

ARCHAEOLOGY AND PALAEOLOGY
RESEARCH PERMIT APPLICATION FORM



PERMIT YEAR 2009

SECTION 1 APPLICANT INFORMATION

Name of Applicant	Affiliation	Representing
Anne Hamilton	University of Manitoba	
Address	City/Province - Territory	Postal Code
302-585 River Ave.	Winnipeg, MB	R3L 2S9
Telephone Number	Fax Number	e-mail
(204) 880-4799	(204) 474-7600	anne_hamilton@umanitoba.ca

Please Note: New applicants must attach a copy of their current résumé or curriculum vitae.

SECTION 2 RESEARCH TEAM INFORMATION

Please list the name and affiliations of all other in your party. Attach a current résumé or statement of qualifications for all co-investigators and technical support personnel. Please identify all team members who are Beneficiaries under the Nunavut Land Claims Agreement.

Name	Affiliation	Beneficiary
Andrea Degagne	McMaster University, assistant	
Rebecca Haspel	Total E&P Canada, assistant	
Bradford Gyselman	Red River College, assistant	
1 assistant, hired in Iqaluit		X

SECTION 3 PERMIT TYPE AND CLASS

Identify the type and class of permit being requested.

Permit Type	Permit Class
Archaeology	Class 2

Indicate the most recent year during which you held a Nunavut Archaeology or Palaeontology permit (if any):

SECTION 4 RESEARCH PROJECT INFORMATION

Project Title:

Palaeo-Eskimo Lithic Exploitation Strategies: Assessing Inferences of Cultural Change through Chert Sourcing on Southern Baffin Island.Qi

Provide a summary of your research proposal in the space below and attach a map of the proposed study area to your application. The proposal summary must provide a clear statement of the aims and objectives of the project, the field and laboratory research methodology, and the potential scientific and public benefits. If the application is related to a tourism initiative (e.g., cruise ship) detailed information including a trip itinerary and estimated number of participants must be provided. **Please Note:** permit applications are translated into Inuktitut and/or Inuinnaqtun; please avoid the use of technical language and jargon.

The objective of this research is to assess patterns of lithic raw material selection and use among Palaeo-Eskimo populations living in the Frobisher Bay region of Baffin Island, and establish if toolmakers were using locally available or exotic stone to manufacture their tools. The Palaeo-Eskimo culture has been sub-divided by archaeologists to include the Pre-Dorset (4500-2800 BP) and Dorset (2500-1000 BP) cultures. Generally, it is thought that Pre-Dorset raw material selection was opportunistic and encounter-based (i.e. they used locally available raw materials), while Dorset were more particular in their raw material choices. Indeed, throughout the Arctic, Dorset sites are defined by the increasing presence of exotic raw materials like green nephrite, crystal quartz, and visually distinctive and high quality stones like Ramah and Southampton Island banded chert. However, because few studies of raw material sourcing have been done in the Arctic, and even fewer have used objective geochemical techniques, this hypothesis has been difficult to confirm.

The purpose my 2009 field project is to assess the availability of lithic raw materials along the coast of Frobisher Bay. Moreover, I hope to determine if Palaeo-Eskimos occupying the region were exploiting local stone sources (if available), or if they were importing toolstone from another region. Maxwell (1973) has noted that lithic resources are scarce in the coastal regions of southern Baffin Island, but small pebbles of chert suitable for tool manufacture are available. However, no archaeologist has conducted research in this region with the express purpose of locating raw material source areas, so unknown lithic resources may exist. I will conduct a survey along the shorelines Peterhead Inlet, located near the head of Frobisher Bay, in order to establish if and in what proportion lithic raw materials suitable for tool manufacture are available in the region.

In addition to the survey, I will carry out an excavation the Tungatsivvik site (KkDo-3), located on the eastern shore of Peterhead Inlet. Tungatsivvik has been occupied by both the Pre-Dorset and Dorset. Therefore, I will be able to assess raw material selection patterns for both periods and determine if there was a change in selection over time. In order to attribute the artifacts collected during my excavations to the local raw materials collected during survey, I will submit the stone to trace element analysis. These analyses will supply a unique chemical fingerprint for each type of chert and provide a definitive list of the raw material sources available to the Palaeo-Eskimos in Frobisher Bay. Additionally,

the data collected from Tungatsivvik artifacts will allow me to determine which sources of stone were being selected and used by individuals, and determine if there was a pattern or change in selection over time.

Methods:

Data acquisition for this fieldwork will involve two methods: (1) surface survey, and (2) site testing.

Survey. Base camps will be set up near Tungatsivvik (KkDo-3), and survey will be conducted on foot in the surrounding area. When this area has been covered, the crew will travel on foot to a new area, set up a temporary camp, and conduct survey in the new location for two to three days. Once completed, the crew will return to the base camp to restock on supplies and then continue on to a new location.

All survey will follow a systematic approach where a selected area will be walked at set intervals with each crewmember spread out approximately two to five meters from one another. Items of interest (e.g. artifacts, tent ring structures, nodules of chert) will be described and recorded using GPS, sketch maps, and photographs.

Site testing. I will conduct subsurface testing at Tungatsivvik in order to collect additional data and learn more about the function and use of the site. Previous excavations at Tungatsivvik revealed that the site was occupied by the Pre-Dorset, Dorset, Thule, and Inuit. I plan to test Area Q, a known Pre-Dorset component of the site which was discovered and excavated by Robert Park in 1999. A total of 5.25 metres² was excavated, revealing an elliptical tent ring structure and a total of 359 lithic artifacts. My investigation of Area Q will allow me to collect valuable data for my own research, and will also provide additional information on the Pre-Dorset occupation of the site.

In addition to testing at Area Q, I hope to identify additional isolated Palaeo-Eskimo components at Tungatsivvik. If any new sites are discovered during my survey of Tungatsivvik or in my survey of Peterhead Inlet, they will be tested in order to determine their cultural affiliation. All testing will follow standard professional archaeological procedures for sites in the Arctic. Areas chosen for testing will be selected based on the presence of surface artifacts and/or their location within the perimeter of a tent ring structure or proximity to an archaeological feature. The size of the test units will range from 25 × 25 cm to 50 × 50 cm, and each test area will be photographed before and after the excavation.

Research Benefits:

A definitive list of lithic sources available in the Frobisher Region of Baffin Island will revolutionize archaeological understandings of Palaeo-Eskimo culture. Researchers will no longer be reliant on visually distinctive toolstones (e.g. Ramah Chert, Southampton Island banded chert) to study culture contact and exchange, because with geochemical techniques it is possible to study the movement of non-descript toolstones, like those found in southern Baffin Island. My study will provide the groundwork to create an inventory of sources available throughout the Arctic, from which sites can be linked on the presence of certain toolstones. This will provide archaeologists with a new way to interpret Palaeo-Eskimo mobility, social interaction, trade, and cultural continuity over time.

Geographic Area of Project:

Region	Qikiqtaaluk Region		
NTS Map Reference	025N		
Air Photo Reference			
Datum	NAD 83		
Latitude	63°45'53" N		
Longitude	68°40'47" W		
UTM	515797	E	7070837 N Zone 19
Land Title	Federal Crown Lands		
Project Budget	\$18,000		
Funding Agency*	NSTP, AINA, ACUNS, CT Shay Scholarship (University of Manitoba)		

*Attach a copy of the contract if the fieldwork described in this application is being undertaken through a contractual agreement.

Research and Analysis Schedule:

Indicate the proposed dates for field work and for analysis.

Field Work (Start)	Field Work (End)
July 31, 2009	August 26, 2009
Analysis (Start)	Analysis (End)
September 1, 2009	March 31, 2010
Total person-days in field	
108	

SECTION 5 CONSULTATIONS

Land Owner

Applicants must consult about their proposed research with landowners or with other groups that may have rights in the study area. Copies of all correspondence with the relevant Government, Land Claims agency, or individual property owner(s) must be attached to the permit application. Contact addresses are listed in the *Guidelines for Nunavut Territory Archaeology and Palaeontology Permits*. If you already hold a valid Land Use Permit or a Certificate of Exemption, please provide the permit or certificate number. If the land owner is being contacted on your behalf by a client, please indicate.

Authorization	Number
Land Use Permit	applied for
Certificate of Exemption	

Client is contacting land owner(s) on behalf of applicant –please summarize:

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Community

Applicants must inform and consult with communities about their proposed research. Provide the details of your consultations concerning the proposed research project, and attach copies of your correspondence to the application.

Community Agency Contacted	Contact Name
Qikitani Inuit Association	John Amagoalik

SECTION 6 COLLECTIONS AND CONSERVATION

Applicants must provide the name, affiliation and contact information of the conservator that has been consulted and retained to provide conservation services for the collections to be made under the proposed research project.

Conservator	
Name	Tara Grant
Affiliation	Canadian Conservation Institute
Address	1030 Innes
	Ottawa, ON K1A 0M5
Telephone	(613) 998-4721
Fax	(613) 998-4721
e-mail	tara.grant@pch.gc.ca

Indicate the project budget allocation for the conservation of collections made under the proposed research project:

Describe the anticipated types of materials to be collected:

The types of materials collected in the project will include lithic debitage, formal and informal stone tools, faunal remains associated with archaeological sites, and all organic artifacts (bone, antler, ivory).

Indicate where the collections (e.g., artifacts, faunal remains, sample materials) will be housed for analysis prior to their return to the permanent repository:

Temporary Repository	
Name	303A Duff Roblin Building, University of Manitoba
Location	Winnipeg, MB

List the locations, if applicable, of other institutions where specialists will undertake analysis of sub-samples of the collections:

Other Research Institutions	
Name	
Location	
Name	
Location	

SECTION 7 INFORMATION FOR APPLICANTS

Depending on the scale of the project, researchers working on Federal Crown Lands may require a Land Use Permit. For information contact:

Land Resources
Indian and Northern Affairs Canada
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone (867) 975-4283
Fax (867) 975-4286

Researchers working on Inuit Owned Lands (IOL) may require an Access to Inuit Owned Lands Permit issued by the Regional Inuit Association. Consult the *Guidelines for Nunavut Territory Archaeology and Palaeontology Permits* for contact information.

SECTION 8 DECLARATION

I agree to comply with the provisions of the *Nunavut Archaeological and Palaeontological Sites Regulations*, the *Guidelines for Nunavut Territory Archaeology and Palaeontology Permits*, and all terms and conditions of the permit issued pursuant to this application.

	June 1, 2009
Applicant Signature	Date

SECTION 9 APPLICATION CHECKLIST

	Enclosed	Required	N/A
Curriculum Vitae (new applicants only)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research Project Description	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Map of Study Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community Consultation Documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Owner Consultation Documents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Attachments (please specify):

-Curriculum Vitae
-Research Project Description
-maps
-INAC Land Use Permit

Submitting Applications

The deadline for applications is March 31. Applications must be submitted electronically to cleypemits@gov.nu.ca, and an original signed copy must be sent to the Territorial Archaeologist by mail to:

Department of Culture, Language, Elders and Youth
Culture and Heritage Division
Government of Nunavut
P.O. Box 310
Igloolik, NU X0A 0L0

Submit by Email

Print Form