mountain fronts. Evidence was found however, that the foothills ridges as well as mountain ridges and peaks were important vision questing and ceremonial locales.

Birch Mountains Wildland Provincial Park
Submitted by Brian Ronaghan

In July 2005, **Brian Ronaghan** and **Jack Ives** of the Archaeological Survey, Alberta Community Development, participated in a multidisciplinary resource inventory undertaken by Alberta's Parks and Protected Areas Division within the newly created Birch Mountains Wildland Provincial Park. The Park encompasses 1,445 km^2 situated atop a major erosional uplands complex in northeastern Alberta and reflects the ecological diversity of the region, including the several large fish bearing lakes. Prior surveys (Donahue 1976; Ives 1980, 1981) and research excavations (Sims 1976; Ives 1977) had identified a relatively rich record of prehistoric occupation in the area, concentrating on Fish Lakes and their associated drainage systems.

Over a period of ten days, five previously recorded sites were revisited and tested and eight new sites were recorded. For logistical reasons a

focus on lake shores was maintained and our results in these situations enhanced regional site distribution information. In addition, a severe fire two years previously afforded unusually high surface visibility on a series of linear glacial flute features paralleling the shores one the major lakes (Namur). Numerous small artifact scatters identified on these features indicate opportunistic use of exposed, glacially transported source materials, well removed from the lake shores, and suggest exposure due to fire or other factors may have been more common in the past.

Bar U Ranch National Historic Site of Canada
Submitted by Rod Heitzmann
Parks Canada, Calgary

On-going restoration of historic buildings necessitated additional archaeology in 2004 at Bar U Ranch National Historic Site of Canada, near Longview, Alberta. Work focussed on two buildings: the Cookhouse and the Foreman's House.

Cookhouse

The Cookhouse was a central building of the ranch that served as a residence and dining room for the ranchhands and riders. The existing Cookhouse was built in 1910 after a fire destroyed two earlier buildings (Cookhouse and Bunkhouse) which served from 1882 to 1910. The original buildings were built of logs placed on local sandstone block foundations. The later Cookhouse (1910 to present) was built of dimension lumber. Some of the foundations of the earlier buildings were reused for the replacement. However, because it had an overall different shape and size, sections of concrete foundations were also added.

Because of the importance of the building it was almost immediately rebuilt following the disasterous fire of 1910. Much of burned debris was left where it fell with the new structure built over the old. As a result a large assemblage of artifacts was recovered. Many of these were fragile and are rarely found in archaeological sites. These include fragments of burned clothing, newspaper, a circus poster and book. From the fully carbonized pages it was possible to identify the book as *A Florida Enchantment* by Archibald Clavering Gunter and Fergus Redmond, The Home Publishing Company, New York (1892).

The location of artifacts was mapped in detail and their distribution indicates that the functional use of the early Cookhouse was duplicated in the current Cookhouse. For example, in the eastern portion of the early Cookhouse leisure items were recovered including a clay smoking pipe, tobacco seals and a playing card. The eastern half of the later Cookhouse was the lounge area were ranchhands played cards and spent some of their leisure time.

The current Cookhouse has now been repositioned atop replacement concrete foundations and the above ground portions of the Cookhouse will be restored and refurnished to present the story of cowboy life at the Bar U Ranch.

Foreman's House

Restoration requirements for the Foreman's House required an archaeological assessment of the impacts to archaeological resources. The Foreman's House was a small rectangular log cabin constructed in 1919 at the western end of the Bar U Ranch headquarters. In 1946 this cabin was moved to the eastern end of the headquarters to access better quality water.

The second location of the Foreman's House was not without its own history. About 1909 a large barn called the "Show Horse Barn" was constructed as part of George Lane's percheron horse breeding operations. This was large frame barn built on sandstone block foundations. However, its lifespan was brief as it burned down around 1927.

The primary archaeological objective at the Foreman's House was to locate and record portions of Show Horse Barn foundations located under and adjacent to the Foreman's House as these would be

adversely affected. This objective was achieved by locating portions of the sandstone foundations that were located along the south and east sides of the Foreman's House. Monitoring during the lifting of Foreman's House and during the subsequent removal of its concrete foundation enabled the identification of a portion of the sandstone foundation that also extended under the structure.

Most of the recovered artifacts resulted from the structure of the barn and had survived the effects of the fire. Most were metal, such as nails and hinges. Other evidence of the fire consisted of sections of charred and burned structure. Some of the artifacts also derive from the post 1946 occupation of the Foreman's House.

The Foreman's House has now undergone structural restoration and has been replaced on new concrete footings. The interior of the Foreman's House will be refurnished to tell the story of the foremen and their families who lived at the ranch.

Fieldwork in the Bodo Locality in 2004
Submitted by Terry Gibson

Terry Gibson and **Elizabeth Mann** conducted fieldwork in the Bodo Archaeological Locality from the end of May to the end of August in 2004. This work was supported by the University of Alberta, the Bodo Archaeological Society and Alberta Western Heritage. An introductory field school program began on May 24 and ran for six weeks, being completed on July 2. Fifteen undergraduate students took part in the course, which emphasized terrain survey and inspection, subsurface test assessment and detailed excavation and recording techniques. A laboratory training component was also included as part of the course, conducted in the extensive laboratory and teaching facilities available at the recently renovated Bodo Community School complex.

The survey and test assessment components were focussed on finding the eastern boundary of FaOm-22. A number of new localities were defined, and subsurface assessment revealed more evidence of the prolific late precontact components found throughout the Bodo Locality, and of one or more deeper, older components. One biface fragment from a lower palaeosol may represent a Pelican Lake projectile point. If so, this would be the first evidence of an occupational bridge between the Middle precontact period (represented by excavated Oxbow and surface recovered Duncan and McKean diagnostic materials) and the late precontact period in the Bodo Locality.

Detailed excavation was undertaken once again in Locality 70, first inspected in 2002. This time, a large block excavation was centered in an area where previous excavation revealed a densely occupied living floor covered in smashed bone, and varieties of stone tools, debitage and pottery fragments. It was suspected that this may have been a remnant residence of some type at the time expanded excavation was initiated. However, after 12 square metres were excavated (some to 75 cm depth) and the main occupation level fully exposed, it became apparent that the area was more characteristic of a disposal location.

There appears little doubt that a residential area is located nearby, but no evidence of it was found in 2004. In fact, Locality 70 is quite large (a flat area located between elevated dunes measuring roughly 100 x 100 m) and test assessment from 2002 suggests there are many different activities taking place there. Consequently, in 2004 an experimental application of ground penetrating radar was used to try and identify concentrations of bone and other cultural remains. **George Mason** of Maverick Inspection Ltd. spent several days calibrating and testing new high resolution mapping equipment, with the intent of adapting Maverick's methods (usually focused on detection of anomalies in concrete and asphalt) to the detection of near-surface cultural remains buried in sand. Approximately 400 square metres of ground were assessed in some detail, anomalies flagged, and some of these were subsequently excavated as one metre units by students. Initial results were ambiguous; clearly the radar

technique will require more calibration and research in the Bodo Locality before it can be used to identify buried cultural remains with reliability. Magnetic prospection to search for hearths and pits may prove more successful and this kind of assessment approach is being considered for the coming field season.

In July and August an Advanced Field Techniques Training Course was offered by the Bodo Archaeological Society and taught by Terry Gibson. Six students participated, leaning GPS and GIS mapping techniques and their application to test assessment and terrain mapping on archaeological sites. Most of their work took place on one quarter of land in the south portion of the Bodo Archaeological Locality, dominated by stabilized sand dunes and dense aspen growth on the north, and open level grass-covered pasture on the south. The varied terrain conditions furnished a broad range of terrain mapping challenges, and subsequent shovel assessment in the hitherto unknown archaeological potential of the area proved very interesting for the students.

Several new local archaeological localities were identified through subsurface testing, and the apparent southern boundary of the Bodo Sites Locality was defined in that quarter. Also, detailed testing was undertaken in Locality 71, where a contemporary water hole surrounded by sand dunes is located. Stratigraphic analysis suggests that this perennial water source, and others like it located nearby, may have been one of the primary reasons that the Bodo Locality was inhabited so intensively in the late precontact period. It is possible that the water sources may have been purposefully exploited to lure small bison herds in proximity to the dunes, where they were ambushed and killed.

Three University of Alberta graduate students conducted work at Bodo in 2005. **Michelle Borowitz** completed collection of informant data related to her Masters Thesis research that addresses local attitudes to climate change in the Bodo district. **Krista Guilliland** began collecting stratigraphic data for her Masters Thesis, which focuses on use of geoarchaeological analysis to interpret land use patterns in the Bodo Sites Locality. **Tim Panas** collected auger data as part of his Ph.D. research program. His work concerns the study of precontact human use of sand dunes and arid environments on the northern Plains.

More fieldwork is planned for 2005, including a undergraduate field school beginning May 30 and running until July 8th. It is anticipated that active archaeological research will be conducted in the Bodo Locality throughout the summer, until the end of August. Visitors are welcome to come to Bodo and view the excavations and tour the laboratory facilities during weekdays starting in mid June.

References Cited

Donahue, P. 1976 *Archaeological Research in Northern Alberta 1975*. Archaeological Survey of Alberta, Occasional Paper 2, Alberta Culture, Edmonton

Ives, J.W. 1977 *A Spatial Analysis of Artifact Distributions on a Boreal Forest Archaeological Site*. Unpublished M.A. thesis, Department of Anthropology, University of Alberta.

Ives, J.W. 1980 Birch Mountain Archaeological Study, 1980, Permit 80-80. *Archaeology in Alberta 1980*, Archaeological Survey of Alberta, Occasional Paper 17, Alberta Culture, Edmonton.

Ives, J.W. 1981 Birch Mountain Archaeological Study, Permit 81_64. *Archaeology in Alberta 1981*, Archaeological Survey of Alberta, Occasional Paper 19, Alberta Culture, Edmonton. pp. 61-70

Sims C. 1976 *An Outline of Archaeological Excavations at the Gardiner Lake Narrows Site*. Report submitted to the Boreal Institute for Northern Studies, University of Alberta, Edmonton.

Compiled by Alwynne B. Beaudoin, with contributions from Joan Damkjar, Terry Gibson, Rod Heitzmann, Brian Reeves with Carmen Olsen and other staff at Lifeways of Canada, Martina Purdon, and Brian Ronaghan.

Northwest Territories Fieldwork News

Editor: Tom Andrews

The Prince of Wales Northern Heritage Centre (PWNHC), a Division of the Department of Education, Culture and Employment, Government of the Northwest Territories, is responsible for managing and protecting the archaeological resources of the NWT. Representing a continuous human occupation stretching back over 7000 years, archaeological sites are fragile and non-renewable and are protected from disturbance by legislation, regulation, and policy in the NWT. There are currently about 5300 archaeological sites recorded in the NWT, though this number represents only a small fraction of the actual number of existing sites, as large areas remained unexplored for archaeological resources. A large part of our work at the PWNHC involves reviewing land use and development permit applications. We currently review, on average, 300 permits per year, providing advice to 11 land management authorities.

Twenty-two archaeological research permits were issued to nine archaeologists for work in the NWT in 2004. Five of these permits (2004-944, 2004-946, 2004-957, 2004-959, 2004-960) were cancelled at the request of the permit holder and no work was conducted under their authority. Of the 17 permits remaining, 14 were for projects related to resource development impact assessment. Oil and gas development in the Mackenzie Delta, along the proposed Mackenzie Valley pipeline route, and in the Sahtu region, along with ongoing diamond exploration in the region north and east of Yellowknife continue to be dominant factors in driving archaeological research in the NWT.

Annual NWT fieldwork summaries are available on the PWNHC website at: http://pwnhc.ca/research/archreports/index.htm.

MacKenzie Delta Heritage Survey
Don Hanna
(NWT Archaeologists Permit 2004-945)

In June of 2004, Bison Historical Services Ltd. and Axys Environmental Consulting Ltd. carried out a survey of heritage sites on northern Richards Island in the Mackenzie Delta on behalf of EnCana Corporation. Known sites were re-visited to ensure that they had not been damaged by last winter's Burnt Lake drilling program. We also examined five potential well sites and related access routes to ensure that upcoming winter projects would avoid all known and newly identified heritage sites.

Fieldwork was based out of Tuktoyaktuk and carried out by helicopter and on foot. We did not excavate any materials at any sites and no artifacts or other cultural materials were collected.

Three known heritage sites were re-visited to evaluate the success of avoidance during the 2003-2004 EnCana Burnt Lake N-16 exploratory drilling program. None of these sites had been damaged by last winter's Burnt Lake N-16 drilling activities. A new well site and access roads in the Burnt Lake area were also examined. Three unrecorded sites were identified near possible access routes. None of these sites will be impacted by the construction or use of the planned access routes. No known heritage sites will be damaged by the proposed Burnt Lake N-05 drilling activities.

A potential drilling program in the Corral Bay area was also examined. These investigations consisted of preliminary scouting of four possible well site locations and access north of Corral Bay.

Encana's Burnt Lake N-16 well site

Each well site, sump location and access route was examined in detail from the air and on the ground.

Five unrecorded ancient heritage sites and two relatively recent traditional land-use localities were identified during these investigations. Where necessary, program elements were changed to ensure that no heritage sites would be impacted. Subsequent to these field examinations, EnCana has determined not to proceed with the Corral Bay drilling program. Consequently, no sites in the Corral Bay area will be impacted by proposed EnCana Corporation activities.

Summit Creek Heritage Survey
Don Hanna
(NWT Archaeologists Permit 2004-947)

On July 12th and 13th of 2004, Bison Historical Services Ltd. carried out a brief archaeological survey of heritage sites in the vicinity of Summit Creek, some 60 kilometres south of Tulita, NWT. These investigations were carried out at the request of Northern EnviroSearch Ltd. on behalf of Northrock Resources Ltd. Fieldwork was based out of Tulita and carried out by helicopter over-flight and on foot. Investigations were carried out by Don Hanna of Bison Historical Services Ltd. and accompanied by Wilfred Lennie of Tulita, who acted as guide, advisor and wildlife monitor.

In 2003 Northrock drilled an oil well at B-44 near Summit Creek on the southwest flanks of the Flint Stone Range. This well was served by an access road extending 74 kilometres east to the Mackenzie River ice road. Our job in 2003 was to identify any heritage sites that might be threatened by Northrock's construction program, and help Northrock develop ways to avoid all sites. In 2004 our role was to document successful avoidance of sites identified in 2003 and to examine new development areas that might contain heritage sites. Three known sites near Stewart Lake and within 100 metres of the Northrock access road were revisited. No impacts to any known heritage sites as a result of the Northrock 2003-2004 Summit Creek B-44 exploratory drilling program were identified.

Northrock also proposes to drill a new oil well at one of four possible locations near Summit Creek during the winter of 2004-2005. Each of the possible well sites will require a short length of new access road connecting to the access road used last year. Each well site and access route was examined from the air and on foot and exploratory shovel tests were excavated at each proposed well site and at the planned camp location. No heritage sites were identified at any of these new locations. The proposed

Heritage Sites at Stewart Lake

2004-2005 Northrock Resources Ltd. drilling program in the Summit Creek area will impact no known heritage sites.

The McKinley Bay Archaeology Project
Matthew Betts ***(cover photo)***
(NWT Archaeologists Permit 2004-948)

Ethnohistoric records suggest that a group of bowhead whalers, the Nuvorugmiut, inhabited the northern Tuktoyaktuk Peninsula during the early contact period. Unfortunately, our knowledge of this adaptation has been limited by both a sparse ethnohistoric record, and by severe coastal erosion, which has destroyed virtually all evidence of this socioeconomy. However, one site on the outer Tuktoyaktuk Peninsula, McKinley Bay (OaTi-1), discovered in 1985 by C. Arnold, has survived the erosion. Positioned directly adjacent to the former location of Nuvurak, one of the few bowhead whaling villages described during the contact period, the site presents a rare opportunity to understand coastal Nuvorugmiut lifeways.

The McKinley Bay Archaeology Project seeks to produce a socioeconomic reconstruction of these poorly understood bowhead whalers, and more broadly, to understand the relationship between economy and social systems in the Western Canadian Arctic. Brief test excavations were conducted at McKinley Bay in 1991, providing a reference point for continued work at the site. Between July 17th and August 7th, 2004, a crew of four returned to McKinley Bay to reassess the scope and integrity of the archaeological deposits, obtain a representative archaeological sample, and gauge the possibility of conducting larger scale excavations at the site in the future.

McKinley Bay is a prehistoric village site, composed of at least 13 semi-subterranean sod and driftwood structures that are roughly arranged along two rows. The northerly row contains six houses, which were generally larger and more robust than other houses at the site. The southerly row contains seven much smaller features, which were partially obscured by sand dunes that have developed in this area of the site. It is possible more features are present in this southerly row, which have been buried by the advancing sand. A comparison of the 2004 site plans and photos with those produced by Arnold in 1991 quite clearly indicates that substantial erosion has compromised parts of the site over the last 13 years. The extensive sand dunes, which once buffered the western portion of the site against the Beaufort Sea, are now almost completely eroded, and this destruction has begun to impact archaeological deposits, particularly the middens to the southwest of the site.

Consistent with this erosion, artifacts and bowhead whale bone were strewn in regular quantities on the beaches to the south and west of the site. The amount of worked whale bone recovered from the beaches, at some distance from the house clusters, suggests that whales were flensed and processed on the beaches. Enduring evidence for intensive processing of whales may be indicated by a greasy, oil soaked palaeosol, which leaches into a small, and thoroughly polluted, tundra pond to the southeast of the site, near the tundra/beach margin.

Subsurface investigations focused on a large semi-subterranean house structure, labelled Feature 2. Approximately 10 square metres of deposits were removed from the feature, in two transects. Although limited, the excavations reveal that Feature 2 was cruciform, with a carefully constructed floor of undressed driftwood logs laid side-by-side, and three low (ca. 20 cm in height) raised platforms, constructed from adzed planks and large logs. Over most of the floor, a thick (ca. 10cm), compacted layer of wood chips and shavings was discovered. This layer was likely part of the active floor, because abundant animal bones and artifacts, the result of domestic activities, were found throughout it.

Artifact styles suggest that the house was occupied sometime in the period circa 1400 AD to 1850 AD. The material culture recovered from the site is typical of the region, although it may include a number of specific attributes that are unique to the

northern Tuktoyaktuk Peninsula. While the faunal analysis is still ongoing, some preliminary observations are possible. Surprisingly, the most abundant taxon in the assemblage was likely bowhead whale, represented by hundreds of small fragmented pieces of ribs and vertebra, and occasional phalanges. Other taxa, including ringed seal, duck, geese, and fish, occurred in more-or-less equal frequencies throughout the assemblage. Interestingly, much of the whalebone recovered appears to have been debris from the manufacture of tools and other artifacts, a situation congruent with the number of finished whalebone implements recovered.

Archaeological Activities at the Ekati Diamond Mine
Jean Bussey
(NWT Archaeologists Permit 2004-949)

Jean Bussey of Points West Heritage Consulting Ltd. has conducted archaeological investigations for BHP Billiton Diamonds Inc. (BHPB) in its claim block north of Lac de Gras since 1994. Each year, she has undertaken to provide archaeological potential assessments, complete archaeological inventories, assess or mitigate sites and conduct tours of archaeological resources for interested groups. Primarily as a result of her work, there are now 198 recorded archaeological sites associated with the EKATI Diamond Mine. Sites located near development areas have been tested and mitigated through systematic data recovery consisting of subsurface examination and/or surface collection. Sites well removed from such activity areas have been recorded and are periodically revisited, but are otherwise avoided.

The majority of the recorded sites in the BHPB claim block are associated with eskers, but sites are also found on other terrain types, usually near the larger lakes. There are still many portions of the claim block that have not been inventoried because no development or exploration activity has been identified in the vicinity. An intensive inventory was conducted at the narrows between Lac de Gras and Lac du Sauvage in response to concerns identified by the Yellowknives Dene First Nation although no BHPB activity is currently proposed in this area. During this inventory, 17 new archaeological sites were recorded and there is potential for additional sites in the area. These sites are likely

Mike Francis and Peter Sangris at LdNs-30 on the Lac de Gras—Lac du Sauvage narrows.

associated with caribou hunting since the narrows represents an important caribou crossing, but judging by its significance today, fishing may have also been an important prehistoric subsistence activity.
A number of the sites in the BHPB claim block have yielded small chert tools suggestive of the Arctic Small Tool tradition, which likely dates 2500-3500 years before present in this area, but the majority of the archaeological sites in the claim block probably relate to the last 2500 years.

The majority of the sites near EKATI are best described as lithic scatters, sites that are characterized by unworked flakes of stone with an occasional tool. The most common lithic or stone material is quartz, which is usually white, but may also be clear, grey or slightly pink in colour. Quartz is found naturally as veins in the bedrock of the Lac de Gras area. In fact, EKATI was named for these fat-like veins. Quartz cobbles are also found naturally in the numerous eskers that cut through the claim block. It is suggested that both sources of quartz were utilized prehistorically to obtain the raw material for stone tool manufacture. Although most sites are associated with the prehistoric period, a number of traditional use sites have also been recorded in the BHPB claim block.

In 2004, no new development areas were identified and no land-based exploration was proposed or undertaken, thus, there was no need to conduct archaeological fieldwork. However, as part of their ongoing commitment to share information on the archaeological work conducted at EKATI, BHPB requested that Jean Bussey conduct tours. Unfortunately, only two groups were able to send representatives on the tours that were offered in late August and early September. Representing the Lutselk'e First Nation was **Ernest Boucher**. Representing the Yellowknives Dene First Nation were **Mike Francis** and **Peter Sangris**. During each of the two tours, five or six sites were visited on the ground and many more were pointed out from the air while conducting helicopter over flights. The sites were viewed over two days; with the eastern portion of the study area examined the first day and the western on the second. Sites throughout the study area were examined, not just those near existing pits or activity areas. Development areas were also viewed from the air and an explanation of the type of archaeological work conducted at such locations was provided.

Archaeological Investigations Along the Tibbitt To Contwoyto Winter Road
Jean Bussey
(NWT Archaeologists Permit 2004-950)

In 2004, **Jean Bussey** of Points West Heritage Consulting Ltd. conducted archaeological investigations for the Joint Venture that operates the Tibbitt to Contwoyto (formerly the Lupin) winter road. The winter road runs from the south end of Tibbitt Lake near Yellowknife to almost the north end of Contwoyto Lake in Nunavut. Field investigations in the Northwest Territories portion of the winter road involved a multi-disciplinary inspection tour conducted in June and the assessment of a possible gravel pit in August. This is the fourth consecutive year that the Joint Venture has sponsored investigations as part of their commitment to ensure that future archaeological impacts are avoided or minimized.

View northwest of markers installed at LcNs-140

In 2001, an archaeological inventory was conducted and resulted in the discovery of 55 new archaeological sites and the revisit of 14 previously recorded sites. All, but six of these sites are situated in the NWT. Because the inventory was conducted nearly 20 years after construction of the road, there are some archaeological sites within 30 m of developed areas. In 2002, all sites within 30 m of the winter road or related facilities were revisited and if threatened were subjected to site assessment and/or mitigation or were protected through the erection of markers. The four sites in the NWT at which markers were erected in 2002 are KiPb-2, KjPa-1, KkNv-9 and LcNs-140. During the 2003 investigations, all sites located near areas with current winter road activity were revisited to assess their status and markers were installed at an additional site along the winter road - LcNs-133.

The major objective of the 2004 field reconnaissance was to determine if markers had adequately protected sites. The markers erected at four of these sites consist of standard four-foot (1.2 m) wooden survey stakes that were pounded approximately 30 cm (1 foot) into the ground. At KiPb-2 the stakes are at some distance from the actual site and are present only on the esker crest since they would be lost in snow cover on lower ground. At KkNv-9 and LcNs-140, it was necessary to install markers immediately adjacent to the east side of each site because of the proximity of the winter road portages. For the same reason, it was necessary to install stakes immediately adjacent to the west side of LcNs-133. At the fifth site, KjPa-1, because of the proximity of a winter road camp (Lockhart Lake Camp), Nuna Logistics arranged to install taller and more permanent metal markers with reflectors.

In 2004, the stakes were intact at KiPb-2 and KjPa-1 and six needed replacement at KkNv-9. Six stakes were also damaged at LcNs-140, likely as a result of snow removal activity, and were replaced. Additional stakes were installed between the original ones at LcNs-140 as added protection. No disturbance was noted within the protected areas associated with these four sites, but tire tracks were evident on the surface of LcNs-133. Two stakes at this site were broken and were replaced. Additional markers were added between the original ones to prevent vehicle traffic from using the site area. All wooden stakes were sprayed with fluorescent orange paint to make them more visible.

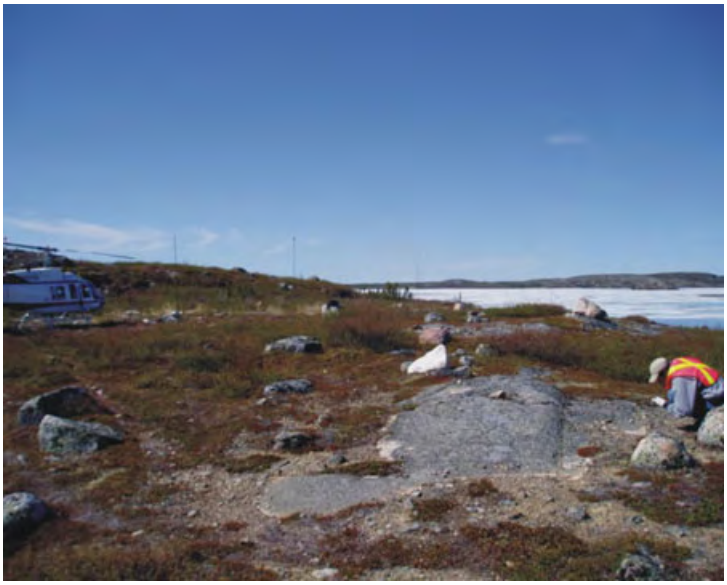
Some of the wooden markers are showing signs of wear although they could last another year or two. It is recommended that the status of the markers and their ability to provide site protection be reviewed annually. During this recheck it is recommended that any weakened markers be replaced, loose stakes be re-installed and the tops of all wooden markers be sprayed with orange paint. No new tools were noted at the sites visited, but additional unworked flakes are evident on the surface of both LcNs-140 and LcNs-133. No artifacts were collected since the 2004 field investigations were conducted under a Class 1 NWT Archaeologists Permit.

During the June inspection tour, limited archaeological survey was conducted at two abandoned repeater station locations formerly associated with the winter road. The more southerly location did not contain any archaeological material. The location on Mackay Lake yielded one new prehistoric archaeological site, a lithic scatter consisting of scattered and concentrated unworked flakes along with at least two tools; all artifacts were left *in situ* (in place). The identification of a potential gravel pit on Burnt Island in Gordon Lake prompted an archaeological assessment, which was conducted in August 2004. In the process both recent and potentially historic mining remains were located.

The De Beers Canada Mining Inc. Snap Lake Project
Jean Bussey
(NWT Archaeologists Permit 2004-951)

Jean Bussey of Points West Heritage Consulting Ltd. conducted archaeological investigations for De Beers Canada Mining Inc. at Snap Lake in 2004. She previously conducted investigations on

this property in 1998, 1999, 2001 and 2003. In 2004, the investigations involved the examination or monitoring of previously recorded sites and limited new inventory. Also working on this project were **Bonnie Campbell** of Points West and **Darren Rabesca** of the Dogrib Dene First Nation.



View southwest of KkNv-6 showing markers installed for site protection.

Past archaeological reconnaissance associated with the Snap Lake Project has resulted in the discovery of 53 archaeological sites, most of which are sufficiently distant from proposed development that no further investigation is required. Two sites judged to be threatened by development activity were previously mitigated. One of these sites, KkNv-6, is adjacent to the Snap Lake winter access road and was revisited in 2003 in company with representatives of the North Slave Metis Alliance (NSMA). At the recommendation of the NSMA, De Beers arranged for the installation of protective markers on the portage where KkNv-6 is located (Photo 1). The positioning of these markers was examined in 2004 to ensure that the site was accurately identified.

During the 2004 investigations, the entire length of the Snap Lake winter access road was flown to ensure no recorded archaeological sites had been disturbed. During this over flight, a number of recorded sites were visited on the ground. Three of the five sites recorded near Portage 1 were revisited, as were all three sites located near Portage 2. At Portage 2, a few unworked flakes exposed since KkNv-6 was mitigated in 2001 were noted on surface, but were left *in situ* since the markers have provided added site protection. Also in this area, KkNv-8 was examined because of concerns that thin ice might require a revised portage in future. It was determined that KkNv-8 is on slightly elevated terrain (Photo 2) that would be easily avoidable and does not provide a suitable crossing for a winter road. A number of sites associated with Portages 3 and 4 were revisited. All sites examined are intact and are sufficiently distant from or far enough above the access road that they are not threatened by its use. The sites near Portages 5 and 6 were not revisited, but were viewed from the air and have not been affected by use of the winter road.

Also as part of the 2004 investigations, archaeological inventory was conducted at three locations. One survey involved a new portage located between the originally assessed Portages 2 and 3 on the Snap Lake access road. This area was examined from the air and ground and is primarily suggestive of low archaeological potential. Foot traverses were undertaken on two slightly elevated bedrock-based landforms, one within the portage and one to the west. No archaeological resources were encountered. The second inventory area involved a bypass to Portage 6 utilized during the winter of 2002-2003 when thin ice precluded the use of the original portage. No archaeological evidence was located in the vicinity of this bypass. The third area of inventory involved the most northwesterly portion of the Snap Lake mine footprint. The shoreline in this area was walked for several kilometers and no archaeological sites were encountered. The entire mine footprint has now been adequately assessed and provided KkNv-6 is avoided and the portages are not revised, no further archaeological investigation is required along the Snap Lake winter access road.

Archaeological Investigations for the Gahcho Kue Project
Jean Bussey
(NWT Archaeologists Permit 2004-952)

Points West Heritage Consulting Ltd. conducted archaeological investigations for De Beers Canada Mining Inc. at their Gahcho Kue Project in 2004. The project is located at Kennady Lake, which is approximately 300 km east/northeast of Yellowknife and west of Walmsley Lake. **Jean Bussey** directed the field investigations and was assisted by **Gabriella Prager**, also of Points West, and **Henry Basil** and **Aaron Catholique** of the Lutselk'e First Nation. The archaeological work was conducted under a Class 2 NWT Archaeologists Permit and was primarily concerned with the relocation and/or assessment of previously recorded archaeological sites associated with the proposed diamond mine and its ancillary facilities.

Henry Basil identifying site boundaries while Gariella Prager records the information.

Twenty-six previously recorded sites located within one km of the proposed Gahcho Kue mine were relocated and assessed. Subsurface testing was conducted at fifteen of these sites and they, in conjunction with an isolated find that was previously collected, were judged to be suggestive of low archaeological significance. This testing along with the preparation of updated site maps and surface collection, where relevant, is judged to be sufficient mitigation in the event these sites are threatened by the proposed mine development. At the remaining ten sites, detailed surface examination was judged to be sufficient to suggest that three sites have high archaeological significance and the other seven have low-moderate to moderate significance. Systematic data recovery consisting of subsurface excavation and surface collection is recommended at each of the three highly significant sites if avoidance is not feasible. Testing of the seven sites with low-moderate to moderate significance is recommended and it is likely that subsurface excavation and/or systematic surface collection will also be necessary at some of these sites if they can not be avoided. Additional archaeological inventory was conducted in areas that had not been previously examined or where revised development plans were identified in the area of Kennady Lake. No new archaeological sites were discovered.

Recorded archaeological sites located along the winter road route to Mackay Lake were also revisited. Emphasis was placed on visiting sites nearest to the land-based portages although aerial reconnaissance was conducted to ensure other sites were sufficiently above or distant from the route. A total

of 20 sites were revisited. The majority of the 20 sites, and all sites that were not revisited, are situated over 30 m from the winter road route or are on elevated landforms that would not likely be crossed even if there was a route revision. Several sites, however, are located on low landforms near the existing route and require periodic monitoring to ensure they are not impacted, while a few sites are very near abandoned sections of the winter road route. One recorded site will require testing to determine if more intensive data recovery is justified and one new site was discovered, but is avoidable.

Representatives of the Lutsselk'e First Nation arriving for a tour of the property.

Ten previously recorded sites were relocated along the esker complex south of Kennady Lake. Two sections of this esker were traversed on foot to assist in the selection of areas where aggregate or other samples could be collected without disturbing archaeological sites. No new archaeological sites were discovered.

Archaeological Activities at the Courageous Lake Property
Jean Bussey
(NWT Archaeologists permit 2004-953)

In 2003, exploration activity prompted archaeological investigations in the vicinity of Courageous Lake on behalf of Seabridge Gold Inc. In 2004, archaeological activities formed one component of a number of tours conducted on the property and a number of drill locations were assessed. Work in both years was directed by **Jean Bussey** of Points West Heritage Consulting Ltd. and was conducted through EBA Engineering Consultants Ltd.

To provide background, in 2003 a total of 14 new sites were recorded. Two graves, the location of a possible tent camp likely used during an early phase of mineral exploration and a log cabin were recorded north of Courageous Lake. Between Matthews and Courageous lakes six archaeological sites were found. Four are associated with esker deposits, one is on a bedrock ridge and the sixth site is on an old lake terrace/beach. All six sites contain varying quantities of quartz flakes, most of them unworked. Two archaeological sites were recorded east of Matthews Lake. One is a windbreak likely relating to early mineral exploration and the other is an isolated find consisting of a white chert artifact suggestive of the Arctic Small Tool tradition (approximately 2500 to 3500 years before present). Both sites are located in an area typified by scattered bedrock outcrops. To the south of Matthews Lake three prehistoric sites were found on elevated bedrock outcrops. One is an

isolated find consisting of a stone tool fragment and the other two are lithic workshops and/or dense lithic scatters.

The investigations conducted in 2003 suggest that portions of the Courageous Lake Property contain landforms with archaeological potential. Only a small portion of this area was examined in detail and it was recommended that further work be conducted in advance of development and/or exploration. Seabridge conducted exploration drilling in 2004 and a post-activity archaeological examination was completed. The drilling activity occurred in areas with low archaeological potential or in locations that had been examined previously with negative results for archaeological sites although one drill hole was just over 30 m from a site. These 2004 investigations confirm that further work should be conducted in advance of any new exploration or development activity.

While **Jean Bussey** was present at the Courageous Lake property in 2004, representatives of the Lutselk'e First Nation, Yellowknives Dene First Nation and Dogrib Treaty 11 Council visited one or more archaeological site. Representing the Lutselk'e First Nation were **Maryrose Enzoe**, **Windi Skye (Sai) Catholique**, **Jordan Michel**, **Gary Michel** and **Monica Krieger**. Representing the Yellowknives were **Noel Doctor**, **Peter Sangris**, **Michel Paper**, **Frank Paper**, **Leo Betsina**, **Alfred Balligeon** and **Louis Azzolini**. Representing the Dogrib were **Eddie Erasmus**, **James Rabesca**, **Georgina Chocolate**, **Joe Migwi** and **Joline Huskey**. Since the major emphasis of the tours was the exploration activity, limited archaeological discussion occurred and only one or two sites were visited with each group. However, **Joe Migwi** provided useful information on the cabin and burials found to the north of Courageous Lake in 2003.

Archaeological Investigations for Chevron Canada Resources on Ellice, Garry and Niglintgak Islands
Wendy J. Unfreed
(NWT Archaeologists Permit 2004-954)

On behalf of Kavik-AXYS Inc., as agents for Chevron Canada Resources, **Wendy Unfreed** of FMA Heritage Resources Consultants Inc. conducted two archaeological investigations that were grouped together under Northwest Territories Class 2 Archaeologists Permit #2004-954. These investi-

General view east of campsite at NiTw-3, on the south side of Garry Island.

gations included an archaeological impact assessment of two proposed well locations related to the proposed 2004-2006 Ellice Taktuk Drilling Program and an archaeological field overview of an area that will be explored during the Garry 3D Seismic Program. The project areas, which are located in the outer Mackenzie Delta, are focused in the vicinities of Ellice, Garry and Niglintgak Islands, approximately 120 kilometres north of Inuvik, NWT.

The proposed 2004-2006 Ellice Taktuk Drilling Program is located on Ellice Island, on the western portion of the outer Mackenzie Delta. Situated within Crown Land in the Inuvialuit Settlement Region (ISR), the program involves the drilling of an exploratory natural gas wells (the West Ellice well), as well as the expansion and testing of an existing well that was drilled in 2003-2004 (well I-48). Drilling at the three locations is scheduled to commence during winter 2004-2005, although some of this work may be carried through to completion during the winter of 2005-2006.

The I-48 and West Ellice well locations were subject to surface examination and subsurface (shovel) testing in an attempt to ascertain whether they were in conflict with any archaeological deposits. Based on the investigation of the two well sites, it was noted that both are situated in low-lying areas of Ellice Island and a small adjacent island to the northwest, all of which are subject to seasonal flooding. This information, combined with that provided by an Inuvialuit Elder who accompanied the field crew, led to the interpretation that the two well site areas possess low potential for the identification of archaeological sites. Surface examination and shovel testing did not result in the identification of any archaeological deposits. One site of traditional concern, however, was identified adjacent to the West Ellice well site. This was found in the form of a burial (site NhTx-1), observed on the crest of a pingo approximately 300 metres southeast of the proposed West Ellice sump location. Due to the sensitive nature of this site, it was recommended that three steps be taken to preserve the location: (1) that development respect a 100 metre buffer around the site as a 'no impact' zone; (2) that unnecessary visitors within this zone be discouraged from visiting the site, to avoid hastened erosion or vandalism; and (3) that local community Elders be consulted to gain insight about the location and determine a culturally relevant mode of treatment for the site.

The Garry 3D Seismic Program is located on land surrounding the mouth of the Middle Channel of the Mackenzie River. It covers an area of approximately 144 km^2, and includes portions of Garry and Niglintgak Islands, as well as part of a third unnamed island on the outer Delta and adjacent sections of the mainland channel. Situated within ISR lands, the program will extend into areas protected by the Canadian Wildlife Service as the Kendall Island Bird Sanctuary.

The investigation of the Garry 3D Seismic areas involved an intensive surface examination of a sample of areas within the proposed seismic exploration area, as well as adjacent areas on the Middle Channel of the Mackenzie River that will be used as campsite and staging locations. Based on the results of the investigation, two archaeological sites and one traditional site were identified. The archaeological sites were comprised of two isolated artifact finds, while the traditional site was interpreted as a fishing camp. The traditional site (site NiTw 3) and one isolated artifact find (site NiTw 2) were identified on the southern sand spit of Garry Island, while the remaining artifact find (site NiTw 4) was noted on a mid-slope area of the highest landform of Niglintgak Island. The remainder of the study area, outside Garry Island and the central portion of Niglintgak Island, were found to be low areas of mud flats and sandbars subject to seasonal flood as part of the active Mackenzie Delta. Based on these observations, combined with insights provided by an Inuvialuit Elder who accompanied the field crew, an interpretation was made that the areas of highest potential for the identification of older archaeological and traditional sites would be in the higher ice-thrust landform areas of Garry Island and central Niglintgak Island. The areas of the active delta and

associated sand spits, although obviously important for modern site location such as NiTw-3, were considered to be of lower potential for the identification of archaeological materials. This is considered to be the result of a combination of factors, including the removal of evidence through water flooding or the burying of evidence through alluvial silting.

Based on the results of the field overview assessment conducted for the Garry 3D Seismic program, it was recommended that the areas of the three identified sites (two archaeological sites, one traditional site) be protected by identifying a large 'impact-free' buffer zone around them. With this buffer, the integrity of each of these locations can be preserved both from primary and secondary impacts. For the remainder of the area, no archaeological or traditional sites were identified in conflict with the objectives of the Garry 3D Seismic Program. As additional development occurs in the region, however, more detailed models of archaeological site probability should be developed and tested with field reconnaissance. Creation of these models will be greatly facilitated through consultation with local community Elders.

Archaeological Surveys Around Great Slave Lake
Callum Thomson
(NWT Archaeologists Permit 2004-955)

The Great Slave Lake investigations comprised four parts. In early July, **Callum Thomson** and **Mike Beauregard**, Project Geologist for Snowfield Development Corp., conducted boat-assisted surveys on the coastline and several kilometres into the interior between Drybones Bay and Matonabbee Bay. **Alfred Baillargeon**, **Modeste Sangris**, **Morris Martin** and **Paul Mackenzie** from the Yellowknives Dene First Nation (YKDFN) joined them for the last two days. The objective was to locate sites that may be affected during Snowfield's mineral exploration activities, expand the site inventory developed during a preliminary survey in the area by the YKDFN, **Randy Freeman**, and Callum Thomson in 2003 (NWT Permit 2003-927), and assess the need for any mitigation measures to protect sites during exploration.

Forty new precontact and early historic sites and three recent sites were found during our five days of survey on more than 30 km of access trails, cut lines, exploration grids and lake shoreline. Sites were found primarily on exposed bedrock outcrops close to lakes and ponds. Some contained worked quartz veins and stone tools, indicating precontact occupation of the area. No sites had been affected by previous exploration activities and, in general, there seemed to be little potential for conflict between planned exploration activities and heritage resources in this area. In August, a follow-up survey was conducted by helicopter of several additional claim blocks east of Drybones Bay. **Rachel Crapeau** of the YKDFN Land and Environment Committee accompanied Mike Beauregard and Callum Thomson. No sites were found. Although archaeological potential was judged to be high in some parts of the Snowfield claim blocks, the planned winter exploration programme, which mostly involves lake-ice drilling and use of existing winter trails, was considered unlikely to negatively affect any heritage resources.

The second part of the survey involved more intensive work between Francois Bay and Gros Cap, then focused on the east shore of the North Arm, northwest of Yellowknife Bay, and the west shore of North Arm between Whitebeach Point and Alexander Point. Forty-two more new sites were found, including fish camps, old cabin sites, cemeteries, and a large number of precontact sites on sandy terraces on the west side of the North Arm, several of which had been disturbed by sand and gravel quarrying operations.

The third and fourth parts of the project involved two phases of boat-assisted survey in July and August of parts of the north shore of the East Arm and the North Arm of Great Slave Lake with representatives of the YKDFN Alfred Baillargeon, **Peter Sangris**, Modeste Sangris, Paul Mackenzie and **Mike Francis**. The first part of the survey area

extended from Taltheilei Narrows on East Arm to Gros Cap, south of Matonabbee Bay. Thirty-three new sites were found, including at least three pre-contact sites containing quartz veins and tools, two cemeteries, a trading post site, six old cabin sites and more than 30 boulder features such as tent rings and hide-drying rings.

Overall, the finding and interpretation of 115 new archaeological sites in two weeks of surveys, added to the 61 new sites found in the vicinity of Drybones Bay in 2003, has contributed greatly to the picture of land use around Great Slave Lake by the Yellowknives Dene and other contemporary, historic and precontact groups over several millennia. These results suggest that a need exists for intensive surveys wherever major exploration and development projects are planned around Great Slave Lake, and indicates that collaborative research and field survey projects by archaeologists and Aboriginal people are beneficial.

MacKenzie Gas Project Heritage Resources Program
Grant Clarke
(NWT Archaeologists Permit 2004-956)

The 2004 program marks the third field season on the Mackenzie Gas Project. A consortium comprised of Imperial Resources Ventures Ltd., the Aboriginal Pipeline Group, ConocoPhillips Canada Ltd., Shell Canada Limited, and ExxonMobil Canada Properties Ltd is proposing the project.

At present, the project includes plans to develop: natural gas production facilities at Taglu, Parsons Lake, and Niglintgak; a gathering system that will collect the natural gas and associated gas liquids from these three fields and transport them to facilities in the Inuvik area; a natural gas liquids pipeline from the Inuvik area to Norman Wells; a natural gas pipeline (the Mackenzie Valley Pipeline) from the Inuvik area south via Norman Wells that will connect to an existing pipeline in northwest Alberta allowing access to the market; and a number of infrastructure locations that will be required to support the construction and continued operation of the pipeline.

A team of archaeologists from MPEG (the Mackenzie Project Environment Group) conducted the 2004 archaeological field program. As the program is wide spread along the Mackenzie Valley numerous local assistants were also involved with the fieldwork and included:

- Inuvialuit Region: Dennis Chicksi, Tommy Chicksi, Robert McLeod, James Rogers
- Gwich'in Area: Julie Ann Andre, Andy Andre, Anna May MacLeod
- K'ahsho Got'ine Sahtu Area: Alfred Orleas, Alfred Masazumi
- Tulita Sahtu Area: Peter Horassi
- Pehdzeh Ki First Nation - Deh Cho Region: George Tally, William Williams
- Trout Lake Dene Band - Deh Cho Region: Fred Jumbo, Ron Kotchea
- Liidlii Kue First Nation - Deh Cho Region: Edward Cholo
- Jean Marie River First Nation - Deh Cho Region: Derrick Norwegian, Raymond Minoza, Darran Gorgon

Conducting a post impact assessment of a geotechnical test location at Oo'in in the Gwich'in Settlement Area.

The 2004 field program was focused primarily on a number of potential infrastructure and granular resource extraction sites that are situated along roughly 1,400 kilometres of proposed pipeline route stretching from the tip of the Mackenzie Delta to the Alberta border. The primary goal of the 2004 program was to conduct heritage resource impact investigations at newly proposed sites as well as to further investigate sites that could not be assessed in 2003 due to snow cover. Reconnaissance level investigations were also conducted for several pipeline re-routes in locations that were considered to be of moderate to high potential for heritage resources. A number of post-impact assessments were also conducted in areas that were with a winter drilling program that was completed in the winter of 2003/2004. Two crews of three people including a local assistant completed the investigations. Ground based assessments were conducted at over 100 locations resulting in the discovery of 20 new heritage resource sites over a period of 30 days. Thirteen previously recorded heritage sites were also re-visited.

Both prehistoric and historic sites were recorded as a result of these investigations. All of the prehistoric sites identified during the 2004 field program are comprised of stone flakes and other debris resulting from the manufacture of stone tools. Historic period sites were more common and include a number of trails, traplines, cabins, and camps that are primarily related to traditional land use.

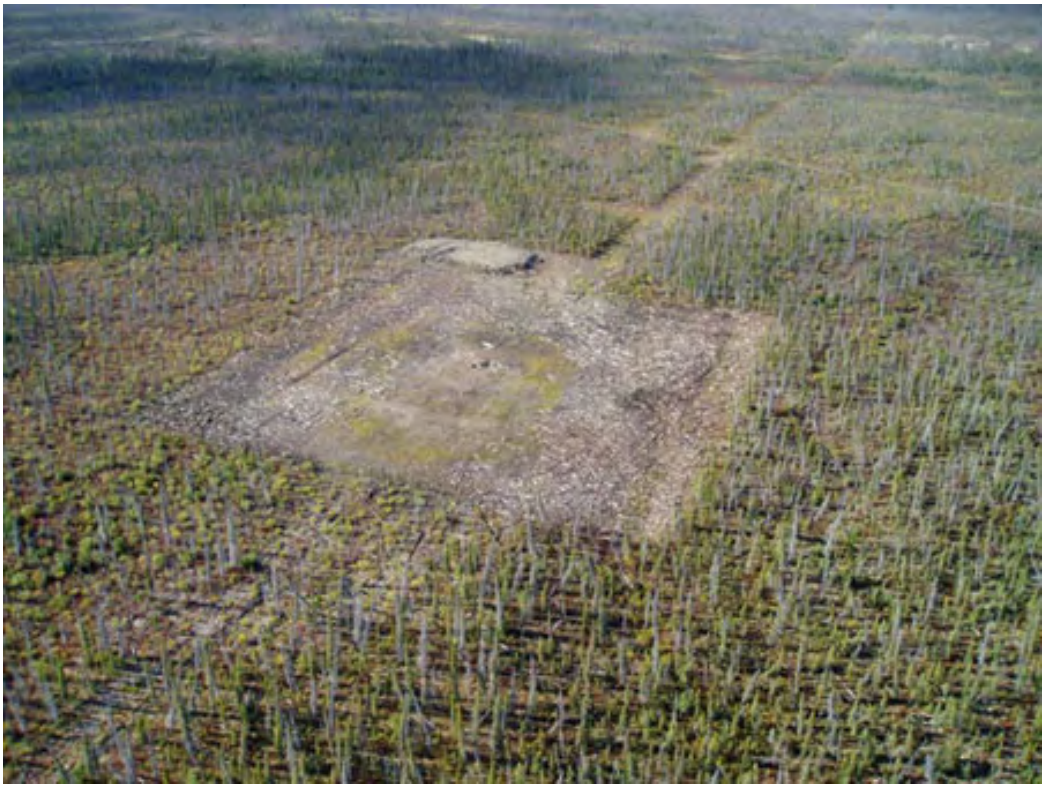
Colville Lake Heritage Survey
Don Hanna
(NWT Archaeologists Permit 2004-958)

Between August 2nd and 7th of 2004, Bison Historical Services Ltd. carried out an archaeological survey for heritage sites in the general vicinity of Colville Lake, NWT. These investigations were carried out at the request of Northern EnviroSearch Ltd. on behalf of Apache Canada Ltd. and Paramount Resources Ltd. Fieldwork was based out of Norman Wells and carried out by helicopter overflight and on foot. Investigations were carried out by **Don Hanna** and **Bob Steinhauser** of Bison Historical Services Ltd. and accompanied by **Rhea MacDonald** of Norman Wells and **Robert Kochon** of Colville Lake, who acted as guides, advisors and wildlife monitors. Examination consisted of helicopter over flight, on-foot surface examination and judgmental shovel testing.

There were three objectives to this study:

- To examine existing well sites drilled by Paramount and Apache to determine if any heritage sites had been damaged by drilling;
- To look at proposed new well site locations to ensure that no heritage sites are damaged; and
- To examine selected portions of the access routes associated with these well sites to identify heritage sites that might be impacted.

Two well sites and portions of access road in the Turton Lake area were examined. One recent traditional land-use locality was identified near the access route. The planned drilling program will not damage this locality. Four well sites and portions of access road in the vicinity of Lac Maunoir were examined. A prehistoric lithic scatter and a relatively recent traditional land-use camp were identified near the already existing access route. Neither of these sites will be damaged by use of the access road. One well site and portions of access road in the vicinity of Tunago Lake were examined. A large traditional land-use camp area was identified on the northeast side of Tunago Lake. This concentration of land-use locales includes cabins, tent frames, stages, deadfall traps and other signs of intensive land use. One of these old camp locales, consisting of the remains of tent frames, stages and other camp debris is close to a proposed water uptake area on Tunago Lake. If necessary the access road will be adjusted to avoid this locality. Six well sites and portions of access road in the Nogha vicinity were also examined. Two traditional land-use camp areas were identified near Lac Belot. Both of these locales are well away from proposed access routes and will not be damaged. Two old traditional land-use locales were also identified on the north



Existing well site.

end of Tweed Lake. These locales are well away from proposed access routes and will not be damaged.

The planned 2004-2005 drilling programs of Apache Canada Ltd. and Paramount Resources Ltd. in the Colville Lake area will damage no known heritage sites.

Tyhee Yellowknife Gold Project
Gabriella Prager
(NWT Archaeologists Permit 2004-961)

In July 2004, on behalf of Tyhee NWT Corp., Points West Heritage Consulting Ltd. completed archaeological assessments relative to proposed mining developments. This project is near the old Discovery Mine, abandoned in 1969, and located approximately 85 km north of Yellowknife. The original Discovery Mine is situated on Giauque Lake, but the two current proposed developments are on Winter Lake, known as the Discovery property (a short distance west of Giauque Lake) and on Nicholas Lake to the northeast, approximately 12 km apart. Both properties have previously excavated exploratory shafts, which are to be reopened and developed.

Archaeological assessments were conducted of proposed development areas identified on a conceptual plan received from EBA Engineering in June 2004. Planned facility locations are fairly preliminary, therefore, archaeological field work was aimed at providing a combination of impact assessments of those more firmly defined developments as well as overview assessments of possible development areas. The latter were meant to provide indications of archaeological potential and to identify specific locations where fieldwork may be required. Impact assessments consisted of pedestrian surveys together with shovel testing where necessary. Overview assessments were completed using low and slow aerial over flights as well as pedestrian surveys of selected portions.

Ground reconnaissance was conducted in the vicinity surrounding the proposed mine on the Discovery property, the entire perimeter of Round Lake (the proposed tailings pond), a possible waste rock storage area west of the mine site, as well as selected portions of the terrain surrounding the Nicholas mine site. Several transects were also walked over a large, broad, rocky ridge extending west from the old Discovery Mine town site, past the current camp location to the north end of Narrow Lake. Old mining debris and various structural remains associated with the past mining activities were found scattered over this ridge. An esker identified as a possible gravel source southwest of Giauque

Lake was also walked. A broad exposed area at the south end was shovel tested, and an old gravel borrow at the north end contained extensive exposures that were closely inspected.

Low-level helicopter over flights were completed of the general route for a road between Discovery and Nicholas Lake properties as well as the northern two-thirds of the old winter road between Discovery property and Yellowknife. This provided a good indication of terrain suggestive of archaeological potential where ground reconnaissance will be necessary when routes are finalized. These landforms generally consist of elevated terrain near the larger water bodies.

Heritage resources found this season were all associated with past mining activities, with one possible exception. Some camp remains found on the south side of Round Lake may relate to Aboriginal hunting activities, but this site did not appear to contain any evidence suggestive of a date older than 50 years. Additional archaeological assessments will be required when locations of all ancillary developments have been finalized.

Old campsite on Round Lake.

Archaeological Investigations at Minto Inlet, Victoria Island
Donald S. Johnson
(NWT Archaeologists Permit 2004-962)

Archaeological investigations (in conjunction with sociocultural investigations, Hamlet of Holman, Victoria Island, Northwest Territories) were conducted between July 26th and August 15th, 2004 in the Boot Inlet Area, and the Fish Bay Area of Minto Inlet, Victoria Island, Northwest Territories. The archaeological investigations represent the second field season in a two-year project, and focus on an assessment of mid-19th century direct and indirect contact and intersocietal interaction between historic northern Copper Inuit groups and the Royal Navy vessels *H.M.S. Enterprise* and *H.M.S. Investigator* in northwestern Victoria Island. Specifically, the project is one of the first to systematically examine possible changes in northern Copper Inuit material culture, intra- and intergroup material trade systems and social relations resulting from direct and indirect contact with elements of the Royal Navy on Victoria Island. Additionally, these investigations also examined sites directly associated with the 1851-52 "wintering" of *H.M.S. Enterprise* at Winter Cove, Walker Bay and environs.

Field surveys were conducted in the immediate Boot Inlet area - including the Isthmus (*itanyak*) connecting Winter Cove, Walker Bay, and the northern extremity of Boot Inlet - and much of the Fish Bay area of northwest Minto Inlet. A total of approximately twenty-four sites, comprising historic Copper Inuit tent rings and caches, Royal Navy habitation, cache and survey features and one site preliminarily identified as Neoeskimo, were recorded.

The nature and amount of data collected varied according to project research plans, though random sampling was conducted at each site, and all features were recorded in detail. The items recovered from sites also varied, although 19th century manufactured metals, glass, and wood predominated. In some cases, evidence of modification of manufactured materials into projectile points was present. All recovered items are now undergoing conservation procedures.

As was the case with the survey conducted in 2003, preliminary results of the 2004 field survey continue to suggest that Northern Copper Inuit groups interacting with the officers and crew of *H.M.S. Enterprise* in the Winter Cove, Walker Bay, and Boot Inlet areas ca. 1851-52, acquired numerous manufactured items of European origin. Some of these items were modified into tools and introduced into the material culture of these groups. Similarly, it can also be suggested that these items were "filtered" into intra- and inter-group trade systems of the Walker Bay, Boot Inlet and Minto Inlet areas thereby contributing to changes in traditional social interaction.

A view of the Boot Inlet Area looking east from project base camp area at Umingmakyut.

The project has received the strong support of the Holman Community Corporation, and the Olokhaktomiut Hunters and Trappers Committee, Holman, Victoria Island, Northwest Territories. **Aaron Kimiksana** and **Jack Kataoyak** of Holman served as Research Assistants. Other invaluable support in the field and in Holman was provided by **Joseph Haluksit**, **Donald Inuktalik**, **Aaron** and **Susie Kimiksana**, and the 1st Canadian Ranger Patrol Group, Holman, Northwest Territories. The following institutions and individuals have contributed support, expertise and guidance: Inuvialuit Land Administration; Aurora Research Institute; Prince of Wales Northern Heritage Centre; Joint-Faculty Research Ethics Board, University of Manitoba, Dr. Jill Oakes, Department of Environment and Geography, University of Manitoba; Dr. Rick Riewe, Department of Zoology, University of Manitoba; Dr. William "Skip" Koolage, Department of Anthropology, University of Manitoba; Dr. James Savelle, Department of Anthropology, McGill University, Vermilion Community College, Ely, Minnesota, Will Steger, Ely, Minnesota, Margaret O'Leary, Salamander Bay, Australia and Dylan Morgan, Ottawa, Canada.

Heritage Resources Impact Assessment of Fortune Minerals Nico All-Weather Access Road
Todd Paquin
(NWT Archaeologists Permit 2004-963)

Todd Paquin of Golder Associates Ltd. completed an archaeological inventory and assessment under NWT Permit 2004-963 for an all-weather access road proposed by Fortune Minerals to service their mine operation near Nico Lake, NWT. The mine property is located about 10 km east of Hislop Lake in the Marian basin, and the proposed access road will proceed approximately 50 km west and south from this location to an existing access road leading west to the village of Wah Ti. **Edward Williah** and **Leon Nasken** of the Dogrib First Nation and **Marcel Lafferty** of the North Slave Métis Alliance assisted with the investigations.

Previous archaeological records and studies within the region, as well as environmental and ethnohistorical data, were consulted to aid in providing a basis for structuring field studies. Map and aerial photograph mosaic analysis served as an orientation to the Project area landforms and their heritage resource potential.

The all-weather access road is in the preliminary planning stage of development; thus, field investigations focused on a 100 m wide proposed corridor. The aim of the pedestrian survey and shovel-testing program were to assess landforms considered to exhibit moderate to high potential for heritage resources. These included river and creek crossings, uplands, ridges and elevated areas adjacent to water bodies. In addition, a potential conflict was noted with previously recorded heritage resource KjPo-44 at the proposed Marian River crossing. Emphasis was placed on relocating the site to develop a mitigation strategy should a conflict exist.

In total 225 shovel tests were excavated along the proposed corridor. No artifacts were recovered from these tests. The Dogrib First Nation and North Slave Métis assistants indicated that use of the area away from the Marian River was limited and significant heritage resources were not expected.

Portage at KjPo-44.

Heritage resource KjPo-44, an approximately 450 m long portage trail site along the southern bank of the Marian River, occurs in conflict with a proposed bridge location. Shovel testing immediately adjacent to the trail and in the near vicinity did not result in the identification of intact cultural components. However, portages are an important component of the Dogrib cultural landscape and considered highly significant. A recommendation for avoidance of this site has been made to mitigate impacts from construction activities.

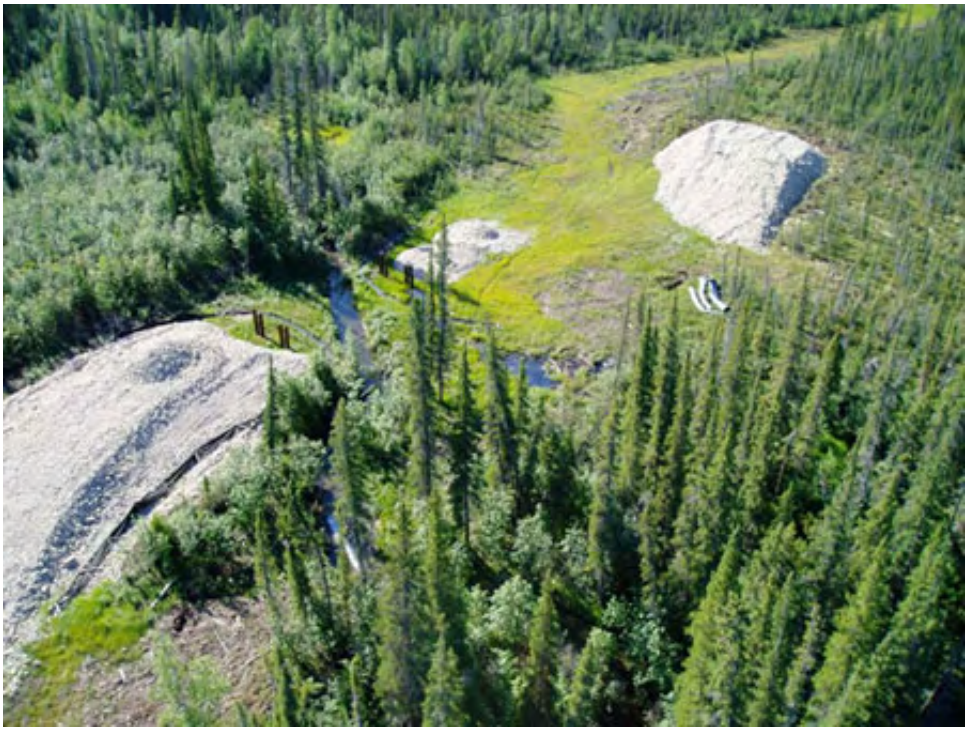
Additionally, visual examinations encountered one claim post, one trail and three small metal

traps. The three metal traps occur along cleared winter roads while the trail exhibits trees cut by chainsaw. In recent times, Aboriginal harvesters on snowmobile would access these trapping locations. The claim post lacks an identification plaque but is consistent in size and structure with claim posts from ca. 1968 identified during a 2003 heritage assessment of the Nico Mine property. None of these areas contains evidence of antiquity greater than 50 years and are not considered archaeological resources under the current provisions of the NWT Archaeological Sites Regulations (GNWT 2001).

All moderate and high potential landforms were examined within the proposed all-weather access road corridor. The crossing of the Marian River must be rerouted to avoid impacting KjPo-44. As a result, additional heritage assessment will be required at the new crossing location, once determined. No heritage concerns were noted for the remainder of the proposed Fortune Minerals all-weather access road corridor. Given that local area traditional users are known to use the region, consultations, directed at determining impacts to local harvesting activities, is recommended.

MacKenzie River Winter Road Bridges Project
Don Hanna
(NWT Archaeologists Permit 2004-964)

In August of 2004, Bison Historical Services Ltd. and Sahtu Environmental Services Inc. carried out a survey of heritage sites at a series of bridge locations on the Mackenzie River winter road. The Department of Transportation of the Government of the Northwest Territories is in the process of building forty permanent bridges along the Mackenzie Valley Winter Road between Wrigley and Fort Good Hope. The Prince of Wales Northern Heritage Centre in Yellowknife recommended that fifteen of these planned bridge installations should be examined by an archaeologist to make sure that no heritage sites would be damaged by construction.



Gibson North Creek crossing with bridge construction already started.

Sahtu Environmental Services Ltd. subcontracted **Don Hanna** of Bison Historical Services Ltd. to carry out the required investigations. Fieldwork was based out of Norman Wells and carried out by helicopter and on foot. The area of each bridge crossing was extensively shovel tested. Accompanying Don Hanna were **Bob Steinhauser** of Bison Historical Services Ltd. and **Thomas Manuel** of Norman Wells. Bridge locations examined include those located at Blackwater River, Little Smith Creek, Big Smith Creek, Denise Creek, Rachelle Creek, Jackfish Creek, Jungle Ridge Creek, Christina Creek, Hellava Creek, Francis Creek, Elliot Creek, Gibson South, Gibson North, Tsintu River and Lynn Creek.

No heritage sites were found at Denise Creek, Jackfish Creek, Jungle Ridge Creek, Christina Creek, Hellava Creek, Francis Creek, Elliot Creek, Gibson South, Gibson North and Lynn Creek.

Two relatively recent traditional land-use localities were identified near the Rachelle Creek crossing. Neither will be impacted by the proposed bridge construction. A recorded traditional land-use site and an unknown traditional land-use site were identified at the Tsintu River crossing. Neither will be impacted by the proposed bridge construction. A small prehistoric site was identified at the Little Smith crossing. This site has already been damaged by bridge construction. However, this site has very limited importance. Four recorded ancient sites lie near the Big Smith Creek crossing. However, examination of this crossing indicates that none will be damaged by the planned bridge construction. Four recorded heritage sites are known to lie near the Blackwater River crossing. However, examination of this crossing indicates that none will be damaged by the planned bridge construction.

MacKay Lake Archaeological Survey
Callum Thomson
(NWT Archaeologists Permit 2004-965)

In late September, on behalf of the Yellowknives Dene First Nation (YKDFN), **Callum Thomson** joined **Noel Doctor**, **Paul Mackenzie** and **Angus Martin** for seven days of boat-assisted surveys from the MacKay Lake Lodge to Warburton Bay, areas traditionally used by the YKDFN for caribou hunting and trapping. While we lost a great deal of time to bad weather and a faulty outboard motor which prevented us from visiting many planned target areas, we were able to record 40 new sites, 33 of which contained precontact stone tools and 12 of which contained boulder features such as tent rings and hearths. Many of the sites were associated with eskers, including three that had been disturbed by runway construction at MacKay Lake Lodge. During our two days at the Warburton Bay camp, more than 500 caribou, in small herds of 50-200, were seen resting at narrow lake crossings on their way south to the tree line.

This was the first intensive archaeological survey around MacKay Lake since the late 1960s, when William Noble recorded several sites, and suggests that many more sites associated with caribou hunting, trapping, fishing and travel on the lake remain to be found. As at Great Slave Lake (see Permit 2004-955), it is recommended that archaeological surveys and assessments be undertaken prior to any major exploration or development project around MacKay Lake, with the research involving collaboration between experienced archaeologists and aboriginal groups familiar with the local environment and resources.

Paul Mackenzie, Angus Martin and Noel Doctor.

Nunavut Fieldwork News

Editor: Julie Ross

There were 24 archaeological projects which took place in Nunavut during the Field season of 2004. These projects can be divided into three categories: consulting, research, and the Nunavut Archaeology Program.

Seven permits where submitted by archaeological consultants however only five projects were conducted. Points West Consulting conducted three projects; one was conducted by **Gabriella Prager** (2004-003A) who performed an archaeological reconnaissance for the Hope Bay Belt Exploration Project; **Jean Bussey** conducted two projects: an archaeological reconnaissance associated with the Tibbitt to Contwoyto Road (2004-04A) and another in the High Lake – Ulu Lake area (2004-005A). **Callum Thomson** with Thomson Heritage Consultants conducted an archaeological mitigation at the PIN-2 Dew line site, Cape Young (2004-011A) and another at Pin-3 Lady Franklin Point (2004-012A).

Thirteen permits focused on research; however one project was cancelled because of weather. **Brooke Milne** (2004-006A) investigated Pre-Dorset inland occupation in the vicinity of Mingo and Amadjuak Lakes on Southern Baffin Island. **Max Friesen** (2004-009A) continued his work at Iqaluktuuq working on sites in the Ferguson Lake and Ekalluk River area. **Susan Rowley** (2004-010A) conducted a field school with the Inuit Heritage Trust at the Naujaan site near Repulse Bay. **Susan Lofthouse** (2004-014A) conducted excavations of Dorset and Thule sites on Rowley Island. **Pierre Desrosiers** (2004-016A) conducted reconnaissance and excavation in the Clearwater River and Clearwater Lake districts in Richmond Gulf. **Jim Savelle** (2004-017A) conducted archaeological reconnaissance along the west coast of Boothia Peninsula. **Andrew Stewart** (2004-019A) was involved with the Kiluhiqtuq oral history and archaeology project conducting archaeological reconnaissance north of the Bathurst Lake region. **Ken Swayze** (2004-021A) conducted an archaeological survey in the Netsilik lake area for the Inuit Heritage Trust at the request of the Kitikmeot Inuit Association. **Daniel Gendron** (2004-022A) worked at the Qajartalik site assessing the potential for preservation and stabilization of the site. Three of the permits which have a research focus were conducted by private individuals. **Charles Moore** (2004-002A) and company were involved with the search for locating the wrecks of HMS Erebus and HMS Terror. **Tom Gross** (2004-007A) conducted a land reconnaissance in the Wall Bay area, King William Island, also in search of material from the lost Franklin expedition. **Luke Suluk** (2004-023A) conducted an archaeological reconnaissance in the Maguse River area.

The Nunavut Archaeology Program was involved with four projects. **Doug Stenton** (2004-001A) conducted an archaeological site assessment of an historical period site in the vicinity of Cape Southwest, Axel Heiberg Island; he also was involved with the excavation and reburial of the remains of Robert Janes and Hector Pitchforth in the vicinity of Pond Inlet (2004-018A); and the inspection of a site which had been reported as containing a locked box, which turned out to be a child's grave (2004-024A). The Nunavut Archaeology Program joined Parks Canada in Sirmilik National Park (2004-008A) to conduct an archaeological site inspection and assessment in the vicinity of Borden Peninsula and Bylot Island.

Yukon Fieldwork News

Editor: Ruth Gotthardt

Ice Patch Research 2004

The 2004 season proved to be an exceptional one in terms of record hot summer temperatures, and record melting at many southwest Yukon ice patches. Government of Yukon researchers, including **Greg Hare** (Yukon Heritage Resources) expanded their reconnaissance to the Pelly Mountains, and with the assistance of the Ross River Dena Council explored the alpine to determine if the phenomenon of ice patches preserving organic remains might be present in this region as well. Results of the survey were negative which increasingly points to the conclusion that the ice patches in southwest Yukon represent a relatively isolated phenomenon, due to a rare combination of environmental and climatic factors. A four day fly-camp at the 'Gladstone' complex of ice patches was the highlight of the 2004 research, with nine participants from the project's First Nation and Yukon Government Partners. Important artifact finds were made by the large group on the extensive main ice patch, and on nearby smaller ice patches. More than two dozen artifacts were recovered, including a variety of throwing darts, arrows and projectile points.

CFTN elder Art Johns at ice patch between Alligator and Friday ice patches.

Spear point from Little Gladstone.

Side-notched point hafted on a spear foreshaft recovered at the East Gladstone ice patch. Dated to about 2050 B.P.

Heritage Investigations at Black City, on the Blackstone River

Heritage investigations at the site of Black City in 2004 were a joint project of the Tr'ondëk Hwëch'in, the Gwich'in Social and Cultural Institute, and the Government of Yukon. Substantive project funding was provided through the Government of Yukon – Historic Places Initiative program. Project archaeologist was **Chris Thomas**, Thomas Heritage Consulting. Black City, located in the Blackstone River Uplands, was traditional gathering place for Teetl'it and Tukudh Gwich'in and Han people engaged in the annual fall caribou hunt. During the Klondike Gold Rush and up to the time the site as abandoned in the late 1920s,

Archaeological Reconnaissance in the Greater Mayo Area, Central Yukon

An inventory of archaeological sites in various localities in the Mayo area and was a joint project of the First Nation of Nyak Dun and Yukon Heritage Resources. The fieldwork was carried out from 26 July to 6 August, 2004 by **Chris Thomas** and **Vicky Castillo** (Thomas Heritage Consulting, Whitehorse) with the assistance of NND students **Wade** and **Craig Gagnon**. Assistance was also provided **Kristina Kane** of the NND Heritage Office and by elders **Alice Buyck**, **Pat Van Bibber**, **Jimmy Jonny** and **Jimmy Lucas**. Survey was carried out within the village of Mayo, at Seventeen Mile Bluff, on the South McQuesten Road, at Old Mayo Village, at Moose Creek campground and at Gordon's Landing. A total of nine small archaeological sites were revisited/identified in the course of the survey; historic sites were recorded at Seventeen Mile Bluff, on the South McQuesten Road, at Moose Creek, Old Mayo Village and Gordon's Landing.

Chris Thomas screening backdirt at Black City.

Steve Ryan excavating at Black City

the residents Black City were engaged in the meat hunt for Dawson City. The numerous tent and cabin outlines and depressions at Black City are a testament to its importance in the history of the Han and Gwich'in people's who once made their home here. The archaeological investigations focussed on the learning more about the occupation of the site, people's daily activities and the age of the site. A profusion of beads were found in the excavation recall the elaborate and beautifully beaded clothing of the 'Dawson Boys' who were renowned in Dawson City at the time of the Gold Rush. Archaeologists, Teetl'it Gwich'in and Han elders and students worked together to explore the history of Black City through the archaeology and the stories of the past.

Archaeological Investigations at Towata Lake

Towata Lake has been for many generations an important resource area for the Selkirk First Nation, for the fall whitefish fishery and for winter fishing of northern pike, whitefish and lake trout. Preliminary archaeological survey and investigation in 2004 documented the historic and archaeological resources at the site of the old village at Towata Lake and around the lake to assist the Selkirk First Nation in identifying resource management and protection issues and priorities. The Selkirk First Nation Heritage Office worked with elders to document the history of Towata Lake and the families who once made their home there. Selkirk First Nation elders assisted archaeologists in locating the cabins and graves at Towata Lake. Archaeological survey around the lake identified a total of five prehistoric occupation sites. The sites at the lake outlet indicate occupations here relate to some of the oldest cultures of the Yukon, likely predating 5000 years ago. The Towata Lake investigations were a joint project of the Selkirk First Nation and Yukon Heritage Resources. Project archaeologist was **Chris Thomas**, Thomas Heritage Consulting. Project funding was provided by the Government of Yukon – Historic Places Initiative program.

Survey on Towata Lake

Archaeological Research in the Rat Indian Creek/*Van Tat Gwich'in Teechik* to Driftwood River Segment of the Middle Porcupine River, Northern Yukon

Crew at Rat Indian Creek: Ray Le Blanc (front) with Jo-Anne Meyer, Trevor Frost and Joseph Bruce.

The Rat Indian Creek/*Van Tat Gwich'in Teechik* region has a rich archaeological record reflecting the history of land use by the Gwich'in people of the Middle Porcupine drainage. Work undertaken in 2004 focussed on the high terraces of the Porcupine River in the Rat Indian Creek area where four localities have been identified with evidence of semi-subterranean house construction. Pit houses are a rare and poorly documented feature in the prehistoric record of the Yukon and are confined apparently exclusively to the Gwich'in territory of northern Yukon. The 2004 investigations documented five semi-subterranean houses and one possible underground meat cache. Variation in construction was seen in one pit house at MjVh-18 which had two rooms. Dates on a pit house at MjVh-16 were approximately 900 – 700 cal BP. A house pit excavated previously at Old Chief Creek on the Porcupine River, several kilometres above Old Crow, was dated 1850 BP. The association of house pits with caribou interception localities suggests these habitations were constructed when a very good supply of caribou meat was assured, enabling a group to overwinter in one place. The 2004 archaeological investigations at Rat Indian Creek were a joint project of the Vuntut Gwitchin First Nation and Yukon Heritage Resources. Project archaeologist was **Raymond Le Blanc**, University of Alberta. Project funding was provided by the Government of Yukon – Historic Places Initiative program.

MjVh-20 house pit.

Information for Contributors

Please send submissions as .rtf attachments or (for short announcements and classifieds) as email messages directly to the *Newsletter* editor (hmartelle@tmhc.ca) or to your regional fieldwork news editor, listed below. Items can also be sent on diskette to:

Holly Martelle, *CAA Newsletter* Editor
Timmins Martelle Heritage Consultants Inc.
205 Oxford Street East, Suite 203A
London, Ontario N6A 5G6

Illustrations are gladly accepted either as hardcopy to the above address, or as .jpeg attachments via email. All photographs and drawings will be returned. Please provide a caption for each image.

Deadlines:

Spring Issue (Fieldwork News)
February 15 to the Regional Fieldwork News Coordinators

Fall Issue (CAA News and announcements)
September 15 to the *Newsletter* Editor.

In 2006, the *Newsletter* will be available online and can be accessed from the CAA website.

Regional Fieldwork News Editors

Atlantic Region Lisa Rankin	Memorial University of Newfoundland, <lrankin@mun.ca>
Ontario Colin Varley	Jacques Whitford Environmental Ltd., <cvarley@jacqueswhitford.com>
Québec vacant	Regional Fieldwork News Editor required
Manitoba/Saskatchewan Peggy McKeand	Alberta Western Heritage, <pnckeand@westernheritage.ca>
Alberta Alwynne B. Beaudoin	Archaeological Survey, Provincial Museum of Alberta, <abeaudoi@gpu.srv.ualberta.ca>
British Columbia Richard Garvin	Dept. of Anthropology and Sociology, Okanagan University College, <rdgarvin@ouc.bc.ca>
Yukon Ruth Gotthardt	Government of Yukon, <Ruth.Gotthardt@gov.yk.ca
Northwest Territories Tom Andrews	Government of the Northwest Territories, <tom_andrews@gov.nt.ca>
Nunavut Doug Stenton	Government of Nunavut, <dstenton1@gov.nu.ca

The *Newsletter* of the Canadian Archaeological Association (CAA) is published twice a year as Spring and Fall issues. Subscription is free with membership in the CAA. Contents of the *Newsletter* may not reflect the viewpoint of the CAA. Your membership in the CAA is due on January 1, 2006. In order to receive your two issues of the Newsletter, the *Canadian Journal of Archaeology*, and maintain your logon account on the CAA Bulletin Board, you should establish or renew your membership as soon as possible.

Le Bulletin de l'association canadienne d' archéologie est publié deux fois par année: au printemps et à l'autonne. Le matériel publié dans *le Bulletin* ne représente pas nécessairement l'opinion oficielle de l'Associasion canadienne d'archéologie. Votre cotisation annuelle à l'Associasion canadienne d'archéologie arrive à terme en date du 1 er janvier 2006. Afin de recevoir les deux prochains bulletins et le noveau numéro du *Journal canadien d' archéologie*, et pour continuer d'avoir accès au Babillard électronique, nous vous encourageons à renouveler votre adhesion, pour l'année 2006, le plus tôt possible.

Student/Étudiant ($35.00)
Regular/Régulier ($75.00)
Instiutional/Institutionnel ($100.00)
(Canadian Funds)

Make cheques payable to the Canadian Archaeological Association/Faire le chèque payable à l'ordre de l'Associasion d'archéologie canadienne. Please send a cheque or money order to/Envoyer votre payment à l'adresse suivante:

Secretary-Treasurer/Secrétaire-trésorier: Jeff Hunston
c/o 4 Salter Place
Whitehorse, Yukon
Y1A 5R2

Tel: (867) 668-7131 (home)
(867-667-5363 (work)

Fax: (867) 667-8023

Email: jhunston@gov.yk.ca; or secretary-treasurer@canadianarchaeology.com

Memberships can now be renewed and acquired over our "secure" web site via credit card (VISA and Mastercard accepted).