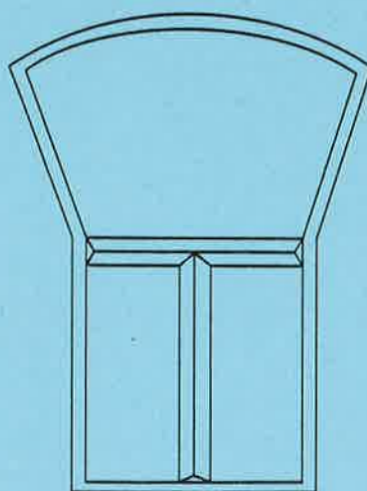


CANADIAN ARCHAEOLOGICAL ASSOCIATION
21ST ANNUAL MEETING
11TH MAY TO 14TH MAY 1988
WHISTLER, B.C.

PROGRAMME AND ABSTRACTS

ASSOCIATION CANADIENNE D'ARCHEOLOGIE
LA 21^e REUNION ANNUELLE
11 MAI AU 14 MAI 1988
WHISTLER, B.C.

PROGRAMME ET RESUMES



Organisation

Organising Committee

Programme : Jonathan Driver, Simon Fraser University
Local arrangements : Colin Gurnsey, Archaeological Society of B.C.
Registration : Ingrid Bell and Laurie Milne, Simon Fraser University
Audio-visual : Geordie Howe, Simon Fraser University
Bookroom : Dave Maxwell, Simon Fraser University
Volunteers : Archaeology Students Society, Simon Fraser University
Archaeological Society of British Columbia
CAA Executive liaison : Bjorn Simonsen, Executive Secretary, CAA

Hosted by

Department of Archaeology, Simon Fraser University
Archaeological Society of British Columbia

Sponsors

B.C. Heritage Trust
Government of British Columbia
(Ministry of Provincial Secretary and Government Services)
(Ministry of Tourism)

Conference Facilities

Julie Willis, Conference Coordinator, Whistler Conference Centre

CANADIAN ARCHAEOLOGICAL ASSOCIATION
ASSOCIATION CANADIENNE D'ARCHEOLOGIE

ANNUAL GENERAL MEETING
ASSEMBLEE GENERALE ANNUELLE

FRIDAY, 13TH MAY, 1988
VENDREDI, 13 MAI, 1988

1530

PARKHURST ROOM

C.A.A EXECUTIVE
CONSEIL D'ADMINISTRATION DE L'A.C.A.

Président/President : Dr. Robert McGhee
Vice-président/Vice-President : Dr. David Burley
Secrétaire-trésorier/Secretary-Treasurer : Dr. David Burley (interim/intérimaire)

Secrétaire permanent/Executive Secretary : Bjorn Simonsen

Rédacteur, Journal Canadien d'Archéologie/
Editor, Canadian Journal of Archaeology : Dr. James Tuck
Rédacteur, Bulletin/Editor, Newsletter : Dr. Margaret Hanna

Welcome to the Canadian Archaeological Association Annual Meeting for 1988. This programme contains general information about the conference, details of scheduled sessions and workshops, business meetings and special symposia, and abstracts of all scheduled papers.

Information

Information on the conference or the Canadian Archaeological Association can be obtained at the registration desk, located on the upper floor of the Conference Centre. You may join the CAA or renew your membership at the registration area.

The staff of the Conference Centre or your hotel can provide information on facilities and local attractions in Whistler. Information on bars and restaurants is available at the entrance to the Conference Centre.

Messages

Messages can be left at the message board at the registration area.

Travel

Maverick Coach Lines operates a daily service to the Vancouver Bus Depot, with buses leaving Whistler at 0830, 1330 or 1830, and arriving at 1045, 1545 and 1815. The airport bus can be boarded at the Vancouver Bus Depot. Check with your hotel for confirmation of the schedule and the nearest pick-up point.

Details of departure of the charter buses on Sunday morning will be announced during the conference. You must have pre-registered for this service.

Airline information can be obtained from the following :

Air B.C. 278-3800 (reservations) 278-5100 (flight information)

Air Canada 688-5515 (reservations) 688-6630 (information)

Alaska Airlines 1-800-426-0333

Canadian Airlines International 682-1411 (reservations)

689-9166 (information)

Continental 1-800-525-0280 (domestic)

1-800-231-0856 (international)

Delta 1-800-843-9378

United 683-7111

Wardair 669-3355 (reservations) 273-2442 (information)

All calls will be long distance, except those with toll-free numbers.

Travel Grants

Some funds will be available to offset expenses incurred in travel to the conference. A claims form will be included in the registration package. You are eligible for funding if you are a CAA member, and if you are a direct participant in the scientific programme of the conference. Note that this funding is for travel only, and cannot be used for hotel costs.

Sessions

Sessions run from approximately 0900 to 1600 on Thursday, Friday and Saturday. With the exception of the Plenary Session (Friday p.m.), **all papers have a maximum time limit of 20 minutes**. Session chairpersons have been asked to enforce this rule rigorously. No changes will be made to the advertised programme. If a scheduled paper is not presented, chairpersons will declare a 20 minute "break" or allow time for questions and discussion. This is to ensure that papers are presented at the time advertised, and will allow people to move from one session to another and be sure of hearing papers at the correct time.

Coffee breaks generally will be at 1020 and 1440.

Please note the following variations in the programme :

1. The "Early Man in B.C." session begins at 0850 on Thursday morning.
2. The "Archaeology and Cultural Tourism" session on Friday morning begins at 0840.
3. Coffee on Friday afternoon is at 1510
4. All sessions on Saturday morning begin at 0920.
5. The "For Old Times" session on Saturday afternoon begins at 1330.

Audio-visual

Carousel - type 35mm transparency projectors and overhead projectors will be provided in each room. A projector and screen will be available for slide previews near the conference rooms. A volunteer will be available in each session to assist with projection.

Posters

A combined session of poster and computer software displays will be held on Saturday morning, 0900 to 1200, in the book room.

Book room

The book room will be in operation from 0900 to 1600 on Thursday, Friday and Saturday, in Hillcrest A. If you have brought material for display, please contact Dave Maxwell or one of the book room volunteers. On Saturday morning, poster and computer

software displays will be located in the book room.

Workshops

Unless you make arrangements with the workshop organisers, you should only attend workshops if you have pre-registered for them. The following workshops are scheduled :

1. Fur Trade Archaeology (Olga Klimko)
Thursday May 12th, 0900 - 1200, Jordans A
2. Archaeological Dating Methods (Gary Nower)
Friday May 13th, 0900 - 1200, Jordans B
3. Conference Organization (Lesley Nicholls)
Saturday May 14th, morning, location to be announced

Plenary Session

The early afternoon of Friday May 13th will be devoted to a plenary session on Archaeology and the Economics of Cultural Tourism. Three invited speakers will present extended papers on various aspects of a topic which will soon begin to impinge on the work of most professional archaeologists. The plenary session will be preceded by a morning session of contributed papers on the same theme.

CAA Executive Meeting

The CAA executive will meet all day, Wednesday, May 11th., in the Board Room of the Mountainside Lodge.

Canadian Provincial and Territorial Archaeologists

There will be a meeting of this organisation on Wednesday, May 11th., in Salon A/B of Blackcomb Lodge.

Forum on Federal Heritage Legislation and Programmes

This forum is hosted by the CAA Federal Heritage Policy Committee (chaired by W.J. Byrne). John Thera and Elizabeth Snow, Department of Communications, will be in attendance. Time : Thursday May 12th, 1930 - 2100. Place : Parkhurst Room. All CAA members are urged to attend. The forum will be followed by a no-host bar.

CAA Annual General Meeting

The Annual General Meeting of the CAA will take place at 1530 on Friday May 13th in the Parkhurst Room. All members of the CAA are urged to attend this meeting.

Association of Consulting Archaeologists

The time and place of this meeting will be announced at the Conference.

Canadian Maritime Heritage Foundation

There will be a meeting of this organisation following the last paper in the Marine Archaeology session on Saturday afternoon. Details will be announced during the session.

Social Events

Wednesday May 11th . Reception hosted by Department of Archaeology, Simon Fraser University, in the Atrium of the Conference Centre from 1730 to 1930. The registration desk will be open at this time.

Thursday May 12th . Cash bar, following the Forum on Legislation and Policy, in the Atrium of the Conference Centre from 2100 to 2400.

Friday May 13th . Cash bar, hosted by the Archaeological Society of British Columbia and the Underwater Archaeological Society of British Columbia, in the Sky Room, Conference Centre, 1800 to 1900. This reception will precede the Banquet.

Friday May 13th . Banquet, Sky Room, Conference Centre, 1900. Tickets available at \$20.00. Banquet speaker will be Jacques Dalibard of Heritage Canada.

Field Trips

The advertised field trip to Lillooet has been cancelled because of low registration.

Rock Art of Gabriola Island

Cost : \$35.00

Leave Whistler by commercial bus on Sunday morning. Drive down coast to Horseshoe Bay, where you will be met by chartered bus. Ferry to Nanaimo. Visit Nanaimo Petroglyph Park. Ferry to Gabriola Island. Visit various petroglyph sites. Gabriola Island has one of the largest concentrations of petroglyphs in B.C. Included are horizontal and vertical panels with many stylistic variations. Four or five sites will be visited. Return to Vancouver by ferry and bus.

THURSDAY MAY 12TH : MORNING

Room : Jordans B

"Temporal and spatial distribution of ceramic complexes on the northern periphery of the Northeast : Manitoba to the Maritimes"

Chairpersons : D.L. Gordon and D.W. Black

0900 : Diana Gordon and David Black : "Introduction to the Symposium"

0920 : Carole A. Stimmell : "Northern ceramics : an archaeological enigma"

0940 : Stephen A. Davis : "The ceramic period in Nova Scotia"

1000 : Michael Deal : "Spednic Lake ceramics : structure, design and function through time"

1020 : COFFEE

1040 : Gilles Tassé : "La céramique du site de la Falaise aux Grandes-Bergeronnes, Comte de Saguenay"

1100 : H.J. Daechsel and P.J. Wright : "The Sand Banks Tradition - a Late Middle Woodland manifestation in eastern Ontario"

1120 : Jean-Luc Pilon, Carole Stimmell, R.G.V. Hancock : "The analysis of ceramics from the Hudson Bay Lowlands, northern Ontario"

1140 : Discussant *1

1200 : LUNCH

THURSDAY MAY 12TH : MORNING

Room : McGuire A

"Early Man in British Columbia"

Chairperson : Roy L. Carlson

0850 : Roy L. Carlson : Introductory Remarks

0900 : Knut R. Fladmark : "Charlie Lake Cave"

0920 : Jonathan C. Driver : "The significance of the Late
Pleistocene/Early Holocene fauna from Charlie Lake Cave"

0940 : Ian R. Wilson : "Pink Mountain and other Paleoindian sites"

1000 : Daryl Fedje : "Early man in the northern Rocky Mountains"

1020 : COFFEE

1040 : Wayne Choquette : "Early remains in the Kutenai region"

1100 : Shawn D. Haley : "The Pasika Complex revisited"

1120 : Nicholas Gessler : "Kiusta and other early assemblages from
the Queen Charlotte Islands"

1140 : Philip M. Hobler : "The excavations at Joashila : some
answers and questions"

1200 : LUNCH

THURSDAY MAY 12TH : MORNING

Room : Hillcrest B

**"The NOGAP Archaeology Project : An Experiment in Northern
Archaeological Research and Management"**

Chairperson : Jacques Cinq-Mars

0900 : Jacques Cinq-Mars : "The NOGAP Archaeology Project : past,
present and future"

0920 : Jeff Hunston : "Yukon's North Coast Project (NOGAP 1985-
88) and northern hydrocarbon development - towards a
framework for regional management of archaeological
resources"

0940 : V.N. Rampton : "Geomorphology as an aid to mapping
archaeological resources in NOGAP areas"

1000 : R.J. Le Blanc : "Archaeological reconnaissance and test
excavations in the Mackenzie Delta-Beaufort Sea region of
the NOGAP study area"

1020 : COFFEE

1040 : David Morrison : "The later prehistory of Franklin Bay,
N.W.T."

1100 : Jacques Cinq-Mars, R.S. MacNeish and Erle Nelson :
"Engigstciak revisited"

1120 : L.A. Still : "Archaeological faunal remains from the
southwest Anderson Plain, N.W.T."

1140 : Murielle Nagy : "L'exploitation du caribou au site NgVh 1
dans le nord du Yukon"

1200 : LUNCH

THURSDAY MAY 12TH : AFTERNOON

Room : Jordans B

"Temporal and spatial distribution of ceramic complexes on the northern periphery of the Northeast : Manitoba to the Maritimes" (continued from morning)

Chairpersons : D.L. Gordon and D.W. Black

1320 : Roger Marois : "Individualism, regionalism, universalism : friends or foes"

1340 : David L. Keenleyside : "Maritime prehistoric ceramics in perspective"

1400 : James B. Petersen : "The pseudo scallop shell ceramic horizon style in North American prehistory"

1420 : Peter G. Ramsden : "The Huron-Algonkian interface : the view from Haliburton and the Kawartha Lakes"

1440 : COFFEE

1500 : B.A. Nicholson : "Ceramics on the Plains/Parkland interface of southwestern Manitoba"

1520 : Discussant #2

THURSDAY MAY 12TH : AFTERNOON

Room : McGuire A

"Early Man in British Columbia" (continued from morning)

Chairperson : Roy Carlson

- 1320 : David L. Pokotylo and Donald H. Mitchell : "Early period components at Milliken Site, Fraser Canyon, B.C."
1340 : R.G. Matson : "The Old Cordilleran component at Glenrose Cannery Site and the origins of the Northwest Coast Pattern"
1400 : Robert E. Ackerman : "Early maritime culture complexes of the northern Northwest Coast"
1420 : Gary Coupland : "The early prehistoric occupation of Kitselas Canyon"

1440 : COFFEE

1500 : Roy L. Carlson and Aubrey Cannon : "Early Namu"

1520 : W. Karl Hutchings : "The Namu obsidian industry"

1540 : Alan McMillan : "Early surface collections from Alberni Valley, Vancouver Island"

1600 : Milton Wright : "Coquitlam Lake"

1620 : Arnoud H. Stryd and Michael K. Rousseau : "The early prehistory of the Mid-Fraser-Thompson River area of British Columbia"

1640 : PANEL DISCUSSION BY ALL PARTICIPANTS

THURSDAY MAY 12TH : AFTERNOON

Room : Hillcrest B

**"The NOGAP Archaeology Project : An Experiment in Northern
Archaeological Research and Management" (continued from
morning)**

Chairperson : Jacques Cinq-Mars

1320 : Jean-Luc Pilon : "New insights into the prehistory of the
Lower Mackenzie Valley; Anderson Plain region, Northwest
Territories"

1340 : Sheila Greer : "The Trout Lake archaeological localities : a
northern Yukon site cluster"

1400 : Patricia D. Sutherland and H. Paul Roy : "Using aerial
photography for site survey in Arctic Canada : the Lancaster
Sound NOGAP study"

1420 : Charles Arnold and Christopher Hanks : "Native training
programs in the NOGAP area"

1440 : COFFEE

1500 : ROUND TABLE DISCUSSION
Facilitator : W.E. Taylor, Jr.

THURSDAY MAY 12TH : AFTERNOON

Room : Jordans A

"Historic and public archaeology – contributed papers"

Chairperson : Scott Hamilton

1320 : Heather Devine : "Archaeology, prehistory and the Native Learning Resources Project"

1340 : Sue Bazely : "The development of urban archaeology in Kingston : working towards a new planning policy"

1400 : W. Bruce Stewart : "The Fort Frontenac Cemetery : the way we treat our heroes"

1420 : Dena Doroszenko : "MacDonell House : an archaeological study of a fur trader's estate"

1440 : COFFEE

1500 : David Burley and Luc Dallabona : "Palisades and function : understanding construction variability in the fur trade of western Canada"

1520 : Scott Hamilton : "Site structure and artifact patterning at Rocky Mountain Fort (HbRf 31)"

1540 : Beth Bedard : "Native Indian presence in the fur trade : problems and considerations"

1600 : W.G. Quackenbush : "Tastes of Canadians and dogs : settlement pattern at McLeod Lake Post, British Columbia (GfRs 2)"

EVENING EVENTS

THURSDAY MAY 12TH

**1930 - 2100 FORUM ON FEDERAL HERITAGE
LEGISLATION AND PROGRAMMES**

CHAIRPERSON : W.J. BYRNE

2100 CASH BAR, ATRIUM

FRIDAY MAY 13TH : MORNING

Room : Hillcrest B

"Ecological and social approaches to the interpretation of material culture : current research in Africa"

Chairpersons : Joanna Casey and Diane Lyons

0900 : Francois J. Kense : "Subsistence, settlement and trade in northern Ghana : preliminary indications from the Gambaga Escarpment survey"

0920 : Joanna L. Casey : "Kintampo and Mamprussi : the past and present use of the Gambaga escarpment"

0940 : Scott MacEachern and Sandra Peacock : "Ethnicity and ceramic variations around Mayo Plata, northern Cameroon"

1000 : Diane Lyons : "Men and women and household space : an ethnoarchaeological study of ethnic spatial patterning in Doulo, northern Cameroon"

1020 : COFFEE

1040 : Kathlyn M. Stewart : "Early Holocene fishing adaptations in northern Kenya"

1100 : M.R. Kleindienst and P.J. Sheppard : "Technological change in the Early and Middle Stone Age at Kalambo Falls"

1120 : VIDEO PRESENTATION : Preview of "Dokwaza : last of the African iron masters" by Nicholas David and Yves Le Bleis

FRIDAY MAY 13TH : MORNING

Room : Jordans A

"Fraser River investigations in corporate group archaeology"

Chairperson : Brian Hayden

0900 : W. Karl Hutchings : "A pre-pithouse component from the Keatley Creek Site (EeR1 7)"

0920 : R.J. Muir : "A rim with a view : an interpretive analysis of housepit rim deposits at the Keatley Creek Site (EeR1 7)"

0940 : Rob Gargett : "Cleaning up after the guests have gone"

1000 : Karla D. Kusmer : "Contributions of zooarchaeological analysis to our understanding of site formation processes and activity patterning at housepit sites"

1020 : COFFEE

1040 : James G. Spafford : "Lithic strategies in an Interior winter village"

1100 : Rob Tyhurst : "Access to traditional resources in the Lillooet area : an ethnoarchaeological approach"

1120 : Diana Alexander : "An ethnoarchaeological model of Interior Plateau land use patterns"

1140 : Brian Hayden : "Big men, little men, beggarmen, feast : the flesh of corporate group remains"

1200 : LUNCH

FRIDAY MAY 13TH : MORNING

Room : McGuire A

"Prehistory of Western North America : contributed papers"

Chairperson : Milt Wright

0900 : R.E. Vance : "Aspects of postglacial climate in the western Interior of Canada"

0920 : Milt Wright : "Brassy minnows and early man - Ice-free corridor research in northwest Alberta"

0940 : John W. Ives : "Site positioning strategies in the Boreal Forest - why the Alsands were where they were"

1000 : Bruce Ball : "Culture-historical integration on the northern Plains"

1020 : COFFEE

1040 : D.P. Johnstone : "1987 excavations at Long Harbour"

FRIDAY MAY 13TH : MORNING

Room : Parkhurst

"Archaeology and cultural tourism"

Chairpersons : Bjorn Simonsen and Brian Spurling

0840 : James A. Tuck : "Public archaeology : an example from Red Bay, Labrador"

0900 : C.J. Turnbull : "Archaeology in use : the potential of cultural tourism in New Brunswick"

0920 : A.P. Buchner : "Heritage resources and cultural tourism in Manitoba" *Heritage Resources Branch.*

0940 : Gerald T. Conaty : "Public archaeology at Last Mountain House, Saskatchewan" *Parks, Rec. + Culture (Museum)*

1000 : Ernie G. Walker : "The establishment of the Wanuskewin Heritage Park" *Sask. 9 Nov. 1981*

1020 : COFFEE

1040 : Jack Brink : "Taking it to the streets : the new 10 million dollar Interpretive Centre at Head-Smashed-In Buffalo Jump"

1100 : Marc Stevenson : "Ethnoarchaeology and ethnohistory in the service of cultural tourism"

1120 : J.F.A. Hamilton : "An outdoor museum : recording the cultural resources on the Chilkoot Trail, British Columbia"

1140 : Mick Collins and Robert D. Adam : "On the Buses : is Indiana Jones ready for the mystery tour"

1200 : Karolyn E. Smardz : "Toronto students dig into their past"

1220 : LUNCH

FRIDAY MAY 13TH : AFTERNOON

Room : Parkhurst

PLENARY SESSION : "Archaeology and the economics of cultural tourism"

Chairpersons : Brian Spurling and Bjorn Simonsen

1340 : W.J. Byrne, Assistant Deputy Minister, Alberta Culture and Multiculturalism

1410 : Jacques Dalibard, Director, Heritage Canada

1440 : Peter Addyman, Director, York Archaeological Trust, U.K.

1510 : COFFEE

1530 : CAA ANNUAL GENERAL MEETING

EVENING EVENTS

FRIDAY MAY 13TH

**1800 - 1900 CASH BAR, HOSTED BY THE
ARCHAEOLOGICAL SOCIETY OF BRITISH COLUMBIA
AND THE UNDERWATER ARCHAEOLOGICAL SOCIETY OF
BRITISH COLUMBIA**

**1900 BANQUET, hosted in part by the Province
of British Columbia
SPEAKER : JACQUES DALIBARD, HERITAGE
CANADA**

SATURDAY MAY 14TH : MORNING

Room : Soo Valley

"Current research on late Paleoindian"

Chairperson : Pat Julig

0920 : Andrew Stewart and Christopher Hanks : " The potential for early human occupation of the barrenlands at the time of the Tyrrell Sea"

0940 : Christopher J. Ellis : "Hi-Lo : an Early Lithic lithic complex in southern Ontario"

1000 : M. Newman : "The analysis of blood residues - Cummins Site, Ontario"

1020 : COFFEE

1040 : P.J. Julig, L.A. Pavlish, and R.G.V. Hancock : "INAA of Paleoindian lithic artifacts from sites in the Thunder Bay, Ontario region : determination of geological sources"

1100 : Andrew Hinshelwood : "Re-examination of the Brohm Site, DdJe 1, in regional context"

1120 : P.J. Julig : "Organizational aspects of the Late Paleoindian taconite industry in the Thunder Bay, Ontario region"

1200 : LUNCH

SATURDAY MAY 14TH : MORNING

Room : McGuire B

"Canadian rock art : recent work"

Chairpersons : Zenon Pohorecky and Tim E.H. Jones

0920 : Tim Jones : "Regional (and ethnic?) style in Canadian Shield rock art"

0940 : Doris Lundy : "Floating in time : attempts to provide chronological anchors for rock art sites in British Columbia"

1000 : Katherine Lipsett : "Ethnographic insights : rock art fieldwork in northern Saskatchewan"

1020 : COFFEE

1040 : Tim Jones : "Conservation of the St. Victor petroglyphs"

1100 : Chris Arnett : "The iconography of Stein River rock painting"

1120 : DISCUSSION : Rock art conservation and research issues

1200 : LUNCH

SATURDAY MAY 14TH : MORNING

Room : Hillcrest A (Book Room)

"Contributed posters and computer applications"

The following displays will run simultaneously. Presenters of each display will be available during the morning session. Abstracts of each display are included with other abstracts in the programme.

Posters

Patricia D. Sutherland : "The NOGAP Archaeology Project :
developing archaeological research and management
approaches in the Northwest Passage region of Arctic
Canada - the Lancaster Sound case study"

Mary Dell Lucas : "Archaeology in tourism"

Computer applications

Terrance H. Gibson : "Disseminating ceramic information using a
visual electronic data base"

Luc Dallabona and Andrew Barton : "A Hypercard based
zoarchaeological cataloguing programme for the Apple
Macintosh"

SATURDAY MAY 14TH : MORNING

Room : McGuire A

"Contributed papers - research methods"

Chairperson : Martin P.R. Magne

0920 : Peter McCartney and M. Bertulli : "Site catchment comparison of Truelove Lowland and Maxwell Bay, Devon Island, High Arctic"

0940 : Bryan C. Gordon : "1450-1700 A.D. faunal distribution over 5 floors in a Copper Inuit hut at Nadlok"

1000 : William C. Prentiss and Ian Kuijt : "Distinctive debitage assemblages and archaeological site formation"

1020 : COFFEE

1040 : Martin P.R. Magne : "Lithic reduction experiments and assemblage formation processes"

1100 : Henry T. Epp : "Man the effect : an alternative look at Pleistocene extinctions"

1120 : Peter T. Bobrowsky : "The completeness of the Holocene sedimentary record and significance of time averaging"

1140 : Moira T. McCaffrey : "Cultural and geological landscapes in the Labrador Trough"

1200 : LUNCH

SATURDAY MAY 14TH : MORNING

Room : Hillcrest B

**"Recent investigations on the Interior Plateau culture area
of northwestern North America"**

Chairpersons : Mike Rousseau and Ian Kuijt

0920 : R.G. Matson : "The origins of the Plateau Pithouse Tradition

- or the Salish Springs Pattern 20 years later"

0940 : Ian Kuijt : "Paleoenvironment and culture change on the
Canadian Plateau : a reappraisal"

1000 : Wayne Choquette : "Palaeohydrology, salmon carrying
capacity, and human settlement in the Upper Columbia River
basin : initial considerations"

1020 : COFFEE

1040 : James C. Chatters : "Resource intensification and
sedentariness on the Columbia Plateau"

1100 : Robert E. Greengo : "A possible prehistoric link between the
Coast and Plateau"

1120 : Daryl Fedje and Joanne McSparran : "'Westerners' in the
eastern valleys of the Northern Rocky Mountains :
population movement or diffusion ?"

1140 : Malcolm A. James : "A discussion of the protohistoric
depopulation of the Upper Athabasca River Valley"

1200 : LUNCH

SATURDAY MAY 14TH : AFTERNOON

Room : McGuire A

"Contributed papers - research methods" (continued from morning)

Chairperson : Martin P.R. Magne

1320 : D.W. Black, K. Gruspier and D.A. Johnston : "The Camp Site : structural and subsistence analyses of an insular Quoddy region shell midden"

1340 : L. Dallabona : "A microcomputer-based system for cartographic and graphics generation"

1400 : James Molnar : "A structural analysis of Algonquian and Iroquoian myth"

1420 : D.I. Godfrey-Smith and D.J. Huntley : "Optical dating : the optical and thermal responses of sediment extracts"

1440 : COFFEE

1500 : Richard E. Morlan : "Zooarchaeology and taphonomy at Tipperary Creek, Saskatchewan"

1520 : S. Copp : "Advantages of an urban archaeology field school"

SATURDAY MAY 14TH : AFTERNOON

Room : Hillcrest B

**"Recent investigations on the Interior Plateau culture area
of northwestern North America" (continued from morning)**

Chairpersons : Mike Rousseau and Ian Kuijt

1320 : Gareth S.L. Jones : "Territoriality, social interaction, and
style : a research design for the Southern Interior"

1340 : Heather Pratt : "Technological variability at a Hat Creek
lithic surface scatter"

1400 : Mike K. Rousseau : "The significance and function of key-
shaped formed unifaces on the Interior Plateau"

1420 : Karla D. Kusmer, Dana Lepofsky and Kenneth Lertzman : "A
statistical sampling method for large pit features : an
example from the Interior Canadian Plateau"

1440 : COFFEE

1500 : E. Gwyn Langemann : "Zooarchaeology of the Lillooet region,
British Columbia"

1520 : Brian Vivian : "Prehistoric adaptations to the B.C. Plateau :
a perspective from the Similkameen Valley"

SATURDAY MAY 14TH : AFTERNOON

Room : Soo Valley

"For Old Times : papers in honour of Richard G. Forbis"

Chairperson : Michael Wilson

1330 : M. Wilson : Introductory remarks

1340 : W.J. Byrne : "The young Dr. Forbis"

**1400 : B.O.K. Reeves : "R.G. Forbis and the development of
archaeology"**

**1420 : Margaret Kennedy : "A brief history of historical
archaeology in Alberta"**

1440 : COFFEE

**1500 : James W. Helmer and Ian G. Robertson : "Quantitative shape
analysis of early Palæo-Eskimo endblades"**

**1520 : J. Rod Vickers : "The Ross Site revisited : seasonal round
problems"**

**1540 : Brian Kooyman : "Documenting ethnic groups using
butchering pattern analysis"**

**1600 : Leslie B. Davis : "Paleoindians in the Rocky Mountains and
Northwestern Plains of Montana"**

**1620 : Michael Clayton Wilson : "Searching for Paleo-Indians in
southern Alberta : current perspectives"**

SATURDAY MAY 14TH : AFTERNOON

Room : McGuire B

"Research reports in marine archaeology"

Chairperson : N. Alexander Easton

1320 : E. Willis Stevens : "Submerged cultural resource
management : the shipwrecks of 18th-century Louisbourg"

1340 : Janette M. Ginns : "Finders-keepers?"

1400 : John Robinson : "A British Columbia perspective on the
problems and some solutions in conserving shipwreck sites
and their contents"

1420 : Tom Beasley : "The Sydney Inlet mystery wreck : 'solving
the mystery' "

1440 : COFFEE

1500 : Andrew N. Sherwood : "Excavations at Herod's Harbour,
Caesarea Maritima (Israel)"

1520 : J. Marc : "Southern Vancouver Island historic shipwreck
inventory"

1540 : N. Alexander Easton : "Shoreline subsidence, rising sea
levels and coastal settlements : implications for
prehistoric underwater archaeology on the Northwest
Coast"

1600 : CANADIAN MARITIME HERITAGE FOUNDATION MEETING

ABSTRACTS

RESUMES

Robert E. Asherman
Department of Anthropology, Washington State University
EARLY MARITIME CULTURE COMPLEXES OF THE NORTHERN NORTHWEST COAST

The Northwest Coast maritime cultural complexes may be a legacy of adaptations brought about by local populations, during the flooding of the Bering-Chukchi Sea platform. The earliest evidence for a coastal occupation, however, is not found immediately adjacent to this coastal shelf, but further to the south in the ice-free coastal margins of western North America. It is here along the North Pacific shores of southeastern Alaska and British Columbia that the earliest coastal occupations of northwestern North America have been recorded, c. 10,000-9,000 B.P.

The early cultural stage, c. 10,000-5,000 B.P., of southeastern Alaska appears to be divisible into two periods, dating roughly between 10,000-8,500 B.P. and 8,500-5,000 B.P. These two cultural periods encompass the transition from the pre-Boreal to the Boreal interval (c. 9,500-9,000 B.P.) and the Boreal (c. 9,300-8,500 B.P.) and Atlantic (c. 8,500-600 B.P.) intervals. This is a time of increasing temperature and precipitation, rising sea levels, and to the north, decreasing sea ice. Culture Period I is characterized by a microblade industry based upon frontal, wedge-shaped cores similar to those in the Diuktai Culture complex of Northeast Asia. Bifacial points are also present at some sites. Microblade technology continues into the Culture Period II, but the frontal, wedge-shaped microblade cores disappear to be replaced by polyhedral microblade cores. In Northeastern Asia, a similar sequence occurs -- the Diuktai Culture (wedge-shaped microblade cores) is replaced by the Sumnagin Culture (polyhedral cores). The change in microblade core preparation procedures may have been related to an increasing use of local raw materials which are coarser in texture than those utilized in the earlier period. This technological shift also coincides with the onset of the warm Atlantic interval which may have provided the opportunity for increased long-range communication and expanded resource exploitation. The second cultural period of the northern Northwest Coast also has provided the first solid evidence of the use of marine resources on the outer coast of the Alexander Archipelago in Southeastern Alaska.

Alexander, Diana
Department of Archaeology, Simon Fraser University
An Ethnoarchaeological Model of Interior Plateau Land Use Patterns

Data from recent ethnoarchaeological studies in the Chilcotin and the Mid-Fraser River area are combined with information from the numerous ethnographic reports from these regions to produce a model of traditional, native, land use patterns on the Interior Plateau. The success of this approach for interpreting the late prehistory of the Interior Plateau is examined in a brief comparison of this predictive ethnoarchaeological model with the archaeological data base. Results include documentation of: (1) the intensive use of the alpine-subalpine ecotone during the historic and protohistoric periods, (2) the use of this ecotone for large, multi-band gatherings featuring competitive games and gambling, (3) the adjunct use of important salmon fishing sites for regional exchange, and (4) the importance of hunting and plant gathering activities and sites for the largely salmon-dependent cultures of the Interior Plateau.

Chris Arnett
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Sooke, B.C.
V8S 1N0

The Iconography of Stein River Rock Painting

The Stein River Valley contains the largest concentration of rock painting sites, in their original settings, in the Interior of British Columbia. To date, thirteen sites, including one of the largest in the Province, have been identified along a twenty mile stretch of the river.

This paper will focus on the iconography, or subject matter, of these paintings using sources such as the late 19th century ethnographic data recorded by James Teit, Charles Hill-Tout, and Harlan Smith, as well as more recent research.

Arnold, Charles and Christopher Hank
Prince of Wales Northern Heritage Centre
Native Training Programs in the NOGAP Area

Northern native people have a long-standing interest in their archaeological heritage, but seldom have had opportunities to participate in archaeological studies. The Prince of Wales Northern Heritage Centre received NOGAP funding in 1985 and 1986 to help resolve that problem by preparing and providing archaeological field training programs in the hydrocarbon development area. We have found that the key to effective training for people who lack an academic background is to make archaeology relevant. This paper summarizes our approach to archaeological field training, and identifies other ways that native people can participate in archaeological studies. Benefits which archaeological projects can derive from participation by native peoples are also discussed.

Bruce Bell
Archaeological Survey of Alberta
Culture-historical integration on the Northern Plains

It has been noted on several occasions previously that there exists no satisfactory culture-historical sequence for northern Plains prehistory. Of the models available, the three most frequently referred to are the Mulloy, Reeves and Frison schemes. This paper reviews the substance of these schemes with particular reference to Willey and Phillips. Mulloy's model is shown to be what it was meant to be: a preliminary, generalized historical outline. Reeves' scheme is shown to suffer from difficulties in terminology resulting in a general lack of consistency and meaning. Frison's model, while more formally defined, also suffers from problems in terminology. The result, in general, has been confusion on the part of northern plains researchers. After a review of the prevailing models an alternative scheme is proposed. Recognizing that researchers working within a defined area will not all agree with respective models, this paper seeks to evaluate existing terminology and stimulate criticism of existing concepts and misuses in northern plains prehistory.

(retyped)

Bazely, Sue
Catawaqui Archaeological Research Foundation, Kingston, Ontario
The Development of Urban Archaeology in Kingston: Working Towards A New Planning Policy

Urban archaeology in Kingston has its roots deeply embedded in the history and development of the city. Discoveries of below surface heritage resources have been recorded as early as the mid-nineteenth century. Such discoveries have provided a source of great curiosity and interest for Kingstonians and indeed Canadians. The series of events, occurring over the last century, have paved the way for a formal assessment of the archaeological resources of the city of Kingston, leading in turn to the inclusion of archaeological concerns in urban planning.

Tom Beasley
Underwater Archaeological Society of B.C.
The Sydney Inlet Mystery Wreck: "Solving the Mystery"

In July 1957, a group of Oregon divers led by Dr. George Cottrell of Portland discovered the wreck of a unique mid-1800's barque in the Sydney Inlet, a fiord west of Vancouver Island. Several expeditions to the site by Dr. Cottrell and the Canadian Navy during the late 50's and early 60's failed to identify this vessel. Unknown are her name, origin, age and destination, thus she is referred to as the "Sydney Inlet Mystery Wreck". She was a large vessel, forty metres in length and over 440 tons, constructed of teak and mahogany, and with a cargo of douglas fir piles.

Unraveling the mystery was the objective of the British Columbia expedition in June 1987. The Society excavated two portions of the vessel using a water dredge in hopes of finding artifacts to identify the vessel. Several artifacts of interest were uncovered including the captain's telescope, an 1850's leather shoe, chinese condiment bowls and carpenter's tools.

The Society's archival research, together with clues from these artifacts, currently points to the "Lord Western" as the Mystery Wreck. This vessel left Sooke for San Francisco in late 1853 with a cargo of douglas fir piles.

More excavation and archival research must be done to positively solve the problem.

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Beth Bedard (Simon Fraser University)

NATIVE INDIAN PRESENCE IN THE FUR TRADE: PROBLEMS AND CONSIDERATIONS

This paper will examine problems encountered in the identification of Native Indian presence at Fort D'Epinet, a fur trade fort from the Peace River area in British Columbia. Two approaches to this problem are examined. The presence and distribution of ethnically diagnostic artifacts found in the fort will be looked at to determine their informative value. In addition, artifact patterning indicating functions performed by the aboriginal people in the context of the fort is outlined.

The strengths and weaknesses of these two approaches are evaluated in terms of their reliability to indicate native presence. Considerations for different approaches will be discussed.

D.W. Black, K. Gruspler and D.A. Johnston

Department of Anthropology, McMaster University/Department of Anthropology, University of Toronto/Roberts Seymour and Associates, Heritage Conservation Technologies

The Camp site: structural and subsistence analyses of an insular Quoddy region shell midden.

The Camp site (8gDq4) is an extensive but shallow shell midden and habitation site located on the Bliss Islands. The site has been occupied intermittently from Early Woodland times until the present.

The prehistoric components at the Camp site have been extensively disturbed post-depositionally by natural pedogenic processes and historic activity. In spite of this, considerable structural integrity remains in the site's contents.

The prehistoric subsistence adaptation represented at the Camp site has been explored through a niche width analysis. It is concluded that, taken as a whole, the faunal assemblage at the Camp site represents a relatively generalized adaptation to the Quoddy region environment, emphasizing the consumption of several relatively productive categories of animal resources.

BOBROWSKY, Peter T.

Department of Geology, University of Alberta

THE COMPLETENESS OF THE HOLOCENE SEDIMENTARY RECORD AND SIGNIFICANCE OF TIME AVERAGING

Detailed analyses of published geologic data have lead several authors to correctly conclude that the completeness of stratigraphic sections is variable depending on the environment of deposition and extent of hiatuses. Quantitative data supports the contention that an inverse relationship exists between accumulation rates and time span. Similarly, the older the deposit sequence the greater the frequency of discontinuities. Holocene sedimentation, represents periodic or episodic deposition, either cyclic or random; that is, any given section represents the net effect of short periods of sediment accumulation imprinted over longer periods of nondeposition and erosion. Hence, an assumed long period of time actually reflects extremely short periods of accretion. Sediment does not accumulate in a gradualistic fashion. Although human activity at a depositional locality may be continuous, the material remains preserved as part of this activity is not equally a gradual phenomenon, but rather depends solely on the periodicity and completeness of the surrounding matrix. It follows from these observations that a lengthy sequence considered in total represents time averaging of numerous shorter term events or activities; again, addition, inaction and removal. On the other hand, temporal dissection of a lengthy time sequence increases the incompleteness of the record. Finer time scales are therefore less complete than the longer scales. Researchers should not attempt to over tax the time resolution capabilities of their exposed deposits and should begin to appreciate the significance of time averaging.

Brink, Jack

Archaeological Survey of Alberta
Taking it to the streets: the new 10 million dollar interpretive Centre at Head-Smashed-In Buffalo Jump

In the summer of 1987, a new 2300 square metre building opened at the Head-Smashed-In Buffalo Jump site in southwestern Alberta, Canada. The Interpretive Centre is a dramatic seven storey high structure built underground in the bedrock escarpment which forms the jump off. Five of the levels contain displays on such themes as Plains environment, Plains Indian culture, the operation of the buffalo jump, European contact and the science of archaeology. The Centre also features a movie theater, two smaller A/V productions, a cafeteria and gift store, education/activity rooms, administrative areas, an archaeological lab, and a series of outside trails.

Displays within the Centre focus primarily on prehistoric Plains Indian life, thus necessitating a high degree of archaeological input. This was combined, however, with input from the contemporary Blackfoot Native community. Such input included the review of all display ideas and text, the fabrication of many artifacts, handling and installation of all ceremonial related artifacts and the provision of additional research information via informant interviews. Within the Centre, the anthropology/archaeology stories are balanced and complemented with a series of the Blackfoot peoples' own Napi (the mythical creator) stories. Native involvement continues with the majority of the Centre's staff - guides, supervisors, archaeological crew - being Blackfoot people.

This paper will present an illustrated preview of the new Interpretive Centre at this U.N.E.S.C.O. World Heritage Site, and will discuss the themes, the displays, Native participation and the on-going archaeological project at Head-Smashed-In.

A.P. Buchner

Historic Resources Branch, Manitoba Culture, Heritage and Recreation
Heritage resources and cultural tourism in Manitoba

Provincial initiatives or involvement in public education and interpretation are discussed. Foci of interest include the Kenosewun Centre at Lockport, the Moncur Gallery of Prehistory, the Stott Site in Grand Valley, a major series of prehistoric boulder alignments of Tie Creek in the Whiteshell Park, and the development of the CN East Yard as the "Forks" of the Red and Assiniboine Rivers.

(retyped)

Burley, David and Luc Dallabona
Department of Archaeology, Simon Fraser University

Palisades and Function: Understanding Construction Variability in the Fur Trade of Western Canada

An imagery of small fortresses surrounded by defensive palisades built as protection from an ever hostile environment forms a popular perception of the western Canadian fur trade. Despite this imagery, historical research and excavations at many posts reveal that palisades either were not built or they were built in such a manner that they would be extremely tentative as defensive features. The present paper presents a survey of palisade use at western Canadian fur trade posts and examines the critical variables associated with palisade construction. While defence is found to be an important factor, it does not account for all palisade construction. Other examined variables include post permanency, the position of the post within a fur trade hierarchical organization, the company involved and individual post circumstances. With each of these considerations, we argue that palisades move beyond defence and form an important means of symbolic communication. This symbolic realm and its implications for fur trade archaeology also is examined.

W.J. Byrne
Alberta Culture and Multiculturalism
The Young Dr. Forbis

While it may seem presumptuous for a former student to purport to speak of the "young" Dr. Forbis, it must be clarified that this is a reference to a state of mind, not the calendar. From this perspective it is fair to state that he has always represented a unique viewpoint in Canadian archaeology, characterized by candour and a healthy contempt for convention in any of its various guises. Collectively these attributes have frequently been the chosen self-descriptors of those who style themselves the radical innovators in any discipline, and have frequently been equated with youth. Throughout his professional career Dr. Forbis could rightfully lay claim to these youthful qualities, and add to them his considerable powers of scholarship. The combination made him a powerful force in the Canadian archaeological community whose influence continues to this day.

(retyped)

Roy L. Carlson
Department of Archaeology, Simon Fraser University
Aubrey Cannon
Department of Anthropology, University of Toronto
EARLY NAMA

The early deposits at Nama dated between 9,700 and 5,000 C-14 years B.P. contain abundant evidence of two lithic complexes: (1) a microcore and blade complex similar to that which occurs earlier in other sites to the north, and (2) a pebble tool and leaf-shaped point complex similar to that from sites to the south. These data suggest that early Nama is an interface between two early widespread cultural traditions.

Faunal remains are found in early Nama deposits in the time span between 5,000 and 6,500 B.P. The same range of fish species as found in all later period deposits occurs in this early period, and indicates the presence of a well-developed fishing technology in the earliest levels for which faunal data are available. Salmon dominates the fish assemblage throughout the site occupation, but are of much lower frequency in this early period.

The range of mammal species is virtually the same throughout the site history, but the early period hunting reflects more of a marine than a marine/forest orientation. Sea mammals are of greatest abundance in early and middle periods as are all fur bearing mammals except for the sea otter.

Joanna L. Casey
Department of Anthropology, University of Toronto
Kintampo and Mampussi: The Past and Present Use of the Gasbaga Escarpment

This paper outlines my proposed research in the Gasbaga Escarpment area of Northern Ghana, West Africa. The research has both archaeological and ethnographic components. The archaeological aspect proposes to investigate the Kintampo industry, the earliest known settled manifestation in Ghana. While evidence from other parts of the country has been provocative, the question of an agricultural base for Kintampo is very much an open question. The Gasbaga Escarpment offers a unique opportunity to examine Kintampo from a regional perspective in order to address the questions of intensification and social complexity. The ethnographic component of the research investigates the current use of indigenous resources in the forest reserves along the escarpment. The ethnographic study is aimed at generating basic data on the range of resources available and their current use from which ecological models for human use of the escarpment may be derived. In addition, this component of the research proposes to investigate ethnic diversity as one source of variability in resource selection.

Chatters, James C.
Battelle Northwest, P.O. Box 999, Richland Washington, 99352
Resource Intensification and Sedentariness on the Columbia Plateau

Sedentariness is assumed to develop among hunters and gatherers only in association with a collector-type resource utilization strategy. Aboriginal peoples of the Columbia Plateau adopted sedentary or semi-sedentary lifestyles twice during the late Holocene; once around 4500 BP, and again shortly after 3500 BP. On the Upper Columbia River, at least, the second event is associated with the expected collector-type strategy, but the first is associated with broad spectrum foraging. The common characteristic is resource intensification, although it takes a different form in each case. Demographic history and contemporary ecological conditions provide insights into the process behind the two developments. Results show that the causes for sedentariness are more complex than many have assumed.

Wayne Choquette
Kootenay Cultural Heritage Centre
EARLY REMAINS IN THE KUTENAI REGION

The conventional geological picture of latest Pleistocene British Columbia depicts extensive ice cover and ice margins suspiciously paralleling the International Boundary. A consideration of climatic, geological and chronometric evidence indicates that the region drained by the upper Columbia River was not as extensively glaciated as has been previously assumed and was apparently deglaciated sooner than most of the rest of interior B.C. The archaeological record of the region is summarized and two early complexes are described. The Goatfall Complex is a well-defined representation of the Stemmed Point Tradition. A second, poorly represented and unnamed complex is characterized by microblade technology. The significance of these early remains is discussed in the context of the prehistory of Western North America.

Choquette, Wayne
Kootenay Cultural Heritage Centre
Palaeohydrology, Salmon Carrying Capacity, and Human Settlement in the Upper Columbia River Basin: Initial Considerations

The Holocene palaeohydrology of the upper Columbia River is reconstructed from palaeoenvironmental and geological data. It forms the basis for a predictive model of relative prehistoric salmon carrying capacity which is tested against the archaeological record. This study reveals correlations between the dynamic palaeohydrology of the upper Columbia and prehistoric human settlement / subsistence systems. It appears that the salmon resource of the upper Columbia supported a sufficiently large human population between 4000 and 2000 years ago that the area cannot be considered to have been "marginal" at this time. It is also apparent that reductions in salmon carrying capacity have occurred at times in the past that have disrupted the continuity of salmon-based human settlement systems.

The NOGAP Archaeology Project: Past, Present and Future

Jacques Cinq-Mars
Canadian Museum of Civilization
Hull, Québec

As an introductory statement for the symposium, this paper will review the history, objectives, and approaches of the archaeological component of the inter-agency NOGAP programme. More specifically, it will discuss in some detail the three main areas of activities of the project, namely the field and laboratory related activities, the development of archaeological research and management mechanisms, and the examination of legislative and policy requirements.

Engistciak Revisited

J. Cinq-Mars
Canadian Museum of Civilization

R.S. MacNeilsh
Boston University

Erle Nelson
Dept. of Archaeology, Simon Fraser University

A small series of AMS radiocarbon dates have recently been obtained on faunal material excavated about twenty-five years ago at the Engistciak site, on the northern Yukon coastal plain. Three determinations on bison bones allow us to now state unequivocally that human groups were exploiting bison herds, in this general area, as early as 9,600 years ago. Other lines of evidence also suggest even earlier similar events. The implications of such Pleistocene/Holocene boundary evidence, for our understanding of human palaeoecology in northwesternmost Canada, will be discussed in detail.

Collins, Mick Mick Collins and Assoc., Consultants in Tourism, Parks and Recreation, Victoria, B.C.
Adam, Robert D. Tourism Consultant, Victoria, B.C.

Title: On the Buses: Is Indiana Jones Ready for the Mystery Tour?

The paper deals with the conceptual foundations and practical applications of the tourism aspects of archaeological and historical presentation and interpretation.

First, the structure of the travel industry is outlined with particular reference to the important roles played by heritage attractions. Details are provided on the kinds of tourist markets that can be tapped by archaeological sites, museums and historical theme attractions such as Native Heritage/Cultural Centres. The paper also examines the nature of the tour bus market including the functions and motivations of the tour company, the tour escort and the tourist. Practical tips are provided on ways to maximize educational and economic benefits and how to minimize potential negative impacts on heritage sites and attractions.

Conaly, Gerald T.

Saskatchewan Museum of Natural History

Public Archaeology at Last Mountain House, Saskatchewan

Public education is an important constituent of museum curatorship and is becoming a significant feature in the discipline of archaeology. Professionals are meeting this demand by providing such passively didactic aids as "popular" books, television series, movies, etc. While these satisfy some elements of the public's wish to learn about archaeology, they often create a desire for programming which will enable active participation in archaeological research. Public participation in professionally directed archaeological field work helps develop a broad support base for the discipline and increases awareness of our past while providing a welcome recreational activity.

The Saskatchewan Museum of Natural History and the Parks Branch, Saskatchewan Parks, Recreation and Culture are developing a long term program of public participation in archaeology. The program features the excavation of an archaeological site within a provincial park and an opportunity to assist in the preparation, cataloguing and preliminary analysis of the artifacts. Informal lectures concerning the regional history/prehistory, the significance of the site and aspects of prehistoric ceramic and lithic technologies compliment the field and laboratory experience. The results of each excavation provide a basis for developing local Park programming, thereby enhancing the public's awareness of the province's heritage.

This paper discusses the first year's project. The program was undertaken at Last Mountain House Historic Park, the location of a late 19th century Hudson's Bay Company provisioning post. The organization and logistics of the project are presented and the results are discussed in terms of both public response and scientific/interpretive benefits. The program is then compared with other public archaeology programs in Saskatchewan.

Copp, S
Vancouver Community College, Langara Campus
Advantages of an Urban Archaeology Field School

Three major areas of interest to those involved in teaching field schools are: cost, pedagogical concerns relating to the training of future archaeologists and locating a site which can be used to increase understanding of the past. The excavation and analysis of a 20th century urban garbage dump has proven to be of value in terms of the low costs involved, application of analytical techniques to the data base and historic significance of materials recovered.

Gary Coupland
Department of Anthropology & Sociology, University of British Columbia
THE EARLY PREHISTORIC OCCUPATION OF KITSELAS CANYON

The earliest known prehistoric occupation of the lower Skeena River area is represented at Kitseelas Canyon by the Bornite Phase, 5,000-4,300 B.P. The salient feature of the Bornite Phase is the presence of an obsidian-based prepared core and blade industry, which, combined with cobble core and flake tools, is typical of Microblade Tradition components of the Pacific Northwest. The Bornite Phase assemblage from the Paul Mason site at Kitseelas Canyon suggests a short-term, seasonal fishing camp. Elsewhere, microblades have not been recovered from dated site components in the lower Skeena -- Prince Rupert Harbour area. The closest parallels to the Bornite Phase are found in site components on the Queen Charlotte Islands and in southeast Alaska.

Daec@el, H. J. and P. J. Wright
Cata@qu i Arch@olog ical Res@arch Found@ tion and Ontario Ministry of C@tu re and Commu nica@on s

The Sand Banks Tradition - A Late Middle Woodland Manifestation in Eastern Ontario

The identification of cord marked, bossed and fabric impressed ceramics on a number of sites in eastern Ontario has provided the basis for the extension of the Princess Point Tradition into this region by Sheryl Smith (1981, 1987) and William A. Fox (1982). The attributes and distribution of ceramics associated with this period in eastern Ontario's prehistory are reviewed in this presentation. It is argued that this cultural manifestation may be distinguished as the Sand Banks Tradition based on: 1) a separate geographic identity, and 2) perceived differences in influences on the cultural development of eastern Ontario.

Dallabona, L.

Department of Archaeology, Simon Fraser University

A Microcomputer-Based System for Cartographic and Graphics Generation

In the past, the vast majority of maps and images used for archaeological purposes have been produced manually at considerable costs in time and in money. Recent developments in personal computer technology and associated software have virtually eliminated the need to produce graphics by hand. With a single Apple Macintosh of at least 1Mb RAM, some relatively inexpensive software, and laserprinting equipment, publication-quality maps and images can be generated in a fraction of the time needed to produce the same image in the more conventional hand-drawn method.

The graphics-oriented Apple Macintosh, besides serving as a useful word processing computer, can be used to produce graphics that equal or surpass the quality of manually produced images. Perhaps the most powerful and certainly most impressive graphics software available for the Macintosh is Illustrator from Adobe Systems. This software incorporates PostScript technology that entirely eliminates the 'jagged' lines normally associated with computer generated images. It is essential that documents created in Illustrator are printed on a laserwriter; a printer that utilizes the photocopier-method of image transfer to achieve an image resolution ranging between 300 dots per inch and >2000 dots per inch. This method of graphics generation has been used extensively to produce images ranging from large base maps to detailed site contour maps to even more detailed artifact distribution maps incorporating a wide variety of symbols. In all cases, this system has proved to be approximately three times as fast as manually producing the same images, and at better than 50% the price.

Other more conventional 'pixel-based' graphics software, such as MacPaint and Superpaint, have also been used to produce graphics that require a variety of textures: for example, excavation profiles. Although this software produces an image with some degree of 'jaggedness' in the lines, it has also shown itself entirely acceptable as a means of image production.

The most useful feature of a computer-based graphics system involves the possibility of repeated use of an image for different purposes. For example, Illustrator base maps can be modified innumerable times for a variety of purposes all the while retaining the original document for future use. Although creation of the base map may involve some effort, subsequent maps can be printed in a fraction of the time it would take to create a new map.

Dellebone, L. and Barton, A.
 Department of Archaeology, Simon Fraser University
A Hypercard based Zooarchaeological Cataloguing Program for the Apple Macintosh

The Department of Archaeology at Simon Fraser University has implemented a zooarchaeological cataloguing system that makes use of a new software programming framework developed by Apple for its Macintosh series computers. This software, called Hypercard, enables one to build stacks of cards that can contain any combination of textual, visual and sound information in an extremely user-friendly format. The user navigates their way between 'cards' and 'stacks' by clicking buttons on the screen with the computer's mouse.

This zooarchaeological program is designed with a Help stack, an Accessions stack, and a Catalogue stack. A detailed zooarchaeological classification system was used as the basis for this program and it has resulted in an extremely flexible, open-ended cataloguing tool that can easily be modified for research and comparative purposes. The system allows for varying degrees of user access ranging from restricted access in the form of passwords to open access where anyone can enter or delete information.

Davis, Leslie B.
 Department of Sociology, Montana State University, Bozeman, Montana 59717
Paleoindians in the Rocky Mountains and Northwestern Plains of Montana

The history and current status of Paleoindian research are reviewed and appraised to update the published record. Active surveys and finely focused Paleoindian site excavations in the mountains and plains are a function of problem-oriented interests by several archaeologists and the availability of both public and private funds for such relatively high-visibility research projects. Projects underway in southeastern, west-central and southwestern Montana are providing primary data and permitting paleoecological interpretations of previously unrecognized Paleoindian complexes as well as illuminating certain questions and long-standing regional problems. Given this impetus, it is predicted that Paleoindian-focused research will intensify and that results statewide will establish that the Paleoindian occupation of Montana was extensive and as intensive as in any other part of the region.

Stephen A. Davis
 Department of Anthropology, Saint Mary's University
The Ceramic Period in Nova Scotia

This paper will begin with a report on the preliminary findings of the 1987 test excavations at the Skora Site. This location represents a early Woodland burial mound located on the outskirts of Halifax.

The body of the paper will address the question of a ceramic sequence within Nova Scotia. In the past, attempts to define ceramic chronologies have relied heavily on external sequences, notably those from New York and Maine. Recent excavations within the province have provided a series of dates for Ceramic period occupations. It is now possible to suggest a sequence on the basis of local context without relying on oft used pigeon-holing techniques.

Michael Deal
 Archaeology Unit, Department of Anthropology, Memorial University of Newfoundland
Spednic Lake ceramics: structure, design and function through time

Sites on Spednic Lake, southwestern New Brunswick, have provided a ceramic sequence that spans the entire Woodland period. The ceramic assemblages from these sites are characterized in terms of design structure, design grammar, morphological variation, use-wear and, in one case, absorption residues. This information is used as the basis for a discussion of local socioeconomic development during the Woodland period, as well as the placement of the Spednic Lake sites within a regional chronology and the identification of inter-regional cultural influences from the south and west.

Heather Devine
 Public Education Officer
 Archaeological Survey of Alberta
Archaeology, Prehistory and the Native Learning Resources Project

Archaeology professionals understandably have a very strong belief in, and a commitment to, the use of archaeological research as a tool for investigation the prehistoric past of native peoples. Concomitant with this belief is the assumption that other special interest groups - educators, publishers, and native people - not only share the archaeologist's perspective but actively support the inclusion of archaeology and prehistory content in the curriculum. What attitudes and circumstances influence the inclusion of prehistoric archaeology content in the curriculum? What conflicts might the archaeology professional encounter while participating in intercultural curriculum development activity? What benefits can be derived? This presentation will address these issues in the context of the writer's experiences as a consultant to the Native Learning Resources Project, a textbook development programme sponsored by Alberta Education.

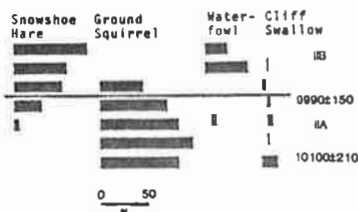
Doroszenko, Dena
 Ontario Heritage Foundation
MacDonell House: An Archaeological Study of A Fur Trader's Estate

During the summer of 1981 and 1982, archaeological investigations were conducted at the MacDonell House in Pointe Fortune on the Ottawa River under the auspices of the Ontario Heritage Foundation. MacDonell House, built c. 1817, is the only structure left from a complex which once included more than 1400 acres of land, fifteen buildings (domestic, commercial and agricultural) and numerous stone walled gardens and orchards. The house, built by John MacDonell (1768 - 1850), who retired there from the fur trade in 1817 with his Metis wife Magdeleine and their children, became the focus of commercial activity during the mid-19th century. MacDonell's holdings included land, grist and saw mills, a forwarding shed on the river, and a retail store. Concurrent with his commercial and farming operations, MacDonell was appointed Judge of the Ottawa District and served in the Parliament of Upper Canada. This paper will focus on the history of the life of a fur trader who upon retirement goes into business for himself and correlating the historical information with the archaeological research, including approx. 60,000 artifacts.

Jonathan C. Driver
 Department of Archaeology, Simon Fraser University
THE SIGNIFICANCE OF THE LATE PLEISTOCENE/EARLY HOLOCENE FAUNA FROM CHARLIE LAKE CAVE

Vertebrate remains from the lower strata of Charlie Lake Cave, Peace River District, B.C. can be divided into two assemblages - IIA (10,700 to 10,000 B.P.) and IIB (10,000 to 9,000 B.P.). Numbers of identified specimens in each assemblage are as follows: IIA - fish (4), duck (1), small wader (2), passerine birds (11), cliff swallow (18), snowshoe hare (18), either arctic hare or jackrabbit (4), ground squirrel (122), mice (8), muskrat (1), small microtine (4), bison (8), IIB - fish (14), frog (2), western grebe (2), horned grebe (15), medium sized grebe (4), duck (2), teal (1), mallard (1), grouse (13), rail (2), coot (10), short-eared owl (8), passerine birds (1), cliff swallow (3), snowshoe hare (146), woodchuck (1), ground squirrel (24), mice (2), Gapper's red-backed vole (2), chestnut-cheeked vole (2), small microtines (22), canid (1), least weasel (2), bison (6). Taphonomic analysis of the assemblages suggests that humans were responsible for the accumulation of bison, but the bones of numerically important small vertebrates were probably accumulated by other agencies. In spite of the very diverse faunal assemblage associated with the artifacts from the lower strata of the site, Paleoindians in northeast B.C. were probably big game hunters. The fauna is also significant in establishing the transition from relatively open to forested conditions. This is well documented by the shift from a fauna dominated by ground squirrels to one dominated by snowshoe hare. The figure below shows the rapid nature of this transition in a unit which spans late IIA and early IIB faunas. Palynological data also support the establishment of coniferous forest at about 10,000 B.P. (G.H. MacDonald, *Journal of Ecology* 75: 303-320, 1987).

Figure 1: Relative frequency of selected species from Unit 3



N. Alexander Easton
Lecturer in Anthropology, Yukon College, Whitehorse.
Shoreline Subsidence, Rising Sea Levels and Coastal Settlements:
Implications for Prehistoric Underwater Archaeology on the
Northwest Coast.

There are two major theories regarding the populating of the New World. The dominant theory postulates the migration of Old World peoples across the Beringia refugium and into North America along an "ice-free corridor." A competing theory, which I support, suggests major migrations from the Old World to the New followed the Pacific coastline. In this paper I will first review current geological, archaeological, and linguistic evidence which lends credence to the coastal migration theory. I will then turn to the problem of locating direct evidence of human occupation during the Quaternary. I will suggest that the fact that we can expect most, if not all, of this evidence to be inundated by changing shoreline elevations is not as problematic as it might seem to terrestrial based archaeologists. Major developments in the technology of underwater survey methods has brought us to the point where the discovery and excavation of prehistoric underwater archaeological sites is possible; what is required is the allocation of sufficient resources and the formation of a multi-disciplinary research team which can apply these new technologies on a question of major importance.

Ellis, Christopher J.
Department of Anthropology, University of Waterloo
Hi-Lo: An Early Lithic Lithic Complex in Southern Ontario

Current knowledge of Hi-Lo sites and assemblages are summarized. External comparisons indicate this material is a Great Lakes area analog of the "Dalton Complex" to the south and should date to ca. 10,000 B.P. This age estimate, along with data on geographic distributions and lithic source preferences, suggest Hi-Lo is contemporary with southern Ontario assemblages including Agate Basin-like and Hell Gap-like "piano" points. Unlike the piano industries, there are clear indications of continuity from Hi-Lo to later Early Archaic assemblages with notched points. However, present evidence suggests Hi-Lo is more similar to earlier Paleoindian assemblages in Ontario including fluted and Holcombe point forms. As such, Hi-Lo is still best regarded as a Late Paleoindian manifestation.

Epp, Henry T.
Saskatchewan Environment and
Public Safety
Regina, Saskatchewan

Man the Effect: an Alternative Look at Pleistocene Extinctions

Throughout the last two decades much has been written on the possible causes of the well documented North American postglacial megafaunal extinctions. Also well documented is the human population expansion which occurred during and immediately following the extinctions. An important explanation of the extinctions has been to single out Early Man as a primary cause. A new look at the facts reveals another possibility. The megafaunal extinctions were superseded by an actual population explosion and dispersion of several somewhat smaller mammalian genera which also were important human resources. I suggest that the human population expansion which occurred in North America toward the end of the Pleistocene epoch likely was more an effect rather than a major cause of the megafaunal extinctions. However, system feedback may have resulted in a coup de grace effect.

Daryl Fedje
Environment Canada, Parks
EARLY MAN IN THE NORTHERN ROCKY MOUNTAINS

Archaeological excavations of Paleo-Indian components at two sites in Banff National Park demonstrate a long history of human adaptation to this mountain valley environment. Recovered data do not support extensive contact with Plains or Canadian Plateau groups, as is evident from the late Middle Prehistoric and Late Prehistoric period record in this area. Lithic technology, at least in that period between ca. 10,000 B.P. and ca. 9,500 B.P., compares favorably with that described for the Early Stemmed Point Tradition which is suggested to have originated in the Intermontane West. It is hypothesized that in the Banff area, as appears to be the case for the Eastern Slopes region south into Montana and Wyoming, at least part of the technology associated with the Fluted Point Tradition of the Plains and 'Parts East' was replaced by elements of the Stemmed Point Tradition by ca. 10,000 B.P. It is considered likely that these diffused via contact with mountain valley adapted groups along both the Eastern and Western Slopes of the Rocky Mountains.

Daryl Fedje and Joanne McSparran
Environment Canada, Parks (Western Region)
"Westerners" in the Eastern Valleys of the Northern Rocky
Mountains: Population Movement or Diffusion?

Investigations conducted in Banff National Park by Environment Canada, Parks during 1986 and 1987 included visitation and test excavations at several prehistoric sites with associated circular cultural depressions. Results from these very preliminary investigations and from reexamination of other elements of the prehistoric record for the Banff area suggest an increased level of interaction with Plateau Culture groups after ca. 3500 BP.

Knut R. Fladmark
Department of Archaeology, Simon Fraser University
CHARLIE LAKE CAVE

Charlie Lake Cave is a deeply stratified site located near Fort St. John, in the Peace River district of northeastern B.C., utilized by native people since the early Holocene. Archaeological excavations at the site, directed by Knut Fladmark and Jon Driver of Simon Fraser University in 1983, located a small deeply buried Paleoindian artifact assemblage, associated with a diverse faunal collection.

Several radiocarbon dates averaging about 10,500 B.P. on this deepest cultural component, and the improbability of any earlier occupations ever being found at or near the site, lend support to the notion that the earliest occupants of this central portion of the proposed "ice-free corridor" reached it through movement northward, after people had already entered central and southern North America by other routes.

This paper will briefly describe the excavations at this site, and the earliest cultural assemblage.

Gargett, Rob
Department of Archaeology, Simon Fraser University
Cleaning up after the guests have gone

Excavations of two late prehistoric housepits at Keatley Creek, B.C. (EeR1 7), have been aimed in part at developing criteria for identifying stratigraphic units such as "roof" and "floor" in the field. Recognizing the contact between these two strata relies to a great extent on knowledge of differences in their make-up, and particle size and orientation. This paper presents the results of two seasons of investigation into their formation and sedimentary characteristics. It is possible to reliably distinguish between the temporally mixed roof sediments and the more homogeneous sediments of the floor. This research has implications both for interpreting cultural/historical affiliation in housepits, and for determining relevant patterning in the interior living space.

Nicholas Gessler
Queen Charlotte Islands Museum, B. C.
KIUSTA AND OTHER EARLY ASSEMBLAGES FROM THE QUEEN CHARLOTTE
ISLANDS

Radiocarbon dated charcoal from hearths at 0.7 and 1.5 m. in a pit dug to 2.4 m. at the rear of Kiusta village, yielded ages of 4,380±115 (UCLA 2721C) and 10,435±105 (UCLA 2721B) years B.P., virtually bracketing a shell midden underlain by beach or outwash sand and overlain by dunes. The latter date is consistent with deglaciation from Langara Island at 10,850±800, and exceeds the previously reported earliest date for cultural materials of the Queen Charlotte Islands by 3,000 years. A maritime adaptation of this age is shared by only a few other sites ranging as far south as Chile. Re-excavation in 1987 sought to clarify the above chronology, which at present appears anomalous.

Disseminating Ceramic Information Using a Visual Electronic Data Base

by

*Terrance H. Gibson
Department of Anthropology
University of Alberta*

During the past few years, considerable archaeological data have been stored on computers. Most of this information is in the form of text and numbers, and much of the data are meant for use by the individual or project who entered them. There has always been a desire to share this labouriously acquired and coded information with many researchers. Unfortunately most computerized data are bound within a tightly defined structure which seriously limits the means by which such information can be expressed. Using ceramics as an example, only specific metric and non-metric attributes such as rim length or paste condition are commonly coded and stored. These attributes are by necessity arbitrarily chosen by the coder, and they are not necessarily the attributes other scholars would find useful for their own research. Consequently, most archaeological data bases become obsolete once the principal investigator moves on to other endeavours.

In this poster session an alternative computer data base methodology is presented which seeks to circumvent the limitations of current electronic archaeological data storage. The focus of the data base design is on the artifact itself, rather than attributes describing the object. Using this system, a researcher can make objective choices of the attributes he or she wishes employ in artifact analysis, and is free to add them to the data base at will. The core of the database is HyperCard, a readily available Macintosh-based information tool which supports the use of text and graphics. HyperCard data files, or "stacks" are extremely portable, self-contained entities which can be distributed and used by anyone who has access to a Macintosh computer. No special skills are required to use the stacks, therefore they become a natural medium for the dissemination of primary archaeological data.

As an example of this data base approach, the entire ceramic assemblage from Bushfield West (FhNa-10) is described in an integrated series of operating HyperCard stacks. The information includes verbal description, metrics, and digitized views of front, rear, top and profile of approximately 100 vessels, many which have been entirely reconstructed. The provenience of each vessel can be displayed on a site grid map at any time. Also, metric attributes can be obtained of pottery views directly from the screen using software linked to the data base. The system is open-ended and can be expanded at will by anyone who understands HyperCard procedures. The data base is designed for interaction by others, especially novice computer users. Therefore, viewers are encouraged to browse through the data, enter their own observations and comments into the data base, and draw their own conclusions about the ceramic assemblage.

Janette M. Ginns
Newfoundland Marine Archaeology Society
St. John's, Newfoundland

FINDERS-KEEPERS?

For many years divers have explored harbors and other coastal areas of Newfoundland and Labrador. Underwater sites have been located and an unknown quantity of artifactual material has been raised. In the fall of 1987, the Historic Resources Division, Department of Culture, Recreation and Youth, initiated a program to solicit registration of archaeological material in private hands, as provided for in section 11, Historic Resources Act (1985). Prior to that date, few divers had made information available to benefit archaeological research and resource management in the province. This illustrated presentation examines some of the significant historical material registered from underwater sites during a five-month period in 1987/1988. The initial response to the registration program will be discussed.

This work was undertaken when the author was under contract to: Historic Resources Division, Department of Culture, Recreation and Youth, St. John's, Newfoundland.

Godfrey-Smith, D.I. and D.J. Huntley
Department of Physics, Simon Fraser University

Optical Dating : The Optical and Thermal Responses of Sediment Extracts

Work on this new technique for dating unheated sediments has confirmed that the optical signal of minerals is zeroed by sunlight at a much faster rate than the thermoluminescence signal, and that a modern quartz is indeed completely zeroed. The thermal and optical pre-treatments of irradiated samples have yielded some unexpected results. These, as well as experiments aimed at determining the upper age limit at which we can reasonably expect to apply this method, will be presented.

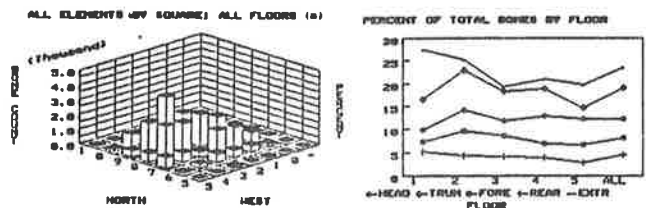
Bryan C. Gordon, Archaeological Survey of Canada, Canadian Museum of Civilization, Ottawa, Ontario K1A 0M8.
1450-1700 A.D. Faunal Distribution over 5 Floors in a Copper Inuit Hut at Nadlok.

Nadlok or "crossing-place-of-deer" in Bathurst Inuit dialect, is an island camp and herd interception site 100 km. southwest of Bathurst Inlet, N.W.T. In the "Little Ice Age" (1450-1700 A.D.), a few families of coastal Copper Inuit appear to have abandoned a declining seal resource on the coast for available and predictable inland caribou hunting at Nadlok. A simple tent camp, as seen in an underlying architecturally sterile cultural level dating 1400 A.D., evolved into 15 sturdy stone and antler dwellings occupied from late summer to spring.

Of Nadlok's 15 dwellings, 5 stone winter houses are paired with 5 antler huts, while 5 untested large stone rings lie to the east of the paired dwellings. One paired house and hut dug in 1985 gave data useful in rebuilding a second pair a year later. The 1986 hut was larger, its uppermost antler ring suggesting a sloping open-domed roof of 3-4,000 antlers likely covered with caribou hide and banked with snow. Beneath this ring were the remains of three sequential but smaller rings surrounding five superimposed stone slab floors, the remains of smaller and earlier occupations.

In addition to artifacts scattered between floors, there were ca. 40,000 bones: 97% caribou, the rest muskox & smaller mammals, birds and fish. In summer, Nadlok's five (?) families jigged for fish, shot or trapped waterfowl and lanced caribou from kayaks as they swam the lake on their way south to forest. Cached meat and fish sustained them over winter, while in spring they preyed on muskox.

As a test for discard patterns over 250 years, caribou bone originally assigned to 33 skeletal elements (including proximal, middle & distal longbone parts) were massed into carcass portions of head, trunk, fore and hind limbs, and extremities. Similar portion frequencies in all floors and distributions on both sides of the door suggest consistent discard. Half as many hind as fore limbs suggest meat trading or more extensive femoral than humeral breakage in marrow extraction, with excessive hind limb splinters assigned to unidentified longbone fragments.



Greengo, Robert E.
Dept of Anthropology, and Burke Museum, University of Washington
A Possible Prehistoric Link between the Coast and Plateau

Interpretation of a stone figure acquired in the early twentieth century from near Sumas, Washington, may shed some light on prehistoric Salishan relationships between the coast and plateau. Although the figure does not appear to relate closely to examples of ethnohistorically known Coast Salishan art, many of its features have stylistic analogues in prehistoric sculptures from the plateau and coastal sections of the Fraser valley. It is suggested that the figure may have been carved late in the Middle Period of Northwest Coast prehistory, and that it may be evaluated with relation to certain Northwest Coast, especially Salishan, mythological themes.

by: Sheila Greer
EDMONTON, Alberta

Abstract

Pre-NOGAP archaeological site collections from the North Slope region of Yukon Territory were re-examined in order to provide regional baseline data. A simplified technological analysis of these materials shows that a range of historic and prehistoric cultures and/or technological complexes has occupied this area in the past. The Trout Lake Locality best demonstrates the regions' cultural record. Situated in the Barn Mountains, this cluster of 16 sites features materials recognizable as belonging to British Mountain, American Palaeo-Arctic, Arctic Small Tool, Norton, a late prehistoric Eskimo/Thule complexes and possibly others as well. The main Trout Lake site, previously described as a single component British Mountain site, is suggested to have at least two, possibly three, different components, which can be separated on the basis of raw material type, debitage platform preparation style, and tool forms, as well as their provenience within the site.

Shawn D. Haley
104 - 120 Piper Drive, Red Deer, Alberta
THE PASIKA COMPLEX REVISITED

The Pasika Complex has long been an enigma in terms of early man studies on the Northwest Coast, as well as a source of considerable debate. This report, a summary of research conducted for a doctoral dissertation, is divided into two parts. The first deals with the original hypothesis that the Pasika Complex, as identified at the South Yale Site, represented an early Pebble Tool Tradition in the lower Fraser Canyon area of British Columbia. In it, the evidence for that hypothesis is discussed step by step. It is demonstrated that each line of evidence did not stand up to testing and the conclusion is reached that the hypothesis must be rejected. In the second part of the report, an alternate hypothesis is offered. It is proposed that the choppers and related artifacts of the Pasika Complex represented a sophisticated reduction methodology for dealing with an extremely difficult but common raw material - cobbles - that persisted virtually unchanged for thousands of years in southwestern British Columbia.

J.F.A. Hamilton
Archaeological Services, Environment Canada-Parks, P&NR
An Outdoor Museum: Recording the Cultural Resources on the
Chilkoot Trail, British Columbia

The proposed Chilkoot Trail National Historic Park in northern British Columbia is one of the largest historic parks in North America. The Canadian portion of the trail extends for 26.6 km. and along its entire length are scattered artifacts with some 12 nodes where the intensity increases substantially. The Chilkoot Trail is unique in that the cultural resources lie unprotected on the ground surface and offer the visitor direct and unrestricted access. These resources are undergoing slow degradation. Three main factors threaten their integrity-- natural forces, user activities and vandalism. For these reasons the need to preserve and protect the cultural resources becomes particularly important. At the same time the traditional archaeological practices used to record cultural resources, namely, excavation and collection, would prove to be ethically irresponsible as the visitor is lured by history as well as the many challenges the trail presents for testing their self-reliance. This paper will discuss the strategies Archaeological Services, Environment Canada-Parks has adapted to establish an archival record of the vast number of artifacts and features located on the Chilkoot Trail while at the same time preserving the aesthetics of an outdoor museum concept.

Scott Hamilton
Dept. of Archaeology, Simon Fraser University

SITE STRUCTURE AND ARTIFACT PATTERNING AT ROCKY MOUNTAIN FORT (HbRf-31)

Over the past two years the Dept. of Archaeology at Simon Fraser University has been engaged in the excavation of a late 18th century North West Company fur trading post on the Peace River in north eastern British Columbia. These excavations have generated a great deal of information (from contiguous block excavations) about the spatial structure of this small community. The artifacts recovered have been catalogued using programs developed for the Apple Macintosh microcomputer. The resultant data base can be expeditiously reordered and sorted under a number of different conditions, permitting rapid statistical manipulation and "plot map" production of the spatial distribution of specific artifact classes.

These efficient data management, interpretation and presentation tools facilitate the rapid development of more sophisticated interpretations of the site settlement and artifact dispersal patterns. Specific questions addressed include the use of space both within and around the buildings, patterns of differential refuse disposal, the definition of localized activity areas, and patterns of food bone processing, use and disposal.

These issues are addressed in the context of Rocky Mountain Fort's comparatively minor role in a continental fur trade system. It served as a small inland wintering station at the most westerly limits of the N.W.C. domain until its abandonment in 1804. It appears to have served as a provisioning station in addition to its role as a frontier fur trading post. These site functional considerations, in the context of its frontier character, had a profound effect upon the occupants' attitudes towards site cleanliness and refuse disposal. The frontier character of the post so distant from sources of supply likely also contributed to the limited range of materials deposited at the site in terms of the diversity of imported items, and the level of curation and reuse of scarce European commodities.

Hayden, Brian
Department of Archaeology, Simon Fraser University
Big Men, Little Men, Beggarmen, Feast: The flesh of corporate group remains

The social organization and ideology of large residential corporate groups in the interior of British Columbia differed dramatically from the organization and ideology of generalized hunter/gatherers. The key elements in explaining these differences are 1) the effective exploitation of rich resources that are impervious to overexploitation, and 2) ownership of rich resources procurement locations. These features enable those controlling resources to use surpluses to increase their own control and power. The means by which this is achieved is the competitive feast in which surplus food is carefully channeled by resource controllers and converted to other desirable goods and services. The concentrated wealth and control stemming from feasting debts and gifts attract supporters who form a residential corporate group involving a mutually beneficial association between administrators and supporters. As the power of corporate groups grows, families with no corporate ties or interests become progressively dispossessed of rights to communal resources and trade goods. This form of organization does not correspond precisely to band, rank, or stratified social types. It is therefore viewed as a distinct type of social organization. The prehistoric village at Keatley Creek appears to represent one of the most elaborate of this kind of hierarchical system in the Interior Plateau.

James W. Helmer and Ian G. Robertson Department of
Archaeology, University of Calgary.

Quantitative Shape Analysis of Early Palaeo-Eskimo
Endblades

Formal typological analyses of Palaeo-Eskimo artefacts are extremely rare. The few classifications that do exist are largely intuitive in nature, and their formulation has tended to emphasize the use of nominal rather than metric criteria. Consequently, there is little standardization in Palaeo-Eskimo artefact description and very few widely recognized chronological types have been developed.

This paper discusses an exploratory typological analysis of about 40 small triangular endblades recovered from a series of Early Palaeo-Eskimo sites located on northern Devon Island in the Canadian High Arctic. These sites range in age from circa 4200 B.P. to 3000 B.P. Standardized continuous data sets, generated from digitized artefact outlines are subjected to graphic and multivariate analysis. Hypotheses of significant temporal variation arising from this study are independently tested against digitized data drawn from published photographs and scale drawings of endblades from other Early Palaeo-Eskimo components in the Canadian Arctic.

Hinschelwood, Andrew
Old & In the Way, Thunder Bay, Ontario
Re-examination of the Brohm Site, Ddfe-1, in Regional Context.

Excavation of the Brohm Site by MacNeish in 1950 marked the earliest excavation of a late palaeo-indian site in Canada. Publication of the results gained wide currency and continue, with the Cummins site, to summarize the late palaeo-indian occupation of northwestern Ontario. Subsequent research in the region, however, raised questions about the original site interpretations. As well, the identification of additional sites has enhanced understanding of the general pattern of occupation within the regional complex of sites. Geographical analysis of the immediate Brohm site area suggests that the site had been utilized seasonally as a game trap, with use becoming less intense as the effectiveness of this feature declined. This is reinforced through the greater diversity of raw material types present, and the situation of the site outside of the 'core area' of the Lakehead Complex as defined.

Philip M. Hobler
Department of Archaeology, Simon Fraser University
THE EXCAVATIONS AT JOASHILA: SOME ANSWERS AND QUESTIONS

This small site on a tiny bay near Kwatna on the Central Coast was the scene of a complex sequence of prehistoric events. Around 600 A.D. a family or two built a plank house on a small bench just back from the high tide. Repeatedly reused and probably rebuilt over a long period of time, the house site was finally abandoned following a disastrous fire a few centuries before European contact. Evidence of this last ill-fortune can be seen to cap a smaltle of shell midden left behind by the earlier house builders. The first builders in the early centuries of the Christian era must have observed that long before them strangers had used the area. They found the ground littered with unfamiliar objects: flaked tools and debitage. Walking the bay at low tides they found this material everywhere on the beach. If they excavated for posts they encountered the strange objects at some depth in the ground, but never associated with shell midden. They even found the first people's hearths just under the littermat. The hearths tell the archaeologist that the earlier people were using the site as late as some 5,000 years before the house builders. But, the questions remain: How early did this initial use of the site begin, and how can it be related to other occupations on the Central Coast?

Yukon's North Coast Project (NOGAP 1985-88) and Northern Hydrocarbon Development -
Towards a Framework for Regional Management of Archaeological Resources

by: Jeff Hunston
Beaufort Archaeologist
Yukon Heritage Branch

In 1984, the Yukon Heritage Branch initiated its North Coast Heritage Research and Protection project as a component of the Government of Canada's Northern Oil and Gas Action Programme (NOGAP). The project was designed to place the Branch in an enhanced position with respect to assessing and mitigating the on-going and future impacts on heritage resources along the Yukon-Beaufort littoral by northern hydrocarbon exploration and development.

An extensive field programme has been carried out over three field seasons in order to provide the requisite technical research and planning information for the Yukon Government's developing regulatory, policy and planning responsibilities. Additionally, considerable effort was extended towards the development of an integrated archaeological resource management infra-structure which can address the challenges posed by Beaufort-area hydrocarbon activities. Through input and involvement in a variety of legislative and policy initiatives at the federal and territorial levels, the essential elements of a management framework are coming together. Although focused on the Yukon-Beaufort area, it is clear that these elements will be of wider application and utility, allowing the Yukon Heritage Branch to address its territory-wide management and research responsibilities in a more substantial and effective manner than was the case prior to the initiation of the NOGAP programme. This paper will provide an overview of research accomplished to date and will outline recent developments in Yukon's archaeological resource management programme.

W. Karl Hutchings
Department of Anthropology, University of Toronto
THE NAMU OBSIDIAN INDUSTRY

Approximately 700 obsidian tools and waste flakes in the Simon Fraser University collections from Namu (EISx 1) have been studied. This assemblage represents nearly 10,000 years of obsidian use on the central coast of British Columbia.

The Namu obsidian is classified into three primary classes and ten secondary sub-classes based on a simple, morphological analysis, and examination of retouch and utilization. In addition, several replicative experiments were conducted to investigate the technological aspects of obsidian tools and their possible applications, as well as the types of use-wear represented.

W. Karl Hutchings
Department of Anthropology, University of Toronto
A Pre-Pithouse Component from the Keatley Creek Site (EeR1 7)

The Keatley Creek site (EeR1 7) is a large Plateau Pithouse village located above the Fraser River, near Pavillion, British Columbia. Test excavations at the site during the 1966 season produced several microblades from the bottom of the Housepit 5 deposits. Continued work in 1977 expanded excavations into the rim of Housepit 5 and revealed a microblade rich component stratigraphically below, and therefore pre-dating, the Housepit 5 deposits.

This preliminary analysis suggests that an early Interior group possessing a basic hunting/hide processing toolkit occupied the Keatley Creek site for resource procurement purposes similar to those of the later Plateau Pithouse tradition. This early occupation is tentatively expected to fall within the range of 6000 to 6000 years ago.

John W. Ives
Archaeological Survey of Alberta
Site Positioning Strategies in the Boreal Forest--Why the Aislands Were Where They Were

Archaeological research in the boreal forest is frequently hindered by shortcomings of the archaeological record for the region itself. Not the least of these difficulties involve the acidic nature of boreal forest soils, which frequently destroy the faunal remains from which archaeologists would normally read information about diet and economic organization. Many sites in the boreal forest are small, however, and are demonstrably the record of brief periods of occupation. The nature of the assemblages from these sites as well as their very locations can yield significant information about social and economic organization.

Impacts from the early stages of development for the Aislands project in northeastern Alberta created conditions under which a considerable number of small residential and task specific sites could be identified. Analysis of assemblages from these sites, their locations, and the resource characteristics of the site settings allow reasonable predictions about subsistence practices and social and economic organization, even in the absence of abundant archaeological remains.

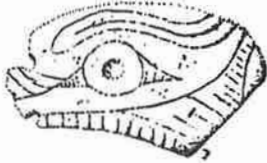
JAMES, MALCOLM A.
Department of Archaeology, Simon Fraser University.
A Discussion of the Protohistoric Depopulation of the Upper Athabasca River Valley.

Historical and ethnographic evidence for the depopulation of the Upper Athabasca will be reexamined and several potential individual or collective causal factors will be discussed. How the depopulation is manifested in the archaeological record and the implications for trans-mountain trade with the Interior Plateau during the Late Prehistoric and Protohistoric periods will also be presented.

An apparent break or reduction in contact between the plateau and the Upper Athabasca is coincident with (and perhaps precedent to) the duration of the Little Ice age. The establishment of the Fur Trade in the area during the early 1800's reopened trade to the Interior and drew small groups of Shuswap into the area.

D.P. Johnstone
Department of Archaeology, Simon Fraser University
1987 Excavations at Long Harbour

Archaeological investigation of the Long Harbour site (DfRu-44), a saltwater marsh site located on Salt Spring Island, in the Strait of Georgia, was undertaken in the summer of 1987 by three S.F.U. students aided by volunteer labour. Excavations revealed four stratigraphically separated cultural components spanning the last 3000 years. A summary of preliminary research and results is presented.



Gareth S.L. Jones
Department of Anthropology and Sociology
University of British Columbia
Territoriality, Social Interaction, and Style: A Research Design for the Southern Interior

To understand human behaviour through stylistic analysis we need to identify iconic and passive components of stylistic variation. These are defined in terms of the intentions of the manufacturers and users of the artifacts: specifically, whether or not the variation is used in social strategies. This paper suggests operational definitions of iconic and passive style which can be used on archaeological materials. The operational definitions are used to analyze the variation in projectile points from Kamloops horizon (ca. 1200-200 B.P.) housepit components in the ethnographic territories of the Shuswap, Upper Lillooet, and Upper Thompson Indians, in southern interior British Columbia. The results are interpreted in terms of group boundaries and interaction across them.

Tim Jones
Saskatchewan Archaeological Society, Saskatoon
Regional (and Ethnic?) Style in Canadian Shield Rock Art

Open-air rock art is notoriously difficult to date or place in known cultural contexts using standard archaeological techniques. Studies of the geographically widespread corpus of Canadian Shield rock art suggest some lines of inquiry which may shed light on prehistoric "ethnic" boundaries and symbolic systems.

Tim Jones
Saskatchewan Archaeological Society, Saskatoon
Conservation of the St. Victor Petroglyphs

How to — and how not to — protect an important rock art site.

Julig, P.J.
Department of Anthropology, University of Toronto
Organizational Aspects of the Late Paleoindian Taconite Industry in the Thunder Bay, Ontario, Region

Two of the largest and most completely analyzed Late Paleoindian lithic collections of the Lakehead Complex are Cummins and Brohm. Cummins is located directly on the Gunflint Formation, while Brohm is distant from taconite outcrops. This study examines and compares these respective lithic assemblages regarding aspects of tool curation, standardization and versatility. The Brohm uniface and biface assemblages are in conformity with predictive models as to the effects of distance from raw material sources.

¹Julig, P.J., ²L.A. Pavlish and ³R.G.V. Hancock
¹Department of Anthropology, ²Department of Anthropology and Department of Physics, and ³SLOWPOKE Reactor Facility, Department of Chemical Engineering and Applied Chemistry, University of Toronto

INAA of Paleoindian Lithic Artifacts from Sites in the Thunder Bay, Ontario Region: Determination of Geological Sources

Taconites of the local Gunflint Formation dominate Lakehead Complex lithic assemblages, however, small quantities of chert, agate, quartzite, and siltstone are present. In this study, instrumental neutron activation analysis (INAA) of short half-life elements was conducted in order to: 1) characterize archaeological samples with respect to a specific suite of elements; 2) likewise characterize prospective geological sources; and 3) compare the results in attempting to determine geological sources. A distant southern exotic, Hixton Silicified Sandstone, occurs as both finished tools (bifaces) and debitage. Local agates and Hudson Bay lowland cherts occur primarily as uniface tools and small sized debitage. Distant western exotics, such as Knife River Flint, are uncommon in regional lithic assemblages.

David L. Keenleyside
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Maritimes Prehistoric Ceramics in Perspective

Abstract:

Prehistoric ceramics excavated from various dated Maritimes archaeological components are used as culture horizon markers for the region. Other examples of ceramic materials from early National Museum collections illustrate the major ceramic forms and range of attributes found in the Maritimes region.

Temporal and cultural comparisons with ceramic assemblages from other areas of the Northeast suggest that a well developed ceramics technology was introduced into the Maritimes between 2000 and 2500 years ago. Given the current archaeological evidence, a time gradient for the diffusion of the technology has yet to be demonstrated between the Great Lakes and Maritimes areas. The diversity of early ceramic types at the outset suggests a multiple source of introduction into the region. It appears probable that the St. John River system, St. Lawrence estuary and Atlantic seaboard all served as avenues for the rapid diffusion of the technology.

Late prehistoric assemblages, although possessing a distinctive Maritimes flavour, are nevertheless characterized by attributes which are shared among many widespread prehistoric groups of the Northeast. The evidence suggests that these shared traits are derived from a common proto-Algonkian ceramic tradition.

A BRIEF HISTORY OF HISTORICAL ARCHAEOLOGY IN ALBERTA

Abstract
Paper to be Presented by Margaret Kennedy, University of Lethbridge
C.A.A.

Dr. Richard Forbis was directly involved with some of the earliest investigations into Alberta's historic sites, most notable of all being the major fur trading site complex of Rocky Mountain House. These excavations among others built a solid base of research which has anchored contemporary work in the discipline. This paper reviews Dr. Forbis' involvement in Historical Archaeology, surveys some of the earlier projects in the province and summarizes the state of Historical Archaeology in Alberta to date.

Dr. Francois J. Kense
Director - Gaabaga Archaeology Research Project
c/o 9725 - 93 Ave
Edmonton, Alta. T6E 2V8
Subsistence, Settlement and Trade in Northern Ghana: Preliminary Indications from the Gaabaga Escarpment Survey

The result of much of the archaeological investigation in sub-Saharan Africa is an uneven mosaic in our knowledge of temporal and spatial changes in Africa's past. In recent years, however, some archaeologists have adopted research strategies that provide a more systematic understanding of processes of cultural change, especially in the past several millennia. These strategies usually comprise a comprehensive areal or even regional survey and a recognition that material culture results from a complex interplay of economic, social, political and historical factors. The papers in this session clearly reflect this perspective.

The Gaabaga Archaeology Research Project (G.A.R.P.) is a two year study of an area, approximately 25 square km., that straddles the Gaabaga Escarpment. The Escarpment is a dramatic geological formation in northeastern Ghana that extends for about 40 miles in an east/west direction and drops 800 feet from the south. Because of its elevation and the concomitant effects on rainfall, temperature and vegetation, its geological distinctiveness and its proximity to the White Volta River, the Escarpment presents a unique environment within Ghana.

Our investigation of this area was to establish whether this environment had any special attraction for human activity in the past and if so, what types of subsistence and settlement had been practised over the millennia. The present inhabitants are largely subsistence farmers who form a heterogeneous population of several ethnic and linguistic groups. The area is under the rule of a dominant group, the Mamprusi, who had conquered the region by the sixteenth century. The control of major north/south trade routes between the Sahel and the forest regions were presumably important factors in their conquest.

This paper summarizes the survey strategy employed for the 1987 field season of G.A.R.P. and presents initial interpretations of the limited excavations. Reference is made to the present state of knowledge concerning the Terminal Stone Age and the early and later Iron Ages in Ghana and how this research relates to those views. The objectives of the final season are presented. The paper by Casey, also in this session, highlights the early component of the occupation sequence.

M.R. Kleindienst and P.J. Sheppard
Department of Anthropology, University of Toronto.
Technological Change in the Early and Middle Stone Age at Kalambo Falls.

Most of the archaeological deposits found at Kalambo Falls (Zambia/Tanzania) have been disturbed by fluvial processes. Analysis of the size of remaining debitage combined with results of flume studies suggest that the material under-30 mm in maximum dimension has been removed by river action exerting a bed shear force comparable to that estimated for the modern Kalambo River. It is postulated that the remaining aggregates at the Kalambo Falls Prehistoric Site are representative of the original deposits (unsorted) minus the under-30 mm debitage. Study of the Early (Bwalya Industry, Upper Acheulean) and Middle (Chipeta and Nekiisasa Industries, Sangoan/Lupemban) Stone Age from deposits at sites A and B2 has provided the following data on the ESA/NSA "transition": 1. A slight, but not marked increase in the use of fine grained raw material occurs; 2. Very little evidence of change in blank production technology (cores, blank forms, dimensions, faceting, dorsal scars) is noted; 3. The tool assemblage is dominated throughout by small scrapers; 4. The only major change is the loss of the well made large Acheulean bifaces (handaxes and cleavers), and their replacement by heavier, cruder forms (Core axes, picks). It seems probable that the suite of activities carried out beside the Kalambo River (characterized by the very high incidence of scraper forms) remained relatively constant through time, and that any technological changes occurring elsewhere at the "transition" are not well represented. It is also suggested that the change in the large biface forms (switch from large, but relatively thin refined forms made on special flake blanks to thick, crude forms made on cobbles) is related to a decrease in the need for portability in the design of these items.

Kooymen, Brian
Department of Archaeology, University of Calgary
Documenting Ethnic Groups Using Butchering Pattern Analysis

There are many reasons for wishing to isolate ethnic groups in the archaeological record. This level of analysis has usually focused on artefactual remains that were clearly used as signals of ethnicity, such as projectile points and ceramic vessels. Some work has also examined isochrestic style as an unconscious signal of ethnic affiliation. This study examines the aspects of butchering practices that might be expected to yield information about ethnicity. It then uses the faunal remains from Metis sites in western Canada to illustrate the analysis and present some aspects of isochrestic ethnic style in Metis butchering.

Kuijt, Jan.
Department of Archaeology, Simon Fraser University.
Paleoenvironment and Culture Change on the Canadian Plateau: A Reappraisal.

During the Middle Prehistoric period hunter-gatherer groups on the Canadian Plateau were small and fairly mobile. It was not until ca.4,500-3,500 B.P. that greater sedentism and a shift to "logistical" resource procurement occurred. Although the causes for this apparent transition in mobility and hunting strategies are not fully understood, it is suggested that they may be related to paleoenvironmental changes which influenced the abundance, reliability and access to ungulate and salmon resources. It is postulated that decreased temperatures and increased coniferous forests would have led to reduced ungulate populations, which in turn could have provided the incentive for hunter-gatherers to broaden their selection of food resources, and led to increased salmon utilization ca. 4,000 B.P.

Kusmer, Karla D.
Department of Archaeology, Simon Fraser University
Contributions of Zooarchaeological Analysis to our Understanding of Site Formation Processes and Activity Patterning at Housepit Sites

Analyses of zooarchaeological remains have the potential to address problems of site formation as well as environmental and cultural questions. Integration of a detailed research design for faunal analysis within the Keatley Creek project has resulted in data which contribute much to our knowledge of housepit formation and utilization of space within a pithouse. Bone fragment quality, quantity, and taxa represented vary significantly between the different housepit deposits examined and can aid in the identification of floor deposits. Clearly defined spatial patterns of various classes of remains in floor deposits support the identification of largely uncontaminated floor sediments at Keatley Creek and allow inferences concerning behavioral patterns within a pithouse.

Kusmer, Karla D., Dana Lepofsky, and Kenneth Lertzman
Department of Archaeology, Simon Fraser University
Department of Anthropology, University of Washington
Department of Zoology, University of British Columbia
A Statistical Sampling Method for Large Pit Features: An Example from the Interior Canadian Plateau

Although large pit features are commonly associated with housepits in the Canadian Plateau, few have been excavated and detailed ethnobiological analyses of these features are all but nonexistent. Food storage was an important aspect of life during the Pithouse tradition and study of these pits should add to our incomplete picture of subsistence and settlement structure during this period. Reliable sampling is essential but problematic for pit features. We evaluate the effectiveness of various field sampling strategies under a few simple depositional conditions using Monte Carlo, a computer simulation modelling technique. The ability of commonly employed sampling strategies to predict archaeological distributions is examined.

Langemann, E. Gwyn
Regina, Saskatchewan
Zooarchaeology of the Lillooet Region, British Columbia.

Zooarchaeologists have stressed the value of a problem-oriented approach to faunal recovery and analysis, and the use of such methods as sampling for microfauna, and recording taphonomic data. Recent Plateau excavations have used such an approach to help distinguish features, living floors, and fill episodes within housepits. However, an emphasis on faunal recovery has not always been part of housepit excavation methodology. While faunal collections presently stored in museums may not allow detailed intra-site analysis, they do form a valuable data base for regional subsistence studies.

Faunal material from five housepit sites in the Lillooet region of the British Columbia Interior Plateau was analyzed in order to obtain a regional picture of subsistence activities during the Late Prehistoric period. The housepits were in two localities and have been dated to four cultural phases. These sites were excavated between 1970 and 1974. During the faunal analysis, careful attention was paid to the potential biases introduced by the selection and butchering of the species, by the taphonomic history of the bones, by excavation methodology, and by analytic techniques.

Ethnographically, the Lillooet people practised a logistically organized hunting and collecting economy, using a wide range of plant and animal resources. The analysis of the archaeological material suggests a similar subsistence economy. Salmon and deer were common in all samples, but a large variety of other artiodactyl, rodent, carnivore, bird and shellfish species were also represented. Their abundances varied between the housepits, but no consistent differences in taxonomic abundances or butchery patterns were observed between the various cultural phases or between the localities sampled. Rather, the variation observed seemed to reflect a diversified opportunistic strategy similar to that observed ethnographically.

R.J. Le Blanc

Department of Anthropology, University of Alberta
Archaeological Reconnaissance and Test Excavations in the Mackenzie
Delta-Beaufort Sea Region of the NOGAP Study Area

Three seasons of archaeological survey and test excavations have been completed since 1985 in the Northern Oil and Gas Action Plan (NOGAP) study area. The coverage for the Beaufort Sea-Mackenzie Delta portion of this region included coastal and interior areas lying north of Inuvik, and extending from Key Point on the Yukon Coast Plain to the east side of the Cape Bathurst Peninsula, N.W.T.

During the survey 34 new sites were recorded in the Yukon and 126 in the Northwest Territories. They include a wide variety of remains such as small to large surface scatters; isolated or clustered Mackenzie Eskimo log groves and winter sod houses; sites of Arctic Small Tool tradition affiliation; inukshuk lines connected with caribou hunting activities; various isolated cobble features; and fences, corrals and other structures associated with the last few decades of reindeer herding. Of special interest is a dense concentration of sites on a 10 km section of the old Horton River channel on Cape Bathurst Peninsula. Preliminary investigation indicates a high frequency of non-local, igneous raw materials, presumably obtained from sources lying approximately 200 kilometres to the southeast.

Test excavations were conducted at several sites, among them a microblade and burin component (N&Tj-1) on a Pleistocene-aged terrace system on the Tuktoyaktuk Peninsula, and two Arctic Small Tool tradition (ASTt) sites (O&Rv-1, O&Rw-11) on the Cape Bathurst Peninsula. The assemblage from N&Tj-1 appears to represent a component of the Northwest Microblade tradition, although the presence of a distinctive burin may suggest an even earlier occupation. Of the two ASTt sites, one (O&Rv-1) is clearly related to a late ASTt variant which has only been found at the Lagoon site (O&Rl-3) on Banks Island; the status of the other (O&Rw-11) is less certain, although it may also relate to this same Paleo-Eskimo culture.

Katherine Lipsett

Department of Anthropology and Archaeology, University of Saskatchewan

Ethnographic Insights: Rock Art Fieldwork in Northern Saskatchewan

Ethnographic fieldwork was conducted in the communities of the Churchill River area of northern Saskatchewan during the period of August 1983 to December 1986. Elderly native informants were questioned as to their knowledge of pictograph site locations and the techniques used to produce pictographs, the reasons for making rock paintings in the precontact period, the perceived cultural significance of the ritual, and possible meanings of the images.

During this same period of fieldwork, traditional myths, legends and stories were collected in the hopes of correlating the characters appearing in the rock paintings with those featured in the oral tradition of the Rocky Cree in this region. The data resulting from both endeavors will be presented and the significance of pictographs in the precontact Rocky Cree religious belief system will be discussed.

Mary Dell Lucas

For Horizons Cultural Discovery Trips Inc., P.O. Box 1529, 16 Fern Lane, San Anselmo, CA 94960

Archaeology in Tourism

Within the past several years, archaeology has become a hot subject to the public. T.V. programmes such as IN SEARCH OF TROY and movies (dare I mention RAIDERS OF THE LOST ARK ?) have created an enthusiasm among laypeople who yearn to understand more about the subject. At the same time, our economy has become lighter and archaeologists have been forced to become more creative in their search for funding.

Money from the private sector is supporting archaeology through paid volunteers (EARTHWATCH and UNIVERSITY OF CALIFORNIA EXPEDITIONS PROGRAMS), excavations opening to visitors (JORVIK VIKING CENTRE), schools abroad (AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS, and the SEMESTER IN GREECE program from San Francisco State University), small institutes (PRE-COLUMBIAN ART RESEARCH INSTITUTE, THE CENTER FOR MAYA RESEARCH, and THE CENTER FOR ARCHAEOASTRONOMY) and tour companies which specialize in trips with an archaeological and cultural emphasis (FAR HORIZONS, TURTLE TOURS, ARCHAEOLOGICAL TOURS). This presentation will discuss these programs and institutes (using their materials), and will also describe the creation of FAR HORIZONS by archaeologist Mary Dell Lucas.

FLOATING IN TIME:

Attempts to Provide Chronological Anchors
For Rock Art Sites in British Columbia.

Doris Lundy,
Canadian Rock Art Research Associates.

Abstract:

Petroglyph and pictograph sites are notorious for their lack of chronological information; they "float in time" unattached to the rest of their cultural matrix.

This paper will examine those rare sources of specific dating information - radiocarbon, ethnographic data, etc., and other possible methods that have been attempted or considered in the province. Although the information we currently possess suggests only recent dates for western petroglyphs and pictographs, other, speculative arguments for an older chronology will be put forward.

Diane Lyons

Department of Archaeology, Simon Fraser University
Men and women and household space: an ethnoarchaeological study
of ethnic spatial patterning in Doulo, northern Cameroon.

The study compares the domestic arrangement of space of three ethnic groups currently living in the village of Doulo in northern Cameroon. These groups are the Mura, the Wandala, and the Choa. Household space is presented as an expression of the economic and social relationships between men and women. In particular the paper explores how the location of resource storage, and the use of walls and open spaces bond or divide men and their wives.

Scott MacEachern and Sandra Peacock

Department of Archaeology, University of Calgary
Ethnicity and ceramic variations around Mayo Plata, northern
Cameroon

A survey of ceramic production and use was undertaken within the territories of a number of montagnard groups in northern Cameroon. There appears to be a great deal of similarity between the vessel types produced by these groups, which today extensively interact with each other. A consideration of 'traditional' vessel types shows similar overlap for three of the groups, but less for the fourth. This corresponds to a larger scale boundary between two ceramic traditions and to different origins for lineages on both sides of the boundary. The original nature of ceramic differentiation over 'ethnic group' boundaries is probably due to extensive intermarriage and trade, and helps illustrate the marginal importance of traditional ethnic groupings in the area.

Much of the ceramic variation found appears to be useful in information exchange in this heavily-populated region. For other vessel types, however, decoration seems to serve as protection and insulation against natural powers, guarding vessel contents. There is no reason to think that different features, or even the same feature, of an artefact cannot function in different cultural realms at the same time.

MAGNE, MARTIN P. R.
ARCHAEOLOGICAL SURVEY OF ALBERTA

LITHIC REDUCTION EXPERIMENTS AND
ASSEMBLAGE FORMATION PROCESSES

ABSTRACT

Key debitage variables as indicators of lithic reduction stages are reviewed across several archaeological examples. Discussion focusses on the effect that particular reduction models may have on assemblage interpretations in terms of site occupation span and group mobility. New methods of dealing with assemblage size and diversity are presented, providing implications for modelling assemblage formation under varying conditions of lithic resource availability and group mobility. In particular, means of studying the rates at which lithic assemblages were formed at various kinds of sites appear to hold promise for understanding hunter-gatherer settlement systems. Lithic reduction experimentation can contribute but must begin to study entire assemblages rather than particular tool types, as well as group rather than individual variability.

Merc, J.

Underwater Archaeological Society of British Columbia
Southern Vancouver Island Historic Shipwreck Inventory

The Underwater Archaeological Society of British Columbia is committed to the protection and preservation of historic shipwrecks in B.C. To this end the Society applied for and received a grant from the British Columbia Heritage Trust in August 1987 to undertake an inventory of Historic Shipwrecks off Southern Vancouver Island. The boundaries of the study area extend from Sidney on the Seanoich to Sheringham Point west of Sooke. This is the fourth in a series of shipwreck inventories to be undertaken by the UASBC during the past eight years.

Considering Victoria was one of the first permanent settlements on the B.C. coast it is not surprising that the waters surrounding this port are inundated with wrecks. In light of the above fact, only those vessels wrecked prior to 1915 will be considered during the course of the inventory. To initiate this project UASBC members have concentrated on compiling all available archival material on each vessel. With this task well in hand we recently began searching for the previously unlocated wrecks. As each vessel is found, its location, condition and degree of encroachment are documented through measurements, visual observations and underwater photographs.

A final report documenting our findings is to be submitted to the British Columbia Heritage Trust by March 31, 1989.

Roger Marois

Canadian Museum of Civilization
Individualism, regionalism, universalism: friends or foes.

This paper intends to demonstrate that lack of commonly accepted definitions for ceramic description and analysis leads to individualism. Without relating to a common base, individualism cannot yield comparative data. Without comparative data, regionalism is out of reach and universalism an impossible mission. Critical comparison of a few authors' analysis methods will point out the deficiencies to be corrected in order to reach a regional and universal level which should characterize a sound scientific analysis of ceramics.

Cette communication se propose de démontrer que le manque de définitions communément acceptées pour la description et l'analyse de la céramique conduit à l'individualisme. Sans se référer à une base reconnue, l'individualisme ne peut produire des données comparables. En l'absence de données comparables, la régionalisme est hors de portée et l'universalisme devient une mission impossible. La comparaison critique des méthodes d'analyse de quelques auteurs indiquera les lacunes qu'il importe de combler si on veut atteindre un niveau régional et universel qui conditionne la valeur scientifique de l'analyse de la céramique.

R. G. Matson

Department of Anthropology & Sociology, University of British Columbia
THE OLD CORDILLERAN COMPONENT AT GLENROSE CANNERY SITE AND THE ORIGINS OF THE NORTHWEST COAST PATTERN

This component is described, incorporating information that was not available when the monograph was written a dozen years ago and correcting certain misunderstandings that have developed. The seasonality and subsistence information is particularly stressed. This information, in conjunction with that from Bear Cove (C. Carlson 1979 *CJA*) and the artifactual information from Olcott sites to the south serve as a basis to characterize the basal culture of the Puget Sound-Gulf of Georgia-Vancouver Island region. This construct is compared to contemporaneous inland variants of the Old Cordilleran Pattern and to the succeeding cultural unit (St. Mungo-Mayne-Charles Cultures).

Matson, R.G.

Anthropology and Sociology, University of British Columbia
The Origins of the Plateau Pithouse Tradition--or the Selah Springs Pattern 20 years later

In the last 15 years the content surrounding the Plateau pithouse origins has shifted radically. The ages, locations and associations of the first pithouses have all changed. I argue that the earliest manifestations can all be seen as variations of a single archaeological culture, one that approximates what Claude Warren called the Selah Springs Pattern in 1968. This culture can in turn be seen as an evolved variant of the underlying Old Cordilleran Tradition. In addition to early pithouse sites and cultures on both sides of the border, non-housepit cultures and sites such as the Keyes Phase and the Terrace and Rattlesnake Hill sites also appear to be related.

McCaffrey, Moira T.

Department of Anthropology, McGill University
Cultural and Geological Landscapes in the Labrador Trough.

Recent analyses of archaeological collections from across the Québec-Labrador subarctic have noted both spatial and chronological patterning in the varieties of lithic raw materials employed by prehistoric groups. In order to better understand the significance of these patterns, a program was established four years ago to locate and to characterize sources of knappable stone in the interior eastern subarctic. This paper presents the results of research on chert-bearing formations in the central Labrador Trough - a folded belt of Precambrian sedimentary, volcanic and metamorphic rocks, extending from Ungava Bay to south of Fermont, Québec. Geological maps were used to pinpoint chert formations, which were then visited. Prehistoric quarry, workshop, and habitation sites were found at many of the chert outcrops. In addition to providing a preliminary culture-history for this interior region, the data collected raise two important issues. First, in designing survey strategies, archaeologists should consider potential lithic source localities, and particularly fault zones within these. Second, the discovery of the Labrador Trough sources leads us to reexamine past assumptions about the lack of high-quality, knappable stone in the interior, and the supposed "need" to acquire stone from distant sources.

MCCARTNEY, PETER AND N. BERTULLI

DEPARTMENT OF ARCHAEOLOGY, UNIVERSITY OF CALGARY; PRINCE OF WALES NORTHERN HERITAGE CENTRE, YELLOWKNIFE
SITE CATCHMENT COMPARISON OF TRUELOVE LOWLAND AND MAXWELL BAY, DEVON ISLAND, HIGH ARCTIC

TWO AREAS FROM THE SAME PHYSIOGRAPHIC REGION, THE PLATEAU, OF DEVON ISLAND ARE COMPARED IN TERMS OF SETTLEMENT AND RESOURCE EXPLOITATION BY PREHISTORIC PEOPLES. TRUELOVE LOWLAND HAS BEEN CALLED AN OASIS IN THE ARCTIC AND IS A COASTAL MARGIN FRINGED BY UPLANDS. MAXWELL BAY IS A DEEP INDENTATION ON THE SOUTHWEST DEVON COAST.

Alan McMillan

Social Sciences Department, Douglas College
EARLY SURFACE COLLECTIONS FROM ALBERNI VALLEY, VANCOUVER ISLAND

Surface artifacts from a number of sites along the Somasa River in the Alberni Valley are considered, based on geological and typological considerations, to represent an early occupation. Microblade cores, leaf-shaped points, and other lithic tools are found at considerable elevations above the modern river level. It is argued that these sites predate the markedly different assemblages found at lower elevations, such as at the excavated Shoemaker Bay site. Comparisons are made to other early coastal microblade assemblages.

Molnar, James

University at Albany, SUNY
A Structural Analysis of Algonquian and Iroquoian Myth

Algonquian and Iroquoian myths are considered to contain information essential to each culture area, dealing with all forms of behaviour from subsistence and local ecology to social relations and belief systems. From an ecological perspective, myth defines a culturally meaningful environmental context and prescribes an adaptive strategy to that perceived context. It operates on, or mediates between, a change in the life of the present people from the ways of their ancestors. A case in point is the adoption of agriculture. By decoding descriptions of myths and belief systems through structural analysis, knowledge is gained of prehistoric practices and culture changes that are not otherwise readily accessible to archaeologists.

Richard E. Morlan
Archaeological Survey of Canada, Canadian Museum of Civilization
Zoarchaeology and Taphonomy at Tipperary Creek, Saskatchewan

This preliminary report will focus on mammalian and amphibian bones from one stratigraphic level of the Tipperary Creek site (FbNp-1). At this stage in the analysis it is necessary to focus on methodological concerns, including quantitative problems, sampling designs, spatial analysis, fragmentation analysis, and a variety of taphonomic considerations. A perennial quantitative problem, MNI counts, will be discussed with reference to different agglomerative levels and different anatomical parts. It will be shown that certain post-cranial elements of rodents possess diagnostic characters but that these elements are often unavailable even in the best reference collections. The dilemma involved in integrating several sampling designs will be illustrated, and several approaches to spatial analysis will be explored. Finally some predictions will be ventured concerning cultural and non-cultural taphonomic pathways to the site.

THE LATER PREHISTORY OF FRANKLIN BAY, N.W.T.

Very little archaeological work has yet been undertaken along the south coast of Amundsen Gulf, that part of the Canadian Arctic mainland between Cape Bathurst and Dolphin and Union Straits. The area was uninhabited historically, and is still remote from transportation centres. Yet it is strategically crucial for any understanding of the movement of Thule culture into Arctic Canada, or the subsequent development and differentiation of historic Western or Mackenzie Inuit culture on one hand, and of the Central Inuit on the other. In 1987 the author excavated at Iglooduit (NIRu-1), a 30-house Neoeskimo village on the coast of Franklin Bay, in the western part of Amundsen Gulf. Two houses were excavated, and both proved to be late prehistoric in date (ca. 1600-1700 A.D.). Other sites in Franklin Bay are known from the itinerant diggings of Vilhjalmur Stefansson and members of the Canadian Arctic Expedition, during and just before World War I, with collections mostly housed at the American Museum of Natural History in New York. Together, the recent diggings at Iglooduit and Stefansson's old collections suggest 1) that Thule culture moved into the area at a very early date, perhaps early enough to be termed late Birnirk, and 2) that in the late prehistoric period Mackenzie Inuit culture existed as far east as the Cape Parry Peninsula.

DAVID MORRISON,
ARCHAEOLOGICAL SURVEY OF CANADA,
CANADIAN MUSEUM OF CIVILIZATION.

Muir, R.J.
Dept. of Archaeology, Simon Fraser University
A Rim With A View: an interpretive analysis of housepit rim deposits at the Keatley Creek site (8cR1 7).

Through the analysis of housepit rim stratigraphy and artifact content a model of what rim deposits represent can be constructed. The evidence from housepit 7 at the Keatley Creek site suggests that rim deposits are primarily the product of multiple housefloor cleaning (including the removal of lithic, organic and hearth debris from inside the house) and re-excavation episodes. The study of housepit 7 also seems to indicate that the house underwent an expansion in size and a transition from a bare to an earthen covered roof through time. Evidence for distinct activity areas on the rim are also discussed.

Murielle NAGY
Department of Archaeology, Simon Fraser University
L'exploitation du caribou au site NgVh 1 dans le nord du Yukon

A travers l'étude des restes archéologiques du site NgVh 1, nous examinerons les activités liées à la chasse au caribou pratiquée par les Inuit du delta du Mackenzie qui occupaient le nord du Yukon à la fin de la période préhistorique. Ce site fut fouillé en 1983, 1985 et 1986 par une équipe de la Commission Archéologique du Canada pour le projet NOGAP (Northern Oil and Gas Action Plan). NgVh 1 est un site d'habitation situé à l'ouest de la rivière Trail, à environ 25 km au sud de la mer de Beaufort.

Les restes de fœtus et de nouveaux-nés de caribous ainsi que ceux de parties médullaires d'os de lagopèdes indiquent que le site fut occupé de la fin mai jusqu'à la fin juin. On a démontré que des activités liées au traitement des os, à la manufacture d'outils et au travail des peaux, furent effectuées par les habitants du site. Lors de l'analyse des restes de la faune, on a identifié 21 espèces animales, parmi lesquelles le caribou et les lagopèdes sont les plus fréquentes. Les caribous étaient chassés près du site et les dépouilles entières y étaient ramenées pour le dépeçage ainsi que pour l'extraction de la moëlle et de la graisse provenant des os.

Le site contient aussi une abondante concentration de débris associés à la production d'objets en bois de caribou et, dans une moindre mesure, ceux associés à la production d'objets en os. L'analyse des techniques de manufacture a permis d'identifier deux catégories d'outils. Premièrement, des outils en bois de caribou: pointes de flèches, manches de couteaux... dont la confection est très élaborée, en vue de futures chasses. Deuxièmement, des outils en os: principalement alènes et écharnoirs, fabriqués plus grossièrement, pour usage immédiat.

Murielle NAGY
Department of Archaeology, Simon Fraser University
Caribou exploitation at NgVh-1 (Northern Yukon)

This paper investigates a poorly-known aspect of the seasonal round of the late prehistoric Mackenzie Inuit, the late spring/early summer caribou hunt, through the study of the NgVh 1 site in the northern Yukon. NgVh 1 is a habitation site located west of the Trail River, approximately 25 km south of the Beaufort sea. The site was excavated in 1983, 1985 and 1986 by a team of the Archaeological Survey of Canada in connection with the Northern Oil and Gas Action Plan (NOGAP).

The presence of foetal and neonate caribou and of medullary bone in some ptarmigan remains indicates that the site was occupied from late May until late June. Activities related to bone processing, tool manufacture and skin-working were shown to have been carried out at the site. Analysis of the faunal material has demonstrated that 21 species were present, of which caribou and ptarmigan were the most important. Caribou were hunted in the vicinity of the site and transported back to the site for butchery, marrow and grease extraction.

The site is notable for the heavy concentration of by-products associated with the manufacture of antler artifacts. There was also some evidence for the production of bone tools. Recognition of two types of gear was substantiated by the analysis of manufacturing techniques performed on the associated by-products. Personal gear (e.g. arrowheads, knife handles), made from antler, was manufactured with considerable effort and skill. These tools would have been prepared in anticipation of future caribou hunting. Situational gear (e.g. awls, scrapers), made from bone obtained on site, was manufactured expeditiously and meant for immediate use.

Newman, M.
Department of Anthropology, University of Toronto
The Analysis of Blood Residues - Cummins Site, Ontario

In recent years a new approach to the functional analysis of lithic artifacts has emerged which circumvents many of the problems associated with traditional techniques such as use-wear analysis, stylistic interpretation and ethnographic analogy. This involves the identification of the specific proteins that a tool's working edge was in contact with during its original use. This paper will discuss the application of immunological techniques, currently employed by Forensic Laboratories, to the analysis of archaeological materials. This has important implications for the determination of prehistoric subsistence patterns especially in areas, such as the Cummins Site, where faunal preservation is poor or non-existent. The results obtained from the analysis of materials from the Cummins Site will be presented.

Nicholson, S.S.
Department of Sociology/Anthropology
Brandon University

CERAMICS ON THE PLAINS/PARKLAND INTERFACE OF SOUTHWESTERN MANITOBA

Until recently, Late Prehistoric ceramics in Manitoba were subsumed under the threefold classification of Blackduck, Duckbay, and Selkirk, together with vague mention of aberrant sherds or occasional mention of wares intrusive into the southwestern corner of the province. This typological scheme was imported from the eastern and northern boreal forest sections of the province and was generally accepted because of the extremely limited data from Southwestern Manitoba.

Recent work at the Lovstrom site (DjLx-1) on the Souris River, south of Brandon, has produced evidence of a more complex set of cultural parameters. At this site a distinctive ware, related to Blackduck, has been identified together with late side-notched points, lunate bifaces and bison scapula knives. An exotic lithic material, Tongue River Silicified Sediment, indicates trade or travel connections to South Dakota. Four vessels have been identified in a circumscribed area of the site and it has been tentatively named Lovstrom Ware.

A very different assemblage of ceramics has been identified in another area of the site. These materials bear some resemblance to materials from the Dakotas but they more strongly suggest Woodland than Plains affinities. In addition, surface collections from a cultivated portion of the site indicate a Blackduck/Duckbay presence together with single vessels from Middle Missouri and Saskatchewan Basin groups. Initial interpretation supports the Co-influence Sphere Model proposed by Syms (1977), coupled with an active trade network linking boreal forest and plains groups to resident parkland nomadic groups in Southwestern Manitoba.

James B. Petersen
Archaeology Research Center, Department of Social Sciences and
Business, University of Maine at Farmington
The Pseudo Scallop Shell Ceramic Horizon Style in North American
Prehistory.

Pseudo scallop shell decorated ceramics represent a widespread pottery
style centered on the Great Lakes-St. Lawrence River drainage in
northeastern North America. This form of decoration can be used as a
hallmark of the putative Lake Forest Middle Woodland cultural complex
and certainly represents an important horizon style of the Middle
Woodland period across this region. Definition of the pseudo scallop
shell horizon style is outlined through discussion of the form and
variation, spatial distribution, temporal range and functions of pseudo
scallop shell decorated ceramics.

Jean-Luc Pilon
Archaeological Survey of Canada, Canadian Museum of Civilization

New Insights into the Prehistory of the Lower Mackenzie Valley; Anderson Plain
Region, Northwest Territories.

Since the landscape of the southwest Anderson Plain assumed its present
appearance approximately 9000 years ago, it is no surprise that some sites
contain the remains of a number of occupations which took place at different
times over the course of many centuries, if not millennia. However, most of
the components which can be attributed to particular time periods or cultural
traditions, seem to relate to late prehistoric Athapaskan people.

A clear pattern of land use in the late prehistoric period is emerging.
It appears to have been predicated upon the exploitation of a wide range of
resource species, but caribou may have been a central element in the
settlement-subsistence strategy.

Two dwelling types have been documented. On the one hand, the use of
tents or similar above-ground structures is inferred while semi-subterranean
features interpreted as habitations now number 34.

Although comparative data from adjoining regions is scant, there is some
tentative archaeological support for Kretsch's argument that this area was
inhabited, at contact, by a distinct group identified by Petitot as the
Awitscha Hutchin.

Le paysage qui domine le sud-ouest de la plaine d'Anderson existe depuis
environ 9000 ans. Il n'est donc pas surprenant que nous y avons trouvé
quelques sites archéologiques à occupations multiples. Les plus anciens
vestiges remonteraient même à quelques millénaires, mais la grande majorité
des gisements que nous avons pu identifier chronologiquement ou
culturellement, s'apparentent au peuple athapaskan de la période préhistorique
tardive.

Nous pouvons leur attribuer un schéma d'utilisation du territoire
caractéristique, basé sur l'exploitation d'une variété d'espèces animales
quandqu'ils semblent avoir privilégié le caribou. Avant l'adoption
d'habitations d'inspiration européenne, les gens utilisaient au moins deux
types d'abris; la structure de tente ou autre aménagement semblable et la
structure semi-souterraine. A date, 34 de ces dernières ont été repérées dans
la région.

En dépit de la difficulté que nous éprouvons à comparer nos découvertes
avec celles des régions voisines, nous croyons, à l'instar de Kretsch, que le
sud-ouest de la plaine d'Anderson était jadis occupé par le groupe identifié
comme les *Awitscha Hutchin* par le Père Petitot.

Jean-Luc Pilon
Archaeological Survey of Canada, Canadian Museum of Civilization

Carole Stimmel
Department of Anthropology, University of Toronto

R.G.V. Hancock
SLOWPOKE Reactor Facility, University of Toronto

The Analysis of Ceramics from the Hudson Bay Lowlands, Northern Ontario

Typological considerations show that the ceramics found along the lower
Severn River relate to two major time episodes (Initial Woodland and Late
Woodland), and three distinctive ware categories (Laurel, Blackduck and
perhaps Selkirk). However, the total Native ceramic collection from the
Severn River sites is 109 pieces, and to date there are less than 200 ceramic
sherds known from all of the Hudson Bay Lowlands of Northern Ontario. On this
basis alone, it would appear that ceramics did not play a very important role
in the material culture of prehistoric Lowlanders.

Instrumental Neutron Activation Analysis allows the comparison of the
chemical constituents of the clays used in the manufacture of the different
pottery types. Application of this method shows that the pottery found along
the Severn River was not manufactured from the abundant, locally available
Tyrrell Sea clays. Further comparisons with ceramics from Southern Indian
Lake in northern Manitoba, and North Caribou Lake in north-central Ontario
indicate that local clay sources were used in these areas over the course of
centuries. However, those regions do not appear to be the ultimate sources of
any of the Severn River ceramics.

L'analyse typologique des tessons de céramique trouvés le long de la
rivière Severn suggèrent la présence de trois types décoratifs (Laurel,
Blackduck et peut-être Selkirk) représentant deux périodes majeures (Sylvicole
initial et Sylvicole tardif). Cependant, très peu des sites découverts dans
les Basses Terres de la baie d'Hudson ont livré de la céramique (109 pour les
sites de la rivière Severn et moins de 200 tessons pour toute la région). Le
rôle de ces récipients dans la culture matérielle n'est donc pas vu comme
étant important.

L'analyse par activation neutronique permet la comparaison des éléments
constitutifs des argiles employées dans la fabrication de la céramique. En
effet, l'utilisation de cette technique indique que les argiles abondantes de
la rivière Severn n'ont pas été employées pour façonner les vases de
céramique. Nous avons, en outre, comparé ces résultats avec des échantillons
de céramique provenant de Southern Indian Lake au Manitoba et de North Caribou
Lake dans le nord ontarien. L'homogénéité des sources d'argile locales se
manifeste nettement dans ces deux régions mais nous ne pouvons pas à présent
suggérer les origines de la céramique des Basses Terres.

David L. Pokotylo
Department of Anthropology & Sociology, University of
British Columbia
Donald B. Mitchell
Department of Anthropology, University of Victoria
EARLY PERIOD COMPONENTS AT MILLIKEN SITE, FRASER CANYON,
B.C.

This paper reports on recent studies of pre-5,000 B.P.
components at the Milliken Site (DJR1 3) in the lower
Fraser River Canyon of British Columbia. We describe the
lithic tool and debitage assemblages from culture-bearing
strata attributed to the Milliken and Masama Phases and
assess the validity of this separation of the DJR1 3 early
occupations into two components. Bordon. The Milliken
Early Period assemblages are also compared to other reported
Old Cordilleran Culture sites in the Pacific Northwest.

Pratt, Heather
University of British Columbia
Technological Variability at a Hat Creek Lithic Surface
Scatter.

The analysis of lithic tools and debitage from a site can
give much information about the nature of a site's occupa-
tion. In particular, core manufacture or tool reduction
activities can be inferred from the presence or absence of
specific categories of lithic debitage. This paper analyzes
a lithic surface scatter at Hat Creek, British Columbia
(EaRj:101) and compares the functions of two separate
activity areas found at the site.

William C. Prentiss
Ian Kuijt
Department of Archaeology
Simon Fraser University
Distinctive Debitage Assemblages and Archaeological Site Formation

Archaeological site formation is conditioned by a variety of
cultural and non-cultural events operating during
pre-depositional, depositional and post-depositional periods. It
is critical for archaeologists to be able to trace the history of
these processes in any given site to realistically identify the
effects of human behavior. One avenue for obtaining data of this
type is through debitage analysis. Debitage is a ubiquitous
artifact type in many archaeological sites and represents a
sensitive indicator of a range of processes affecting
archaeological site formation. A distinctive assemblage approach
defines debitage as groups of artifacts reflecting often complex
formational histories rather than as distinctive artifacts
reflecting only simple technological origins. This approach,
supported by controlled experimental research, is utilized to
examine some aspects of the formational history of the debitage
assemblage from Skoglund's landing, a 4,165±130 A.P. lithic site
from the Queen Charlotte Islands. Implications for reconstruction
of cultural behavior at this site are presented.

W.G. Quackenbush
Department of Archaeology,
Simon Fraser University, Burnaby, B.C.
Tastes of Canadians and Dogs: Settlement Pattern at McLeod
Lake Post, British Columbia (GRS 2)

McLeod Lake is the longest continually occupied
Euro-American settlement in British Columbia. The opening
up of New Caledonia for direct trade began with Simon
Fraser's orders to construct a house there in 1805. The
post came into the hands of The Hudson's Bay Company after
the 1821 amalgamation with the North West Company.
Distinguishing building layout patterns for periods which
have little documentation poses a problem. Archival
research indicates a grid-like (or right angle) positioning
of structures through time. This appears similar to
previously excavated and documented Hudson's Bay and North
West Company posts. Grid layout can be contrasted with more
'organic' patterns of settlement seen in local Sekani and in
Metis and French Canadian arrangements. Historically, grid
systems are associated with intensive capital input where
directed settlement growth is fueled by specific capital
interests. McLeod Lake saw no such intensive development,
but still utilized a grid system for building layout. It is
suggested that grid layout is a culture tradition that
imposes a benign control on employees in the same way that
directed growth aims at increasing profits.

Geomorphology as an Aid to Mapping Archaeological Resources in NOGAP Areas.

By incorporating air photo and surficial geology map interpretations, terrain units are defined. Landscape units combine terrain units and other physical parameters, such as ease of excavation, which are thought to affect archaeological potential. Finally, landscape categories based on geomorphology in conjunction with position or geographic location allow for an effective means of classifying the archaeological potential of large areas of landscape.

Des unités de terrain sont définies à partir de photos aériennes et de cartes géologiques des dépôts meubles. L'intégration des unités de terrain et de facteurs qui peuvent modifier le potentiel archéologique, telle la facilité de creuser dans le sol, résulte en une description d'unités de paysage. Enfin, la combinaison de facteurs géomorphologiques et géographiques permet l'établissement de catégories de paysage qui reflètent le potentiel archéologique de grandes régions.

Peter G. Ramsden
Department of Anthropology, McMaster University
The Huron-Algonkian Interface: the view from Halliburton and the Kawartha Lakes.

Archaeological survey and excavation in the region from Balsam Lake to Halliburton has produced data relevant to the question of the nature of the boundary between the Hurons of the upper Trent valley and the Algonkians of the Canadian Shield to the north. These data suggest that the boundary is a very wide and hazy one. While it is likely that the Huron exploited the lakes of the Shield area occasionally, it is also likely that Algonkians visited, and may have resided in, the Trent valley. There appears to be an archaeological continuum between Huron and Algonkian, and it appears that some sites that have previously been regarded as Huron were in fact occupied by Algonkians with a very Huron-like culture.

B.O.K. Reeves
Department of Archaeology, University of Calgary
R.G. Forbis and the development of archaeology

Dick Forbis can be truly said to be the Father of Alberta Archaeology. Over his 30 plus year career of research and teaching in Alberta, he has played many roles and made many pioneering and instrumental contributions, not only to the Archaeology of Alberta and adjacent regions of Western North America, but also to the education of undergraduate and graduate students in Archaeology and to the development of the discipline in Canada. Beginning with the Glenbow Foundation, where he was hired as Alberta's first archaeologist in 1955, and ending with his retirement from the University of Calgary in 1987, his contributions to knowledge, scholarship, education, and legislation are discussed, highlighting those which were particularly significant in the development of Archaeology within the Provincial and National perspective.

(retyped)

A BRITISH COLUMBIA PERSPECTIVE ON THE PROBLEMS AND SOME SOLUTIONS IN CONSERVING SHIPWRECK SITES AND THEIR CONTENTS

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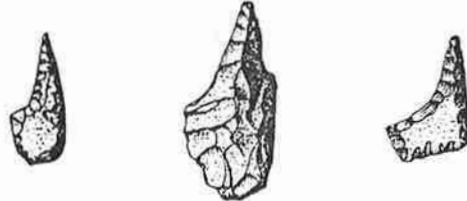
ABSTRACT

Shipwrecks are an important component of world cultural resources. Increasing accessibility of wreck sites since the 1950's, coupled with destructive activities by many wreck divers, has depleted this resource in both quality and quantity. The U.A.S.B.C. was founded in 1975 by members of the sport diving community to help address this problem in B.C.'s waters and to promote the (then) relatively new science of underwater archaeology. This presentation is intended as a review of some of our successes, failures and future plans in the movement to preserve our maritime heritage and to conserve those artifacts which have been recovered from the sea. Reference is made to specific wrecks, including 'Ericsson', 'Del Norte' and the 'Sydney Inlet Mystery Wreck', as examples of the different environments encountered and the different tactics that have been adopted.

Rousseau, Mike K.
Department of Archaeology, Simon Fraser University
The Significance and Function of Key-Shaped Formed Unifaces on the Interior Plateau.

"Key-shaped formed unifaces" constitute a unique chipped stone tool type commonly found at late prehistoric sites on the Interior Plateau of northwestern North America. Despite previous recognition of their potential to be regarded as temporal horizon markers and indicators of specific task execution, their cultural, chronological, and functional significance has never been fully explored or assessed.

This paper outlines the approximate geographical and temporal distribution of key-shaped formed unifaces in the northwest; presents results and interpretations of a detailed study concerned with determining their primary function; and discusses the implications of these considerations with respect to our current understanding of certain aspects of late Interior Plateau prehistory.



SHERWOOD, Andrew N.
Department of Classics, University of Victoria.

Excavations at Herod's Harbour, Caesarea Maritima (Israel)

The present underwater excavation at Herod's harbour began in 1980 and has continued until 1987. Funding for the project has been provided by SSHRCC, NEH, National Geographic, the Universities of Victoria, Boulder at Colorado, Maryland, and Haifa and numerous private donors. Four co-directors, one from each university, have directed the expedition and have channelled the energies of an international, volunteer workforce which at times approached one hundred divers.

The ultimate goal of the project is to document the design, technology and history of the harbour and to develop some understanding of the role it played as one of the major anchorages in the Eastern Mediterranean during the Roman Empire.

The principle value of the site rests in the fact that it is one of a very small number of classical harbours, constructed on a massive scale, which is presently available for archaeological examination. Other major harbours such as those at Athens and Rome are buried beneath modern construction, too busy with maritime traffic or inaccessible for other reasons.

We are also fortunate that several historical sources describe Herod's harbour and its construction. One of the objectives of the project has been to evaluate the accuracy of such testimonia by comparing them with the physical remains. The excavation has yielded data confirming much of the testimonia and has provided surprising information about the sophistication of harbour technology at the end of the first century B.C.E.

Herod meant to provide a showcase city, Caesarea, and he spared no effort or expense to furnish it with a first-class anchorage. Huge artificial breakwaters (c.500 m and c.250 m long) were constructed to protect an inner basin equipped with quays, loading platforms and storage facilities. The testimonia tell us that huge blocks were used for their construction; excavation has revealed immense blocks (12 m x 15 m x 2 m) composed of hydraulic concrete. Since the testimonia also record that expensive materials were imported from various regions in the Eastern Mediterranean to adorn the harbour, samples of the hydraulic concrete are being analyzed to see whether Herod might also have imported this unusual material from its most famous quarries in central Italy. If this proves to be correct, it may suggest that Herod also imported specialists familiar with the material in order to oversee the construction of his harbour.

Herod meant to impress -- and he did. Not until sixty years later did Claudius, a Roman Emperor, attempt to build a harbour on such a scale. Herod built his anchorage at a critical moment in the development of Roman construction technology and he used every means available to satisfy his ambition. We are particularly fortunate to have this particular harbour as our example of Roman maritime technology.

Karolyn E. Smards
Archaeological Resource Centre
Toronto Board of Education
Toronto Students Dig Into Their Past

In 1985, the Toronto Board of Education created the first Archaeological Resource Centre in any North American public school system. The Centre is staffed by seven qualified archaeologists who operate a year-round calendar of excavation, resource, and curriculum development projects. Some 12,000 students and members of the public annually take part in participatory excavation, analysis and workshop programmes relating to heritage research and conservation. An intensive public information campaign is carried out in order to increase popular awareness of the important role archaeology plays in uncovering and preserving our fragile urban heritage resources.

This paper will describe the mandate and operating structure of the Archaeological Resource Centre. Emphasis will be placed on the methods used to encourage public knowledge and awareness of heritage information.

Spafford, James G.
Department of Archaeology, Simon Fraser University
Lithic Strategies in an Interior Winter Village

Hayden et al. (1987) have argued that large housepits at Keatley Creek may have been inhabited by corporate groups which exercised considerable control over important resources. This paper considers some of the ways in which this form of social organization, and the subsistence-settlement system which produced it, could have influenced strategies for the procurement of lithic raw materials and the manufacture, use, and disposal of stone tools. Implications for the formation of lithic assemblages at the site are proposed and tested against excavated materials.

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Stevens, E. Willis
Environment Canada - Parks
Marine Archaeology Unit
Submerged Cultural Resource Management: the Shipwrecks of 18th-century Louisbourg

Independent, submerged cultural resource data bases have specific attribute sets which dictate management policy. The resulting management plan must first and foremost consider ways to lessen the hazard and damage to the resource, to control resource deterioration and to provide interpretative information which will enhance marine heritage appreciation and preservation. The management plan adopted for the 18th-century wrecks of Fortress Louisbourg is best explained as an eco-museum. This concept emphasizes that the resource base be left intact for public visitation through private diving tours which operate under a permit system. How this approach is being implemented at Louisbourg will be discussed with reference to one particular wreck site, the Celebre, a 64-gun French ship of the line.

Ethnoarchaeology and Ethnohistory in the Service of Cultural Tourism

Marc Stevenson
Northern Past Heritage Consultants
Edmonton/Yellowknife

This paper describes the process by which Kekertan Island became the first historic park in the Northwest Territories. The roles of Inuit elders, Inuit youth and southern scientists in the research and development of Kekertan are discussed. While economically motivated, the development had and continues to have numerous cultural and social benefits for the community of Pangnirtung. These are described.

ANDREW STEWART AND CHRISTOPHER HANKS
DEPT. OF NEW WORLD ARCHAEOLOGY, ROYAL ONTARIO MUSEUM AND PRINCE OF WALES
NORTHERN HERITAGE CENTRE.
THE POTENTIAL FOR EARLY HUMAN OCCUPATION OF THE BARRENLANDS AT THE TIME OF THE TYRRELL SEA.

DEGLACIATION OF THE KEEWATIN DISTRICT OF THE NORTHWEST TERRITORIES OCCURRED BETWEEN 8,000 AND 7,000 BP. A NUMBER OF SITES WITH PLANO MATERIAL HAVE BEEN REPORTED FROM THE MIDDLE AND LOWER THELON, DUBAWNT AND KAZAN RIVERS, AND THE TLEWIAZA AND THA-ANNE RIVER SYSTEMS. THIS MATERIAL IS EXAMINED IN THE CONTEXT OF THE ENVIRONMENTS OF THIS EARLY POST-GLACIAL PERIOD BETWEEN ABOUT 8,000 AND 5,000 BP.

A NUMBER OF PROBLEMS FOR HUMAN ADAPTATION SHOULD HAVE BEEN POSED DURING THIS PERIOD BY THE RATE AND SCALE OF ENVIRONMENTAL CHANGE. RAPID CHANGE TOOK PLACE IN VEGETATION, ICE MARGIN POSITION, AND THE LEVELS OF LAKES AND THE TYRRELL SEA. THIS TRANSITION MAY HAVE DELAYED THE APPEARANCE OF REGULAR PATTERNS IN THE SEASONAL AND SPATIAL DISTRIBUTION OF RESOURCES WHICH WE SEE TODAY IN THE NORTHERN BOREAL FOREST AND BARRENLANDS. MOREOVER, PEOPLE WHO HAD MIGRATED RECENTLY INTO THIS REGION WOULD HAVE BEEN UNFAMILIAR WITH THE LANDSCAPE AND RESOURCES.

THESE UNCERTAINTIES SUGGEST THAT PEOPLE EMPLOYED STRATEGIES OF SETTLEMENT AND PROCUREMENT TO INCREASE THE AMOUNT AND RANGE OF INFORMATION ABOUT THEIR NEW ENVIRONMENT, AND TO MINIMIZE THE VARIABILITY IN RESOURCES WHICH MAY HAVE BEEN PERCEPTIBLE WITHIN LIFETIMES. THESE STRATEGIES HAVE IMPLICATIONS FOR PATTERNING WITHIN EXISTING PLANO ASSEMBLAGES. IF BORNE OUT, THESE PATTERNS MAY ALSO PROVIDE ADDITIONAL MEANS OF IDENTIFYING EARLY SITES FROM THIS REGION IN THE FUTURE.

Kathlyn M. Stewart
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Early Holocene Fishing Adaptations in Northern Kenya

Across the sahelian-saharan zone of Africa clusters of semi-sedentary or sedentary fishing settlements appear in the archaeological record in the early Holocene period (circa 9000-4500 bp). Their occupation spans a period of approximately 5000 years. They share a similar ceramic and bone industry, as well as apparently similar subsistence adaptations. Concomitant with the appearance of these sites is a period of climatic amelioration and of more abundant lakes and rivers, which, however, is later interspersed with periods of severe climatic deterioration and aridification. Subsequent decline and in some cases abandonment of these sites coincides with a later period of climatic deterioration.

Much of the earlier archaeological work on these fishing sites was typological in nature, being concerned with documenting stylistic changes in the ceramic and worked bone assemblages in isolation of other cultural and environmental variables. More recent research has investigated variation in the cultural assemblages within the context of environmental change; lacking however has been an examination of similar variation in the faunal assemblages.

This paper examines the faunal assemblages at several early Holocene fishing sites at Lake Turkana, Kenya and integrates variation therein with changes in the cultural assemblages, and environmental change. Preliminary findings suggest that changes in subsistence strategies were effected in response to severe environmental change, and that these changes are also reflected in the ceramic and worked bone assemblages.

Stewart, W. Bruce
Catawagui Archaeological Research Foundation, Kingston, Ontario
The Fort Frontenac Cemetery: The Way We Treat Our Heroes.

In late August 1987, construction activities within the present Fort Frontenac (Department of National Defence) compound exposed the remains of a seventeenth century French military cemetery. Archaeological assessment and impact mitigation on the site has been halted while D.N.D. considers whether or not it has responsibility for the management of cultural resources found on its land. The Federal Government is presently reviewing its environmental assessment process and is working to establish a policy for the treatment of archaeological sites. These developments will be discussed within the context of the Fort Frontenac Cemetery.

Archaeological Faunal Remains from the Southwest Anderson Plain, N.W.T.

Archaeological site surveys conducted by staff from the NOGAP programme of the Archaeological Survey of Canada over the last two field seasons have resulted in the recovery of faunal remains from a number of late prehistoric and early historic sites located in the southwest Anderson Plain area of the Northwest Territories. Although most of these samples are individually too small to represent a clear picture of the subsistence pattern at each site, examined together they provide a basic overview of seasonal faunal utilization at the northern limit of the boreal forest. Of particular interest was the recovery in one site of three birch bark containers filled with the remains of caribou, beaver, northern pike, whitefish, arctic or red-throated loon, and trumpeter swan. The presence of the waterfowl suggests a spring or summer occupation of the site, as does the quantity of juvenile caribou bone. Although caribou was apparently the primary dietary mainstay at virtually all of the sites, the secondary focus shifted between snowshoe hare, fish, and waterfowl, revealing an adaptable exploitation of the faunal resource base.

Carole A. Stimmell
 Department of Anthropology, University of Toronto
NORTHERN CERAMICS: AN ARCHAEOLOGICAL ENIGMA

The production and use of ceramic materials by prehistoric peoples is linked in the minds of many archaeologists to a complex of cultural traits which include horticulture and sedentary life. However in northern Canada, pottery is associated with a number of cultures which are primarily hunter-gatherer in nature. This paper will discuss some of the special conditions required for manufacturing pottery in the north and how these factors may have affected choices of technological and stylistic attributes. The restrictions imposed by limited environmental and cultural resources make it difficult to understand the development of such ceramic complexes using the typological models of more southern communities. An analysis of technological variables may prove more worthwhile in the study of northern ceramics.

Arnold H. Stryd
 Arcas Associates
 Michael K. Rousseau
 Department of Archaeology, Simon Fraser University
THE EARLY PREHISTORY OF THE MID-FRASER-THOMPSON RIVER AREA OF BRITISH COLUMBIA

This paper reviews what is known about human history and adaptation in the Mid-Fraser-Thompson River drainage area of southcentral British Columbia for the time span between deglaciation ca. 12,000/11,000 B.P. and the establishment of the Plateau Pithouse Tradition ca. 4,000/3,500 B.P. Review of Sanger's chronology leads to the definition of three revised periods: the early prehistoric (ca. 11,000 to 7,000 B.P.); the middle prehistoric (ca. 7,000 to 4,000/3,500 B.P.), and the late prehistoric (ca. 4,000/3,500 to 200 B.P.). Sanger's Nesikep tradition and Lochnore complex are redefined, and two additional archaeological units, the Sqaleten tradition and Lehman phase are introduced.

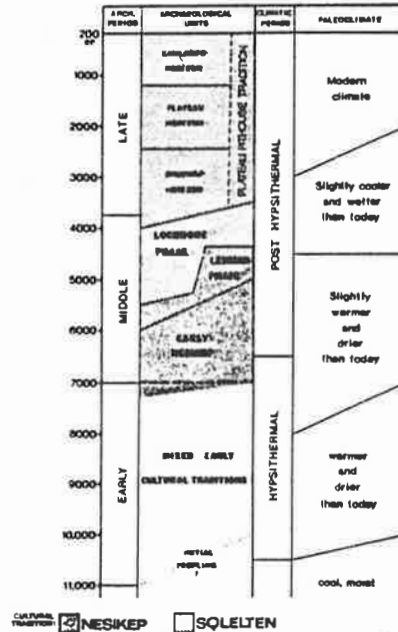
Initial peopling of this area probably commenced between ca. 11,000 and 10,000 B.P. Affiliations with the western Plano tradition, Early Coast Microblade tradition, Windust phase, and possibly the western Fluted Point tradition, are noted. There is dated evidence for an inland hunting adaptation by 8,200 B.P., and for riverine fishing, possibly for salmon, by as early as 7,500 B.P.

The middle prehistoric period commences ca. 7,000 B.P. with the emergence of the Nesikep tradition which existed to ca. 4,400 B.P. The first 1,500 to 2,000 years are characterized by the melding of earlier technological traits with new traits found in many parts of western North America at that time. Subsistence was based primarily on hunting, although people undoubtedly engaged in some fishing and gathering. The later part of Nesikep tradition is called the Lehman phase and dates from ca. 6,000/5,000 to 4,400 B.P. It is differentiated from the early Nesikep tradition by certain artifact styles and technological attributes.

The Sqaleten tradition began ca. 5,500 B.P. Its name is derived from the Shuswap word for salmon. The appearance of this tradition signals the arrival of riverine-adapted Salishan-speaking peoples from the Northwest Coast, presumably to exploit the salmon which became more numerous in the main rivers of the area with the onset of the post-Hypothermal. The first part of this tradition, dating between ca. 5,500 and 4,000/3,500 B.P., is called the Lochnore phase. The Lehman phase people and the Lochnore phase people may have coexisted and maintained

separate cultural identities for at least several hundred years. By ca. 4,400 B.P. the Salishan-speaking Lochnore phase people had absorbed (presumably both culturally and genetically) the Lehman phase people.

The Lochnore phase (and middle prehistoric period) ends with the establishment of the Plateau Pithouse tradition sometime between ca. 4,000 and 3,500 B.P. The latter is a sub-tradition of the Sqaleten tradition that developed out of the Lochnore phase, and represents a more sedentary way of life focused on intense salmon exploitation and storage, and on use of the semi-subterranean winter pithouse.



Patricia D. Sutherland
 Archaeological Survey of Canada
 Canadian Museum of Civilization
 Ottawa, Ontario

THE NOGAP-ARCHAEOLOGY PROJECT: Developing Archaeological Research and Management Approaches in the Northwest Passage Region of Arctic Canada - the Lancaster Sound Case Study.

The Northern Oil and Gas Action Plan was created as a means to increase government preparedness in response to the concern that modern industrial development, in particular hydrocarbon exploration and extraction, poses a serious potential threat to biological and cultural resources north of 60 degrees. Accordingly, the principal objectives of the NOGAP-Archaeology Project have been defined as the formulation and implementation of an integrated resource management system for the Canadian North. While the emphasis of this project is upon the Western Arctic and Subarctic, some attention has been given to the Northwest Passage, in particular to the Lancaster Sound region, an area that would be part of the most likely tanker route to the east coast of North America or to Europe.

A variety of reconnaissance techniques have revealed a rich and lengthy occupational history for the south coast of Devon Island, an area that had received relatively little archaeological attention prior to the initiation of this project. This poster session illustrates some of the methods and results of the NOGAP-archaeology project conducted in the Lancaster Sound area since 1985.

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Canadian Museum of Civilization
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USING AERIAL PHOTOGRAPHY FOR SITE SURVEY IN ARCTIC CANADA:
THE LANCASTER SOUND NOGAP STUDY.

Aerial photography is widely recognized as one of the most efficient means of conducting a survey, particularly in inaccessible areas. Despite this, its application in archaeological studies within Canada has been quite limited.

Since the late 1940's, aerial photography has been used for mapping purposes throughout the Canadian Arctic with excellent results. In 1987, a pilot study using low level aerial photography for archaeological survey was undertaken in the Lancaster Sound region of High Arctic Canada, as part of the NOGAP Archaeological Project.

This paper examines the procedures used and the results obtained in the pilot study, and discusses the efficacy of this approach vis-a-vis conventional survey methods and its application to other parts of Arctic Canada.

Gilles Tassé
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La céramique du site de la Falaise aux Grandes-Rapergonnes, Comté de Saguenay.

Le site de la Falaise (DbEj-13), sur la haute Côte-Nord du Saint-Laurent près de l'embouchure du Saguenay, a livré de la poterie de deux périodes culturelles: Sylvicole moyen et récent. La première présente le décor caractéristique de cette période, les impressions au peigne (denticulés) et en bord de coquille. La seconde est montée au battoir côtelé ou gaufré, avec un bord décoré d'impressions linéaires. Un vase monté au battoir gaufré comporte un parement typique de la céramique iroquoise du Saint-Laurent. La poterie du Sylvicole moyen est datée au radiocarbone vers l'an mille de notre ère. Celle du Sylvicole récent n'est pas datée, mais les tessons gaufrés paraissent associés à un couteau de traite. Tout ce matériel, ainsi que des prélèvements d'argile crue, a fait l'objet d'analyses par activation neutronique pour en déterminer l'origine (Robert Crépeau et G.G. Kennedy, Université de Montréal) et d'analyses des traces d'aliments (Henry Schwarcz, McMaster University). On donnera également un aperçu du contexte archéologique et écologique du site d'où proviennent ces céramiques.

Pottery from the "site de la Falaise" (DbEj-13), Co. Saguenay, on the Upper North Shore of the St. Lawrence estuary, encompasses two cultural periods: Middle and Late Woodland. Carbon-14 has dated the first component circa 1000 A.D. The second component remains undated to this day, but one checker-stamped castellated vase, typical of the St. Lawrence Iroquois, appeared to be associated with an iron trade knife. Middle Woodland sherds are decorated with pseudo-scallop shell and dentate stampings. Late Woodland pottery is made by means of the grooved paddle and checker-stamped paddle techniques, decoration being either linear incised or stamped on rim and lip. This material and local samples were submitted to clay analysis by neutron activation in order to determine their origin (Robert Crépeau and G.G. Kennedy, Université de Montréal). Food trace analysis was made by Henry Schwarcz (McMaster University). Ecological and archaeological contexts of these ceramic finds will also be given.

PUBLIC ARCHAEOLOGY;
an example from Red Bay, Labrador

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ABSTRACT:

Excavations at sixteenth century Basque whaling stations, and more recently sites of other cultures, have been under way at Red Bay for more than a decade. During that time the unexpected influx of visitors has forced archaeologists to develop plans for accommodating these visitors. This paper describes the gradually evolving attempts to deal with the general public, attempts to explain the benefits to archaeology of such efforts, and offers a few suggestions to others who might attempt such an approach.

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Archaeology in Use: the potential of cultural tourism in New Brunswick.

For many years now, there has been no real growth in infrastructure of archaeology in New Brunswick (or the Maritime Provinces as well). The last full-time position to be established was in 1977. There still are no full-time teaching positions in N.B. universities. However, a recent government re-organization at the provincial level, brings together the necessary elements to provide one major avenue of growth.

A newly created department of Tourism, Recreation, and Heritage has the specific mandate to use these resources to create jobs—to provide measurable economic impact on the lives of present day citizens. In this context, the Archaeology Branch of the Department has the opportunity to take advantage of the opportunities to use archaeology as a public resource in an overall provincial development strategy.

The key question is how? Funding has been received to undertake a system planning exercise to ferret out development possibilities, but it must go beyond major developments to permeate the whole programme. There must be a broadening of the rôle from resource manager to resource developer. It must be an additive process with new direction melded into an honest use of our heritage that will benefit our past; and our present citizens.

Tyhurst, Rob
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Access to Traditional Resources in the Lillooet Area: an
Ethnoarchaeological Approach

This paper is concerned with access to salmon and to deer in the Fountain-Parillan area, historically a part of the territory of the Sli'at'imx (Lillooet) people of south-central British Columbia. Contemporary ethnographic accounts have been used in combination with older ethnographic sources and intensive archaeological survey to produce a model of intra- and inter-Band patterns of granting, sharing, or denying access to these vital traditional resources.

R.E. Vance
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Aspects of Postglacial Climate in the Western Interior of Canada

A survey of recent paleoecological literature reveals an increasing tendency on the part of researchers to characterize periods of past climate in terms of configurations of the upper westerly air flow. Descriptions of past westerly flow patterns may be developed by synthesizing a variety of paleoecological data from a wide geographic area, since upper air flow is a hemispheric phenomenon. Since westerly flow patterns are important determinants of local climate, models of past hemispheric air flow may be utilized to hypothesize characteristics of past climatic regimes for a particular region. This process requires the use of historic data on westerly airflow and local meteorological conditions in concert with variations in postglacial boundary conditions (such as the waning continental ice sheets, dynamic patterns of solar radiation, and sea-surface temperature changes). In this paper a model of postglacial westerly air flow patterns will be presented and used to reconstruct aspects of postglacial climate in the western interior of Canada.

Vickers, J. Rod
Archaeological Survey of Alberta
THE ROSS SITE REVISITED: SEASONAL ROUND PROBLEMS

The Ross Site (D1Pd-3) is a Late Prehistoric multicomponent campsite located on the Oldman River in southern Alberta. Following excavation in 1957 by Richard G. Forbis, the site has become known as one of the finest winter campsite deposits on record. Forbis, however, cautioned that site use in other seasons was likely; a brief testing programme conducted in 1980 confirmed this proposition. Problems were encountered in trying to articulate site seasonality, the regional data base, and seasonal round described for the historic Blackfoot. Archaeological hint at substantial changes in the timing of population aggregation and subsistence activities. These, in turn, have important implications regarding the timing of ceremonial events and security aspects of life in pedestrian Plains culture.

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Prehistoric Adaptations to the B.C. Plateau: A Perspective from the Similkameen Valley.

This paper details the results of a four month survey conducted in 1987 in the Upper Similkameen Valley. The Similkameen River forms part of the Columbia drainage basin, originating high in the Coast mountains east of Hope, B.C. The Upper Similkameen Valley forms a natural corridor between the Fraser/Thompson area and the Columbia Plateau. Ethnographically the valley falls within the boundaries of three groups: the Okanagan Salish; the Thompson Salish; and the Nicola Athapaskans. The presence of a known ochre source, and numerous rock art sites hold promise that the archaeological resources in the valley are very rich. Despite these factors, this is the first systematic survey ever to be conducted in the Upper Similkameen Valley.

A total of 116 prehistoric sites were located. Surface collections were made of temporal and functional diagnostic tools, and extensive notes were taken on the nature of the lithic assemblages. Preliminary interpretations of prehistoric adaptations in the Similkameen Valley have been made based on these results.

More specifically this paper:

- 1) Explores the nature of subsistence in a region that does not have a dependence on a salmon fishery;
- 2) Examines the role the Similkameen Valley has played in the transmission of material culture and ideas between the Fraser River and Columbia River; and
- 3) Questions the presence of the Athapaskans, as represented in the archaeological record.

THE ESTABLISHMENT OF THE WANUSKEWIN HERITAGE PARK

The establishment of heritage parks concerned with prehistory are not new but an increased interest in such developments is apparent at the present time. The Wanuskewin Heritage Park located near Saskatoon, Saskatchewan is an example of one of these developments. The main goal of this project is to promote and establish an internationally-recognized heritage park that serves as a major tourist attraction while at the same time contributing to increased public awareness and understanding of the cultural legacy of the Northern Plains Indians. To this end, four objectives dominate the development plan including: (a) research, (b) public education, (c) tourism, (d) cultural expression. The purpose of this paper is to describe these various components in detail and to highlight certain unique attributes of the Wanuskewin project.

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PINK MOUNTAIN AND OTHER PALEO-INDIAN SITES

IhRr 1, a site with fluted points, microblade cores and a Scottsbluff point was found during inventory of a pipeline project in northeastern B. C. The discovery of this site led to a brief exploratory survey of the region the following year. This follow-up program resulted in the discovery of ten additional sites, three of which yielded unequivocally early point types including another fluted point. The sites all represent surface or shallowly buried occupations yielding only lithic artifacts. Sites tend to be large in area with thinly disbursed material. Regardless of the nature of the sites, the constraints of access and site visibility, it is evident this region in the northeastern Rocky Mountain foothills holds great promise for the study of early populations.

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Searching for Paleo-Indians in Southern Alberta: Current Perspectives

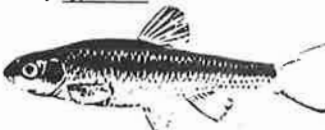
Paleo-Indian projectile points, from fluted types onward, are well represented in Alberta collections. However, discoveries of Paleo-Indian sites in primary buried contexts have been surprisingly few. Excavations at the Fletcher and Bayrock sites (by R.G. Forbis) and the Lindoe site (by A.L. Bryan) remain as prominent exceptions from the open plains, and recent excavations at Sibbald Creek (by E.M. Gryba) and Vermilion Lakes (by D. Fedje) have opened up new possibilities in the foothills and mountains. Acceptance of this area as part of an "Ice-free Corridor" during deglaciation has guided research since the 1930s; workers such as W.A. Johnston, E. Antevs, W. Bliss and J.B. Bird all specifically pursued this issue in terms of human migrations through Alberta. This association of the Corridor with human migration, which is even now being touted as a new insight, has in fact been the longest-standing paradigm in Alberta archaeology. Tantalizing suggestions of pre-Wisconsinan humans and artifacts at Taber and Medicine Hat (by A. MacS. Stalker) have regrettably not been supported by recent investigations. Fluted point finds, as mapped by E.M. Gryba and by the author, reflect a late Pleistocene ice-frontal position, allowing northwestward extension of the "Mason-Quimby line" from the Great Lakes area. Finds of mammoth teeth and bones in Alberta have been numerous, but few have been followed up by archaeologists. Landscape change during the Holocene has been extensive, with deep burial of early Holocene deposits at some sites (Mona Lisa, Hawkwood, Fletcher, Vermilion Lakes), in part due to paraglacial processes shortly after ice retreat, and in part due to accelerated landscape process rates during the Hypsithermal. Also during the Hypsithermal, many shallow stratified sites were subjected to extreme ablation, producing the mixed lag assemblage termed the "Little Gem Complex", which at some sites was reburied by aeolian drift. Renewed ablation during the 1930s had much the same effect. During the Hypsithermal and 1930s destruction of shallow sites helped to skew the remaining sample to deeply buried sites. Appropriate geoarchaeological models should allow enhanced visibility of the remaining material and improve discovery rates.

Milt Wright
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Brassy Minnows and Early Man- Ice free corridor research in northwest Alberta

Critics of the ice free corridor route as means of peopling the new world usually cite the harsh climate and inimicable terrain of such an environment as crucial liabilities. In particular, the large proglacial lakes known to have bordered and periodically inundated this 'corridor' are characterized as alternately ice choked or turbid, biologically sterile, offering only obstacles to human passage and providing negligible food resources. The sites which have been discovered in proximity to these relict lakeshores are usually presumed to be terrestrial game interception points and are not taken to imply either lacustrine resource extraction or water transport.

Evidence in support of biological productivity within, and stability of a series of interconnected proglacial lakes is available through the study of the zoogeography of North American fish species. Movement of 30 fish species can be demonstrated between the Missouri and Arctic drainage systems suggesting that Glacial Lake Peace flow regimes and habitat settings were markedly different from the harsh scenarios currently circulating in the literature. The intriguing possibility exists that lacustrine resources could have been harvested by early man and that water craft may well have played a role in the transit of the ice free corridor. At the very least it is now apparent that proglacial lakes are biologically productive and relatively stable, and that analogs for these lakes can be sought in present lacustrine settings.

Order Cypriniformes
Family Cyprinidae



(Smith 1979. The Fishes of Illinois)

Order Early Man
Family Clovidae

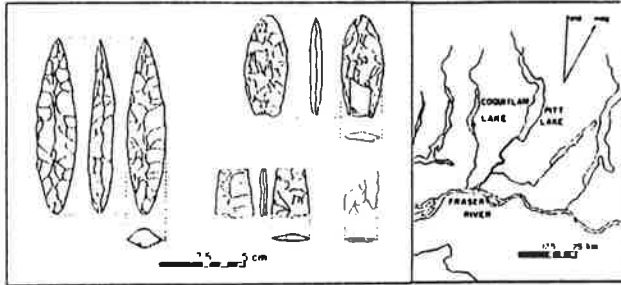


(Vickers 1986. Alberta Plains Prehistory)

Milton Wright
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COQUITLAM LAKE

Upland lakes draining into the lower Fraser River have long been recognized as holding good potential for the discovery of early man sites. However, little effective archaeological reconnaissance has, or can be conducted in these remote lake settings. Lithic assemblages recovered from the inundated shores of Coquitlam Lake confirm the presence of these early sites and identify the use of a hitherto undocumented lithic source material.

The stone tool assemblages recovered from Coquitlam Lake represent several of the early lithic traditions found in the Pacific Northwest. Coquitlam Lake provides a tantalising glimpse of early adaptations to the Coastal Mountain/Fraser River regions, but the data are frustratingly limited. In the absence of buried and datable cultural contexts, the Coquitlam Lake sites provide examples of regional site settings which can be used to focus future surveys within the Coastal Mountains.



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