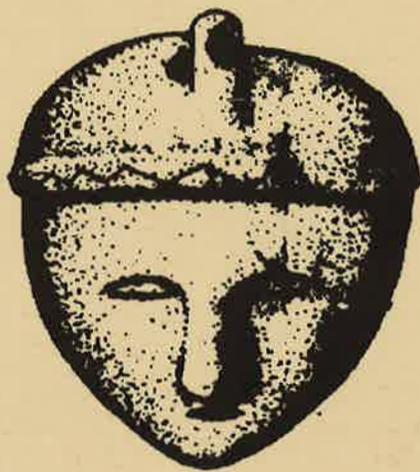


Canadian Archaeological Association

25th Annual Meeting

London, Ontario

May 5 - 10, 1992



Association canadienne *NE*
d'archéologie

25ème réunion annuelle

London, Ontario

5 - 10 mai 1992

CAA EXECUTIVE - CONSEIL D'ADMINISTRATION A.C.A.

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Mima Kapches

Associate Editor, Canadian Journal of Archaeology/Rédacteur associé du Journal canadien d'archéologie

Claude Chapdelaine

COVER

The artifact depicted on the cover of the programme is a stone effigy, likely originally part of a pipe and subsequently worked into a pendant, recovered from the historic Neutral Iroquoian Meisner site near Brantford, Ontario (ca. AD 1620). The style of effigy suggest the design was influenced, if not actually produced, by cultural groups to the south and west of Iroquoian communities. Foreign influences and regional interaction in Iroquoian archaeology is a theme explored in a session and workshop during the Saturday proceedings (Illustration by Nick Adams).

COUVERTURE

L'artefact représenté sur la couverture du programme est une pierre à effigie, qui faisait probablement partie d'une pipe et ultérieurement travaillé en un pendent, a été retrouvé sur le site Iroquoien historique Neutre Meisner près de Brantford, Ontario (ca. AD 1620). Le style de l'effigie nous suggère que le modèle a été grandement influencé, si non fabriqué par des groupes culturels situés au sud e a l'ouest des communautés Iroquoiennes. Les influences étrangères ainsi que les interactions régionales à l'intérieur de l'archéologie Iroquoienne sont des volets qui seront explorés lors d'une session et d'une atelier qui se tiendront Samedi (Illustration par Nick Adams).

WELCOME - BIENVENUE

On behalf of the CAA Organizing Committee, I would like to welcome you to the 25th Annual meeting of the Canadian Archaeological Association. We hope that you will enjoy your stay in London. Have a great conference.

Au nom du comité organisateur, je désire souhaiter la bienvenue à tous à l'occasion de la 25ème réunion annuelle de l'Association canadienne d'archéologie. Nous espérons que vous trouverez votre séjour à London agréable. Bonne conférence.

Neal Ferris

Sponsored by/À l'initiative de:

The Archaeological Community of London, Ontario/La communauté d'archéologique de London

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CAA Conference Organizing Committee/Le Comité Organisateur de la Conférence ACA

Neal Ferris, Chris Ellis, Christine Dodd, Peter Timmins, Mike Spence, Harri Mattila, Bev Morrison, Pat Weatherhead

Volunteers/Volontaires

Tom Arnold, Francis Carson, Jodi Cassidy, Jane Cottrill, Dena Doroszenko, Lisa Fogt, Lorelyn Giese, Wayne Hagerty, Malcolm Horne, Chris Jackson, Manina Jones, Paul Lennox, Bob Mayer, Karen Niece, Dana Poulton, Dave Riddell, Teresa Smith, Christine White

The Conference organizing committee would like to gratefully acknowledge the donations made by the following agencies/ Le Comité de planification remercie les organismes suivants pour leurs contributions:

Ontario Ministry of Culture & Communications - Ministère de la Culture et des Communications,
Ontario

Ontario Archaeological Society, London Chapter -La Société d'Archéologie Ontarien, Chapitre
de London

City of London - La ville de London

Algonquin Brewing Company

London Museum of Archaeology - Musée de l'archéologie de London

Ontario Heritage Foundation - La Fondation du Patrimoine Ontarien

Association of Professional Archaeologists - La Association des Archéologues Professionnels

Canadian Association of Professional Heritage Consultants - La Association Canadienne de
Consultants Professionnels en Patrimoine

Ontario Ministry of Transportation - Ministère de Transport, Ontario

RÉCAPITULATION DU PROGRAMME DE L'AGENDA PRÉLIMINAIRE/ REVISIONS TO THE PROGRAMME FROM THE PRELIMINARY AGENDA

Les participants à la conférence doivent noter les changements au programme qui étaient inscrits à l'agenda préliminaire déjà annoncé:

1 - La séance organisée pour le Dimanche en matinée a été changée au jeudi matin, les deux sujets sont présentés à la Salle de bal du Centre, au 2^{ième} étage de l'Hôtel Radisson.

2 - Malheureusement, la réception de vendredi soir pour le Musée d'Archéologie de London a été annulée, le pourquoi est en rapport au conflit organisé pour une levée de fonds du Musée.

3 - Étant donnée l'annulation de la réception du Musée, les "Roasts" pour William E. Taylor Jr. et J.V. Wright ont été modifiés. Le "Roast" de Taylor aura lieu au Musée d'Archéologie de London, mais dans la soirée du 7 Mai. Le "Rôtir" de J.V. Wright demeure à la même date: en soirée vendredi le 8 Mai mais à l'Hôtel Radisson dans la salle Victoria/Albert.

Meeting participants are asked to note the following changes in the programme from that advertised in the preliminary agenda:

1 - The sessions previously scheduled for Sunday morning, entitled "Canadian Archaeologists Beyond Their Border" and "Advances in Iroquoian Archaeology: Miscellaneous Papers", have been moved to Thursday morning, both in the Ballroom Centre, on the 2nd Floor of the Radisson Hotel.

2- Unfortunately, the Friday evening reception scheduled for the London Museum of Archaeology has been cancelled due to a scheduling conflict with a Museum fund-raising event. Meeting participants can still visit the Museum during the Sunday tour of the facility.

3- Due to the cancellation of the Museum reception, the Roasts for Dr. William E. Taylor Jr., and Dr. J.V. Wright have been modified. Dr. Taylor's roast will take place at the London Museum of Archaeology, but on the evening of Thursday, May 7th. Dr. Wright's roast will still take place on the evening of Friday, May 8th, but will now take place in the Victoria/Albert room of the Radisson Hotel.

RENSEIGNEMENT GÉNÉRAUX - CONFERENCE INFORMATION

LOCAUX DE LA CONFÉRENCE

La 25ème réunion de l'Association canadienne d'archéologie aura lieu à l'Hôtel Radisson au centre-ville de London, Ontario. Elle débutera mardi le 8 mai 1992, et se terminera dimanche le 10 mai 1992. Les séances de la conférence auront lieu dans les salles de réunion de la convention sur les deuxième et troisième étages de l'hôtel.

INSCRIPTION

L'inscription pour la conférence aura lieu à la réception aire sur le deuxième étage de l'Hôtel Radisson. Elle commencera mercredi le 6 mai 1992. L'inscription inclut une copie du Programme et Résumés et une étiquette que vous devrez porter pour être admis à toutes les sessions. Les personnes qui se seront Pré-inscrites pourront prendre leur trousse de conférence et leur reçu au bureau d'inscription. Heures d'ouvertures: Mercredi, le 6 mai, 16h - 20h; Jeudi, le 7 mai, 8h - 17h; Vendredi, le 10 mai, 8h - 17h; Samedi, le 11 mai, 8h - 12h.

MEMBRES DE L'ACA

Les personnes désireuses de devenir membres ou de renouveler leur cotisation pourront le faire au cours de la conférence de l'Association canadienne d'archéologie.

DÉPENSES DE VOYAGE

Des formulaires de l'ACA pour le remboursement des dépenses de voyage sont inclus dans votre trousse d'inscription et devront être envoyés directement au secrétaire-exécutif de l'Association avant le 31 Mai 1992.

CONFERENCE FACILITIES

The 25th Annual Meeting of the Canadian Archaeological Association will be held at the Radisson Hotel in downtown London, beginning Tuesday May 5, 1992 and ending Sunday May 10, 1992. Conference sessions will be held in the meeting rooms on the second and third floors of the hotel.

REGISTRATION

Registration will be on the reception foyer of the Radisson Hotel beginning on Wednesday May 6, 1991. Registration includes a copy of the Programme and Abstracts and a name tag, the wearing of which is required for admission to all sessions. Persons who have pre-registered may pick up their conference kits and receipts at the registration desk. The registration desk will be staffed during the following hours: Wednesday, May 6, 4 PM - 8 PM; Thursday, May 7, 8 AM - 5 PM; Friday, May 10, 8 AM - 5 PM; Saturday, May 9, 8 AM to 12 PM.

CAA MEMBERSHIP

A membership desk will be open in the registration area throughout the conference for those who wish to renew their memberships or join the Canadian Archaeological Association.

TRAVEL GRANTS

Applications for reimbursement of travel costs for Canadian Archaeological Association members are included with your registration kits. Applications must be submitted to the Executive Secretary of the Association by May 31, 1992.

MESSAGES

Un babillard pour les messages sera installé dans le réception aire de le deuxième étage près du bureau d'inscription, et mis à la disposition des participants de la conférence. S'il y a des changements au programme ou aux événements vous en serez avisé.

PRÉSENTATIONS

Toutes les présentations sont limitées à 20 minutes. On demande aux modérateurs de faire respecter le temps alloué à chacun afin de suivre l'horaire prévu.

DIAPPOSITIVES

Les participants devront fournir leur carrousel à diapositives. Veuillez bien l'identifier avec votre nom. Le carrousel devra être donné au préposé technique à la pause-café ou au début de la présentation.

PAUSE-CAFÉ

Du thé et du café seront servis aux participants de la conférence deux fois par jour durant les sessions: de 10h20 à 10h40 et de 15h20 à 15h40.

EXPOSITION D'AFFICHES ET SALLE DE LIVRES ET DE ARTISAN

Exposition d'affiches et salle de livres seront sur place pour les participants de 9h à 17h, du 7 au 9 mai 1992 dans les salles duc de l'Albany et duc de l'Edinburgh sur le troisième étage sur l'Hôtel Radisson. Un VHS - VCR et une télévision seront mis à votre disposition dans les salles des expositions. De plus, des expositions seront mis sur pied aux alentours l'aire de réception démontrant des groupes et projets de patri-

MESSAGES

A bulletin board for messages will be set up by the registration desk in the second floor reception foyer, for use by conference participants. Any changes to the programme or conference events will be posted at this location.

PAPERS

All papers are restricted to 20 minutes. Session chairs are requested to strictly enforce this time limit and to maintain session schedules.

SLIDES

Participants are requested to supply their own carousels. Please mark these clearly with your name and give to the projectionist prior to the start of the session or during the coffee break.

COFFEE BREAKS

Tea and Coffee will be provided for conference participants twice daily during the sessions. This service will be available from 10:20 - 10:40 AM and from 3:20-3:40 PM.

EXHIBITION, CRAFT AND BOOK ROOMS

Exhibition, crafts and book rooms will be open for participants from 9:00 AM to 5:00 PM from May 7 through 9th, 1992, in the Duke of Albany and Duke of Edinburgh Rooms on the third floor of the Radisson Hotel. A VHS VCR and television monitor will be available for use in one of the display rooms. In addition, exhibits will be set up around the second floor reception foyer illustrating Ontario and local heritage

moine locaux et provinciaux.

L'heure de levée de l'étalage dans les salles d'exposition est le Jeudi le 7 Mai de 9h à midi. Les exhibiteurs installés dans la Salle Duc d'Albany devront défaire leur exposition pour le Samedi 9 Mai à 13h. Des tables seront disponibles à la démonstration de prospectus commerciales ainsi que des annonces publiques dans la Salle du Duc d'Edinburgh qui a été réservé à cette fin. S'il vous plaît noter: Il y a des frais d'exposition pour l'affichage commerciale ainsi que la vente de livres. Les espaces disponibles sont limités, le premier arrivé, premier servi. Les exhibiteurs qui ont des questions et/ou plaintes devront s'adresser au bureau d'inscription.

RÉUNIONS D'AFFAIRES

La Réunion Exécutive de l'Association canadienne d'archéologie aura lieu mercredi le 6 mai 1991 dans la Salle du Duc d'Edinburgh à partir de 9h.

La Réunion annuelle de l'Association canadienne des archéologues provinciaux et territoriaux aura lieu mercredi le 6 mai 1991 dans la salle Duc de le Connaught à partir de 9h.

La Réunion annuelle d'affaires de l'Association canadienne d'archéologie aura lieu A 17h15 jeudi le 8 mai 1992 dans la salle de bal est. Tous les membres sont invités à y assister.

La Réunion annuelle de l'Association d'art pariétale canadienne est prévue de 15h20 à 17h samedi le 10 mai 1992 dans la salle de bal est.

groups and projects.

Set up for displays in the Exhibit rooms is Thursday, May 7th from 9 AM to Noon. Exhibitors in the Duke of Albany room will have to remove their exhibits by Saturday, May 9th at 1 PM. Table space will be provided in the Duke of Edinburgh Room for company flyers and publication announcements. Please Note: there is an exhibitor fee for book-sellers and company displays. As well, space in these rooms are limited, and were awarded on a first come - first served basis. Exhibitors with questions should enquire at the conference registration desk.

BUSINESS MEETINGS

The Canadian Archaeological Association Executive Meeting will be held on Wednesday May 7, in the Duke of Edinburgh Room, beginning at 9:00 AM.

The Annual Meeting of the Canadian Association of Provincial and Territorial Archaeologists (C.A.P.T.A.) will be held on Wednesday May 8, in the Duke of Connaught Room beginning at 9:00 AM.

The Annual Business Meeting of the Canadian Archaeological Association will be held at 5:15 PM on Friday May 8, 1992 in the Ballroom East, 2nd floor, Radisson Hotel. All members are urged to attend.

The Annual Meeting of the Rock Art Association of Canada Inc. is scheduled from 3:20 PM to 5 PM on Saturday May 10, in the Ballroom East.

ATELIERS

L'Atelier identification du verre historique (co-parrainé par la association des archéologues professionnels) aura lieu mardi le 5 mai de 9h à 16h dans la salle Prince of Wales. Animatrice: Olive Jones (Service canadien des Parcs).

L'Atelier l'organisation d'un bureau de consultation en patrimoine (co-parrainé par la association canadienne de consultants professionnels en patrimoine) aura lieu mercredi le 6 mai de 9h à 16h Prince of Wales. Animateur: Robert G. Mayer (Mayer consultant héritage) et Neal Ferris (Ministère de la Culture et des Communications).

L'Atelier l'influence extérieur sur la céramiques iroquoien aura lieu samedi le 9 mai de 14h à 17h dans le salle Victoria/Albert.

L'Atelier s'adresser à l'école gradué aura lieu samedi le 9 mai de 14h à 17h dans la salle du Duc d'Albany. Animatrice: Lesley Nicholls (département d'archéologie, Université de Calgary). Les gens intéressés à s'inscrire pour cet atelier doivent le faire au bureau d'inscription avant Samedi à midi.

PRÉSENTATION PUBLIQUE

Une session publique aura lieu samedi le 9 mai 1992 de 9h à 17h dans la salle de bal ouest, L'Hôtel Radisson. Paul Antone, de le Communications Canada, présidera la session. La séance est intitulée: "Participation Directe: Premières Nations et l'Archéologie au Canada". La séance inclus des présentations par:

E. MacDonald (Services Archéologiques)
D. Pokotylo & G. Brass (Université de la Colombie Britannique)

WORKSHOPS

The Workshop on Historic Glass identification (co-sponsored by the Association of Professional Archaeologists), will be held on Tuesday, May 5th from 9 AM to 4 PM in the Prince of Wales Room. Host: Olive Jones (Canadian Parks Service).

The Workshop on The Business of Running a Heritage Consulting Business (co-sponsored by the Canadian Association of Professional Heritage Consultants), will be held on Wednesday, May 7th from 9 AM to 4 PM in the Prince of Wales Room. Hosted by Robert G. Mayer (Mayer Heritage Consultants) and Neal Ferris (Ministry of Culture and Communications).

The Workshop on Foreign Influences in Iroquoian Ceramics will be held on May 9th, 2 to 5 PM in the Victoria/Albert Room.

The Workshop on Applying to Graduate School will be held on Saturday, May 9th from 2 PM to 5 PM in the Duke of Albany Room. Hosted by Lesley Nicholls (University of Calgary). People interested in attending this workshop should sign up at the registration desk before Saturday at Noon.

PUBLIC SESSION

A public session will be held on Saturday, May 9th from 9 AM to 5 PM in the Ballroom West of the Radisson Hotel. Paul Antone, of Communications Canada, will chair the session. The session is entitled "Direct Participation: First Nations and Archaeology in Canada." The session will include presentations by:

E. MacDonald (Archaeological Services Inc.)

P. Allen (Succursale Patrimoine, Nouveau Brunswick)

M. Hanna (Musée Naturel, Saskatchewan),
& T. Gibson (Service de Patrimoine Occidental)

Comité De Discussion:

D. Jacobs (Nin.Da.Waab.Jig)

S. Pfeiffer (Université de Guelph)

T. Weetaluktuk (Institut Culturel Avataq)

R. Crowshoe (La Première Nation Peigan)

W. Byrne (Culture et Multiculturalisme Alberta)

T. Gibson (Service de Patrimoine Occidental)

Le déroulement consiste à la présentation de documents, en matinée, pour faire suite aux discussions et questions par les membres du comité dans l'après midi.

ACTIVITÉS SOCIALES

Réception D'ouverture

Le Mercredi soir de 19h à 23h dans la Salle Victoria/Albert au troisième étage de l'Hôtel Radisson, il y aura une réception d'accueil pour les participants qui sera animé par La Société Archéologique d'est Ontario, Chapitre London. Les bureaux de consultation en patrimoine Ontarien vous offre gracieusement la première boisson:

- Adams Heritage Consultants
- Archaeological Research Associates
- Archaeological Services Inc.
- D.R. Poulton & Associates Inc.
- Federation of Arch. Research Technicians
- Jouppien Heritage Resource Consultant
- Mayer Heritage Consultants Inc.
- Settlement Surveys Ltd.

Le Jeudi en soirée de 17h30 à 20h dans la

D. Pokotylo & G. Brass (University of British Columbia)

P. Allen (Heritage Branch, New Brunswick)

M. Hanna (Museum of Nature, Saskatchewan) & T. Gibson (Western Heritage Services)

Discussion Panel:

D. Jacobs (Nin.Da.Waab.Jig.)

Susan Pfeiffer (University of Guelph)

Tommy Weetaluktuk (Avataq Cultural Institute)

Reg Crowshoe (Peigan Nation elder)

Bill Bryne (Culture & Multiculturalism, Alberta)

Terry Gibson (Western Heritage Services)

The proceedings will consist of paper presentations in the morning, followed by panel discussion and questions from the floor in the afternoon.

SOCIAL EVENTS

Opening Reception

On Wednesday Evening, from 7 PM to 11 PM, in the Victoria/Albert room on the 3rd floor of the Radisson Hotel, there will be a welcoming reception for meeting participants, hosted by the London Chapter of the Ontario Archaeological Society. A complimentary first drink will be provided to reception goers, courtesy of Algonquin Brewing Company Limited and donated by the following archaeological consulting companies:

- Adams Heritage Consultants
- Archaeological Research Associates
- Archaeological Services Inc.
- D.R. Poulton & Associates Inc.
- Federation of Arch. Research Technicians

Salle de Bal de l'aire ouest au deuxième étage de l'Hôtel Radisson, l'ACA parrainera une réception à bar payant pour célébrer les 25 ans de l'Association. Une exposition de photographie des anciens membres de l'exécutifs et activités sera soulignée, ainsi qu'une présentation brève de quelques membres exécutifs du ACA. Des hors d'oeuvres seront servis.

Jeudi soir au Musée Archéologique de London, il y aura un "Roast" en l'honneur de Dr. William E. Taylor Jr. Dr. Taylor prendra bientôt sa retraite du Musée Canadien Des Civilisations, ce "Roast" est l'occasion pour les amis et confrères de remonter dans le passé et de soulever les moments embarrassants et les exploits du Dr. Taylor. Ça promet beaucoup de vivacité et de jeux de mots. Tout cela débutera à 19h30. Vous êtes tous Bienvenu.

La Fondation du Patrimoine Ontarien animera un lancement de livres ainsi qu'une réception de 18h30 à 20h, dans la Salle Victoria/Albert, le Vendredi 8 Mai. Des hors d'oeuvres et un bar payant seront à votre disposition.

Et dans le même esprit aiguisé des activités des soirées précédentes le Vendredi soir de 20h30 à 22h, un "Roast" sera donnée en l'honneur de la retraite récente de J.V. Wright qui aura lieu dans la Salle Victoria/Albert. Encore une fois dans le même cadre de commentaires et souvenirs embarrassants et mémorables plein d'agacement et vivacité. Milt Wright présidera l'événement, les personnes intéressés à participer au "Roast" devront faire une lignée à la porte. Le bar payant sera de même en continuité de l'événement précédant. Vous êtes tous Bienvenu.

Jouppien Heritage Resource Consultant
Mayer Heritage Consultants Inc.
Settlement Surveys Ltd.

On Thursday evening, from 5:30 PM to 8 PM, in the Ballroom West on the 2nd floor of the Radisson Hotel, the CAA will sponsor a cash bar reception celebrating the first 25 years of the Association. A photo exhibit of past members and activities will be featured, as well as a brief presentation on some of the past members of the CAA executive. Appetizers will be provided.

On Thursday evening, at the London Museum of Archaeology, there will be a Roast in honour of Dr. William E. Taylor Jr. Dr. Taylor is soon to be retiring from the Museum of Civilization, and this roast is an opportunity for friends and colleagues to reminisce and dredge up favourite, and embarrassing, tales of the many exploits of Dr. Taylor. This promises to be an evening of sharp wit and bad puns. The spit begins to turn after 7:30 PM. Everyone is welcome.

The Ontario Heritage Foundation will host a book launch and reception from 6:30 PM to 8 PM, in the Victoria/Albert Room, on Friday, May 8th. Appetizers and a cash bar will be provided.

And with wits honed from the previous night's activities, on Friday evening, from 8:30 PM to 10 PM, a Roast for recently retired Dr. J.V. Wright will take place in the Victoria/Albert Room. Once again unparalleled heights of witty comments and snappy comebacks will be attained. Milt Wright will chair the proceedings, and the "roaster" lineup starts at the door! The cash bar will continue on from the previous function. Everyone is welcome.

BANQUET ET BAL

Le Banquet aura lieu le Samedi soir et débutera à 19h dans la Salle de Bal ouest. Après le repas il y aura présentation par Alison Wylie, Département de Philosophie, Université de l'ouest de l'Ontario, nous entretiendra sur le sujet "Réalité et Fictions: Écrire l'Archéologie dans un contexte différent". Cette présentation sera suivie d'une danse qui se prolongera jusqu' à 1h. Un bar payant est encore une fois mis à votre disposition à partir de 18h30. La musique sera animé par un D.J. Les billets pour le banquet devront être achetés au bureau d'inscription avant le Jeudi 7 Mai à 17 h.

VISITES GUIDÉES

La tournée du Musée d'Archéologie de London et du site de reconstruction du Village Lawson, l'occupation Iroquoise au 16ième siècle accompagnée d'une visite du village pionnier Fanshawe, est à l'horaire dans l'après-midi du Dimanche 10 Mai. Les gens peuvent visiter les emplacements, le transport est fourni ou vous pouvez visiter vous-même (Prix: \$25.00).

Une tournée de la vallée des Iroquoiens, hôte par Ian Kenyon (La Fondation du Patrimoine Ontarien), et présentant des tournées de la Culture Sylvicole, la Chapelle Mohawk et Village, et des parties de la colonisation des Six Nations aux abords de la Grand River, est prévue pour le Dimanche 10 mai, le départ de l'Hôtel est à 10h. Un document d'information vous seras remis. les gens intéressés à la tournée devront en faire l'inscription pour le Jeudi 7 Mai à midi (Prix: \$50.00).

BANQUET AND DANCE

The Banquet will be held on Saturday Evening, starting at 7 PM in the Ballroom West. Following the meal, Dr. Alison Wylie, Department of Philosophy, University of Western Ontario, will give a presentation entitled "Facts and Fictions: Writing Archaeology in a Different Voice". This presentation will be followed by a dance, going to 1 AM. A cash bar will be set up from 6:30 PM on. Music provided by a DJ. Tickets for the banquet must be purchased from the registration desk before Thursday, May 7th at 5 PM. Those wishing to attend the dance after the banquet are welcome to do so.

TOURS

A tour of the London Museum of Archaeology and site reconstruction of the Lawson Village, a 16th century Iroquoian occupation along with a visit to the Fanshawe Pioneer Village, is scheduled for the afternoon of Sunday, May 10th. People can visit the facilities through transportation provided (cost: \$25.00), or visit the facilities on your own.

A Tour of the Valley of the Iroquois, hosted by Ian Kenyon (Ontario Heritage Foundation), and featuring tours of the Woodland Cultural Centre, Mohawk Chapel and Village, and parts of the Six Nations settlement along the Grand River, is scheduled for Sunday, May 10th, leaving the hotel at 10 AM. A package of background material will be provided to participants. People interested in the tour must sign up by Thursday, May 7th at Noon. Cost: \$50.00.

Parcourir le Programme/Programme at a Glance

THURSDAY, MAY 7TH, 1992

	Ballroom East	Ballroom Centre	Victoria/Albert	Connaught	Prince of Wales
9:00 (8:40) to 10:20 (10:25)	Caribou/ Reindeer Hunters [#2]	Beyond Their Borders [#5]	Manitoba Archaeology [#1]	B.C. Subsistence [#3]	Science & Archaeology [#4]
10:20 to 10:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:40 (10:35) to 12:00 (12:20)	Caribou/ Reindeer Hunters [#2]	Miscellaneous Iroquoia [#8]	Taylor-Made Palaeo-Eskimo [#6]	Faunal Studies [#7]	Science & Archaeology [#4]
12:00-2:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
2:00 (1:50) to 3:20 (3:00)	St. Lawrence Iroquoians [#9]	NA	Taylor-Made Palaeo-Eskimo [#6]	Faunal Studies [#7] Ethnicity [#10]	Science & Archaeology [#4]
3:20-3:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
3:40 to 5:00 (5:20)	St. Lawrence Iroquoians [#9]	NA	Taylor-Made Palaeo-Eskimo [#6]	Ethnicity [#10]	Science & Archaeology [#4]

FRIDAY, MAY 8TH, 1992

	Ballroom East	Victoria/Albert	Connaught	Prince of Wales
9:00 to 10:20	Ethnographic Analogues [#11]	Taylor-Made Neo-Eskimo [#12]	Expedient Lithic Technology [#13]	Canadian Shield Arch. [#14]
10:20-10:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:40 to 12:00	Iroquoian Spatial Archaeology [#15]	Taylor-Made Neo-Eskimo [#12]	Expedient Lithic Technology [#13]	Canadian Shield Arch. [#14]
12:00-2:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break
2:00 to 3:20	Iroquoian Spatial Archaeology [#15]	Taylor-Made Neo-Eskimo [#12]	Aspects of Contact [#16]	Canadian Shield Arch. [#14]
3:20-3:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break
3:40 to 5:00 (5:20)	Iroquoian Spatial Archaeology [#15]	Canadian Arch. West & North [#17]	Aspects of Contact [#16]	Artifact Studies [#18]

SATURDAY, MAY 9TH, 1992

	Ballroom East	Ballroom West	Victoria/Albert	Connaught	Prince of Wales	Duke of Albany
9:00 to 10:20	Archaic Studies [#19]	First Nations & Arch. [#23]	Iroquoian Interaction [#20]	Historical Archaeology [#21]	Surveys, Computers & Databases [#22]	NA
10:20-10:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:40 to 12:00	Archaic Studies [#19]	First Nations & Arch. [#23]	Iroquoian Interaction [#20]	Historical Archaeology [#21]	Surveys, Computers & Databases [#22]	NA
12:00 - 2:00	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
2:00 to 3:20	Archaic Studies [#19]	First Nations & Arch. [#23]	Ceramic Workshop	Canadian Arch. - East [#24]	Surveys, Computers & Databases [#22]	Graduate School Workshop
3:20 - 3:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
3:40 to 5:00 (4:20)	Rock Art Business Meeting	First Nations & Arch. [#23]	Ceramic Workshop	Canadian Arch. - East [#24]	Surveys, Computers & Databases [#22]	Graduate School Workshop

PROGRAMME

THURSDAY/JEUDI

Session 1: ASPECTS OF MANITOBA ARCHAEOLOGY

(Barry Greco, Chair)

ROOM: Victoria/Albert, 3rd Floor

- 8:40 - 9:00 Maurice P. Lanteigne (Rock Art Association of Canada): *Gamma-Aminobutyric Acid Inhibition of Cytochrome Oxidase Neural Activity in the Human Brain: A Re-examination of the Trance Hypothesis in Prehistoric Art.*
- 9:00-9:20 Patricia M. Badertscher (Historic Resources Branch, Manitoba Culture, Heritage and Citizenship): *Heritage Resource Impact Assessment: Cultural Resource Management in Manitoba*
- 9:20-9:40 Bev Nicholson (Dept. of Sociology/Anthropology, Brandon University): *Observed Patterning in the Site Placement of Late Prehistoric Burial Mounds and Associated Campsites in South-Central Manitoba*
- 9:40-10:00 K. David McLeod (Historic Resources Branch, Manitoba Culture, Heritage and Citizenship): *Fort Dufferin: Archaeological Investigations at a British Fort, Prairie Style*
- 10:00-10:25 Kate Peach & Barry Greco (The Forks Public Archaeology Project, Winnipeg): *Standing on a Rock - Investigations at Fort Gibraltar I*

Session 2: CARIBOU/REINDEER HUNTERS OF THE NORTHERN HEMISPHERE

(Lawrence Jackson, Organizer & Chair)

ROOM: Ballroom East, 2nd Floor

- 9:00-9:20 Marianne Stopp (Cambridge University): *Modelling Mythologies of Early Human Adaptation in the Northern Hemisphere*
- 9:20-9:40 Stephen Loring (Arctic Studies Program, Smithsonian Institution): *On the Trail of the Caribou House: Some Reflections on Innu Caribou Hunters in Nitassinan*
- 9:40-10:00 Don Simons (Michigan Archaeological Society): *The Gainey and Butler Sites as Focal Points for Caribou and People*
- 10:00-10:20 Doug Heard (Dept. of Renewable Resources, Northwest Territories): *Biological Factors Affecting Caribou Migration Routes: Versatility and Patterned Behaviour*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Lawrence Jackson (Northeastern Archaeological Associates): *Caribou Predation by Southern Ontario Palaeo-Indians - Hit or Near Myth?"*
- 11:00-11:20 Michael Gramly (Great Lakes Artifact Repository): *Site Locations and Hypothesized Hunting Strategies for the Magalloway Valley Clovis, Western Maine*
- 11:20-11:40 Ariane Burke (New York University) & Anne Pike-Tay (Vassar College): *Reconstructing the "Age du Renne"*
- 11:40-12:00 Paul Thacker (Southern Methodist University): *The Significance of Rangifer as a Human Prey Species: The Paleolithic of Eastern Europe*
- 12:00-12:15 Discussant: Mary Ann Levine (University of Massachusetts)

Session 3: SUBSISTENCE STUDIES IN BRITISH COLUMBIA ARCHAEOLOGY

(Aubrey Cannon, Chair)

ROOM: Duke of Connaught, 3rd Floor

- 9:00-9:20 Gary Coupland, Craig Bissell (University of Toronto) & Sarah King (University of Bradford): *Prehistoric Subsistence and Seasonality at the McNichol Creek Site, Prince Rupert Harbour,*

British Columbia

- 9:20-9:40 Aubrey Cannon (McMaster University): *The Ratfish and Marine Resource Deficiency on the Northwest Coast*
- 9:40-10:00 David Pokotylo, Brian Chisholm (University of British Columbia) & Toshio Nakamura (University of Nagoya): *Paleodiet in the Lower Fraser Canyon and Fraser Valley, British Columbia*
- 10:00-10:20 Ronald J. Nash, A. Georgallas, N. Jan & D. Hunter (St. Francis Xavier University): *A Computer Simulation of Coastal Population Ecology*

Session 4: SCIENCE AND ARCHAEOLOGY

(L.A. Pavlish & R.G. Hancock, Organizers; L.A. Pavlish, R.G. Hancock, P. Julig and R. Farquhar, Chairs)
ROOM: Prince of Wales, 3rd Floor

"Pots & Rocks" - Chair: Ron Hancock

- 9:00-9:20 Alicia Hawkins (University of Toronto): *Instrumental Neutron Activation Analysis of Fritted Pottery*
- 9:20-9:40 Carole Stimmell (Toronto Board of Education), Jean-Luc Pilon (Canadian Museum of Civilization) & Ron Hancock (University of Toronto): *Northern Ontario Ceramics: Taking it to the Source*
- 9:40-10:00 Ron Hancock (University of Toronto): *Ancient Ceramic Analysis: Who Cares?*
- 10:00-10:20 Hugh Jarvis (State University of New York at Buffalo): *Tracking the Elusive Hornfels: South African Stone Age Behaviour*
- 10:20-10:40 COFFEE BREAK

"Rocks and Surveys" - Chair: Pat Julig

- 10:40-11:00 P.J. Julig (Laurentian University), L.A. Pavlish & R.G. Hancock (University of Toronto): *Sourcing of Lithic Artifacts by INAA: Some Examples From the Great Lakes Region*
- 11:00-11:20 P.M. Badertscher & K.D. McLeod (Historic Resources Branch, Manitoba Culture, Heritage and Citizenship): *Electromagnetic Ground Conductivity at St. Paul's-Middlechurch: A Heritage Resource Management Study in a Historic Cemetery*
- 11:20-11:40 Brian Ross (Canadian Parks Service): *An Historic Ojibway Cemetery on Beausoleil Island*
- 11:40-12:00 Vito Volterra (McMaster University & Toronto University): *Provenancing of Millstones from Two Roman Villas in Southern Italy*
- 12:00-2:00 LUNCH BREAK

"Dating and/or/of Metals" - Chair: Larry Pavlish

- 2:00-2:20 Eric Oksanen (York University): *Pots and Pans For Pelts: The European Copper and Brass Industry and the Fur Trade*
- 2:20-2:40 William Fox (Canadian Parks Service) *Where East Meets West: The New Copper Cultures*
- 2:40-3:00 L.A. Pavlish, R.G. Hancock, R.P. Beukens, R.M. Farquhar (University of Toronto), Wm. Fox (Canadian Parks Service), Pat Julig (Laurentian University), Wm. Ross (Ontario Ministry of Culture & Communications), & G.C. Wilson (Turnstone Geological Services Ltd.): *Distinguishing European Trade Copper and Northeastern North American Native Copper*
- 3:00-3:20 R.P. Beukens (University of Toronto): *AMS Radiocarbon Dating of Archaeological Materials: Successes and Failures*
- 3:20-3:40 COFFEE BREAK

"Iron, Lead, Organics and Diet" - Chair: Ron Farquhar

- 3:40-4:00 Richard G. Cresswell (University of Toronto): *Iron: Why Radiocarbon Dating Doesn't Always Work*
- 4:00-4:20 R.M. Farquhar (University of Toronto), J.A. Walthall (Illinois State Museum) & R.G. Hancock (University of Toronto): *Early Lead Smelting in the Mid-Western United States: Lead Isotope Evidence*

- 4:20-4:40 Chris Sergeant (Canadian Parks Service): *Identification of Archaeological Materials by Fourier Transform Infrared Spectrophotometry and FTIR Microscopy*
- 4:40-5:00 A.C. D'Andrea (University of Toronto): *Palaeoethnobotany of Later Jomon and Earliest Yayoi Cultures of Northeastern Aomori Prefecture, Northeastern Japan*

Session 5: CANADIAN ARCHAEOLOGISTS BEYOND THEIR BORDER

(Chair: Michael Spence, University of Western Ontario)

ROOM: Ballroom Centre, 2nd Floor

- 9:00-9:20 Penny Young (McMaster University): *Gods and Glyphs: A Re-evaluation of the Zapotec Urn*
- 9:20-9:40 Jeremy Brett (University of Toronto): *INAA and Obsidian Hydration Dating of Mayan Bladelets from Cahal Pech, Belize, C.A.*
- 9:40-10:00 Joan Kanigan (Trent University): *Chimu Ceramics from Chan Chan, Peru: A Reanalysis*
- 10:00-10:20 Marilyn MacKellar (Direction Des Antiquités Préhistoriques D'Aquitaine): *A Fireplace is a Fireplace -- Isn't it?*

Session 6: ARCTIC PREHISTORY, TAYLOR-MADE: PAPERS IN HONOUR OF WILLIAM E. TAYLOR JR. - PART 1: PALAEOESKIMO STUDIES

(Organizer & Chair: J.-Luc Pilon)

ROOM: Victoria/Albert, 3rd Floor

- 10:35 Jean-Luc Pilon (Canadian Museum of Civilization): *Introductory Comments*
- 10:40-11:00 Jean-Luc Pilon (Canadian Museum of Civilization): *Palaeo-Eskimo Remains From the Lower Mackenzie Valley, District of Mackenzie, Northwest Territories, Canada*
- 11:00-11:20 Raymond J. Le Blanc (University of Alberta): *The Crane Site and the Late Pre-Dorset Period in the Western Canadian Arctic*
- 11:20-11:40 J. Helmer (University of Calgary): *Resurrecting the Spirit(s) of Taylor's Carlsberg Culture: Cultural Traditions and Cultural Horizons in Eastern Arctic Prehistory*
- 11:40-12:00 Ian Badgley (Avataq Cultural Institute Inc.): *Pre-Dorset Settlement Patterns in Nunavik*
- 12:00-2:00 LUNCH BREAK
- 2:00-2:20 Murielle Nagy (University of Alberta): *Pre-Dorset/Dorset Transition: The State of the Question*
- 2:20-2:40 Patrick Plumet (Université du Québec à Montréal): *La Continuité Du Paléoesquimau Dans La Baie Du Diana (Arctique Québécois)*
- 2:40-3:00 Steven L. Cox (Maine State Museum): *The Pre-Dorset-Dorset Transition in Labrador*
- 3:00-3:20 Jean-Yves Pintal (Québec, Qc.): *Présence Groswaterienne en Basse-Côte-Nord Oriental, Québec*
- 3:20-3:40 COFFEE BREAK
- 3:40-4:00 M.A.P. Renouf (Memorial University of Newfoundland): *The Transitional Period on the Island of Newfoundland*
- 4:00-4:20 Discussant: Moreau Maxwell (Michigan State University)

Session 7: FAUNAL STUDIES

(Chair and Organizer: Frances Stewart)

ROOM: Duke of Connaught, 3rd Floor

- 10:40-11:00 Peter Dawson (University of Toronto): *From Death Assemblage to Fossil Assemblage: Understanding the Nature of Inter and Intra-Site Variability in Faunal Assemblages*
- 11:00-11:20 Maribeth Murray (Memorial University of Newfoundland): *Dorset Settlement and Subsistence at Phillip's Garden, Port au Choix, Newfoundland*
- 11:20-11:40 Frances Stewart (University of New Brunswick): *Meat in Acadian Diets: Early Indications*
- 11:40-12:00 Howard Savage (University of Toronto): *Prehistoric Fauna in a Vertical Fissure Cave in the Niagara Escarpment, Dufferin County, Ontario*

- 12:00-2:00 LUNCH BREAK
 2:00-2:20 Anne Rick (Canadian Museum of Nature): *Table Scraps From a Prime Minister*
 2:20-2:40 Kathlyn Stewart (Canadian Museum of Nature): *Fauna From the Historic/Prehistoric Site of Forks, Manitoba*
 2:40-3:00 Richard Morlan (Canadian Museum of Civilization): *Rodent Bones in Archaeological Sites*

Session 8: ADVANCES IN IROQUOIAN ARCHAEOLOGY-PART 1: MISCELLANEOUS PAPERS

(Chair: Martha Latta)

ROOM: Ballroom Centre, 2nd Floor

- 10:40-11:00 Barry Gray and Jeanie Tummon (Sainte Marie Among the Hurons): *"Sainte Marie Re-Visited": 1987-90 Excavations at Sainte Marie Among the Hurons*
 11:00-11:20 Colin Varley & Penny Young (McMaster University): *Every Burial Pit Has a Fur Lining*
 11:20-11:40 Martha Latta (University of Toronto): *The Kettle is Full: The Feast of the Dead at the Auger Site*
 11:40-12:00 Dean Knight (Wilfrid Laurier University): *The Chronology of the Ball Site, or: Did Champlain Sleep Here?*

Session 9: ADVANCES IN IROQUOIAN ARCHAEOLOGY - PART 2: ARCHAEOLOGY OF THE SAINT LAWRENCE IROQUOIANS

(Organizers: J.F. Pendergast & C. Chapdelaine, Chair: J.F. Pendergast)

ROOM: Ballroom East, 2nd Floor

- 1:50-2:00 James F. Pendergast (Canadian Museum of Civilization): *Introductory Comments*
 2:00-2:20 James F. Pendergast (Canadian Museum of Civilization): *Archaeological Evidence of Prehistoric Iroquoian Genocidal Warfare*
 2:20-2:40 J. Bruce Jamieson (Department of Communications, Canada): *St. Lawrence Iroquoian Bone Technology*
 2:40-3:00 J.V. Wright (A.H.B.I. Associates): *Iroquoian Archaeology: Its the Pits*
 3:00-3:20 Evelyne Cossette (Université de Montréal): *The Exploitation of Deer Among Northern Iroquoians*
 3:20-3:40 COFFEE BREAK
 3:40-4:00 Judith Blais (Université de Montréal): *The Bilodeau Site Near Missisquoi Bay: Postmolds, Fishbones and Corn Ear Motif*
 4:00-4:20 Claude Chapdelaine (Université de Montréal): *Eastern Saint Lawrence Iroquoians in the Cap Tourmente Area*
 4:20-4:40 Michel Plourde (Contractual Archaeologist): *Iroquoians in the St. Lawrence Estuary: The Ouellet Site Seal Hunters*
 4:40-5:00 Roland Tremblay (Université de Montréal): *Looking for Adhothuys: Iroquoian Beluga Hunting on Ile Verte*

Session 10: ETHNICITY IN ARCHAEOLOGY

(Chair: Neal Ferris, Ministry of Culture & Communications, Ontario)

ROOM: Duke of Connaught, 3rd Floor

- 3:00-3:20 Scott MacEachern (University of Calgary): *Defining Ethnicity: The Mandara Example*
 3:20-3:40 COFFEE BREAK
 3:40-4:00 Peter Denny (University of Western Ontario): *The Entry of Algonquian Language into the Boreal Forest*
 4:00-4:20 Diana E. French (Okanagan College): *Erasing Ethnicity: The Case of the Chinese Lepers of D'Arcy Island*
 4:20-4:40 Scott MacEachern & Genevieve Le Moine (University of Calgary): *Style Visible, Style Invisible: Artifact Variation and its Meaning*

- 4:40-5:00 Theresa C. Sparks (University of Calgary): *Oxbow, McKean, and the Old Copper Culture: A Discussion of Ethnicity at the Castor Creek Site*
- 5:00-5:20 David M. Stothers (University of Toledo), James R. Graves (University of Wisconsin, Madison), Susan K. Bechtel & Timothy J. Abel (University of Toledo): *The Western Basin Tradition- Algonquian or Iroquois? A 1992 Perspective*

FRIDAY/VENDREDI

Session 11: ETHNOGRAPHIC AND ETHNOHISTORIC ANALOGUES, AND ORAL HISTORY, IN ARCHAEOLOGY

(Chair: Ralph Pastore, Memorial University of Newfoundland)

ROOM: Ballroom East, 2nd Floor

- 9:00-9:20 Allison Young (University of British Columbia): *Ethnographic and Ethnohistoric Analogy: The Challenge of Constructing a Settlement Pattern Model for Pre-Contact Aleuts*
- 9:20-9:40 Suzanne Needs-Howarth (University of Toronto): *Using Ethnographic, Ethnohistoric and Ethnoarchaeological Data to Understand the Processing and Disposal of Plant and Animal Remains*
- 9:40-10:00 Sylvia Albright (Nlaka'pamux Nation Tribal Council): *A Working Woman Needs a Good Toolkit*
- 10:00-10:20 Robert Casagrand (State University of New York at Albany): *Oral Tradition, Archaeology, and the League of the Iroquois*

Session 12: ARCTIC PREHISTORY, TAYLOR-MADE: PAPERS IN HONOUR OF WILLIAM E. TAYLOR JR. - PART 2: NEOESKIMO STUDIES

(Organizer & Chair: D. Morrison)

ROOM: Victoria/Albert, 3rd Floor

- 9:00-9:20 William W. Fitzhugh (Smithsonian Institution): *The Dorset-Thule Transition: Culture Change in the Eastern Canadian Arctic*
- 9:20-9:40 Charles D. Arnold (Prince of Wales Northern Heritage Centre): *An Early Thule Archaeological Site on Banks Island, N.W.T.*
- 9:40-10:00 James M. Savelle (McGill University) & Allen P. McCartney (University of Arkansas): *Thule Eskimo Bowhead Whale Selection: a Biometrical Analysis*
- 10:00-10:20 Doug Stenton (Arctic College) & Robert Park (University of British Columbia): *Site Formation Processes and Thule Archaeofauna*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Norm Hallendy (Tukilik Project): *Inuksuit*
- 11:00-11:20 David Morrison (Canadian Museum of Civilization): *An Archaeological Perspective on Neoeskimo Economics*
- 11:20-11:40 Jack Brink (Provincial Museum of Alberta): *Parameters of Caribou Biology and Hunting Strategies*
- 11:40-12:00 Bryan C. Gordon (Canadian Museum of Civilization): *Nadlok and the Origins of the Copper and Caribou Inuit*
- 12:00-2:00 LUNCH BREAK
- 2:00-2:20 T. Max Friesen (McGill University) & Andrew Stewart (Royal Ontario Museum): *Protohistoric Settlement Patterns in the Interior District of Keewatin: Implications for Caribou Inuit Social Organization*
- 2:20-2:40 Susan Rowley (Pittsburgh): *The Sadlermiut - Mysterious or Misunderstood?*
- 2:40-3:00 Discussant: Allen P. McCartney (University of Arkansas)

Session 13: EXPEDIENT LITHIC TECHNOLOGY IN A GLOBAL PERSPECTIVE

(Organizers and Chairs: J. Casey & J. Siggers)

ROOM: Duke of Connaught, 3rd Floor

- 9:00-9:20 Joanna Casey (University of Toronto): *It Ain't the Meat its the Motion: Subsistence and Mobility in Holocene Ghana*
- 9:20-9:40 Julain Siggers (University of Toronto): *The Lithic Tradition at Wadi Ziqlab: A Late Neolithic Site in Northern Jordan*
- 9:40-10:00 Patrick J. Julig (Laurentian University): *Expedient Lithic Technology in Late Paleo-Indian Assemblages: Some Examples from the Upper Great Lakes*
- 10:00-10:20 Mary M.A. MacDonald (University of Calgary): *Expedient Lithic Technology and Possible Sedentization in Early Holocene Dakleh Oasis, South Central Egypt*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Bruce Schroeder (University of Toronto): *Settling Down: Sedentism and its Impact on Lithic Assemblages of the Late Pleistocene Levant*
- 11:00-11:20 Timothy Kaiser (University of Toronto): *A Late Neolithic Assemblage From Hvar, Yugoslavia*
- 11:20-11:40 Discussant: Maxine Kleindienst (University of Toronto)

Session 14: NEW APPROACHES IN CANADIAN SHIELD ARCHAEOLOGY

(Organizer & Chair: C.S. "Paddy" Reid)

ROOM: Prince of Wales, 3rd Floor

- 9:00-9:20 Colleen Halverson (Kenora): *Methods Applied to Palaeo Sites in the Boreal Forest: An Evaluation of the Simmonds Site*
- 9:20-9:40 William A. Ross (Ministry of Culture & Communications, Ontario): *The Interlakes Composite: A Re-definition of the Aggaziz-Minong Peninsula*
- 9:40-10:00 J. Scott Hamilton (Lakehead University): *Modelling Palaeo-Indian Settlement Pattern North of Lake Superior*
- 10:00-10:20 Andrew Hinshelwood (Old & In The Way) & Wm. A. Ross (Ministry of Culture & Communications, Ontario): *Lakehead Complex Lithic Reduction Sequence: A Synthetic Approach*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Peter L. Storck (Royal Ontario Museum) & Patrick J. Julig (Laurentian University): *Re-Excavations at Sheguiandah, Ontario*
- 11:00-11:20 Diana L. Gordon (McMaster University), John H. McAndrews (Royal Ontario Museum) & Ian D. Campbell (University of Toronto): *Palaeohydrology and Prehistoric Occupations of Lake Temagami: Preliminary Research*
- 11:20-11:40 Jean Dumont (Ministère des Transports du Québec), Claude Chapdelaine et Steve Bourget (Université de Montréal): *Archaeo-Magnetism and the Dating of a Plano Site From Rimouski, Que.*
- 11:40-12:00 C..S. Reid (Ministry of Culture & Communications, Ontario): *The "Sacredness" of Carved Stone Pipes in the Ojibwa-Cree Area of the Northern Mid-Continent: A Spatial and Temporal Dilemma*
- 12:00-2:00 LUNCH BREAK
- 2:00-2:20 William A. Fox (Canadian Parks Service): *The Serpent's Copper Scales*
- 2:20-2:40 Andrew Hinshelwood (Old & In The Way): *New Directions in the Visual Description of Large Pictograph Collections*
- 2:40-3:00 Discussant: J.V. Wright (A.H.B.I. Associates)

Session 15: ADVANCES IN IROQUOIAN ARCHAEOLOGY-PART 3: IROQUOIAN SPATIAL ARCHAEOLOGY

(Organizers & Chairs: P.A. Timmins & G. Warrick)

ROOM: Ballroom East, 2nd Floor

- 10:40-11:00 Philip J. Woodley (Hamilton), William Fitzgerald (Wilfrid Laurier University) & Rebecca A. Southern (McMaster University): *The Zamboni Cemetery: A Glen Meyer Period Burial Ground*
- 11:00-11:20 Angele Smith (Toronto): *An Alternative Approach to the Analysis of a Chief's House*
- 11:20-11:40 Peter A. Timmins (McGill University & Ministry of Transportation, Ontario): *An Interpretive Framework For the Early Iroquoian Village*
- 11:40-12:00 R.F. Williamson (Archaeological Services Inc.): *The Myers Road Site: A Community in Transition*
- 12:00-2:00 LUNCH BREAK
- 2:00-2:20 Shaun Austin (Archaeological Services Inc.): *The Wilcox Lake Site (AlGu-17): An Early Middle Iroquoian Component in the Regional Municipality of York, Ontario*
- 2:20-2:40 Christine F. Dodd (Ministry of Transportation, Ontario): *Two Neutral Cabin Sites: A Case Study in Small Site Archaeology*
- 2:40-3:00 Martin S. Cooper & David A. Robertson (Archaeological Services Inc.): *The Norton Site (AfHh-86): A Late Iroquoian Village in London, Ontario*
- 3:00-3:20 Rick Sutton (McMaster University): *The Middle Iroquoian Colonization of Simcoe County, Ontario*
- 3:20-3:40 COFFEE BREAK
- 3:40-4:00 Dana R. Poulton (D.R. Poulton & Associates Inc.): *The Bead Hill Site (AkGs-5, 8): An Historic Seneca Component on the North Shore of Lake Ontario*
- 4:00-4:20 Robert I. MacDonald (McGill University & Archaeological Services Inc.): *Soil as a Determinant of Major Settlement Location in the Late Woodland of Southcentral Ontario*
- 4:20-4:40 Gary Warrick (Ministry of Transportation, Ontario): *Estimating Prehistoric Iroquoian Population*

Session 16: ASPECTS OF CONTACT AND CULTURAL TRANSFORMATION

(Organizer & Chair: W.R. Fitzgerald)

ROOM: Duke of Connaught, 3rd Floor

- 2:00-2:20 Réginald Auger (Université Laval): *16th Century English Venture to Baffin Island: Evidence From Martin Frobisher's Expeditions*
- 2:20-2:40 Laurie MacLean (Chain Rock Consulting & Management): *The Beaches Revisited*
- 2:40-3:00 Martha L. Sempowski (Rochester Museum & Science Center): *Early Historic Exchange Patterns of the Seneca and Susquehannock*
- 3:00-3:20 William R. Fitzgerald (Wilfrid Laurier University): *Contact, Contraction, and the Little Ice Age*
- 3:20-3:40 COFFEE BREAK
- 3:40-4:00 C. Wesley Cowan (Cincinnati Museum of Natural History): *The Dawn of History and the Demise of the Fort Ancient Cultures of the Middle Ohio Valley*
- 4:00-4:20 Shelley R. Saunders, Peter G. Ramsden & D. Ann Herring (McMaster University): *Transformation and Disease: Precontact Ontario Iroquoians*
- 4:20-4:40 D. Ann Herring (McMaster University): *Reconsidering Disease and Contact in the Americas*
- 4:40-5:00 Georges Sioui (Newberry Library): *The History of Contact with Europeans in the Northeast: A Wendat Perspective*

Session 17: STUDIES IN CANADIAN ARCHAEOLOGY: WEST AND NORTH

(Chair: Sandra Zacharias)

ROOM: Victoria/Albert, 3rd Floor

- 3:40-4:00 Gordon R. Freeman (University of Alberta) & Phyllis J. Freeman (Edmonton): *Majorville Medicine Wheel Complex: Distant Outliers and Accurate Solstice Alignments*

- 4:00-4:20 Andrew R. Mason (University of British Columbia): *Preliminary Results of the 1990-91 Excavations at the Hatzic Rock Site, Hatzic, B.C.*
- 4:20-4:40 Sandra K. Zacharias (Heritage Consultant): *Archaeology as a School Activity: The Education of an Archaeologist*
- 4:40-5:00 Sheila Greer (University of Alberta): *Annie Lake: A Southern Yukon Mid-Holocene Cultural Complex*
- 5:00-5:20 James A. Tuck (Memorial University of Newfoundland) & Robert McGhee (Canadian Museum of Civilization): *The Archaeology of Frobisher's Mines*

Session 18: ARTIFACT STUDIES: BASKETS, POINTS AND POTS

(Chair: C.J. Ellis)

ROOM: Prince of Wales, 3rd Floor

- 3:40-4:00 Kathryn Bernick (Vancouver): *Diagnostic Features of Marpole Baskets*
- 4:00-4:20 Chris J. Ellis (University of Western Ontario) & James H. Payne (University of Michigan): *Estimates of Failure Rates in Fluting Based on Archaeological Data: Examples From Northeastern North America*
- 4:20-4:40 Doris Zibauer (Trent University): *The Ceramics of the Hungry Hall Site*
- 4:40-5:00 Colin Varley (McMaster University): *The Height of Fashion: Lalonde Focus Research in Simcoe County*

SATURDAY/SAMEDI

Session 19: ARCHAIC STUDIES IN THE NORTHEAST

(Organizers: C.J. Ellis & P.J. Woodley, Chair: P.J. Woodley)

ROOM: Ballroom East, 2nd Floor

- 9:00-9:20 Tony DeRegnaucourt (Upper Miami Valley Archaeological Research Museum): *Late Paleo-Indian and Early Archaic Manifestations in West-Central Ohio and Possible Ontario Connections*
- 9:20-9:40 Andrew Murray & Jeff Bursey (Ministry of Transportation, Ontario): *The Kipling Cluster: An Early Archaic (Nettling) Site Complex*
- 9:40-10:00 J.E. Bowen (Ohio Archaeological Council): *Early Archaic Nettling Settlement Patterns in North-Central Ohio*
- 10:00-10:20 Paul A. Lennox (Ministry of Transportation, Ontario): *The Kassel and Blue Dart Sites: Two Components of the Early Archaic Bifurcate Base Projectile Point Tradition, Waterloo County, Ontario*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Bruce Welsh, Debbie Steiss, Carol Ramsden & Steve Thomas (Archaeological Services Inc.): *Archaic Sites in the Ancaster, West Hamilton Escarpment Region*
- 11:00-11:20 David Sanger (University of Maine, Orono) & James B. Petersen (University of Maine, Farmington): *Advances in the Understanding of the Archaic Stage in Maine*
- 11:20-11:40 Peter G. Ramsden (McMaster University): *Archaic Materials From the Gull River Drainage, South-Central Ontario*
- 11:40-12:00 Donna Morrison (Simon Fraser University) & Lawrence Jackson (Northeastern Archaeological Associates): *The Laurentian Archaic at East Sugar Island*
- 12:00-2:00 LUNCH BREAK
- 2:00-2:20 William A. Lovis (Michigan State University): *Settlement System Superposition, Typological Confusion, Population Packing and Environmental Variation: Causes for Perceived Late Archaic Site Density Increases in Great Lakes Coastal Environments*
- 2:20-2:40 Keith J. Tinkler & James W. Pengelly (Brock University): *Southern Niagara: Ephemeral Lakes, Sporadic Outlets, Transitional Environments for Native Habitation*

2:40-3:00 Ward Brownell (Trent University): *A Functional Analysis of a Late Archaic Lithic Assemblage*

Session 20: ADVANCES IN IROQUOIAN ARCHAEOLOGY-PART 4: IROQUOIAN REGIONAL INTERACTION: SYSTEMS AND STRUCTURE

(Organizer & Chair: R.F. Williamson)

ROOM: Victoria/Albert, 3rd Floor

- 9:00-9:20 Robert J. Hasenstab (Rutgers University): *A Predatory Expansion Hypothesis: Evidence for Territorial Conflicts in Late Woodland New York*
- 9:20-9:40 Susan M. Jamieson (Trent University): *Regional Interaction and Ontario Iroquois Evolution*
- 9:40-10:00 Robert H. Pihl (Archaeological Services Inc): *Understanding Southern Ontario Before "Mississippification": The Transition From Middle to Late Woodland*
- 10:00-10:20 R.F. Williamson & David A. Robertson (Archaeological Services Inc): *Iroquoian Regional Interaction: Peer Polities at the Periphery*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 William C. Johnson (Michael Baker Jr. Inc.): *Ontario Iroquoian and Monongahela Culture Contact During the Terminal Late Prehistoric and Protohistoric Periods: The Case for the Massawomeck Connection*
- 11:00-11:20 William Engelbrecht (Buffalo State College): *Population Trends Among the St. Lawrence Iroquoians*
- 11:20-11:40 Michael Stewart (Temple University): *Prehistoric Northern Influences in the Middle Atlantic Region*

Session 21: DEVELOPING CONTEXT IN HISTORICAL ARCHAEOLOGY

(Organizer & Chair: D. Doroszenko)

ROOM: Duke of Connaught, 3rd Floor

- 9:00-9:20 Rod Crocker (Toronto Board of Education): *Gore Vale Preliminary Findings*
- 9:20-9:40 Ellen Blaubeurgs (Toronto Board of Education): *Documentary Context and its Importance: Preliminary Research Into a Nineteenth Century Toronto China Merchant*
- 9:40-10:00 Heather Henders on (University of Toronto): *Price Indexing for 20th Century Historic Site Assemblages: A Cautionary Note*
- 10:00-10:20 Ian Kenyon (Ontario Heritage Foundation): *Spilled Ink and Broken Cups*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Dena Doroszenko (Ontario Heritage Foundation): *"Death Lurked in the Floorboards and Stained the Walls": Behavioral Inferences From the Inge-va Privy Deposit*
- 11:00-11:20 Mary Catherine Garden (Ontario Heritage Foundation): *Home is Where the Hearth is*
- 11:20-11:40 Dwanye James (Toronto): *On Their Own: The Subsistence Adaptations Effected by Residents of the Hudson's Bay Company Staff House in Moose Factory From 1848 Onwards*
- 11:40-12:00 Richard H. Gerrard (Toronto Historical Board): *Museums, Cyberspace and the Construction of Archaeological Context*

Session 22: ON SITE SURVEYS, DATABASES AND COMPUTER-BASED TECHNIQUES IN ARCHAEOLOGY

(Organizer & Chair: L. Dalla Bona)

ROOM: Prince of Wales, 3rd Floor

- 9:10-9:20 Luke Dalla Bona (Lakehead University): *Introductory Remarks*
- 9:20-9:40 Morgan J. Tamplin (Trent University): *Canadian Archaeological Computing in Perspective: The Last 20 Years and Future Prospects*
- 9:40-10:00 Gary Adams (Canadian Parks Service): *Site Survey in Grasslands National Park: Site Prediction*

- and Usability Models*
- 10:00-10:20 Kevin McAleese (Department of Municipal Affairs, Newfoundland): *Naming the Sites - Citing the Names: Ground Survey, Oral History and Predictive Modelling on the Kanairiktok River, Labrador*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Steve Acheson (Archaeology Branch, British Columbia) & Diana E. French (Okanagan College): *Plotting Archaeologists or Plotting Sites? An Evaluation of Survey Objectives and Techniques in Selected Areas of British Columbia*
- 11:00-11:20 Genevieve Le Moine (University of Calgary): *Idrisi Under the Microscope: Digital Image Processing and Use Wear Analysis*
- 11:20-11:40 Luke Dalla Bona (Lakehead University): *I Know Exactly Where I am: Using GPS in Archaeology*
- 11:40-12:00 David Smith (University of Toronto), Robert G. Mayer (Mayer Heritage Consultants) & Heidi Bohaker (University of Western Ontario): *Computer Plotting of Archaeological Data Made Easy*
- 12:00-2:00 LUNCH BREAK
- 2:00-2:20 Micha Pazner, Nancy Thies (University of Western Ontario) & Roberto Chavez (The World Bank): *Basic Computer Imaging for Archaeological Mapping*
- 2:20-2:40 Rebecca J. Balcom & Rick F. Courtney (Environmental Management Associates): *Using a Geographic Information System to Predict Archaeological Resource Sensitivity at the Development Planning Stage*
- 2:40-3:00 Luke Dalla Bona & Scott Hamilton (Lakehead University): *Helping Out the Foresters: Predicting Heritage Resource Localities*
- 3:00-3:20 Ann L. Balmer (Algonquin Associates) & John Peters (Ontario Hydro): *An Illustration of Prehistoric Site Potential Mapping in Regional Studies*
- 3:20-3:40 COFFEE BREAK
- 3:40-4:00 Robert D. Wall (Louis Berger & Associates): *Stratifying Northern Ontario Landscapes: A Predictive Model for Archaeological Site Locations*
- 4:00-4:20 Jim Finnigan (Western Heritage Services Inc.): *Are Resource Managers Expert (Systems)? A Proposal for Developing and Applying Knowledge-Based Rules Using GIS*
- 4:20-4:40 Terrence H. Gibson (Western Heritage Services Inc.): *A Proposal for the Integration of Canada's Archaeological Database*
- 4:40-5:00 Carlos Germann (Heritage Branch, Saskatchewan Family Foundation): *Full-Serve to Self-Serve: Saskatchewan's Archaeological Inventory Remote Access System*

Session 23: DIRECT PARTICIPATION: FIRST NATIONS AND ARCHAEOLOGY IN CANADA

(Organizer & Chair: P. Antone)

ROOM: Ballroom West, 2nd Floor

PUBLIC SESSION

- 9:20-9:40 Paul Antone (Communications Canada, Ottawa): *Introductory Remarks*
- 9:40-10:00 David Pokotylo & Gregory Brass (University of British Columbia): *Public Archaeology at the Hatzic Site, British Columbia*
- 10:00-10:20 Patricia Allen (Archaeology Branch, New Brunswick): *What Was Lost? A Response From the Northeastern Sector of the Micmac Culture Area*
- 10:20-10:40 COFFEE BREAK
- 10:40-11:00 Eva MacDonald (Archaeological Services Inc.): *The Application of Oral History Studies to Archaeological Master Plans for First Nations*
- 11:00-11:20 Margaret Hanna (Saskatchewan Museum of Natural History) & Terry Gibson (Western Heritage Services Inc.): *Trespassing Into the Past: A Report on a Workshop Between Cree Elders and Archaeologists*
- 11:20-12:00 Video Presentation & Introduction of the Afternoon Discussion Panel
- 12:00-2:00 LUNCH BREAK
- 2:00-5:00 Afternoon Discussion Panel: Issues, Trends, Directions

Session 24: STUDIES IN CANADIAN ARCHAEOLOGY: EAST

(Chair: D.W. Black)

ROOM: Duke of Connaught, 3rd Floor

- 2:00-2:20 Yves Chrétien (Université de Montréal): *A Meadowood Mortuary Site in the Quebec City Area*
2:20-2:40 Gilles Tassé (Université du Québec à Montréal): *La Dation Des Peintures Rupestres*
2:40-3:00 David L. Keenlyside (Canadian Museum of Civilization): *Archaeological Investigations on the Aroostook and Tobique Rivers, New Brunswick*
3:00-3:20 Susan Blair (Archaeology Branch, New Brunswick): *Public Archaeology at the Enclosure Provincial Park*
3:20-3:40 COFFEE BREAK
3:40-4:00 Kevin Leonard (University of Toronto): *Micmac Interaction With Plants and With Neighbouring Peoples*
4:00-4:20 David W. Black (University of New Brunswick) & Annette Wilkins (McMaster University): *Seasonality of Modern and Archaeological Soft-Shelled Clams From the Quoddy Region, New Brunswick*

Workshop: FOREIGN INFLUENCES IN IROQUOIAN CERAMICS

(Chair: R.F. Williamson) ROOM: Victoria/Albert, 3rd Floor, 2:00-5:00

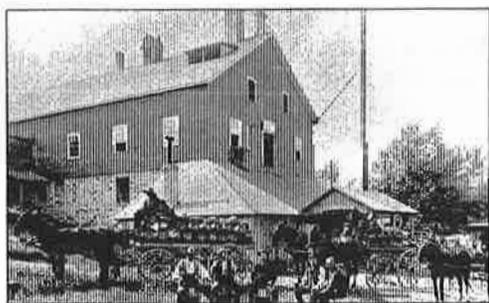
Workshop: APPLYING FOR GRADUATE SCHOOL

(Chair: Lesley Nicholls) ROOM: Duke of Albany, 3rd Floor: 2:00-5:00

Banquet: ROOM: Ballroom West, 2nd Floor, 6:30 PM - 1 AM.

Presentation: *Facts and Fictions: Writing Archaeology in a Different Voice*, Alison Wylie, Department of Philosophy, University of Western Ontario

TAP INTO THE ORIGINAL



The Original Formosa Springs Brewery in Formosa, Ontario (Circa 1870)

EVERY BOTTLE OF FORMOSA SPRINGS
DRAFT IS COLD FILTERED FOR THAT
CLEANER, FRESHER DRAFT BEER TASTE.
NOW AVAILABLE AT REGULAR
PRICES WHEREVER YOU BUY BEER.

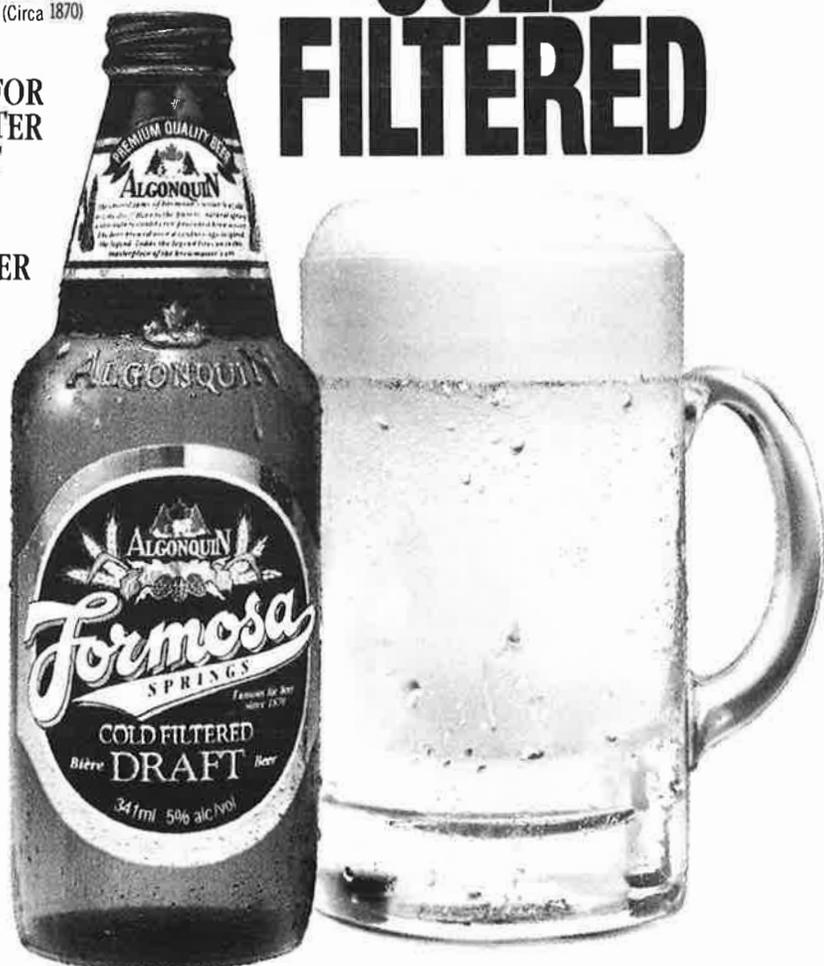
COLD FILTERED

FORMOSA SPRINGS – FAMOUS FOR
BEER SINCE 1870, IS BACK BETTER
THAN EVER WITH TRUE DRAFT
BEER IN A BOTTLE.

BREWED WITH LEGENDARY
PURE FORMOSA SPRINGSTM WATER
BY THE ALGONQUIN BREWERY
IN FORMOSA, ONTARIO.

THE ORIGINAL DRAFT IN A BOTTLE

REGULAR
PRICES



ABSTRACTS/RÉSUMÉS

Plotting Archaeologists or Plotting Sites? An Evaluation of Survey Objectives and Techniques in Selected Areas of British Columbia (Session 22 - Sat. AM)

Steven R. Acheson (Archaeology Branch, British Columbia) & Diana E. French (Okanagan College)

This paper evaluates how differing project objectives and methodological approaches affect the results of archaeological site surveys. The discussion considers the role of contemporary environmental and logistical criteria, as well as theoretical biases, in archaeological interpretation. Two culturally and geographically distinct localities, Meares Island and a section of the Fraser Canyon, British Columbia, are compared. Analysis demonstrates the failure of many archaeologists to address these factors in archaeological survey. Explicit recognition of such constraints will generate a more critical and ultimately more constructive means of interpreting archaeological site data.

Site Survey in Grasslands National Park: Site Prediction and Usability Models (Session 22 - Sat. AM)

Gary Adams (Canadian Parks Service)

When surveys produce 1100 prehistoric sites and very little information about them, archaeological analysis becomes a problem. This paper reviews the site information from Grasslands National Park and presents conclusions on how the data can be used in predicting site locations and site relationships. It also demonstrates how cultural resource management principles can be applied to best manage the sites.

A Working Woman Needs a Good Toolkit (Session 11 - Fri. AM)

Sylvia Albright (Nlaka'pamux Nation Tribal Council)

In response to increased interest in gender issues in archaeology, this paper looks at the action spheres in which women are engaged as tool makers and tool users in hunting-gathering societies. Based on ethnoarchaeological research in northern British Columbia, this paper examines the roles of men and women in

subarctic hunting-gathering communities, the kinds of activities they are involved in and the kinds of tools they require for various tasks. Direct observations on women's tool making and tool using behaviour help to define the contexts in which the results or remains of these activities are visible in the archaeological record. This research indicates that knowledge obtained from ethnographic and oral history sources can provide new insights and perspectives for interpreting the patterning seen in artifact assemblages and their distribution in archaeological sites.

What Was Lost? A Response From the Northeastern Sector of the Micmac Culture Area (Session 23 - Sat. AM)

Pat Allen (Municipalities, Culture and Housing, New Brunswick)

This paper will briefly examine archaeological data that has been gathered from northeastern New Brunswick during the last 20 years. A lot of this data gathering has been done in cooperation with and with assistance from the Red Bank Indian Band, Northumberland County, N.B. A prehistoric Micmac way of life will be suggested for the Miramichi, Nipisiguit and Restigouche River districts (an area encompassing about 1/4 to 1/5 of the total geographic area occupied by the Micmac at the time of contact). There is a clear concentration on anadromous fishing. A semi-permanent village lifestyle is suggested. This interpretation differs significantly from a *generalized Woodland economy* that was recorded for the Micmac during the historic fur trade.

Rough Translation:

Ce document est une brève étude sur des données archéologiques recueillies dans le nord-est du Nouveau-Brunswick dans les 20 dernières années. Plusieurs données ont été compilées en coopération et avec l'assistance du "Red Bank Indian Band" du comté de Northumberland, N.B. On suggère un mode de vie des Micmac préhistoriques pour les territoires des rivières Miramichi, Nipisiguit et Restigouche (une région qui comprend approximativement 1/4 à 1/5 de la région géographique habitée par les Micmac lors du contact). Il existe une concentration en référence à la pêche d'espèces anadromes. Un village semi-perman-

ent est suggéré. Cette interprétation est contraire à l'adaptation généralisée du sylvicole qui fût enregistré pour les Micmac pendant le commerce de la fourrure.

An Early Thule Archaeological Site on Banks Island, N.W.T.
(Session 12 - Fri. AM)

Charles D. Arnold (Prince of Wales Northern Research Centre)

In an article published in 1963, William Taylor presented a series of linked hypotheses on the origin of the Canadian Thule culture. The central idea expressed in these hypotheses was that Thule did not appear full-blown in the Canadian Arctic, but instead developed out of an earlier Birnirk phase that had extended along the Beaufort Sea coast as far as Amundsen Gulf by A.D. 900. Excavations on southern Banks Island carried out in 1980 and 1981 provided evidence which supports this idea. This paper examines the archaeological evidence from the Nelson River site, with particular emphasis on the technological repertory represented by the artifact assemblage.

16th Century English Venture to Baffin Island: Evidence From Martin Frobisher's Expeditions
(Session 16 - Fri. PM)

Réginald Auger (Université Laval)

Martin Frobisher's expeditions (1576-1578) to the Eastern Arctic sought initially to find a route to Cathay and when that proved to be less lucrative than the gold the English could bring back, the Company of Cathay was funded in order to mine tons of supposedly gold-bearing black ores. The enterprise resulted in the implantation of the earliest, though short-lived, industrial English establishment in the New World. This presentation highlights the archaeological potential of Frobisher's base camp on Kodlunarn Island, and discusses the results and preliminary analysis of the data from the 1990-1991 limited testing on the island. The overview of the limited archaeological research carried out so far provides us with architectural, artifactual and archaeometric data which will help in answering a host of anthropological and historical questions related to technological aspects of the Frobisher endeavour.

The Wilcox Lake Site (AlGu-17): An Early Middle Iroquoian Component in the Regional Municipality of York, Ontario
(Session 15 - Fri. PM)

Shaun Austin (Archaeological Services Inc.)

The Wilcox Lake site (AlGu-17) is a 1.2 hectare early Middle Iroquoian village situated in a public park along the elevated eastern shore of a large kettle lake in the Oak Ridges Interlobate Moraine physiographic region, approximately 35 km north of Toronto. Between 1989 and 1990, 383 square metres of the site were excavated by Archaeological Services Inc. in advance of the installation of a playground unit and washroom sewer line in the park. The available evidence indicates a year-round village occupation dating to between ca. A.D. 1280-1320. The Wilcox Lake site is beginning to provide data on a previously unknown regional expression of the Early to Middle Iroquoian transition. Although the ceramic sample is meagre, preliminary inter-site comparisons are made with the Uren, Boys, Bennett, and Barrie ceramic assemblages.

Heritage Resource Impact Assessment: Cultural Resource Management in Manitoba
(Session 1 - Thurs. AM)

Patricia M. Badertscher (Culture, Heritage and Citizenship, Manitoba)

Heritage Resource Impact Assessments (HRIAs) have been carried out in Manitoba, albeit informally, since the inception of the Historic Resources Branch in 1974. The HRIA process was formalized in 1986 with the proclamation of the Heritage Resources Act, which not only contains provisions for protecting heritage resources on provincially designated Heritage Sites, but also protects resources on sites where the Minister only has "reason to believe" that they are present and will be adversely impacted by development or other activities.

The Archaeology Section of the Branch coordinates initial HRIA screening for impacts to architectural, historical and archaeological resources. Field personnel examine any project with potential to require a developer to conduct a HRIA. Permits for field activities are issued, HRIA reports are reviewed and monitoring of project impacts are also functions of the Branch. HRIA Guidelines, in the form of seven self-contained "modules", are available for use by the developer and the archaeological consultant in

carrying our HRIAs.

Electromagnetic Ground Conductivity at St. Paul's-Middlechurch: A Heritage Resource Management Study in a Historic Cemetery
(Session 4 - Thurs. AM)

Patricia M. Badertscher & K. David McLeod (Culture, Heritage and Citizenship, Manitoba)

Archaeological applications for electromagnetic ground conductivity survey were presented by the authors at the 24th Annual Conference in St. John's, Newfoundland. At that time, the results and preliminary conclusions from studies at three historic cemeteries in southern Manitoba were discussed.

Historic Resources Branch archaeologists have been able to test the validity of their interpretations of the electromagnetic ground conductivity survey data at St. Paul's-Middlechurch Cemetery. The estimated 650 burials at this Anglican church cemetery located north of Winnipeg, Manitoba, date from ca. 1850 to the present. Investigations have combined archival research, electromagnetic ground conductivity survey and archaeological excavation to produce locational information for unmarked grave sites.

Pre-Dorset Settlement Patterns in Nunavik
(Session 6 - Thurs. AM)

Ian Badgley (Avataq Cultural Institute)

Archaeological research carried out over the years in Nunavik has resulted in the inventory of a large number of Pre-Dorset sites. Sites of this culture are particularly numerous along sections of the east coast of Hudson Bay and occur in high density in several localities, including Kuujjuaraapik and the Inukjuak-Witch Bay area. The majority are located in boulder fields situated at high altitudes. Pre-Dorset sites known in the Ungava Bay region are more widely dispersed and, for the most, occupy raised gravel beach ridges.

This paper reviews and compares the settlement pattern data obtained from these Early Palaeo-eskimo sites. Marked contrasts in the physical settings and composition of the Hudson Bay and Ungava Bay sites indicate different patterns of occupation in each region. As well, differences in the lithic tool assemblages recovered from the sites tend to suggest 2 regional variants of the Pre-Dorset culture in Nunavik, both of which appear to have been of different geo-

graphical origin.

Translation:

La recherche archéologique se poursuit depuis quelques années en Nunavik. Un des résultats de ces travaux est un inventaire important de sites pré-dorsétiens. Ces sites sont particulièrement nombreux le long de la côte orientale de la baie d'Hudson. De plus, de fortes concentrations de sites pré-dorsétiens se retrouvent à certains endroits tel Kuujjuaraapik et dans la région d'Inukjuak-Witch Bay. La plupart des sites se retrouvent dans des champs de blocs de haute altitude. Les sites pré-dorsétiens de la baie d'Ungava sont plus dispersés et tendent à se retrouver sur des anciennes plages de galet.

Cette communication compare ces deux schèmes d'établissement Paléo-Esquimaux anciens. Les différences aux niveaux de l'environnement immédiats des sites et de leurs compositions indiquent différents modes de d'occupation de chacune des régions. De plus, les différences au niveau de l'outillage lithique suggèrent l'existence de deux manifestations pré-dorsétiennes en Nunavik qui auraient eu des sources distinctes.

Using a Geographic Information System to Predict Archaeological Resource Sensitivity at the Development Planning Stage
(Session 22 - Sat. PM)

Rebecca J. Balcom & Rick F. Courtney (Environmental Management Associates)

Environmental Management Associates is a diversified environmental consulting company. With the heightened awareness regarding the environment, our clients are frequently requesting that considerable effort be expended at the project planning stage in determining the environmental and cultural resource sensitivity of various areas. A Geographic Information System is used to predict the potential for various resources, thereby allowing the client to choose the least sensitive options for detailed assessment. This paper examines how GIS has been used to establish the archaeological resource sensitivity using an example from a valley in the Canadian Rockies. Completing this project involved examining known sites for common characteristics. Subsequently, the study area was modelled in 3D to determine slope and aspect and water bodies were buffered at 100 and 200 metres. Certain landforms such as alluvial fans known

to have sites associated with them were also given a high potential rating. The attributes were weighted and the scores were summed to determine overall site potential. Because this valley has generally high sensitivity for both environmental and cultural resources throughout, the proponent will be able to focus further states of the route selection process on areas where the overall sensitivity is most manageable.

**An Illustration of Prehistoric Site Potential
Mapping in Regional Studies**
(Session 22 - Sat PM)

Ann Balmer (Algonquin Associates) & John Peters
(Ontario Hydro)

This paper presents a case study to illustrate the practical application of a method for prehistoric site potential mapping in regional studies described by the authors in 1991. The study area is located in the Canadian Shield of north central Ontario.

The method described emphasizes a contextual approach incorporating both ecological and cultural data for assessing archaeological potential. Cultural data (ethnographic, ethnohistorical, archaeological) are reviewed to derive general settlement and land-use models. Environmental attributes associated with the settlement and land-use patterns are selected and mapped at a scale of 1:50,000 using a GIS. Specific examples of the mapped attributes will be reviewed. The individual mapped attributes are then overlaid to identify the range of environmental situations. The resulting patterns are analyzed to provide a ranking of areas of archaeological potential.

Diagnostic Features of Marpole Baskets
(Session 18 - Fri. PM)

Kathryn Bernick (Vancouver)

Artifacts with numerous techno-stylistic attributes have great diagnostic potential, but recognizing the relevant features can pose a considerable challenge. Recent research in the Coast Salish area of the Northwest Coast identifies decorative patterns typical of patterns from the Marpole Phase (400 BC - AD 500). Zig-zag and chevron motifs are especially characteristic and often occur as part of rim construction and reinforcement wrappings. Replication of these attributes on a Marpole Phase stone bowl, as well as purely decorative imitation reinforcements, strengthen the conclusions indicated by inter-site comparisons.

**AMS Radiocarbon Dating of Archaeological
Materials: Successes and Failures**
(Session 4 - Thurs. PM)

R.P. Beukens (University of Toronto)

The small sample size of AMS radiocarbon dating has changed fundamentally the preferred archaeological material requirements. In addition to the charcoal, wood and large bone samples, commonly used for conventional radiocarbon dating by beta-ray counting, a large number of different materials such as steel, ivory, silk, small bone fragments, antlers, narwhal tusks, seeds, pine and spruce needles, food remains, mud brick and walls, egg shells, paper and parchment, ropes, copper tools, etc., are now commonly dated. A decade of experience has shown that a careful selection of these materials on the basis of their archaeological use or function as well as the careful chemical extraction and purification of the appropriate fractions has improved the accuracy and reliability of the dating results and has solved archaeological problems which could not be solved by conventional radiocarbon dating. These successes and some of the spectacular failures have created new insights into the suitability of some materials and the limitations imposed by sample contamination.

**Seasonality of Modern and Archaeological Soft-
Shelled Clams From the Quoddy Region, New
Brunswick**
(Session 24 - Sat. PM)

David W. Black (University of New Brunswick) &
Annette Wilkins (McMaster University)

Recently, there has been some controversy regarding interpretations of the seasonality of prehistoric shellfishing on the Northeast coast of North America. In this paper, a study of the seasonality of soft-shelled clams, *Mya arenaria*, the most common archaeological shellfish in northern New England and Maritime provinces sites, is reported. Eighty-eight modern clams from the Quoddy region, and 266 archaeological clams from 9 prehistoric sites in the insular Quoddy region, were thin-sectioned, and their growth patterns analyzed. A model of the annual growth cycle of the clams is presented. The seasonality of prehistoric shellfishing is interpreted in light of this model. In the insular Quoddy region, shellfishing appears to have been predominantly a spring/early

summer activity; however, there is evidence for seasonality differences among sites and for changes in seasonality through time.

Public Archaeology at the Enclosure Provincial Park

(Session 24 - Sat. PM)

Susan Blair (Archaeology Branch, New Brunswick)

In recent years, the Archaeology Branch of the province of New Brunswick has been actively pursuing a policy to develop an awareness of archaeology in the public, both at a local level and through tourism. This has been accomplished through a number of programs. This paper will discuss their development and implementation. A prime example of such programming is the Enclosure Provincial Park project. The Enclosure Provincial Park, on the Miramichi River, was the site of excavations in 1990 and 1991. These excavations revealed evidence of habitation in the 18th and 19th centuries by Acadian, Planter, Loyalist and later settlers. During both of these field seasons the public and the local community were involved in all activities at the site through volunteer programs, site tours, interpretation, and community events. This project and others like it are attempting to invest local groups in archaeology by developing direct links between people and the archaeological past. This paper will discuss this and other projects in terms of the shift from private to public archaeological research, and in practical terms, examining benefits and pitfalls of the potential for public involvement in both the excavation process and the narration of the archaeological record.

**The Bilodeau Site Near Missisquoi Bay:
Postmolds, Fishbones and Corn Ear Motif**
(Session 9 - Thurs. PM)

Judith Blais (Université de Montréal)

In 1990, during a survey, a Saint Lawrence Iroquoian pot sherd was found on the Bilodeau site. This site is located on the Pike River, five kilometres upstream from Missisquoi Bay, Lake Champlain. During the summer of 1991, the excavation of 30 square metres in the area of this find, revealed the presence of a fishing camp. More than 80 postmolds were found, delimiting a small oval habitation. The analysis of the ceramics demonstrates the presence of the Saint Lawrence Iroquoians in the area around AD 1450. We

will give here an overview of the findings and discuss the relations with Saint Lawrence Iroquoian data from southern Quebec.

Translation:

En 1990, lors d'un inventaire archéologique, un tesson de céramique iroquoien du Saint Laurent était découvert sur le site Bilodeau. Ce site archéologique est situé le long de la rivière aux Brochets, à environ 5 km de la baie Missisquoi au Lac Champlain. À l'été de 1991, la fouille de 30 mètres² dans le secteur d'où provenait ce tesson a permis de mettre à jour un campement de pêche. Plus de 80 traces de piquets délimitent une petite habitation de forme ovale. L'analyse de la céramique nous permet d'associer ce site aux Iroquoiens du Saint Laurent et atteste de façon formelle la présence de ces amérindiens dans la région vers 1450 AD. Nous voulons ici rendre compte des données recueillies sur ce site et les mettre en relation avec les découvertes de matériel iroquoien du Saint Laurent dans d'autres sites du sud du Québec.

**Documentary Context and its Importance:
Preliminary Research Into a Nineteenth Century
Toronto China Merchant**
(Session 21 - Sat. AM)

Ellen Blaubergs (Toronto Board of Education)

Most documents, according to Robert Schuyler, give us direct insight into emic phenomena and indirect views of behaviour (etic). This paper will examine how these two dimensions have been considered and incorporated into research on one of Toronto's most prominent nineteenth century China merchants, Glover Harrison, and his King Street shop "China Hall". A cracked maker's mark uncovered during the 1990 excavation of "Gore Vale" in Trinity Bellwoods Park initiated an often unique search for this obscure contributor to Toronto's commercial history.

**Early Archaic Netting Settlement Patterns in
North-Central Ohio**
(Session 19 - Sat. AM)

J.E. Bowen (Ohio Archaeological Council)

Since Stan Wortner discovered the Netting site north of Lake Erie in 1965, extensive survey has shown that initial Early Archaic (ca. 9000 BP) Palmer-like Netting points occur over an area of about 70,000 km²,

centered roughly on modern Lake Erie. Four base camps, each at least as intense as the Nettling site itself, each of which have yielded at least 200 points and 200 endscrapers, have been identified within a 10,000 km² tract in north-central Ohio, south of the western end of Lake Erie. They are 1) the Trapp locality at the upper rapids of the Sandusky River, 2) the Chapman locality on the Sandusky River near the mouth of Sycamore Creek, 3) the Demuth locality on the west branch of the Huron River, and 4) the Fulk locality at the Savannah Lakes, a glacial kettle complex at the head of the Vermilion River.

INAA and Obsidian Hydration Dating of Mayan Bladelets from Cahal Pech, Belize, C.A.
(Session 5 - Thurs. AM)

Jeremy Brett (University of Toronto)

Obsidian bladelet fragments were collected in the 1988 field season with Trent University at the Mayan site of Cahal Pech which is a ceremonial and administrative centre occupied in the Late Preclassic and Late Classic periods. Trace element analysis of these samples resulted in provenience information relating to known obsidian sources for the Central American region, and a relative chronological placement of architectural phases at the site by means of hydration rim dating. The C-14 dating of limestone plaster samples from the site was also attempted but with limited success. These resulting dates were far too early to be possible due to the dilution effect of geological carbonates, however the dates were appropriate for a relative chronology and in agreement with the obsidian hydration dates.

Parameters of Caribou Biology and Hunting Strategies
(Session 12 - Fri. AM)

Jack Brink (Provincial Museum of Alberta)

Due to the extreme seasonality of environment caribou undergo dramatic changes in body composition. During winter body growth slows or ceases, total body weight declines, fat reserves are severely diminished or exhausted, and muscle tissue is mobilized to provide energy and protein to vital functions. Seasonal patterns of caribou carcass composition differ according to age and sex. Calves are very lean at birth, remain lean through most of the summer, but by autumn have accumulated considerable fat. By the

end of the first year fat levels in calves are similar to those of adults. Mature males are fattest in the fall but lose most of their stored fat during the rut and enter the winter in poor condition. Mature females are also fattest in the fall, are affected little by the rut, and enter winter in excellent condition. Despite the energy demands of gestation, pregnant females are often fatter than barren cows and maintain greater fat deposits into spring. At parturition the onset of lactation creates severe energetic demands on the dam and females are in poorest condition in mid summer. Dry cows are fatter at this time.

The physiological need for fat in the diet of hunters inhabiting northern latitudes led to a well documented preference for the fattest animals. Patterns of caribou energetics and carcass composition were likely exploited to yield maximum return of high energy food. Archaeological verification of selective hunting and butchering can be achieved through sexing of bones, determination of seasonality, and probably delineation of the conditions of pregnancy and lactation. An example from the Plains of North America demonstrates a strong correlation between bioenergetics of bison and historic period hunting patterns. It is suggested that a similar correspondence may be found in the Arctic literature.

A Functional Analysis of a Late Archaic Lithic Assemblage
(Session 19 - Sat. AM)

Ward Brownell (Trent University)

Our knowledge of Late Archaic occupations in Southern Ontario is limited by the lack of sites with strong contextual information. However, there are numerous unanalyzed surface collections. Surface collected lithic assemblages have traditionally been considered poor indicators of human behaviour. With this in mind, a low-power use-wear study and debitage analysis has been conducted on the Abbot site (AgHb-17), a surface collected lithic assemblage located just outside Brantford. This paper explores the potential of surface collected lithics to elucidate various aspects of Archaic culture.

Reconstructing the "Age du Renne"

(Session 2 - Thurs. AM)

Ariane Burke (New York University) & Anne Pike-Tay (Vassar College)

A popular representation of reindeer-dependent Ice Age peoples has endured since the designation "Age du Renne" was bestowed upon the Upper Paleolithic of Southwest France in 1877. In this paper we expand the discussion of French Upper Paleolithic subsistence and settlement activities to include other prey species and ask whether the apparent emphasis on Rangifer is (a) the result of strategic planning (ie. specialization), on the part of hunters, or (b) a function of species availability. Seasonality studies and prey mortality patterns are used as a means of assessing the degree to which Upper Paleolithic hunter-gatherers in Southwest France relied on reindeer.

The Ratfish and Marine Resource Deficiency on the Northwest Coast

(Session 3 - Thurs. AM)

Aubrey Cannon (McMaster University)

Data from faunal reports, ethnographies, and nutritional studies are used to assess the prehistoric economic value of the ratfish (*Hydrolagus colliei*) on the Northwest Coast. It is shown that sites or components of sites that exhibit a relatively high proportion of ratfish among the fish remains also tend to exhibit relatively low quantities of salmon and a high ratio of deer to harbour seal among mammalian fauna. Ethnographic and nutritional data indicate the low food value of ratfish and deer in contrast to more highly prized salmon and harbour seal. It is concluded that increased or relatively intense use of ratfish can serve as an indication of economic hard times. On this basis it may be possible to construct a more finely textured understanding of spatial and temporal variation in Northwest Coast economy.

Translation:

Les données qui sont dérivées des rapports de faunes, des ethnographies, et des études alimentaires sont utilisées d'évaluer la valeur économique de la chimère (*Hydrolagus colliei*) sur la Côte Nord-ouest pendant le temps préhistorique. Ils montrent que les sites ou les périodes des sites qu'indiquent une relativement

haute proportion de chimère parmi les restes poissons, ont la tendance aussi de montrer une relativement basse quantité de saumon et une haute proportion de cervidés contre les phoques parmi les faunes mammifère. Les données ethnographiques et alimentaires indiquent la basse valeur nutritive de la chimère et des cervidés en contraste avec le saumon de grand prix et les phoques. On conclure que l'augmentation ou le relativement intensif emploi de la chimère peut servir comme un indice d'épreuves économiques. Dans ces conditions il pourrait être possible, de bâtir une plus détaillée compréhension des changements spatial et temporel sur l'économie de la Côte Nord-ouest.

Oral Tradition, Archaeology, and the League of the Iroquois

(Session 11 - Fri. AM)

Robert S. Casagrand (S.U.N.Y. at Albany)

An historical analysis of the oral tradition concerning the formation of the League of the Iroquois is discussed, focussing on the limitations of using ritual oral discourse for interpreting the circumstances that influenced the formation of the League. This analysis differs from previous work on this topic by emphasizing oral tradition as a dynamic system utilized within a changing social context. The bounds within which information flow, modification, and manipulation occur imply the roles and origins of consistent verbal motif types that appear throughout the tradition. Implications for the interpretation of settlement patterns, exchange, and symbolic attributes are examined in reference to assemblages in the Mohawk River drainage.

It Ain't The Meat, Its the Motion: Subsistence and Mobility in Holocene Ghana

(Session 13 - Fri. AM)

Joanna Casey (University of Toronto)

This paper looks at the lithic assemblages from a series of Kintampo Complex (Ceramic LSA, 3500-3000 bp) sites on the Gambaga Escarpment in Northeastern Ghana, West Africa. These assemblages contain a small, formal component of ground and chipped stone tools, and a large, informal component of bipolar flakes and flake tools. The size and relative permanence of the Kintampo communities argue for a settled, horticultural subsistence, but the informal

tool assemblage indicates regular access to non-local sources of lithic raw material. In this paper I will demonstrate two things. First that the act of forest clearing and burning enhances the animal protein yield to such an extent that a formalized hunting strategy and its consequent toolkit are rendered superfluous, and second, that without the necessity to create a formal, portable toolkit, bipolar technology is a highly effective means of producing efficient tools.

**Eastern Saint Lawrence Iroquoians in the Cap
Tourmente Area**
(Session 9 - Thurs. PM)

Claude Chapdelaine (Université de Montréal)

The principal objective of this paper is to present new evidence concerning the Iroquoian occupation of the lowlands east of Quebec City. For the last three years, we have investigated more than twenty prehistoric sites in the Cap Tourmente area but I will concentrate here on eight Late Woodland sites. Most of the Iroquoian sites are located on the first available terrace emerging from the Saint Lawrence River. The geographical setting of these settlements indicates a pattern of fishing stations regularly distributed on a stretch of 4 km along the lower terrace. The discovery of a small 16th century village, containing at least 4 longhouses, in the same environment as the smaller fishing camps is intriguing. On the basis of this new Iroquoian cluster and its characteristics, we will discuss the settlement pattern and the related adaptive system of these northern farmers.

Translation:

L'objectif principal de cette communication consiste à présenter les données archéologiques inédites concernant l'occupation par les Iroquoiens des basses terres laurentiennes à l'est de Québec. Au cours des trois dernières années, nous avons inventorié plus de 20 sites préhistoriques dans la région du Cap Tourmente mais nous concentrerons nos efforts sur les huit sites du Sylvicole supérieur. La majorité de ces sites iroquoiens occupe la première terrasse en bordure du fleuve. Cette position géographique indique que ces sites ont pu être des stations de pêche distribuées à intervalle régulier sur une distance de 4 km le long de la première terrasse. La découverte d'un petit village datant du XVI^e siècle, constitué d'au moins quatre maisons-longues, dans le même contexte géographique que les camps de pêche s'avère très provocante.

Sur la base de cet ensemble de sites iroquoiens très particuliers, nous discuterons le schème d'établissement et le système adaptatif de ces agriculteurs nordiques.

**A Meadowood Mortuary Site in the Quebec City
Area**
(Session 24 - Sat. PM)

Yves Chrétién (Université de Montréal)

The Lambert Site is located on the periphery of the principle area of distribution of Meadowood sites. It presents several characteristics which suggest that its occupants were full participants in the Meadowood cultural sphere. A substantial concentration of cache blades in Onondaga chert (approximately 180) were discovered in association with a cremation burial. This feature is typical of Meadowood funerary ritual. Other Meadowood artifacts, such as side-notched projectile points, bifacial triangular scrapers, Vinette I pottery and a steatite vase were also found during excavations. A radiocarbon date of 950 BC +60 (non calibrated) was obtained from a hearth. This early Meadowood presence outside of the principal distribution area for this culture permits us to formulate some hypotheses regarding the expansion of Meadowood culture in the Saint Lawrence Valley.

**The Norton Site (AfHh-86): A Late Iroquoian
Village in London, Ontario**
(Session 15 - Fri. PM)

Martin S. Cooper & David A. Robertson (Archaeological Services Inc.)

The Norton site (AfHh-86) is a large village site located in a public park, overlooking the Thames River in London, Ontario. Portions of nine, closely spaced and regularly aligned longhouses were recorded in 1988 during excavations conducted by Archaeological Services Inc. within a 100 metre long utilities right-of-way which crossed the site. While artifactual finds were relatively few, they suggest that the site was occupied between A.D. 1450 and 1500. As the site had largely been unknown to researchers in the London area, the Norton site is of considerable importance for the reconstruction of the late prehistoric settlement sequence of southwestern Ontario.

**The Exploitation of Deer Among Northern
Iroquoians**
(Session 9 - Thurs. PM)

Evelyne Cossette (Université de Montréal)

A trend in general opportunism is apparent in most northern Iroquoian faunal assemblages, but these also stress the importance of some specific mammalian and fish species. Faunal profiles indicate that White-tailed deer (*Odocoileus virginianus*) was a major prey item in Iroquoian economy and it is often the most numerous mammalian species identified, but its relative importance might be exaggerated due to preservation factors and recovery methods. Faunal reports comprising analyzed White-tailed deer remains from a variety of sites dating to Late Middle Woodland and Late Woodland periods will be examined and compared in order to trace patterns in deer exploitation in northern Iroquoia. Synchronic differences in the economic importance of deer hunting activities among northern Iroquoian groups as well as possible diachronic changes leading towards an apparent intensification of deer exploitation will be assessed.

Translation:

La plupart des assemblages fauniques associés aux groupes Iroquoiens septentrionaux suggèrent que l'exploitation des ressources animales, tout en étant caractérisée par un opportunisme généralisé, était axée sur l'acquisition de quelques espèces mammaliennes et ichthyennes. Les profils fauniques montrent que le Cerf de Virginie (*Odocoileus virginianus*), est la principale espèce mammalienne identifiée en termes d'effectifs. Cette importance relative pourrait avoir été exagérée, à cause de facteurs de préservation différentielle et des techniques de récupération des restes osseux, mais le Cerf de Virginie devait néanmoins constituer une ressource économique particulièrement recherchée en Iroquoisie. À partir d'une étude comparative des données zooarchéologiques provenant de plusieurs sites iroquoiens datant du Sylvicole Moyen tardif et du Sylvicole Supérieur, nous aborderons, essentiellement, deux facettes de cette exploitation: celle de l'expression d'une variété régionale ou culturelle entre les divers groupes iroquoiens, et celle de l'intensification des activités prédatrices au cours du temps.

**Prehistoric Subsistence and Seasonality at the
McNichol Creek Site, Prince Rupert Harbour,
British Columbia**
(Session 3 - Thurs. AM)

Gary Coupland, Craig Bissell (University of Toronto)
& Sarah King (University of Bradford)

Analysis of faunal remains has led to a reconstruction of subsistence economy and seasons of occupation at the McNichol Creek site, a 1500 year-old village in Prince Rupert Harbour, British Columbia. Results support some existing ideas about prehistoric economy in the area, but conflict with others. Subsistence was based mainly on stored salmon, supplemented by shellfish, deer, and herring. Local environments in close proximity to the site were intensively exploited, but important resources from more distant locations, such as sea mammals and eulachon, were apparently not used. Seasonality analysis of shellfish confirms winter occupation, but also indicates an extended occupation of the site into early summer. The particular aspects of the subsistence and settlement pattern at McNichol Creek may be the result of limited or denied access to certain key resources, and may not be typical of contemporaneous village sites in the harbour area.

The Pre-Dorset - Dorset Transition in Labrador
(Session 6 - Thurs. PM)

Steven L. Cox (Maine State Museum)

The terminal Pre-Dorset period in Labrador (ca. 3200-2500 B.P.) saw the end of a long period of cultural stability and a relatively rapid cultural transformation to the Dorset-like Groswater Phase. A number of paleoeskimo sites dating to within this period have been investigated, permitting a view of this transformation with a resolution of approximately one century intervals. The evidence indicates an in situ cultural evolution, probably influenced by external ideas. On the other hand, the appearance of classic Dorset at ca. 2500 B.P. (termed the Early Dorset phase in Labrador), appears to represent the arrival of a new population, and the ultimate fate of the Groswater Dorset inhabitants of northern Labrador remains unclear.

Translation:

La phase terminale du Pré-Dorsétien au Labrador (ca. 3200- 2500 A.A.), signala la fin d'une longue période

de stabilité culturelle et la transition rapide à la phase Groswater avec ses caractéristiques dorsétiennes. Plusieurs sites de cette période transitionnelle ont été fouillés et nous permettent d'étudier les changements à intervalles d'environ 100 ans. Ces données suggèrent un développement local sans doutes avec l'apport d'idées de l'extérieur. D'autre part, l'arrivée des Dorsétiens "classiques" - au Labrador on les connaît sous l'appellation Dorsétien ancien - représente vraisemblablement un remplacement de population. Nous ignorons toujours le sort des Dorsétiens Groswater du Labrador septentrional.

Iron: Why Radiocarbon Dating Doesn't Always Work
(Session 4 - Thurs. PM)

Richard G. Cresswell (University of Toronto)

"The history of iron is the story of the continuous endeavour of metallurgists to attain a practical mastery over the carbon content of the iron, without knowing that it contained any carbon, or what the effects of carbon are... ." Thus, the words of T.T. Read (1934) remind us that in addition to the usual fuels, charcoal and coal, such carbonaceous materials as dogs' blood, pigeons' droppings, rice husks and humans have all been used in the manufacture of iron implements, while the mixing of irons of different types and/or sources has also been a common practice. A detailed knowledge of an artifact's metallurgical history is therefore a pre-requisite for obtaining a meaningful date. Fortunately, this is commonly available, and careful metallography can often give strong clues into the artifact's mode of manufacture, and hence reliability of the date obtained.

A number of iron artifacts have been analyzed, many of which give dates consistent with their metallurgical/historical context: a few, however, have yielded misleading dates. Some of these can be resolved by metallographic inspection, chemical analyses or knowledge of the metallurgical context of the site. In addition, the small sample size ($\leq 5g.$) capability of accelerator radiocarbon dating permits multiple analyses in some cases that can further help elucidate the history of an artifact. In other cases, inconclusive results are obtained. Examples of samples analyzed at the Isotracer Laboratory will illustrate these capabilities and limitations.

Gore Vale Preliminary Findings
(Session 21 - Sat. AM)

Rod Crocker (Toronto Board of Education)

Gore Vale was an 1820 brick house situated in the area of modern day Trinity Bellwoods Park, Toronto. Initially owned by Duncan Cameron, it later was home to the influential Bickford family, and afterwards was used as an Institute for recovering alcoholics, a dormitory, a veterans' psychiatric hospital, and finally a Boy's Club, before being demolished in 1928. A multi-year project, begun in 1990, includes the excavation and mapping of the remaining foundations, an analysis of artifacts relevant to the material history of the city, and a multi-faceted study of the bricks used in the initial construction and later renovations.

Palaeoethnobotany of Later Jomon and Earliest Yayoi Cultures of Northeastern Aomori Prefecture, Northeastern Japan
(Session 4 - Thurs. PM)

A.C. D'Andrea (University of Toronto)

This research focuses on prehistoric subsistence and the development of farming in northeastern Japan. Archaeobotanical sampling was carried out in Aomori prefecture at sites dating to the Middle Jomon Period, ca. 3000-2500 B.C.; the Tokoshinai I and IV phases of the Late Jomon, ca. 2500-1000 B.C.; and, to the Fukurashima phase of the Tohoku Yayoi, ca. 150 B.C. Distributional analyses of plant remains recovered from pithouse floors and other contexts are undertaken, and it is demonstrated that archaeobotanical remains can reflect the depositional history of these features. Plant remains recovered from the Late Middle Jomon Tominosawa site suggest a focus on weed seed procurement, similar to contemporary sites found nearby on the southwestern portion of the island of Hokkaido. The Kazahari site produced evidence of Tokoshinai IV phase rice and foxtail and broomcorn millet dating to 2540 \pm 240 B.P. (TO-2202). Sampling of later Fukurashima phase contexts at Kazahari produced evidence of rice, foxtail and broomcorn millet, Japanese barnyard millet, and hemp. These data demonstrate that rice and millets were present in northeastern Aomori since the Tokoshinai IV phase, and that mixed farming systems were in place during later Fukurashima phase occupations. Ecological and ethnographic evidence is used to post-

ulate that farming may have been present in north-eastern Aomori at a time shortly after the first known occurrence of rice in southwestern Japan. This observation implies that the movement north of rice farming may not have been greatly affected by cultural and ecological factors. The processes involved in the development and diffusion of farming into north-eastern Japan are somewhat comparable to those evidenced in other temperate regions.

I Know Exactly Where I am: Using GPS in Archaeology
(Session 22 - Sat. AM)

Luke Dalla Bona (Lakehead University)

In February and March of 1992, a global positioning system device (GPS) was evaluated for use by archaeologists in the heavy bush of northern Ontario. Archaeological site locations were visited in and around the City of Thunder Bay. Locational readings were taken using the GPS device and these readings were compared with existing site records. The GPS was evaluated in a variety of terrain and vegetation settings for accuracy of the locational readings, ease of use and (important for archaeologists) durability.

Helping Out the Foresters: Predicting Heritage Resource Localities
(Session 22 - Sat. PM)

Luke Dalla Bona & Scott Hamilton (Lakehead University)

In June 1991, the Ontario Ministry of Natural Resources and the Centre for Archaeological Resource Prediction at Lakehead University initiated a research project to develop predictive models of prehistoric settlement location in the boreal forest north of Thunder Bay, Ontario. A GIS based predictive-modelling approach will be developed using a wide variety of sources including existing archaeological data, new archaeological survey data, informant data, ethnographic/historic data and geographical/geomorphological data. This paper will present the results of the first year of this project.

From Death Assemblage to Fossil Assemblage: Understanding the Nature of Inter and Intra-Site Variability in Faunal Assemblages
(Session 7 - Thurs. AM)

Peter Dawson (University of Toronto)

Archaeologists often criticize the continuing use of normative frameworks in Southwestern archaeology, suggesting that they frequently diminish the researcher's ability to recognize and interpret variability in the archaeological record. While variability can be a product of cultural processes like adaptive diversity, various site formation/destruction processes also have the potential to generate complex patterns in assemblages recovered from different areas within and between sites. Recent faunal analysis of two Jornada Mogollon rockshelters in southeastern New Mexico offer possible avenues for interpreting the nature of inter and intra-site variability in faunal assemblages.

The Entry of Algonquian Language into the Boreal Forest
(Session 10 - Thurs. PM)

J. Peter Denny (University of Western Ontario)

Algonquian languages seem to have moved into the boreal forest on three occasions. The earliest is the spread of Cree, carried by Laurel culture, from a prior position northwest of Lake Michigan around both ends of Lake Superior starting around 100 B.C. The second entry occurred about A.D. 1 in the south-central Quebec peninsula. It was heralded by the Middlesex complex, the carrier of Eastern Algonquian, on the north shore of the St. Lawrence and penetrated far inland at the Caniapiscau site (GcEl-1) which seems to be Middlesex related. This may be the founding group for Daniel Rattle/Point Revenge on the Labrador coast - Daniel Rattle also shows Middlesex connections. Beothuk or a related language may have been the form of Eastern Algonquian spoken. The third entry was the spread of Ojibway north around the east end of Lake Superior, in the form of Blackduck, occurring after A.D. 700. More southerly boreal forest groups switched language to Ojibway and more north-erly ones spread west and east. In the Quebec peninsula East Cree/Naskapi dialects of Cree seem to arrive at Caniapiscau about A.D. 1200.

**Late Paleo-Indian and Early Archaic
Manifestations in West-Central Ohio and
Possible Ontario Connections**
(Session 19 - Sat. AM)

Tony DeRegnaucourt (Upper Miami Valley Archaeological Research Museum)

This paper will briefly describe some Late Paleo-Indian and Early Archaic manifestations in west-central Ohio as evidenced by diagnostic lithic finds. Distribution of such Phases (complexes) as Barnes, Gainey, and Hi-Lo in west-central Ohio and adjacent areas in Indiana will be examined. Also, possible connections with Ontario for raw chert will be postulated. Early Archaic Kirk, Thebes, and Bifurcate Traditions will also be described for the west-central Ohio area. Settlement patterns and differential site functions will be briefly explored for both the Late Paleo-Indian and Early Archaic manifestations.

**Two Neutral Cabin Sites: A Case Study in Small
Site Archaeology**
(Session 15 - Fri. PM)

Christine Dodd (Ministry of Transportation, Ontario)

The focus of this paper is two small, short term Iroquoian cabin sites in southwestern Ontario: the Day site (ca. A.D. 1450), and the Haley's Pond site (ca. A.D. 1620-1630). Both sites were subject to complete mitigative excavations by the Ontario Ministry of Transportation, in advance of highway construction.

This paper considers the issues of seasonality, site function and delineation of activity areas, through an analysis of the nature and distribution of cultural remains at these two sites. The placement of the site type represented by Day and Haley's Pond within a broader settlement system for the Neutral Iroquoians is briefly considered.

**"Death Lurked in the Floorboards and Stained
the Walls": Behavioral Inferences From the
Inge-va Privy Deposit**
(Session 21 - Sat. AM)

Dena Doroszenko (Ontario Heritage Foundation)

Built in 1823, Inge-va represents one of the finest Neo-Classical Georgian houses in eastern Ontario. In 1988, archaeological excavations at the Inge-va estate in Perth, Ontario under the auspices of the Ontario

Heritage Foundation, uncovered over 15,000 artifacts from an abandoned privy pit. The large number of ceramic and glass vessels recovered from this discrete feature and the high degree of vessel completeness allowed several analytical and cultural questions to be addressed.

The incidents of death in the family during the approximate deposition date of the material has great relevance for interpreting archaeological responses to these events, i.e. disease within the household and the resulting discard behaviour. This paper will explore whether disease is a possible explanatory tool that can be used in reconstructing the past life cycle of the Radenhurst family at Inge-va and whether it provides clarification of the discard pattern uncovered in 1988.

**Archaeo-Magnetism and the Dating of a Plano
Site From Rimouski, Québec**
(Session 14 - Fri. AM)

Jean Dumont (Ministère des Transports du Québec),
Claude Chapdelaine & Steve Bourget (Université de Montréal)

Discovered in 1990, a potentially old site located on a marine terrace of the Goldthwait Sea was the subject of a particular investigative approach because of its temporal placement within the cultural history of the region. Because the site was directly under a proposed section of Highway 20 behind Rimouski, a salvage operation, sponsored by the Ministère des Transports du Québec, was conducted in August and September 1991. This project involved a multi-disciplinary team composed of archaeologists, as well as a palynologist, pedologist, geomorphologist, geologist, and a physicist. Of the several objectives, the dating of the site was essential because of the lack of relevant dates for the Plano Tradition in Québec and in the Northeast. The archaeo-magnetism approach, undertaken prior to the beginning of the dig, was chosen to discover areas on the site that can be related to features like hearths. We will describe the experiment, the results and present some considerations about archaeo-magnetism for future research. Finally, a brief presentation of the archaeological findings will follow.

**Estimates of Failure Rates in Fluting Based on
Archaeological Data: Examples From
Northeastern North America
(Session 18 - Fri. PM)**

Chris J. Ellis (University of Western Ontario) &
James H. Payne (University of Michigan)

The fluting of Early Paleo-Indian bifaces, and failure rates therein, has received considerable archaeological attention -- perhaps at a scale exceeding its relative importance. Nonetheless, if we are to properly evaluate explanations of the origins and function of fluting and the place of particular sites in Paleo-Indian settlement systems, estimates of failure rates are required. To date, such estimates have been largely based on experimental replication, and rarely on archaeological data, and it is suggested these estimates are inaccurate. In order to overcome these problems, three interrelated, yet independent, methods of estimating fluting failure rates from archaeological data are developed and applied to assemblages from the Parkhill site in Ontario and the Windy City site in Maine. The consistency in the results obtained by these methods inspire faith in their relative accuracy. The results suggest failure rates, at least at these sites, were not on the scale often assumed by previous investigators, being on the order of only 10 to 12% percent or less.

Translation:

Les cannelures des bifaces du Paléo-Indien Inférieur, et la fréquence de bris des pointes de projectile à cannelure en cours de fabrication, ont fait, de la part des archéologues, l'objet d'un intérêt considérable et, peut-être, hors de proportion avec leur importance relative. Néanmoins, si nous voulons apprécier correctement les différentes explications de l'origine et de la fonction des cannelures et la place qu'occupent certains sites dans les schèmes d'établissement Paléo-Indiens, nous devons évaluer cette fréquence. Jusqu'ici les évaluations ont été fondées, en grande partie, sur la répétition expérimentale, et rarement sur les données archéologiques. Nous suggérons que ces évaluations sont inexactes. Pour résoudre les problèmes, trois méthodes connexes mais indépendantes d'évaluation de la fréquence de bris en cours de fabrication des pointes à cannelure sont développées à partir des données archéologiques, et appliquées à des assemblages provenant du site de Parkhill en Ontario et du site de Windy City dans le Maine. Les résultats obtenus par ces méthodes sont

cohérents, ce qui nous fait croire qu'ils sont relativement précis. Les résultats laissent penser que le bris, au moins sur les sites étudiés, était moins fréquent que ce que les précédents chercheurs ont conclu, et se serait produit dans environ 10 à 12 % des cas, ou même moins.

**Population Trends Among the St. Lawrence
Iroquoians
(Session 20 - Sat. AM)**

William Engelbrecht (Buffalo State College)

During Late Prehistoric times, there was a large Iroquoian population in northern New York, just east of Lake Ontario and south of the St. Lawrence River. Nineteenth and early twentieth century accounts describe at least 75 village sites in this region. Sometime during the late 15th or early 16th centuries, the region was abandoned. Warfare, European diseases, and climatic change have all been suggested as factors involved in this abandonment. Current research seeks to trace population shifts during the 14th century through to the abandonment in order to document whether this depopulation was sudden or gradual and whether any trend of population nucleation or dispersion was present. Trends in site size, natural defensibility, and the elevation of settlements will also be considered.

Rough Translation:

Vers la fin de la période préhistorique, il existait une importante population iroquoise dans le nord de New York, plus précisément à l'est du lac Ontario et au sud du fleuve du St-Laurent. Des données recueillies aux 19ième siècle et au début du 20ième siècle, suggèrent un nombre d'au moins 75 villages dans cette région. Vers la fin du 15ième siècle et au début du 16ième siècle, la région fut abandonnée. On pense que les raisons de l'abandon de cette région sont les suivantes: la guerre, les maladies européennes, à le changement de climat. Des recherches récentes sur le 14ième siècle ont été effectuées afin de retracer la variation de la population et voir si l'abandon fut graduel ou drastique ou s'il y avait des indices de dispersion et de nucléation de la population. Nous considérerons les tendances des sites en ce qui concerne leur dimension, leur emplacement naturel défensif et leur altitude.

Early Lead Smelting in the Mid-Western United States: Lead Isotope Evidence
(Session 4 - Thurs. PM)

R. M. Farquhar (University of Toronto), J. A. Walt-hall (Illinois State Museum), & R. G. Hancock, (University of Toronto)

Utilization of the rich lead-zinc deposits of Missouri (SEM) in early historic times, has been documented, but there are no records that the ore from mineral occurrences in the Upper Mississippi Valley (UMV) was exploited. Lead isotope analysis of lead artifacts (mainly musket balls and metallic debris) found on mid eighteenth century sites in Illinois (Guebert, Kolmer, Fox encampment, Starved Rock outpost) show clearly that both SEM and UMV sources were used to supply raw materials for those products. The same technique indicates that European lead was also being used. Neutron Activation Analyses (NAA) on the available suite of samples record a broad range of trace elements, none of which distinguish the sources.

Are Resource Managers Expert (Systems)? A Proposal for Developing and Applying Knowledge-Based Rules Using GIS
(Session 22 - Sat. PM)

Jim Finnigan (Western Heritage Services Inc.)

Effective resource management requires an intimate knowledge of the resource base and an equally thorough understanding of the types of impacts and their effects. Current resource managers are hampered because they, and the rest of the archaeological community, have a less than desirable knowledge of both. As a result, typical decision making matrices are relatively simple, employing discontinuous variables (high, medium, low), and binary assumptions (there is an impact/there is no impact).

This is not the best level of decision making that can be achieved, and is particularly ineffective for managing regional scale impacts such as forestry and agriculture. It is argued here that we should start looking at the resource management process in a much broader context. Ideally, we would look at probability of site occurrence, type of site, probability of detection, type of impact, equipment used, soils, weather, vegetation cover, etc. In doing so, we are forced to move from a two dimensional to an "n" dimensional decision matrix.

Without ingesting harmful substances, people

don't like to think in "n" dimensions. Computers are not as inhibited - what's a dimension? We can create expert systems to determine the best possible management solutions and then apply these solutions, as rules, to the landscape using GIS. This paper discusses a proposal for an appropriate pilot study and outlines some of the potential benefits of such an approach.

Contact, Contraction, and the Little Ice Age
(Session 16 - Fri. PM)

William R. Fitzgerald (Wilfrid Laurier University)

The explanation of cultural developments for the Neutral Iroquoians of southern Ontario during the 16th and 17th centuries has been largely influenced by the fact that many of the changes occurred during the initial era of the European presence in eastern North America. Additional modifying factors can be attributed both directly and indirectly to other human and natural agencies through a re-evaluation of the available archaeological and ecological record.

The Dorset-Thule Transition: Culture Change in the Eastern Canadian Arctic
(Session 12 - Fri. AM)

William W. Fitzhugh (Smithsonian Institution)

In 1968, seeking advice on a graduate paper featuring the Dorset-Thule transition, the author sent a copy to Bill Taylor for review and comment. In retrospect the response was predictable -- vigorous, thoughtful, witty, and provocative -- and set the tone for a stimulating personal relationship of twenty-five years standing. Taylor's comment concluded: "I suggest you have the paper read by others, for it may contain an article well worth publishing -- I am too predisposed to its basic thinking to be a good judge of that [but]...most arctic types would probably recommend the deletion of most of the theoretical and methodological content." Unfortunately, though I have shared the paper with a number of others, I never got around to taking up Taylor's challenge of publication.

Today the Dorset-Thule transition remains one of the most puzzling subjects in Eastern Arctic prehistory, despite advances in many other areas. The problem remains resistant to study and has received few contributions in the literature. Since much of the substance from the original paper has never appeared elsewhere in print, it is high time to take up Taylor's

challenge and present a publishable version accounting for Taylor's unique contributions, his critique of the original draft, contributions by other scholars, and new field data.

Where East Meets West: The New Copper Cultures

(Session 4 - Thurs. PM)

William Fox (Canadian Parks Service)

Trace element analyses of metal artifacts from sixteenth century archaeological sites in Ontario have provided new evidence concerning not only the initiation of European contact, but the character of the contemporary Native metal working industry. Fifteenth through seventeenth century native metal artifact forms are compared with assemblages of reworked European metal in an effort to determine the degree of paradigmatic continuity evidenced in the manipulation of those materials.

The Serpent's Copper Scales

(Session 14 - Fri. PM)

William A. Fox (Canadian Parks Service)

A considerable literature exists concerning the form and distribution of native copper artifacts in eastern North America, particularly during the Archaic through Middle Woodland periods. Some studies relating to the sources and artifact types utilized by Mississippian societies are available, however, little has been written concerning native copper use among Woodland groups. Historic references are unfortunately brief and provide few insights into the importance of this raw material to the First Nations. Trace element analyses of copper artifacts from sixteenth and early seventeenth century sites in Ontario have provided new information on the distribution and use of native copper at this critical period in the Great Lakes region. Archaeological data are combined with ethnohistoric and ethnographic observations to better understand the significance of this metal in proto-historic Woodland society.

Majorville Medicine Wheel Complex: Distant Outliers and Accurate Solstice Alignments

(Session 17 - Fri. PM)

Gordon R. Freeman (University of Alberta) & Phyllis J. Freeman

The Majorville complex contains solstice sun rise and set lines up to 1800 m long, marked by small cairns or large rocks. Some of the lines point to the sun's first or last flash on a horizon 20-30 km distant; others look uphill to a horizon 800-1800 m away. The uphill lines serve when a band of cloud obscures the more distant horizon. At the Majorville site we have found the distant horizon to be clear about one third of the time, but with the two levels of siting lines we find one or the other clear about half of the time.

Near a solstice the sun rise and set points move along the horizon slowly; it takes nine days to move the last diameter to the solstice position. It takes three days to move the last 0.1 diameter. At Majorville one of the summer solstice rise lines runs 1.8 degrees north of the intersection of the northern slope of the Medicine Wheel Hill with the distant horizon. The sun rise occurs at this intersection on about 4 June, which provides a seventeen day countdown to the solstice. We have found five lines that mark the summer rise, two that mark the summer set, one that marks the winter rise and three that mark the winter set. Of greatest significance were the summer sun rise and the winter sun set.

Erasing Ethnicity: The Case of the Chinese Lepers of D'Arcy Island

(Session 10 - Thurs. PM)

Diana French (Okanagan College)

The paucity of ethnic markers in the archaeological record of a predominantly Chinese leper colony is explained. This institution was located on Big and Little D'Arcy Islands, British Columbia, between 1891 and 1924. The isolation of the colony and administrative policies are dominant factors contributing to the blurring of Chinese ethnicity. Other significant processes include the status of the incarcerated victims, refuse disposal patterns and historically documented site abandonment practices.

Protohistoric Settlement Patterns in the Interior District of Keewatin: Implications for Caribou Inuit Social Organization
(Session 12 - Fri. PM)

T. Max Friesen (McGill University) & Andrew Stewart (Royal Ontario Museum)

Inuit of the interior District of Keewatin were named "Caribou Eskimo" by Birket-Smith in 1929, due to their profound reliance on caribou for food, clothing, shelter, and technology. In part because of this adaptation, they have generally been portrayed as among the most primitive and simple societies in the Canadian Arctic. This portrait is based on ethnographic research conducted after major epidemics and drastic reductions in caribou populations had decimated Inuit societies of the Keewatin. This paper, based on two recent archaeological projects in the District of Keewatin, presents Inuit site distributions for two areas: Aberdeen Lake on the Thelon River, and the lower Kazan River. Both areas yielded settlement patterns characterized by significant variability in site size, complexity, and function. These data indicate that the Inuit of interior Keewatin were able to maximize their social interaction in ways more complex than are indicated by the ethnographic record.

Home is Where the Hearth is
(Session 21 - Sat. AM)

Mary Catherine Garden (Ontario Heritage Foundation)

The Benares estate is a nineteenth century farmstead located in Mississauga which has been home for over 150 years to the Harris family. In addition to good documentary evidence, there is a wealth of oral tradition from living descendants of the family. Much of this revolves around two fires which occurred in the mid-1800's. The problem of integrating the oral history and documentary evidence with the archaeological data to establish context is not uncommon on historic sites. Focusing on the 1836 summer kitchen, which survived the fire(s), the specific problems encountered in applying the oral histories and the documents to the archaeological evidence at the Benares estate will be discussed.

Full-Serve to Self-Serve: Saskatchewan's Archaeological Inventory Remote Access System
(Session 22 - Sat. PM)

C. Germann (Heritage Branch, Saskatchewan)

Provincial and territorial archaeological site inventories are increasingly used in regional land use and development planning, tourism and recreational planning, archaeological research and resource management, and elsewhere. In Saskatchewan, two developments in particular have helped increase the provincial inventory's utility and value: more exacting and consistent site recording standards which improved data quality and reliability, and database automation which made information retrieval significantly faster and easier. However, handling the increasing demand for inventory-related client services (with fewer and fewer operational resources) required shifting emphasis away from a full service approach, to enabling inventory users to serve themselves. Saskatchewan's archaeological remote access system enables authorized individuals to directly access basic inventory data from virtually any micro-computer station. This paper briefly describes the technical specifications and current scope of this preliminary, largely experimental system. Prospects for enhancing the system to enable more sophisticated database analyses are also discussed.

Museums, Cyberspace and the Construction of Archaeological Context
(Session 21 - Sat. AM)

Richard Gerrard (Toronto Historical Board)

Context n. Parts that precede or follow a passage and fix its meaning (out of-, without these and hence misleading); ambient conditions; in this- (connection); hence contextual a. [ME, f.L. *contextus* f. con (texture text- weave)]

-The Concise Oxford Dictionary, New Edition (1976)

From our earliest introduction to archaeology, we are often told that we destroy the context of artifacts during the course of excavating them. While this is often used as an intimidation tactic at field schools to make the student excavators take better notes, it could give us pause for reflection about what do we mean when we refer to "the context of archaeological objects".

We are all familiar with archaeological con-

text in terms of stratigraphy and culture-history. For this reason, I will begin by taking one step away from the field and look at other archaeological contexts in museums outside these areas. In continuing to explore this process, and to try to come to an understanding of the essence of "context" in archaeology, I will take an even larger step away from the rarefied atmosphere of museums to examine archaeology inside the world of the computer, or archaeology in Cyberspace.

**A Proposal for the Integration of Canada's
Archaeological Database**
(Session 22 - Sat. PM)

Terrence H. Gibson (Western Heritage Services Inc.)

Archaeologists have been storing all kinds of information into every conceivable computer data base for over 30 years. Not surprisingly, most of this information, painstakingly mannered in by keypunching or hand digitizing over the decades, is simply so much dead-storage now, destined for the great blue box of history. It is not to say that this information is unusable - it is just that the data are stored in some unique, often intricate way which the designer has long since abandoned and probably forgotten. This loss of past work is regrettable, but at least the original research information is still available in the form of field and lab notes and artifacts.

Today, things are different. It is the rare archaeologist indeed who does not use a personal computer for a significant portion of their research. Archaeologists regularly catalogue their artifacts using their own custom computer databases, producing only a minimal paper record of their artifact descriptions. Important primary information can be found only on custom computer files. This information, possibly more important than the raw artifacts and catalogues which by law must be archived, consists of electronic field notes, computer-drawn maps and diagrams, digitized images and even sounds. These data are rarely considered for archiving.

How can this information be saved from oblivion? Since it is all digital in form, one should be able to access the information via a computer link. The problem is, a standard is required which should establish how electronic archaeological information should be organized so that anybody using any kind of computer can access at least part of every record. This paper examines the kinds of digitally stored data that must be considered, describes a sample data structure that can accommodate the data types, and

suggests national organizations which might be able to establish and maintain such an electronic standard.

**Nadlok and the Origins of the Copper and
Caribou Inuit**
(Session 12 - Fri. AM)

Bryan C. Gordon (Canadian Museum of Civilization)

Copper usage, heavy caribou and fish subsistence, extensive inland knowledge and mythology suggested inland origins for Copper and Caribou Inuit to Jenness and Birket-Smith. This was widely accepted until the mid-20th century when archaeologists suggested Thule coastal origins instead. The archaeological site of Nadlok in extreme southeast Copper Inuit territory is on the traditional Bathurst Inlet trade route to the Caribou Inuit. The Barrenland distribution of copper tools, winter houses, radiocarbon-dated floors, and trees are used to determine whether Nadlok was simply a trade center or whether it and related sites were formative to both Inuit groups.

**Formal Stratigraphic Analyses and Prehistoric
Archaeology: Two Examples**
(Poster Session)

Diana L. Gordon (McMaster University) & David W. Black (University of New Brunswick)

Since the mid-1970's, there has been a revival of interest in the stratigraphy of archaeological sites. Several archaeologists have proposed formal systems of stratigraphic analyses. One of these was developed by Edward Harris for analyzing complex stratification in British historic sites. This presentation illustrates how the authors have adopted Harris' system and applied to two different North American prehistoric archaeological contexts: 1) a shallow, disturbed, multi-component habitation site in northern Ontario, and 2) a deep, undisturbed, multi-component shell midden in southern New Brunswick.

**Palaeohydrology and Prehistoric Occupations of
Lake Temagami: Preliminary Research**
(Session 14 - Fri. AM)

Diana Lynn Gordon (McMaster University), John H. McAndrews (Royal Ontario Museum) & Ian D. Campbell (University of Toronto)

One goal of the archaeological research at Lake Tem-

agami is to discover the full sequence of prehistoric occupation since deglaciation (ca. 10,500 B.P.). Surveys and site excavations to date have focused on the modern shoreline. Lake and river shores formed an important ecotone for human occupation in the Upland Shield - Boreal Forest as seen from ethnographic and archaeological settlement pattern studies. In order to trace prehistoric occupations through time, it is necessary to reconstruct past shoreline configurations.

Recent work indicates that lake levels in the complex north-south basin of Lake Temagami have been dynamic. Differential isostatic rebound is posited as the mechanism, with the northern end of the lake rebounding faster than the southern end. This phase of the research focuses on reconstructing the palaeohydrology of Lake Temagami, as a means of predicting archaeological site location. The effects of isostatic rebound were computer modelled by digitizing MNR 1:20,000 basemaps and applying published rebound curves. Initial results predict a 30m vertical displacement of the north end of the lake, relative to the south, at 9,500 B.P. Two separate lakes, one draining northeast through Sharp Rock Inlet, and the other draining northeast through the town of Temagami, would result. As the basins rebounded, lake regression would occur near these outlets, resulting in palaeoshorelines inland from the modern shoreline. Fieldwork in 1991 involved coring bogs at the two outlets. The preliminary results bear out several predictions of the computer model.

This work has several archaeological implications. First, Lake Temagami levels underwent rapid change. Sites on the present shoreline may not provide the full sequence of prehistoric occupation. Second, changing lake levels differentially affected the basin; while inland archaeological survey may be useful for locating early sites, it is only appropriate in selected locales. Third, local effects of changing lake levels on travel routes, lithic sources, and fauna resources merit consideration in reconstructions of prehistoric land usage. Finally, this work has implications for heritage planning.

Site Locations and Hypothesized Hunting Strategies for the Magalloway Valley Clovis, Western Maine
(Session 2 - Thurs. AM)

Michael Gramly (Great Lakes Artifact Repository)

Discoveries at the nine, closed Clovis sites of the Magalloway Valley Complex, western Maine, are

reviewed as a basis for speculations about ancient hunting strategies.

"Sainte Marie Re-Visited": 1987-90 Excavations at Sainte Marie Among the Hurons
(Session 8 - Thurs. AM)

W. Barry Gray (London) & Jeanie Tummon (Sainte-Marie Among the Hurons)

Four years of excavation and research have discovered and confirmed the presence of a multi-component site on the property including and surrounding the 17th century French Jesuit mission community. The data indicate that this site complex has been used by a variety of cultural groups since the 13th century A.D. Sainte Marie has undergone a series of excavations, most notably those directed by Kenneth E. Kidd (1941-43) and Wilfrid Jury (1947-51). However, in 1987 Archaeological Research Associates Ltd. was contracted to carry out excavations on the property under the direction of Dr. Dean Knight and W. Barry Gray. Archaeological investigations have focused on the southern portion of the reconstructed mission settlement, the section of the site presently identified as the Non-Christian Native area. Further testing has also been conducted in the northern part of the reconstruction inside the Non-Christian and Christian Native Areas. In 1990, the west bank of the Wye River was tested, resulting in the identification of another, multi-component site which has been named the Heron Site. This site was first used during the 14th century through to the 20th century. The data from the Heron site has been of use in our study of Sainte-Marie since it has provided us with comparative data from a less disturbed context. This present study of land-use represents a new direction for research related to the 17th century mission site.

Annie Lake: A Southern Yukon Mid-Holocene Cultural Complex
(Session 17 - Fri. PM)

Sheila Greer (University of Alberta)

Excavations at the multi-component Annie Lake site, located south of Whitehorse, have produced evidence for at least three occupations before ca. AD 700. The most recent of these has been assigned to the Teye Lake Phase of the Northern Archaic Tradition, while the earliest occupation of the site, a microlithic component, is attributed to the Little Arm Phase. Between

these two components a previously unrecognized Yukon point type was recovered. The concave-based lanceolate Annie Lake points cannot be attributed to either of the previously mentioned south Yukon prehistoric cultures. These points have been used to define the Annie Lake Complex, whose age is bracketed to ca. 4400/4900 to 2000 years ago. The Complex is still poorly understood; its relationship to the site's earlier and later occupations remains uncertain. Based on the design of the point that marks this cultural complex, external contacts or information exchange with the Canadian Plateau and Plains regions to the south are indicated.

Methods Applied to Palaeo Sites in the Boreal Forest: An Evaluation of the Simmonds Site
(Session 14 - Fri. AM)

C. Halverson (Kenora)

Recovery and some analysis techniques applied in 1973 and in 1991 during the excavation of a single component Palaeo-Indian site in northwestern Ontario are compared. The earlier investigations on the site by a local university concentrated their efforts along a washed-out area. Nine two by two metre units were excavated in five centimetre levels and screened through 1/4 inch mesh. For the purpose of cultural resource management, the site was reinvestigated in 1991. These new investigations followed a north-south transect utilizing a five by six metre block of one by one metre units excavated in 3 centimetre levels. All soils were screened through 1/8 inch mesh. Methods discussed incorporate grid layout, provenance, analysis, etc. Are we placing too much emphasis on using complex and complicated techniques when more elementary ones will do?

Inuksuit
(Session 12 - Fri. AM)

Norm Hallendy (Tukilik Project)

Among the important instruments created by the first known people to inhabit the Arctic are stone figures called *inuksuit*. The meaning of the word *inuksuk*, "to act in the capacity of a human," is an extension of the word *Inuk* which means "human being." We know that many *inuksuit* functioned as hunting instruments, navigational aids and message centres along with a number of other functions related to earthly activities.

In addition, however, certain *inuksuit* were objects of veneration. They compelled humans to build them out of fear, love, loneliness and, more importantly, they marked the thresholds of the spiritual landscape. They too were made of stone.

**Modelling Palaeo-Indian Settlement Pattern
North of Lake Superior**
(Session 14 - Fri. AM)

Scott Hamilton (Lakehead University)

The early history of human occupation in northwestern Ontario dates to Plano times, and is primarily represented by "lithic scatter" sites located along glaciofluvial and lacustrine features in the more southerly part of the region. The best known of these deposits are sites such as Cummins and Brohm, located upon relict beaches of glacial Lake Minong overlooking the current shores of Lake Superior. These and other nearby sites exhibit a strong correlation with post-glacial littoral features and "flakeable" bedrock exposures. However, a growing body of data indicates that Plano sites are not exclusively limited to the shores of major meltwater lakes, but are also encountered in upland regions. Many of these latter sites are associated with relict shorelines, outwash deposits and other peri-glacial and post-glacial features. It remains to be determined whether the current distribution of Plano sites is representative, or whether it reflects a sample bias in favour of littoral situations.

Plano settlement pattern is addressed as a case study, in part to address the utility of archaeological predictive modelling. To this end, elements of early Holocene palaeogeography, hydrology and biomass potential are modelled in order to determine whether the current distribution of sites can be "explained" in light of these variables. This approach uses a Geographical Information System to produce a digital model of the current landscape, and then to manipulate these spatial data to propose what it might have looked like 8,000 years ago. Spatial correlates of known or proposed elements of Plano settlement pattern are then overlaid upon the ancient landscape model. Finally, this proposed site distribution is compared to the known site inventory to determine how well the model explains the distribution, and to identify new areas which may contain sites representing other elements of the Plano settlement system.

Ancient Ceramic Analysis: Who Cares?
(Session 4 - Thurs. AM)

R. G. V. Hancock (University of Toronto)

Today's advanced ceramics are somewhat different from the "advanced" ceramics that were produced 300 to 10,000 years ago. But, they achieve similar cultural and technological ends. They both allow(ed) people to perform tasks in new ways that could not be done before. Although new ceramics have the glitter of science fiction as they help to propel us from the present into the 21st century, we should not forget just how far up the technological ladder we have climbed from our pre-ceramic past to our current state of ignorance.

How will future historians evaluate the effects of 20th century advances in ceramic technology with respect to more ancient breakthroughs? For example, What value to society were the rough looking coarse ware water storage jars found scattered throughout the archaeological sites of the ancient world? Research has shown that they not only stored water, as do modern metal buckets, but, unlike their modern, non-porous metal counterparts, they also kept the water cool through porosity controlled evaporation, and that the exterior morphology (e.g. Byzantine) not only promoted this cooling process but also provided added mechanical strength. Notwithstanding the variety and "quality" of ceramics made for holding the food and drink of more "civilized" eating times, these items have improved little in real intrinsic quality over their counterparts in antiquity.

Trespassing Into the Past:
A Report on a Workshop Between Cree Elders
and Archaeologists
(Session 23 - Sat. AM)

Margaret Hanna (Museum of Natural History, Regina)
& Terry Gibson (Western Heritage Services Inc.)

Most heritage sites pertain to the history of aboriginal people; nevertheless, legislation, policies, and procedures have been developed without input from the aboriginal community. From an aboriginal perspective, archaeologists and governments alike have "trespassed into the past". The Saskatchewan Association of Professional Archaeologists (SAPA) passed a Code of Ethics in 1990 that recognized that aboriginal peoples have special interests in the conduct of archaeology. SAPA also recognized that archaeologists

must cease to trespass by learning about these concerns and respecting and accommodating them.

To assist that learning process, SAPA sponsored a workshop on May 1 to 3, 1992 that brought together its members and Cree elders to discuss ways in which the pursuit of archaeology can become more in harmony with traditional aboriginal values. The elders were: Lawrence Tobacco (Kawacatoose Reserve), Jim Kanipetitew (Onion Lake), Noah Cardinal (Saddle Lake), Emma Sand (Saskatoon), and Mary Jollioux (Kehewin). The discussion focused on the differences between archaeological and aboriginal values, how traditional aboriginal values should become an integral part of archaeological training in universities, and how policies and legislation can be revised to accommodate these values.

Rough Translation:

La plupart des sites du patrimoine sont en relation avec la population aborigène; Néanmoins, les législations politiques et les règlements ont été créés sans l'opinion ou contribution de la communauté aborigène. Du point de vue des aborigènes, les archéologues de même que les gouvernements ont "transgressé dans le passé". L'Association des Archéologues Professionnels de le Saskatchewan (AAPS) a formé un code d'éthique en 1990 qui reconnaît que la population aborigène a des intérêts spéciaux face à la gestion de l'archéologie. AAPS doit reconnaître que les archéologues cessent d'enfreindre en se souciant et se concernant de leur inquiétudes en les respectant et les considérant dans leur projet.

Afin de supporter ce procédé d'apprentissage, AAPS a commandité un atelier du 1er au 3 mai, qui a réuni les aînés Cris ainsi que leur membres afin de conserver, poursuivre et discuter d'options qui menerais vers une harmonie dans les valeurs traditionnelles aborigènes. Les aînés se composant de: Laurence Tobacco (Kawacatoose Reserve), Jim Kanipetitew (Onion Lake), Noah Cardinal (Saddle Lake), Emma Sand (Saskatoon), ainsi que Mary Jollioux (Kehewin). La discussion à été principalement basé sur les différences existantes entre les valeurs aborigènes et archéologiques, et on suggère que les valeurs traditionnelles aborigènes soient intégrés à l'intérieur du programme archéologique dans les universités, comment, on pourrait réviser les lois et politiques afin d'inclure les valeurs aborigènes.

A Predatory Expansion Hypothesis: Evidence for Territorial Conflicts in Late Woodland New York

(Session 20 - Sat. AM)

Robert J. Hasenstab (Rutgers University)

The *In Situ* Theory of Iroquoian origins assumes that maize horticulture led to a gradual development of tribal social organization - and later warfare - among the indigenous populations of the Iroquoian homeland. This paper adopts an alternative explanation for Late Woodland transformation in New York: Sahlin's "predatory expansion" model. Ceramic evidence indicates Late Woodland population intrusions into New York from the west and southwest. Results of the author's detailed settlement analysis, based on New York Late Woodland sites, support a similar interpretation. These presumed expansions are seen as the source of conflict and social change. The ultimate causes of these population expansions are suggested.

Rough Translation:

La théorie de l'origine "in situ" des Iroquoiens suggère que l'horticulture du maïs a contribué à leur développement graduel et à l'organisation sociale de leur tribu - ainsi que la guerre - parmi les populations indigènes du territoire des Iroquoiens. Notre présentation s'appuie sur une autre explication de la transformation des groupes du Sylvicole Supérieur dans l'État de New York: le modèle de Sahlin "expansion prédatrice". L'évidence de céramique nous indique les intrusions des groupes du Sylvicole Supérieur à l'intérieur de New York de l'ouest au sud-ouest. Les résultats d'analyses des schémas d'établissement de l'auteur en référence aux sites Sylvicole Supérieur de New York, appuient une interprétation semblable. Ces expansions suggèrent qu'elles pourraient être la cause de conflit et de changement social. Les causes fondamentales des expansions démographiques sont suggérées.

Instrumental Neutron Activation Analysis of Frilled Pottery

(Session 4 - Thurs. AM)

Alicia Hawkins (University of Toronto)

Frilled and barbed pottery is found in small amounts on historic sites in Huronia and Neutralia. It has been

suggested that such pottery can be attributed to the Wenro, a group of Iroquoian-speaking people said to have migrated to Huronia in the late 1630s. This analysis employs Instrumental Neutron Activation Analysis (INAA) to analyze the chemical composition of pottery from sites in Ontario and New York. The composition of ceramics with "typical" Huron and Neutral decoration is compared to the composition of "frilled" pottery in order to determine whether such pottery was brought into Ontario, or made locally.

Causes and Consequences of Caribou Migration

(Session 2 - Thurs. AM)

Doug Heard (Dept. of Renewable Resources, Northwest Territories)

Insights into the causes and consequences of caribou migration might help archaeologists appreciate both the problems and potential solutions hunters may have had finding caribou. Migration patterns reflect how caribou balance the trade-off between the risk of predation and the necessity of finding sufficient food. In spring, caribou cows migrate from their winter ranges in the boreal forest to distant tundra calving grounds where the food is of low quality and quantity. Bulls, on the other hand, spend the early part of the growing season near treeline where the food is abundant and nutritious. Because most wolves den near treeline, spring migration benefits cows by reducing predation risk to their newborn calves while access to high quality food in bulls is paid for in greater predation risk. All caribou pass back through the treeline in the fall, and when they do, both wolves and people have been there to meet them.

Resurrecting the Spirit(s) of Taylor's Carlsberg

Culture: Cultural Traditions and Cultural Horizons in Eastern Arctic Prehistory

(Session 6 - Thurs. AM)

J. Helmer (University of Calgary)

Following the lead (though only late by some 23 years) of William E. Taylor Jr., who once argued that "Eastern Arctic archaeology is still in its infancy.... The laissez-faire attitude towards its terminology reflects this." (Taylor 1968:38), this paper calls for a standardization of Eastern Arctic culture classificatory terminology using the complementary concepts of Cultural Tradition and Cultural Horizon. Focusing specifically on the period ca 4500-1000/500 B.P., a

pan Eastern Arctic Pre-Dorset Cultural Tradition subdivided into four Cultural Horizons (Initial, Early, Middle and Late Pre-Dorset), is defined. The advantages of adopting this system of nomenclature for describing the major spatio-temporal division of the Arctic Small Tool tradition in the Eastern Arctic are discussed. By way of a conclusion, a complementary culture classificatory taxonomy intended to measure historically meaningful patterning and variation in Eastern Arctic Palaeo-Eskimo assemblages through both time and space is briefly described.

Translation:

En tenant compte de l'observation de William E. Taylor Jr. (avec un retard de 23 ans) qui voulait que "l'archéologie de l'Arctique est encore à son enfance...Le peu d'importance que l'on attache à sa terminologie en est témoin" (1968:38), cette communication nous incite à uniformiser les termes utilisés pour classer les cultures de l'Arctique oriental en utilisant les concepts complémentaires de tradition et d'horizon. Nous proposons donc une Tradition pré-dorsétienne à l'échelle de l'Arctique oriental qui serait divisée en quatre Horizons (Pré-Dorsétien initial, ancien, moyen et récent). De plus, nous discutons des avantages qui résulteraient de l'utilisation d'un tel système pour décrire les divisions socio-temporelles les plus importantes dans l'Arctique oriental de la tradition microlithique de l'Arctique. En concluant, nous décrivons un système taxonomique de classification qui tente de cerner les ressemblances et les différences au niveau des outillages paléoesquimaux dans l'Arctique oriental tant synchroniquement que diachroniquement.

Price Indexing for 20th Century Historic Site Assemblages: A Cautionary Note (Session 21 - Sat. AM)

Heather Henderson (University of Toronto)

Ceramic indexing has become an accepted methodology for determining socio-economic behaviour on 19th century historic sites in North America. The technique has also been applied to faunal assemblages representing commercially available meat. However, the use of indexing for post-1880 sites is problematic, as reliable relative pricing scales have yet to be developed for this time period. This paper will discuss the problems associated with the use of mail order catalogues, documentary price listings, and late 20th

century analogies for developing price scales for early 20th century ceramic and faunal assemblages. The geographic and socio-cultural contexts of the pricing source, as well as the site, must be considered in deciding on the reliability of any resulting indices.

Reconsidering Disease and Contact in the Americas (Session 16 - Fri. PM)

D. Ann Herring (McMaster University)

This paper discusses the evidence for infectious diseases in the Americas prior to European contact and argues that the experience of postcontact epidemics must have been highly variable in aboriginal societies. The magnitude and severity of introduced diseases depended on a host of local factors, including previous disease experience and pathogen load, proximity to and connections with sources of contagion, and sanitary-social conditions. It is suggested that a more comprehensive appreciation of variation in epidemiologic and demographic responses to prolonged European contact may be developed through: (1) breaking down the artificial structure of academic inquiry which parcels human history in the Americas into "historic" and "prehistoric" components; (2) developing models for interpreting American disease and contact scenarios from analyses of the phenomenon in other geographical areas; (3) tracking epidemic cycles to assess the impact of a series of disease experiences in single populations; (4) carrying out Monte Carlo simulations of a variety of diseases under different demographic regimes to evaluate the relative impacts of infectious diseases traditionally viewed as agents of depopulation; (6) tapping the wealth of information contained in parish records on fertility/nuptiality necessary to more rigorously assess the demographic consequences of epidemics.

New Directions in the Visual Description of Large Pictograph Collections (Session 14 - Fri. PM)

A. Hinshelwood (Ministry of Culture and Communications, Ontario)

In the proceedings of the 1977 Canadian Rock Art Research Associates (CRARA) symposium, Selwyn Dewdney argued for rock art researchers to develop visual rather than verbal terms of reference in pictograph description: that is, to use descriptive terms that

derive from the form of the pictograph rather than its inferred "meaning". A recent conservation project, in which the original field tracings from over sixty sites in northeastern Ontario were manually transferred onto a more stable medium, afforded the opportunity of developing a visually based descriptive system for the collection. Drawing on a variety of sources, a list of objective descriptors was developed. With this list in place, a checklist approach to the recording of attributes can be followed. The structure of the checklist guides the researcher towards consistent description of similar morphs based on the visual terms of reference. So doing, the objectivity of the description is ensured, and the separation of analysis from the more subjective process of interpretation is supported.

**Lakehead Complex Lithic Reduction Sequence:
A Synthetic Approach
(Session 14 - Fri. AM)**

A. Hinshelwood & W. A. Ross (Ministry of Culture and Communications, Ontario)

Increasingly over the past two decades, investigations of lithic technologies have focussed on two primary areas: debitage analysis and implement replication. These approaches, particularly when used in combination, are proven effective methods for the derivation of general models of stone tool manufacture. The application of these models to assemblages originating beyond the region of their initial derivation requires critical review of both the models and of the regional lithic industry under consideration. A review of the late Palaeo-Indian lithic industry of the Thunder Bay, Ontario, region reveals that the innate character of the primary toolstone has created a unique regional expression of a relatively typical period technology. The local (silicious) taconites are difficult to work due to frequent and irregularly occurring planes of weakness. Analysis has focussed on the analysis of debitage, failed or otherwise unused bifaces from the larger reduction sites, and a significant biface cache. The debitage and biface production trajectories are determined from standards set in the literature, while the biface cache serves to anchor these hypothetical reduction sequences by illustrating an actual target form in the prehistoric sequence.

**Caribou Predation by Southern Ontario Palaeo-Indians - Hit or Near Myth?
(Session 2 - Thurs. AM)**

Lawrence J. Jackson (Northeastern Archaeological Associates)

Palaeo-Indian studies in Canada began in 1935 with an early focus on possible associations of fluted points and mastodon in southern Ontario. Almost 60 years later, there is no clear and convincing case of a large mammal hunting association. Yet, there is abundant indirect and circumstantial evidence of a Palaeo-Indian economy based on the exploitation of cervids - with caribou the best represented and most logical of species available during the Late Pleistocene. This paper explores what is beginning to be regarded as the "myth" of a caribou-reliant economy and poses new criteria for evaluation of this kind of settlement and herd behaviour data.

**On Their Own: The Subsistence Adaptations
Effected by Residents of the Hudson's Bay
Company Staff House in Moose Factory From
1848 Onwards.
(Session 21 - Sat. AM)**

Dwayne James (Toronto)

Faunal evidence retrieved from the area surrounding the Staff House demonstrates a broadening of the residents' subsistence base. Rather than relying on stores shipped overseas from the London headquarters, HBC employees exploited available food sources as well. This paper will show that by using archaeological resources and through the interpretation of on-site contextual information, significant insight into behavioral and subsistence patterns is revealed.

**St. Lawrence Iroquoian Bone Technology
(Session 9 - Thurs. PM)**

J. Bruce Jamieson (Department of Communications, Ottawa)

Bone and antler artifacts, which comprise a sizable portion of most Iroquoian artifact assemblages, have received only cursory attention from Iroquoian scholars. When we consider the rich and varied character of Iroquoian bone and antler artifact assemblages, especially from St. Lawrence Iroquoian sites, it is surprising that the study of Iroquoian

prehistory has focused almost exclusively on the study of ceramics, settlement patterns and faunal remains.

My paper will present a system of classification for the bone, antler, ivory and shell artifact assemblages of the prehistoric Iroquoians of eastern Canada using characteristics of form, function and style. I will examine temporal, spatial, and functional variations in these artifacts at the level of both individual attributes, types and assemblages in order to derive the maximum amount of information relating to their manufacture and use; and to distinguish variations that relate to ethnic divisions within Iroquoian populations and to the evolution of Iroquoian subsistence and settlement systems. I will also try to demonstrate how bone, antler, ivory and shell artifacts were made, used, and for what purpose they served.

Translation:

Les artefacts en os en andouiller, qui correspondent à une portion considérable de la plupart des assemblages Iroquoien, reçoivent généralement peu d'attention des chercheurs Iroquoianistes. Quand on considère le caractère important et varié des assemblages d'artefact en os et en andouiller, tout particulièrement sur les sites des Iroquoiens du St-Laurent, on s'étonne que la préhistoire iroquoise soit particulièrement basée sur l'étude de la céramique, les schèmes d'établissement et les restes fauniques.

Ma présentation propose un système de classement pour l'os, l'andouiller, l'ivoire ainsi que les assemblages des artefacts sur coquillage pour la période préhistorique des Iroquoiens de l'est du Canada, en insistant sur les caractéristiques morphologiques, fonctionnelles, et stylistiques. J'examinerai les variations temporelles, spatiales, et fonctionnelles des artefacts en considérant pour les assemblages les attributs individuels les types afin de mettre en évidence l'information reliée à leur fabrication et à leur utilisation; et de mettre en évidence les variations qui se rapportent aux divisions ethniques à l'intérieur des populations ainsi que l'évolution de la subsistance et du schème d'établissement iroquoise. J'essaierai aussi de démontrer comment les artefacts en os, en andouiller, en ivoire et en coquillage ont été fabriqués, et à quoi ils servaient

Regional Interaction and Ontario Iroquois Evolution

(Session 20 - Sat. AM)

Susan M. Jamieson (Trent University)

Recent studies have argued that northern "Iroquoianization" can be explained as a consequence of regional interaction. This has been expressed by a west to east time-transgressive Cahokia as centre-Iroquoia as margins-linked model. The explanation is discussed with reference to archaeological data from Ontario. Trait distributions indicate that although the model may offer general insight into northern Iroquois development, it does not adequately summarize the patterns of regional interaction which are believed to have promoted the "Iroquoianization" of Ontario populations. These are explicated by a less restrictive periphery--margins model that interprets Northeastern culture processes in light of generalized Mississippian developments occurring after ca. A.D. 850 throughout the eastern half of the North American continent.

Rough Translation:

Des études récentes nous indiquent que les l'évolution des Iroquoiens du Nord-Est peut être expliquée comme une conséquence des interactions régionales. Ceci à été formulé par un modèle diachronique où Cahokia est au centre et l'Iroquoisie en périphérie. En référence aux données archéologiques de l'Ontario, une explication est soulevée. Malgré que le modèle nous offre un regard général sur le développement des Iroquois du Nord, il ne nous indique pas adéquatement le mécanisme des interactions régionales, ce qui nous fait croire qu'il y a joué un rôle important à l'Iroquoianisation des populations de l'Ontario. Ceux-ci nous sont expliqué par un modèle périphérique qui nous fait voir les procédés de la culture de Nord Est en vue des développements généraux Mississippien qui se sont produits après A.D. 850 dans tout l'Est du continent Nord Américain.

Tracking the Elusive Hornfels: South African Stone Age Behaviour

(Session 4 - Thurs. AM)

Hugh Jarvis (S.U.N. Y. at Buffalo)

Extensive sampling of all hornfels outcrops in a 10 km catchment zone surrounding a Later Stone Age, South African Bushmen rock shelter allowed research-

ers to carry out sourcing studies of prehistoric stone tools which in turn provided evidence of band territoriality. Instrumental Neutron Activation Analysis (INAA) of the samples provides a geological source data base with which the artifacts can be compared to ascertain their origin. Discriminant analysis of the suite of short-lived elements allowed differentiation of key outcrop clusters, and will allow linkage of the artifacts to specific parts of the catchment area. These data not only provide information on artifact origin, they also indirectly provide a record of past behaviour which can be compared to ceramic information on territoriality which is already available. The combined information not only yields a much better vision of Later Stone Age behaviour, but also gives insight to human behaviour in general.

Ontario Iroquoian and Monongahela Culture Contact During the Terminal Late Prehistoric and Protohistoric Periods: The Case for the Massawomeck Connection
(Session 20 - Sat. AM)

William C. Johnson (Michael Baker, Jr., Inc.)

Cultural traits, notably community pattern, ceramic technological and decorative attributes, and maize-bean horticulture, manifested by the Late Prehistoric period Early and Middle Monongahela culture, reflect patterns exhibited by more complex societies in the Middle Ohio Valley. During the final decades of the Late Prehistoric period, changes in ceramic decorative modes suggest a re-orientation of the direction of Monongahela contacts toward Iroquoian groups in the northeast. By the beginning of the Protohistoric Late Monongahela period, the presence of "western Iroquoian" ceramic attributes and specific items of Native manufacture on Foley Farm and Johnson phase sites indicates that the Monongahela were involved in a trade axis anchored on the Lower Great Lakes. This apparently included the role of middlemen in the Neutral-Chesapeake Bay whelk shell trade.

Cartographic and ethnohistoric sources variously suggest an identification of the Protohistoric Monongahela with the Black Minqua, *Massawomeck*, and a little noted *Atioundaron* designation in the Upper Ohio Valley. All three appellations suggest reference to Iroquoian speakers, and suggest that the Foley Farm and Johnson phase folk may represent two or more tribes comprising the *Massawomeck* nation. Alternatively, they could represent, respec-

tively, the *Massawomeck* proper and the *Hereckeenes*. Archaeological and ethnohistoric data indicate the dispersal of the Monongahela by ca. A.D. 1635, almost surely at the hands of the Seneca, thus severing the Ontario Iroquoian - Ohio Valley trade network.

Rough Translation:

Les traits culturels, tout particulièrement le fonctionnement des communautés, les attributs technologiques et décoratifs de la céramique, ainsi que l'horticulture de maïs-fèves, illustrée par la période Préhistorique récente des phases ancienne et moyenne de la culture Monongahela, nous indique une similitude démontrée par des sociétés plus complexes de la vallée d'Ohio. Dans les dernières décennies de la période Préhistorique récente, des changements dans la décoration de céramique nous indique une réorientation des contacts entre Monongahela et les Iroquoiens du Nord Est. Au début de la période Proto-historique et le phase Monongahela récente, la présence d'attributs de céramique ainsi que des artefacts particuliers des "Iroquois de l'ouest" et de la manufacture fait par les habitants sur les Ferme Foley et les sites de la phase Johnson nous indique que les Monongahela étaient impliqués et axés vers l'échange ancré sur la basse région des Grands Lacs. Ceci apparemment entrain en ligne de compte dans leur rôle d'intermédiaires entre les Neutres et la baie de Chesapeake pour obtenir des coquillages.

Les sources cartographiques et ethnohistoriques nous suggèrent à plusieurs reprises une relation entre les Monongahela Protohistorique et les Black Minqua, *Massawomeck*, on note une désignation minime d' *Atioundaron* dans la vallée supérieur de l'Ohio. Ces trois appellations nous suggèrent une référence aux interlocuteurs Iroquoiens, et nous suggèrent que les gens de la Ferme Foley ainsi que la phase Johnson peuvent représenter deux tribus ou plus incluant la nation *Massawomeck*. Alternativement, ils pourraient représenter respectivement les *Massawomeck* et les *Hereckeenes*. Des informations archéologiques et ethnohistoriques nous font voir que la dislocation des Monongahela vers A.D. 1635, presque certainement que mains des Seneca, affectant très sévèrement les Iroquoiens de l'Ontario - et le réseau d'échange de la Vallée d'Ohio.

**Expedient Lithic Technology in Late
Paleo-Indian Assemblages: Some Examples from
the Upper Great Lakes**
(Session 13 - Fri. AM)

Patrick J. Julig (Laurentian University)

Binford has described aspects of technology along a continuum ranging from curated to expedient. Curated assemblages are generally defined as consisting of tools that are versatile, manufactured in anticipation of need, maintained, transported and recycled. Explanations of curation in lithic assemblages are varied, however several components including recycling and maintenance may be related to raw material availability. Paleo-Indian lithic assemblages are commonly described as curated, relative to the subsequent Archaic period. This paper will examine late Paleo-Indian lithic assemblages from several upper Great Lakes sites, and will examine the effect of distance from raw material source on assemblage curation and expediency.

**Sourcing of Lithic Artifacts by INAA: Some
Examples From the Great Lakes Region**
(Session 4- Thurs. AM)

Patrick J. Julig (Laurentian University), L. A. Pavlish & R. G. Hancock (University of Toronto)

Mechanisms of prehistoric exchange, that is, how and in what form materials moved within and between geographical regions and social groups, are of considerable interest to archaeologists. On the basis of observed distributions and the contexts of distinctive archaeological discoveries, various trade mechanisms are proposed. Determining prehistoric exchange patterns on the basis of some types of lithic materials in the Great Lakes region is complicated by difficulties in accurately determining source(s). In the case of rare artifacts of variable size where subsampling (such as thin sections) may not be permitted, analysts often rely on instrumental neutron activation analysis (INAA) to chemically characterize and source several Great Lakes and adjacent region lithic materials.

**A Late Neolithic Assemblage From Hvar,
Yugoslavia**
(Session 13 - Fri. AM)

Timothy Kaiser (University of Toronto)
Abstract not submitted at time of printing.

**Chimu Ceramics from Chan Chan, Peru: A
Reanalysis**
(Session 5 - Thurs. AM)

Joan Kanigan (Trent University)

The site of Chan Chan in the Moche valley, Peru, was the capital city for the Chimu culture during the Late Intermediate Period (900 - 1476 A.D.) of Peruvian prehistory. The ceramics excavated from this site represent one of the few collections from this time period with a known archaeological context. Despite this importance, the material has previously only received a cursory analysis. This paper will discuss the results of a more in depth study of the ceramic material and its importance in understanding Chimu culture.

**Archaeological Investigations on the Aroostook
and Tobique Rivers, New Brunswick**
(Session 24 - Sat. PM)

David Keenlyside (Canadian Museum of Civilization)

Five weeks of archaeological fieldwork during the summer of 1991 were spent surveying the Aroostook and Tobique Rivers in the Upper St. John region of northwestern New Brunswick. The section of the lower Aroostook between the Canadian border and the St. John River produced four previously unreported prehistoric sites including a buried, possible Paleo-Indian site, found at high elevation on an early post-glacial terrace. Survey on the Tobique River concentrated on a re-evaluation of sites reported by G.F. Clarke and D. Sanger in the 1960's and collection of comparative lithic samples. Three new sites are reported, one of which was a deeply buried cultural stratum of lithic artifacts found near the Gulquac River on the Middle Tobique. Future excavation at this site, it is hoped, will shed further light on the age and origin of Sanger's Tobique Complex.

Spilled Ink and Broken Cups
(Session 21 - Sat. AM)

Ian Kenyon (Ontario Heritage Foundation)

This paper will review the use of written documents, in particular accounting records from general stores, to develop a context for understanding the distribution and consumption of tableware ceramics in early 19th century Ontario. Notable is that until about 1840 ceramic sales in Ontario display strong seasonal variation

owing largely to limitations in transportation networks. This seasonal pattern of ceramic consumption has certain implications for the interpretation of archaeological ceramic assemblages.

Chronology of the Ball Site, or: Did Champlain Sleep Here?

(Session 8 - Thurs. AM)

Dean H. Knight (Wilfrid Laurier University)

Champlain wintered in Ontario in 1615. The historic identification of the village at which he stayed, Cahiaque, has long been a controversy in Ontario archaeology. The most recent foray into this battle suggests that the Ball site may in fact be that village. While Fitzgerald's glass bead analysis places Ball in the right time period, additional bead and ceramic analysis indicate that there may be some difficulty in the temporal placement of Ball. This paper explores some of the problems with historic village identification and the chronology of the Ball site.

Gamma-Aminobutyric Acid Inhibition of Cytochrome Oxidase Neural Activity in the Human Brain: A Re-examination of the Trance Hypothesis in Prehistoric Art

(Session 1 - Thurs. AM)

Maurice Lantaigne (Rock Art Association of Canada)

The shamanic "trance hypothesis" is but the latest of a series of paradigms (including "fertility ritual", "mother goddess", "hunting magic" etc.) forwarded as universal formulae for the interpretation of prehistoric art. Such simplistic postulates do little to strengthen our understanding of an extremely complex subject matter; with some theoreticians suggesting that such are merely the biased products of our own cultural historical context (Bahn 1991). The model presented by Lewis-Williams and Dowson (1988) is examined in light of recent technological advances in mapping the neural pathways of the human brain. While there is some neurophysiological evidence to substantiate that geometric and other visual hallucinatory phenomena may occur during a "trance" experience, the phenomena are not "entoptic". It is further demonstrated that the neural sequencing of the trance visual experience is more complex than that which may validate its current application in prehistoric art studies. The discussion is illustrated by examples of "shamanic" art drawn from the Drakensburg Mountains,

South Africa and the Precambrian Shield, Manitoba.

The Kettle is Full: The Feast of the Dead at the Auger Site

(Session 8 - Thurs. AM)

Marti Latta (University of Toronto)

"The feast of the dead is the most renowned ceremony among the Hurons; they give it the name of feast because...when the bodies are taken from their Cemeteries, each Captain makes a feast for the souls of his Village....The Feast abounds in ceremonies, but you might say that the principal ceremony is that of the kettle; this latter overshadows all the rest, and the feast of the Dead is hardly mentioned, even in the most important Councils, except under the name of "the kettle" [Brebeuf Jesuit Relations 10:279-311].

Every 17th century observer noted the importance of the Feast of the Dead in Huron society. Its structure and concepts formed a model against which events of everyday life were measured. For the Huron, and for modern researchers, the Feast provides a map of the Huron conceptual universe. The final outcome of this ceremony was the transition of the souls of the deceased to the next life, symbolized by the deposition of their remains in an ossuary; this portion of the ceremony has been reasonably well documented through studies of ossuaries. The events which preceded this deposition took place in the home villages of the deceased and formed the heart of the ceremony, as described above. The Auger Site, BdGw-3, in southern Ontario, provides the first recognized archaeological remains of this portion of the Feast of the Dead. This paper will discuss aspects of this data including ceremonial foods, special artifacts and the problems of identifying non-skeletal cremations in archaeological contexts.

The Crane Site and the Late Pre-Dorset Period in the Western Canadian Arctic

(Session 6 - Thurs. AM)

Raymond J. Le Blanc (University of Alberta)

The Crane site (ObRv-1) is located along the Old Horton River Channel in the interior of the Cape Bathurst Peninsula, about 250 km east and slightly north of Tuktoyaktuk. The site was found and tested in 1987 and subsequently excavated in 1989. Seven tightly clustered radiocarbon dates on caribou bone place the occupation around 2500 B.P. The assem-

blages, which include abundant lithic and organic remains, show strong affiliations in a variety of typological categories with the Norton and Dorset culture influenced Lagoon site on Banks Island. The faunal collection of more than 39,000 specimens is dominated by caribou, but includes a significant amount of seal and waterfowl, notably snow goose; seasonality indicators suggest a late spring-early summer occupation much like that exhibited by the coastal Lagoon site. The similarities shared by the Crane and Lagoon sites, as well as possible indications of comparable material on Melville Island, suggest the presence of a peripheral, regional cultural complex (the Crane Complex) that existed during the period of change from the Pre-Dorset to the Dorset phases of the palaeoeskimo continuum.

Translation:

Le site Crane (ObRv-1) est situé sur l'ancien cours de la rivière Horton. Celui-ci occupe l'intérieur de la péninsule du Cape Bathurst, à environ 250 km à l'est de Tuktoyaktuk et quelque peu au nord de ce village. Le site fut découvert et sondé en 1987, et fouillé en 1989. Une suite de datation au radiocarbone indique une occupation datant d'il y a environ 2500 ans B.P. L'outillage, qui est composé d'objets lithiques et organiques, témoigne de plusieurs similarités avec la collection du site Lagoon de l'île Banks. Ce gisement atteste d'influences tant de la culture Norton que dorsésiennes. La collection faunique compte plus de 39 000 spécimens. L'espèce la plus abondante est le caribou, mais on y retrouve aussi des quantités non-négligeables de phoques et de sauvagines dont l'oie blanche. La saison d'occupation aurait vraisemblablement été la fin du printemps - début de l'été, tout comme le site côtier Lagoon. Les ressemblances entre les sites Crane et Lagoon, ainsi que des restes semblables trouvés sur l'île Melville, suggèrent l'existence d'un complexe culturel régional (le complexe Crane) qui aurait existé pendant la transition du Pré-Dorsétien au Dorsétien.

Idrisi Under the Microscope: Digital Image Processing and Use Wear Analysis (Session 22 - Sat. AM)

Genevieve Le Moine (University of Calgary)

Digital image processing, used both to enhance the appearance of images and as an analytical tool, is becoming increasingly available to archaeologists

through inexpensive software such as the GIS program IDRISI. Here examples of both aspects of digital image processing will be discussed using micrographs of traces of manufacture and use on bone. Images were both visually enhanced and processed to emphasize particular aspects of the image.

The Kassel and Blue Dart Sites: Two Components of the Early Archaic Bifurcate Base Projectile Point Tradition, Waterloo County, Ontario (Session 19 - Sat. AM)

Paul A. Lennox (Ministry of Transportation, Ontario)

Archaeological mitigation, undertaken by the Ministry of Transportation in advance of highway construction, has recently resulted in the identification and excavation of two Early Archaic sites, components of the Bifurcate Base Tradition. The description and analysis presented here are of the Kassel site, a base camp, and the nearby Blue Dart site, interpreted as a short term, special purpose activity area, likely used as a kill site or butchering station. These sites provide some of our first excavated assemblages from this Archaic manifestation in Ontario and aid in establishing not only its presence here but also its form.

Micmac Interaction With Plants and With Neighbouring Peoples (Session 24 - Sat. PM)

Kevin Leonard (University of Toronto)

In the late seventeenth and early eighteenth century, maize horticulture was practiced by the Micmac and the Maliseet in climatologically suitable areas of the Maritimes. Accounts of sixteenth and early seventeenth century Micmac and Maliseet interaction with the St. Lawrence Iroquoians from Stadacona and with the Algonquian groups along the Maine coast show us that the Micmac and the Maliseet had opportunities to acquire knowledge of maize horticulture from these groups. The possibility of earlier arboriculture is suggested by charred plum pits (*Prunus nigra*) found in a fourteenth century cremation cemetery (CdDd-1) in southeastern New Brunswick, particularly when considering present *Prunus nigra* distribution in the Maritimes.

Artifacts from the cremation cemetery combine with botanical data to provide rudimentary infor-

mation about an exchange system in place in the late prehistory of the Maine/Maritimes/St. Lawrence estuary region.

On the Trail of the Caribou House: Some Reflections on Innu Caribou Hunters in Nitassinan (Labrador)
(Session 2 - Thurs. AM)

Stephen Loring (Smithsonian Institution)

Ethnographic analogy has played a prominent role in structuring our perceptions of the past. The accessibility of written records and the drama of photography have an immediacy and power that easily swamps the more constricted view afforded by archaeology. Accepted uncritically, ethnographic analogy is a dangerously subjective methodology whose cross-cultural comparisons impertinently dismiss local, specific historical, ecological and socio-economic developments for the sake of gross superficial similarities. To add insult to injury, ethnographic models, especially those of hunters and gatherers, by ignoring the temporal perspective gained through archaeology, invariably present hunters as fossilized cultural relics. These ethnographic stereotypes pervade the archaeological literature and channel our perceptions of the past. If used at all, ethnographic analogy needs to be applied judiciously and cautiously. A case study in the use of analogy and archaeology is provided by the growing popularity of modelling Northeastern Paleo-Indian cultures after the 19th and 20th century Naskapi (Innu) caribou hunters of Labrador. A critical evaluation of this assumption is provided based on caribou population dynamics and on archaeological and ethnohistorical research in Labrador.

Settlement System Superposition, Typological Confusion, Population Packing and Environmental Variation: Causes for Perceived Late Archaic Site Density Increases in Great Lakes Coastal Environments
(Session 19 - Sat. PM)

William A. Lovis (Michigan State University)

This paper addresses the perceived increase in Late Archaic period site densities relative to other periods, and its consequent demographic implications, as a function of the cumulative effect of the formation of the archaeological record and our current perceptions of that record. It is argued that despite perceived high

frequencies of Late Archaic sites, there is no reason to suspect substantial population differences. The perceived frequency is attributed to the compounded phenomena of typological confusion, the packing of populations as a consequence of lake level rise, the superpositioning of high density Late Archaic settlement system components on the low density parts of preceding and subsequent systems, and the effects of short term lake variation on the proliferation of Late Archaic coastal sites.

The Application of Oral History Studies to Archaeological Master Plans for First Nations
(Session 23 - Sat. AM)

Eva MacDonald (Archaeological Services Inc.)

This paper will outline the Oral History component of the Master Plan of archaeological resources that was undertaken by Archaeological Services Inc. in the summer of 1991 for the Municipality of Howland, the Ojibways of Sucker Creek and the Sheguiandah First Nation of Manitoulin Island. The goal of this particular component was to produce a detailed inventory of traditional use sites which recognized Ojibway heritage and land use in the study area. In this way, a set of cultural data specific to sites used by the two First Nation bands will be available for consideration when the final phase planning document is drafted for the Master Plan. The oral history document was not meant to be a comprehensive record of the Ojibway oral tradition; only sites that could be placed on a map and checked in the field were recorded for the purposes of the Master Plan. However, the importance of the documentation of traditional use sites, landscape features and their Ojibway placenames was viewed as essential to ensure their consideration during both Native and non-native land development projects.

Rough Translation:

Ce document a pour but de souligner les éléments de l'Histoire Orale du Plan Principal des ressources archéologiques prises en main par les Services Archéologiques Inc. à l'été de 1991 pour la Municipalité de Howland, les Ojibways de Sucker Creek ainsi que la Première Nation de Sheguiandah de l'île Manitoulin. La raison de ce document est de réunir et produire une analyse détaillée de sites traditionnels qui reconnaît l'héritage et terre des Ojibway dans les aires de recherches. De cette manière des données culturelles recueillies en se concentrant sur les sites utiliser par les

deux troupes de Première Nations sera disponible pour examen lorsque le document de planification de dernière phase soit extrait du Plan Directeur. Le document de l'histoire orale n'a pas pour objectif de servir de données de compréhension de la tradition orale des Ojibway; uniquement les sites que l'on pouvait inscrire sur la carte et justifier sur les lieux ont pu être documentés à l'intérieur du Plan Directeur. Cependant, l'importance des sites traditionnels documentés et vérifiés sur le terrain les traits d'architectures ainsi que les toponymes Ojibway étaient considérés comme essentiels pour affirmer leur importance lors de projet de développement des territoires autochtones et non-autochtones.

Expedient Lithic Technology and Possible Sedentization in Early Holocene Dakhleh Oasis, South Central Egypt
(Session 13 - Fri. AM)

Mary M. MacDonald (University of Calgary)

Lithic assemblages from a series of ninth millennium BP sites in Dakhleh Oasis, South Central Egypt, differ markedly from contemporary Epipalaeolithic collections from other Northeast African sites. In contrast to these Epipalaeolithic blade-dominated and bladelet-dominated assemblages, collections from "Masara C" sites in Eastern Dakhleh show a heavy reliance on locally available indurated limestone which is knapped expediently. Use of an expedient or informal technology may in this case correlate with changes in settlement patterns in Eastern Dakhleh. Unlike most Epipalaeolithic campsites scattered across Northeastern Africa at this time, Masara C sites feature clusters of stone rings - possible hut circles - as well as other traits suggesting a trend towards sedentization.

Soil as a Determinant of Major Settlement Location in the Late Woodland of Southcentral Ontario
(Session 15 - Fri. PM)

Robert I. MacDonald (McGill University/Archaeological Services Inc.)

Early studies suggesting a correlation between Iroquoian settlements and sandy soils have entrenched the notion that these soils were actively sought by Late Woodland agriculturalists. This paper re-examines this notion in two ways. First, the correlation hypothesis is tested by comparing the distribution of

selected major settlements in southcentral Ontario to a detailed analysis of the background distribution of soils. Second, the direct selection of soil hypothesis is tested by considering the possibility that putative settlement-soil correlations are partly or wholly a proxy for some other paleo-environmental correlation.

Defining Ethnicity: The Mandara Example
(Session 10 - Thurs. PM)

Scott MacEachern (University of Calgary)

The archaeological study of ethnicity first requires definitions of both that term and of "ethnic groups". Such definitions are by no means self-evident, but perhaps the most valid definition of ethnicity situates it in the realm of self-identification and group affiliation. These factors may appear to be too internalized, too "psychological", to be amenable to archaeological investigation; without supplementary data from other sources, such research will probably never be sufficient for the confident identification of ethnic units. Mandara Archaeological Project fieldwork in northern Cameroon has yielded useful information on ethnic identification within an extremely complex social and cultural milieu. These data show that ethnographic identifications of ethnic groups are themselves often very problematical, and offer some perspectives on the relationships between artifact patterning and ethnic affiliation within this region.

Style Visible, Style Invisible: Artifact Variation and its Meaning
(Session 10 - Thurs. PM)

Scott MacEachern & Genevieve Le Moine (University of Calgary)

An understanding of style, both what we mean by it and what may have been meant by prehistoric peoples, is vital to our understanding of artifact variation on many levels. Style seems to be an inevitable byproduct of artifact production. It resides along a spectrum from iconological style, actively created and manipulated, to microscopic attributes, unconsciously added as byproducts of manufacture or other culturally defined processes. In this paper we use an isochrestic approach to style, as defined by J. Sackett, to discuss the multiple levels of style generated and manipulated by everyone, including archaeologists.

A Fireplace is a Fireplace -- Isn't it?
(Session 5- Thurs. AM)

Marilyn MacKellar (Direction Des Antiquités Pré-historiques D'Aquitaine)

There are many approaches to fireplace analysis. At the rock shelter Roc Allan in southwest France geology is the starting point, and the analyses used are revealing an amazing range of new facts about the Mesolithic. This paper will examine the methods used in French archaeology and how this approach lends a new perspective to site analysis. Methods are not limited to geologic analysis. Material provided by the French archaeologists Alain Turq and Luc Detrain will be incorporated in the paper.

The Beaches Revisited
(Session 16 - Fri. PM)

Laurie MacLean (Chain Rock Consulting & Management)

In the past 10-15 years, archaeology has greatly expanded our knowledge of the historic Beothuk. Many of the long-term effects of the European presence on these people, including their adoption of iron technology, retreat from the coast, and eventual extinction, have been described and partly interpreted. However, little research has addressed the early Beothuk response to the European presence in Newfoundland. New data from the Beaches site, Bonavista Bay, suggests that the Beothuks here practised a strong traditional lifestyle, despite the availability of European goods, until as late as the mid-seventeenth century. This includes aspects of early iron technology and settlement-subsistence patterns that are integral to understanding the large scale changes to subsequent Beothuk generations that have been considered typical of this culture.

Preliminary Results of the 1990-91 Excavations at the Hatzic Rock Site, Hatzic, B.C.
(Session 17 - Fri. PM)

Andrew R. Mason (University of British Columbia)

During 1991 the University of British Columbia and the Sto:lo Tribal Council conducted a collaborative excavation at the Hatzic Rock site, near Mission, B.C. Excavations concentrated on exposing the remains of an 8 by 9 metre structure partially excavated into the

side of a former river terrace. The work revealed structural data including multiple post mould features, an interior bench, and a large drainage trench located parallel to the north side. Large numbers of stemmed projectile points and pebble tools indicate a Charles Culture occupation dating from 4590 \pm 70 B.P. (WSU-4328) for the surface and 4930 \pm 70 BP (WSU-4327) for basal levels. These data provide substantial insight into this poorly understood period of British Columbia prehistory.

Naming the Sites - Citing the Names: Ground Survey, Oral History and Predictive Modelling on the Kanairiktok River, Labrador
(Session 22 - Sat. AM)

Kevin McAleese (Department of Municipal Affairs, Newfoundland)

A reconnaissance of the Kanairiktok River Valley during the 1991 field season located twenty archaeological sites. A few of these have spatially separate prehistoric, historic and recent occupations. At GdCn-1, the style and raw material of a few bifaces and flakes indicates an Intermediate Period Indian occupation, ca. 2500-3500 B.P. Wooden tent frames and cobble tent rings on the terrace immediately above indicates a recent occupation. Additional recent Innu camps were further documented by interviews with Inu elders of Shesharshit, Labrador. The river survey, artifacts and sites are described in this paper, and regional comparisons are made with assemblages from the Labrador interior and coast.

Fort Dufferin: Archaeological Investigations at a British Fort, Prairie Style
(Session 1 - Thurs. AM)

K. David McLeod (Culture, Heritage and Citizenship, Manitoba)

The usual perception of a British fort is a major military installation constructed primarily as a means of defence during conflicts, such as the Seven Years War or the War of 1812. Fort Dufferin, however, located on the west bank of the Red River 100 km south of Winnipeg, was designed solely as wintering quarters for the 1872-1875 British North American Boundary Commission. It was subsequently used by the North West Mounted Police as a mustering point prior to its march west in 1874, and also as a quarantine station for the first Mennonite settlers in 1875.

The Historic Resources Branch has conducted intermittent archaeological investigations of the fort since 1984, some of which have utilized new remote sensing techniques for the location of features. This paper will outline the historical background of Fort Dufferin and its significance to the Late Historic Period in Manitoba, as well as the results of the various archaeological studies.

Rodent Bones in Archaeological Sites
(Session 7 - Thurs. PM)

Richard E. Morlan (Canadian Museum of Civilization)

Rodent bones and teeth are often found in archaeological sites but dismissed as intrusive because of the animal's burrowing habits. Two facts are often overlooked in such dismissals: 1) not all rodents burrow; and 2) those that do so burrow to live, not to die. Although burrowing rodents sometimes die in their hibernacula, such deaths probably account for very few occurrences of rodent bones in archaeological sites. It is much more common for bones of both burrowing and non-burrowing rodents to be introduced to site deposits by burrow-digging burrowing predators whose presence may reflect important aspects of site formation processes. Rodent bones may also be contemporaneous with archaeological occupation debris. They may be brought to the site by people or by mammalian, avian and reptilian predators. They may be attracted to the site as commensal residents only to fall prey to people and their dogs. This paper discusses methods of taphonomic analysis designed to unravel the complex histories of rodent bones in archaeological sites.

An Archaeological Perspective on Neoeskimo Economics
(Session 12 - Fri. AM)

David Morrison (Canadian Museum of Civilization)

The excavation of a number of late pre-contact and early contact Inuvialuit sites in the western Canadian Arctic has revealed an interior occupational focus during the summer-autumn period which would not have been suspected from the ethnographic literature. It appears that while some Inuvialuit were whaling on the main Arctic coast, other groups or social segments spent this same crucial time of year exploiting fish

and caribou in the near-interior of the Eskimo Lakes. This type of dual exploitive pattern is comparable to the Nunamiut-Taremiut situation in northern Alaska and may be typical of the Western Eskimo in general. It has implications when considering the spread of Thule culture from the richer environments of Alaska and the Mackenzie Delta (which allow different economic strategies during the same season) to the much poorer environments of the Central Arctic.

The Laurentian Archaic at East Sugar Island
(Session 19 - Sat. AM)

Donna Morrison (Simon Fraser University) & Lawrence Jackson (Northeastern Archaeological Associates)

Recent examination of the bone, copper, and lithic artifacts from this site has provided many valuable insights into the adaptive strategies that humans employed in the Rice Lake region during this time period. Analysis of the material culture representing this regional manifestation not only contributes to our understanding of the widespread Laurentian Archaic tradition in general, but demonstrates the wide range of variability in technological and subsistence organization that can be expected from other sites across the Northeast. In this regard, the East Sugar Island site has proven to be an unique opportunity not only for testing our current theories on such adaptations but also for expanding them with renewed analysis.

The Kipling Cluster: An Early Archaic (Nettling) Site Complex
(Session 19 - Sat. AM)

A. Murray & J. Bursey (Ministry of Transportation, Ontario)

Beginning in the fall of 1989, intensive survey and excavation at a proposed highway interchange had begun to reveal a series of discrete, presumably related, Early Archaic, Nettling-like components in a relatively small geographic area. This introduction to the initial results of the investigations will discuss how improving the survey methodology and refining site significance criteria can contribute significantly to our understanding of the nature and distribution of the Early Archaic in southern Ontario. Additionally, the nature of Early Archaic settlement patterns will be discussed with reference to repeated use of a discrete area over several years.

Dorset Settlement and Subsistence at Phillip's Garden, Port au Choix, Newfoundland
(Session 7 - Thurs. AM)

Maribeth S. Murray (Memorial University of Newfoundland)

The analysis of a large faunal assemblage from a Dorset palaeoeskimo site in northern Newfoundland was undertaken. Results suggest that despite a varied resource base, the exploitation of marine mammals, particularly the Harp seal, was the focus of economic activity at the site. In addition, it is suggested that there is greater regional variability in Dorset subsistence activities and that the division of interior house space may not be as standardized as previously suggested.

Pre-Dorset/Dorset Transition: The State of the Question
(Session 6 - Thurs. PM)

Murielle Nagy (University of Alberta)

During the summers 1957-58-59, William Taylor Jr. excavated archaeological sites located on Mansel Island, Ivujivik and Sugluk (Salluit) in Nouveau-Québec. The results of this work can be found in several published articles, especially in a study of the origins of the Dorset culture published in 1968. Taylor's conclusions were as follows: there is a cultural continuity from Pre-Dorset to Dorset in the Canadian eastern Arctic and, within this area, the Dorset culture developed *in situ*.

What is remarkable about Taylor's work is that although he was using very small samples to reach his conclusions, the latter are still accepted by eastern Arctic archaeologists. However, despite a discourse that describes Pre-Dorset and Dorset as part of a cultural continuum, these two concepts are used primarily to contrast and accentuate cultural differences rather than to stress similarities between these two periods. Furthermore, the identification of the so-called "PreDorset/Dorset transitional" sites is not obvious. One might even ask if substantial cultural changes really took place between the Pre-Dorset and Dorset periods. This paper will discuss several issues linked to the Pre-Dorset/Dorset transitional period in the eastern Arctic.

Translation:

Durant les étés de 1957-58-59, William Taylor Jr. fouilla des sites archéologiques situés sur l'île Mansel, à Ivujivik et à Sugluk (Salluit) au Nouveau-Québec. Les résultats de ce travail furent publiés dans divers articles mais surtout dans une étude sur les origines de la culture dorsétienne parue en 1968. Les conclusions de Taylor étaient les suivantes: il existe une continuité culturelle entre le Pré-Dorsétien et le Dorsétien de l'Arctique oriental canadien et la culture Dorsétienne s'y est développée *in situ*.

Ce qu'il y a de remarquable dans le travail de Taylor c'est que ce dernier se basait sur de petits échantillonnages pour arriver à des conclusions qui sont toujours acceptées par les archéologues travaillant dans l'Arctique oriental. Cependant, malgré un discours qui décrit le Pré-Dorsétien et le Dorsétien comme faisant partie d'un continuum culturel, ces deux concepts sont surtout utilisés pour contraster et accentuer des différences culturelles et non pour souligner les similarités entre ces deux périodes. De plus, l'identification de sites dits de "transition" entre le Pré-Dorsétien et le Dorsétien n'est pas évidente. On peut même se demander s'il y a vraiment eu des changements culturels substantiels entre le Pré-Dorsétien et le Dorsétien. Cette communication discutera des problèmes relatifs à la période de transition entre le Pré-Dorsétien et le Dorsétien dans l'Arctique oriental.

A Computer Simulation of Coastal Population Ecology
(Session 3 - Thurs. AM)

R. Nash, A. Georgallas, N. Jan, & D. Hunter (St. Francis Xavier University)

We present a computer simulation representing a model of resource use by coastal populations with specific application to the Nimpkish of Vancouver Island. The model centres on a detailed representation of fluctuating resources, ranked by economic importance according to ethnographic and archaeological sources. The model may be used to predict yearly population changes and subsistence-settlement patterns. Two fundamental questions which we address are: 1) How a stable population arises and how carrying capacity reflects fluctuations in resources; 2) What circumstances may give rise to growth, steady-state, instability and chaos in the simulated population.

Using Ethnographic, Ethnohistoric and Ethnoarchaeological Data to Understand the Processing and Disposal of Plant and Animal Remains

(Session 11- Fri. AM)

Suzanne Needs-Howarth (University of Toronto)

The research on which this paper is based is part of a detailed quantification of diet at the Coleman site, a fifteenth century Iroquoian village near Waterloo, Ontario. Ethnographic and ethnohistoric information is used to determine how plant foods were processed, to infer likelihood of preservation, and to estimate the probability that the remains of larger animals may be distributed among several features. Ethnoarchaeological and ethnographic data on refuse disposal are examined to evaluate the effect of site formation processes on ecofact preservation, and to assess which features on the site may be lumped together for analytical purposes.

Observed Patterning in the Site Placement of Late Prehistoric Burial Mounds and Associated Campsites in South-Central Manitoba

(Session 1 - Thurs. AM)

Bev Nicholson (Brandon University)

Recent work in southwestern Manitoba has revealed a localized patterning in the placement of a series of Late Prehistoric burial mounds and associated camp sites. The positioning of these mounds in the context of widely diverse topographical variability indicates consistency in site choice and this consistency can be supposed to reflect the cosmology of the mound builders and their understanding of sacred landscape. Similarly, the positioning of the related camp sites follows a recognizable pattern which may, in part, be influenced by environmental constraints but can also be shown to be consistent with cosmological considerations unrelated to material well being. The probable cultural association of these mounds is hypothesized to be the hunter-gatherer Blackduck Complex based upon ceramics recovered from the associated camp sites. Several other distinctive mound complexes in the vicinity show different contextual configurations and these mounds probably reflect the cosmology of horticulturalists who occupied nearby camp sites.

Pots and Pans For Pelts: The European Copper and Brass Industry and the Fur Trade

(Session 4 - Thurs. PM)

Eric Oksanen (York University)

During the 17th and 18th centuries, French, Dutch, and English traders, missionaries and settlers imported copper and brass wares to North America. These goods were quickly assimilated into the aboriginal North American lifestyle after contact, displacing the native items; their remains are found on archaeological sites today. INAA has proved useful in separating European copper from Native copper. But, these kinds of analytical data can not be evaluated without historical context. Questions of European sources, technology, and trade relations are discussed with respect to the copper and the brass industry.

Distinguishing European Trade Copper and Northeastern North American Native Copper

(Session 4 - Thurs. PM)

L. A. Pavlish, R.G. Hancock, R.P. Beukens, R.M. Farquhar (University of Toronto), W.A. Fox (Canadian Parks Service), G.C. Wilson (Turnstone Geological Services), & W. Ross (Ministry of Culture and Communications, Ontario)

Instrumental neutron activation analysis (INAA), and Accelerator Mass Spectrometry (AMS) [Carbon-14 & REE], Lead Isotope analysis are employed to examine the problem of chemically distinguishing between 16th and 17th century European copper and northeastern North American native copper samples which were recovered from archaeological contexts. Samples from geological, archaeological and modern contexts are analyzed. Three chemically distinct groups of native copper are established. The geologically and archaeologically provenanced native copper samples are shown to separate from European kettle copper with concentration differences of up to three orders of magnitude in the elements Au, Sb, and As. Smaller concentration differences are found for other elements. The data suggest that, while it is not feasible to physically reconstruct copper trade goods, as can be done with pottery sherds, it is possible to identify scraps of materials that were made from the same batch of industrial metal, with the associated distinct possibility that they came from one trade item. The chemical separation of copper items between those of European and North American provenance may pro-

vide a measure of the volume and distribution of European trade goods throughout eastern North America during the 17th century, a period of critical social and political events among the aboriginal peoples. The chemical data may also contribute relative chronological information. Precontact copper items have had organics preserved within them AMS radio-carbon dated and represent some of the earliest workings of copper material in the world.

Basic Computer Imaging for Archaeological Mapping

(Session 22 - Sat. PM)

Micha Pazner, Nancy Thies (University of Western Ontario) & Roberto Chavez (The World Bank)

This paper introduces a collection of image-based techniques for acquiring, processing and presenting digital spatial data. The techniques were chosen because they are relatively easy to implement with personal computer equipment. The intent is to present tools for manipulating and communicating spatial information useful in archaeological research, exploration, excavation, and cultural resource management.

Standing on a Rock - Investigations at Fort Gibraltar I

(Session 1 - Thurs. AM)

Kate Peach & Barry Greco (The Forks Public Archaeology Project)

The Forks Public Archaeology Project, Winnipeg, has allowed 1645 members of the public to experience archaeology over the last three years. The excavation has focused on the North West Company provisioning post, Fort Gibraltar I (1810-1816). The original records describe the fort as covering an area of approximately 100 square feet, with palisades enclosing nine buildings. Evidence of two of these structures has been uncovered. One cellar depression, a temporary storage pit, as well as an ash refuse pit have also been located. Two activity areas have been located between the two buildings. One of these relates to metal working/reworking, while the second indicates gunflint and lithic tool manufacture. Associated artifacts include "imported" trade goods as well as items made "on site". A number of the diagnostic artifacts, such as "Jesuit" trade rings and a trigger-guard, appear to reflect earlier French influences.

Archaeological Evidence of Prehistoric Iroquoian Genocidal Warfare (Session 9 - Thurs. PM)

James F. Pendergast (Canadian Museum of Civilization)

Archaeological evidence on Huron sites along the north shore of Lake Ontario coupled with archaeological evidence on Saint Lawrence Iroquoian sites to the east of Lake Ontario in Jefferson County, New York, indicate that these two communities were at war during the late prehistoric period. One effect of this hostile relationship was the withdrawal of these Hurons to the hinterland in the vicinity of Balsam Lake in Victoria County near Peterborough. It may also have resulted in the decimation of the Saint Lawrence Iroquoians in Jefferson County, New York, which resulted in their having abandoned their territory by the time of the Contact or Protohistoric periods in this region.

Translation:

Des évidences archéologiques sur les sites hurons longeant la Rive Nord du lac Ontario appuyé par d'autres évidences archéologique sur les sites des Iroquoiens du Saint-Laurent à l'est du lac Ontario dans le comté de Jefferson, New York, nous indiquent que ces deux communautés était en guerre à la fin de la période préhistorique. Une conséquence de cette relation d'animosité est le retrait de ces Hurons vers l'arrière-pays dans la région du Lac Balsam, dans le Comté de Victoria près de Peterborough. Il est possible que ce retrait ai créé la décimation des Iroquoiens du Saint-Laurent dans le Comté de Jefferson, New York, produisant l'abandon de leur territoire à la période du Contact ou à la période Protohistorique dans cette région.

Understanding Southern Ontario Before "Mississippification": The Transition From Middle to Late Woodland (Session 20 - Sat. AM)

Robert H. Pihl (Archaeological Services Inc.)

A growing number of authors are challenging the widely accepted notions of an Iroquoian *in situ* development within southern Ontario, and are postulating alternative explanations for the origins of its distin-

ctive cultural assemblage. These explanations often rely on a core-periphery type of model invoking the "Mississippification" of Late Woodland cultures, or the incursion of exogenous populations into the region. This paper briefly addresses these hypotheses from a pre-Iroquoian perspective and will focus on the evidence for pre A.D. 800 inter-regional contact with the south (i.e. the Mississippi valley via the Ohio and Illinois Rivers), and the context and data for understanding the transition of an *in situ* development of Middle to Late Woodland cultures in southern Ontario. It is argued that currently available data still provide a consistent explanation without relying on the above mentioned external factors.

Rough Translation:

Un nombre croissant d'auteurs remettent en question l'acceptation générale d'un développement "in situ" des Iroquoiens dans le sud de l'Ontario, et nous soumettent des explications alternatives en relation aux origines de l'assemblage culturel distinctif. Ces explications s'associent à une périphérie générale qui invoque la "Mississippification" des cultures du Sylvicole Supérieur, ou une invasion des populations d'origine externe à l'intérieur de la région. Notre présentation s'arrête brièvement aux hypothèses dans une angle pré-Iroquoien et se concentre sur les évidences du contact inter-régional de la période pré A.D. 800 avec la région du sud (ex.: la vallée du Mississippi vers les Rivières de l'Ohio et de l'Illinois), et le contexte et informations pour éclairer le développement "in situ" des cultures dans le sud de l'Ontario. En tenant compte des données disponibles, nous considérons comme encore valable la continuité culturelle entre les cultures du Sylvicole moyen et supérieur sans faire intervenir les facteurs externes.

**Palaeo-Eskimo Remains From the Lower Mackenzie Valley, District of Mackenzie, Northwest Territories, Canada
(Session 6 - Thurs. AM)**

Jean-Luc Pilon (Canadian Museum of Civilization)

To date evidence of Arctic Small Tool tradition use of the southwest Anderson Plain, east of Inuvik, has been found at four distinct localities. East of this region, a southern shift of Pre-Dorset range into the barrenlands of the District of Keewatin and perhaps as far west as Great Slave and Great Bear Lakes is gen-

erally thought to have begun about 3500 B.P. This inland movement was made possible by a marked dependence on the seasonal movements of caribou from their tundra calving grounds to their winter ranges in the northern boreal forest. Available radiocarbon dates for two of the Anderson Plain sites are roughly contemporaneous with this movement; 3390±255 (S-3000) and 3470±430 (S-3377) B.P. respectively. However, a distinctive lithic raw material, vesicular clinker, links three of these sites to the coastal region around Cape Bathurst, more than 300 km north of the northernmost of the four Anderson Plain ASTt sites. The maintenance of a coastal link is in contrast to the specialized economic pattern of the Keewatin Pre-Dorset. Moreover, an assessment of the artifacts found at the Anderson Plain ASTt sites suggests closer links with the contemporaneous ASTt manifestation to the west (Denbigh Flint Complex). Indeed, these few sites may attest to the western extent of the Denbigh Flint Complex range at this time period.

Translation:

A date, des artefacts de la tradition microlithique de l'Arctique (TMA) ont été identifiés sur quatre gisements du sud-ouest de la plaine d'Anderson, à l'est d'Inuvik. A l'est de cette région, on prétend que le mouvement des Pré-Dorsétiens vers le sud dans les Barrenlands s'est effectué vers 3500 ans B.P. Ce déplacement vers l'intérieur des terres fut facilité par l'exploitation du caribou tant sur ses territoires d'hivernage dans la forêt boréale que sur les aires de mise bas de la tundra. Les datations au radiocarbone des sites de la plaine d'Anderson suggèrent que cette région fut occupée à la même époque, soit 3390 ±255 (S-3000) et 3470 ±430 (S-3377) B.P. Cependant la présence sur trois des quatre sites d'une matière première provenant de la région de la péninsule du Cape Bathurst, à plus de 300 km au nord, indique l'utilisation ou tout au moins le maintien de contacts avec la zone côtière. La fréquentation de la zone côtière est un élément qui distingue les Pré-Dorsétiens des Barrenlands des porteurs de la TMA de la plaine d'Anderson. Enfin, l'outillage des sites de la plaine d'Anderson s'apparente plus aux styles du Denbigh Flint Complex. On peut donc avancer l'hypothèse que les sites de la TMA trouvées dans la plaine d'Anderson représentent l'extension orientale du territoire effectivement sous l'influence du Denbigh Flint Complex) à cette époque.

**Présence Groswaterienne en Basse-Côte-Nord
Oriental, Québec
(Session 6 - Thurs. PM)**

Jean-Yves Pintal (Québec)

La Basse-Côte-Nord du golfe Saint-Laurent était depuis longtemps un territoire ancestral amérindien lors de l'arrivée des premiers groupes paléoesquimaux dans la région, il y a environ 2500 ans AA. Malgré cette contrainte relative, ces derniers se sont semblent-ils bien adaptés à leur nouvel environnement, en témoignent la douzaine de sites mis au jour au cours des vingt dernières années. Des fouilles étendues sur un site particulier à Blanc-Sablon, EiBg-43A, ont révélé une occupation complexe bien structurée, où plusieurs activités concurrentes se tenaient sur un espace dé-limité. La présentation des composantes de ce site nous permettra de décrire les caractéristiques de la culture matérielle de ces Paléoesquimux (Gros-water), leur mode d'occupation ainsi que leur système d'établissement.

Rough Translation:

The lower north coast of the Gulf of St. Lawrence was for a long time the ancestral territory of Amerindians at the time of the arrival of the first Palaeo-Eskimos into the region, around 2500 B.P. Despite this, the latter group seemed to have adapted well to their new environment, as evidenced by the dozen sites recovered in the region during the last 20 years. The extensive excavations at one site in particular, Blanc-Sablon (EiBg-43a), have revealed a complex, well organized occupation, where several concurrent activities were taking place in a well defined area. A review of the all of these components on the site will allow us to describe the material culture characteristics of these Palaeo-Eskimos (Gros-water), their mode of occupation, as well as their settlement system.

**Iroquoians in the St. Lawrence Estuary: The
Ouellet Site Seal Hunters
(Session 9 - Thurs. PM)**

Michel Plourde (Contractual Archaeologist)

The Ouellet site sheds new light on the presence of Iroquoians in the St. Lawrence estuary. Archaeological excavations in 1986 and 1987 revealed that a multi-family camp, occupied in the mid-13th century

A.D., had been set up near the mouth of the Saguenay River. The many seal bone and clam shell fragments found in hearths on the site indicate that the inhabitants exploited marine resources. Their pottery's decorative patterns differ from those of Iroquoian groups upstream from Trois-Rivières. This cultural difference was noted by Jacques Cartier 200 years later as he travelled up the St. Lawrence River in 1535.

Translation:

Le site Ouellet jette un nouvel éclairage sur la présence des Iroquoiens dans l'estuaire du Saint-Laurent. Les excavations de 1986 et de 1987 ont révélé l'existence d'un campement multi-familial localisé près de l'embouchure du Saguenay et occupé principalement au milieu du 13^e siècle de notre ère. L'abondance des restes de phoques et de myes dans les foyers révélé une exploitation axée sur des ressources marines. Les motifs décoratifs de la céramique différent de ceux des groupes iroquoiens situés en amont de Trois-Rivières, une démarcation culturelle qui sera reconnue 200 ans plus tard par Jacques Cartier lors de sa remontée du Saint-Laurent en 1535.

**La Continuité Du Paléoesquimau Dans La Baie
Du Diana (Arctique Québécois)
(Session 6 - Thurs. PM)**

Patrick Plumet (Université du Québec à Montréal)

Les recherches archéologiques menées dans la baie du Diana jusqu'en 1980, et particulièrement à l'île du Diana, montrent que l'occupation de la région commence dès le début du Paléoesquimau inférieur et se poursuit au-delà des limites habituelles assignées au Paléoesquimau supérieur. Le site Tuvaaluk, en effet, contient une structure attestant d'une certaine influence thuléenne, mais seulement dans l'organisation de l'habitation, datée de 470-90 B.P., et un gisement, vers les plus basses plages, qui a livré du matériel dorsétien associé à des dates postérieures à 450 B.P. D'un bout à l'autre de cette séquence, la matière première utilisée montre que les relations étaient beaucoup plus étroites avec le Labrador qu'avec les régions situées plus à l'ouest.

Rough Translation:

The archaeological research which took place in Diana Bay until 1980, and particularly on Diana Island, has demonstrated that the occupation of the region began

at the beginning of the early Palaeo-Eskimo, and continued through the period generally associated with the end of the late Palaeo-Eskimo. Proof of this can be seen at the Tuvaaluk site, which contained a structure reflecting Thule influences, but only in the organization of the habitation, and is dated to 470 ± 90 B.P.; and from another layer of the site, toward the lowest beaches, which yielded Dorset material associated with dates later than 450 B.P. Throughout this sequence, the materials primarily used at this site demonstrate much closer relations to Labrador than with regions further to the west.

**Paleodiet in the Lower Fraser Canyon and
Fraser Valley, British Columbia**
(Session 3 - Thurs. AM)

David Pokotylo, Brian Chisholm (University of British Columbia) & Toshio Nakamura (University of Nagoya)

This paper reports the results of accelerator mass spectrometer (AMS) radiocarbon dating and stable carbon isotope analysis of eight burials from the lower Fraser Canyon, and one burial from the Chilliwack area in the Fraser valley. Relative proportions of marine (salmon) versus terrestrial protein for these individuals are compared to values for populations in the mid-Fraser and Thompson River valleys, and the Fraser delta, to identify regional and temporal differences in prehistoric salmon utilization. The lower Fraser Canyon represents a boundary between rates of salmon consumption for Interior Plateau and south Coast populations.

**Public Archaeology at the Hatzic Site, British
Columbia**
(Session 23 - Sat. AM)

David Pokotylo & Gregory Brass (University of British Columbia)

During May-July 1991, the University of British Columbia and the Sto:lo Tribal Council conducted a collaborative archaeological project at the Hatzic Rock site (DgRn-23), situated near Mission in the lower Fraser River valley. An on-site public interpretation program was an integral aspect of the project, and attracted over 7000 visitors to the site during the excavations. This paper describes the objectives of the interpretive programming and reviews the results from professional, First Nations and public perspectives.

Rough Translation:

Durant la période de Mai-Juillet 1991, l'Université de la Colombie Britannique et le Conseil de Tribu Sto:lo ont effectuée un projet archéologique au site Hatzic Rock (DgRn-23), situé près de Mission dans la vallée du bas de la Rivière Fraser. Un programme d'interprétation du public sur le site faisait partie intégrale de ce projet, ce qui à amener un nombre important de visiteurs, plus de 7,000 au site lors des fouilles. Ce document a pour but de déterminer les objectifs de ce programme d'interprétation et de présenter les résultats des professionnels, des premières Nations, ainsi que les perspectives du public.

**The Bead Hill Site (AkGs-5, 8): An Historic
Seneca Component on the North Shore of Lake
Ontario**
(Session 15 - Fri. PM)

Dana R. Poulton (London)

This paper describes the history of discoveries and investigations at the Bead Hill site, an historic Seneca component on the Lower Rouge River on the eastern fringe of Metropolitan Toronto. In part, the paper details the methods and results of limited test excavations carried out on behalf of the Canadian Parks Service and the National Historic Sites and Monuments Board of Canada in 1991.

The collective investigations of this site have recovered in excess of 3000 artifacts, including a wide range of European trade goods, among them 278 glass beads. Analyses demonstrate that this material is consistent with the time span indicated by historical documentation for the Seneca occupation of the Lower Rouge, ca. A.D. 1669-1687. The site is strategically situated, commanding the base of the eastern branch of the Passage de Toronto: the Rouge trail. Research indicates that Bead Hill may well represent the historically documented village of Ganestiguiagon, one of the seven villages of the Iroquois du Nord which were established on the north shore of Lake Ontario in the decade following 1665.

**Archaic Materials From the Gull River
Drainage, South-Central Ontario**
(Session 19 - Sat. AM)

Peter G. Ramsden (McMaster University)

Archaic period materials recovered from the Gull

River Drainage, encompassing parts of the Haliburton highlands and the Kawartha Lakes in south central Ontario, are predominantly of middle Archaic age, and appear to be most closely related to the Vergennes phase of the Laurentian Tradition. It is suggested that this reflects the northward movement of the Lake Forest zone and other environmental changes related to the mid-Holocene climatic optimum, and a consequent northward expansion of Laurentian Archaic people from eastern Ontario via the Trent and Gull River systems.

The "Sacredness" of Carved Stone Pipes in the Ojibwa-Cree Area of the Northern Mid-Continent: A Spatial and Temporal Dilemma
(Session 14 - Fri. AM)

C.S. "Paddy" Reid (Ministry of Culture and Communications, Ontario)

Excavations over four years at the Ballynacree Site (DkKp-8) at the mouth of the Winnipeg River in northwestern Ontario uncovered a relatively large number of carved stone pipes in the French Fur Trade stratum. The pipes were extremely varied in size and shape, and one was in the "calumet" style. During analysis of the DkKp-8 materials the author discovered major discrepancies in pipe styles between the French, North West Company, and Hudson Bay Company strata; a subsequent examination of over 3000 site collections from northwestern Ontario revealed that only one stone pipe could be classed as prehistoric, and it was probably an imported Adena-Hopewell burial offering. It also became apparent that in the period between French contact in the early 1700s and the creation of the Hudson Bay Company monopoly in 1821 stone pipe styles in the study area were extremely varied, however, after 1821 the "calumet" style began to dominate and stone pipe frequencies declined.

The Transitional Period on the Island of Newfoundland
(Session 6 - Thurs. PM)

M.A.P. Renouf (Memorial University of Newfoundland)

This paper presents new material from the transitional pre-Dorset to Dorset period, which was one of the focuses of William Taylor's archaeological research. Both sites come from Port au Choix, northwestern

Newfoundland, and are particularly important because of the organic preservation which has allowed the recovery of harpoon heads and faunal remains. The sites are interesting in a number of ways: [1] the older, larger winter-spring site contrasts with the younger, smaller, possibly summer site, [2] together both sites contrast with the later and very much larger Dorset palaeoeskimo site close by, and [3] the extremely fine lithics from the later of the two transitional sites, which are so far unique to the island of Newfoundland. The two sites are examined from the perspective of changing resource use over time, and implications are drawn for the transitional period throughout the eastern arctic.

Translation:

Cette communication discute de données nouvelles ayant trait au changement du Pré-Dorsétien au Dorsétien. Cette transition est un thème qui a retenu l'attention de William Taylor. Les deux sites qui seront décrits se trouvent à Port au Choix, au nord-ouest terre-neuvien. Ils sont particulièrement importants en raison de la bonne préservation des matières organiques incluant les têtes de harpons et les restes fauniques. De plus, nous notons que [1] le plus ancien des deux sites atteste d'une occupation d'hiver-printemps tandis que le site plus récent aurait été occupé vraisemblablement en saison estivale, [2] les deux sites se distinguent de façon importante des sites dorsétien de la région, [3] l'outillage du site transitionnelle plus récent est beaucoup plus raffiné que le site plus ancien. Soulignons que ces deux sites transitionnelles sont les premiers de ce genre connus sur l'île de Terre-Neuve. Nous y traitons des changements économiques et des implications qu'ont ces modifications pour comprendre la période de transition dans l'Arctique oriental.

Table Scraps From a Prime Minister
(Session 7 - Thurs. PM)

Ann Rick (Canadian Museum of Nature)

Woodside House in Kitchener, Ontario, was the boyhood home from 1886 to 1893 of Canada's tenth prime minister, William Lyon Mackenzie King. It has been a National Historic Site since 1954. A privy pit near the house, excavated by the Canadian Parks Service, is attributed to the King family occupation.

Mammal, bird and fish remains found in the pit were analyzed by the Zooarchaeology group of the

Canadian Museum of Nature. Together with documentary evidence, these bones give us a glimpse of late nineteenth-century middle class life as lived by a famous Ontario family.

An Historic Ojibway Cemetery on Beausoleil Island

(Session 4 - Thurs. AM)

Brian Ross (Canadian Parks Service)

The historic Ojibway cemetery at Cedar Spring on Beausoleil Island, in the Georgian Bay Islands National Park, was investigated and documented during the 1991 field season. The intent of this project was to gather as much information as possible on the true extent and orientation of this cemetery without any site intrusion. The cemetery was first mapped using standard surveying techniques and then mapped by remote sensing, using a ground conductivity meter. A comparison between two mapping techniques indicates that such remote sensing is a valuable predictive tool in locating archaeological resources.

The Interlakes Composite: A Re-definition of the Aggassiz-Minong Peninsula

(Session 14 - Fri. AM)

W.A. Ross (Culture & Communications, Ontario)

This paper deals with the archaeology of the earliest inhabitants of the area between Glacial Lakes Aggassiz and Minong. It details past archaeological investigations in the area, summarizes the current hypothesis suggested by the literature and suggests a new approach to viewing these early settlers. Using Symms' definition of a composite, a new term "The Interlakes Composite" is suggested to define the archaeological complexes discussed in the paper.

The Sadlermiut - Mysterious or Misunderstood?

(Session 12 - Fri. PM)

Susan Rowley (Pittsburgh)

In the spring of 1903 a dog team left the whaling station at Cape Low on Southampton Island for the Sadlermiut camp at Native Point. Nothing had been heard from the Sadlermiut since 1902 and the whalers feared something had happened. As they approached the settlement their suspicions were confirmed: something was dreadfully wrong. No light glowed from the

qarmats and no one came to greet them. The scene discovered was gruesome. In every qarmat people were curled up on the sleeping platforms, lying where they had died, victims of an introduced disease.

Throughout the north, Inuit suffered tremendously from the effects of introduced diseases. Families were destroyed and camps disbanded as survivors joined with others to survive. However, the epidemic on Southampton Island went one step further, it wiped out an entire regional group: the Sadlermiut. In so doing a mystery was created that has proved an intellectual curiosity for archaeologists. Who were the Sadlermiut? Is it possible that they were the last eastern Arctic survivors of the Dorset culture, or were they an aberrant group of Thule Inuit?

Our desire to perceive the Sadlermiut as the last of the Dorset culture or an aberrant Thule population has coloured our interpretation of the data. In this paper I will make use of evidence from history, oral history, archaeology and ethnography to argue that we have been looking in the wrong direction for information about the Sadlermiut. Most of our ethnographic and oral history data come from the Aivilingmiut of the west coast of Hudson Bay. Instead, we should be examining links between the Sadlermiut and the Sikosuilarmiut of Foxe Peninsula and the Inuit of north-eastern Quebec. Rather than being a remnant or an aberrant group, the Sadlermiut were another example of Inuit ability to adapt to different environmental constraints.

Advances in the Understanding of the Archaic Stage in Maine

(Session 19 - Sat. AM)

David Sanger (University of Maine, Orono) & James B. Petersen (University of Maine, Farmington)

Until recently, the Archaic stage in Maine has meant the Late Archaic, a complex period where competing models far exceeded the data they purported to explain. New data on the Early and Middle Archaic, the result of a number of excavated sites and nearly 50 radiocarbon dates, provide a different perspective. Radiocarbon determinations up to 10,000 B.P., coupled with deeply stratified sequences, have demonstrated an Early Archaic and Middle Archaic presence in river valleys and in close proximity to wetlands. Results of several ongoing research efforts in Maine define a suite of technologic and morphologic traits that do not meet earlier expectations based on bifacial lithic traditions found further to the south.

Equipped with an altered perspective on the Early and Middle Archaic, it is profitable to re-examine the Late Archaic of Maine. Of special importance is the relationship between the Middle and Late Archaic and the utility of borrowing, *in toto*, culture types from other regions of the Northeast. The debate over indigenous as opposed to external influences continues.

Transformation and Disease: Precontact Ontario Iroquoians
(Session 16 - Fri. PM)

Shelley Saunders, Peter Ramsden & Ann Herring
(McMaster University)

Skeletal biologists have now begun to document the physical evidence for the effects of European contact on various North American Native populations and to compare this data to published views by historical demographers and ethnohistorians. We review some of these skeletal studies and discuss the validity and relative strengths of the biological data by way of introduction to a regional example.

Ontario Iroquoia should be an excellent testing ground for the impact of European diseases on Native cultures since we have ethnohistoric records dating to the time of earliest contact and substantial archaeological and osteological evidence bearing on this time period. The ethnohistoric records relate accounts of severe epidemics in the early 1600's some time after contact, and several researchers take the view that mortality increased dramatically with the introduction of European pathogens. On the other hand, protohistoric Iroquoian society had already been substantially transformed, experiencing increased population density as a result of crowding and immigration. The social circumstances of Ontario Iroquoian longhouse village life undoubtedly affected the disease ecology of these groups in a variety of ways. We discuss the possibility that Ontario Iroquoians were already dealing with a heightened infection load and perhaps even epidemics before contact.

Prehistoric Fauna in a Vertical Fissure Cave in the Niagara Escarpment, Dufferin County, Ontario

(Session 7 - Thurs. AM)

Howard Savage (University of Toronto)

Exploration of a vertical fissure cave to a depth of 75 feet in the Niagara Escarpment, Dufferin County, Ontario in 1990 yielded a considerable quantity of faunal bone and shell species. Bone specimens of the Marten (*Martes americana*), previously known only from archaeological sites in southern Ontario between 1250 to 1650 A.D. were identified, one of which was Isotrace-dated to 510 60 years B.P. A Pika bone (*Ochotona* sp.), not previously dated by radio-carbon or Isotrace methods in eastern North America, was dated to 8670 220 years B.P. Present-day habitats of the Pika in mountainous terrain in western North America, suggest extrapolation of similar habitat in the post-glacial period of Palaeo-Indian occupation of southern Ontario. Heat-altered bone remnants from this period of Ontario prehistory should be examined for the presence of Pika species.

Thule Eskimo Bowhead Whale Selection: a Biometrical Analysis
(Session 12 - Fri. AM)

James M. Savelle (McGill University) & Allen P. McCartney (University of Arkansas)

Biometrical analyses of bowhead whale bone to estimate age/length at death of individual whales represented at Thule sites were conducted in the central Canadian Arctic in 1978 (McCartney) and 1988 (McCartney and Savelle). While summaries of the overall results have been previously reported by us, in this paper we present a breakdown of whale lengths by individual region and according to site type (i.e. residential vs. processing). These results are in turn compared with age/length estimates of naturally beached Early Holocene bowhead whales measured by us in 1990. The analyses suggest that a) bowhead bones at Thule Eskimo sites derive almost exclusively from active whale hunting, and b) regional variation in age/length profiles at Thule sites is related to regional variation in bowhead abundance and predictability.

Bruce Schroeder (University of Toronto) -
Nothing Submitted.

**Early Historic Exchange Patterns of the Seneca
and Susquehannock**
(Session 16 - Fri. PM)

Martha L. Sempowski (Rochester Museum and
Science Center)

This study is aimed at elucidating the nature of trading relationships affecting the Seneca and the Susquehannock during the critical early historic period (A.D. 1575-1625). It is hypothesized that a pattern of close interaction, involving the exchange of European goods, marine shell and other exotics, existed between the two groups during the early part of this period, but was disrupted at the beginning of the seventeenth century. In order to test this hypothesis, several key categories of artifacts from Seneca and Susquehannock sites of this period will be intensively compared for possible time-related patterns of similarities and differences.

**Identification of Archaeological Materials by
Fourier Transform Infrared Spectrophotometry
and FTIR Microscopy**
(Session 4 - Thurs. PM)

Christopher Sergeant (Canadian Parks Service)

FTIR has proved to be a very powerful tool in Conservation Science, where a variety of organic and inorganic materials must be identified, often with severe restrictions on sample size. Examples are coatings, resins, corrosion products, mineral pigments, and commercial products used to conserve artifacts. In some materials, such as fats and oils, the degree of degradation of the samples can be determined by the appearance of spectral peaks of characteristic degradation products. FTIR microscopy allows the analysis of very small samples, such as cross-sections of multiple paint, varnish and dirt layers, or single crystals on the surface of archaeological artifacts.

**The Lithic Tradition at Wadi Ziqlab: A Late
Neolithic Site in Northern Jordan**
(Session 13 - Fri. AM)

Julian Siggers (University of Toronto)

This paper focuses on the lithic assemblage from Wadi Ziqlab, a late Neolithic farmstead site in northern Jordan. In keeping with late Neolithic lithic traditions, and mid Holocene tools in general, the assem-

blage is predominantly destandardised or expedient in nature. The paper will be divided into two sections. First, I will present an outline of the preliminary results of a technological and use-wear analysis of the assemblage. Specific reference will be made to the ways in which tool use data can help reconstruct Neolithic behavioral dynamics. The second section will be a theoretical investigation into the nature of Neolithic tool destandardisation. This discussion will examine the articulation of expedient technology and changes in mid Holocene settlement and subsistence practises.

**The Gainey and Butler Sites as Focal Points for
Caribou and People**
(Session 2 - Thurs. AM)

Don Simons (Michigan Archaeological Society)

The hypothesis for caribou as a major prey species of Early Palaeo-Indians in the Great Lakes region is supported by data from the Gainey and Butler sites. The two sites are located 1.6 km apart in Grand Blanc Township, Genesee County, Michigan. Data involving tool typology and Indian trail, a unique landform and biome, are combined with socio-economic theory to produce a model wherein seasonally migratory hunter-gatherers patterned on caribou initiate the aboriginal settlement of the Lower Peninsula of Michigan.

**The History of Contact with Europeans in the
Northeast: A Wendat Perspective**
(Session 16- Fri. PM)

Georges Sioui (Newberry Library, Chicago)

Prior to the coming of the Europeans, the Northeast was, by in large, an Algonkian universe where Iroquoians, generally named Nadouek by the Algonkian (Aljic) majority, were regarded as fairly recent intruders. I propose to examine and compare the prehistorical and historical trajectories of the two best known groups of peoples belonging to this family: the Wendat and the Hodenosaunee.

One of my hypothetical lines will be that the Nadouek eventually saw in the wholesale adoption of agriculture a way of making up for their smallness as well as designing a role and a vocation for themselves amidst a world of Aljic landlords who, for their part, did not have to make such a drastic concession in a nomadic way of life; a way of life which they, the Nadouek, saw as spiritually richer and materially more enjoyable than the sedentary compromise.

Thereafter I will turn to the question of how one group of surviving Nadouek, the Huron-Wendat, have traditionally looked at the history of its contact with Europeans and how this group conceives of the future of that history.

An Alternative Approach to the Analysis of a Chief's House
(Session 15 - Fri. AM)

Angele Smith (Toronto)

Social differentiation on Iroquoian sites has traditionally been determined through the archaeological analysis of house settlement data. In these studies, characteristics such as longest house and greatest density of wall posts, internal house pits, and post moulds have been used to interpret specific houses on sites as chiefs' houses. Finlayson (1985) used these criteria at Draper, a 15th century Huron village in Pickering Township. In this paper, I compare two Draper houses - one, a chief's house, based on the criteria above, and another "non-chief's" house. The analysis involves examining the variation within and between artifact assemblages and the distribution of artifacts through these houses. The considerable differences observed may be explained by variation in: a) house function; b) amount of status held by the headman of the house; and/or c) length of house occupation. As each of these may be taken as evidence for a chief, this paper introduces an alternative method for the identification of chiefs' houses.

Computer Plotting of Archaeological Data Made Easy
(Session 22 - Sat. AM)

David G. Smith (University of Toronto), Robert G. Mayer (Mayer Heritage Consultants Inc.) & Heidi Bohaker (University of Western Ontario)

Cartographic applications of *Surfer* (Version 4), in combination with other custom software programs designed by Jim Keron and Heidi Bohaker, are presented with reference to archaeological data obtained from recent assessments of Native villages. Using a standard IBM PC computer and a laser printer, high quality camera ready drawings can be prepared with relative ease and efficiency from triangulation measurements, bearing and distance observations, and Cartesian readings. Specific examples to be shown in-

clude contour maps, site excavation plans, artifact distributions and settlement pattern reconstructions. The drawings can also be readily incorporated into many of the standard word processing programs for changing scales and orientations to fit publication requirements.

Oxbow, McKean, and the Old Copper Culture: A Discussion of Ethnicity at the Castor Creek Site
(Session 10 - Thurs. PM)

Theresa C. Sparks (University of Calgary)

The archaeological period called the Early Middle Prehistoric II (5,000 to 3,500 B.P.) on the Northern Plains is well represented in the archaeological record. Cultural processes within that period, however, remain poorly understood. Many features appear for the first time including the presence of dogs and large scale "ceremonial" structures (Medicine Wheels). This period also sees the end of some buffalo jumps, and the possible temporal co-existence of two cultural groups (McKean and Oxbow) in the Northern Plains.

The notion of two cultures inhabiting the same region relies heavily upon morphological changes in projectile points. Those who posit that McKean and Oxbow represent two separate cultures also suggest that McKean is a derivative of a Great Basin culture, while Oxbow represents an *in situ* development. An alternative view, drawing on suggested similarities between the two lithic technologies, posits a mono-cultural model wherein McKean and Oxbow represent variants within the same cultural complex. This debate is further complicated in that a few archaeological excavations (Castor Creek, Hawkwood) show McKean and Oxbow associated in the same levels. In addition to cultural remains, including Oxbow and McKean points, a thin crescent-shaped copper blade was recovered near the site, which seems to have a cultural affiliation with the Old Copper Culture of the Great Lakes region. The focus of my research project was to examine aspects of culture beyond point styles in an attempt to discover discontinuity between Oxbow and McKean "cultures".

**Site Formation Processes and Thule
Archaeofauna
(Session 12 - Fri. AM)**

Doug Stenton (Arctic College) & Robert Park (University of British Columbia)

The material record of the Thule culture in the Canadian Arctic is rich and diverse, especially that portion represented by winter sites of semisubterranean houses. The contents of these structures have played a pivotal role in modelling developments in Thule settlement and subsistence behaviour. Reconstructions of Thule subsistence behaviour continue to be based primarily on the analysis of faunal assemblages; however few studies have recognized the interpretive limitations imposed by successional use of Thule winter house ruins and related structures. Through a discussion of site formation processes as they pertain to faunal remains in Thule winter houses, we argue that certain inferences concerning Thule settlement and subsistence behaviour are based on uncritical interpretations of the faunal data. Directions for future research in this area are outlined.

**Meat in Acadian Diets: Early Indications
(Session 7 - Thurs. AM)**

Francis Stewart (University of New Brunswick)

Relatively few Acadian sites have been excavated and thus, the number of faunal samples is limited but those which are available provide some interesting insights into the meat portions of the diets of the early Acadians. Using three sites, primarily, one each from New Brunswick, Nova Scotia, and Prince Edward Island, what is presently known from Acadian faunal remains is reviewed. Some possible interpretations and suggestions for further research are offered.

**Fauna From the Historic/Prehistoric Site of
Forks, Manitoba
(Session 7 - Thurs. PM)**

Kathlyn Stewart (Canadian Museum of Nature)

The archaeological site of Forks, located in modern Winnipeg at the junction of the Red and Assiniboine Rivers, contains a well-preserved faunal sequence dating from ca 1500 BP to the present. Over 50,000 elements of all vertebrate classes have been identified, with most deriving from the immediate pre-contact

and historic levels. The diversity of fauna changes radically through the sequence, as do changes in hunting/fishing practices. Not surprisingly, this is particularly noticeable in the early 1700's, when the hunting/fishing practices of local Indian groups were replaced by those of the European fur traders. Both wild and domestic animals are present throughout the site, with hare (*Lepus americanus*), bison (*Bison bison*), beaver (*Castor canadensis*) and muskrat (*Ondatra zibethicus*) the most common of the wild animals. The latter two are predictably more common in the historic levels. Considerable numbers of birds, fish, frogs and toads are also present throughout the site. Of special interest is the presence of channel catfish (*Ictalurus punctatus*) which average a total length over 1 metre, larger than modern channel catfish in the area. Further changes in the diversity and composition of the Forks fauna occur with the establishment of the railway in the Forks area in the 1880's, reflecting the impact of increased human activity.

**Prehistoric Northern Influences in the Middle
Atlantic Region
(Session 20 - Sat. AM)**

Michael Stewart (Temple University)

This paper explores potential interactions between Late Woodland cultures of the Middle Atlantic region and those located in the region to the north that came to be known as Iroquoia. The relationship between Owasco, Clemen's Island and other contemporaneous cultures in southerly sections of the Ridge and Valley and Piedmont physiographic provinces is addressed. In addition, the differential development of agriculturally based cultures in three of the major drainage systems of the Middle Atlantic Region (Delaware, Susquehanna, Potomac) is tentatively linked with the nature of northern interactions.

Rough Translation:

Cette présentation explore les interactions potentielles entre les cultures Sylvicoles Supérieures de la région du centre de l'Atlantique ainsi que celles qui sont situées au nord que l'on nomme Iroquoisie. Les relations entre les cultures contemporaines Owasco, Clemen's Island et les autres cultures situées plus au sud près de la hauteur des terres et dans la région du Piedmont sont aussi discutées. De plus, la distinction du développement des cultures basses sous l'agricul-

ture dans trois des systèmes hydrographiques du milieu de la Région de l'Atlantique (Delaware, Susquehanna, Potomac) est mis en relation avec la nature des interactions avec la région du nord.

Northern Ontario Ceramics: Taking it to the Source

(Session 4 - Thurs. AM)

Carole Stimmell (Toronto Board of Education), Jean-Luc Pilon (Canadian Museum of Civilization), and R.G. Hancock (University of Toronto)

Analysis techniques like instrumental neutron activation analysis (INAA) can provide important information to help identify prehistoric sources of ceramic raw materials and changes in pottery technology over time. This paper will discuss the progress of research on prehistoric Woodland ceramics which uses INAA, combined with other techniques of physical examination, to characterize pottery from northern Ontario and Manitoba. The information on chemical composition gained from INAA has allowed the recognition of ware groups in otherwise unsorted assemblages and has helped identify regional "fingerprints" for source materials. When combined with archaeological information, the authors hope to use the INAA data to distinguish regional trade and communication networks.

Modelling Mythologies of Early Human Adaptation in the Northern Hemisphere

(Session 2 - Thurs. AM)

Marianne Stopp (St. John's, Newfoundland)

This paper compares European interpretations of early human adaptation to those applied in North America. The earliest open-air sites in both western and eastern Europe date to roughly 400,000 years ago, while in North America the Paleo-Indian period is considerably later in time, at 15-12,000 years ago. Despite the vast time difference between the advent of humans in these regions, approaches to modelling adaptation share similarities in both logic and practice. Three of these shared perspectives are presented as potential mythologies which require consideration if links are to be made between the archaeological data and the adaptive models. They include: 1. a reconsideration of the efficacy of the large mammal hunting model as a viable portrayal of early human survival; 2. an implementation of broad-based taphonomic analysis at the analytical level; 3. a critical re-examination of why

the association of lithics with faunal remains at open-air sites is held to be a causal relationship.

Re-Excavations at Sheguiandah, Ontario

(Session 14 - Fri. AM)

Peter L. Storck (Royal Ontario Museum) & Patrick J. Julig (Laurentian University)

The Sheguiandah site was initially discovered and excavated in the early 1950's by Thomas E. Lee, then at the National Museum of Man, and interpreted to contain evidence of human occupation dating at least 30,000 years B.P. Renewed investigations at the site, conducted in part under a Master Plan study directed by Archaeological Services Inc., a CRM firm, in collaboration with university/museum-based archaeologists and an interdisciplinary team of earth scientists, is re-examining the field evidence and Lee's interpretations. Preliminary results indicate that the earliest occupations at the site may be considerably younger than Lee proposed.

The Western Basin Tradition - Algonquian or Iroquois? A 1992 Perspective

(Session 10 - Thurs. PM)

David M. Stothers (University of Toledo), James R. Graves (University of Wisconsin, Madison), Susan K. Bechtel & Timothy J. Abel (University of Toledo)

For two decades, Canadian and American researchers have recognized an hitherto unknown archaeological manifestation, which inhabited the lands surrounding the western end of Lake Erie between ca. 500 and 1300 AD. This group, originally called the Younger Tradition, and subsequently renamed the Western Basin Tradition, has since caused a flurry of controversy between some of these Canadian and American researchers. The Murphy and Ferris "Algonquian/*In Situ* hypothesis", in the recently published Ontario Prehistory volume, has brought the Canadian view into perspective, as an alternative to the "Iroquoian hypothesis" proposed by Stothers et al. The present paper will reaffirm the "Iroquoian" perspective of the American contingent, drawing from multiple lines of mutually supportive data. The interpretation of these data sets seem to logically conclude that the Western Basin Tradition is a distinct cultural and ethnic entity, both in southwestern Ontario, and Michigan and Ohio, having no affiliation to or continuity with the con-

temporaneous Algonquian-speaking populations of the same region, known as the Sandusky Tradition. Rather, it is clear from the available data that the two existed in a state of conflict into historic times as members of the historic Neutral Confederacy and Fire Nation, respectively.

The Middle Iroquoian Colonization Of Simcoe County, Ontario
(Session 15 - Fri. PM)

Rick Sutton (McMaster University)

Over the last one hundred years Simcoe County has been subjected to a number of extensive archaeological survey projects. The results of these projects clearly show a lack of cultural continuity in the region. While there is extensive evidence for a large Middle Woodland occupation, the evidence for a subsequent Early Iroquoian occupation is limited to a couple of multi-component seasonal fishing sites. It is only in the Middle Iroquoian period (A.D.1230-1400) that we see the establishment of village sites in the region. Thus, it appears that the extensive Middle Iroquoian occupation of Simcoe County was not the result of *in situ* development. Instead, these groups colonized this region from other areas of south-central Ontario. This paper consists of a discussion of the current evidence which supports the colonization hypothesis, and offers some insights into the processes involved in this colonisation.

Canadian Archaeological Computing in Perspective: The Last 20 Years and Future Prospects
(Session 22 - Sat. AM)

Morgan Tamplin (Trent University)

A review of the published and unpublished literature in Canadian archaeology indicates that the use of computers in Canada has followed the same general trends as the rest of the world. Lacking the resources of larger research institutions, Canadian archaeologists have worked on isolated projects for the most part. The increased use of micro-computers has intensified this activity, which remains fragmented despite occasional computer sessions at meetings. Communication can now be easily achieved through the use of computer networks and future trends in computer visualization of archaeological data appear to be the

most promising development for research.

La Dation Des Peintures Rupestres
(Session 24 - Sat. PM)

Gilles Tassé (Université du Québec à Montréal)

A partir d'une première percée dans la compréhension des facteurs de conservation des peintures rupestres du Bouclier canadien (travaux de Taylor, Myers et Wainwright de l'Institut Canadien de Conservation en 1974), l'auteur a entrepris une expérimentation au moyen d'essais de peinture à l'ocre rouge dans le Parc National de la Mauricie, près de Shawinigan. Il expose la nature de cette expérimentation et les premiers résultats obtenus ou attendus.

Translation:

Following a first breakthrough in understanding the factors of conservation of the prehistoric rock paintings in the Canadian Shield (by Taylor, Myers and Wainwright of the Canadian Conservation Institute in 1974), the author initiated an experiment with red ochre in the Parc National de la Mauricie, near Shawinigan (Quebec). The nature of this experiment is described, along with the first obtained and expected results.

The Significance of *Rangifer* as a Human Prey Species: The Paleolithic of Eastern Europe
(Session 2 - Thurs. AM)

Paul Thacker (Southern Methodist University)

Faunal assemblage variability within the late Pleistocene archaeological record of Eastern Europe indicates that reindeer were not utilized at a constant rate throughout the Middle and Upper Paleolithic. The environmental context of significant *Rangifer* assemblages is detailed. Site data from Poland, Czechoslovakia, Hungary and Romania are used to test possible causal factors for reindeer specialization. Changes in climate and resulting faunal community changes represent the largest factor in the representation of reindeer as a prey species. Presumed cultural affiliation, at least as defined by lithic industry, does not strictly correlate to a more specialized *Rangifer* adaptation. Site location and raw material procurement data are poorly detailed in published reports for eastern Europe. However, some interpreting correlations with

migratory herd species hunting are presented.

**An Interpretive Framework For the Early
Iroquoian Village**
(Session 15 - Fri. AM)

Peter A. Timmins (McGill University/Ministry of
Transportation, Ontario)

Early Iroquoian villages often involve complex overlapping community patterns resulting from multiple occupations or rebuilding on the same site. A method for the analysis of these confusing village patterns is presented in this paper. The methodology involves the analysis of structure spatial patterns, stratigraphic superpositions, ceramic cross-mend patterns, and refuse disposal patterns, to discover contemporaneous structures and features and reconstruct occupational history. The role of feature analysis and refuse stream modelling in understanding site formation processes is stressed. The method is applied to the Glen Meyer Calvert site, located near London, Ontario, resulting in the delineation of four sequential periods of village construction. The implications of a clear understanding of the occupational history of the village are discussed in relation to interpretations of subsistence economy and socio-political organization.

**Southern Niagara: Ephemeral Lakes, Sporadic
Outlets, Transitional Environments for Native
Habitation**
(Session 19 - Sat. PM)

Keith J. Tinkler & James W. Pengelly (Brock University)

During the past 11,500 years, the Native occupants of the southern Niagara Peninsula in Ontario have been forced to relocate their territories at least twice due to flooding of a vast area, caused by rising Lake Erie levels. The first and most dramatic event occurred at about 11,000 to 10,500 B.P. and the second between 5,500 and 3,900 B.P. This paper will examine the causes of these lake level rises and some of the changes they caused in Native habitation patterns and resource procurement.

**Looking for Adhothuys: Iroquoian Beluga
Hunting on Ile Verte**
(Session 9 - Thurs. PM)

Roland Tremblay (Université de Montréal)

One of the estuarine resources that the Québec city region Iroquoians exploited during their summer travels was the beluga. Cartier quotes their Iroquoian name: Adhothuys, and is told of their good taste and best fishing areas. This exploitation is archaeologically documented at three places on Ile Verte: the Turcotte-Lévesque site, the Anse-à-la-Vache site, and the Levasseur site. Varying numbers of beluga bones are found along with other faunal remains (seal, fish, waterfowl, and shell), as well as bone tools such as harpoons, all pointing to a marine oriented subsistence. These faunal assemblages are associated with Middle and Late Woodland pottery. It is argued here that the later pottery tradition was manufactured by Iroquoians living in the Québec City area. Archaeological and historical evidence will be discussed to support this ethnic affiliation.

Translation:

L'une des ressources qu'exploitaient les Iroquoiens de la région de Québec au cours de leurs déplacements estivaux était le béluga. Cartier utilise son nom iroquoien: Adhothuys, et se fait renseigner sur leur bon goût et l'endroit de leur chasse. Cette exploitation est documentée archéologiquement sur trois sites de l'Ile Verte: le site Turcotte-Lévesque, le site Anse-à-la-Vache et le site Levasseur. Des nombres variés d'ossements de béluga furent trouvés avec d'autres vestiges fauniques (phoques, poissons, oiseaux marins, et coquillages) ainsi qu'un outillage en os incluant des harpons, suggérant une subsistance orientée vers les ressources marines. Ces assemblages fauniques sont associés à de la céramique du Sylvicole moyen et supérieur. Nous considérons cette dernière comme étant fabriquée par les Iroquoiens de la région de Québec et les données archéologiques et historiques seront mises de l'avant afin de supporter cette affiliation ethnique.

The Archaeology of Frobisher's Mines
(Session 17 - Fri. PM)

James A. Tuck (Memorial University of Newfoundland) & Robert McGhee (Canadian Museum of Civilization)

In 1577 and 1578, English expeditions led by Sir Martin Frobisher undertook a major mining operation on Kodlunarn Island in the eastern Canadian Arctic; this was also planned to be the site of the first English colony in the New World. The value of this site as a heritage resource is now threatened by increasing tourist access, and by invasive archaeological proposals. An assessment of the archaeological resources of the island was carried out in 1991, using techniques which would minimize the permanent scarring which would detract from the heritage value of the site. The major cache of materials and supplies left by the Frobisher party in 1588 was located, and found to have been thoroughly salvaged by Inuit. The foundations of a small masonry house, built at the summit of the island, were found to be relatively intact and were protected from vandalism until excavation and recording can be undertaken. Ground-penetrating radar surveys confirmed that no other major buried features exist on the site as an archaeological resource. A plea is made for heritage conservation, and establishment of an effective management regime, for this unique site.

**The Height of Fashion: Lalonde Focus Research
in Simcoe County**
(Session 18 - Fri. PM)

Colin Varley (McMaster University)

The Lalonde focus of Iroquoian prehistory, located in Simcoe County, Ontario, has long been a poorly known entity. This paper presents the results of research on six large Lalonde collections, including the Carson site near Barrie. This research demonstrates that there are problems with both the way data has been collected, and with the subsequent interpretations of Lalonde material culture. Further, a provisional chronology of Lalonde era sites developed and presented, providing a framework for future research

Every Burial Pit Has a Fur Lining
(Session 8 - Thurs. AM)

Colin Varley & Penny Young (McMaster University)

While archaeology has long been thought of as the study of humans through their material culture, archaeologists in general have not been quick to attempt to incorporate some of these theoretical advances from Material Culture studies into their interpretations of the archaeological record. Using ossuary material from historic Huronia we explore new interpretations of old problems, including the inclusion of grave goods, the mixing of interred bones, and the lining of ossuaries with beaver pelts.

**Provenancing of Millstones from Two Roman
Villas in Southern Italy**
(Session 4 - Thurs. AM)

Vito Volterra (McMaster University/University of Toronto)

Many Roman millstones were made of igneous rocks imported to sites where the mills are found and may be important indicators of resource procurement and trade, if the origin of the rock can be traced. Samples of rotary millstones made from volcanic material and retrieved from current excavations by the University of Alberta at two Roman Villas in southern Italy have been analyzed with instrumental neutron activation analysis (INAA) at the SLOWPOKE Reactor Facility, University of Toronto. Results are compared with published data on lavas from several volcanoes of the Mediterranean basin. Close correlation of trace elements points to two Italian volcanoes as the main sources of the material used.

**Stratifying Northern Ontario Landscapes: A
Predictive Model for Archaeological Site
Locations**
(Session 22 - Sat. PM)

Robert D. Wall (Louis Berger & Associates)

Archaeological surveys conducted in northern Ontario since the late 1970s have focused principally on lakeshore and riverine environments, hence most of the sites recorded are on large lakes and major rivers. Much of this is due to circumstances such as accessibility and exposure of sites through commercial and residential development. Recent development in the

north has accessed environments which rarely have been surveyed for archaeological sites (eg. minor lakes and ponds, swamp and bog margins, low order stream settings, upland areas and so forth), but are likely to contain them. With development expanding in some areas of the north, a wider range of environments need to be considered in cultural resources surveys. Also of some concern is the potential for buried intact sites in riverine floodplain environs. Based on surveys conducted in northern Ontario since the late 1970s, a settlement model is offered with implications for designing cultural resource surveys.

Estimating Prehistoric Iroquoian Population
(Session 15 - Fri. PM)

Gary Warrick (Ministry of Transportation, Ontario)

The distribution of archaeological sites in a region can be used to estimate past population size. A methodology is presented for transforming Iroquoian site distributions into population numbers and it is used to generate a population curve for the Huron-Petun (A.D. 900-1650). It is argued that population estimates for other Iroquoian tribal groups could make significant contributions to our understanding of the demographic impact of the adoption of agriculture and the timing and magnitude of Native American depopulation resulting from European contact.

**Archaic Sites in the Ancaster, West Hamilton
Escarpment Region**
(Session 19 - Sat. AM)

Bruce Welsh, Deborah Steiss, Carol Ramsden & Steve Thomas (Archaeological Services Inc.)

Archaeological Services Inc. has conducted extensive survey and excavation during the past five years of numerous prehistoric sites in the Town of Ancaster and City of Hamilton. In particular, pre-development assessments of Bayview Glen Estates and the Meadowlands resulted in the identification of over 90 sites and 130 isolated findspots, many of which represent Early, Middle and Late Archaic occupations. Salvage excavations were conducted at 11 of these, including the Pickard site (AhGx-24) which yielded more than 3,000 surface artifacts. This paper will describe the results of these investigations.

**The Myers Road Site: A Community in
Transition**
(Session 15 - Fri. AM)

R.F. Williamson (Archaeological Services Inc.)

The Myers Road site, formerly situated in Cambridge, Ontario would appear to have been used intermittently and sometimes seasonally for a relatively long period of time, perhaps as long as fifty years, as a base for a wide range of subsistence activities. While there is clear evidence for multiple phases of occupation for both individual houses and the site, several features contained both classic Early Iroquoian and Middle Iroquoian vessels, suggesting continuity in the use of the site during the Early to Middle Iroquoian transition. Notwithstanding the evolving socio-economic nature of the successive occupations of the site during this period, there was no evidence that pan-regional warfare had a role to play in that transition.

**Iroquoian Regional Interaction: Peer Politics at
the Periphery**
(Session 20 - Sat. AM)

R.F. Williamson & D. Robertson (Archaeological Services Inc.)

Several studies have recently focused upon the question of interaction between Iroquoian groups of the Great Lakes region and groups further to the south, particularly in the Mississippi River Valley. The constructs this research has generated have largely been influenced by models of "core and periphery", originally developed as a means of accounting for the nature and effects of the relationships that existed between capitalist and non-capitalist societies of the medieval and modern ages.

This paper seeks to address the difficulties encountered in applying the "centre and periphery" model to the late prehistoric Great Lakes region. Of major concern is the comparative scarcity of clearly identified exotic material on sites in southern Ontario and the use of certain artifact attributes expressions of group identity or solidarity in the absence of a clear understanding of their evolution and structural context. Since there is little evidence of clearly identified, consistent interregional contact, it is more likely that prolonged and consistent exchange and communication, between groups at a similar level of complexity, within the Great Lakes region, was of greater significance than sporadic contacts with more highly

structured, but distant, societies to the south. Indeed, while there may have been limited access to, or knowledge of, the material goods produced in Cahokia, for example, it is unlikely that these goods or constituent symbols were incorporated into the material cultures of local Iroquoian populations without undergoing a process of radical reinterpretation. Thus, it is suggested that the changes Iroquoian society experienced in southern Ontario are more likely to be understood in terms of regular interaction between groups within the "periphery", rather than as influences emanating from a Mississippian "core".

Rough Translation:

Plusieurs études ont été concentrées sur la question de l'interaction existant entre les groupes Iroquoiens de la région des Grands Lacs ainsi que des groupes situés plus au sud, tout particulièrement dans la Vallée de la rivière Mississippi. Cette recherche a largement été influencée par des modèles "centre d'importance et périphérie", qui a été créée afin de justifier la nature et la réaction des relations qui ces existé entre les sociétés capitalistes et non-capitalistes du Moyen-âge ainsi que des temps modernes.

Ce document a pour objectif de se pencher sur les difficultés marquées dans l'application du modèle "centre et périphérie" dans la région préhistorique récente des Grands Lacs. La préoccupation principale se base comparativement sur la rareté de matériel exotique reconnu sur les sites du sud de l'Ontario et l'utilisation de symboles d'artefact comme expression d'identification de groupe ou solidarité dans l'absence de la compréhension de leur évolution et le contexte architectural. Puisque l'on ne retrouve pas ou presque pas de preuves qui se apprennent des contacts interrégionaux, il est évident que des échanges prolongés et consistants et la communication entre des groupes du même niveau de complexité, à l'intérieur de la région des Grands Lacs, ont une importance beaucoup plus marquée que des contacts à intervalles irréguliers, beaucoup plus structurés mais très distants de sociétés vers le sud. En effet, même si on avait des moyens d'accès et le savoir, malgré que limité, comme exemple, les matériaux fabriqués à Cahokia, il serait toutefois très surprenant que ces matériaux ou symboles distinctifs ont été inclus dans la culture matérielle des sociétés Iroquoiennes sans passer au travers d'une ré-interprétation définitive. Aussi, nous suggères très fortement que les changements que la société Iroquoise ont effectué dans le sud de l'Ontario se comprennent en terme d'interactions réguliers

à travers des groupes à l'intérieur de la région même de la périphérie, au lieu d'influences du "centre" du Mississippien.

The Zamboni Cemetery: A Glen Meyer Period Burial Ground (Session 15 - Fri. AM)

Philip J. Woodley (Hamilton), William Fitzgerald (Wilfrid Laurier University) & Rebecca A. Southern (McMaster University)

The Zamboni burial ground (AgHb-144) is a Glen Meyer period burial ground located beside the Grand River in northwestern Brantford, Brant County, Ontario. The site was accidentally found during the excavation of the basement of the Zamboni's private residence. This site presents a fairly unique burial pattern, consisting of a series of at least 13 pits, each containing a thick layer of refuse overlying disarticulated, fragmented human remains. Isolated features with a similar pattern of human interment have been found on at least two other excavated Glen Meyer period villages in Ontario, but this is the first such site known to contain only burial pits. This report discusses the excavation of the burial ground, the artifact and osteological analyses of the material recovered, and attempts to draw some preliminary conclusions concerning the Glen Meyer period interment patterns.

Iroquoian Archaeology: Its the Pits (Session 9 - Thurs. PM)

J.V. Wright (Canadian Museum of Civilization)

The dry and wet sieving of nearly 30 tons of fill from 992 pits and 11 palisade ditch sections from the 16th century St. Lawrence Iroquois Mckeown site in eastern Ontario has produced a unique body of data. Some of these data appear to relate to family unit activities which probably took place in the longhouses during the winter, while others relate to probable food processing methods. Among these are the following in no particular order:

A hitherto unrecognized flake/split nodule stone tool technology likely involved in the production of wood and bone implements; the discarding in pits of masses of bone mash which was apparently rendered for its fat and protein during broth production; the recovery of fishbone "tooth-brushes"; the presence of large, burnt succotash feasts of corn and beans; the occurrence of numerous fragments of

beaver incisor knives suggestive of wood-working activities; an abundance of small steatite beads but a total lack of production evidence suggesting that such items were the product of trade rather than local manufacture; the apparent use of awls as meat skewers in cooking resulting in an abundance of carbonized awl tips; the limited recovery of juvenile ceramic materials adding support to the proposal that pottery manufacture was essentially carried on outside of the longhouse during the warmer months of the year; the limited but ubiquitous occurrence of clam shell fragments in pits suggesting that clams were dried at or near their source before being brought to the village and were probably more important in the diet than their bulk recovery in the village would suggest; an abundance of fish bone but a relative scarcity of fish scales suggesting fish were skinned or scaled outside of the houses; and other evidence which provide some glimpses of individual and group activities within the longhouses.

In addition to an abundance of charred corn kernels and cobs, beans, some squash and sunflower and wild plant foods as well as other general cultural debris, a bizarre occurrence were diseased human teeth in the pits. These occurrences are interpreted as evidence for the need to hide discarded portions of the body in order to avoid their use in witchcraft. Finally, it is worth noting that it was necessary to process 30 tons of feature fill in order to recover single examples of exotic items such as the single native copper bead and iron awl.

Translation:

Le tamisage à sec et humide de près de 30 tonnes de remplissage de 992 fosses et de 11 sections de fossé d'une palissade du 16^{ième} siècle du site Iroquois McKeown du St-Laurent de l'est de l'Ontario a produit une gamme d'informations uniques. Quelques-unes de ces informations s'apparentent aux activités familiales qui se sont produites durant l'hiver dans les maisons-longues, mais certaines données sont reliées aux méthodes de préparation de la nourriture. Parmi les méthodes de préparation en voici quelques-unes sans un ordre particulier:

Jusqu'à maintenant non identifié, un outil de pierre taillée ou un nodule est probablement en relation avec la production des outils en bois et en os; l'abandon de masses d'os broyés qu'ils utilisaient pour le gras et les protéines à la production de bouillon; la récupération d'arêtes de poissons; la présence de grands festins de succotash consistant de blé

et fèves ont été découverts; fréquemment un nombre important de couteaux d'incisives de castor nous indique qu'ils travaillaient le bois; un nombre important de petites perles de pierre à savon, mais on note qu'il y a un manque total de production qui nous suggère que ces perles étaient obtenues par la voie du commerce et non pas manufacturées le site. Les poinçons servaient comme broche à viande lors de la cuisson, causant la carbonisation à l'extrémité du poinçon; la récupération de céramique juvénile nous porte à croire et supporte nos notions que la production de la poterie était essentiellement faite à l'extérieur des maisons-longues durant les mois les plus chauds; On note qu'un nombre limité de fragments de coquilles d'huîtres dans les fosses, nous suggère que les huîtres étaient séchées près de leur source avant d'être apportées au village et nous supposons qu'elles étaient plus importantes dans leur diète, même si un nombre important d'huîtres a été découvert dans le village. Une quantité importante d'arêtes et une rareté d'écaillés de poissons nous suggère que le poisson était écaillé et écorché à l'extérieur des maisons; ainsi que de faibles indications d'activités en groupe ou individuelle à l'intérieur des maisons-longues.

On note un nombre abondant de grains de blé, épis, fèves, quelques courges et graines de tournesol et herbes sauvages carbonisés, ainsi que des débris culture, un facteur exceptionnel a été la découverte dans les fosses de dents humaines déjà décédés le comportement est un indice qui représente le besoin de cacher les membres d'un corps afin d'éviter la sorcellerie.

Finalement, il est très important de noter qu'il a été nécessaire de passer à travers 30 tonnes de dépôts de structures afin de découvrir des exemples uniques d'articles exotiques comme la perle de cuivre ainsi que le poinçon en fer.

Ethnographic and Ethnohistoric Analogy: The Challenge of Constructing a Settlement Pattern Model for Pre-Contact Aleuts (Session 11 - Fri. AM)

Allison Young (University of British Columbia)

Although there has been much discussion in the literature about the nature of prehistoric Aleut villages, archaeologists lack a comprehensive model for Aleut subsistence-settlement patterns. Such a subsistence-settlement model must take into account the nature of winter and summer seasonal villages (population structure, activities specific to types of villages, etc.),

Aleut concepts of territory and property ownership, and socio-political relations. This paper will examine the problems involved in constructing such a model from available ethnographic and ethnohistoric resources and the implications of such a model for Aleutian archaeology. It will discuss how such a model might be tested archaeologically.

Gods and Glyphs: A Re-evaluation of the Zapotec Urn
(Session 5 - Thurs. AM)

Penny Young (McMaster University)

This paper assesses the early Spanish interpretation that the anthropomorphic figures displayed on funerary urns from Oaxaca, Mexico are depictions of Zapotec 'gods'. Utilizing material recovered from Jalieza, Mexico with Late Classic and Early Post-classic occupations, a re-interpretation is suggested. This re-evaluation proposes the connection between urn figures, quasideified ancestors and community-level social organization.

Archaeology as a School Activity: The Education of an Archaeologist
(Session 17 - Fri. PM)

Sandra K. Zacharias (Heritage Consultant)

In 1990-91, the B.C. Archaeology Branch funded my participation in school programs at two rural elementary schools in the Cariboo region of B.C., developed in response to the unauthorized excavation of a Late Prehistoric Lakes Shuswap site by a Grade 6/7 teacher and his class (non-Native) during their study of "Early Man". My participation in these programs has led me to evaluate the perception of archaeology by the teaching profession, particularly at an elementary school level where course content and teaching children how to learn are nowadays viewed as equally important.

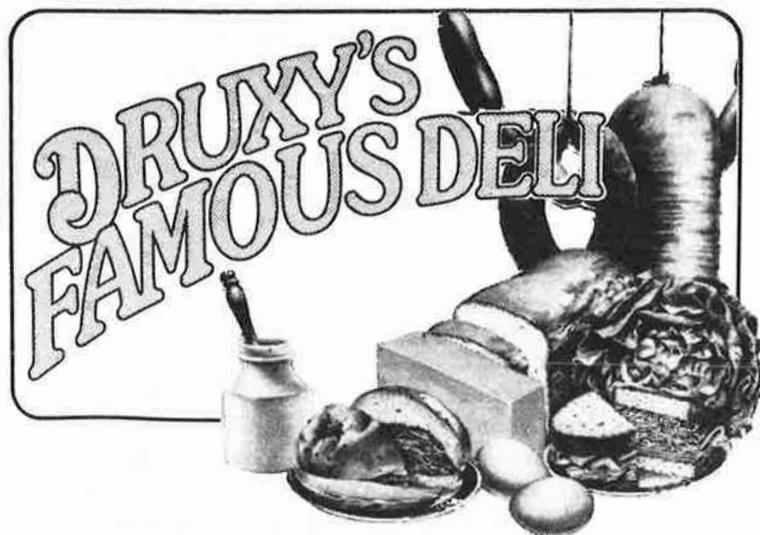
Archaeology is presently taught in some form at many schools. With its combination of scientific rigor and creative interpretation, archaeology is a near-ideal vehicle for teaching elementary school students new abilities (e.g. collecting and organizing information) and attitudes (e.g. appreciation for other cultures). Within the context of teaching, archaeology is often perceived primarily as a vehicle for learning rather than as professional discipline. Without thoughtful input by professional archaeologists, this per-

ception can lead to the view that archaeology is no more than a neat "hands on" learning activity, and to the loss of important concepts such as resource conservation.

The Ceramics of the Hungry Hall Site
(Session 18 - Fri. PM)

Doris Zibauer (Trent University)

The Hungry Hall mortuary site is one representative of a significant Woodland Period mound complex along the Rainy River in northwestern Ontario. As there is a large Laurel ceramic component present, Hungry Hall has been reported as a Late laurel site. However, a significant non-Laurel (Blackduck) component exists as well, and this aspect has never been fully integrated into the cultural and temporal interpretations of the site. This paper will present results of a detailed study of Hungry Hall ceramic components, with the specific focus on the non-Laurel component, and will discuss the implications of these results at the regional level.



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