



16-20 MAI



MAY 16-20

XXXI<sup>e</sup> Réunion annuelle de l'Association  
des archéologues du Québec

45<sup>e</sup> Réunion annuelle • 45<sup>th</sup> Annual Meeting  
de l'Association canadienne d'archéologie  
of the Canadian Archaeological Association



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**Comité organisateur • Organizing Committee:**

Adrian L. Burke, Claude Chapdelaine, Brad Loewen, Josée Villeneuve

**Coordonateurs de la conférence et du programme • Conference and programme coordinators:**

Adrian L. Burke, Claude Chapdelaine, Brad Loewen

**Comité des étudiants bénévoles • Volunteers Student committee:**

Justine Bourguignon-Tétreault, Mariane-Marilou Leclerc, Delphine Leouffre,  
Aimie Néron, Stéphanie Trottier, Mathieu Mercier Gingras et Alex Lefrançois Leduc

**Responsable de la salle des publications • Book and Poster displays:**

Justine Bourguignon-Tétreault, Mélanie Jonhson-Gervais

**Mise en page du programme • Program layout:**

Stéphanie Trottier

Couverture

Pointes en cuivre, en silex européen et en chert provenant des fouilles de l'Université de Montréal au site de Pointe-à-Callière, Montréal. Toutes les pointes proviennent du même contexte daté entre 1683 et 1688.

Cover

Projectile points in copper, European flint and chert, found at Pointe-à-Callière, Montréal, during excavations by the Université de Montréal. All the points were found in the same context, dating to 1683-1688.

# BIENVENUE • WELCOME

## *Boujou!*

*Welcome to Montréal. Welcome to the 2012 annual meeting of the Canadian Archaeological Association.*

*Delegates to the conference can choose from a number of exciting sessions that bring together advocates, students, and researchers to inform each other of their latest results. The organizers have done a wonderful job of ensuring that all branches of archaeology are represented. So whether your interests guide you to underwater, historic or area-specific archaeology, the programme has a session for you. There is a poster session where authors can meet their audience on a personal level and discuss their research areas. There are receptions and a banquet where delegates can mingle and visit with old acquaintances or make new friends.*

*While the conference is on, please take some time to enjoy the many cultural amenities that Montréal has to offer. For example, the McCord Museum and Musée des Beaux-Arts are nearby the conference venue and there are also many public spaces that are easily accessible bus or metro, such as Jean Talon Market or Mount Royal. Enjoy the town between sessions by walking down St. Catherine Street or bring your crowd to Schwartz's deli. There is a lot to do in this town.*

*We hope you enjoy the sessions you attend and find them informative and thought provoking. The conference is our best opportunity to meet like-minded people and share new knowledge about archaeology. Of course, enjoy your time in Montréal.*

*Sincerely,  
Eldon Yellowhorn*

## *Cher Collègues*

*Il me fait plaisir en mon nom, celui du Conseil d'administration et de tous les membres de l'Association des archéologues professionnels du Québec (AAQ) de vous saluer tous et de vous accueillir à ce colloque annuel conjoint de l'Association canadienne d'archéologie (ACA) et de notre association québécoise. Je profite de l'occasion pour féliciter le comité organisateur de l'événement qui a su préparer un contenu stimulant reflétant la très grande diversité de nos champs de recherche respectifs. Ce colloque est un lieu d'échange et de partage de nos connaissances, souhaitons qu'il soit aussi le lieu de départ de collaborations fructueuses permettant de faire avancer la science archéologique.*

*Marc Côté, archéologue  
Président*

## *Bonjour!*

*Bienvenue à Montréal. Bienvenue au colloque annuel 2012 de l'Association canadienne d'archéologie.*

*Les conférenciers peuvent choisir parmi une panoplie de sessions qui regroupent les amateurs, étudiants et chercheurs afin de partager leurs dernières découvertes. Les organisateurs ont fait un excellent travail pour que tous les aspects de l'archéologie soient représentés. Donc, peu importe si vos intérêts sont pour l'archéologie subaquatique, l'archéologie historique, ou une région en particulier, le programme contient une session pour vous. La session des affiches permet aux auteurs de rencontrer leur auditoire en personne et de discuter face-à-face à propos des résultats présentés. Il y a des réceptions et un banquet où les participants pourront rencontrer de vieux amis et faire des nouvelles connaissances.*

*Lors de votre séjour, n'oubliez pas de profiter des nombreuses attractions culturelles de Montréal, par exemple le Musée McCord et le Musée des Beaux-Arts qui se trouvent près de l'hôtel. Il y a aussi des parcs et marchés qui sont faciles à rejoindre par métro ou autobus comme le Marché Jean-Talon et le parc Mont-Royal. Profitez de la ville en faisant une balade sur la rue Sainte-Catherine ou amenez un groupe d'amis chez Schwartz. Il y a beaucoup de choses à faire dans cette ville.*

*Nous espérons que vous allez aimer les sessions auxquelles vous assisterez et que vous les trouverez intéressantes et informatives. Le colloque annuel est le moment idéal pour rencontrer des collègues et partager de nouvelles connaissances sur l'archéologie. Surtout, amusez-vous à Montréal.*

*Sincèrement,  
Eldon Yellowhorn*

## *Dear Colleagues*

*I want to particularly greet our Canadian colleagues and I invite them to discover the extend and richness of our archaeological heritage. I hope they take advantage as much as possible of the attractions of Montreal and the warm welcome of the archaeologists of Quebec.*

*Marc Côté, archéologue  
Président*

# 50 ans ça se fête • Let's celebrate 50 years

*Le comité organisateur tient à mentionner que l'organisation de ce colloque conjoint, ACA et AAQ, a été motivé dès l'automne 2010 par la volonté de ses membres de célébrer les 50 ans du Département d'anthropologie de l'Université de Montréal tout en soulignant le dynamisme de l'archéologie au cours de ces cinq décennies. Cet événement n'aurait pas pu se dérouler sans la contribution exemplaire des étudiants bénévoles ainsi que la participation financière des organismes suivants : Pointe-à-Callière, Musée d'archéologie et d'histoire de Montréal, le ministère de la culture, des communications et de la condition féminine du Québec, l'institut culturel Avataq, Archéotec Inc., Arkeos, Ethnoscop, Patrimoine-Experts, et l'Université de Montréal.*

*The organizing committee wishes to mention that this joint meeting of the CAA and the AAQ was proposed in the Fall of 2010 to celebrate the 50 year anniversary of the Department of Anthropology at the Université de Montréal and to reflect on the dynamism of archaeology over the last five decades. This event would not have been possible without the exemplary contribution of the student volunteers, as well as the financial participation of the following institutions: Pointe-à-Callière, Musée d'archéologie et d'histoire de Montréal, le Ministère de la culture, des communications et de la condition féminine du Québec, l'Institut culturel Avataq, Archéotec Inc., Arkeos, Ethnoscop, Patrimoine-Experts, and the Université de Montréal.*

## Cocktail à Pointe-à-Callière, musée d'archéologie et d'histoire de Montréal

18 mai de 17h30 à 19h30 (Bar payant)

Le vendredi 18 mai, l'équipe de Pointe-à-Callière vous convie au Musée pour souligner son 20<sup>e</sup> anniversaire et célébrer les 10 ans de l'École de fouilles réalisée en partenariat avec l'Université de Montréal, la ville de Montréal et le ministère de la Culture, des Communications et de la Condition féminine du Québec.

Pour l'occasion, l'exposition permanente *Ici naquit Montréal* sera accessible.

*Pointe-à-Callière offre une véritable plongée dans le passé, le présent et le futur. Dans le **passé** parce que le Musée est édifié sur le lieu de fondation de Montréal et qu'il révèle d'authentiques vestiges au fil d'un surprenant parcours souterrain. Dans le **présent**, parce qu'il propose des expositions temporaires d'envergure, des programmes éducatifs animés, des événements urbains différents qui font vibrer, chaque année, des centaines de milliers de visiteurs. Dans le **futur**, parce que nous aimons, au Musée, rêver sans cesse de nouvelles façons de partager avec nos publics ce qui a fait notre ville. Spectacle multimédia à vivre depuis une galerie suspendue au-dessus de vestiges. Muséographies misant sur des technologies nouvelles et conviviales. Mais une chose est certaine : quelque soit l'âge de nos visiteurs, il ne s'ennuie pas à Pointe-à-Callière.*

Coordonnées :  
Pointe-à-Callière, musée d'archéologie et d'histoire de Montréal  
350, place Royale, Vieux-Montréal  
[www.pacmusee.qc.ca](http://www.pacmusee.qc.ca)

Conference attendees will find a free pass to the PàC museum of archaeology in their packets. You can use this ticket to visit the museum and current exhibit at any time.

Les participants à la conférence trouveront un billet pour le musée d'archéologie PàC dans leur trousse. Vous pourrez utiliser ce billet pour visiter le musée et l'exposition courante en tout temps.

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# RENSEIGNEMENTS GÉNÉRAUX

# • CONFERENCE INFORMATION

## INSCRIPTION

Les inscriptions commenceront le mercredi soir 16 mai dans le lobby de l'hôtel entre 17h et 20h. Les jeudi 17 et vendredi 18 mai, les inscriptions se feront de 8h à 15h dans le foyer du 4<sup>e</sup> étage près des ascenseurs et de 8h à 12h le samedi 19 mai.

## BOURSES DE VOYAGE DE LACA

Il y a des bourses de voyage disponibles pour les étudiants qui participent au colloque. SVP contacter Jeff Hunston ou le comité étudiant de l'ACA.

Jeff.Hunston@gov.yk.ca - caa.students@gmail.com

## PRIX POUR LA MEILLEURE AFFICHE ÉTUDIANTE

Il y aura un prix populaire pour la meilleure affiche étudiante. L'étudiant doit être le premier auteur sur l'affiche. Pour voter, prenez votre bulletin dans la salle Sherbrooke #2 lors de l'atelier des affiches.

## RÉUNIONS D'AFFAIRES

La réunion du conseil d'administration de l'Association canadienne d'archéologie se tiendra dans la salle Rimouski/Chicoutimi au 4<sup>ème</sup> étage le samedi 19 mai à compter de 15:30.

## AUTRES RÉUNIONS

Réunion de l'exécutif de l'ACA, salle Gouverneur 1, mercredi 16 mai, 9h à 17h.

CAPTA - La réunion se tient le mercredi 16 mai. Contact :

Pierre Desrosiers, archéologue  
Direction du Patrimoine et de la Muséologie  
Ministère de la Culture, des Communications et de la  
Condition féminine  
Pierre.Desrosiers@mcccf.gouv.qc.ca

## SALLE DES PUBLICATIONS ET LES AFFICHES

La salle Longueuil au 6<sup>ème</sup> étage est disponible du jeudi 17 mai au samedi 19 mai entre 8:00 et 17:00 pour exposer les publications.

La session des affiches se tiendra le samedi après-midi dans la salle Sherbrooke #2. Le montage est prévu à partir de 12:30 et la session débute à 13:20 jusqu'à 17:00.

## ÉVÉNEMENTS SOCIAUX

## REGISTRATION

Registration will start on the evening of Wednesday May 16th in the hotel lobby from 17:00 to 20:00. Thursday, May 17th and Friday May 18th, registration is from 8:00 to 17:00 in the foyer on the 4<sup>th</sup> floor in front of the elevator and from 8:00 to 12:00 on Saturday morning May 19<sup>th</sup>.

## TRAVEL FUNDING FROM THE CAA

There are travel grants for students available from the CAA. Please contact Jeff Hunston or the CAA student committee.

Jeff.Hunston@gov.yk.ca - caa.students@gmail.com

## STUDENT POSTER AWARD

There will be a prize for the best student poster. To vote, get your ballot in Sherbrooke #2 room during the poster session.

## BUSINESS MEETING

The CAA Business Meeting will be held in the Rimouski/Chicoutimi room on the 4<sup>th</sup> floor Saturday afternoon May 19 starting at 15:30.

## OTHER MEETINGS

CAA Executive meeting, Gouverneur 1 room, Wednesday May 16, 9h-17h.

CAPTA - Meeting will be held Wednesday May 16.  
Contact:

Pierre Desrosiers, archéologue  
Direction du Patrimoine et de la Muséologie  
Ministère de la Culture, des Communications et de la  
Condition féminine  
Pierre.Desrosiers@mcccf.gouv.qc.ca

## POSTER AND BOOK DISPLAYS

Book display in Longueuil Room on the 6<sup>th</sup> floor will be available from Thursday May 17 to Saturday May 19. It will be open from 8:00 to 17:00.

The poster session is in Sherbrooke #2 room on Saturday afternoon. Setup starts at 12:30 and the session runs from 13:20 to 17:00.

## SOCIAL EVENTS

(3 events: cocktail on wednesday night; PAC on friday

(3 événements : cocktail du mercredi soir; PAC le vendredi soir ; cocktail et lancement samedi pm)

**Mercredi soir :** Cocktail de bienvenue dans le foyer du 6<sup>e</sup> étage en face de la salle Sherbrooke (bar payant) à partir de 18:00 (un coupon pour une consommation gratuite peut être utilisé lors de ce cocktail ou à celui du samedi après-midi)

**Vendredi soir :** Invitation gratuite pour visiter l'exposition permanente de Pointe-à-Callière, musée d'archéologie et d'histoire de Montréal

Lieu : 350, place Royale, Vieux-Montréal,  
www.pacmusee.qc.ca

Heure : 17:30 Bar payant

Trajet à pied à partir de l'hôtel est de 2 km ou 25 minutes

**Samedi après-midi :** bar payant de 14:00 à 17:00 dans le foyer du 6<sup>e</sup> étage en face de la salle Sherbrooke puis de 17:00 à 19:00 dans le foyer du 4<sup>e</sup> étage en face de la salle Québec (le coupon pour une consommation gratuite peut être utilisé lors de ce cocktail du samedi après-midi).

Le lancement de «**Archéologiques #25**» de l'AAQ se tiendra dans le foyer au 6<sup>ième</sup> étage en face de la salle Sherbrooke #2 à 16 :30, suivi de l'annonce du gagnant ou de la gagnante de la meilleure affiche.

## BANQUET (SAMEDI SOIR)

Le conférencier invité pour le banquet est Robert Grenier, O.C., ex-président du Comité scientifique international ICUCH à l'UNESCO/ICOMOS, ex-chef du Service d'archéologie subaquatique de Parcs Canada, qui nous présente «40 ans sous la mer : le développement de l'archéologie subaquatique au Canada».

## VISITES GUIDÉES

Il y a trois excursions de planifiées pour le dimanche, 20 mai. Elles sont gratuites. Prière de s'inscrire lors de votre inscription. Premier arrivé, premier servi.

### **1.Randonnée pédestre et visite de l'archéologie (préhistorique et historique) et de la géologie du parc du mont-Royal, Montréal (Theresa Gabos, Valérie Janssen, Adrian Burke)**

*Le point de rencontre sera le hall du Musée McCord à 9H30.*

690 rue Sherbrooke Ouest

*Durée : 2 à 3 heures, à pied, SVP porter des chaussures confortables*

*Les points forts seront :*

1. Collection du site Dawson au Musée McCord
2. Sépulture de Simon McTavish
3. Réservoir d'eau du Haut-Niveau
4. Carrière préhistorique

Le mont Royal, la montagne au cœur de Montréal, fut un point de repère culturel important pour les habitants de cette île depuis la préhistoire. Au fil des années, le mont Royal fut l'emplacement de sépultures préhistoriques, de cimetières, de terres agricoles ainsi qu'une banlieue

night; cocktail and launch saturday pm)

**Wednesday night:** Welcome cocktail in the foyer on the 6<sup>th</sup> floor in front of Sherbrooke (cash bar) starting at 18:00 (one ticket for a free drink can be used on Wednesday night or Saturday Afternoon)

**Friday night:** Free invitation to visit the permanent exhibit at Pointe-à-Callière, musée d'archéologie et d'histoire de Montréal

Place: 350, place Royale, Vieux-Montréal,  
www.pacmusee.qc.ca

Time: 17:30 Cash Bar

Walking distance from the Hotel is 2 km or 25 minutes walk.

**Saturday afternoon:** cash bar from 14:00 to 17:00 in the foyer on the 6<sup>th</sup> floor in front of Sherbrooke and from 17:00 à 19:00 in the foyer of the 4<sup>th</sup> floor in front of Québec (ticket for a free drink can be used for the Saturday Afternoon cocktail).

The launch of the AAQ's publication *Archéologiques #25* will be held in the foyer on the 6<sup>th</sup> floor in front of the Sherbrooke #2 room at 16:30, the announcement of the winner of the best poster will follow.

## BANQUET (SATURDAY NIGHT)

The speaker for the banquet will be Robert Grenier, O.C., ex-president International Scientific Committee on Underwater Cultural Heritage, ICUCH, UNESCO/ICOMOS. Former Chief of Underwater Archaeology Service at Parks Canada, who will be presenting: "40 years under the sea: Development of underwater archaeology in Canada"

## TOURS

There will be three field trips on Sunday, May 20. They are all free. Please register on site at the registration desk. First come, first served.

### **1.Walking tour of the archaeology (prehistoric and historic) and geology of the Mount Royal park, Montreal (Theresa Gabos, Valérie Janssen, Adrian Burke)**

*The meeting point will be the lobby of the McCord Museum at 9:30 am.*

690 Sherbrooke Street West

*Length: 2 to 3 hours on foot, wear comfortable shoes!*

*The highlights are:*

1. Dawson site collection at the McCord Museum
2. Burial site of Simon McTavish
3. High-level water reservoir
4. Prehistoric stone quarry

Mount Royal, the mountain at the heart of Montreal, has been an important cultural landmark for the inhabitants of this island since prehistory. Over time, Mount Royal has been the site of both prehistoric and modern burial grounds, cultivated farmland, as well as a prestigious neighbourhood inhabited by Montreal's social elite.

fortunée habitée par l'élite de Montréal. Avec la création du Parc du Mont-Royal en 1876, le mont Royal est devenu l'un des espaces verts les plus importants de l'île de Montréal. En 2005, l'importance historique de la montagne fut reconnue par le Ministère de la Culture, des Communications et de la Condition féminine quand elle a été déclarée arrondissement historique et naturel.

## **2. Visite à l'école de fouille de l'Université de Montréal au site de Pointe-à-Callière dans le Vieux Montréal (Brad Loewen).**

*Le point de rencontre sera au site même, au 214, place d'Youville.*

*Les visites auront lieu entre 13H et 15H.*

*Description :* L'Université de Montréal tient son école de fouilles en archéologie historique urbaine en mai, et le site sera ouvert aux conférenciers le dimanche, 20 mai, de 13h à 15h. Ce site urbain complexe, avec ses 2,5 mètres de sols stratifiés, couvre 400 ans d'histoire montréalaise. Le site est dans un entrepôt en brique à deux étages, avec deux portes de garage, deux édifices à l'ouest du Musée Pointe-à-Callière dans le Vieux-Montréal.

## **3. Randonnée pédestre le long du Canal Lachine et introduction à l'archéologie industrielle, Montréal (Parcs Canada).**

*Le point de rencontre sera le hall du Musée Pointe-à-Callière à 9H30.*

*Les points forts seront :*

1. Vieux-Port (canal, silos, bassins etc.)
2. Bassins Peel
3. Bassins St-Gabriel
4. Pointe des Seigneurs
5. Stelco/Dominion Wadding/Brewster
6. Canadian Bag / Swing Paint
7. Belding Corticelli/Canal des Sulpiciens
8. Redpath
9. Ancien Pont CN
10. Rue Mill (ateliers, déversoir 2, canaux hydrauliques)

Le canal de Lachine, inauguré en 1825, a permis d'ouvrir à la navigation la voie tumultueuse du Haut Saint-Laurent et a joué un rôle majeur dans le développement de l'Ouest du pays. De plus, sa position stratégique entre les portions est et ouest du Saint-Laurent a amené, sur ses rives, la concentration industrielle la plus diversifiée du pays. Son importance historique nationale en tant que voie navigable a été reconnue par la Commission des lieux et monuments historiques du Canada (CLMHC) dès 1929, réitéré en 1987 pour l'inclure dans le réseau national des canaux du Canada. Le corridor formé par le canal de Lachine et ses abords a été reconnu Lieu historique national du Canada en 1996 comme témoin important de l'industrie manufacturière canadienne. Le canal de Lachine a été ouvert à la circulation maritime pendant près de 150 ans (1825-1970). Fermé à la navigation commerciale en 1970, il est réouvert à la navigation de plaisance en 2002 sous la responsabilité de Parcs Canada qui en gère la navigation et l'interprétation historique.

With the creation of Mount Royal Park in 1876, Mount Royal became one of the most prominent green-space on the Island of Montreal and in 2005, the mountain's significance was recognized by the Ministry of Culture when it was declared a historic and natural district.

## **2. Visit of the Université de Montréal field school site of Pointe à Callière in Old Montreal (Brad Loewen).**

*The meeting point will be at the site, at 214, Place d'Youville.*

*The visits will be between 13:00 pm and 15:00 pm.*

*The highlights are:* The Université de Montréal field school in urban historical archaeology takes place in May, and the site will be open to visitors from the conference on Sunday, May 20th, from 1 to 3 PM. This is a complex urban site, with 2.5 metres of stratified soils covering 400 years of Montréal's history. Place d'Youville. The site is in a two-storey brick warehouse with two large garage doors, two buildings west of the Pointe-à-Callière Museum in Old Montréal.

## **3. Walking tour of the Lachine Canal industrial archaeology zone, Montreal (Parcs Canada).**

*The meeting point will be the lobby at 9:30 am, Musée Pointe-à-Callière.*

*The highlights are:*

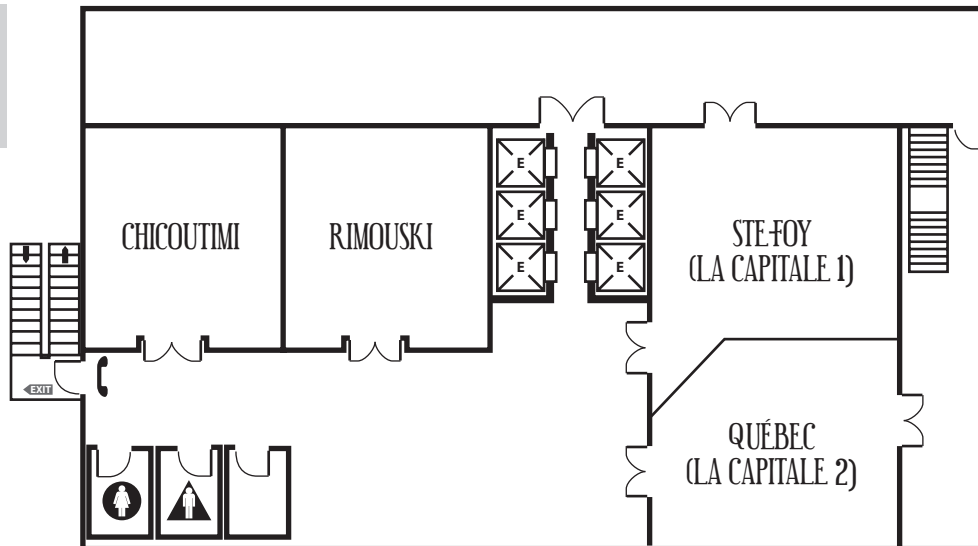
1. Old Port (canal, silos, basins, etc..)
2. Peel Basin
3. St. Gabriel Basins
4. Pointe des Seigneurs
5. Stelco / Dominion Wadding / Brewster
6. Canadian Bag / Swing Paint
7. Belding Corticelli / Sulpicians' Canal
8. Redpath
9. Old Bridge CN
10. Mill Street (workshops, Weir 2, water channels)

The Lachine Canal, opened in 1825, opened the tumultuous Upper St. Lawrence to navigation and played a major role in the development of the West. Its strategic position on the St. Lawrence made the canal the most significant industrial concentration in the country. Its national historic significance as a waterway has been recognized by the Historic Sites and Monuments Historical Association (HSMBC) in 1929, renewed in 1987 for inclusion in the national network of canals of Canada. The corridor formed by the Lachine Canal and its approaches was recognized National Historic Site of Canada in 1996 as a material legacy in the Canadian manufacturing industry. The Lachine Canal was opened to marine traffic for nearly 150 years (1825-1970). Closed to commercial traffic in 1970, the canal reopened to recreational boating in 2002 under the responsibility of Parcs Canada, which manages navigation and historical interpretation.

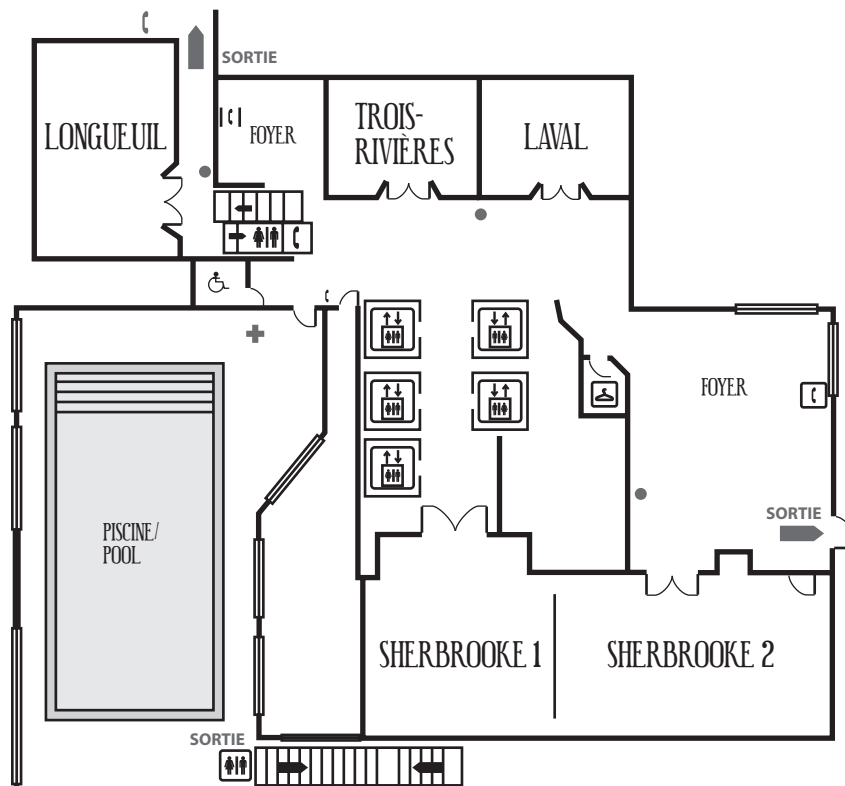
# ORGANISATION DES SALLES • MEETING ROOM LAYOUT

Gouverneur Place Dupuis

4<sup>e</sup> étage  
4<sup>th</sup> floor



6<sup>e</sup> étage  
6<sup>th</sup> floor



# COUP D'OEIL SUR LE PROGRAMME • PROGRAM AT A GLANCE

JEUDI 17 MAI • THURSDAY MAY 17, 2012

	RIMOUSKI	CHICOUTIMI	STE-FOY	QUÉBEC	SHERBROOKE 1	SHERBROOK 2
AM	Pérou/Peru 1	Quarries 2	Theory 3	Ontario Iroquoians 4	Pointe-à-Callière 6	Artic 7
				St. Law. Iro. 5		
PM	Gender 8	Maritime 9	Theory 3	St.Law. Iro. 5	Hunters 10	Artic 7
	Brit. Colu. 11					

VENDREDI 18 MAI • FRIDAY MAY 18, 2012

	RIMOUSKI	CHICOUTIMI	STE-FOY	QUÉBEC	SHERBROOKE 1	SHERBROOK 2
AM	Historique 12	Fisheries 14	Western 15	General 17	Lakehead 19	PSS Horizon 20
	Dendro 13		Managing 16	Boreal 18		
PM	Dendro 13	Archaeometry 21	Managing 16	Boreal 18	Rock Art 22	Ramsden 23

SAMEDI 19 MAI • SATURDAY MAY 19, 2012

	RIMOUSKI	CHICOUTIMI	STE-FOY	QUÉBEC	SHERBROOKE 1	SHERBROOK 2
AM	Bio Arch. 24	Techniques 25	Modelling 26	Montréal 27	Field School 28	Trois-Rivières 29
PM	CAA • ACA Business Meeting		General 30	Montréal 27		Posters • Affiches
				Banquet Conf./Guest : Robert Grenier		AAQ : lancement

# PROGRAMME • PROGRAM

JEUDI 17 MAI, AVANT-MIDI • THURSDAY MAY 17, MORNING

SALLE • ROOM

**1** L'archéologie péruvienne : nouvelles approches théoriques et technologiques  
Fanny Guyon (Organisatrice / Animatrice) **RIMOUSKI**

- 9:00 – 9:20** **Jean-François Millaire et Edward Eastaugh (The University of Western Ontario)**  
Morphologie urbaine d'une cité ancienne du Pérou: une approche de télédétection intégrée
- 9:20 – 9:40** **Alexis Mantha (Champlain College, Saint-Lambert)**  
La vallée de Rapayán lors de périodes tardives de la préhistoire andine : Reconnaissance de terrain VS Google Earth
- 9:40 – 10:00** **Paul Szpak<sup>1</sup>, Jean-Francois Millaire<sup>1</sup>, Fred J. Longstaffe<sup>2</sup>, Christine D. White<sup>1</sup> (The University of Western Ontario)**  
Llama Dung and Seabird Guano: Isotopic Perspectives on Andean Fertilizers from Field and Growth Chamber Studies
- 10:00 – 10:20** **Pause café / Coffee break**
- 10:20 – 10 :40** **Marilyn Girard-Rheault (Université de Montréal)**  
Les camélidés et l'archéologie péruvienne
- 10:40 – 11:00** **Jordan Downey and Jean-François Millaire (The University of Western Ontario)**  
Satellite Imagery and the Development of the Virú State on the North Coast of Peru
- 11:00 – 11:20** **Fanny Guyon (Université de Montréal)**  
L'analyse de l'agencement spatiale des sites architecturés de la culture Recuay
- 11:20 – 11:40** **Nicole C. Couture, Maria C. Bruno and Deborah E. Blom (The University of McGill)**  
Truth and reconciliation at Tiwanaku: coming to terms with contradiction in interdisciplinary archaeological research
- 11:40 – 12:00** **Fernando Astudillo (University of Calgary), Daniela Balanzátegui and Barbara Winter (Simon Fraser University)**  
Collectors, Forgers, and Looters: The History behind Andean Ancient Art

**2** Pre-Contact Quarries: Permanent Places, Eternal Resources?  
*Session sponsored by the CAA Quarry special interest group*  
Organizers: Laura Roskowski and Adrian L. Burke ; Session chair: Laura Roskowski **CHICOUTIMI**

- 9:00 – 9:20** **Nathaniel Kitchel (University of Wyoming)**  
The Newest of Worlds: Quarries as Proxy Measures of Landscape Learning in the Pleistocene Northeast
- 9:20 – 9:40** **Meaghan Porter (M.A., Stantec Consulting Ltd.)**  
Why on earth would you want to knap this? A preliminary assessment of site FbPi-8 and the use of Red Deer Mudstone
- 9:40 – 10:00** **Julie Martindale (University of Saskatchewan)**  
Bogged down: Mobility and the Exploitation of the Quarry of the Ancestors
- 10:00 – 10:20** **Pause café / Coffee break**
- 10:20 – 10 :40** **Laura Roskowski and Morgan Netzel (Stantec Consulting Ltd.)**  
Finding the Needle in the Haystack: Using bone to understand pre-contact mobility within and around the Quarry of the Ancestors
- 10:40 – 11:00** **Glen MacKay (Prince of Wales Northern Heritage Centre), Adrian L. Burke (Université de Montréal) Gilles Gauthier (Université de Montréal), Charles Arnold (University of Calgary)**  
Assessing the Long-Distance Procurement of Thunder River Chert by the Mackenzie Inuit Using Non-Destructive Polarized Energy Dispersive X-Ray Fluorescence
- 11:00 – 11:20** **Laurie McClean (Burnside Heritage Foundation Inc.)**  
Recent Research at the Bloody Bay Cove Summit (DeAl-09), Part of the Bloody Bay Cove Quarry
- 11:20 – 11:40** **Kenneth R. Holyoke (University of New Brunswick) and M. Gabriel Hrynck (University of Connecticut)**  
The Mill Brook Washademoak Lake Siteless Survey: Hunter-gatherers, Riverine Landscapes, and Fixed Resource Locales
- 11:40 – 12:00** **Christian C. L. Thériault (University of New Brunswick)**  
The Potential Significance of Selected New Brunswick's Ordovician Cherts into the Regional Archaeological Record

3

### Archaeological Theory: A Canadian Perspective Matthew Beaudoin and Scott Neilsen (Organizers / Chairs)

- 9:00 – 9:20** **Kathryn Denning (York University)**  
Archaeology in 'The Land God Gave Cain'
- 9:20 – 9:40** **Jennifer Campbell (Archaeology Centre, University of Toronto/Lakehead University)**  
Identity, Subjectivity, and the Canadian Archaeologist Abroad
- 9:40 – 10:00** **Joshua Dent (The University of Western Ontario)**  
Defining a Canadian Political Archaeology
- 10:00 – 10:20** **Pause café / Coffee break**
- 10:20 – 10:40** **Gary Warrick (Wilfrid Laurier University)**  
Ontario Archaeology and Bruce Trigger
- 10:40 – 11:00** **Jennifer Schumacher (McMaster University)**  
Ontario Ceramic Analysis: Moving Forward Through Projects of the Past
- 11:00 – 11:20** **Jeffrey Dillane (McMaster University)**  
Out of Site: Applying Non-Site Approaches to the Pre-Contact Landscape of the Trent Valley, Southern Ontario
- 11:20 – 11:40** **Jennifer Birch (University of Georgia)**  
Between Villages and Cities: Settlement Aggregation and Community Transformation
- 11:40 – 12:00** **M. Gabriel Hrynck (University of Connecticut)**  
Historiographical Considerations for Archaeological Reports by Nineteenth-Century Natural Historians: Considering George Frederic Matthew and Henry David Thoreau

STE FOY

4

### Ontario Iroquoian Archaeology Claude Chapdelaine (Chair)

- 9:00 – 9:20** **Steven Dorland (University of Toronto)**  
The Inside is What Counts: an analysis of regional identity associated with interior and exterior pottery decoration.
- 9:20 – 9:40** **Peter Popkin and Thanos Webb**  
Re-examining deer populations in ancient Huronia
- 9:40 – 10:00** **Gregory V. Braun (University of Toronto)**  
Between Memory and Materiality: Biographies of Iroquoian Smoking Pipes
- 10:00 – 10:20** **Pause café / Coffee break**

QUÉBEC

5

### Iroquoiens du Saint-Laurent / St. Lawrence Iroquoians Claude Chapdelaine (Organisateur / Animateur)

- 10:20 – 10:40** **Timothy J. Abel (Jefferson Community College, SUNY Canton)**  
St. Lawrence Iroquoians in Northern New York: Past, Present, and Directions for the Future
- 10:40 – 11:00** **Bruce Jamieson (Citizenship and Immigration Canada, Government of Canada)**  
St. Lawrence Iroquoian Bone and Antler Tool Typology
- 11:00 – 11:20** **Francis Scardera (Fort Drum Cultural Resources)**  
Using Squier to Help Identify Remnants of St. Lawrence Iroquoian Earthworks in Jefferson County, New York
- 11:20 – 11:40** **Michel Gagné (archéologue municipal, MRC du Haut-Saint-Laurent)**  
Le site McDonald, une fenêtre ouverte sur les premiers Iroquoiens horticulteurs du Québec
- 11:40 – 12:00** **Claude Chapdelaine (Université de Montréal)**  
De la maisonnée à l'espace villageois : deux saisons de fouilles au site Droulers

6

### Dix années de fouilles à la pointe à Callière, Vieux-Montréal Brad Loewen et Sophie Limoges (Organisateurs / Animateurs)

- 9:00 – 9:20** **Sophie Limoges (Musée Pointe-à-Callière)**  
Présentation du projet mixte muséo-universitaire. Dix ans déjà!
- 9:20 – 9:40** **Christian Bélanger (Université de Montréal)**  
Le fort de Ville-Marie, 1642-1683. Vers un premier plan archéologique de l'établissement historique
- 9:40 – 10:00** **Daniel Landry (Université de Montréal)**  
Le paysage végétal de la pointe à Callière au XVI<sup>e</sup>-XVII<sup>e</sup> siècle
- 10:00 – 10:20** **Pause café / Coffee break**

SHERBROOKE 1

- 10:20 – 10:40** **Geneviève Treyvaud (Université Laval)**  
Fer, cuivre et minerais : les activités métallurgiques du fort Ville-Marie, 1642-1688
- 10:40 – 11:00** **Justine Bourguignon-Tétreault (Université de Montréal)**  
Présence amérindienne et traite à Montréal (1675-1688). Objets et contextes
- 11:00 – 11:20** **Brad Loewen (Université de Montréal)**  
Dîner au travail. Consommation alimentaire en milieu industriel au XIX<sup>e</sup> siècle

## SHERBROOKE 2

7

### Archaeological Perspectives on Arctic territory Pierre M. Desrosiers and Susan Lofthouse (Organizers / Chairs)

- 9:00 – 9:20** **Desrosiers, Pierre (Avataq Cultural Institute)**  
Lithic Raw Material and the Size of Palaeoeskimo Territory
- 9:20 – 9:40** **Susan Lofthouse (Avataq Cultural Institute)**  
Shifting Dorset subsistence strategies in northern Foxe Basin: Early to Late Dorset at Needle Point
- 9:40 – 10:00** **Hervé Monchot (Université Paris Sorbonne-Paris IV)**  
Cinquante ans après Taylor, la faune du site dorsétien de Tayara (KbFk-7) : état des lieux
- 10:00 – 10:20** **Pause café / Coffee break**
- 10:20 – 10:40** **Marie-Michelle Dionne (Université Laval, V.P. G.A.I.A. Inc., Group for Archaeological Interpretations and Analyses)**  
Skin Working Process and Dorset Women across the Land: Functional and Socioeconomical study of lithic tools
- 10:40 – 11:00** **Claire Houmard (UMR 7055, Préhistoire et technologie)**  
Foxe Basin and Hudson Strait: a territory shared by analogous cultural groups
- 11:00 – 11:20** **Patty Wells (Memorial University of Newfoundland), Tim Rast (Elfshot), M.A.P Renouf (Memorial University of Newfoundland)**  
Techniques of Osseous (Bone, Antler and Ivory) Tool Manufacture at the Dorset Site of Phillip's Garden, Northwestern Newfoundland: Some Insights from Experimentation
- 11:20 – 11:40** **David Craig and Peter Whitridge (Memorial University of Newfoundland)**  
Not so big: Inuit dwellings and the "small house" movement
- 11:40 – 12:00** **June Zinck, Memorial University of Newfoundland**  
Bringing Archaeology into the New Dimension: the benefits of using CAD programming to create virtual 3D reconstructions of Canadian archaeological sites

## JEUDI 17 MAI, APRÈS-MIDI • THURSDAY MAY 17, AFTERNOON

8

### The Archaeology of Gender: The French Fishery at Newfoundland Peter Pope (Organizer / Chair)

## RIMOUSKI

- 13:40 – 14:00** **Peter E. Pope (Department of Archaeology, Memorial University)**  
Fisher Men at Work: the Material Culture of the Champs Paya Fishing Room, as a Gendered Site
- 14 :00 – 14 :20** **Mélissa Burns (Department of Archaeology, Memorial University)**  
The Taskscape of an 18<sup>th</sup>-century French Seasonal Fishing Station on Newfoundland's Petit Nord
- 14 :20 – 14 :40** **Stéphane Noël (Université Laval)**  
Eating like a (Fisher) Man: Faunal Remains as Social Markers in a French Seasonal Cod Fishing Site on the Petit Nord of Newfoundland
- 14 :40 – 15 :00** **Hilary Hatcher (Department of Archaeology, Memorial University)**  
Were Women There? A Look at Gender during the English Occupation of a French Fishing Station
- 15 :00 – 15 :20** **Amanda Crompton (Memorial University)**  
Tinker, Tailor, Soldier, Sailor: Gender and the French Resident Fishery in Placentia Bay, Newfoundland, 1662-1713
- 15 :20 – 15 :40** **Pause café / Coffee break**

11

### British Columbia Archaeology David Pokotylo (Chair)

- 15 :40 – 16 :00** **David Pokotylo (UBC, Vancouver), Nichloas Waber (University of British Columbia, Vancouver), Sandra Peacock (University of British Columbia, Okanagan) and Brian Kooyman (University of Calgary)**  
Dating a Stratified Microblade Component at the White Rock Springs Site, Southern Interior British Columbia
- 16 :00 – 16 :20** **Gary Coupland (University of Toronto)**  
Bead Burials and Complex Hunter-Gatherers in the Salish Sea

- 16 :20 – 16 :40 **Paul Prince (Grant MacEwan University) and Deanna McAvoy (Grant MacEwan University)**  
Where Are the Deer? Prey Selection and Taxonomic Representation in Faunal Assemblages From Central British Columbia
- 16 :40 – 17 :00 **Alejandra Diaz<sup>1</sup>, Alejandra, M.P. Richards<sup>1</sup>, Suzanne Villeneuve<sup>2</sup>, Brian Hayden<sup>2</sup> (1Department of Anthropology, University of British Columbia, Vancouver; 2Department of Archaeology, Simon Fraser University, Burnaby)**  
Stable Isotope Analysis in the Mid-Fraser Region: Determining Prehistoric Diet in British Columbia

9

### Maritime Archaeology on land and under water

**Charles Dagneau (Organizer / Chair)**

CHICOUTIMI

- 13:40 – 14:00 **Vincent Delmas (University of Montreal) et Erik Phaneuf (AECOM)**  
Underwater archaeological research at the Petit Mecatina Island site, Lower-North-Shore
- 14 :00 – 14 :20 **Éric Legua, Mathieu Mercier Gingras, Marcel Goulet and Brad Loewen (Université de Montréal)**  
Archéologie de la flotte française de 1759
- 14 :20 – 14 :40 **Erik Phaneuf (AECOM)**  
Beach shipwreck assessment in Douglstown, Gaspésie, Québec (DeDc-6)
- 14 :40 – 15 :00 **Charles Dagneau (Parks Canada)**  
The investigation of the Clyde, a mid 19<sup>th</sup> c. steamship lost off île du Wreck, Mingan Archipelago National Park Reserve of Canada
- 15:00 – 15:20 **Karolyn Gauvin**  
A bow anchor from the wreck of the Machault, Battle of the Restigouche National Historic Site of Canada
- 15 :20 – 15 :40 **Pause café / Coffee break**
- 15 :40 – 16 :00 **Mike Moloney, University of Calgary**  
Applications of Space Syntax in Maritime Archaeology
- 16:00 – 16:20 **Phil Dunning (Parks Canada)**  
Yeoman and Merchant: Clothing and Accessories from the Elisabeth and Mary, a 1690 New England Shipwreck
- 16: 20 – 16:40 **Alexandre Poudret-Barré (Association Adramar)**  
L'Atlas archéologique des 2 Mers : un projet archéologique transfrontalier  
The Archaeological Atlas of the 2 Seas: a cross-border archaeological project
- 16:40 – 17:00 **Daniel LaRoche (Parcs Canada/Parks Canada)**  
Challenges in the Management of Underwater Cultural Heritage in Canada

3

### Archaeological Theory: A Canadian Perspective

**Matthew Beaudoin and Scott Neilsen (Organizers / Chairs)**

STE-FOY

- 13 :40 – 14 :00 **James Keron (The University of Western Ontario)**  
Archaeology and Spatial Statistics
- 14:00 – 14: 20 **Gerald Oetelaar (University of Calgary)**  
Theory and Evidence: The Tyranny of Scientific Objectivity in Archaeological Practice
- 14 :20 – 14 :40 **Amelia Fay (Memorial University)**  
Merging the Local and the Regional: Future Directions for the archaeology of Inuit-European Contact in Labrador
- 14:40 – 15:00 **Matthew Beaudoin (The University of Western Ontario)**  
Archaeologists Colonizing Canada: The Effects of Unquestioned Categories
- 15:00 – 15:20 **Jeff Oliver (University of Aberdeen)**  
Archaeological Theory and the Indigenization of Canada's past
- 15 :20 – 15 :40 **Pause café / Coffee break**
- 15 :40 – 16 :00 **Eldon Yellowhorn (Simon Fraser University)**  
First Nations Historical Archaeology
- 16: 00 – 16:20 **Scott Neilsen (Labrador Institute of Memorial University)**  
Regrettably, still implicit...
- 16:20 – 16:40 **Neal Ferris (The University of Western Ontario)**  
Discussant

5

### Iroquoiens du Saint-Laurent / St. Lawrence Iroquoians

**Claude Chapdelaine (Organisateur / Animateur)**

QUÉBEC

- 13 :40 – 14 :00 **Christine Perreault (Université de Montréal)**  
Conservatisme et innovation chez les potières iroquoiennes du site Droulers-Tsiionhiakwatha

- 14 :00 – 14 :20 Christian Gates Saint-Pierre (Université de Montréal)**  
L'exploitation de la faune et le travail des matières dures animales au site Droulers (Québec)
- 14 :20 – 14 :40 Stéphanie Trottier (Université de Montréal)**  
De l'importance du maïs et autres cultigènes au site Droulers
- 14:40 – 15:00 Luc Doyon (Université de Montréal)**  
Droulers 3.0 – Les SIG et le patrimoine du Haut-Laurent
- 15:00 – 15:20 Peter Ramsden (McMaster University (Retired))**  
A Reconsideration of St. Lawrence Iroquoian Artifacts in the Trent Valley and Beyond
- 15 :20 – 15 :40 Pause café / Coffee break**
- 15 :40 – 16 :00 Ellen R. Cowie (Northeast Archaeology Research Center)**  
St. Lawrence Iroquoian Pottery in Maine: A Review and Update of the Evidence
- 16: 00 – 16:20 John G. Crock (University of Vermont)**  
In the Middle of the Lake Between: St Lawrence Iroquoian Sites and Ceramic Finds in the Northern Lake Champlain Valley, Vermont
- 16:20 – 16:40 Michel Plourde (Archéologue consultant)**  
L'exploitation du phoque dans le secteur de l'embouchure du Saguenay(Québec, Canada) par les Iroquoiens au Sylvicole supérieur (1000-1534 de notre ère)
- 16:40 – 17:00 Mariane Gaudreau (Université de Montréal)**  
Les Stadaconiens sous la loupe : la question de l'identité culturelle dans l'estuaire du St-Laurent
- 17:00 – 17:20 Roland Tremblay (Archéologue consultant)**  
L'occupation iroquoise du côté sud de l'estuaire du Saint-Laurent. Chronologie, adaptation, identité : constat et prospectives

10

Seeing beyond the data: Hunter-gatherer Studies  
using archaeometry and anthropology

**Marie-Michelle Dionne (Organizer) and Frédéric Dussault (Organizer and Chair)**

SHERBROOKE 1

- 13 :40 – 14 :00 Frédéric Dussault (Université Laval)**  
Reconciling past perceptions: Explorers to Northwest Greenland and Inughuit hygiene
- 14 :00 – 14 :20 Maryse Cloutier-Gélinas (Université Laval)**  
Through Space, Time, and Otherness: A Spatial Analysis of Fifteenth to Twentieth Century Labrador Inuit Settlement Patterns
- 14 :20 – 14 :40 Woollett, James<sup>1</sup>, Najat Bhiry<sup>2</sup>, Andréanne Couture<sup>2</sup>, Isabelle Lemus-Lauzon<sup>2</sup>, Natasha Roy<sup>2</sup>, Lindsay Swinarton<sup>1</sup>, Cynthia Zutter<sup>3</sup> (<sup>1</sup>Département d'histoire and Centre d'études Nordiques, Université Laval; <sup>2</sup>Département de géographie and Centre d'études Nordiques Université Laval; <sup>3</sup>Department of Social Sciences, McEwan College)**  
Soil, ice, forest and seals: An interdisciplinary landscape history of the Dog Island region, Nunatsiavut
- 14:40 – 15:00 Nathalie Gaudreau (Université Laval / Artefactuel)**  
Adding flesh to the bones: a recent zooarchaeological study from Labrador
- 15:00 – 15:20 Lindsay Swinarton (Université Laval)**  
Bones in the Home: Depositional Practices Among the Labrador Inuit
- 15 :20 – 15 :40 Pause café / Coffee break**
- 15 :40 – 16 :00 Andréanne Couture<sup>1</sup>, James Wollett<sup>2</sup>, Najat Bhiry<sup>1</sup>, Yves Monette<sup>3</sup> (<sup>1</sup>Center for Northern Studies, geography department, Université Laval; <sup>2</sup>Center for Northern Studies, history department, Université Laval; <sup>3</sup>Canadian Museum of Civilization)**  
Household Geoarchaeology: Studying the spatial organization of Contact-Period Labrador Inuit communal houses
- 16: 00 – 16:20 Marie-Michelle Dionne (Université Laval et G.A.I.A. Inc.)**  
What Happened There? Perceive the economic strategies and social relations beyond Use Wear Data
- 16:20 – 16:40 Cora Woolsey (McMaster University)**  
That's The Way the Cookie Doesn't Crumble: The Deliberate Use of Decorative Impressions to Reduce Surface Cracking on Pre-Contact Cooking Pots from New Brunswick
- 16:40 – 17:00 Gordon R. Freeman (University of Alberta)**  
Hunter-Gatherer Societies Possessed Scientific and Artistic Genius
- 17:00 – 17:20 James Wollett (Département d'histoire and Centre d'études nordiques, Université Laval)**  
Discussant

7

Archaeological Perspectives on Arctic territory  
**Pierre M. Desrosiers and Susan Lofthouse (Organizers / Chairs)**

SHERBROOKE 2

- 13 :40 – 14 :00 Lisa Hodgetts (Western University)**  
Gendered Landscapes of Banks Island's Northern Interior
- 14 :00 – 14 :20 Elsa Cencig (Avataq Cultural Institute), Jennifer Bracewell (McGill University), Elspeth Ready (Stanford University), Hervé Monchot (Université Paris Sorbonne-Paris IV), Daniel Gendron (Avataq Cultural Institute)**  
Aivirtuuq (Kangiqsujuaq, Nunavik) : Archaeology, fieldschool and potential for cultural tourism
- 14 :20 – 14 :40 Hervé Monchot (Université Paris Sorbonne-Paris IV), Elspeth Ready (Stanford University), Elsa Cencig (Avataq Cultural Insitute), Jennifer Bracewell (McGill University) and Daniel Gendron (Avataq Cultural Insitute)**  
Saunitarlik (JiEv-15, Nunavik), a winter walrus kill-butchery site
- 14:40 – 15:00 Benjamin Patenaude (Avataq Cultural Institute)**  
Preliminary Results of the 2010 and 2011 Excavations at Point Ford (Kangiqsujuaq, Nunavik)
- 15:00 – 15:20 Jamie E.S. Brake (Nunatsiavut Government)**  
The Repatriation and Reburial of Human Remains from Zoar, Labrador
- 15 :20 – 15 :40** Pause café / Coffee break
- 15 :40 – 16 :00 Lauren Norman (University of Toronto)**  
Seasonal Spaces: An archaeofaunal spatial comparison between cold- and warm-season dwellings at the Pembroke Site, Nunavut
- 16: 00 – 16:20 Jennifer Bracewell (McGill University)**  
Mobility and Adaptation in Prehistoric Northern Finland: a case-study from Northern Ostrobothnia
- 16:20 – 16:40 Kristján Ahronson (Prifysgol Bangor University)**  
An Atlantic Territory and the End of Prehistory in the near-Arctic Islands of the European Atlantic

## VENDREDI 18 MAI, AVANT-MIDI • FRIDAY MAY 18, MORNING

12

### L'archéologie historique Catherine Losier (Animatrice)

RIMOUSKI

- 8 :40 – 9 :00 Catherine Losier (Université Laval)**  
Commercer à Cayenne au cours du XVIII<sup>e</sup> siècle
- 9 :00 – 9 :20 Agnès Gelé (Université Laval)**  
La verrerie de table française en Amérique du Nord entre 1650 et 1760
- 9 :20 – 9 :40 Désirée-Emmanuelle Duchaine (Ruralys)**  
Wolfe's Cove Hill: un point stratégique pour l'armée britannique lors des batailles de 1759 et 1760
- 9 :40 -10 :00 Caroline Parent (Université Laval)**  
L'hygiène au XVIII<sup>e</sup> siècle : une étude des latrines du second palais de l'intendant à Québec
- 10 :00 – 10 :20** Pause café / Coffee break

13

### Using Tree Rings to Date and Locate: Dendrochronology and Dendroprovenance Charles Dagneau and Brad Loewen (Organizers / Chairs)

- 10 :20 – 10 :40 Marie-Claude Brien (Université de Montréal)**  
Le cèdre blanc (*Thuja occidentalis*) dans le paysage culturel en amont de Montréal au XIX<sup>e</sup> siècle. Une approche dendroarchéologique
- 10 :40 – 11 :00 Michael F.J. Pisaric, Trevor J. Porter, Peter de Montigny, Melissa Dick, Joelle T. Perrault, Kerry-Lynn Robillard and Ève Wertheimer (Carleton University, Ottawa)**  
The use of salvaged white pine river logs for dendroarcheological dating in eastern Ontario, Canada
- 11 :00 – 11 :20 Igor Drobyshev (Université du Québec en Abitibi-Témiscamingue, Rouyn-Noranda and Sveriges lantbruksuniversitet (SLU), Alnarp)**  
Understanding large scale changes in land-use patterns with the help of tree rings
- 11 :20 – 11 :40 Aoife Daly (University College, London)**  
Oak in Northern Europe
- 11 :40 – 12 :00 Thomas A. Richmond (Cornell University, Ithaca)**  
The Bennett Tavern and La Chasse-galerie... (The Flying Canoe)

14

### The Archaeology of Fish and Fisheries Jesse Webb and Susan blair (Organizers / Chairs)

CHICOUTIMI

- 8 :40 – 9 :00 Susan E. Blair (University of New Brunswick), Matthew K. Litvak (Mount Allison University) and W. Jesse Webb (University of New Brunswick)**  
The Precontact Sturgeon Fishery of the Miramichi River Drainage, Northeastern New Brunswick, Canada

- 9 :00 – 9 :20** **Eric J. Guiry (Memorial University), Stéphane Noël, Céline Dupont-Hébert (Université Laval) and Vaughan Grimes (Max Plank Institute for Evolutionary Anthropology, Leipzig)**  
Understanding Meat Provisioning Practices among Historic North Atlantic Fisheries: Insights from Stable Isotope Analyses
- 9 :20 – 9 :40** **Jennifer Comeau (Memorial University of Newfoundland)**  
Consumption by the French Migratory Fishermen at Sixteenth-Century Ferryland, Newfoundland
- 9 :40 -10 :00** **Paul Szpak (The University of Western Ontario)**  
Molecular Perspectives on the Taphonomy of Fish Bone
- 10 :00 – 10 :20** *Pause café / Coffee break*
- 10 :20 – 10 :40** **Megan Caldwell (University of Alberta), Dana Lepofsky (Simon Fraser University) and Michelle Washington (Sliammon First Nation)**  
Fish and Fishing in Tla'amin Traditional Territory – From 3,000 years ago until the present
- 10 :40 – 11 :00** **David Bilton and Gay Frederick**  
What Does Northern Gulf Diversified Fishing Look Like? Presenting Archaeofaunal Data from Shishalh Territory, British Columbia
- 11 :00 – 11 :20** **Trevor J. Orchard**  
Salmon or Herring, Clams or Mussels?: Regional Trends and Local Variations in Fisheries and Shell-fisheries during the late Holocene in Southern Haida Gwaii, British Columbia
- 11 :20 – 11 :40** **A. Katherine Patton, Trevor J. Orchard and David Bilton**  
Reconciling irreconcilable differences: the variable importance of fisheries and shellfisheries on the North-west Coast

**15** Western Canada  
**Nathan Friesen (Chair)**

STE FOY

- 8 :40 – 9 :00** **Nathan Friesen (Saskatchewan Ministry of Tourism, Parks, Culture and Sport)**  
A Spatial Analysis of Tipi Encampment Locations as they Relate to Bison Habitat, Grasslands National Park, Saskatchewan
- 9:00 – 9:20** **Darryl Bereziuk and Robin Woywitka (Alberta Culture and Community Service)**  
The Hummingbird Creek Site (FaPx-1): A Late Period Stratified Archaeological Site in Alberta's Eastern Slopes
- 9 :20 – 9 :40** **Lindsay Amundsen-Meyer (Department of Archaeology, University of Calgary)**  
Footprints in the Forest and Islands in a Sea of Grass: A Comparison of Blackfoot and Kayapó Agroforestry Practices
- 9 :40 -10 :00** **Karen L. Church (Department of Archaeology, University of Calgary)**  
Understanding the Nature and Patterned Distribution of Culturally Modified Trees on Haida Gwaii / the Queen Charlotte Islands, BC
- 10 :00 – 10 :20** *Pause café / Coffee break*

**16** Informing and Implementing Archaeological Management Plans : Case Studies from Canada  
**William Moss and Ron Williamson (Organizers / Chairs)**

- 10 :20 – 10 :40** **Susan Hughes (City of Toronto) and Ronald F. Williamson (Archaeological Services Inc.)**  
Archaeological Site Management Planning in the City of Toronto: Challenges to Implementing the Plan
- 10 :40 – 11 :00** **Andrew Mason (Golder Associates Ltd.) and Doris Zibauer (Golder Associates Ltd.)**  
Heritage Site Management Planning in British Columbia: Challenges and Opportunities
- 11 :00 – 11 :20** **William Moss (Ville de Québec), Daniel Simoneau (Ville de Québec) and Michel Plourde (consulting archaeologist)**  
Québec City's archaeological master plan, a work in progress
- 11 :20 – 11 :40** **Marcus Letourneau (Golder Associates Ltd.)**  
Planning for Archaeology: Reflections on the municipal management of archaeological resources in Kingston, Ontario
- 11 :40 – 12 :00** **Robert I. MacDonald (Archaeological Services Inc.)**  
Paleo-environmental Reconstruction for Archaeological Potential Models: Validation from the Sault Ste. Marie Master Plan

**17** General Session A  
**Scott MacEachern (Chair)**

QUÉBEC

- 8 :40 – 9 :00** **Scott MacEachern (Bowdoin College)**  
Rooting the San: Reinscribing African Foragers in Human Genetic History

- 9 :00 – 9 :20 **Frédéric Belley (Institut d'Archéologie Saint-André)**  
Why the Mayas Built Pyramids? A Comparative Analysis of the Water Supply System of Zapotitan
- 9:20 -9:40 **Sarah Sifontes (York University)**  
Developing a Fossil and Limestone Index using the UV and Red Ranges of the Spectrum
- 10 :00 – 10 :20 **Pause café / Coffee break**

**18** The Northeastern Boreal Forest: New Research, Changing Perspectives

**David Denton (Organizer), André Burroughs (Organizer and Chair)**

- 10 :20 – 10 :40 **Gilles Rousseau (Arkéos inc.)**  
La géographie du secteur Rupert-Eastmain et son incidence sur l'occupation humaine
- 10 :40 – 11 :00 **André Costopoulos and Colin D. Wren (McGill University)**  
Archaeological and paleo-environmental survey in Wemindji, James Bay's paleo-coastal region
- 11 :00 – 11 :20 **Myriam Letendre (Arkéos inc.)**  
Répartition et variabilité des sites préhistoriques situés sur le territoire touché par les travaux de EM-1A et dérivation Rupert, bief « aval »
- 11 :20 – 11 :40 **David Tessier (Archéotec inc.)**  
EjFt-003 : 4000 ans d'occupations humaines à la confluence des rivières Kamistikawesich et Rupert. Mise en contexte et résultats
- 11 :40 – 12 :00 **Daniel Chevrier (Archéotec inc.)**  
EjFt-003 : 4000 ans d'occupations humaines à la confluence des rivières Kamistikawesich et Rupert. Les matières premières lithiques en Jamésie

**19** The Lakehead Complex Revisited 2: New Research and New Results from the 2011 Thunder Bay Studies

**Terrance Gibson (Organizer and Chair)**

- 8 :40 – 9 :00 **Dave Norris (Western Heritage, Winnipeg)**  
Archaeology in Northern Ontario: How Modern Day Roads are Discovering Ancient Travel Corridors
- 9 :00 – 9 :20 **Mark Paxton-MacRae (Western Heritage, Winnipeg) and Terrance Gibson (Western Heritage, St Albert)**  
Excavation and Preliminary Interpretation of the Hodder East Site, Thunder Bay
- 9 :20 – 9 :40 **Samantha Markham (Lakehead University, Thunder Bay)**  
Projectile Point Assemblage Variability at the Paleo-Indian Mackenzie 1 Site
- 9 :40 -10 :00 **Gjende Bennett (Lakehead University, Thunder Bay)**  
Lithic Reduction Strategies at a Late-Paleo-Indian site in North-western Ontario
- 10 :00 – 10 :20 **Pause café / Coffee break**
- 10 :20 – 10 :40 **Terrance Gibson (Western Heritage, St Albert)**  
Magnetic Susceptibility: Explorations in the Detection and Excavation of the Intangible in Thunder Bay's Ancient Archaeological Record
- 10 :40 – 11 :00 **Krista Gilliland (Western Heritage, St Albert), W. Paul Adderley (University of Stirling), Terrance Gibson (Western Heritage, St Albert), Dave Norris (Western Heritage, Winnipeg)**  
Context, Chronology, and Culture: Problem-based Geoarchaeology at the Lakehead Complex Sites, Thunder Bay
- 11 :00 – 11 :20 **Scott Hamilton (Lakehead University, Thunder Bay)**  
Evaluation of Site Prospecting Effectiveness: RLF Site Field School Excavations
- 11 :20 – 11 :40 **Christine Shultis (Lakehead University, Thunder Bay)**  
Geoarchaeological Investigation of Five Paleoindian Sites in the Northwestern Lake Superior Basin
- 11 :40 – 12 :00 **William Ross (Ross Archaeological Research Associates, Thunder Bay)**  
Discussant

SHERBROOKE 1

**20** L'horizon « pseudo-scallop-shell » : nouveaux résultats, bilans et perspectives

**Ronan Méhault (Organisateur et Animateur)**

- 8 :40 – 9 :00 **Peter Timmins (Western University/Timmins Martelle Heritage Consultants Inc.), Amanda Diloreto (Timmins Martelle Heritage Consultants Inc.)**  
Beaverbrook: An Early Woodland (Meadowood) Habitation Site in Southwestern Ontario
- 9 :00 – 9 :20 **Francis Robinson IV (University at Albany-SUNY and The University of Vermont Consulting Archaeology Program)**  
The Unrealized Periphery: a Multiscalar Investigation of the Native Americans of the Early Middle Woodland in Vermont and Beyond

SHERBROOKE 2

- 9 :20 – 9 :40 Ronan Méhault (Université de Montréal)**  
Regard macroévolutionniste sur la poterie du Sylvicole moyen ancien (400 avant notre ère. – 500 de notre ère) à la pointe du Buisson (BhFl-1d), Haut-Saint-Laurent, Québec
- 9 :40 -10 :00 Amélie Sénécal (Pointe-du-Buisson/Musée québécois d'archéologie)**  
Originalité culturelle au Sylvicole moyen sur le site de Pointe-du-Gouvernement, Haut-Richelieu, Québec
- 10 :00 – 10 :20 Pause café / Coffee break**
- 10 :20 – 10 :40 André Miller (Groupe de recherche archéologique de l'Outaouais)**  
Variation stylistique de la céramique de la culture Pointe Péninsule et le changement culturel au Sylvicole moyen en Outaouais
- 10 :40 – 11 :00 Christian Gates Saint-Pierre et Claude Chapdelaine (Université de Montréal)**  
Existe-t-il une sphère d'interaction au Sylvicole moyen tardif?
- 11 :00 – 11 :20 Kenneth R. Holyoke (University of New Brunswick)**  
Ambiguous but Contiguous? Late Maritime Woodland Technology and "Period 6" in the Lower Saint John River

## VENDREDI 18 MAI, APRÈS-MIDI • FRIDAY MAY 18, AFTERNOON

13

Using Tree Rings to Date and Locate: Dendrochronology and Dendroprovenance  
Charles Dagneau and Brad Loewen (Organizers / Chairs)

RIMOUSKI

- 13 :20 – 13 :40 Carol Griggs (Cornell Tree Ring Laboratory, Cornell University, Ithaca)**  
Climate change during the mid-Younger Dryas to early Holocene evident in buried logs found southeast of Lake Ontario
- 13:40 – 14:00 Claire Alix (CNRS / Université de Paris 1 Panthéon Sorbonne) et Glenn P. Juday (University of Alaska Fairbanks)**  
Date, transit time and origin of driftwood – a tool for tree-ring dating archaeological sites in northwestern Alaska
- 14:00 – 14:20 Yan Boulanger<sup>1</sup>, Dominique Arseneault<sup>2</sup>, Hubert Morin<sup>3</sup>, Charles Dagneau<sup>4</sup>, Yves Jardon, Philip Bertrand<sup>2</sup> (<sup>1</sup>Service canadien des forêts, Centre de foresterie des Laurentides ; <sup>2</sup>Chaire de Recherche sur la Forêt Habitée, Département de biologie, chimie et géographie, Université du Québec à Rimouski ; <sup>3</sup>Centre d'Étude sur la Forêt, Département des sciences fondamentales, Université du Québec à Chicoutimi ; <sup>4</sup>Groupe de Recherche en Dendrochronologie Historique, Université de Montréal)**  
Dendro-archaeology and insect outbreaks: The development of long spruce chronologies from old buildings in eastern and southern Québec to reconstruct the multi-centennial spruce budworm outbreak history
- 14:20 - 14 :40 Sarah L. Quann<sup>1</sup>, Amanda B. Young<sup>1</sup>, Colin P. Laroque<sup>1</sup>, Howard J. Falcon-Lang<sup>2</sup> and Martin R. Gibling<sup>3</sup> (<sup>1</sup>Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University; <sup>2</sup>Department of Earth Sciences, Royal Holloway, University of London, Egham; <sup>3</sup>Department of Earth Sciences, Dalhousie University)**  
Dendroarchaeological evidence of coal extraction time periods, Joggins Fossil Cliffs, Nova Scotia, Canada
- 14 :40 – 15:00 Colin P. Laroque<sup>1</sup>, André Robichaud<sup>2</sup> and Mike Dillon<sup>3</sup> (<sup>1</sup>Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University; <sup>2</sup>Université de Moncton, campus de Shippagan; <sup>3</sup>Parks Canada, Cultural Resource Specialist, Jasper National Park, Jasper)**  
Who lobbed the lobster? Dating the Jasper Lobstick, Jasper National Park, Alberta
- 15 :00 – 15:20 Pause café / Coffee break**
- 15 :20 – 15:40 Malgorzata Danek<sup>1,4</sup>, André Robichaud<sup>2</sup>, Colin P. Laroque<sup>3</sup> and Trevor Bell<sup>1</sup> (<sup>1</sup>Department of Geography, Memorial University; <sup>2</sup>Université de Moncton, campus de Shippagan; <sup>3</sup>Department of Geography, Mount Allison University; <sup>4</sup>Faculty of Geology, Geophysics and Environment Protection, AGH-University of Science and Technology, Krakow)**  
Developing a regional eastern larch (*Larix laricina*) chronology for the Maritimes
- 15 :40 – 16:00 Bryan J. Mood, Colin P. Laroque (Mount Allison University) and André Robichaud (Université de Moncton)**  
Dendroarchaeological investigations at the Campbell Carriage Factory, Sackville, NB
- 16:00 – 16 :20 André Robichaud (Université de Moncton) and Colin P. Laroque (Mount Allison University)**  
Anneaux et aboiteaux : comment se servir du bois pour étudier le passé
- 16:20 – 16 :40 Cecilia Jennings<sup>1</sup>, Andre Robichaud<sup>2</sup>, James M. Erhman<sup>3</sup>, and Colin P. Laroque<sup>1</sup> (<sup>1</sup>Mount Allison University; <sup>2</sup>Université de Moncton, campus de Shippagan; <sup>3</sup>Digital Microscopy Facility, Mount Allison University)**  
Odes of Joy, or Sounds of Silence? How do you sample a "priceless" artifact?
- 16:40 – 17 :00 Emily Hogan<sup>1</sup>, Emma Davis<sup>1</sup>, Cecilia Jennings<sup>1</sup>, Stephen Hall<sup>1</sup>, Bryan Mood<sup>1</sup>, Colin P. Laroque<sup>1</sup> (<sup>1</sup>Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University)**  
A Dendroarchaeological Analysis of the Cormier House Sackville, New Brunswick

Archaeometry: Sciences to help archaeologists  
**Adelphine Bonneau et Jean-François Moreau (Organizers and Chairs)**

- 13:20 – 13:40 Corina Tudor, and M.A.P. Renouf (Department of Archaeology, Memorial University)**  
 Geophysical Investigation at Phillip's Garden, Northwestern Newfoundland
- 13:40 – 14:00 Céline Gillot, Département d'Anthropologie (Université de Montréal)**  
 The role of thin section petrography in the understanding of ancient architectural practices: A case study from the Maya site of Río Bec (Mexico)
- 14 :00 – 14 :20 Françoise Duguay, Célat (Université Laval)**  
 Clay Pipes in New France, 1625-1760: Can Archaeometry be Helpful in Identifying Imitations
- 14 :20 – 14 :40 J. Victor Owen (Department of Geology, Saint Mary's University)**  
 Microstructures of 1st patent Bow porcelain (c. 1744-1749): evidence for the behaviour of alkali-lime glass frit during the firing of siliceous-aluminous-calcic ceramics and implications for melt fertility
- 14:40 – 15:00 R.G.V. Hancock (Department of Medical Physics and Applied Radiation Sciences and Department of Anthropology, McMaster University)**  
 Thoughts on the usefulness of instrumental neutron activation analysis in archaeometry
- 15:00 – 15:20 Pause café / Coffee break**
- 15 :20 – 15 :40 Adelphine Bonneau (Université du Québec à Chicoutimi), Jean-François Moreau (Université du Québec à Chicoutimi), Réginald Auger (Université Laval), et Bertrand Emard (Hydro-Québec)**  
 Analytical studies of European Trade Glass Beads in Quebec: what instrument for what kind of results?
- 15 :40 – 16 :00 Geneviève Treyvaud (Laboratoires d'archéologie de l'Université Laval et INRS, Eau, Terre et Environnement)**  
 Archaeological materials and CT Scan application
- 16: 00 – 16:20 Rachel ten Bruggencate (Department of Anthropology, University of Manitoba) and Mostafa Fayek (Department of Geological Sciences , University of Manitoba)**  
 A combined visual-geochemical approach to establishing provenance for pegmatitic quartz artifacts
- 16:20 – 16:40 Kate Helwig and Jennifer Poulin (Canadian Conservation Institute, Ottawa)**  
 Archaeometric Studies at the Canadian Conservation Institute
- 16:40 – 17:00 André Bergeron (Centre de conservation du Québec), Jennifer Poulin (Canadian Conservation Institute, Ottawa), David Denton et Dario Izaguirre (Cree Regional Authority)**  
 Analyse par chromatographie en phase gazeuse et spectrométrie de masse de deux tessons du Sylvicole supérieur provenant du site FaFs-5 (Baie James)
- 17 :00 – 17 :20 Yves Monette (Musée canadien des civilisations)**  
 Vingt fois sur le métier, remettez votre ouvrage disait Boileau ?

Informing and Implementing Archaeological Management Plans:  
 Case Studies from Canada

**William Moss and Ron Williamson (Organizers / Chairs)**

- 13:20 – 13:40 Jonathan Fowler (Saint Mary's University)**  
 Integrating Archaeological Resource Management and Research at Grand Pré, Nova Scotia
- 13:40 – 14:00 Rebecca Duggan (Parks Canada)**  
 The Louisbourg coastal conservation plan
- 14 :00 – 14 :20 Theresa Gabos (Université de Montréal), et Valérie Janssen (Université de Montréal)**  
 Les paysages culturels du mont Royal : une réflexion sur l'étude de potentiel archéologique
- 14 :20 – 14 :40 Martin Cooper (Archaeological Services Inc.)**  
 AMPs and TEKS in the Context of Mineral Exploration in northern Ontario
- 14:40 – 15:00 David Gagné (Réseau Archéo-Québec)**  
 L'archéologie préventive : Guide pratique à l'intention des municipalités du Québec
- 15:00 – 15:20 Pause café / Coffee break**
- 15:20 – 15:40 April Chabot (University of Manitoba)**  
 Federal Repatriation Policy and First Nations in Canada: A Best Practices Model
- 15 :40 – 16 :00 Zeeshan Abedin (Archaeological Services Inc.), Ron Williamson (Archaeological Services Inc.), Barbara Jeffrey, York Region), and Laura Atkins-Paul (York Region)**  
 A 21<sup>st</sup> Century "Kettle with One Spoon." Aboriginal Engagement Program for the York Region Archaeological Management Plan
- 16: 00 – 16:20 Daniel Gendron (Institut culturel AVATAQ)**  
 Old and New Challenges in Cultural Management in Nunavik

- 16:20 – 16:40 **Michael Heilen (Statistical Research, Inc.), Jeffrey H. Altschul (Statistical Research, Inc.), Michael R. Polk (Sagebrush Consultants, L.L.C.), and Robert A. Heckman (Statistical Research, Inc.)**  
Cultural Resource Management Plans from a U.S. Perspective: Challenges and Opportunities
- 16:40 – 17:20 **William Moss (Ville de Québec), Ron Williamson (Archaeological Services, Inc.), Teresita Majewski (Statistical Research, Inc, President, American Cultural Resources Association (ACRA)), Andrew Mason (Golder Associates Ltd.), Pierre Desrosiers (MCCCFQ (substitute))**  
Round table

18

**The Northeastern Boreal Forest: New Research, Changing Perspectives**  
**David Denton (Organizer), André Burroughs (Organizer and Chair)**

QUÉBEC

- 13:20 – 13:40 **Jessica Massé (Archéotec inc.)**  
L'analyse taphonomique des ossements animaux. Exemples provenant des sites EjFt-003 et EjFu-010
- 13:40 – 14:00 **Marc Boucher et Thierry Rauck (Archéotec inc.)**  
Stockage et gestion de données archéologiques et spatiales : de l'analyse scientifique à la publication
- 14 :00 – 14 :20 **Yvonne Ly (Archéotec inc.)**  
Essai d'identification de la provenance de la poterie jamésienne selon leurs caractéristiques chimiques
- 14 :20 – 14 :40 **Daniel Poulin (Arkéos inc.)**  
Les occupations du site EkFs-03 à la fin du XIII<sup>e</sup> siècle de notre ère
- 14:40 – 15:00 **Anthony Jenkinson, Richard Nuna and Stephen Loring**  
An "Archaic" boat building site at Kamestastin
- 15:00 – 15:20 **Pause café / Coffee break**
- 15 :20 – 15 :40 **Francis Marcoux (Cree Regional Authority), James Chism (Waskaganish Cultural Institute)**  
Nuutameshaanan, State of Knowledge of the EiGo-1 Site
- 15 :40 – 16 :00 **Nicolas Cadieux, Jean-Christophe Ouellet, Hélène Buteau (Archéotec inc.)**  
La modélisation tridimensionnelle et la représentation des données archéologiques : perspectives et prospectives
- 16: 00 – 16:20 **David Denton and John Bosum (Cree Regional Authority)**  
People, Place and Custom: Exploring and Passing on Historical and Archaeological Knowledge in the Rupert Diversion Area
- 16:20 – 16:40 **Dario Izaguirre (Administration régionale Crie)**  
Le Boumhounan au XIX<sup>e</sup> siècle, témoins archéologiques sur une partie du réseau d'échange à la Baie-James
- 16:40 – 17:00 **Kevin Brownlee (The Manitoba Museum) and Myra Sitchon (The University of Manitoba)**  
Shifting research paradigms in archaeological impact assessments of Hydroelectric Development Projects along the Churchill River in northern Manitoba

22

**Current Research in Canadian Rock Art**  
**Jack Brink (Organizer) and Dagmara Zawadzka (Organizer and Chair)**

SHERBROOKE 1

- 13:20 – 13:40 **Rex Weeks (University of Arkansas)**  
Seeing Mide Rock-Paintings: Perspectives on the Midewigaaan
- 13:40 – 14:00 **Daniel Arsenaault (CÉLAT-UQAM, Université du Québec à Montréal)**  
Rock art as non art: towards the interpretation of some peculiar "rock art" sites in the Far-Eastern Canadian Shield!
- 14 :00 – 14 :20 **Serge Lemaitre (Chercheur postdoctorant du Célat, UQAM)**  
Pour une macro-vision des peintures rupestres du Bouclier canadien
- 14 :20 – 14 :40 **Dagmara Zawadzka (Université du Québec à Montréal)**  
Rock art and territoriality: An example from the Canadian Shield
- 14:40 – 15:00 **John Norder (Michigan State University)**  
Sacred Places and Social Landscapes in Northwestern Ontario
- 15:00 – 15:20 **Pause café / Coffee break**
- 15 :20 – 15 :40 **Chris Arnett (University of British Columbia)**  
Picture This: Salishan Rock Painting as Resistance
- 15 :40 – 16 :00 **André Bergeron (Centre de conservation du Québec)**  
Aux grands maux les grands remèdes : la seconde vie des pétroglyphes de Bromptonville
- 16: 00 – 16:20 **Jack W. Brink (Royal Alberta Museum)**  
Rock Art and Graffiti Removal at the Okotoks Site: A Never Ending Problem
- 16:20 – 16:40 **Michael H.J. Turney (Golder Associates Ltd.)**  
Not Quite Written in Stone: Rock Art Monitoring at Writing-on-Stone Provincial Park, Alberta

- 16:40 – 17:00** **LJ Butch Amundson, Lisa Hein, and Doug Powell (Stantec Consulting Ltd. Saskatoon, Regina and Edmonton)**  
Get it before it's gone: A summary of image capture at St. Victor Petroglyph Historic Park in southern Saskatchewan
- 17:00 – 17:20** **Emily Royer**  
L'importance de l'art rupestre autochtone dans l'enseignement de l'histoire de l'art canadien
- 17:20 - 17:40** **Brad Himour (Parks Canada)**  
The Parks Canada Pictograph Project: Working With Aboriginal Elders to Preserve, Protect and Interpret Aboriginal Rock Art in Western Canada

23

Papers in honour of Peter Ramsden  
**Jennifer Campbell (Organizer and Chair)**

SHERBROOKE 2

- 13:20 – 13:40** **Jennifer L. Campbell (University of Toronto)**  
Opening Remarks and Remarkable Openings: Dr. Peter Ramsden
- 13:40 – 14:00** **Christopher Read (Institute of Technology Sligo)**  
Deviant burials and the Undead in Medieval Ireland: Evidence from The Bishop's Seat Kiltasheen Co. Roscommon
- 14:00 – 14:20** **D. Ann Herring (Department of Anthropology, McMaster University)**  
Peter Ramsden as Innovative Iconoclast
- 14:20 – 14:40** **Christopher Ellis (University of Western Ontario)**  
The Davidson Site (AhHk-54) and Late Archaic Settlement Systems
- 14:40 – 15:00** **Eric and Joan Damkjar (Archaeological Survey of Alberta)**  
A Tale of Two Longhouses: Archaeological Vignettes from the South and the North
- 15:00 – 15:20** *Pause café / Coffee break*
- 15:20 – 15:40** **Penny Young and Joseph Muller**  
Regional Analyses and Pre-ceramic Site Distribution Patterns: A Paper Honouring the Research of Peter Ramsden
- 15:40 – 16:00** **Susan M. Jamieson (Trent University)**  
Rethinking Trigger's Wendat Socio-Political Model
- 16:00 – 16:20** **Aubrey Cannon (McMaster University)**  
Peopling the Millennial Past: Chronology, Memory, Factions and Events at Namu, British Columbia
- 16:20 – 16:40** **Neal Ferris (Lawson Chair of Canadian Archaeology, Western University/Museum of Ontario Archaeology)**  
In Praise of Counter Factual Ontario Late Woodland Culture History
- 16:40 – 17:00** **Peter Carruthers**  
A Strange Encounter in 1960: Adventures in Ontology
- 17:00 – 17:20** **Lisa K. Rankin (Memorial University)**  
Wishful Thinking
- 17:20 - 17:40** **Jack Brink (Royal Alberta Museum)**  
Who's the Guy with the Spoon on his Nose?

SAMEDI 19 MAI, AVANT-MIDI • SATURDAY MAY 19, MORNING

24

La bioarchéologie au Québec  
**Isabelle Ribot (Organisatrice et Animatrice)**

RIMOUSKI

- 8:40 – 9:00** **Robert Larocque (Bioarchéologue indépendant)**  
Les sépultures du cimetière St. Matthew: reflet de la diversité de la communauté protestante de Québec
- 9:00 – 9:20** **Étienne Taschereau (Université Laval, Ville de Québec)**  
Âge, stress et croissance: test de méthodes nouvelles et anciennes sur des individus immatures exhumés du cimetière protestant de l'église St. Matthew, rue St-Jean à Québec, QC
- 9:20 – 9:40** **Simon Lucas<sup>1</sup>, Elsa Leboff, Loïc Mourlane, Fanny Morland, Olivier Dutour, Isabelle Ribot, Anne-Marie Grimoud (<sup>1</sup>Ecole Pratique des Hautes Études, Paris)**  
Apports de l'usage dentaire en bioarchéologie: comparaison de populations historiques française et québécoise
- 9:40 – 10:00** **Isabelle Ribot<sup>1</sup>, Fanny Morland (<sup>1</sup>Université de Montréal)**  
Bilan des recherches récentes en paléonutrition au Québec
- 10:00 – 10:20** *Pause café / Coffee break*

- 10 :20 - 10 :40 Jacinthe Vigeant (Université de Montréal)**  
Immigration et alimentation à Montréal au 17<sup>e</sup>-18<sup>e</sup> siècle: essai d'interprétation des analyses d'isotopes du carbone et de l'oxygène de populations archéologiques
- 10 :40 - 11 :00 Étienne Taschereau (Université Laval, Ville de Québec)**  
La pensée bioarchéologique québécoise: confusion récente et perspectives d'avenir

25

**Les pratiques techniques des populations passées et des archéologues aujourd'hui**  
**Patrick Eid et Manek Kolhatkar (Organisateurs et Animateurs)**

CHICOUTIMI

- 8 :40 - 9 :00 Harry J Lerner (Université Laval)**  
From data to interpretation: What does measuring use-wear have to do with past human behaviour? An example from Chicoutimi, Quebec
- 9 :00 - 9 :20 Frédéric Hottin (Université Laval)**  
Des polis aux paradigmes : la réalité de l'analyse tracéologique d'artéfacts lithiques du Québec méridional
- 9 :20 - 9 :40 Sean C. Lynch (University of Alberta)**  
Burning Rocks and Taking Samples: An actualistic experimental approach to identifying thermally altered quartz
- 9 :40 - 10 :00 Patrick Eid (Université de Montréal)**  
La recherche des intentions et des choix économiques à travers les chaînes opératoires lithiques
- 10 :00 - 10 :20 Pause café / Coffee break**
- 10 :20 - 10 :40 Yoann Pépin (Université de Montréal)**  
La production et l'organisation technologique de la pierre polie dans les campements de la moyenne vallée du Saint-Laurent, 5500-3000 AA
- 10 :40 - 11 :00 Manek Kolhatkar (Université de Montréal)**  
Loosening the bonds of technical practice: the chaîne opératoire as a flawed metaphor
- 11 :00 - 11 :20 Jaclyn Nadeau (University at Albany, New York State Museum)**  
Typologies, Chronologies, and Cultural Markers : Reevaluating Transitional Archaic Broad-Bladed Bifaces
- 11 :20 - 11 :40 Geneviève Treyvaud (Université Laval/ Université de Genève)**  
Reconstitution des technologies employées par les artisans amérindiens et européens de la Nouvelle France aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles
- 11 :40 - 12 :00 Jasmine Aslan**  
Métis Captains' Coats: Articulating Similarity and Difference

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**Modelling environment/agent interactions in prehistory**  
**Ariane Burke (Organisatrice et Animatrice)**

STE-FOY

- 8 :40 - 9 :00 James Woollett<sup>1</sup>, Martin Fields, Lindsay Swinarton, Céline Dupont-Hébert (¹Département d'histoire, Université Laval)**  
Modeling the sea ice landscape of the Labrador Inuit through zooarchaeological, climatological and historical proxies
- 9 :00 - 9 :20 William J. D'Andrea<sup>1</sup>, Yongsong Huang<sup>2</sup>, Raymond S. Bradley<sup>3</sup> (¹Lamont-Doherty Earth Observatory of Columbia University, Palisades; ²Dept. of Geological Sciences, Brown University, Providence; ³Dept. of Geological Sciences, University of Massachusetts, Amherst)**  
Abrupt Holocene climate change as an important factor for human migration in West Greenland and Ellesmere Island
- 9 :20 - 9 :40 Burke, A.<sup>1</sup>, Guiducci, A., Izquierdo, M., Levavasseur, G. (¹Département d'anthropologie, Université de Montréal)**  
Modelling climate variability during the Last Glacial Maximum and its impact on human population expansion
- 9 :40 - 10 :00 William E. Banks<sup>1</sup>, Francesco d'Errico, João Zilhão (¹Université de Bordeaux I)**  
Human-climate interaction in the Early Upper Palaeolithic: testing the hypothesis of an adaptive shift between the Proto-Aurignacian and the Early Aurignacian
- 10 :00 - 10 :20 Pause café / Coffee break**
- 10 :20 - 10 :40 Dr. Andrew Bevan (Institute of Archaeology, University College London)**  
Modelling the interaction of paths and places in prehistoric environments
- 10 :40 - 11 :00 Mark Collard (Human Evolutionary Studies Program and Department of Archaeology, Simon Fraser University)**  
Environmental drivers of cultural evolution in small-scale populations
- 11 :00 - 11 :20 Dr. Mark Lake and Enrico Crema (Institute of Archaeology, University College London)**  
The Cultural Evolution of Adaptive-Trait Diversity when Resources are Uncertain and Finite

- 11 :20 – 11 :40** **Colin D. Wren and André Costopoulos (McGill University)**  
The role of foresight and information sharing on spatio-temporal patterns of heterogeneous habitat occupation
- 11 :40 – 12 :00** **Enrico Crema (Institute of Archaeology, University College London)**  
Exogenic and endogenic forces in group fission-fusion dynamics: an abstract model

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## L'archéologie montréalaise à l'ère des grands projets

Marie-Claude Morin (organisatrice) et Christian Gates Saint-Pierre (Organisateur et Animateur)

QUÉBEC

- 8 :40 – 9 :00** **Marie-Claude Morin (Ville de Montréal)**  
Trois places publiques, trois échelles d'interventions
- 9 :00 – 9 :20** **Violette Vidal, Pascale Vaillancourt et Hélène Buteau (Archéotec inc.)**  
Un aperçu du développement du faubourg Saint-Laurent dans le cadre du projet Quartier des Spectacles
- 9 :20 – 9 :40** **Martin Royer (Ethnoscop inc.)**  
Inventaires archéologiques dans le cadre de la conception d'une place publique dans le Vieux-Pointe-aux-Trembles
- 9 :40 – 10 :00** **François C. Bélanger (Ville de Montréal)**  
La prise en compte des ressources archéologiques dans un projet d'aménagement- Le cas du cimetière Saint-Antoine
- 10 :00 – 10 :20** **Pause café / Coffee break**
- 10 :20 – 10 :40** **Marie-Geneviève Lavergne (Ville de Montréal)**  
Les vestiges archéologiques du Champ-de-Mars - Restaurer un projet de mise en valeur... selon les règles de l'art
- 10 :40 – 11 :00** **Yanik Blouin (Consultant)**  
Travaux archéologiques au Champ-de-Mars : analyse et comparaison des modes de construction chez deux équipes de maçons du XVIII<sup>e</sup> siècle
- 11 :00 – 11 :20** **Hugo Comète (Ethnoscop inc.)**  
Projet Bonaventure : la mise en oeuvre d'une intervention archéologique à travers la circulation et la machinerie
- 11 :20 – 11 :40** **Désirée-Émanuelle Duchaine (Patrimoine Experts inc.)**  
Incursion archéologique dans un projet d'envergure : la reconstruction du complexe Turcot
- 11 :40 – 12 :00** **Francis Lamothe (Ethnoscop inc.)**  
Fouilles archéologiques en aires ouvertes du marché Sainte-Anne et du parlement du Canada-Uni

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## Field Schools in the Twenty-First Century

Allison Bain and Alicia Hawkins (Organizers and Chairs)

SHERBROOKE 1

- 8 :40 – 9 :00** **Allison Bain<sup>1</sup>, William Moss<sup>2</sup>, Réginald Auger<sup>1</sup> and Marcel Moussette<sup>1</sup> (<sup>1</sup>Université Laval, <sup>2</sup>Ville de Québec)**  
Celebrating 30 years of Teaching and Promoting Historical Archaeology in Quebec City
- 9 :00 – 9 :20** **Alicia Hawkins (Department of Anthropology, Laurentian University)**  
The Ontario Customer Service Standard: How a government policy transformed the Laurentian University field school
- 9 :20 – 9 :40** **Nathalie Gaudreau et Gina Vincelli (Artefactuel, coopérative de travail)**  
Dépotoir de la ferme Murphy : témoin de vie d'un cordonnier
- 9 :40 – 10 :00** **Amanda Crompton (Department of Archaeology, Memorial University)**  
Digging on the Hill: The Memorial University Field School at Signal Hill National Historic Site, St. John's, Newfoundland
- 10 :00 – 10 :20** **Pause café / Coffee break**
- 10 :20 – 10 :40** **Roland Sawatzky (The Manitoba Museum and Mennonite Heritage Village) and Valerie McKinley (Department of Anthropology, University of Winnipeg)**  
The Quiet in the Land? Field School in a Mennonite Context
- 10 :40 – 11 :00** **Catherine M. Crinnion, Marganit Kenedy, Edgar Lea, Aldo Missio and Janice Teichroeb (Toronto and Region Conservation Authority)**  
The Boyd Archaeological Field School: Partners and PR
- 11 :00 – 11 :20** **Joshua Lindala<sup>1</sup>, Dusan Mihailovic<sup>2</sup>, and Mirjana Roksandic<sup>1</sup> (<sup>1</sup>Department of Anthropology, University of Winnipeg; <sup>2</sup>University of Belgrade Department of Archaeology)**  
Balanica field school: student to TA perspective

Archéologie dans la région de Trois-Rivières, Bécancour et Lac Saint-Pierre  
**Adrian L. Burke (Organisateur) et Françoise Duguay (Animatrice)**

SHERBROOKE 2

- 8 :40 – 9 :00** **Adrian L. Burke (Université de Montréal)**  
Trois-Rivières et Bécancour à la fin de l'Archaïque : résultats du projet triennal de l'Université de Montréal
- 9 :00 – 9 :20** **Pierre J.H. Richard, Tamylia Elkadi et Louis-Philippe Roy (Laboratoire Jacques-Rousseau, Département de géographie, Université de Montréal)**  
Paléogéographie post-champlainienne de la région de Bécancour, Laurentie trifluvienne
- 9 :20 – 9 :40** **Louis-Philippe Roy, Pierre J.H. Richard et Tamylia Elkadi (Laboratoire Jacques-Rousseau, Département de géographie, Université de Montréal)**  
Végétation holocène autour des lacs aux Outardes et Saint-Paul, Bécancour
- 9 :40 – 10 :00** **Karine Taché (University of York)**  
Contribution d'une analyse de résidus organiques à l'étude de la poterie Vinette I dans la vallée moyenne du Saint-Laurent
- 10 :00 – 10 :20** **Pause café / Coffee break**
- 10 :20 - 10 :40** **David Tessier (Archéotec inc.)**  
Étude de potentiel archéologique et intervention dans l'emprise d'une ligne de transport d'Hydro-Québec reliant le poste de Francheville (Trois-Rivières) à celui de Sorel
- 10 :40 – 11 :00** **Geneviève Treyvaud (Université Laval) et Michel Plourde (Archéologue consultant)**  
Les Abenakis de la rivière Saint-François au XVIIIe siècle et la question du fort d'Odanak
- 11 :00 – 11 :20** **Louis Gilbert**  
Le site de la maison du gouverneur de Varennes à Trois-Rivières (CcFd-20) : bilan de 3 saisons de chantier-école archéologique
- 11:20 – 11:40** **Françoise Duguay (CÉLAT, Université Laval)**  
Tadoussac et Trois-Rivières : deux hauts lieux de la traite des fourrures (fin XVI<sup>e</sup> – tournant XVIII<sup>e</sup> siècle)

SAMEDI 19 MAI, APRÈS-MIDI • SATURDAY MAY 19, AFTERNOON

General Session B  
**Terence Clark (Chair)**

STE-FOY

- 13 :20 – 13 :40** **Terence Clark<sup>1</sup>, Mathew Betts<sup>1</sup>, Shawn Graham<sup>2</sup> and Andrea Gilchrist<sup>1</sup> (<sup>1</sup>Canadian Museum of Civilization; <sup>2</sup>Department of History, Carleton University)**  
3D Modeling for the Masses: new technologies that make virtual archaeology accessible
- 13 :40 – 14 :00** **Manuel Lapensée-Paquette (Groupe de recherche archéologique de l'Outaouais)**  
La recherche archéologique au Parc de Plaisance. La localisation et l'évaluation d'établissements historiques
- 14 :00 – 14 :20** **Erin Hogg (UBC)**  
An Analysis of the State of Archaeology in the Canadian School Curricula
- 14:20 – 14:40** **Charest, Nadia and Caroline Jackson (The University of Sheffield)**  
Rethinking French importance in the trade of European items in New France: following the circulation French trade beads in Quebec and Ontario, 1600-1650 A.D.
- 14 :40 – 15 :00** **Julie-Anne Bouchard-Perron, Émilie Young-Vigneault et Nadia Ardila (G.A.I.A. Inc.)**  
Se doter d'un toit et d'une pitance au 17<sup>e</sup> siècle: Résultats des analyses environnementales sur le site du Parc des Braves à Québec

L'archéologie montréalaise à l'ère des grands projets  
**Marie-Claude Morin (organisatrice) et Christian Gates Saint-Pierre (Organisateur et Animateur)**

QUÉBEC

- 13 :40 – 14 :00** **Julie-Anne Bouchard-Perron, Jacynthe Bernard et Nadia Ardila (G.A.I.A. Inc.)**  
Vendre, acheter et échanger à Montréal au 19<sup>e</sup> siècle : Résultats des analyses environnementales sur le site de la Place d'Youville
- 14 :00 – 14 :20** **François Véronneau et Claude Joyal (SACL inc.)**  
Le site de la maison Nivard-de-Saint-Dizier à Verdun, un bijou du patrimoine archéologique préhistorique et historique montréalais
- 14 :20 – 14 :40** **Sophie Limoges (Archéo-Québec et Pointe-à-Callière, musée d'archéologie et d'histoire de Montréal) et Nathalie Barbe (coordonnatrice du réseau Archéo-Québec)**  
Le réseau Archéo-Québec: Bilan et projets d'avenir

**Ames, Christopher J.H.<sup>1</sup>, Carlos E. Cordova<sup>2</sup>, April Nowell<sup>3</sup>, and Michael Bisson<sup>1</sup> (<sup>1</sup>McGill University, <sup>2</sup>Oklahoma State University, <sup>3</sup>University of Victoria)**

Hominin occupation, landscape evolution, and middle and late Pleistocene environmental change in the north Azraq Basin in Jordan's desert interior

**Anstey, Robert J.<sup>1</sup>, Stephen P. Norris<sup>2</sup>, M.A.P. Renouf<sup>1</sup> and T. Bell<sup>3</sup> (<sup>1</sup>Department of Archaeology, Memorial University; <sup>2</sup>Department of Educational Policy Studies, University of Alberta; <sup>3</sup>Department of Geography, Memorial University)**  
Science Education via Archaeology: Enriching High School Curricula through Adapted Primary Archaeology Literature

**Collins, Benjamin R. (McGill University)**

The Taphonomy of the Final Middle Stone Age Faunal Assemblage from Sibudu Cave, South Africa

**Dunlop, John<sup>1</sup>, Dan Kellogg<sup>2</sup> and Blake Williams<sup>2</sup> (<sup>1</sup>Archaeological Services Inc., University of Western Ontario; <sup>2</sup>Archaeological Services Inc.)**

Geophysical Survey Applications to the CRM Industry in Southern Ontario: Case studies of success at three sites in southern Ontario

**Duval, Isabelle (Université du Québec à Chicoutimi)**

Analyse de provenance sur un gorgerin avec la micro-XRF

**Forbes, Lisbeth, Carol Griggs, and Thomas Richmond (Cornell Tree Ring Laboratory, Cornell University)**

Settling claims of "the earliest construction" between several houses in Schenectady, New York

**Foreman, Lindsay J. (University of Western Ontario, London, Project Archaeologist, Golder Associates Ltd.)**

Ubiquitous Fragmented Fauna: Interpreting Western Basin Cervid Processing and Discard Practices in Ontario, A.D. 800-1600

**Gervais, Mélanie Johnson (Université de Montréal)**

Pêcheries et échanges transatlantiques au Régime français : Étude de la répartition géographique des grès grossiers français en Nouvelle-France

**Gilliland, Krista (Western Heritage)**

The Hearth and the Hummock: A sediment-based record of cultural activities at the Fort Denison site near Humboldt, Saskatchewan

**Guiry, Eric J.<sup>1</sup>, Vaughan Grimes<sup>1,2</sup>, and Domingo C. Salazar-García<sup>2</sup> (<sup>1</sup>Department of Archaeology, Memorial University; <sup>2</sup>Department of Human Evolution, Max Plank Institute for Evolutionary Anthropology)**

Dogs as Dietary Proxies for Humans in Bone Chemistry: Case Studies from the Maritime Archaic and Spanish Copper Age

**Higdon, John, and Corey Hutchings**

Northern Cultural Resource Management and Climate Change

**Léouffre, Delphine, et Monique Laliberté (Ethnoscop inc., Montréal)**

Vendre et gouverner: Coup d'oeil sur la collection de la place D'Youville

**Ponomarenko, Elena V. (Ecosystem Archaeology Services, Ottawa)**

Human Visibility in Maritime Landscapes: Anthropogenic Ignition of Hurricane Debris

**Tulloch, Heather (Parcs Canada, Cornwall)**

Discovering the Officers' Barracks from the 1812 Fort on Point Henry, Kingston, Ontario

**Wolff, Christopher B., Marné Timon, and Jesse Crosier (SUNY Plattsburgh)**

Analysis of Dorset Paleoeskimo Stone Tool Production at the Stock Cove Site (CkAl-3), Newfoundland

**Woods, Audrey (Université de Montréal)**

Le village iroquoien de Mailhot-Curran, Saint-Anicet

**Zutter, Cynthia, and Claire Earley, MacEwan (University, Edmonton)**

Starch Grain Analysis of Organic Residue from 18th Century Inuit Soapstone Vessels in Northern Labrador

**Grenier, Robert (O.C., ex-président du Comité scientifique international ICUCH à l'UNESCO/ICOMOS, ex-chef du Service d'archéologie subaquatique de Parcs Canada)**

40 ans sous la mer : le développement de l'archéologie subaquatique au Canada / 40 years under the sea: development of underwater archaeology in Canada.

# RÉSUMÉS • ABSTRACTS

Par ordre alphabétique / by alphabetical order  
[1]: numéro de l'atelier / session number

**Abel, Timothy J. (Jefferson Community College, SUNY Canton) •** *St. Lawrence Iroquoians in Northern New York: Past, Present, and Directions for the Future* [15]

For over a century and a half, researchers have pondered the numerous earthen enclosure settlements in Jefferson and St. Lawrence Counties, New York. Despite being among the most densely populated areas of New York in late prehistory, archaeologists have only sporadically sought to conduct research and answer key research questions about who these populations were, where they came from, and what happened to them at the boundary between prehistory and history. This paper summarizes that past research, research of my own between 1994-2001 and, finally, discusses some fertile topics for future research.

**Ahronson, Kristján (Prifysgol Bangor University) •** *An Atlantic Territory and the End of Prehistory in the near-Arctic Islands of the European Atlantic* [7]

Carved and rock-cut sculpture identifies a poorly understood facet of early Christianity, whether on Skellig Michael, rising out of the Ocean off southwest Ireland, or perched on the Heimaklettur cliff-face in Iceland's Westman Islands. Hundreds of Atlantic places marked as special or sacred by simple sculpture span a zone stretching from the Irish and Scottish coasts to Iceland. Established 'certainties' and fundamental ambiguities characterise this northern region. Scotland's western islands are known as a core area for early medieval monastic communities, thought to have produced simple cross sculpture through devotional impulse, and yet the nature and extent of early Christian settlements beyond the Gaelic-speaking world is unclear. Similarly, Old Norse speakers dominated this north Atlantic territory by the late Viking Age, but the timing and way in which this region was transformed are difficult to perceive. By looking to Iceland, we may be able to resolve some of these ambiguities.

**Alix<sup>1</sup>, Claire (CNRS / Université de Paris 1 Panthéon Sorbonne) et Glenn P. Juday (University of Alaska Fairbanks) •** *Date, transit time and origin of driftwood – a tool for tree-ring dating archaeological sites in northwestern Alaska* [13]

We have undertaken an effort to establish a library of dendrochronologies from the main driftwood-producing rivers in Alaska with the goal of re-initiating archaeological tree-ring research in Arctic coastal regions. Trees from interior Alaska fall in the rivers and are transported downstream to the sea. Some logs get stuck in the rivers, others sink while a few end up on the coast and are used by people. Over the centuries, wood remains have been frozen into archaeological middens (especially of the last 1500 years) and are under-utilized for chronological and climatic reconstructions. In this paper, we present our first results, propose an average transit time for driftwood between place of origin and first use and discuss applicability to archaeological wood. Beyond the regional signal found within interior Alaska, the trees share a common climate signal that may also prove useful for long-term reconstructions.

**Ames, Christopher J.H.<sup>1</sup>, Carlos E. Cordova<sup>2</sup>, April Nowell<sup>3</sup>, and Michael Bisson<sup>1</sup> (McGill University, <sup>2</sup>Oklahoma State University, <sup>3</sup>University of Victoria) •** *Hominin occupation, landscape evolution, and middle and late Pleistocene environmental change in the north Azraq Basin in Jordan's desert interior* [31]

Recent archaeological excavation and geomorphic survey in the former bed of the North Azraq marsh has identified a complex stratigraphic succession characterized by cyclical aggradations of lake and/or marsh deposits indicative of wet periods, intercalated with erosional unconformities and wind-blown sediments suggestive of drier environments. Archaeological material embedded within this stratigraphic sequence typologically spans the past 250,000 years,

including Lower, Middle, Upper, and Epipaleolithic industries. Coupled with the evidence of upland lake terrace deposits and paleo-shorelines in the basalt flows that flank the north Azraq basin, we hypothesize that the Azraq region and its inhabitants experienced dramatic environmental fluctuations since at least the middle Pleistocene, corresponding to at least three distinct paleo-environments, including perennial lakes we suspect occurred during parts of MIS 9, MIS 7, and MIS 5. We also believe these fluctuations play a critical role in understanding the spatial distribution of archaeological material throughout the current Azraq landscape.

**Amundsen-Meyer, Lindsay (Department of Archaeology, University of Calgary) •** *Footprints in the Forest and Islands in a Sea of Grass: A Comparison of Blackfoot and Kayapó Agroforestry Practices* [15]

The Americas contain a diverse array of past and present cultures in highly varied environments with a wide range of cultural beliefs and subsistence practices. Included in this menagerie are hunter-gatherers as well as agricultural/horticultural groups, two economic systems often considered to be on opposite ends of a subsistence continuum. Acceptance of this continuum creates a dichotomy between subsistence strategies based solely on the use of nature, and those based on control of nature. Through comparison of the evidence for domesticated landscapes in Amazonia and on the Northwestern Great Plains, this paper will show that this is, in fact, a false dichotomy. Furthermore, although the management and use of "wild" or semi-domesticated resources is often seen as a step on the road to agriculture, this domestication of landscape and resource management can, in fact, be a specifically chosen subsistence strategy in and of itself.

**Amundson, LJ Butch, Lisa Hein, and Doug Powell (Stantec Consulting Ltd. Saskatoon, Regina and Edmonton) •** *Get it before it's gone: A summary of image capture at St. Victor Petroglyph Historic Park in southern Saskatchewan* [22]

St. Victor Petroglyph Historic Park is the site of a large collection of precontact rock carvings on the horizontal surface of an outcrop of the Ravenscrag sandstone. Situated on a prominent, north-facing cliff, the site has a commanding view of the glacial lake plain to the north. The glyphs include the hoof prints of bison, paw prints of grizzly bears, human hand and foot prints, several human forms, bird prints, the representation of a turtle and geometric forms. The glyphs are subject to erosion by both chemical and mechanical process included a significant rock fall in 2001. Over the years several attempts to capture the glyphs in images for posterity have included rubbings, mapping, standard and stereo photography, digital photography and laser imagery.

**Anstey, Robert J.<sup>1</sup>, Stephen P. Norris<sup>2</sup>, M.A.P. Renouf<sup>1</sup> and T. Bell<sup>3</sup> (Department of Archaeology, Memorial University; <sup>2</sup>Department of Educational Policy Studies, University of Alberta; <sup>3</sup>Department of Geography, Memorial University) •** *Science Education via Archaeology: Enriching High School Curricula through Adapted Primary Archaeology Literature* [31]

This poster presents an overview of an ongoing project focused on student understanding of archaeology in high schools. This project is a collaborative venture between CRYSTAL-Alberta and Memorial University of Newfoundland. The overall aim of CRYSTAL-Alberta is to increase understanding of the skills and resources needed to improve the quality of science and mathematics education, and understanding of the best ways to enrich the preparation of young Canadians in these foundation subjects. One of the ways to enrich high school curricula is through the adaptation of primary literature. Interactive text and visualizations can improve interest and engagement in science education. The specific aim of the current project is to extend this scope to include social science subjects, in particular archaeology that often incorporates scientific methods and reasoning. The first phase of this project involves the adaptation and visualization of primary literature about the Maritime Archaic occupation of Newfoundland for eventual use in interactive web-based high school curricula. The

social and pedagogical implications of this project are discussed and future work is proposed.

**Arnett, Chris (University of British Columbia) • *Picture This: Salishan Rock Painting as Resistance* [22]**

Rock art studies in Western North America rely on 19<sup>th</sup> century ethnographic models of interpretation which attribute the production of rock art to a range of activities in a variety of locations. The ethnographic and archaeological record suggests variability over time but in the Salishan territories there is a consistent Late Period association between large rock painting displays, overland trail systems and natural travel corridors such as lakes and inlets. The paintings along these travel corridors are on distinctive landforms associated with mythological events. From the cultural perspective, tumulh, the red ochre paint used in the paintings, has protective qualities. The iconography, rarely seen in public as it was the product of shwoonAhm guardian spirits and dreams, served a similar function. Thus Salishan rock paintings fulfilled a dual purpose: the rock (the mythological being and its story/teachings) was marked and protected and the paintings, possessed of material agency, served as a prophylactic, deterrent art placed in a visible location to mitigate social and cultural disruption connected to European influences.

**Arsenault, Daniel (CÉLAT-UQAM, Université du Québec à Montréal) • *Rock art as non art: towards the interpretation of some peculiar "rock art" sites in the Far-Eastern Canadian Shield!* [22]**

The North Shore of the St. Lawrence River, Québec, has yielded a few rock painting sites, but just two of them can be identified as real "rock art sites" thanks to their graphic contents. Three other sites are rock outcrops with some smudges of red ochre. What can be said about such sites without visual symbols? Indeed some clues are found in Innu traditions as well as in XVIII<sup>th</sup> century's old maps, but the results of the 2011 summer fieldwork offer additional answers and some insights for the better interpretation of what appears to be rock art sites without graphic.

**Aslan, Jasmine • *Métis Captains' Coats: Articulating Similarity and Difference* [25]**

Although the establishment of the fur trade in North America is often described in negative or destructive terms, cultural contact also engendered processes of creation and invention. From the 16<sup>th</sup> century on, indigenous groups assimilated foreign goods and manufacturing techniques, producing any number of 'hybrid' artefacts. In this paper, I discuss the emergence and evolution of one such class of objects: painted hide captains' coats. Made according to traditional processes, they nonetheless reflect striking European influences in their design. My discussion of these artifacts hinges on research I conducted into the ethnohistories of two such garments from the British and Pitt Rivers museums' collections. In the first part of my paper, I consider models and approaches in the study of hybrid artifacts, and the ways in which these affected my ethno-archaeological analyses of these specimens. In the second, I present my findings; the outcome of my research into their ethnohistories.

**Astudillo, Fernando (University of Calgary), Daniela Balanzátegui, and Barbara Winter (Simon Fraser University) • *Collectors, Forgers, and Looters: The History behind Andean Ancient Art* [1]**

The publication of "Incidents of Travel and Expedition in the Land of the Incas" (Squier 1887), showing drawings of Inca art, created a demand in Europe and North America for "Andean antiquities". As result, collectors and museums included in their wish list the Andean art as an essential piece. The demand created a network of looters and artisans that made replicas often sold as authentic. These replicas are now part of the modern museum collections worldwide. The Museum of Archaeology and Ethnology of Simon Fraser University (Burnaby, B.C.), have objects associated with Andean pre-Columbian societies such as Inca, Chimu, Moche, Pasto, Quimbaya, Tumaco-La Tolita, Manteño, and Sican. In the format of a museum temporary exhibit we presented to the public the probable reasons why the ceramics form part of the collection. Objects of Andean cultures have special significance for collectors and museums; however, it does not mean that they are authentic.

**Bain<sup>1</sup>, Allison, William Moss<sup>2</sup>, Réginald Auger<sup>1</sup> and Marcel Moussette<sup>1</sup> (Université Laval, <sup>2</sup>Ville de Québec) • *Celebrating 30 years of Teaching and Promoting Historical Archaeology in Quebec City* [28]**

In partnership with the Ville de Québec and Québec's Ministry of Culture, Communications and Women's Condition, Université Laval has offered a field school in Historical Archaeology since 1982. In 2012 we will celebrate thirty years of training young archaeologists. Over 400 undergraduate and graduate schools have been trained under three different field directors. The school has worked at three major sites in the City: the Intendant's Palais; Domaine de Maizerets and the îlot Hunt site, now known as the award-winning Auberge Saint-Antoine. This presentation will discuss each of these projects and will highlight the importance of consistent training and collecting methods, and the key role that long term partnership agreements have played for research and the development of theoretical agendas as well as for the promotion of archaeology within this UNESCO World Heritage City.

**Banks<sup>1</sup>, William E., Francesco d'Errico, João Zilhão (Université de Bordeaux I) • *Human-climate interaction in the Early Upper Palaeolithic: testing the hypothesis of an adaptive shift between the Proto-Aurignacian and the Early Aurignacian* [26]**

Material culture changes during the Proto-Aurignacian and the Aurignacian are coincident with abrupt and marked climatic changes. We use eco-cultural niche modeling to quantitatively evaluate whether shifts in material culture are correlated with environmental variability and, if so, whether the ecological niches exploited by human populations shifted accordingly. We employ genetic algorithm (GARP) and maximum entropy (Maxent) techniques to estimate the ecological niches exploited by humans (i.e., eco-cultural niches) during these two phases of the Aurignacian. A Partial-ROC analysis is used to evaluate niche variability between the two phases. Results indicate that the changes in material culture between the Proto-Aurignacian and the Early Aurignacian are associated with an expansion of the ecological niche exploited during the latter phase. These shifts in eco-cultural niche and material culture are interpreted to represent an adaptive response to the relative deterioration in environmental conditions at the onset of Heinrich Event (HE) 4.

**Beaudoin, Matthew (The University of Western Ontario) • *Archaeologists Colonizing Canada: The Effects of Unquestioned Categories* [3]**

Many would argue that colonialism is a fundamental aspect of historical archaeology; however, the underlying meaning of this statement is often ignored. In sum, the production of archaeology is part of the colonial process and is based around a discourse of colonizer norms and colonized enclaves. This has resulted in the unconscious production of an accepted Euro-Canadian dominant "historical archaeology" and various "colonial archaeologies" of perceived minority groups, that accepts the premise of a Euro-Canadian normative master narrative punctuated with alternative discourses of specific groups. In effect, we've created two distinct narratives of historical archaeology that are framed against each other but never quite coming in contact. By examining multi-generational sites from 19<sup>th</sup>-century Ontario I explore the effects this has on the continued discourse, and why we should be bridging these disparate narratives.

**Bélanger, Christian (Université de Montréal) • *Le fort de Ville-Marie, 1642-1683. Vers un premier plan archéologique des vestiges* [6]**

De nombreux vestiges de construction associés au fort de Ville-Marie ont été mis au jour au fil des campagnes de fouilles. Les structures, parmi lesquelles figurent notamment un puits, des segments de plusieurs palissades, deux grandes fosses d'emprise de bâtiment, divers ouvrages maçonnés en pierre ainsi que des poteaux isolés, sont distribués au travers de tous les secteurs d'intervention, soit sur une superficie d'environ 150 mètres carrés. Dans le cadre de cette présentation, nous verrons que ces structures, bien qu'enchevêtrées en partie, sont pour la plupart inter-reliées et articulées dans l'espace et témoignent de l'existence d'un plan d'ensemble d'aménagement dont nous tenterons de reconstituer les principales caractéristiques. Il sera également fait mention de certaines difficultés d'interprétation qui subsistent, notamment en ce qui concerne la fonction de certains des ouvrages mis au jour.

*Ville-Marie's old fort (1642-1675).*

Toward a reconstructed map based on archaeology The remains of several structures associated with Ville-Marie's old fort have come to light over the years of excavation. They include a well, segments of several palisades, two large building pits, various masonry remains

and individual post-holes, distributed throughout the excavation area of about 150 square metres. Analysis of these densely packed structures shows that they are interrelated and articulated as a single spatial ensemble, revealing aspects of an original plan that we can partially reconstruct. Difficulties persist, however, in the interpretation of certain structural remains.

**Bélanger, François C. (Ville de Montréal) • *La prise en compte des ressources archéologiques dans un projet d'aménagement- Le cas du cimetière Saint-Antoine* [27]**

La Ville de Montréal a développé une expertise qui lui permet de pratiquer une archéologie préventive, s'insérant en amont des projets d'aménagement et de construction et en travaillant de concert avec les architectes, architectes paysagistes, ingénieurs, urbanistes et archéologues. Le cas du réaménagement du square Dorchester, de la place du Canada et des rues adjacentes illustre bien cette expertise de prise en charge d'un patrimoine archéologique funéraire. En effet, la présence du cimetière Saint-Antoine datant de 1799 à 1854 incite à minimiser l'impact des travaux sur les sépultures en place et à conserver in situ la quasi totalité du cimetière. Derrière tout cela, la Ville de Montréal affirme son implication dans la protection, la gestion et la mise en valeur de son patrimoine archéologique.

The Ville de Montréal has developed an expertise which enables it to practice preventive archaeology, fitting upstream of installation and construction projects while working in liaison with the architects, landscape gardeners, engineers, town planners and archaeologists. The case of the refitting of Dorchester Square, of Place du Canada and the adjacent streets illustrates well this expertise of assumption of responsibility of a funerary archaeological heritage. Indeed, the presence of the Saint-Antoine cemetery going back to 1799 to 1854 encourages to minimize the impact of work on the burials in place and to preserve in situ to it quasi totality of the cemetery. Behind all that, the Ville de Montréal affirms its implication in protection, management and the development of its archaeological inheritance.

**Belley, Frédéric (Institut d'Archéologie Saint-André) • *Why the Mayas Built Pyramids? A Comparative Analysis of the Water Supply System of Zapotitan* [17]**

This paper examines the meaning of the pyramids of Zapotitan, a territory that is not much studied. This area provides valuable information about the way the aboriginal population survived during the Classical period. The analysis of the water supply system helps to reconstitute a path of life. Also, we examine the Classical ecological contexts that set the human occupation in this area. The paper is characterized by an archaeological and historical analysis of the landscape, the geology, in order to learn how the ecological elements affected the first human occupation in this area. How the humans survived in this area is our main interrogation. The project proposes the hypothesis through the analysis of the writings and architecture, and the ecology. - Firstly, we do a short summary of the principal datas relating to the space, the time, and to the social structures of the Classical period. Secondly, we try to state on the knowledge on the three following principles: 1) the role of ideology inside a Maya society; 2) the role of the environment in the daily life of the Mayas; 3) the role of the pyramids in the immediate environment of the inhabitants of the sample sites. We will observe that the relations of our samples were characterized by the necessity to keep a strong control of the water supply to help the population to survive.

**Bennett, Gjende (Lakehead University, Thunder Bay) • *Lithic Reduction Strategies at a Late-Paleo-Indian site in North-western Ontario* [19]**

Recent excavations at the Mackenzie 1 site located on a Lake Minong strandline and overlooking the Mackenzie River gorge east of Thunder Bay have added a great amount of information to the knowledge of the Paleo-Indian occupation of the area. Due to the nature of the soil and the age of the site only the lithics remain. This entire collection is largely made from a local siliceous chert found in the gunflint formation called taconite. During the two seasons of excavation a very large lithic assemblage was collected. This includes not just debitage and cores but various types of formal tools, some in their early stage of manufacture. With this in mind I have started thesis work by applying reduction sequence studies to the Mackenzie 1 assemblage. In doing this I hope to determine what stages are present and in what quantities in an attempt to help establish the site functionality. From

this it may be possible to determine where in the sequence the distinct flavour of the Lakehead Complex appears.

**Bereziuk, Darryl, and Robin Woywitka (Archaeological Survey, Historic Resources Management Branch, Alberta Culture and Community Services) • *The Hummingbird Creek Site (FaPx-1): A Late Period Stratified Archaeological Site in Alberta's Eastern Slopes* [15]**

Targeted exploratory field programs guided by high resolution landscape models (LiDAR) in support of the Green Zone Adaptive Management Program (GZAMP) have resulted in the discovery of the Hummingbird Creek Site (FaPx-1). The site is located within the central eastern slopes of Alberta, and lies upon a remnant alluvial terrace that provides a commanding view of the confluence of Hummingbird Creek and the Ram River. Excavation conducted in 2011 identified a series of precontact occupations within a well-stratified sedimentary sequence. Radiocarbon AMS dates and tephrochronology results indicate the cultural occupations span the last 2,500 <sup>14</sup>C years. The artifact assemblage is described, and a preliminary chronostratigraphic framework is presented. The significance of the site to our understanding of Late Holocene cultural dynamics within Alberta's Eastern Slopes is also discussed.

**Bergeron, André (Centre de conservation du Québec) • *Aux grands maux les grands remèdes : la seconde vie des pétroglyphes de Bromptonville* [22]**

À l'automne 1963, des archéologues amateurs découvrent un ensemble de pétroglyphes sur du schiste ardoisier localisé dans le lit de la rivière Saint-François, en Estrie (Cantons-de-l'Est), au Québec. Les pétroglyphes sont vraisemblablement d'origines culturelles mixtes, c'est-à-dire amérindiennes et autres, et datent d'entre 1740 et 1815, mais peuvent aussi être plus récents ou anciens. L'année suivant leur découverte, l'archéologue qui s'intéresse à ce site croit les vestiges menacés et décide d'entreprendre leur prélèvement à l'aide de dynamite. Cette présentation retrace les grandes lignes de la découverte de ces pétroglyphes, leurs pérégrinations et leur oubli dans des réserves après leur extraction du site. Suite à leur redécouverte en 1995, un projet de restauration permet de reconstituer deux segments du site à l'aide des blocs de pétroglyphes retrouvés. En 2002, ces interventions connaissent leur conclusion lors de la mise en valeur, au Musée de la nature et des sciences de Sherbrooke, du seul site à pétroglyphes attesté dans les Cantons-de-l'Est.

In the fall of 1963, two amateur archaeologists discovered an assemblage of petroglyphs on slate in the Saint-François river bed, in Estrie (Eastern Townships), Quebec. Their provenance may be culturally mixed (Native and other), and they likely date from between 1740 and 1815, although this remains an estimate. A year after their discovery, the archaeologist who had taken an interest in the site, concerned that the petroglyphs were at risk, decided to have them removed using dynamite. This paper highlights the history of these petroglyphs from their discovery and travels, through to their long years of obscurity in storage after removal from the site, to their rediscovery. It was decided, when the petroglyphs were once again uncovered in 1995, to undertake the conservation of two segments of the site for display at the Sherbrooke Musée de la nature et des sciences. In 2002, these petroglyphs were put on display, an example of the only petroglyphs found in the Eastern Townships.

**Bergeron, André (Centre de conservation du Québec), Jennifer Poulin (Canadian Conservation Institute, Ottawa), David Denton (Cree Regional Authority), Dario Izaguirre (Cree Regional Authority) • *Analyse par chromatographie en phase gazeuse et spectrométrie de masse de deux tessons du Sylvicole supérieur provenant du site FaFs-5 (Baie James)* [21]**

Le site FaFs-5 a été répertorié lors de la campagne d'inventaire archéologique conduite par les équipes de l'Administration régionale crie durant l'été 2003. La collection de FaFs-5 comprend un total de 242 tessons de poterie dont l'analyse a permis d'identifier 4 vases, un tesson de pipe et 232 tessons de corps. En 2011, une demande est présentée au Centre de conservation du Québec pour consolider la structure des tessons, en prévision de leur intégration dans un projet d'exposition itinérante. Lors de la documentation des objets, des résidus de nature organique sont remarqués sur un rebord de col et sur deux tessons de panse du Sylvicole supérieur. Des échantillons sont alors prélevés et envoyés à l'Institut canadien de conservation pour analyse. Cette dernière va notamment révéler la présence de

produits associés à la pharmacopée traditionnelle des populations autochtones, suggérant une continuité dans l'utilisation des produits de la médecine traditionnelle depuis la préhistoire.

**Bevan, Andrew (Institute of Archaeology, University College London)** • *Modelling the interaction of paths and places in prehistoric environments* [26]

Geographers have a long tradition of modelling settlement hierarchies, as well as a continuing interest in routing problems both through discrete networks such as road systems, and across continuous landscapes. Archaeologists have an interest in understanding how settlements, camps and other more enduring areas of human activity distribute themselves across a landscape, how such places interact with one another, how travel between them is structured, and what role the environment plays as a forcing factor. Unfortunately, the paleoenvironmental evidence available to archaeologists is often far more patchy than for those studying the present day or very recent periods of human history. This paper will address these challenges, emphasising the increasing relevance of methods such as point process models, spatial interaction models, moderate levels of environmental realism and Monte Carlo simulation.

**Bilton, David, and Gay Frederick** • *What Does Northern Gulf Diversified Fishing Look Like? Presenting Archaeofaunal Data from Shishalh Territory, British Columbia* [14]

Different fishing adaptations were noted amongst Coast Salish groups in the Gulf of Georgia. Northern groups had a diversified fishing adaptation, while Central and Straits groups had more specialized fishing technologies. Archaeological investigations have traditionally focused in the latter areas, and these data have been well-used to understand the development of ethnographic cultural traits. This paper presents new archaeofaunal data from the traditional territory of the Shishalh nation, the southernmost Northern group, to expand our understanding of prehistoric cultural diversity amongst the Coast Salish.

**Birch, Jennifer (University of Georgia)** • *Between Villages and Cities: Settlement Aggregation and Community Transformation* [3]

Archaeologists have focused a great deal of attention on explaining the origins of village societies and the transition to a Neolithic way of life. Considerable interest has also concentrated on urbanism and the rise of the earliest cities. Between these two revolutions in human cultural development lies a critical and under-theorized phase in societal evolution. Throughout world, at various points in time, people living in small, dispersed village communities have come together into larger and more complex social formations. This paper will begin with an exploration of the social processes involved in the creation and maintenance of aggregated settlements and how they brought about transformations that affected virtually every aspect of a society and its culture. It will conclude with a discussion of how the archaeological record of Northern Iroquoian communities is particularly well suited to understanding how changes in community-based practices relate to cultural change at the regional scale.

**Blair, Susan E. (University of New Brunswick), Matthew K. Litvak (Mount Allison University) and W. Jesse Webb (University of New Brunswick)** • *The Precontact Sturgeon Fishery of the Miramichi River Drainage, Northeastern New Brunswick, Canada* [14]

The modern community of Metepenagiag Mi'kmaq Nation is located in northwestern New Brunswick, Canada, at the confluence of the Northwest and Little Southwest Miramichi Rivers, near the modern head-of-tide. This area has a high density of recorded precontact archaeological sites, including two National Historic Sites, the Oxbow Site, and the Augustine Mound. When combined with local knowledge and historical information, these sites contain rich, contextualized information about the period between 3500 and 500 years ago, and are the focus of long-term collaborative research between archaeologists, biologists, community researchers and institutions, such as Metepenagiag Heritage Park. On most of these sites, calcined sturgeon scutes and spines (many identified as *Acipenser oxyrinchus*) dominate faunal assemblages. This paper will explore the distribution of sturgeon remains in these sites, and present preliminary NSERC-supported research on their implication for our understanding of the relationship among the ancient Mi'kmaq of Metepenagiag, the Miramichi River, and sturgeon.

**Blouin, Yanik (Consultant)** • *Travaux archéologiques au Champ-de-*

*Mars : analyse et comparaison des modes de construction chez deux équipes de maçons du XVIII<sup>e</sup> siècle* [27]

En 1717, Chaussegros de Léry amorce la construction d'une enceinte bastionnée protégeant la ville de Montréal. Le projet n'est achevé qu'en 1744 et il aura requis la participation de plus de 230 artisans et journaliers, sans compter l'aide apportée par les soldats en poste dans la ville. Aujourd'hui, les vestiges mis en valeur au Champ-de-Mars constituent l'unique exemple d'un front complet de cette ancienne fortification. Les travaux de restauration qui ont pris place en 2010 ont donné l'occasion de procéder à un relevé exhaustif des parements de l'escabe et de la contrescarpe. Leur analyse permet de reconstituer les gestes de deux équipes différentes de maçons, de même qu'elle soulève de nouvelles avenues pour l'enregistrement et la description des vestiges archéologiques.

Under Chaussegros de Léry, Montreal's fortification was built between 1717 and 1744. Today, Champ-de-Mars remains are the last example of a complete front of this old fortification. In 2010, an archaeological survey allows an exhaustive drawing of the walls. Their analysis shows differences between two mason teams. Also, the conclusion brings some new ways in field archaeology.

**Bonneau Adeline (Université du Québec à Chicoutimi), Jean-François Moreau (Université du Québec à Chicoutimi), Réginald Auger (Université Laval), et Bertrand Emard (Hydro-Québec)** • *Analytical studies of European Trade Glass Beads in Quebec: what instrument for what kind of results?* [21]

Chemical analysis on trade glass beads in Quebec were performed since the 1990's by Ron Hancock and Jean-François Moreau using Neutron Activation Analysis (NAA) (Hancock et al. 1996, Moreau et Hancock 2010). This work results on a huge database of trade glass beads composition that can provide an estimate dating for the beads by comparison of the chemical composition. However, new questions are asked by the archaeologists: how were these beads made? Is it possible to make sub-groups in the dating groups in order to follow the penetration of beads from their coastal point of arrival into the continent? In literature, two techniques are more and more developed: Raman spectroscopy, which gave us the opportunity to find the "shape" of the opacifiers in the glass, to identify the type of glass and to make different groups of beads because of their glass type; and LA-ICP-MS, gave us the total composition of the glass with the analysis of 38 chemical elements and thus makes possible to defined sub-groups of beads which correspond with archaeological evidence on the site.

**Bouchard-Perron, Julie-Anne, Émilie Young-Vigneault et Nadia Ardila (G.A.I.A. Inc.)** • *Se doter d'un toit et d'une pitance au 17<sup>e</sup> siècle: Résultats des analyses environnementales sur le site du Parc des Braves à Québec* [30]

Au cours de la fouille du site du Parc des Braves par la Commission des Champs de Bataille Nationaux à l'été 2011, deux logis érigés au 17<sup>e</sup> siècle et visiblement incendiés avant le 18<sup>e</sup> siècle ont été mis au jour. L'analyse des échantillons de sol et de bois prélevés dans ces logis par l'équipe de GAIA Inc. a permis d'acquies plusieurs informations autrement inaccessibles et concernant la façon dont les logis ont été construits, divisés, utilisés et détruits. Les résultats obtenus jettent une lumière nouvelle sur le processus de colonisation aux environs de Québec et sur la manière dont les colons ont pu combiner des techniques anciennes et un environnement nouveau pour se créer un mode de vie unique.

**Bouchard-Perron, Julie-Anne, Jacynthe Bernard et Nadia Ardila (G.A.I.A. Inc.)** • *Vendre, acheter et échanger à Montréal au 19<sup>e</sup> siècle : Résultats des analyses environnementales sur le site de la Place d'Youville* [27]

Situé en plein cœur du vieux-Montréal, le site de la Place d'Youville a abrité successivement deux édifices imposants ayant été utilisés comme marchés au 19<sup>e</sup> siècle. L'étude des restes botaniques, entomologiques et fauniques provenant de dépôts associés aux marchés et excavés par la firme Ethnoscop Inc. a permis d'obtenir une perspective unique quant à la façon dont les activités mercantiles se déroulaient à l'intérieur des édifices. De la salubrité des lieux aux produits échangés en passant par les techniques de boucherie employées et la répartition des activités en allant jusqu'aux réseaux d'échanges déployés et à la façon dont les tendances observées s'inscrivent dans le monde occidental, cette présentation proposée par GAIA Inc offre un survol de l'expérience de «faire son marché» au 19<sup>e</sup> siècle.

*Trading and exchanging in 19<sup>th</sup> century Montreal: Some perspectives from environmental archaeology at Place d'Youville site*

Located in the heart of Old Montreal, Place d'Youville hosted successively two imposing buildings that were used as markets during the 19<sup>th</sup> century. The botanical, entomological and faunal contents of the deposits associated with these markets, excavated by the firm Ethnoscop Inc., were analyzed and have provided unique insights on how mercantile activities took place on site. From the sanitary conditions to the products traded, through the butchery techniques employed, activities distribution, the exchange networks deployed and the way the trends relate to the Western world as a whole, this paper proposed by GAIA Inc. provides an overview of the experience of "going to the market" in the 19<sup>th</sup> century.

**Boucher, Marc et Thierry Rauck (Archéotec inc.) • Stockage et gestion de données archéologiques et spatiales : de l'analyse scientifique à la publication [18]**

L'informatisation des pratiques en archéologie offre un éventail grandissant d'outils de traitement des données. Mettre en relation les différentes données, de provenances multiples, structurées selon différents formats et stockées sur différents supports représente un défi de taille. Afin de remédier à ce genre de limitation technique, un projet d'intégration des données archéologiques a été mis sur pied au sein de la firme Archéotec inc. L'objectif principal vise à permettre une saisie solide, un archivage fiable ainsi qu'une consultation flexible et facile des connaissances. Privilégiant l'utilisation de logiciels et de formats ouverts, ce projet vise aussi à permettre une exportation aisée de l'information vers les outils d'analyse et de publication existants, tout en offrant de nouvelles possibilités. Nous présentons un aperçu des différentes technologies utilisées ainsi que leurs fondements philosophiques respectifs. Nous abordons ensuite les bénéfices obtenus durant l'analyse archéologique ainsi qu'au moment de la publication, qu'elle soit sous une forme traditionnelle imprimée ou dans un format numérique, tel le catalogue web des outils lithiques des sites de la dérivation Rupert produit à la demande de la Société d'énergie de la Baie James.

Spatial and archaeological data storage and management: from scientific analysis to publishing. The computerization of archaeological practices offers a growing set of tools for data processing. To assemble data coming from multiple origins, each having their own structures and being stored on different types of support, often represents quite a challenge. In order to lift those technical limitations and difficulties, Archéotec inc. launched a project to globally integrate all of our current archaeological data. The main goal was to provide a solid input control towards a reliable archiving system that offers great flexibility and ease of use. Favouring open software and formats, this endeavour also facilitates data exporting toward existing tools for analysis and publication while providing new opportunities. This communication presents an overview of the various technologies being used as well as their respective philosophical basis. We show their usefulness during the analysis stage as well as during the publishing stages, whether it be on a traditional paper format or digital format like the web catalogue of the stone tools from the sites of the Rupert Diversion produced for the Société d'énergie de la Baie James.

**Boulanger<sup>1</sup>, Yan, Dominique Arseneault<sup>2</sup>, Hubert Morin<sup>3</sup>, Charles Dagneau<sup>4</sup>, Yves Jardon, Philip Bertrand<sup>2</sup> (1Service canadien des forêts, Centre de foresterie des Laurentides ; 2Chaire de Recherche sur la Forêt Habitée, Département de biologie, chimie et géographie, Université du Québec à Rimouski ; 3Centre d'Étude sur la Forêt, Département des sciences fondamentales, Université du Québec à Chicoutimi ; 4Groupe de Recherche en Dendrochronologie Historique, Université de Montréal Spruce budworm (SBW, Archips fumiferana Clem.)) • Dendro-archaeology and insect outbreaks: The development of long spruce chronologies from old buildings in eastern and southern Québec to reconstruct the multi-centennial spruce budworm outbreak history [13]**

Outbreaks are the most important natural disturbance in the southern part of the boreal forest in north-eastern North America. Long reconstructions spanning several outbreak cycles are needed to accurately assess the long-term SBW outbreak dynamic. Such long history may be obtained through classical dendrochronological analyses as severe defoliation causes marked reductions in radial growth of host trees. As the use of living trees rarely led to chronologies longer than 200 years, we built several host and non-host chronologies from

"archaeological" material in eastern and southern Québec. This material allowed us to reconstruct the multi-centennial SBW outbreak history (AD 1513-2002 and AD 1551-1995) in these two areas. Results suggested that eastern and southern Québec have experienced frequent and synchronized outbreaks throughout the last 400 years. We demonstrate that old buildings, especially early settlement churches, provide an excellent dendrochronological material to build long and well-replicated SBW host chronologies. As a complement, host and non-host chronologies built in this dendroentomological context were also used to date several patrimonial buildings in these regions.

**Bourguignon-Tétreault, Justine (Université de Montréal) • Présence amérindienne et traite à Montréal (1675-1688). Objets et contextes [6]**

Les fouilles sur le site de l'îlot Callière ont révélé des contextes stratigraphiques que l'on associe à la période comprise entre le démantèlement des installations du fort de Ville-Marie et la reprise du terrain par Louis-Hector de Callière en 1688. La composition des sols, de pair avec la culture matérielle qu'ils contiennent, jette une lumière nouvelle sur l'occupation de la pointe durant cet intervalle; plusieurs éléments soutiennent l'hypothèse d'occupations amérindiennes sur la pointe lors des foires de fourrures, tout en montrant la persistance de traditions et technologies autochtones à la fin du XVII<sup>e</sup> siècle. La collection à l'étude comprend des céramiques et de verre européen, divers biens de traite et de la céramique amérindienne en quantité notable. L'étude d'un assemblage aussi diversifié dans une perspective d'interculturalité euro-amérindienne pose certains problèmes méthodologiques et appelle une réflexion critique sur la division préhistoire-histoire et le lien à établir entre l'approche conceptuelle et l'analyse de la collection.

*Native presence and trade at Montréal (1675-1688). Objects and contexts*

Excavations at the Îlot Callière have brought to light stratigraphic contexts associated with a short hiatus between the dismantling of Ville-Marie's old fort and the sector's redevelopment by Louis-Hector de Callière. The soils' composition and the material culture they contain reveal an period of Native occupation, possibly related to the annual fur trade fair, and show the persistence of Native traditions and technology in the later 17<sup>th</sup> century. The collection includes European ceramics and glass, various trade goods and significant concentrations of Native pottery. The study of this assemblage, from the perspective of Euro-Amerindian "interculturalité", raises methodological issues and calls for a critical reconsideration of the Prehistory-History boundary. It also holds challenges for a conceptual approach to the collection's study.

**Bracewell, Jennifer (McGill University) • Mobility and Adaptation in Prehistoric Northern Finland: a case-study from Northern Ostrobothnia [7]**

Since the end of the last ice-age, adaptation to arctic and sub-arctic environments has meant adaptation to rapidly changing environments. Mobile populations became sedentary and then mobile again. Calling this a "reversion" to mobility fails to consider the importance of history in shaping societies, and subscribes to an outdated conception of cultural evolutionism. This paper considers how a mobile population that was sedentary adapted to changes in their environment. A case-study along a river estuary in Neolithic and Iron Age Northern Finland demonstrates that sometimes new technologies and a diversification of resources can facilitate and enhance the option of increased mobility in response to changing climate and ecosystemic conditions. Supporting cases from the Canadian sub-arctic are discussed. It is also shown that although the population became increasingly mobile, they retained some of their former relationships to the landscape, returning to and re-using monumental sites at important locations along the river.

**Brake, Jamie E.S. (Nunatsiavut Government) • The Repatriation and Reburial of Human Remains from Zoar, Labrador [7]**

William Duncan Strong visited Labrador from 1927-28 as a member of the second Rawson-MacMillan Subarctic Expedition and Assistant Curator of Ethnology and Archaeology at the Chicago Field Museum. His expedition responsibilities included investigating archaeological sites and collecting artifacts to build an understanding of the history of human occupation in this region. He had also been tasked with

bringing human remains from Inuit graves to Chicago to add to the Field Museum collections. In 1927 Strong visited the former Moravian mission station of Zoar where he removed the remains of 22 individuals from marked graves in a Christian cemetery. A reburial was staged in 1928 to quiet local anger when people were outraged after learning about what happened and the facts of the matter remained unknown in Labrador for more than 80 years. In the Spring of 2011 the remains were returned to the Labrador Inuit and were reburied at Zoar.

**Braun, Gregory V. (University of Toronto) • *Between Memory and Materiality: Biographies of Iroquoian Smoking Pipes* [4]**

Smoking pipes are ubiquitous finds at many Iroquoian domestic settlements; however the traditional focus on their decoration may limit our understanding of the social and mechanical performance of these objects. This paper therefore employs a biographical approach in order to better understand the various contexts in which smoking pipes were manufactured, used and discarded. Petrographic, macroscopic and experimental techniques are used to examine the ceramic industries at two Middle Ontario Iroquoian villages that were occupied during the late 13<sup>th</sup> century AD. The resulting data suggest that an important interplay existed between memory and materiality throughout the life-cycle of smoking pipes – beginning with the selection of symbolically charged raw materials for their manufacture, and ending with their decommissioning, deliberate breakage and discard.

**Brien, Marie-Claude (Université de Montréal) • *Le cèdre blanc (Thuja occidentalis) dans le paysage culturel en amont de Montréal au XIX<sup>e</sup> siècle. Une approche dendroarchéologique* [13]**

Le cèdre blanc est une essence forestière fortement utilisée dans les constructions rurales et urbaines du XIX<sup>e</sup> siècle. L'analyse dendrochronologique de six ensembles architecturaux ruraux composés de bâtiments en pièce-sur-pièce et situés dans les vallées de l'Outaouais et du haut Saint-Laurent nous a permis d'aborder l'établissement colonial d'une façon originale. Elle nous en apprend entre autres davantage sur le paysage culturel domestique et sur les différentes stratégies d'exploitation des ressources ligneuses. Les chronologies élaborées à partir de ces sites ruraux ont par ailleurs servi de points d'ancrage géographique dans la recherche de la région de provenance des pièces de cèdre blanc mis au jour sur cinq sites archéologiques montréalais. L'étude de dendroprovenance a permis de différencier quatre sous-régions d'approvisionnement du cèdre blanc pour Montréal au XIX<sup>e</sup> siècle, apportant une meilleure compréhension des réseaux d'échanges de cette ressource. Cette étude ouvre la voie à une compréhension renouvelée du patrimoine architectural et archéologique de Montréal et son amont.

*The Eastern white cedar (Thuja occidentalis) in the 19<sup>th</sup> century cultural landscape of Montreal's upstream valleys: a dendroarchaeological approach*

The Eastern white cedar appears widely in rural and urban construction of the 19<sup>th</sup> century. Dendrochronological study of six rural building groups, made of stacked logs, in the Ottawa and Upper St. Lawrence Valleys sheds new light on colonial settlement patterns. It informs us on aspects of the domestic cultural landscape and on different strategies for exploiting this forest resource. The chronologies from these rural sites also serve as geographical anchorage points for a dendroprovenance study of white cedar timbers recovered from five archaeological sites in urban Montreal. We have differentiated four sub-regions that supplied cedar timber to Montreal in the 19<sup>th</sup> century, leading to a better understanding of rural-urban trade networks for this resource. In these ways, the study refines our understanding of architectural and archaeological heritage in Montreal and its upstream hinterland.

**Brink, Jack W. (Royal Alberta Museum) • *Rock Art and Graffiti Removal at the Okotoks Site: A Never Ending Problem* [22]**

A large quartzite glacial erratic south of Calgary has red ochre rock art in a number of places. This prominent rock has been subjected to repeated graffiti making by visitors. A program of graffiti removal using high pressure water spray was undertaken, initially without archaeological consultation. This oversight led to a second project where graffiti was removed under close supervision by the author. Most graffiti falls on non-rock art surfaces but some directly overlies ochre images. Close inspection of water spraying suggests that no damage is being done to the underlying rock art. It appears that a

mineral veneer has developed over the ochre, protecting it from damage. Though far from ideal, water spray removal of graffiti is one tool to address the never ending problem of continuous vandalism and protection of the rock art at the Okotoks site.

**Brink, Jack (Royal Alberta Museum) • *Who's the Guy with the Spoon on his Nose?* [23]**

Peter Ramsden's sole and entire contribution to my education has been to teach me about something called a Google-Smack: a juxtaposition of two words that is so bizarre that no Google search will find them linked together. Like domesticated fowl coming home to roost, I now see the words "Honour" and "Peter Ramsden" in the same sentence. As we pause to reflect on the deeper meaning of this, I provide a western perspective on Peter's influence on Canadian archaeology. And in my remaining 19 minutes...

**Brownlee, Kevin (The Manitoba Museum) and Myra Sitchon (The University of Manitoba) • *Shifting research paradigms in archaeological impact assessments of Hydroelectric Development Projects along the Churchill River in northern Manitoba* [18]**

Archaeological investigations in northern Manitoba are driven primarily by hydroelectric development. The largest project involved a six year pre-impact archaeological assessment project prior to the diversion of the Churchill River into the Nelson River in 1976. Its inception occurred late into the planning process resulting in a lack of funding, understaffing and limiting its scope. Subsequent archaeological investigations began 14 years later in 1990 with a post mitigation reassessment of sites with outcomes that have significantly changed our perspectives on the ancient history of the region. More recently in Granville Lake, an area with a proposed hydroelectric dam, archaeological work initiated by the Okawamithikani First Nation with The Manitoba Museum, furthers our understanding of site identification and interpretation in the boreal forest. This presentation compares archaeological investigations carried out on the Churchill River since 1969 and the role the local community plays in the recording of their history.

Le développement hydroélectrique dans le nord du Manitoba constitue le principal moteur derrière la mise en place de programmes de recherches archéologiques. Réalisé avant la dérivation en 1976 du Fleuve Churchill vers la rivière Nelson, le projet de plus grande envergure, d'une durée de six ans, visait à évaluer les impacts de ce projet sur les ressources archéologiques. Sa mise en place tardive dans le processus de planification s'est traduit par un manque de financement et d'effectifs qui ont limité sa portée. Des recherches archéologiques entreprises 14 ans plus tard, soit en 1990, avaient pour but de réexaminer les sites qui avaient fait l'objet de mesures d'atténuation. Les résultats ont changé, de manière significative, notre perspective sur l'histoire ancienne de la région. Plus récemment, à Granville Lake, une région visée par la construction d'un autre aménagement hydroélectrique, le travail archéologique initié par la Nation d'Okawamithikani, en collaboration avec le Musée du Manitoba, a contribué à faire avancer notre interprétation et l'identification de sites en forêt boréale. Cette présentation compare les recherches archéologiques réalisées sur le Fleuve Churchill depuis 1969 et le rôle des communautés locales dans la collecte de données concernant leur histoire.

**Burke, A.<sup>1</sup>, Guiducci, A., Izquierdo, M., Levavasseur, G., (Département d'anthropologie, Université de Montréal) • *Modelling climate variability during the Last Glacial Maximum and its impact on human population expansion* [26]**

The "Groupe d'Étude des Dispersions d'Hominidés" was formed in 2008 to investigate the impact of environmental change on the pattern of hominid dispersals. In this research, we use a high-resolution climate simulation to test the impact of climate variability on the distribution of human populations in the Iberian Peninsula during the Late Glacial Maximum. The effects of climate change on regional environments during the onset of full glacial conditions in the Iberian Peninsula is a hotly debated topic, our research helps shed light on this debate as well as exploring the relationship between climate variability and population dynamics during the early phases of the modern human colonisation of Europe.

**Burke, Adrian L. (Université de Montréal) • *Trois-Rivières et Bécancour à la fin de l'Archaique : résultats du projet triennal de l'Université de Montréal* [29]**

La région de Trois-Rivières et Bécancour a toujours été un lieu d'interaction et d'échanges pour les peuples amérindiens. Vers la fin de l'Archaïque et le début du Sylvicole (env. 4000-2500 BP), cette région devient particulièrement courue ou achalandée. Les sites archéologiques sont nombreux et les matériaux indiquent des liens avec plusieurs régions à travers le grand Nord-Est. Comment expliquer l'importance de la région de Trois-Rivières et Bécancour pendant l'Archaïque terminal et le Sylvicole inférieur? Sa position géographique peut sans doute expliquer en partie cette popularité. Cependant, d'autres aspects environnementaux et sociopolitiques rentrent en jeu aussi. Un projet de recherche mené par les archéologues de l'Université de Montréal et étalé sur trois ans (2009-2011) a abordé ces questions avec des campagnes de prospection, sondages et fouilles archéologiques ainsi qu'une campagne de carottage dans deux lacs de la région. Nous présentons les premiers résultats de ces recherches et nos interprétations.

**Burns, Mélissa (Department of Archaeology, Memorial University) • *The Taskscape of an 18<sup>th</sup>-century French Seasonal Fishing Station on Newfoundland's Petit Nord* [8]**

From the early 1500s, migratory fishermen from Brittany and Normandy pursued a seasonal salt-cod fishery on the Petit Nord, in northern Newfoundland. Returning every summer, year after year, French fishermen acquired the knowledge needed to tame and develop the Petit Nord. This small-scale, exclusively male society was well adapted to the Newfoundland landscape. By 1700, fishermen had significantly modified their environment by clearing forests, fishing cod, hunting birds and building paths, cookrooms, fishing stages, shelters and such. Through a case study of the fishing room Champs Paya, this paper will discuss the daily life of seasonal fishermen in northern Newfoundland in the 18<sup>th</sup> century. A taskscape analysis suggests that this male society treated the Petit Nord as part of the Breton maritime cultural landscape, even if this was, geographically, part of another continent.

**Cadieux, Nicolas, Jean-Christophe Ouellet, Hélène Buteau (Archéotec inc.) • *La modélisation tridimensionnelle et la représentation des données archéologiques : perspectives et prospectives* [18]**

La modélisation en trois dimensions de sites archéologiques constitue un nouvel outil qui s'offre aux archéologues pour représenter visuellement les données archéologiques obtenues sur le terrain. Ce type de représentation a été appliqué à un ensemble de données provenant du site EjFt-003. C'est par la combinaison des données topographiques, archéologiques et ethnographiques qu'ont été reconstruits l'environnement et les activités réalisées par les groupes préhistoriques dont témoignent les données archéologiques récoltées sur le site. Au-delà d'une simple reconstruction visuelle, l'application de cette méthode de représentation permet de rendre compte, avec un grand souci de réalisme et d'acuité, de certaines facettes de la vie des groupes préhistoriques étudiés. Certains résultats issus de cet exercice sont présentés ici dans le but de stimuler les discussions sur l'utilité et le potentiel de ce type de méthode pour l'interprétation et la diffusion des données archéologiques.

*Tridimensional imaging and the representation of archaeological data: perspectives and prospectives*

3D modeling of archaeological site offers archaeologists a new and stimulating way to represent data gathered in the field. This type of 3D representation has been used to visualize archaeological data from the site EjFt-003. By combining topographical, archaeological and ethnographical information, we have reconstructed the environment and the activities conducted by the prehistoric groups. The resulting 3D model offers more than just a pretty picture. This method allows us to visualize with great detail and veracity the daily life of the studied groups. Results of this exercise are presented here in order to stimulate debate and discussion on the potential and utility of the application of this type of method upon interpretation and diffusion of archaeological data.

**Caldwell, Megan (University of Alberta), Dana Lepofsky (Simon Fraser University), and Michelle Washington (Sliammon First Nation) • *Fish and Fishing in Tla'amin Traditional Territory – From 3,000 years ago until the present* [14]**

Fish and shellfish are central to Tla'amin cultural identity. In the past, many species of marine fish and shellfish were managed through-out Tla'amin traditional territory. Our research over the past several

years has focused on identifying intertidal management features (fish traps, cleared clam beaches) on the landscape, and associating these features with both other archaeological remains (village and camp-site locations, faunal remains) and the specific local ecological knowledge held by Tla'amin community members. We present the findings of this research, with a focus on the specific means by which Tla'amin people managed fish and shellfish resources in the past – the intertidal management features, tenure systems and social conventions that allowed for management and harvest of a variety of taxa over the last 3,000+ years – and will conclude with a discussion on the current state of fish and shellfish resources in Tla'amin traditional territory.

**Campbell, Jennifer (Archaeology Centre, University of Toronto/Lakehead University) • *Identity, Subjectivity, and the Canadian Archaeologist Abroad* [3]**

Anthropological archaeologists often examine national identity programs that use history to legitimize geo-political engagements; focusing on the colonial legacy and the lasting entanglements of the past colonial-subject with the post-post-colonial-subjectivity. In this paper I explore the impacts of researcher subjectivity, in particular the subjectivity of Canadian trained anthropological archaeologists, on the interpretations we draw about the colonial subject. How does our unique "theoretical moment" impact our analysis of the colonial endeavour elsewhere? If we are approaching shared anthropological themes from unique perspectives (by comparison to our colleagues trained in distinctly American and European schools) than how can we relate this in our work?

**Campbell, Jennifer L. (Archaeology Centre – University of Toronto) • *Opening Remarks and Remarkable Openings: Dr. Peter Ramsden* [23]**

Reflections on the career and academic contributions of Dr. Peter Ramsden - a silver back of Canadian archaeology.

**Cannon, Aubrey (McMaster University) • *Peopling the Millennial Past: Chronology, Memory, Factions and Events at Namu, British Columbia* [13]**

From observations of micro-stratigraphy, differences in the content of midden deposits, and variable histories of house construction and abandonment, Peter Ramsden has constructed a vivid history of the people of the Benson Site that convincingly reveals their perceptions, decisions and conflicts. Inspired by his efforts, this paper extends a comparable perspective to the scale of the millennia-long history of occupation at the site of Namu. Patterns of site development, variation in midden contents over time and the timing of village establishment at nearby locations evoke events, perceptions, actions and differences that can only be understood from the scalar perspective of the people responsible for the histories represented. New refinements in the chronology of the Namu occupation add to an increasingly evocative history of the site, though, paradoxically, they also illustrate the limitations of any capacity to see people and the details of their histories over such vast periods of time. This paradox opens new questions regarding potential inconsistency between the reality of long-term cultural tradition and its role in contemporary archaeological narrative.

**Carruthers, Peter • *A Strange Encounter in 1960: Adventures in Ontology* [23]**

An unexpected encounter with Dr. Ramsden in Huronia during August, 1960 lead to a my rethinking of the entire structure of where I was going in archaeology. There is a tendency to dismiss the brain development of 17 year olds. This is usually wise and based on personal experience. Experience, for example, has taught us to be guarded when working too long in the sun and so some people wear hats. But how can you protect yourself from the power of Wendat villages when filtered through the genius of an evolving mind? Well, stick around and I'll tell you how Ramsden showed the way.

**Cencig, Elsa (Avataq Cultural Institute), Jennifer Bracewell (McGill University), Elspeth Ready (Stanford University), Hervé Monchot (Université Paris Sorbonne-Paris IV), Daniel Gendron (Avataq Cultural Institute) • *Aivirtuuq (Kangiqsujuq, Nunavik) : Archaeology, fieldschool and potential for cultural tourism* [7]**

Aivirtuuq is a peninsula located 40 km southeast of Kangiqsujuq (Nunavik). It is known to the Inuit as an old sea mammal hunting area,

mostly walrus and bowhead whales. At the request of Nunaturlik Land Holding Corporation of Kangiqsujuaq, Avataq Cultural Insitute started an archaeological project in this area. Supported by the CURA-ASI research program, this project aims to promote local knowledge and cultural tourism. In the summer of 2010 an evaluation of potential was undertaken at the site. About 20 archaeological sites are known in the area, both historic and prehistoric. A historical butchering site (JiEv-15) and a Dorset longhouse (JiEv-4) are of particular interest. During summer of 2011, a fieldschool in archaeology for Inuit youth was undertaken at the historical site of Saunitarlik (JiEv-15).

Aivirtuq est une péninsule située à 40 km au sud-est de Kangiqsujuaq (Nunavik), connue des Inuits comme étant un ancien lieu de chasse aux mammifères marins, principalement le morse et la baleine boréale. À la demande de la Corporation foncière de Kangiqsujuaq, Nunaturlik, l'Institut culturel Avataq, via son programme de recherche ARUC-ASI, y a entrepris un programme de recherches archéologiques dans le cadre d'un projet de développement sur le «tourisme culturel». Une première mission fut menée à l'été 2010 pour évaluer le potentiel archéologique d'Aivirtuq. On y compte près d'une vingtaine de sites archéologiques, tant historiques que préhistoriques, dont notamment un site historique de boucherie (JiEv-15) et une maison longue dorsétienne (JiEv-4). À l'été 2011, un chantier-école en archéologie pour les jeunes inuits y fut mené sur le site historique Saunitarlik (JiEv-15).

**Chabot, April (University of Manitoba) • Federal Repatriation Policy and First Nations in Canada: A Best Practices Model [16]**

Canada lacks a cohesive federal policy regarding the repatriation of First Nations cultural heritage property. Thus, policy initiatives have been left largely to individual provinces. Consequently, the developments of provincial policies vary in the degree of accountability of government and cultural resource management firms from province to province. A case study of the Human Rights Museum in Winnipeg examines the application of current policies and guidelines in place within Manitoba to a particular site. This site provides the opportunity to examine the impact of current policy recommendations on the work undertaken by archaeologists, contractors, as well as public and private development interests within Manitoba. The research undertaken for this thesis includes a comparative analysis across Canada and to other Commonwealth countries such as Australia and New Zealand, with the aim of creating a best practices model broadly applicable to the provinces of Canada.

**Chapdelaine, Claude (Université de Montréal) • De la maisonnée à l'espace villageois : deux saisons de fouilles au site Droulers [5]**

Le site Droulers est le plus gros village iroquoien connu dans la partie québécoise de la Laurentie iroquoienne. L'école de fouilles de l'Université de Montréal a initié un projet de quatre ans en 2010 en inscrivant les recherches dans une démarche favorisant l'archéologie sociale et l'étude des maisons-longues. Des efforts ont été investis en septembre 2011 à l'échelle du village pour répondre à une question fondamentale : ce type de communauté datant du XVe siècle était-il entouré d'une palissade ? Un premier bilan s'impose après la fouille de près de 580 m<sup>2</sup> depuis les fouilles dans les années 1990 sur cet espace villageois couvrant au moins 13,000 m<sup>2</sup> ou 1.3 hectares.

*From household to village: two field seasons at Droulers/Tsiionhiakwatha*

Droulers is the biggest known Iroquoian village in the Quebec portion of Iroquoian Laurentia. The Université de Montréal field school started a 4-year project with the objective of making social archaeological by investigating long houses. Efforts were carried out at the village scale in September 2011 to answer a fundamental question: was the XV<sup>th</sup> century settlement palisaded? A first summary is presented after the excavation of more than 580 m<sup>2</sup> since the first digs in the 1990 on this village covering about 13,000 m<sup>2</sup> or 1,3 hectares.

**Charest, Nadia and Caroline Jackson (The University of Sheffield) • Rethinking French importance in the trade of European items in New France: following the circulation French trade beads in Quebec and Ontario, 1600-1650 A.D. [30]**

The Jesuit Relations report that trade between the French of New France and the Huron confederacy of southern Ontario did not begin until 1609; direct trade only in 1615 (Thwaites 1896-1901, Vol. 20). Furthermore, these trade relations were inconsistent and often

unreliable ventures disrupted by warfare and mistrust caused by rival nations. It is therefore not surprising that recent research by the authors has revealed reason to question the importance of the French in the procuring of European trade goods amongst the Ontario Iroquois; especially regarding trade glass beads. This paper will review the evidence for the presence of the French in the circulation of trade glass beads in Quebec and Ontario for GBP2 (1600-1615) and GBP3 (1615-1650). To do this, the research combines the 154 new glass compositions analysed by EPMA from Huron, Neutral and French colonial sites (n = 6) with the approximate 1,464 glass compositions analysed by INAA between 1994 and 2002 from a number of Huron, Neutral, Petun, Seneca, and Algonquian sites (n = 32). Through the comparison of the compositional data, the presence of French material in the context of trade in each of the (generalized) five Native groups was examined. It was found that while the French remained a peripheral source for trade beads amongst the Ontario Iroquois, and an almost absent source amongst the Seneca of present day New York State, they held a stronger presence amongst the Algonquians of northern Quebec.

**Chevrier, Daniel (Archéotec inc.) • EJT-003: 4000 years of human occupation at confluence of the Rupert and Kamistikawesich rivers. Les matières premières lithiques en Jamésie [18]**

Au cours des dernières années, différentes démarches ont été suivies pour identifier les matières premières lithiques utilisées par les groupes amérindiens en Jamésie. La première démarche fut une recherche des sources potentielles sur l'ensemble de la Jamésie. La deuxième consista à répertorier toutes les descriptions proposées par les archéologues dans les sites de la Jamésie et à jumeler les matières des sites aux sources potentielles. La troisième fut une analyse macroscopique fine des matières présentes dans les sites de la dérivation Rupert. La quatrième fut une catégorisation chimique des matières des sites de la dérivation Rupert à l'aide d'un spectromètre à fluorescence des rayons-X (XRF portatif); certaines sources ont également pu être analysées chimiquement. Ces recherches permettent de dresser un portrait révélateur de l'utilisation des matières premières au cours des différentes périodes d'occupation de la Jamésie. Ces travaux ont été réalisés dans le cadre de mandats obtenus de Hydro-Québec et de la Société d'Énergie de la Baie James par Archéotec inc.

*James Bay Raw Lithic Materials*

During the last six years, Archéotec Inc. has used various techniques to identify raw lithic materials used by Amerindian groups in the James Bay area. We first began with the identification of all possible geological sources in the James Bay region. We then assembled a list of all the descriptive expressions used by the archaeologists in the archaeological reports in order to link them with potential sources found in proximity of the sites. A third method consisted in producing a refined macroscopic description of the stone types found in the archaeological sites of the Upper Rupert Diversion area. The fourth method is a categorization of various lithic material found in the sites of the Rupert Diversion area with the help of a portable X-Ray fluorescent spectrometer; some sources have also been described chemically. All these approaches allow us to present an overall picture of the use of lithic materials during the different periods of occupation. All these projects have been carried out under contracts with Hydro-Québec and the Société d'Énergie de la Baie James.

**Church, Karen L. (Department of Archaeology, University of Calgary) • Understanding the Nature and Patterned Distribution of Culturally Modified Trees on Haida Gwaii / the Queen Charlotte Islands, BC [15]**

The inland archaeology of Haida Gwaii has had little intensive archaeological study other than culturally modified tree (CMT) inventories. These inventories, conducted in response to logging plans, have documented thousands of CMTs, some of which are outliers. Individual CMT sites that exist several kilometers inland away from major concentrations may indicate where ancient trails once existed - trails that are hinted at in the ethnographic literature and described by Haida Elders. Due to the dynamic temperate rainforest environment and industrial logging, evidence of these trails is now well obscured. By means of a landscape archaeology approach, I combine least cost path analyses in a Geographic Information System (GIS) with ethnographic information, archival maps and other data to derive a methodology for testing where these trails and related archaeological sites existed.

**Clark<sup>1</sup>, Terence, Mathew Betts<sup>1</sup>, Shawn Graham<sup>2</sup> and Andrea Gilchrist<sup>1</sup>** (<sup>1</sup>Canadian Museum of Civilization, <sup>2</sup>Department of History, Carleton University, Canada3D) • *Modeling for the Masses: new technologies that make virtual archaeology accessible* [30]

A number of recent studies have outlined the use of high resolution 3D modelling of archaeological materials for archival, analytical, and educational ends. Although the output created by such projects is often measured in the hundredths of millimetres, the cost and time to create these models, and their resulting file sizes, is a severely limiting factor in their production and dissemination. Reacting to the increasing demand for interactive virtual content in museum websites and exhibitions, we present more expedient digital technologies that tap into the power of cloud computing, and the ubiquity of smart phones and tablets, to bring archaeological remains to the masses. While these models do not have the resolution of archival-level scans, we argue that such detail is often not necessary for public uses and in fact is hindering our ability to provide virtual access to collections. This paper outlines a workflow - from model creation to end-user visualization - that is time-efficient, virtually no-cost, and requires minimal personnel and training.

**Cloutier-Gélinas, Maryse (Université Laval)** • *Through Space, Time, and Otherness: A Spatial Analysis of Fifteenth to Twentieth Century Labrador Inuit Settlement Patterns* [10]

Using as an example the MA thesis I submitted in 2010, I wish to discuss some of the difficulties that may arise from using archaeological data to decipher the cultural phenomena lying behind the archaeological record. Focusing on winter sites containing sod houses temporally ranging from precontact Inuit to modern times, my MA research examined the variability in the spatial patterning of Labrador Inuit sod houses, and addressed the particular issue of structures that can be characterized as “outlier houses”. The data was analyzed using the nearest neighbour method, a distance method stemming from point pattern analyses, and interpretations were enlightened by landscape archaeology, ethnolinguistics and phenomenology. Results suggested that for the Inuit, social distance and spatial distance are directly proportional, and not bounded by contemporaneity.

**Collard, Mark (Human Evolutionary Studies Program and Department of Archaeology, Simon Fraser University)** • *Environmental drivers of cultural evolution in small-scale populations* [26]

Successfully modeling human-environment interactions in prehistory requires a better understanding of the impact of climatic and ecological factors on the behavior of recent small-scale societies. In this paper, I outline a series of studies my colleagues, students, and I have carried out over the last few years in which we have investigated the drivers of material culture diversity and complexity among historically-documented hunter-gatherers. These studies indicate that at a global scale the number and intricacy of the subsistence tools that hunter-gatherers employ are strongly influenced by effective temperature and other latitude-linked variables. The studies also indicate that latitude-related variables have a major impact on both the total number of artifacts and the total number of artifact-parts among hunter-gatherers. Together, our studies suggest that the diversity and complexity of subsistence toolkits and overall material culture assemblages may provide a means of tracking human-environment interactions in prehistory.

**Collins, Benjamin R. (McGill University)** • *The Taphonomy of the Final Middle Stone Age Faunal Assemblage from Sibudu Cave, South Africa* [31]

This study examined the entire faunal assemblage from the Final Middle Stone Age layers (~38,000 years ago) at Sibudu Cave in order to generate a more detailed and novel understanding of the taphonomic processes that took place during the assemblage's formation. In this regard, taphonomic indicators such as bone surface modifications (including cut marks, percussion marks, carnivore tooth marks, rodent gnawing marks and trampling marks), limb shaft circumference ratios, fracture patterning, burning and fragmentation were all considered. The results demonstrate a strong anthropogenic origin for the faunal assemblage, with cut marks and percussion marks being much more frequent than tooth marks and few carnivore remains being present within the assemblage. Furthermore, the highly fragmentary nature of the assemblage in conjunction with the high incidence of burned bone agrees with the pattern of site maintenance that has been presented for the earlier Post-Howieson's Poort and Howieson's

Poort levels, suggesting some behavioural continuity through time.

**Comeau, Jennifer (Memorial University of Newfoundland)** • *Consumption by the French Migratory Fishermen at Sixteenth-Century Ferryland, Newfoundland* [14]

The French cod fishery boasts an expansive history in Newfoundland, beginning at the onset of the sixteenth century, and perhaps even before. Ferryland is best known for its permanent seventeenth-century English settlement, and the early migratory visitors are often overlooked. Archaeology at Ferryland shows us that the French were utilizing the area in the early sixteenth-century for their shore-based dry fishery. Sixteenth-century ceramics compose the majority of the material culture present, along with Paleoethnobotanical material. The historical record provides some description of the fishermen's lives in Newfoundland as a whole, while archaeological investigation at Ferryland gives a much deeper understanding in terms of various crew dynamics, including class differences. An analysis of the material culture offers an idea of the diet and foodways of the French fishermen and provides insight into the daily lives of these early seasonal visitors at Ferryland.

**Comète, Hugo (Ethnoscop inc.)** • *Projet Bonaventure : la mise en œuvre d'une intervention archéologique à travers la circulation et la machinerie* [27]

La mise en œuvre du projet Bonaventure, impliquant le réaménagement de l'autoroute du même nom, pouvait affecter l'intégrité de contextes archéologiques historiques associés au développement du quartier Griffintown. Les travaux préparatoires, notamment l'ajout de voies supplémentaires le long des rues Duke et Nazareth, ont fait l'objet d'une expertise archéologique au mois de novembre 2011. La supervision archéologique des travaux de décontamination et d'implantation des infrastructures, couvrant une aire de près de 2000 m<sup>2</sup>, et des fouilles ponctuelles ont permis de documenter les occupations domestiques de la deuxième moitié du XIX<sup>e</sup> siècle. Par endroits, la fouille d'aires de circulation a exposé des niveaux stratigraphiques associés aux occupations antérieures à l'incendie du secteur en 1845. Tout au long des travaux, de nombreux défis logistiques ont dû être relevés par l'équipe d'archéologues. Ces activités archéologiques réalisées en bordure de rues achalandées, notamment lors des heures de pointe, doivent faire l'objet de fréquents ajustements afin d'atteindre les objectifs fixés.

Archaeological interventions accompanied the initial phase of the re-development of the Bonaventure highway. Levels prior to the 1845 fire of this part of Griffintown are among the discoveries. These archaeological activities, carried out along busy streets, are subject to frequent adjustments in order to achieve the objectives

**Cooper, Martin (Archaeological Services Inc.)** • *AMPs and TEKs in the Context of Mineral Exploration in northern Ontario* [16]

Ontario's recently updated Mining Act (2009) will contain regulations, not yet finalized, requiring mineral explorers to consult with Aboriginal communities prior to undertaking exploration programs. In addition, there will be a requirement for the identification of both archaeological and traditional use sites prior to conducting prospecting and drill programs. Significant spiritual and burial sites will be protected. CRM companies are already being called upon to conduct archaeological and Traditional Ecological Knowledge (TEK) programs within mineral claim areas, some of which are exceedingly large. Consequently, the approach required will be similar to an Archaeological Management Plan (AMP). This paper discusses an ongoing project in north-western Ontario where the AMP approach is being employed to identify areas of archaeological potential as well as to map TEK information. This work has also been integrated into the overall Aboriginal Consultation program.

**Costopoulos, André and Colin D. Wren (McGill University)** • *Archaeological and paleo-environmental survey in Wemindji, James Bay's paleo-coastal region* [18]

Under a project funded by SSHRC, NSF, ESF, and the Finnish Academy on environmental change and settlement patterns, we surveyed in the Old Factory watershed (Wemindji Cree Territory, James Bay, Quebec) and developed a shoreline displacement curve for eastern James Bay. Based on previous results from Northern Finland, we hypothesized that we would find population aggregation at places and times of relative shoreline stability in a changing landscape. We located two

prehistoric occupation sites and two quarries. While the occupation sites occur in places of temporary relative shoreline stability in the past, our chronological control of the occupations does not allow a full test of our model. The locations of the occupations are consistent with the predictions of the model but their timing is insufficiently known. The larger site (FeGj-2), one component of which dates to the 16<sup>th</sup> century, includes substantial dwelling features, decorated ceramics, and a large lithic assemblage.

Dans le cadre d'un projet financé par le CRSHC, le FNS, le ESF et le Finnish Academy on environmental change and settlement patterns, on a réalisé un inventaire de la région de Old Factory (Wemindji, Baie James) et établi une courbe de migration des cordons littoraux de l'est de la baie James. Basé sur des résultats provenant de la Finlande du Nord, nous avons formulé l'hypothèse que nous trouverions des occupations à des endroits et à des moments de stabilité relative du littoral. Nous avons localisé deux sites d'occupations de la période préhistorique et deux carrières. Tandis que les sites d'occupations se retrouvent à des endroits de stabilité relative provisoire du littoral, le manque de données chronologiques associées à ces occupations ne nous permet pas de vérifier en totalité notre modèle. Les emplacements des occupations sont compatibles avec les prévisions du modèle, mais on ne connaît pas suffisamment leur position dans le temps. Le site de plus grande envergure (FeGj-2) dont une des composantes remonte au 16<sup>e</sup> siècle, renferme d'importantes structures d'habitation, de la céramique avec décors, ainsi qu'un grand assemblage lithique.

**Coupland, Gary (University of Toronto) • *Bead Burials and Complex Hunter-Gatherers in the Salish Sea* [11]**

In recent years archaeologists working in the Salish Sea (Strait of Georgia) on Canada's west coast have unearthed several human burials copiously adorned with stone beads. This paper reports two new "bead burials" from DjRw14 located at the mouth of Salmon Inlet in the traditional territory of the shíshááh Nation. The age of the burials is presented and a model of complex hunter-gatherers is developed invoking prestige goods exchange, landscape, and mortuary ritual.

**Couture<sup>1</sup>, Andréanne, James Wollett<sup>2</sup>, Najat Bhiry<sup>1</sup>, Yves Monette<sup>3</sup> (1Center for Northern Studies, geography department, Université Laval; 2Center for Northern Studies, history department, Université Laval; 3Canadian Museum of Civilization) • *Household Geoarchaeology : Studying the spatial organization of Contact-Period Labrador Inuit communal houses* [10]**

By the late 17<sup>th</sup> century in Labrador, Inuit communities began to live in large semi-subterranean winter houses that consolidated multiple nuclear families in single households. Given that the house is a fundamental space in Inuit daily life, it is possible to assume that this architectural transition reflects a significant change in the organization, economy and patterns of social interaction of Labrador Inuit communities. Using a geoarchaeological approach, we intend to document the spatial configuration of these "communal" houses. Sedimentological, micromorphological and geochemical analyses are used to identify the location of different activity areas within communal houses in the Okak Bay and Nain regions of Labrador. We will compare our results with descriptions of this type of dwelling drawn from anthropological, historical and archaeological sources. Through these analyses, we hope to refine the application of geoarchaeological methods to the study of households and of domestic space.

*Géoarchéologie de la maisonnée : Étude de l'organisation spatiale des maisons communautaires inuites de la période de contact au Labrador*

Vers la fin du 17<sup>e</sup> siècle, les communautés inuites du Labrador ont commencé à vivre dans de grandes maisons semi-souterraines dans lesquelles plusieurs familles nucléaires composaient une maisonnée. Puisque la maison représente un espace fondamental dans la culture de ces communautés, cette transition architecturale a probablement engendré des changements majeurs dans leur organisation, leur économie et leurs modes d'interactions sociales. À l'aide d'une approche géoarchéologique, nous tentons de documenter la configuration interne de ces maisons « communautaires ». Des analyses sédimentologiques, micromorphologiques et géochimiques sont utilisées pour identifier la localisation d'aires d'activités au sein de maisons communautaires de la baie d'Okak et de la région de Nain au Labrador. Nous projetons comparer nos résultats avec les descriptions faites de ce type d'habitation dans les sources anthropologiques, historiques

et archéologiques. Par le biais de cette recherche, nous espérons établir davantage la pertinence des méthodes géoarchéologiques dans l'étude de la maisonnée et de l'espace domestique.

**Couture, Nicole C., Maria C. Bruno, and Deborah E. Blom (The University of McGill) • *Truth and reconciliation at Tiwanaku: coming to terms with contradiction in interdisciplinary archaeological research* [1]**

Since 2005 the authors have co-directed an interdisciplinary field project focused on the intensive study of the Mollo Kontu urban neighborhood at the site of Tiwanaku in highland Bolivia; this research includes topographic mapping, pedestrian and remote sensing surveys, and excavations, as well as laboratory analysis of both micro and macrofauna, ceramics, macrobotanical remains, and human bone. Drawing on the Mollo Kontu data, we argue that our most important insights do not necessarily occur when the findings of specialists from different fields lead to similar conclusions to a common research question, but rather when their results contradict each other. Such experiences challenge us to re-evaluate our working hypotheses and to question the accepted paradigms and agendas particular to each investigator's sub-discipline. As such, meaningful interdisciplinary and collaborative research entails not just the division of labor between investigators, but also tacking back and forth during all stages of the research process.

**Cowie, Ellen R. (Northeast Archaeology Research Center) • *St. Lawrence Iroquoian Pottery in Maine: A Review and Update of the Evidence* [5]**

Twenty years ago, actual St. Lawrence Iroquoian ceramics were recovered from four site locations at Norridgewock in the central Kennebec River Valley in Maine. This concentrated sample of over 17 individual vessels added to a few other isolated St. Lawrence Iroquoian ceramic finds in a coastal setting, as well as inland settings in the upper Penobscot and St. John River drainages of Maine. The ceramics from Norridgewock were variably dated at the Sandy River site at AD 1450-1650 and all ceramics but those from one site were found in association with other non-Iroquoian, proto-Abenaki vessels. This paper reviews past findings and interpretations and presents the results of new radiocarbon analyses of the Norridgewock samples and the results of a recent search for other St. Lawrence Iroquoian ceramics among known Late Woodland sites in the Kennebec River valley in Maine.

**Craig, David and Peter Whitridge (Memorial University of Newfoundland) • *Not so big: Inuit dwellings and the "small house" movement* [7]**

Precontact Inuit archaeology avails of a rich architectural record. House outlines and some construction details are typically visible on the ground surface, allowing preliminary analysis of the size and fabrication of even unexcavated dwellings. A striking feature of this record is the diminutive scale of most houses, in stark contrast with the vast scale of the routinely utilized landscape, made possible in part by an extraordinarily elaborate travel technology. Indeed, compact and modular house design (e.g., the snow house) is an intimate correlate of Inuit mobility. An interesting analogue for these miniature dwellings is provided by the recent "small house" movement, which champions compact living spaces such as micro-lofts and tiny houses. Rationales for small houses emphasizing reduced housing costs and energy expenditure, and hence greater environmental sustainability, are clearly germane to the Inuit case, as is the hyper-mobile lifestyle to which small houses seem like a logical solution.

**Crema, Enrico (Institute of Archaeology, University College London) • *Exogenic and endogenic forces in group fission-fusion dynamics: an abstract model* [26]**

Human resource exploitation are generally characterised by a non-linear relation between group size and individual fitness. Increasing group size provides benefits (e.g. cooperating, risk-sharing, mutual defence etc.) up to a certain point, when negative frequency dependence (e.g. higher resource exploitation, interference) starts to predominate, and being part of a group is no longer a viable strategy. Such relation has evolutionary implications in human meta-populations where individuals can improve their fitness by fissioning to smaller groups or joining larger communities. This paper will seek to explore the consequences of such decision making process by means of an abstract agent-based simulation. I will specifically try to determine

whether macro-scale shifts in the metapopulation structure could occur endogenically (i.e. as a result of interaction between individuals) and what are the consequences of disturbance processes derived by external environment changes.

**Crinnion, Catherine M., Marganit Kenedy, Edgar Lea, Aldo Missio and Janice Teichroeb (Toronto and Region Conservation Authority) • *The Boyd Archaeological Field School: Partners and PR* [28]**

For the past 35 years the Boyd Archaeological Field School has served to enlighten and challenge more than 1,100 high school students as they journey from imagery of Indiana Jones to a more mature understanding of Ontario's past peoples and the role of archaeology as a tool of inquiry. While the waiting lists were long every year in the beginning, the 21st century brought on tougher times of lower enrolment and higher costs. While the Field School continues to provide a full credit course at the secondary school level and attracts a wide range of geographically diverse students attending from the province, Canada, the United States, and even Europe, there has been a concerted effort to provide a program that is accessible to students from a broader range of socioeconomic and cultural backgrounds - including a focus on Aboriginal youth. Strategies for addressing these challenges as well as the challenges of moving towards a curriculum that is relevant in an era dominated by CRM assessments will be discussed.

**Crock, John G. (University of Vermont) • *In the Middle of the Lake Between: St Lawrence Iroquoian Sites and Ceramic Finds in the Northern Lake Champlain Valley, Vermont* [5]**

The presence of St. Lawrence Iroquoian sites and ceramics in the northern Lake Champlain valley has long suggested the presence of St. Lawrence Iroquoian people in what is now northwestern during the late pre-Contact. The nature of occupation remains a mystery, however, with interpretations ranging from longer-term, permanent settlement to a more intermittent or event-specific presence, perhaps associated with refugee populations. These hypotheses are compared to the density and geographic distribution of known sites and finds to offer additional insight into the meaning of St. Lawrence Iroquoian sites and ceramic finds in the northern Lake Champlain valley, Vermont.

**Crompton, Amanda (Department of Archaeology, Memorial University) • *Digging on the Hill: The Memorial University Field School at Signal Hill National Historic Site, St. John's, Newfoundland* [28]**

Memorial University's Archaeology Field School was held at Signal Hill National Historic Site between 2008 and 2010, in association with Parks Canada. Signal Hill is an iconic site in St. John's, and one that is heavily-frequented by local residents and tourists. Our field school provided students with a local, accessible site to learn about doing archaeology in the public eye. The accessibility of the site had significant logistical advantages, and presented students with an affordable option for a field school. Our field school also presented distinct challenges, such as heavy site visitation and after-hours site security. Students were expected to participate in standard field excavations and laboratory work, as well as making contributions to public outreach, both in the real world and on the internet. This paper will examine the logistical, institutional and pedagogical realities that emerged in the course of three seasons of Digging on the Hill.

**Crompton, Amanda (Memorial University) • *Tinker, Tailor, Soldier, Sailor: Gender and the French Resident Fishery in Placentia Bay, Newfoundland, 1662-1713* [8]**

Between 1662 and 1713, French settlers built fishing establishments in Placentia Bay, Newfoundland. The main settlement was the colony of Plaisance, home to French administrators, a military detachment and a sizeable residential and seasonal fishing community. The vast majority of Plaisance's population - seasonal fishing crews, fishing servants working for residents and the garrison - were men. An examination of the barracks of the Vieux Fort site (1662-1690) will demonstrate how the male gender was constructed and reinforced in the military at Plaisance. In smaller fishing settlements outside of the main colony, the gender balance was not as overwhelmingly male as in Plaisance. One small settlement (ca. 1700-1713) in Placentia Bay, on Oderin Island, provides an interesting contrast to the situation in Plaisance. In the smaller communities, women are more visible in the archaeological and historical record, though they were still immersed in a predominantly male world.

**D'Andrea<sup>1</sup>, William J., Yongsong Huang<sup>2</sup>, Raymond S. Bradley<sup>3</sup> (<sup>1</sup>Lamont-Doherty Earth Observatory of Columbia University, Palisades; <sup>2</sup>Dept. of Geological Sciences, Brown University, Providence; <sup>3</sup>Dept. of Geological Sciences, University of Massachusetts Amherst) • *Abrupt Holocene climate change as an important factor for human migration in West Greenland and Ellesmere Island* [26]**

West Greenland has had multiple episodes of human colonization and cultural transitions over the past 4,500 y. However, the explanations for these large-scale human migrations are varied, including climatic factors, resistance to adaptation, economic marginalization, mercantile exploration, and hostile neighborhood interactions. Evaluating the potential role of climate change is complicated by the lack of quantitative paleoclimate reconstructions near settlement areas. I will present high-resolution records of temperature over the past 5,600 y based on alkenone unsaturation in sediments of two lakes in West Greenland. They indicate that major temperature changes in the past 4,500 y occurred abruptly (within decades), and were coeval in timing with the archaeological records of settlement and abandonment of the Saqqaa, Dorset, and Norse cultures, which suggests that abrupt temperature changes profoundly impacted human civilization in the region. Temperature variations in West Greenland display an antiphased relationship to temperature changes in Ireland over centennial to millennial timescales, resembling the interannual to multidecadal temperature seesaw associated with the North Atlantic Oscillation. I will also present a temperature reconstruction, based on the same methodology, from Ellesmere Island in the Canadian High Arctic that contextualizes the summer temperatures experienced by the members of the Arctic Small Tools tradition who occupied this landscape at different intervals during the past 4,500 years.

**Dagneau, Charles (Parks Canada) • *The investigation of the Clyde, a mid 19<sup>th</sup> c. steamship lost off île du Wreck, Mingan Archipelago National Park Reserve of Canada* [9]**

Parks Canada's Underwater Archaeology Service conducted a submerged cultural resource inventory in Mingan Archipelago National Park Reserve of Canada from 2007 to 2010. This work has led to the discovery and study of several archaeological sites and features. In 2008-2010, large sections of a 19<sup>th</sup> century steamship and its associated debris field were documented at île du Wreck, both on land and underwater. Detailed analysis of the ship remains and targeted archival research were undertaken in order to help the interpretation of the site, as well as the nearby lighthouse station on île aux Perroquets. The remains are believed to be associated with the wreck of the Clyde, a transatlantic steamer stranded and lost on île du Wreck in 1857.

**Daly, Aoife (University College, London) • *Oak in Northern Europe* [13]**

Viking ships in royal burials, barrel staves discarded on a smithy floor, panels as the support for paintings by the Dutch Masters, beams in the roofs of cathedrals, planks lining a latrine. A multitude of contexts: all linked by oak. Through precise chronology and identification of origin, a history of trade links and timber resource exploitation throughout Northern Europe, over time, can be told. Dendrochronological study of oak in the region, over the last 50 years or so, has resulted in the accumulation of an enormous tree-ring dataset. The generous sharing of data between scholars has allowed links between a wide diversity of material contexts. Tree-rings are the key to the nature of Northern Europe's forest and its exploitation by humans, to the balance between regions with surplus and those with shortage, to connections between regions and to mechanisms of trade, both of timber objects and of timber as a raw material.

**Damkjar, Eric and Joan (Archaeological Survey of Alberta) • *A Tale of Two Longhouses: Archaeological Vignettes from the South and the North* [23]**

This paper touches on two of Peter Ramsden's favorite research areas - dealing with sites we had the privilege to investigate with Peter. In the Upper Trent Valley of Southern Ontario, the Coulter site is a late 16<sup>th</sup> century Iroquoian village that saw continued expansion at a time when the St. Lawrence Iroquoians were experiencing great demographic disruption - events that may be reflected in the small but growing amounts of St. Lawrence Iroquoian pottery at Coulter. An unusual artifact from Coulter may provide a more tangible link with the St. Lawrence River Valley - what we believe to be a "pottery decorator" made from sea mammal bone. During two field seasons exploring the archaeological terra incognita of Prince of Wales Island, Nunavut,

we were struck by the paucity of Late Dorset sites – but there was one. We will draw a tentative connection between the non-descript Wicklow site and Late Dorset Longhouses.

**Daneke<sup>1,4</sup>, Malgorzata, André Robichaud<sup>2</sup>, Colin P. Laroque<sup>3</sup> and Trevor Bell<sup>1</sup>** (<sup>1</sup>Department of Geography, Memorial University; <sup>2</sup>Université de Moncton, campus de Shippagan; <sup>3</sup>Department of Geography, Mount Allison University; <sup>4</sup>Faculty of Geology, Geophysics and Environment Protection, AGH-University of Science and Technology, Krakow) • *Developing a regional eastern larch (*Larix laricina*) chronology for the Maritimes* [13]

Eastern larch (*Larix laricina*) is one of the species commonly found in historical buildings in the Maritimes, especially those associated with shipyard structures. Determining the absolute age of larch structural elements from the 1800s is hindered by the lack of a long-lived regional master chronology. Today, the tree is only found in bogs, and when located, it is usually under 100-years old. This research describes how the MAD Lab sought out a number of long-lived larch chronologies from living trees, and extended the regional chronology back in time by adding wood from structures. In this case study, we will describe the spatial extent of the base chronologies and look closely at how wood from five structures adds to the regional chronology. Since there is no previous regional chronology for this species in the Maritimes, any attempt to produce one furthers the dendroarchaeological efforts in the region.

**Delmas, Vincent (Université de Montreal) and Erik Phaneuf (AECOM)** • *Underwater archaeological research at the Petit Mecatina Island site, Lower-North-Shore* [9]

The Hare Harbor-1 site (EdBt-3) is situated in a deep and well protected cove on the Petit Mecatina Island along the Quebec's Lower-North-Shore. Since 2001, several terrestrial expeditions realized by the Smithsonian Institution revealed the presence of characteristic structures of Basque activities and coeval Inuit occupation. Basque features consisted of a stony tiled floor covered with red earthenware tiles, as well as middens revealing cooperage and smithy activities. Since 2005, the underwater portion of the site has been explored and partially excavated. The deposit includes ballast piles, tiles and some whalebones with a rich stratigraphic sequence reminiscent of the Red Bay site, with well-defined layers of cod bones and wood offcuts. The aim of this presentation is to make a retrospective of the various underwater campaigns with emphasis on the methods, the stratigraphy and some diagnostic artefacts in order to show that the underwater finds reveal an original and complementary aspect of this complex site.

**Denning, Kathryn (York University)** • *Archaeology in 'The Land God Gave Cain'* [3]

Famously, Cartier is said to have remarked upon his landfall in what is now Newfoundland, that he supposed this was the land God gave Cain. One imagines that he was disconcerted by the manifest unsuitability of the terrain for agriculture, and accordingly surmised that this was exactly the sort of place to which an accused sibling-murderer might be banished to wander for all eternity. This is a surprisingly good entrée into the world of Canadian archaeology. Cartier's multivalent pronouncement foreshadowed some distinctive characteristics of archaeology in Canada: archaeology's troubled engagements with First Nations (though now, at times, new resolutions which bode well for the future); remarkably widely-disseminated archaeological work done in Canada on the lives of hunter-gatherers and early farmers; and, arguably, some unique theoretical approaches to the constitution of archaeological knowledge.

**Dent, Joshua (The University of Western Ontario)** • *Defining a Canadian Political Archaeology* [3]

Though studying the presence of colonial and post-colonial institutions within archaeology and the wider field of cultural resource management (CRM) is not unique to the Canadian context, Canadian archaeologists and theorists have developed a diverse array of research and commentary surrounding the contested nature of CRM in Canada. Can a case be made for a distinctly Canadian field of political archaeology? This paper attempts to accomplish this by highlighting Canadian research in areas including Indigenous stewardship, historical archaeology, and heritage legislation and policy. Reference is also made to the globally developing field of heritage studies and the unique contribution the Canadian perspective will bring to this

emerging discipline.

**Denton, David and John Bosum (Cree Regional Authority)** • *People, Place and Custom: Exploring and Passing on Historical and Archaeological Knowledge in the Rupert Diversion Area* [18]

Between 2006 and 2010, the Archaeology and Cultural Heritage Program (ACHP) worked on the land with elders and community members from the Cree communities of Waskaganish, Nemaska and Mistissini on a community-based program to explore, document and commemorate the lands affected by the Rupert Diversion. The paper first examines the historical significance of places, the knowledge related to them and the people who lived there. We discuss the sometimes complex interplay between archaeological work and interpretations, and Cree historical knowledge. The paper then presents current work to pass on the project results through educational products, and discusses issues of how to best represent the past, respecting both Cree knowledge and perspectives and archaeological findings. This work is funded by Niskamoon Corporation and the Société d'énergie de la Baie James, with additional support from Ministère de la Culture, des Communications et de la Condition féminine.

*Des gens, des lieux et des coutumes : Découverte et transmission de l'héritage historique et archéologique dans le secteur de dérivation de la rivière Rupert.*

Entre 2006 et 2010, les archéologues du programme sur l'archéologie et la patrimoine culturel (ACHP), de concert avec les aînés et les membres des communautés de Waskaganish, de Nemaska et de Mistissini, ont travaillé sur un programme visant à explorer, documenter et commémorer le territoire touché par la dérivation de la rivière Rupert. D'abord, cette communication explore l'importance historique de certains lieux sur le territoire, les connaissances reliées à ces lieux et les personnes qui y ont vécu. Nous examinons l'interaction parfois complexe entre les interprétations archéologiques et les connaissances historiques crie. Nous présentons ensuite les démarches en cours pour diffuser les résultats de nos recherches par le biais de produits éducatifs et comment mieux représenter le passé, en respectant à la fois la perspective historique crie et les découvertes archéologiques. Ce travail est financé par la Société Niskamoon et la Société d'énergie de la Baie James, avec le soutien du Ministère de la Culture, des Communications et de la Condition féminine.

**Desrosiers, Pierre (Avataq Cultural Institute)** • *Lithic Raw Material and the Size of Palaeoeskimo Territory* [7]

Exotic lithic materials are remarkably frequent finds in Palaeoeskimo assemblages. By documenting the "chaîne opératoire" of tool production, it is possible to explain why and how some raw materials have travelled across such long distances from their source to final destination. This paper will discuss the different models that consider size of territory, exchange networks and/or direct procurement strategies. The notion of territory during the Palaeoeskimo period will be explored, using examples drawn from lithic quarry sites, production at residential sites, and ethnographic data.

**Diaz<sup>1</sup>, Alejandra, M.P. Richards<sup>1</sup>, Suzanne Villeneuve<sup>2</sup>, Brian Hayden<sup>2</sup>** (<sup>1</sup>Department of Anthropology, University of British Columbia, Vancouver; <sup>2</sup>Department of Archaeology, Simon Fraser University, Burnaby) • *Stable Isotope Analysis in the Mid-Fraser Region: Determining Prehistoric Diet in British Columbia* [11]

This paper explores dietary adaptations of humans using stable isotope analysis as a means of direct dietary reconstruction. We discuss results of carbon, nitrogen, and sulphur dietary isotope analyses of canid and human remains from the Mid-Fraser region of British Columbia. Although dogs are not a direct proxy for humans in dietary isotope studies, their diets are influenced by human dietary practices, and therefore indicative of human subsistence strategies and activities. We examine the relationship between human and canid diet variability as well as the potential of the isotopic method to differentiate between the consumption of dietary resources both spatially or temporally. Results demonstrate that while salmon played an important part of dog diet at Keatley Creek, dietary intake differed across age groups and culture periods and differed from human isotopic values, indicating that prehistoric and proto-historic diet in the Plateau region requires deeper understanding and further investigation.

**Dillane, Jeffrey (McMaster University)** • *Out of Site: Applying Non-Site Approaches to the Pre-Contact Landscape of the Trent Valley,*

### *Southern Ontario [3]*

The site remains the standard unit of analysis in most archaeological research, despite the reality that sites represent a modern construct imposed on past landscapes. While there is a certain necessity to sites as an organizational tool, to apply such tools blindly, risks alienating the realities of past practices that led to the often unrelated and very long term accumulations that we perceive as the modern site. While non-site approaches are certainly not new to the theoretical discourse of archaeology, their application has been limited. I propose a new framework for interpreting the material record, which focuses on the regional distribution of artifacts and other cultural features as evidence of practice in a space-time context not reliant on the associations embodied by sites.

### **Dionne, Marie-Michelle (Université Laval, V.P. G.A.I.A. Inc., Group for Archaeological Interpretations and Analyses) • *Skin Working Process and Dorset Women across the Land: Functional and Socioeconomic study of lithic tools [7]***

Understanding the “chaîne opératoires” of material culture production is a valuable way of accessing the world of technical and socio-economical choices. Ethnographic data shows the importance of skin working for the production of clothing and equipment necessary to survival in the Arctic. The analysis of the skin working process gives access to: a) the management of the different phases of these technical activities in time and space, and b) the nature of women’s contributions during the seasonal round. This study demonstrates that, with a combination of use wear (using high power magnification) and spatial and gender analyses, it is possible to reconstruct a model of Palaeoeskimo socioeconomic organization and infer their social interactions. Three archaeological sites from the south shore of Hudson Strait (Nunavik) were used in this study, spanning from early to late Palaeoeskimo: Pita (KcFr-5/2800-2600 BP), Tivi (KcFr-8A/2600-1000 BP) and Tayara (KbFk-7/2125-1186 BP).

### **Dionne, Marie-Michelle (Université Laval, Vice-President G.A.I.A. Inc) • *What Happened There ? Perceive the economic strategies and social relations beyond Use Wear Data [10]***

Determining tools function, by usewear analysis, is not a final objective. The interpretation of functional data must be used to address technical and cultural choices dimension and, in a larger perspective, socioeconomic strategies of hunter-gatherer people. However, the use of ethnoarchaeology and anthropological concepts is necessary to achieve this goal. The study presented here concerns more specifically the prehistory of the Arctic. It will be shown that obtaining functional subcategories (high magnification use wear analysis) from typological categories makes it possible to observe a preferential organization, both in space and in seasonal cycle, of technical activities. Moreover, spatial analysis of those data allows us to study household dynamics and gender interactions.

### *Que s’est-il passé à cet endroit ? Percevoir les stratégies économiques et les relations sociales au-delà des données tracéologiques*

La détermination de la fonction des outils, par l’analyse tracéologique, ne constitue pas une fin en soi. L’interprétation des données fonctionnelles doit impérativement permettre d’aborder la dimension des choix techniques et culturels et, dans une perspective plus large, les stratégies socioéconomiques des peuples de chasseurs-cueilleurs étudiés. Or, le recours à l’ethnoarchéologie et à certains concepts anthropologiques est nécessaire à l’atteinte de cet objectif. Il sera démontré que grâce à l’obtention de sous-catégories fonctionnelles (analyse des traces d’utilisation à fort grossissement) à partir de catégories typologiques classiques, il est possible d’observer une organisation préférentielle, tant dans l’espace qu’au cours du cycle saisonnier d’exploitation des ressources, des activités techniques. De plus, l’analyse du mode de répartition spatiale de ces données permet l’étude de la microéconomie domestique ainsi que des relations entre les genres.

### **Dorland, Steven (University of Toronto) • *The Inside is What Counts: an analysis of regional identity associated with interior and exterior pottery decoration [4]***

Recently, there has been a shift to recognize regional variation associated with pre-contact southern Ontario, demonstrable through environmental, social and ideational contexts. This paper focusses on regional strategies associated with Late Woodland pottery decoration. Two site assemblages dating roughly to the 13<sup>th</sup> and 14<sup>th</sup> century A.D.

respectively, were analyzed during this study; the Holly site in Simcoe County, and the Antrex site in the municipality of Peel. My analysis led me to identify stylistic relations present among variables located on varying sections of the vessel. By applying a multi-attribute analysis, my research demonstrated the Antrex site has the same decoration on the interior and neck sections of the vessel, roughly three times more than what was apparent among the Holly assemblage. The results indicate possible regional variation relating to alternate strategies for actively displaying group identity, at a time when considerable social change was occurring in the area.

### **Downey, Jordan and Jean-François Millaire (The University of Western Ontario) • *Satellite Imagery and the Development of the Virú State on the North Coast of Peru [1]***

Satellite remote sensing has become a standard aspect of archaeological inquiry in the last decade thanks to the widespread availability of low-cost satellite data and powerful analytical computer software. A particular strength of digital satellite imagery is its ready integration into GIS platforms, which has been made all the more seamless with the recent arrival of ArcGIS 10. Through this and other platforms, high-resolution satellite imagery is available for the coast of Peru yet few studies have made use of its potential for studying the socio-political organization of ancient Andean societies. In this paper, we use satellite imagery to explore the development of centralized polities in the Virú Valley during the first half of the Early Intermediate Period, a time that witnessed extensive remodelling of the landscape in conjunction with the development of the Virú state around 150 B.C.

### **Doyon, Luc (Université de Montréal) • *Droulers 3.0 – Les SIG et le patrimoine du Haut-Laurent [5]***

Les systèmes d’information géographique constituent des outils permettant la planification des fouilles archéologiques, la gestion des données amassées sur le terrain, l’élaboration de documents cartographiques fiables et la production d’analyses complexes. La présente communication nous permettra d’exposer les résultats préliminaires d’un projet visant à intégrer les SIG aux recherches archéologiques du site Droulers-Tsiionhiakwatha (BgFn-1), dans la région de Saint-Anicet, au Québec. Ce projet, initié suite à une recherche exploratoire, a pour but d’utiliser le concept de « spatialisation différentielle » et les techniques propres de la géographie afin de mieux comprendre le schéma d’établissement intrasite de ce village iroquoien du Sylvicole supérieur. Les études de cas porteront sur a) la topographie et sur la délimitation d’obstacles pouvant diminuer la productivité des fouilles, b) sur l’estimation de l’axe d’orientation de la maison-longue #3 à partir de techniques d’échantillonnage statistique, et c) sur l’analyse des tessons de corps de la maison-longue #1.

### **Drobyshev, Igor (Université du Québec en Abitibi-Témiscamingue, Rouyn-Noranda and Sveriges lantbruksuniversitet (SLU), Alnarp) • *Understanding large scale changes in land-use patterns with the help of tree rings [13]***

In the temperate zones of the globe, dendrochronology provides a powerful tool for dating archeological artifacts. By using tree rings we can date archeological wood with annual and sometimes even seasonal resolution, allowing an objective check of historical and ecological hypotheses. The power of the method increases when dendrochronological dates are available from a large network of sites, allowing for analysis of regional and sub-continental patterns. In my presentation I exemplify this point by discussing the results of fire history reconstructions in two boreal regions – Sweden and the Upper Peninsula of Michigan. I argue that the availability of large datasets with precisely dated forest fires is an important prerequisite for understanding past environmental history and the dynamics of human land-use patterns.

### **Duchaine, Désirée-Émanuelle (Patrimoine Experts inc.) • *Incur-sion archéologique dans un projet d’envergure : la reconstruction du complexe Turcot [27]***

Des projets d’envergure sont dans la mire des autorités gouvernementales notamment en raison du fait que la durée de vie de plusieurs infrastructures routières dans la Ville de Montréal arrive à terme. Parmi ces derniers, celui visant la reconstruction du complexe Turcot retient particulièrement l’attention. En effet, l’échangeur Turcot est une voie névralgique de près de 9 km permettant l’accès au centre-ville de Montréal mais surtout au Pont Champlain et à l’autoroute

Transcanadienne. Bien que le complexe Turcot soit constitué presque essentiellement de voies aériennes, le ministère des Transports du Québec prévoit de revoir sa configuration, ce qui pourrait avoir un impact sur les biens archéologiques potentiellement présents dans le sol. En ce qui concerne l'archéologie, une approche méthodologique spécifique à ce type de projet est donc essentielle afin de planifier les interventions archéologiques nécessaires.

At the moment, the Turcot interchange is almost entirely an aerial highway. It's reconfiguration, by the ministry of Transports of Québec, could have an impact on the archaeological sites potentially buried within the ground of the future highway layout. From an archaeological point of view, a methodological approach specific to this type of project is required to plan the archaeological interventions needed.

**Duchaine, Désirée-Emmanuelle (Ruralys) • *Wolfe's Cove Hill: un point stratégique pour l'armée britannique lors des batailles de 1759 et 1760* [12]**

Au cours de l'été et de l'automne 2011, des fouilles archéologiques ont été réalisées sur les sites du musée du Québec (CeEt-542) et du couvent Saint-Dominique (CeEt-893) dans le cadre du projet d'agrandissement du Musée national des beaux-arts du Québec. Les interventions archéologiques sur le site du musée du Québec ont permis de mettre au jour des témoins importants de l'histoire de la ville de Québec. Une sépulture d'un militaire ainsi que des vestiges en bois respectivement associés aux batailles des Plaines (1759) et de Sainte-Foy (1760) jettent un nouveau regard sur ces événements décisifs dans l'histoire de Québec. Les fouilles archéologiques sur le site du couvent Saint-Dominique ont conduit à la découverte des fondations de la villa Battlefield Cottage construite en 1829. Un autre témoin significatif de la vie bourgeoise de la ville de Québec.

**Duggan, Rebecca (Parks Canada) • *The Louisbourg coastal conservation plan* [16]**

A coastal conservation plan is currently in development for the management of eroding heritage at the Fortress of Louisbourg. A peer-reviewed draft conservation plan has been produced, drawing together information about coastal geomorphology, coastally-positioned heritage sites, erosion rates, and anticipated coastal change at Louisbourg based on the IPCC's fourth assessment report predictions for sea level rise over the next century. The conservation plan divides the Louisbourg coastline into management units according to natural coastal cell divisions. Within each cell, the future outlook for heritage site protection is to be assessed through a coastal 'triage' process. This is proving to be a complex task with numerous variables to consider such as heritage value, protection vs. rescue options, financial viability, research potential, and public engagement options. This paper will discuss current efforts to work through the triage process, to best meet resource management needs now & in the years to come.

**Duguay, Françoise (Célat, Université Laval) • *Clay Pipes in New France, 1625-1760: Can Archaeometry be Helpful in Identifying Imitations* [21]**

A small number of clay pipe bowls from collections housed in the Netherlands and the United Kingdom were submitted to neutron activation, to be used as reference samples. Pipe fragments from an archaeological site in Trois-Rivières (Canada), presenting unusual features (identified through macroscopic and microscopic observations), were also submitted to the same procedure. Comparisons of results tend to support the impression gained from qualitative characterisation, that pipes used in New France were mainly imports from the Netherlands. However, minute chemical component differences with both the Netherlands and UK pipes, combined with visual characterisation, lead to another conclusion: some pipes might be imitations of Dutch products. Where were they made? We propose that imitations used in New France originated from continental Europe, perhaps France, since the observed chemical components offer greater similarity with the Netherlands' sample than the UK one. Warning: given the small number of artefacts and samples, the archaeometric findings shouldn't be regarded as definitive.

**Duguay, Françoise (CÉLAT, Université Laval) • *Tadoussac et Trois-Rivières : deux hauts lieux de la traite des fourrures (fin XVI<sup>e</sup> – tournant XVIII<sup>e</sup> siècle)* [29]**

L'observation d'une ressemblance des lieux physiques, entre Tadous-

sac et Trois Rivières, a initié une réflexion par rapport à leur statut prépondérant dans la traite des fourrures. La synthèse des données biophysiques, ethnohistoriques et historiques établit des points de comparaison, afin d'identifier des variables qui orientent le sens de diverses manifestations, notamment l'instauration de postes de traite. L'étude met en exergue l'importance des deux lieux pour les populations amérindiennes, notamment algonquiennes, facteur qui semble avoir eu une incidence pour déterminer leur statut dans le commerce des fourrures. On remarque, par ailleurs, une dichotomie dans l'historiographie relative aux deux endroits, quant à la place accordée aux Amérindiens et au commerce.

**Dunlop, John<sup>1</sup>, Dan Kellogg<sup>2</sup> and Blake Williams<sup>2</sup> (1<sup>Archaeological Services Inc., University of Western Ontario; 2<sup>Archaeological Services Inc.</sup>) • *Geophysical Survey Applications to the CRM Industry in Southern Ontario: Case studies of success at three sites in southern Ontario* [31]</sup>**

Geophysical surveying is a non-destructive surveying technique that is currently regulated as an optional activity during site-specific investigations in the CRM industry in Ontario. As such, these applications have little bearing on the regulated process of CRM archaeology. An examination of geophysical surveys undertaken by Archaeological Services Inc. at three sites: the Fort York National Historic site-Government House Area (AjGu-28), the Damiani Site (AlGv-231), and Blacker's Brickworks (AgHb-415), resulted in positive identification of subsurface archaeological deposits, which guided the excavation and interpretation of the sites. The results indicate that geophysics can be effectively used in the assessment process to assist in refining investigative strategies to sites, the result of which would be greater efficiency in areas such as project budgeting and site conservation.

**Dunning, Phil (Parks Canada) • *Yeoman and Merchant: Clothing and Accessories from the Elisabeth and Mary, a 1690 New England Shipwreck* [9]**

The year 1689 saw the beginning of King William's War, between France and an alliance of England, Spain and Holland. In 1690 the New Englanders launched a naval expedition to take Quebec City, the capital of New France. The attack failed, and on the return voyage the fleet encountered violent storms in the St. Lawrence River. Four ships were lost, including the *Elisabeth* and *Mary*, carrying members of the Dorchester, Massachusetts militia. Parks Canada's underwater archaeologists excavated the wreck, and the recoveries include footwear, buttons, textiles, ribbons, buckles and jewellery. These accessories and articles of clothing represent a microcosm of Dorchester society, from yeoman to merchant, from kersey to broadcloth, from pewter to silver.

**Dussault, Frédéric (Université Laval) • *Reconciling past perceptions: Explorers to Northwest Greenland and Inughuit hygiene* [10]**

While initially "discovered" by the explorer John Ross in 1818, the Polar Inuit also achieved certain recognition for helping Robert Peary reach the North Pole. Explorers' accounts attracted the interest of anthropologists, such as Knud Rasmussen and Erik Holtved, who sought to understand the essence of Inughuit life by cataloguing their myths and legends as well as observing them in daily life. Following their expeditions in Greenland, explorers and anthropologist, related conflicting details about Inughuit cultural practices, such as hygiene. By observing the spatial distribution of ectoparasites found in different activity areas of four sod houses, we were able to infer hygienic practices described in the Inughuit oral tradition. Through interdisciplinary analysis of archaeoentomological evidence, oral traditions and material culture associated with the Polar Inuit, we propose a different narrative of past hygienic practices of Greenland's Northwest coast.

**Duval, Isabelle (Université du Québec à Chicoutimi) • *Analyse de provenance sur un gorgerin avec la micro-XRF* [31]**

Une caractérisation géochimique, de manière non destructive par micro-XRF, a été réalisée sur un fragment de gorgerin en pierre retrouvé sur le site Cartier-Roberval (CeEu-4). Les données d'analyses ont permis d'associer la pierre du gorgerin avec une carrière de pierre décorative de grès rouge datant de la fin du 19<sup>e</sup> siècle dans le Bas-Saint-Laurent. La compréhension du contexte géologique permet de suggérer des lieux accessibles pouvant avoir été exploités à la préhistoire. Les gorgerins sont des objets polis rares qui apportent des in-

formations sur les habitudes d'acquisition des matières premières des groupes autochtones. Des comparaisons ont été faites avec d'autres gorgerins du Québec et ceux fabriqués en ardoise rubanée.

*Provenance analysis with micro-XRF on a gorget stone*

A geochemical characterization with a non-destructive micro-XRF analysis has been done on a stone gorget fragment found at the 16th-century Cartier-Roberval site at Québec City (CeEu-4). Data analysis has linked the gorget stone with a Bas-Saint-Laurent red sandstone quarry that was used for decorative construction at the end of the 19<sup>th</sup> century. Understanding of the geological context allows us to suggest accessible places that may have been exploited at the pre-contact time. Gorgets are rare polished objects that provide information on Native patterns of raw material acquisition. Comparisons will be made with other gorgets including those made of banded slate.

**Eid, Patrick (Université de Montréal) • *La recherche des intentions et des choix économiques à travers les chaînes opératoires lithiques* [25]**

Il n'est certes pas nouveau d'aborder l'étude de la technologie lithique sous l'angle de l'économie. Dans la tradition anglo-saxonne, cette question a été principalement abordée via différents modèles théoriques. Or, aussi intéressants puissent-ils être, il demeure difficile de faire le pont entre un modèle généralisant et des données archéologiques, surtout lorsqu'elles prennent la forme de milliers de petits morceaux de roche. Dans la tradition française, l'approche technologique aborde plutôt la question selon un angle inductif et empirique par la recherche des intentions des tailleurs et des choix économiques perceptibles dans leurs chaînes opératoires. L'application de cette approche à un échantillon de sites du Sylvicole dans la région du Témiscouata (Québec) servira de base pour étudier les apports et les inconvénients de cette méthode.

*The search of intentions and economic choices in lithic chaînes opératoires.*

The study of lithic technology from an economic viewpoint is not new in itself. In the Anglo-Saxon tradition, this question has mostly been addressed through the use of theoretical models. As interesting as this approach can be, it remains difficult to fill the gap between a model and the archaeological data, especially when they take the form of thousands of pieces of rock. The French technological approach however addresses this question with an inductive and empiric method, where the intentions and economic choices of individuals are rebuilt as chaînes opératoires. The application of this approach on a sample of archaeological sites from the Woodland period in Southern Québec (Témiscouata region) will be used to explore the contributions and disadvantages of this method.

**Ellis, Christopher (University of Western Ontario) • *The Davidson Site (AhHk-54) and Late Archaic Settlement Systems* [23]**

This paper revisits one of Peter Ramsden's early research interests, the seasonality of Archaic site occupations, through the lens of Davidson, a 1.5 ha site near Parkhill, Ontario, intensively used from ca. 2500-800 BC. In general, Archaic research has been known for the "domination of theorizing and paucity of data" to quote one group of observers and since our analytical work is still very much in its infancy, this research in some ways continues that trend. Nonetheless, preliminary observations allow us to actually assess some long-standing ideas about Archaic settlement systems and suggests that while some conclusions seem correct, many other assumptions we use to approach Late Archaic settlement systems in Ontario may be misleading. Notably, we have used rigid and mechanistic models of these systems grounded in adaptationist ideas. However, actual settlement and subsistence practices of Archaic peoples seem to have been much more flexible and "messy" and cannot be as easily explained solely in terms of environmental or least effort influences on behaviour.

**Fay, Amelia (Memorial University) • *Merging the Local and the Regional: Future Directions for the archaeology of Inuit-European Contact in Labrador* [3]**

The study of Inuit-European contact in Labrador presents the perfect opportunity for a combination of analytical approaches. Geographic and temporal scale are represented by the different extent and timing of contact along the coast, the physical environment served to both permit and constrain human activities and mobility, and power and

identity are negotiated through the spatial and material realms. 'Contact' in Labrador is difficult to define because it occurred at different times throughout many places along the coast to various extents. My archaeological exploration of Inuit-European contact in Labrador takes this into account by merging a local history from Nain within the broader coastal network.

**Ferris, Neal (Lawson Chair of Canadian Archaeology Western University/Museum of Ontario Archaeology) • *In Praise of Counter Factual Ontario Late Woodland Culture History* [23]**

Peter's contribution to what is commonly referred to as Ontario's Late Woodland has been both profound and insignificant. Profound in that it has invited imaginings, conceptions, and interpretations of the archaeological record from this period as, in fact, an archaeological record inviting archaeologically-based theorizing of that material record; Insignificant in that many of his cohort in Ontario ignored as irrelevant an approach that didn't obviously and logically build cultural historical models of the ancient past based on historically transitory socio-linguistic ethnicities. And so some if not most of Peter's writings on the subject was thus freed from interfering with the dominant cultural historical debates of the day around what dialect pots or sites spoke, or how ancient archaeological patterns were the result of early 17<sup>th</sup> century historical events and observations. Unfettered by that Ontario cultural historical logic, Peter's musings have retained an intellectual currency that invites imagining an archaeology of Ontario's Late Woodland that is, well, of relevance to archaeology beyond those still wishing to conceive of Ontario's Late Woodland as a local history of how the early 17<sup>th</sup> century came to be. It is a relief to think that Ontario Late Woodland archaeology might just be increasingly close to catching up with Peter's irrelevance.

**Ferris, Neal (The University of Western Ontario) • *Discussant* [3]**

**Forbes, Lisbeth, Carol Griggs, and Thomas Richmond (Cornell Tree Ring Laboratory, Cornell University) • *Settling claims of "the earliest construction" between several houses in Schenectady, New York* [31]**

Schenectady was first settled by the Dutch Colony at a bend in the Mohawk River upstream from the Hudson River, as a strategic location for the fur trade in the mid-1600s. The city has a well-documented history, with the historic section nicely preserved. "My house was built first" is bantered about by the residents, especially for the Brouwer and Yates Houses where the properties were owned before 1700. In resolving this dilemma, the history of the city and its inhabitants need to be considered. The biggest problem with the claim is a major catastrophic event in 1690 – the Schenectady massacre – in which most residents were killed or captured and the city completely demolished, and after which it took a long time for re-establishment. Another question is whether the fur traders would build such elegant homes. The Cornell Tree-Ring Laboratory dated the two houses plus the Mabee Farm west of Schenectady to resolve this dilemma.

**Foreman, Lindsay J. (University of Western Ontario, Project Archaeologist, Golder Associates Ltd.) • *Ubiquitous Fragmented Fauna: Interpreting Western Basin Cervid Processing and Discard Practices in Ontario, A.D. 800-1600* [31]**

Between A.D. 500 and 1600 the Western Basin peoples of the lower Great Lakes region practiced a mixed subsistence economy, combining the production of domestic crops with hunting, fishing, and gathering of local animal and plant resources. The cervid remains recovered from their sites are consistently highly fragmented. This study attempts to identify the cause(s) of this fragmentation in four southwestern Ontario assemblages dating between A.D. 800 and 1600. It examines both the identifiable and unidentifiable large mammal remains by bone size, type, degree of burning, and long bone fracture angle, outline, and edge texture. Together these data suggest that bone marrow and grease were consistently extracted from "fresh" cervid carcasses, and that axial and appendicular elements were processed and frequently discarded separately. These activities were conducted throughout the year, indicating that within-bone nutrients were central to Western Basin meal preparation and to the taste of individual dishes.

**Fowler, Jonathan (Saint Mary's University) • *Integrating Archaeological Resource Management and Research at Grand Pré, Nova Scotia***

[16]

The Government of Canada has recently put forward The Landscape of Grand Pré for inscription on the World Heritage List. Part of the submission process involved formulating a plan to protect and study archaeological resources at Grand Pré. This presentation highlights some of the challenges and opportunities for archaeology within one of Atlantic Canada's most storied landscapes.

**Freeman, Gordon R. (University of Alberta) • Hunter-Gatherer Societies Possessed Scientific and Artistic Genius [10]**

The megazonic TEMPLE TO THE SUN, MOON AND MORNINGSTAR near Majorville, Alberta contains an accurate 5200-year-old solar calendar. The calendar is marked by alignments of stones, or of V-sights made by the intersection of hillsides or of rocks, which accurately point to the positions of Sun rises and sets on the Summer and Winter Solstices, and when the day and night are each 12.0 hours long (the Equalday/night). The most accurate horizon astronomy measurements ever made in an archaeological site will be shown. The Gregorian Equinoxes (20-21 March and 22-23 September) are not true Equalnights. The true Equalday/nights are 17-18 March and 25-26 September. The calendar ARTISTICALLY marks EACH SEPARATE YEAR in the leap year cycle. The Plains population 5200 years ago possessed the same scientific and artistic genius as populations possess today. We are still hunter-gatherers. In general, women gather (shop), and men hunt (brute-force activity). See HIDDEN STONEHENGE, G. R. Freeman (May 2012).

**Friesen, Nathan (Heritage Conservation Branch, Saskatchewan Ministry of Tourism, Parks, Culture and Sport) • A Spatial Analysis of Tipi Encampment Locations as they Relate to Bison Habitat, Grasslands National Park, Saskatchewan [15]**

Previous research by the author found that tipi encampments within Grasslands National Park tend to be located along the margins of areas that are modeled to be preferentially grazed by bison. The suggested explanation for this pattern was that camps were located in order to best surveil bison herds for the purpose of maximizing opportunities to hunt any herd that might be in the area. The current analysis will use cumulative viewshed analysis to test whether the modeled bison grazing areas are more visible from the camp locations than from a set of random locations. Bison movement data from the current resident bison population within the Park will be used to test whether the model of bison grazing areas is accurate, as well as to explore how the distribution of tipi encampment sites compares with this data.

**Gabos, Theresa (Université de Montréal), et Valérie Janssen (Université de Montréal) • Les paysages culturels du mont Royal : une réflexion sur l'étude de potentiel archéologique [16]**

L'étude de potentiel archéologique est un outil de gestion du territoire de plus en plus utilisé dans la protection du patrimoine archéologique. Néanmoins, sa réalisation mène rarement à une réflexion sur la nature de l'étude, de même que sur sa structure et son contenu et cela, malgré son importance en archéologie préventive. Dans notre présentation, nous aborderons plusieurs problématiques associées à l'étude de potentiel, autant en ce qui concerne la nécessité de mettre à jour les méthodes et les critères que la place de la population dans la prise de décision concernant le patrimoine archéologique. Par l'utilisation des paysages culturels, nous tentons donc à la fois de répondre aux besoins de gestion actuelle en archéologie préventive, mais également de proposer une approche qui permettrait de pallier les problématiques observées.

**Gagné, David (Réseau Archéo-Québec) • L'archéologie préventive : Guide pratique à l'intention des municipalités du Québec [16]**

L'adoption de la nouvelle loi sur le patrimoine culturel du Québec amène de nouvelles dispositions pour les municipalités désirant mettre en valeur ou protéger son patrimoine. En matière d'archéologie, les démarches peuvent paraître complexes et coûteuses. Pour contrer cette image erronée, le réseau Archéo-Québec présentera un guide pratique destiné aux municipalités pour comprendre la marche à suivre adapté à chacune des réalités. Ce guide, présenté en avant-première, comporte de nombreux exemples illustrant différentes situations que peuvent vivre les municipalités ainsi que des solutions détaillées selon les différents cas.

**Gagné, Michel (MRC du Haut-Saint-Laurent) • Le site McDonald, une fenêtre ouverte sur les premiers Iroquoiens horticulteurs du Québec [5]**

La période qui marque le début de la sédentarisation des groupes iroquoiens dans la vallée du Saint-Laurent représente une étape très peu documentée. Jusqu'ici, l'ensemble des sites villageois connus reliés à l'occupation des Iroquoiens du Saint-Laurent sur les territoires québécois et ontarien fait remonter l'occupation villageoise la plus ancienne vers le milieu du 15<sup>e</sup> siècle, soit à une époque où le schème d'établissement, les structures sociales et les stratégies de subsistance semblent déjà très bien établis, voire cristallisés. Avant la découverte du site McDonald, cette phase cruciale du développement ne trouvait aucune évidence matérielle permettant de mieux saisir le processus menant à l'établissement des premières communautés villageoises. L'analyse des données du site McDonald ouvre dorénavant la porte à une meilleure compréhension des phénomènes complexes qui permettront à ces communautés d'amorcer leur trajectoire culturelle les menant vers un mode de vie basé essentiellement sur la sédentarité.

**Gates Saint-Pierre, Christian (Université de Montréal) • L'exploitation de la faune et le travail des matières dures animales au site Droulers (Québec) [5]**

Les fouilles archéologiques entreprises au site Droulers dans les années 1990, puis en 2010-2011, ont mené à la récupération d'une quantité impressionnante de restes osseux d'animaux, incluant plusieurs outils en os (outils sur matières dures animales) et des débris de production. Cette communication présente un aperçu des modes d'exploitation de la faune par les villageois du site Droulers et des modes de production des outils en os, en mettant l'accent sur les particularités locales et régionales. Ces premiers résultats s'inscrivent dans un plus vaste projet visant ultimement à identifier des techniques de production précises, à reconstituer les chaînes opératoires et à déterminer la fonction de certains outils ou catégories d'outils problématiques à l'aide d'analyses tracéologiques.

**Gates Saint-Pierre, Christian et Claude Chapdelaine (Université de Montréal) • Existe-t-il une sphère d'interaction au Sylvicole moyen tardif? [20]**

La transition du Sylvicole moyen ancien au Sylvicole moyen tardif est souvent comprise comme le passage d'une relative homogénéité stylistique de la production céramique à une régionalisation accrue au Québec méridional. Si la distribution des empreintes ondulantes sur un large territoire et pendant une longue période de 900 ans donne l'impression d'une stase culturelle, que se passe-t-il après l'abandon de ce style? Le Sylvicole moyen tardif profite de marqueurs culturels variés avec une production céramique distinctive et plusieurs types de pointes en pierre taillée. Un examen de la distribution des sites de cet épisode culturel permettra d'aborder la notion de sphère d'interaction et de la comparer brièvement à la répartition des principaux sites du Sylvicole moyen ancien.

**Gaudreau, Mariane (Université de Montréal) • Les Stadaconiens sous la loupe : la question de l'identité culturelle dans l'estuaire du St-Laurent [5]**

L'identité culturelle des occupants des sites à caractère iroquoïde retrouvés à l'extérieur du territoire d'occupation traditionnel des Stadaconiens est encore aujourd'hui matière à débats. En effet, ces traces éparses retrouvées dans l'estuaire du St-Laurent ainsi que la quasi-invisibilité des groupes algonquiens forcent les archéologues à ne pas reléguer aux oubliettes cette vieille question qui occupait déjà l'esprit des chercheurs dans les années 1960 et 1970. Cette présentation détaille les données de mon projet de maîtrise dans lequel j'ai tenté de cerner l'identité culturelle des autochtones qui se sont établis sur le site Rioux, sur l'île Verte, au Sylvicole supérieur tardif. Résultats, réflexions et déconstruction vers une meilleure compréhension des occupants de la province de Canada.

**Gaudreau, Nathalie (Université Laval / Artefactuel) • Adding flesh to the bones: a recent zooarchaeological study from Labrador [10]**

Semi-subterranean sod house ruins from the Seal Islands site (FaAw-5), long believed to be of Inuit origin, yielded an abundant faunal collection. The old saying: "Tell me what you eat, I'll tell you who you are" has been proven wrong in this case. Zooarchaeological analyses including a cementochronological study, the examination

of butchery marks on seal bones, and archival and environmental analyses, suggest that the Seal Islands inhabitants were mostly European rather than Inuit. It is also possible that Seal Islands site may represent one of the first known examples of mixed marriages between Europeans and Inuit, perhaps shedding light on Métis origins in Labrador. Furthermore, many aspects of the subsistence strategies practiced on this site are similar to those of other Settlers whom were employees of various commercial ventures. The establishment of the first permanent European inhabitants in Labrador represents a significant shift from the employees of the fish trade, the majority of whom lived in the region only for the fishing season. The new Settler population had to adapt to their new environment with its particular seasonal calendar in order to sustain their basic subsistence needs while also trying to obtain commercially traded goods. From now on we should ask ourselves: "Tell me what you eat, when, where, how and why you eat it... and I'll tell you who you are".

**Gaudreau, Nathalie, et Gina Vincelli (Artefactuel, coopérative de travail) • Dépotoir de la ferme Murphy : témoin de vie d'un cordonnier [28]**

La fouille archéologique éducative effectuée à l'automne 2010 sur le site du dépotoir Murphy (CfEv-2) sur les terrains de l'école secondaire Mont-Saint-Sacrement à Saint-Gabriel-de-Valcartier, a permis aux 12 étudiants formant le groupe parascolaire d'archéologie de connaître le métier d'archéologue et d'expérimenter les méthodes d'intervention sur le terrain et en laboratoire. L'intervention a été réalisée dans une zone de dépotoir associé à l'ancienne ferme des Murphy, une famille irlandaise établie à Saint-Gabriel-de-Valcartier au courant de la deuxième moitié du XIX<sup>ème</sup> et de la première moitié du XX<sup>ème</sup> siècle. La fouille archéologique de ce secteur, par la mise au jour d'une culture matérielle des plus riches et l'enquête orale effectuée auprès de monsieur Herman Murphy, dernier descendant de cette famille irlandaise, ont permis de documenter les modes de vie d'un cordonnier et de sa famille.

**Gauvin, Karolyn (Parks Canada) • A bow anchor from the wreck of the Machault, Battle of the Restigouche National Historic Site of Canada [9]**

The frigate Machault was a French convoy vessel lost in a naval encounter to the British in July 1760 in the Restigouche River, Chaleur Bay, Canada. Parks Canada archaeologists excavated the wreck site from 1969 to 1972 and proceeded to raise a portion of the ship's hull as well as an anchor during the 1972 field season. These vestiges are now displayed at the visitor interpretation centre with a rich collection of artefacts, which are part of the Battle of the Restigouche National Historic Site of Canada. The Machault anchor was discovered tethered in place 40m west of the wreck. From its positioning, size, and weight, it would seem logical to conclude that this was a bow anchor located on the starboard side. Strangely, this was the only anchor found on the Machault site. Other abnormalities came to light as well. This paper is the object of a case study in which the Machault anchor's irregularities and unique craftsmanship will be discussed.

**Gelé, Agnès (Université Laval) • La verrerie de table française en Amérique du Nord entre 1650 et 1760 [12]**

En archéologie historique, les artefacts en métal et céramique sont étudiés quasi-systématiquement, entre autre à des fins de datation. Ce n'est pas le cas pour la verrerie de table, moins facile à appréhender et qui nécessite souvent un recours à l'archéométrie. Dans le cadre d'un doctorat à l'université Laval, j'entreprends une étude de la verrerie de table française en Amérique du Nord, en me penchant plus particulièrement sur les collections québécoises et de la Guyane Française pour la période 1650-1760. Il s'agit de présenter cette recherche, qui a pour objet de spécifier ce qu'est susceptible de nous apporter l'étude de ce mobilier, de déterminer entre autre si l'établissement d'une typo-chronologie précise liée à des données d'ordre compositionnel pourrait permettre d'utiliser la verrerie de table comme élément de datation fiable, de renseigner les échanges commerciaux dans la zone Atlantique nord et de voir s'il est possible d'observer des données d'ordre social par l'étude de ce mobilier.

**Gendron, Daniel (Institut culturel AVATAQ) • Old and New Challenges in Cultural Management in Nunavik [16]**

Avataq created its Department of Archaeology 27 years ago to look after the archaeological resources of Nunavik. Its mandate was given

by the Elders Conference. The Department has been carrying all manners of projects from salvage excavations, CRM, and long-term research projects. Always having to deal with two levels of Government: Provincial for the mainland, and Federal (now Nunavut for the islands). Although there have been a number of management plans devised, there has never been one aimed specifically at cultural management. Avataq has always worked out of the good will of the regional government and municipalities and landholding corporations. The upcoming implementation of the Plan Nord will necessitate the elaboration of a more concrete and solid management plan. This presentation focuses on the various ways in which archaeology has been carried out and how it should be developed from this point on.

**Gervais, Mélanie Johnson (Université de Montréal) • Pêcheries et échanges transatlantiques au Régime français : Étude de la répartition géographique des grès grossiers français en Nouvelle-France [31]**

Les dernières décennies ont vues quelques rares études concernant le grès grossier français retrouvé sur le territoire de la Nouvelle-France. Pourtant, ces céramiques ont beaucoup à dire sur les groupes humains et les contextes dans lesquels ils étaient utilisés et échangés durant le Régime français. La littérature existante démontre que les grès français sont généralement retrouvés dans les contextes archéologiques maritimes, d'où ils offrent un aperçu privilégié sur les activités des marchands et des marins normands et basques qui voguèrent vers l'Amérique du Nord. Le but de notre recherche documentaire était d'examiner les tendances et d'augmenter notre connaissance du grès français retrouvé sur les sites archéologiques québécois principalement, mais aussi dans les régions maritimes canadiennes. Nous désirions ainsi cartographier avec plus de précision les interactions entre les groupes impliqués dans les pêcheries et les échanges transatlantiques au Régime français. Cette affiche se veut une présentation des principaux tableaux et cartes émanant de notre étude.

**Gibson, Terrance (Western Heritage, St Albert) • Magnetic Susceptibility: Explorations in the Detection and Excavation of the Intangible in Thunder Bay's Ancient Archaeological Record [19]**

In previous papers at the CAA I have provided a number examples showing that near surface geophysical surveys, using gradiometers and magnetometers, can help to localize archaeological fire hearths, since they regularly produce faint but detectable magnetic anomalies that can be mapped with good precision on a site. This is caused by a steady conversion of the natural iron compounds in soils into magnetically susceptible ones during the repeated heating and cooling conditions encountered for most archaeological hearths. Magnetically susceptible soil appears to be profoundly enduring in a soil profile even as the visible components of hearths may completely disappear over time. The challenge is to find these soil remnants that are invisible and for all intents and purposes intangible. For several years the author has coordinated an intensive effort to do this through the collection of tens of thousands of soil samples from a number of PalaeoIndian excavations in the Thunder Bay district. The effort to collect these soils has been great, and has produced interesting results, but it has inevitably led to a serious re-evaluation of the data recovery process. Regular soil sampling, though laudable in its goals, is not without its pitfalls, not only in the effort need to collect the soils, but also in their laboratory measurement. The author's most recent efforts have taken a new direction, moving from soil collection and post-excavation processing to direct in-situ measurement of susceptibility. This approach promises to be easier, faster and has the potential to produce immediate results that could help in the identification of intangible hearths while excavation proceeds.

**Gilbert, Louis • Le site de la maison du gouverneur de Varennes à Trois-Rivières (CfFd-20) : bilan de 3 saisons de chantier-école archéologique [29]**

En 2009, le chantier-école archéologique du Collège Lafèche commençait l'exploration d'un nouveau site de l'arrondissement historique de Trois-Rivières. Après une première saison plutôt décevante, qui avait tout de même permis de s'assurer de la présence de sols anciens non perturbés dans un secteur à risque, les résultats obtenus ont permis de dresser une séquence d'occupation de ce secteur allant d'avant 1674 jusqu'à la fin du XIX<sup>e</sup> siècle. Des vestiges de la maison de René Gaultier de Varennes, deuxième gouverneur de la ville, ont été mis au jour, ainsi que des indices d'une occupation ouvrière du XIX<sup>e</sup> siècle. Ces fouilles, réalisées par des étudiants en Histoire et Civilisation du Collège Lafèche, ont permis de jeter un regard nouveau sur

un site qui était jusqu'alors mal connu et de confirmer son potentiel archéologique.

**Gilliland, Krista (Western Heritage, St. Albert, AB) • *The Hearth and the Hummock: A sediment-based record of cultural activities at the Fort Denison site near Humboldt, Saskatchewan* [31]**

Two key features were recovered during excavations at Fort Denison. The first is a hearth demonstrating multiple uses, and the second is a low sandy hill-like feature bounded by upper and lower layers of clay-rich sediment, interpreted as representing a defensive trench or zareba. The working hypothesis is that both features date to the military occupation of the fort, and geoarchaeological work was undertaken to investigate their formation and relative chronology. Preliminary results of stratigraphic and micromorphological analyses demonstrate that episodes of hearth use were interrupted by periods of disuse and possible site abandonment, and that it later functioned as a pit for domestic waste. These analyses also support a cultural origin for the hill-like feature and indicate that it precedes the formation of the hearth. These investigations suggest a broader history of cultural activity at Fort Denison that includes the periods preceding and post-dating military occupation of the site.

**Gilliland, Krista (Western Heritage, St. Albert), W. Paul Adderley (University of Stirling), Terrance Gibson (Western Heritage, St. Albert), Dave Norris (Western Heritage, Winnipeg) • *Context, Chronology, and Culture: Problem-based Geoarchaeology at the Lakehead Complex Sites, Thunder Bay* [19]**

With the goal of advancing site interpretations to include the broader landscape and cultural contexts, geoarchaeological work at the Lakehead Complex/Interlake Complex sites in the Thunder Bay region is addressing three fundamental problems. Firstly, we comment on the nature and extent of disturbance and redeposition at these sites. Secondly, we investigate the origin of pit-like depressions that are frequently associated with more deeply buried artifact-bearing sediments. Thirdly, we address the relative lack of a detailed chronology for these sites. Using a combination of stratigraphic and thin section analyses, luminescence profiling, and optical dating, we document the depositional history of predominantly artifact-bearing sediments to construct key stratigraphic and chronological frameworks for the site complex. Our work has broader resonance with current issues regarding interpreting archaeological sites in fluvial landscapes, establishing chronologies at sites with poor organic preservation, and employing sediment-based evidence to further understandings of sites found in Boreal forest settings.

**Gillot, Céline (Doctorante, Département d'Anthropologie, Université de Montréal) • *The role of thin section petrography in the understanding of ancient architectural practices: A case study from the Maya site of Río Bec (Mexico)* [21]**

Despite the significant achievements made over the last few decades in the scientific examination of archaeological materials and the constant development of new efficient analytical techniques, conventional thin section petrography continues to hold an important place in the archaeologist's toolkit. Simple observation of thin sections with a polarizing microscope still has the potential to provide large amount of information not easily obtained by other methods. In some cases, this basic method can even be sufficient to answer the archaeologists' questions. Using as an example the work carried out on the building materials employed in the prehispanic Maya site of Río Bec, this presentation aims to demonstrate how valuable petrographic analyses are for the understanding of past architectures in particular. They may bring new insights not only on the building materials and the construction techniques, but also on the technological choices made by the builders and the reasons behind these choices.

**Girard-Rheault, Marilyn, (Université de Montréal) • *Les camélidés et l'archéologie péruvienne* [1]**

Les camélidés furent les mammifères les plus polyvalents pour l'homme en Amérique du sud avant l'arrivée des colons. Les archéologues attestent non seulement de leur présence durant toute la préhistoire, mais aussi de leur exploitation par les peuples préhispaniques. Parmi ces camélidés, il semble qu'un petit camélidé, aujourd'hui disparu, ait été exploité par les Mochicas. Afin de mieux comprendre l'évolution des camélidés et de leur relation avec les peuples préhispaniques, il serait nécessaire d'effectuer davantage d'analyses génétiques (ADN) sur les restes fauniques attribués aux camélidés. Ces

nouvelles sources d'informations offriront un nouveau regard sur les données archéologiques et ethnohistoriques.

**Grenier, Robert (O.C., ex-président du Comité scientifique international ICUCH à l'UNESCO/ICOMOS, ex-chef du Service d'archéologie subaquatique de Parcs Canada) • *40 ans sous la mer : le développement de l'archéologie subaquatique au Canada / 40 years under the sea: development of underwater archaeology in Canada* [32]**

Cette communication bilingue, fortement illustrée, retrace la naissance et les étapes marquantes qui ont permis au Canada de devenir, à l'échelle internationale, un chef de file incontesté pour la gestion et la protection des biens culturels submergés. Ce succès est souligné par la sélection du galion basque le San Juan de 1565, trouvé à Red Bay, sur le logo officiel de l'UNESCO pour la Convention de 2001 sur le patrimoine culturel subaquatique. Ce choix est justifié, selon l'UNESCO, par la signification du San Juan et par l'excellence du travail des archéologues subaquatiques de Parcs Canada sur cette épave qui relie l'histoire du Nouveau Monde et de l'Ancien. La sélection de l'UNESCO a été appuyée, récemment, par le prestigieux prix Keith Muckelroy attribué par le British Heritage au rapport de 2000 pages publié par l'équipe de Parcs Canada en 2007. Ce prix reconnaissait ce rapport comme la référence internationale pour les générations futures; évaluation confirmée par les maîtres de la discipline tant en Europe qu'en Amérique.

Les principales étapes menant à ce succès incluent la recherche controversée du trésor du Chameau de 1725 près de Louisbourg, au début des années 60; les fouilles d'une canonnière de la guerre 1812 près de Brockville en 1967; la fouille majeure de la frégate française Machault de 1760, dans la Baie des Chaleurs, de 69 à 72; l'évaluation de potentiel de la célèbre frégate anglaise Sapphire de 1696, à Bay Bulls, Terre-Neuve, en 1977; la fouille du galion San Juan coulé en 1565 à Red Bay, au Labrador, avec trois autres baleiniers basques; les fouilles du Elizabeth and Mary de 1690, un des navires de la flotte d'invasion de l'amiral Phipps, coulé près de Baie-Comeau; enfin plusieurs expéditions en Arctique de 1983 à 2008 à la recherche des navires de John Franklin complètent ce tour d'horizon de 1963 à 2008. L'expertise ainsi accumulée allait nous permettre de jouer un rôle de chef de file dans l'élaboration du texte de la Convention de l'UNESCO de 2001 sur la Protection du patrimoine culturel subaquatique.

Through Robert Grenier's four decade career since 1963, this illustrated and bilingual talk retraces the birth and selected chapters of underwater archaeology development in Canada, now a world leader in the field. This leadership is best demonstrated by the selection by UNESCO in 2000 of the 16<sup>th</sup> century Basque galleon San Juan of Red Bay on its logo as the representative of all heritage shipwrecks. UNESCO justified this selection by the excellence of the work of Park Canada's marine archaeologists and by the international historic importance of the Basque galleon for its role as an outstanding link between the history of the Old World with that of the New World. The validity of the UNESCO selection has been confirmed recently by the prestigious Keith Muckelroy Award given by British Heritage to the 2000 page Red Bay report published by Parks Canada in 2007. This prize recognized the report as the international reference in the field for years to come, a statement which was corroborated by leading experts in the field.

Among the main steps leading to this success, we have to include, the controversial search for the Chameau treasure of 1725, near Louisbourg, NS, in the early sixties; the excavation and raising of a gun boat related to the War of 1812, near Brockville, Ontario, in 1967; the earliest large scale underwater excavation ever undertaken in North America, the one of the 1760 French frigate Le Machault, in la Baie des Chaleurs, 1969-72; the test excavation of 1696 British frigate Sapphire, in 1977, in Bay Bulls NFDL; the excavation, raising and reburial of the 1565 Basque galleon San Juan, in Red Bay Labrador, including the finding of three contemporaneous galleons; the excavation near Baie-Comeau, Québec, of the Elizabeth and Mary, one of admiral Phipps' invading ships from Boston in 1690. Information on several expeditions looking for John Franklin's ships in the Arctic will complete this overview ranging from 1963 to 2008. This accumulated expertise finally helped us play a leading role in the development of the 2001 UNESCO Convention for the Protection of the Underwater Cultural Heritage, 1996-2001.

**Griggs, Carol (Cornell Tree Ring Laboratory, Cornell University, Ithaca)** • *Climate change during the mid-Younger Dryas to early Holocene evident in buried logs found southeast of Lake Ontario* [13]

Horizontal logs sticking out of the bank of Bell Creek near Fulton, NY, intrigued the landowner enough to contact the Cornell Tree Ring Laboratory. Five samples were collected on the first visit, and <sup>14</sup>C dates of two samples placed one in early and the other in mid-Holocene. Subsequent collection and analysis of samples from 75 logs extended the range back into the mid-Younger Dryas with a significant number of samples from the middle YD into the Preboreal chronozone during the early Holocene. Tree-ring chronologies and stable isotope analysis indicate several clumps of extreme environmental and climatic change at the site. The site's location on the southeastern lowlands of Lake Ontario and the lake sediments below the logs indicate that the changes potentially link to those on a much larger scale (e.g. isostatic rebound, meltwater drainage from the northwest, and changes in the level of ancestral Lake Ontario) during the retreat of the Laurentide ice sheet.

**Guiry, Eric J.<sup>1</sup>, Vaughan Grimes<sup>1,2</sup>, and Domingo C. Salazar-García<sup>2</sup>** (<sup>1</sup>Memorial University; <sup>2</sup>Department of Human Evolution, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany) • *Dogs as Dietary Proxies for Humans in Bone Chemistry: Case Studies from the Maritime Archaic and Spanish Copper Age* [31]

Domestic dog (*Canis familiaris*) remains have been recognized as possible proxies for humans in stable isotope-based paleodietary reconstructions. In light of the Native American Graves Protection and Repatriation Act and similar legislation, this 'Canine Surrogacy Approach' (CSA) has been used as a method for reducing reliance on direct analyses of human remains. The majority of CSA applications have been conducted on an ad hoc basis and few systematic analyses of the degree to which dog stable isotope signatures cross-contextually reflect those of humans have been conducted. This poster compares human and dog stable carbon and nitrogen isotope data deriving from Maritime Archaic as well as a Spanish Copper Age sites in order to assess the suitability of dog remains as proxies for associated humans in pre-contact/prehistoric hunter-gatherer and agricultural contexts. Results suggest that dogs in these contexts can provide suitable, albeit rough, proxies for their human keepers.

**Guiry<sup>1</sup>, Eric J. , Stéphane Noël<sup>2</sup>, Céline Dupont-Hébert<sup>2</sup>, and Vaughan Grimes<sup>1,3</sup>** (<sup>1</sup>Department of Archaeology, Memorial University, St. John's; <sup>2</sup>Laboratoires d'archéologie, Département d'histoire, Université Laval, Québec City; <sup>3</sup>Department of Human Evolution, Max Planck Institute for Evolutionary Anthropology, Leipzig) • *Understanding Meat Provisioning Practices among Historic North Atlantic Fisheries: Insights from Stable Isotope Analyses* [14]

Newfoundland and Iceland were annually visited and/or settled in part by European cod fishermen after the 16<sup>th</sup> and 10<sup>th</sup> centuries, respectively. Meat products were a key aspect of diet for these seafarers. Zooarchaeological work at these early historic fisheries has provided insights into many aspects of livestock and meat use. These techniques, however, give limited information of animal husbandry and meat product origin (i.e. imported from Europe vs. locally raised). We present new stable carbon and nitrogen isotope ratios from the bone collagen of domestic and wild fauna (n=46) excavated from an early French fishing station in Newfoundland (17<sup>th</sup>-19<sup>th</sup> century) and a historic fishing settlement in Iceland (19<sup>th</sup> century). Data are interpreted to show animal husbandry and meat trade practices in each context. Results suggest similar approaches to the provisioning of animal products between French and Icelandic cod fishing operations and allow identification of transatlantic origin of certain livestock species.

**Guyon, Fanny (Université de Montréal)** • *L'analyse de l'agencement spatiale des sites architecturés de la culture Recuay* [1]

Bien que de notoriété ancienne dans l'archéologie péruvienne, la culture Recuay demeure peu étudiée. La concentration de ces recherches sur les céramiques, fournit aux chercheurs une image fragmentée des connaissances sur la culture Recuay. Notre sujet de recherche porte sur l'analyse de l'agencement spatial des sites architecturés référencés Recuay. A partir d'une étude comparée des caractéristiques architecturales des sites archéologiques, nous tenterons de mettre en exergue les similitudes et les différences qui existent au sein et entre les occupations Recuay. Cette recherche a pour but de s'interroger sur l'occupation spatiale intra et interrégionale, tout en tentant d'extraire de l'architecture un schéma identitaire. Pour y parvenir,

nous utiliserons une voie qui débute en archéologie; les restitutions archéologiques assistées par ordinateur (TICs). Notre présentation tentera de montrer le potentiel de l'informatique dans les recherches archéologiques au Pérou.

**Hamilton, Scott (Lakehead University, Thunder Bay)** • *Evaluation of Site Prospecting Effectiveness: RLF Site Field School Excavations* [19]

As part of an Archaeological Field School, different methods of archaeological prospecting were conducted at a late Paleo-Indian site within the larger McKenzie River highway salvage project. This involved 5 metre interval shovel testing coupled with magnetic gradiometer survey as tools for identifying archaeological sites defined by very localized lithic scatters. This was followed by conventional large-scale excavation. Significant problems with 'false negative' results were observed when comparing the results of 30 to 40 cm wide shovel test pits with those from 50 cm wide pits. Even these larger pits failed to identify and delimit localized lithic scatters that are interpreted to represent discrete flaking stations.

**Hancock, R.G.V. (Department of Medical Physics and Applied Radiation Sciences and Department of Anthropology, McMaster University, Hamilton)** • *Thoughts on the usefulness of instrumental neutron activation analysis in archaeometry* [21]

Instrumental neutron activation analysis (INAA) has proven useful over time in the analysis and interpretation of many different materials, including obsidians, ceramics, glass trade beads, trade copper and brass, and even lithics. Some successes will be briefly illustrated. The primary problem in Canada is getting access to INAA, since the numbers of research reactors across the country is dwindling. A secondary problem is that INAA is a bulk analysis technique and sometimes it may be more profitable to conduct spot analyses, especially for understanding multicoloured glasses. The most important problem facing archaeometrists these days is a technique-independent one. It is a mixture of the quality of data being produced, and the suitability of the data analysis approach(es) that is(are) applied to the data.

**Hatcher, Hilary (Department of Archaeology, Memorial University)** • *Were Women There? A Look at Gender during the English Occupation of a French Fishing Station* [8]

In 1684, describing the Newfoundland migratory fishery, Captain Francis Wheler, R.N., famously observed that "Soe longe as there comes noe women, they are not fixed". However, women did come to Newfoundland and so some British fishermen did become fixed, leading to a shift from a predominantly migratory to a resident fishery, on the English Shore. Women became an integral part of this resident industry, as members of the shore crews who processed the catch. Archaeological evidence from EFAx-09, the site of the migratory French fishing room Champs Paya, in northern Newfoundland, suggests a British occupation for several seasons, around 1800. This paper will look at the historical and archaeological evidence to assess whether there were women present during this temporary occupation and to consider what this might say about the nature of the British occupation on the French shore of Newfoundland.

**Hawkins, Alicia (Department of Anthropology, Laurentian University, Sudbury)** • *The Ontario Customer Service Standard: How a government policy transformed the Laurentian University field school* [28]

The Laurentian University archaeology fieldschool is traditionally located on an aboriginal site in central or northern Ontario. It is a six-week on-site course with no modern amenities and no possibility for commuting. Recent Ontario government policy requires people working in the public sector, such as universities, to provide accessible services to 'consumers' of a range of abilities. How the policy is applied to fieldschools has not yet been worked out at Laurentian, but awareness of it led to the discovery that people self-select out of the fieldschool, and that our policies for admission discourage others from enrolling. Cognizance of these two things led to a reconsideration of the goals of the fieldschool and how those goals could be achieved. I will discuss the positive outcomes of this for the 2011 fieldschool, and consider future challenges.

**Heilen, Michael (Statistical Research, Inc.), Jeffrey H. Altschul (Statistical Research, Inc.), Michael R. Polk (Sagebrush Consultants, L.L.C.), and Robert A. Heckman (Statistical Research, Inc.)**

• *Cultural Resource Management Plans from a U.S. Perspective: Challenges and Opportunities* [16]

In the United States, as with most countries, historic preservation is predicated on a model of balancing development with heritage preservation. Most U.S. federal agencies and many state and local jurisdictions have historic preservation plans that identify the steps and schedules of historic preservation activities. Through UNESCO conventions and international lenders, there is also increasing pressure in developing countries to deal with cultural heritage in the planning process as part of economic and social impact assessments. Recent efforts have advocated using predictive modeling to provide stakeholders with an objective and replicable approach to: (1) predicting the location of archaeological resources, (2) assessing the significance of resources, and (3) validating predictions. In this presentation, we present management approaches and show how predictive models are being integrated into management plans in the United States to streamline compliance and in Mongolia to show how models are used in developing countries to build cultural heritage programs.

**Helwig, Kate (Canadian Conservation Institute, Ottawa), and Jennifer Poulin (Canadian Conservation Institute, Ottawa)** • *Archaeometric Studies at the Canadian Conservation Institute* [21]

This presentation describes several examples of archaeometric studies undertaken at the Canadian Conservation Institute. For each project, the methodology, instrumental techniques and key results are outlined. The scientific and photographic techniques employed include: x-radiography, Fourier transform infrared spectroscopy (FTIR), gas chromatography-mass spectrometry (GC-MS), Raman spectroscopy, x-ray diffraction (XRD), scanning electron microscopy/energy dispersive spectrometry (SEM-EDS) and polarized light microscopy (PLM). The projects that will be discussed are: a study of hafting adhesive residues on objects from Southern Yukon ice patches undertaken to identify the residues and to determine patterns of material use; research into the characterization of Canadian amber allowing deposits from different geological sources to be distinguished; the identification of dyes on archaeological textiles using GC-MS; and finally, the scientific examination of a knife with a corroded iron blade associated with the body of an Aboriginal man discovered in a glacier in Northern British Columbia.

**Herring, D. Ann (Department of Anthropology, McMaster University)** • *Peter Ramsden as Innovative Iconoclast* [23]

Peter Ramsden is perhaps best known for his scholarship in Ontario archaeology but less well known are his substantive contributions to many aspects of academic life. His iconoclastic approach led to a legacy of innovations to sport, administrative transparency, and the conduct of university business at McMaster; his revolutionary ideas challenge central dogma in nutritional and evolutionary theory.

**Higdon, John, and Corey Hutchings** • *Northern Cultural Resource Management and Climate Change* [31]

Changes in environmental conditions have opened northern regions to never before seen commercial and recreational concerns. Exploitation and access to northern locales have exposed seldom-visited archaeological sites to new and potentially destructive factors. Territorial archaeology offices in these regions are being confronted with the difficult task of changing focus from the traditional small-scale academic interest in these sites to more large-scale commercial exploitation. Additional aspects such as involvement of local governments and translation of proposals further complicate the job of local authorities. These aspects must be addressed in such a way that a balance is met between the expanding economic interests and the protection of cultural remains.

**Himour, Brad (Parks Canada)** • *The Parks Canada Pictograph Project: Working With Aboriginal Elders to Preserve, Protect and Interpret Aboriginal Rock Art in Western Canada* [22]

Archaeologists from Parks Canada are attempting to preserve First Nation pictographs in the region of Kootenay National Park. The project has two primary goals: first, to provide a permanent record of pictograph sites area using digital photography. Images were processed with software designed to enhance faint pigment residues. The resulting inventory will be kept on file by Parks Canada and First Nation communities. The second goal is to record First Nation Traditional Knowledge concerning rock art sites in order to preserve the cultural meaning of the pictographs. This provides First Nation communities

with the opportunity to speak for themselves regarding their cultural history. Interviews were conducted with Elders of four First Nation communities that are associated with the study area: Piikani, Stoney Nakoda, Ktunaxa and Kinbasket. It was a privilege to learn sacred aspects of First Nation culture. This presentation summarizes the results of the project and illustrates the software technology.

**Hodgetts, Lisa (Western University)** • *Gendered Landscapes of Banks Island's Northern Interior* [7]

Many recent anthropological and archaeological approaches to landscape define it as simultaneously physically tangible and culturally constructed. Landscapes are grounded in the physical reality of particular spaces, but also incorporate the meanings associated with them by people and groups as they go about their daily lives. We must therefore recognize that at any given moment, the same landscape may be experienced and understood in different ways by different people. This paper compares the distribution of archaeological camp sites and hunting sites in the northern interior of Banks Island to reconstruct the use of the region by Inuinnait men and women from the seventeenth to twentieth centuries. It suggests that in this area, travelled primarily on foot during the summer months, differences between men's and women's knowledge of the landscape may have been less pronounced than in areas occupied at other times of year.

**Hogan<sup>1</sup>, Emily, Emma Davis<sup>1</sup>, Cecilia Jennings<sup>1</sup>, Stephen Hall<sup>1</sup>, Bryan Mood<sup>1</sup>, Colin P. Laroque<sup>1</sup> (<sup>1</sup>Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University)** • *A Dendroarchaeological Analysis of the Cormier House Sackville, New Brunswick* [13]

The Cormier family has lived in their home in Sackville, NB for the past decade and a half. Due to a long-standing disagreement between father and son with respect to the speculated age of their family home, the MAD Lab was contacted to assist in determining the year in which the structural timber from within their home was harvested. Ten samples were collected from log beams in the home's basement and were identified as red spruce (*Picea rubens*). Samples were then processed and crossdated to regional master chronologies of red spruce. Beams from the structure illustrated a probable construction period between 1810 and 1815, giving the house an approximate age of 200 years. This date ultimately confirmed Perry Cormier's (father) long-held estimation of the home's age, while Phillip Cormier (son) lost the bet. Although a simple structure, the Cormier House marks the 100<sup>th</sup> structure dated by the MAD Lab.

**Hogg, Erin (University of British Columbia)** • *An Analysis of the State of Archaeology in the Canadian School Curricula* [30]

This paper examines the nature and extent that archaeology is covered in the Canadian public school curricula. Archaeology should have a stake in the Canadian school curricula, so that all students have an understanding of the discipline and can understand and promote heritage conservation. I examine the current coverage of archaeology in each province and territory's Social Studies curricula, first by searching for key words such as archaeology, aboriginal, past and heritage in each document. I then review the content of this coverage by a statistical comparative analysis of my data. Finally, I evaluate my findings to the guidelines developed by the Canadian Archaeological Association in the early 2000's, to determine if its expectations for students' achievement in archaeology are appropriate and are being met, and identify what future steps for both the school system and the Canadian Archaeological Association might be to better address these guidelines.

**Holyoke, Kenneth R. (University of New Brunswick)** • *Ambiguous but Contiguous? Late Maritime Woodland Technology and "Period 6" in the Lower Saint John River* [20]

The Late Maritime Woodland (LMW) is an enigmatic period in the prehistory of the Maritime Peninsula of northeastern North America. This statement is particularly true of the LMW in the Lower Saint John River of south central New Brunswick. A model for settlement and technology for this area was presented in Blair (2004). This model was based on the integration of feature, artifact and stratigraphic analyses with supporting radiocarbon dates and encompassed the period from the Terminal Archaic to the Middle Maritime Woodland (3090 to 1540 BP), or, "Period 1" to "Period 5" (Blair 2004). To complete this sequence, I conducted detailed analysis of artifacts and features from four LMW assemblages. These assemblages revealed

distinctive patterns of procurement and treatment of lithic raw materials, intra- and intersite patterning. This paper presents the results of this synthesis and considerations for future research.

**Holyoke, Kenneth R. (University of New Brunswick) and M. Gabriel Hrynick (University of Connecticut)** • *The Mill Brook Washademoak Lake Siteless Survey: Hunter-gatherers, Riverine Landscapes, and Fixed Resource Locales* [2]

In the Lower Saint John River Valley of New Brunswick (LSJR), small lithic scatters and findspots comprise a large portion of the current archaeological inventory. Despite the prevalence of these archaeological phenomena, surveys and analyses in the LSJR have tended to focus on large habitation sites. Using "site" as the dominant archaeological unit in the region hinders archaeologists' ability to analyze larger scale patterning (Blair 2004). Here we argue that "siteless" surveys can be used to gather landscape-oriented data, centred on fixed resource locales such as the Washademoak Lake Chert Source. The results of such surveys can be integrated with site-oriented research provided that archaeologists are explicit about scale and unit construction. Toward that end, we offer a case study from Washademoak Lake and Mill Brook stream in the LSJR.

**Hottin, Frédéric (Université Laval)** • *Des polis aux paradigmes : la réalité de l'analyse tracéologique d'artéfacts lithiques du Québec méridional* [25]

Depuis près d'une décennie, des chercheurs tentent d'appliquer l'analyse tracéologique à fort grossissement à l'étude des assemblages lithiques québécois. Inspirés par les résultats obtenus par des tracéologues européens, certains tentèrent de l'incorporer à des projets de recherche à teneur processualiste. Les embûches méthodologiques se sont toutefois avérées nombreuses et certains problèmes apparaissent de plus en plus insolubles. Afin de dénouer l'impasse et de permettre à la tracéologie de jouer un rôle dans l'étude de la préhistoire québécoise, il pourrait être avantageux d'adopter, d'adapter ou de développer une approche qui soit plus à même de s'accorder avec la réalité particulière du Québec méridional.

*Traces, Theory and the reality of use-wear analysis in southern Quebec*

For almost a decade, researchers have tried to apply high-power use-wear analysis to the study of Quebec's lithic assemblages. Inspired by the promising results of European studies, some have tried to incorporate it in processualist research projects. But, so far, the enterprise has proved itself quite an ordeal. Numerous methodological problems have arisen, some of which that cannot be resolved. It thus seems that if use-wear analysis is to play a part in the study of Quebec's prehistory, an other paradigm has to be adapted or developed in accordance to its unusual context.

**Houmard, Claire (UMR 7055, Préhistoire et technologie)** • *Foxe Basin and Hudson Strait: a territory shared by analogous cultural groups* [7]

Foxe Basin is particularly well-known for its wealth of archaeological sites and the high quality of organic presentation found there. This permitted a thorough study of approximately 2,500 osseous objects from six different sites: the Tayara site from Hudson Strait and five sites from the Igloodik region - Parry Hill (Kaleruserk), Lyon Hill, Jens Munk (Kapuvik), Freuchen and Kaersut (K'aersut). Each site revealed different occupation sequences that viewed together covered the whole Palaeo-Eskimo period, from the Early Pre-Dorset to the Terminal Dorset. The long-term trends in cultural evolution could thus be reconstructed. The comparison of Tayara and the sites from the Igloodik region, in terms of typological and technological characteristics evidenced strong cultural analogies from the Final Pre-Dorset to the Middle Dorset phase: similar types of artifacts, similar choices in terms of raw material selection and similar technological practices.

**Hrynick, M. Gabriel (University of Connecticut)** • *Historiographical Considerations for Archaeological Reports by Nineteenth-Century Natural Historians: Considering George Frederic Matthew and Henry David Thoreau* [3]

On the Maritime Peninsula, nineteenth-century archaeological reports by natural historians comprise an important portion of the regional literature, yet the information and interpretations they contain are frequently used without explicit attention to historiography. This can distort contemporary perceptions of variability in the archaeological record, especially of archaeological manifestations represented by

small data sets. Here I argue that nineteenth century natural history reports must be considered within the genre of natural history, free from post hoc disciplinary distinctions. To illustrate this point, I compare George Frederic Matthew's (1884) account of dwelling features from the Quoddy Region, New Brunswick to Henry David Thoreau's natural history writings about Native Americans in the Northeast. I suggest that careful attention to genre and historical context, as well as comparisons to subsequent reports, can help archaeologists to better employ such accounts in contemporary research.

**Hughes, Susan (City of Toronto), and Ronald F. Williamson (Archaeological Services Inc.)** • *Archaeological Site Management Planning in the City of Toronto: Challenges to Implementing the Plan* [16]

The City of Toronto has developed a comprehensive archaeological potential and site management model and is now employing it to review all Planning Act applications and proposed smaller scale impacts to known archaeological sites. While these are major achievements for the largest municipality in Canada, other Divisions in the City engage in land-disturbing activities that are rarely preceded by assessment. The City is currently designing a framework for the dissemination of AMP data and the creation of inter- and intra-divisional and external protocols/processes to address this issue. It is anticipated that a new Major Capital Infrastructure Co-ordination office, initiated by the City Manager, will obviate the need for multiple project tracking IT systems and allow for the tracking of most city activities, including external service and infrastructure providers, in one system. The challenge will be to implement this system in a way that recognizes the full range of impacts to known and potential archaeological sites by the activities of the various divisions and providers.

**Izaguirre, Dario (Administration régionale Crie)** • *Le Boumhounan au XIX<sup>e</sup> siècle, témoins archéologiques sur une partie du réseau d'échange à la Baie-James* [18]

Avec l'installation du commerce des fourrures sur le territoire de la Baie-James, les rivières, qui étaient déjà des voies de communication, devinrent de vraies routes commerciales. Ainsi, des postes de traite apparurent le long de certains plans d'eau. Ces établissements sont pour la plupart historiquement connus. Cependant, nous connaissons peu la manifestation archéologique des échanges commerciaux, dans les sites éloignés des postes de traite situés à l'intérieur des terres, surtout au XIX<sup>e</sup> siècle. Boumhounan est l'appellation crie désignant les cours d'eau utilisés pour le transport des fourrures et le ravitaillement des postes de traite. Un boumhounan était situé sur le territoire affecté par la dérivation de la rivière Rupert; il servait à connecter les rivières Rupert et Eastmain aux postes de traite de Neoskweskau et Nichikun. Le long de cette voie, une série de sites datant du XIX<sup>e</sup> siècle ont été découverts. Cette présentation contribuera à démontrer de quelle façon les sites faisant partie du Boumhounan nous permettent de mieux connaître la dynamique commerciale entre les traiteurs de fourrures et les Cries occupant ces régions durant le XIX<sup>e</sup> siècle.

*The Boumhounan in the 19<sup>th</sup> century: Archaeological witness to part of an exchange network in the James Bay area territory*

With the onset of the fur trade in the James Bay territory, the rivers, communications ways, became true commercial routes. Trading posts appears on certain bodies of water; for the most part, these establishments are historically documented. Much less well known are the archaeological manifestations of this trade in sites far from the inland trading posts. This is especially true for the 19<sup>th</sup> century. Boumhounan is the Cree term for waterways used for the transport of furs and the resupply of the fur trade posts. A boumhounan was located in the territory affected by the Rupert diversion; it connected the Eastmain and Rupert Rivers with the trading posts of Neoskweskau and Nichikun. Along this route a series of sites dating to the 19<sup>th</sup> century have been discovered. This paper will show how these sites tied to the Boumhounan help us to better understand the dynamics of trade between the fur traders and the Crees occupying these regions during the 19<sup>th</sup> century.

**Jamieson, Bruce (Citizenship and Immigration Canada, Government of Canada)** • *St. Lawrence Iroquoian Bone and Antler Tool Typology* [5]

This presentation will examine the bone, antler, ivory and shell artifacts from St. Lawrence Iroquoian and Huron archaeological assemblages and offer some preliminary observations regarding functional

and ethnic variations reflected in them. Five sites, will be compared: Draper and Keffer-late pre-contact Huron villages; Roebuck and McKeown - late pre-contact St. Lawrence Iroquoian villages; and Steward, a stratified St. Lawrence Iroquoian fishing station.

**Jamieson, Susan M. (Trent University) • *Rethinking Trigger's Wendat Socio-Political Model* [23]**

Bruce Trigger's Wendat socio-political construct continues to be widely cited and generally accepted as fact by archaeologists working in southern Ontario. However, Trigger's underlying assumptions of Northern Iroquoian homogeneity and neo-evolutionary understandings of such concepts as 'egalitarianism' and 'hierarchy' limit questions asked of the archaeological record and cause us to uncritically dismiss historical documents. Similarly, our archaeological interpretations are constrained by his predominantly rationalist interpretations for trade items. I conclude that approaches of the sort termed 'romantic' by Trigger provide a means to address intensified group ritual, especially as expressed by the Feast of Souls/Feast of the Dead and its associated feasting and gifting. In turn, they allow us to more forcefully interpret networks of social obligation and agencies of cultural transformation that resulted in varying degrees of political centralization in southern Ontario during the late sixteenth and early seventeenth centuries.

**Jenkinson, Anthony, Richard Nuna and Stephen Loring • *An "Archaic" boat building site at Kamestastin* [18]**

Since 1999 Tshikapisk Foundation, (an organization promoting Innu experiential education and historical and archaeological research) has pursued archaeological work in the tundra regions of Northern Labrador and adjacent Northern Quebec. This region is the homeland of the Mushuau Innuts, the People of the Tundra, the northern most group of Innu. So far this research has discovered over 260 sites (143 of these dating from the pre-contact era) including occupations from all recognized archaeological periods in the region, from about 7000 BP to the present. Unique among the pre-contact sites in the Kamestastin region is the Kaniuekutat site (GLCs-15.) This paper will describe the characteristics and discuss the significance of what appears to be an archaic era canoe building site with an assemblage consisting entirely of quartz and slate.

*Un site de construction de canoë de la période Archaïque à Kamestastin*

Depuis 1999 la Fondation de Tshikapisk, (une organisation vouée à la promotion de l'apprentissage innu expérientielle dans le domaine de la recherche historique et archéologique) réalise des recherches dans la toundra du Labrador et du Nord du Québec. Cette région est occupée par les Mushuau Innuts, les Gens de la Toundra, le groupe innu le plus septentrional. À ce jour, ces recherches ont permis d'enregistrer plus de 260 sites (dont 143 datent de la période pré-contact) associés à toutes les périodes archéologiques reconnues dans la région, depuis 7000 ans BP à aujourd'hui. Parmi ceux-ci, le site Kaniuekutat (GLCs-15), dans la région Kamestastin, est unique. Cette conférence décrira les caractéristiques de ce site et discutera de la signification de ce qui, vraisemblablement, s'apparente à un site de fabrication de canoë de la période archaïque, dont l'assemblage lithique se compose entièrement de quartz et d'ardoise.

**Jennings<sup>1</sup>, Cecilia, Andre Robichaud<sup>2</sup>, James M. Erhman<sup>3</sup>, and Colin P. Laroque<sup>1</sup> (Mount Allison University; <sup>2</sup>Université de Moncton, campus de Shippagan; <sup>3</sup>Digital Microscopy Facility, Mount Allison University) • *Odes of Joy, or Sounds of Silence? How do you sample a "priceless" artifact?* [13]**

Antonio Stradivari's violins are famous around the world for their superior quality and incredible cultural and financial value, but only a fraction of authentic Stradivari survive today, making them a common subject of replication. The MAD Lab received an old violin from a client, with a label claiming it had been built by Stradivarius in 1734. In order to determine whether or not this violin was a fake, the wood of the violin had to be dated, since any growth past 1734 would prove the instrument false. We relied on traditional dendroarchaeological methods, but in order to ensure there was no damage to a potentially priceless instrument, we also used new applications of a replication polymer technology in conjunction with a scanning electron microscope, as we tried to trace the violin's wood back to its origins and discover when and where it was made.

**Keron, James (University of Western Ontario) • *Archaeology and Spatial Statistics* [3]**

This paper presents the history and intellectual traditions of spatial statistics in archaeology, discusses some of the methodological problems and reviews the tools available to assist the archeologist in conducting this form of analysis. Thirty-five years ago a focus of processual archaeology was the application of spatial statistics. After 1990, with the advent of the post processual approach, emphasis waned and, in the more extreme forms, was simply rejected altogether. Despite this shift, some focus has been maintained and advances have been made in other areas of the academy. The spatial nature of most archaeological material imposes constraints on statistical analysis in that it violates one of the conditions for application of traditional statistics - homogeneity. Familiarity with the nature and applicability of spatial statistics is critical to valid statistical analysis. Fortunately, there are a number of statistical packages available which implement the more common methods.

**Kitchel, Nathaniel (University of Wyoming) • *The Newest of Worlds: Quarries as Proxy Measures of Landscape Learning in the Pleistocene Northeast* [2]**

Quarries and toolstone acquisition areas of fined grained siliceous materials provide fixed points on the landscape with particular importance to prehistoric populations. Despite the occurrence of a constellation of lithic raw materials during the Paleoindian period, questions remain about the rapidity with which these early populations acquired knowledge of tool stone sources. It is also unclear whether the acquisition of this knowledge is archaeologically visible. In this study the presence or absence of various raw materials in early and middle fluted point sites from northeastern North America is used to investigate changes in toolstone use between earlier and later Paleoindian populations. These differences may help us understand the process of landscape learning and other phenomenon associated with the colonization of uninhabited landscapes. This study will evaluate different models of colonization and how quickly stone quarries and tool stone sources became places of lasting importance throughout prehistory.

**Kolhatkar, Manek (Université de Montréal) • *Loosening the bonds of technical practice: the chaîne opératoire as a flawed metaphor* [25]**

For the past half-century, the chaîne opératoire approach has allowed its practitioners to gain a better understanding of the technical practices of people, through the belief that form should not preclude the deeper structural explanation of such practices. In this regard, the chaîne opératoire can be understood as a metaphor as to how we should link gestures together, that is, a sequential but linear, programmatic as well as ultimately homogenizing reconstruction and understanding of technical activities. Here, through my analysis of the manufacture of projectile points that occurred at the Late Paleoindian site of La Martre (Gaspé peninsula, Quebec), I will show that such an approach is useful but insufficient for it brings one to confuse the different logical links that happen at various scales of technical practice, where the craftsman and the social group end up being considered as the same person. Other, more complex metaphors, could be used so as to make more room for the variability that archaeologists try to describe with increasing levels of details.

*Les failles de la chaîne opératoire, et la libération de la pratique technique*

Depuis les années 60, l'approche de type chaîne opératoire a permis aux archéologues d'acquérir une meilleure connaissance des pratiques techniques des populations étudiées, au travers d'une analyse structurelle plutôt que formelle de telles pratiques. La chaîne opératoire peut ainsi être comprise comme une métaphore permettant de lier les gestes techniques de façon séquentielle, mais aussi linéaire, prédéterminée et homogénéisée. Mes analyses de la fabrication de pointes de projectiles qui ont eu lieu sur le site paléoindien récent de La Martre (Gaspésie, Québec) montrent qu'une telle approche est utile mais insuffisante car elle ne fait pas suffisamment la distinction entre les différents liens logiques qui se manifestent dans les multiples échelles de la pratique technique. D'autres métaphores plus complexes pourraient être utilisées de telle sorte que la variabilité dont les archéologues tentent de rendre compte puisse s'exprimer avec moins de restrictions.

**Lake, Mark and Enrico Crema (Institute of Archaeology, University College London) • *The Cultural Evolution of Adaptive-Trait Diversity when Resources are Uncertain and Finite* [26]**

In this paper we present a model aimed at exploring how the diversity of adaptive cultural traits (e.g. subsistence traits) evolves by innovation and cultural transmission when the payoff from adopting those traits is both uncertain and frequency dependent. We find that traits that exploit the same shared resource evolve most quickly when intermediate rates of cultural transmission promote fluctuation in trait diversity. Higher rates of cultural transmission, which promote predominantly low diversity, and lower rates, which promote predominantly high diversity, both retard the adoption of traits offering higher payoff. We also find that the distribution of traits that exploit independent resources can evolve towards the theoretical Ideal Free Distribution so long as the rate of cultural transmission is low. Increasing the rate of cultural transmission reduces trait diversity, so that a more limited number of 'niches' are occupied at any given time.

**Lamothe, Francis (Ethnoscop inc.) • *Fouilles archéologiques en aires ouvertes du marché Sainte-Anne et du parlement du Canada-Uni* [27]**

Situé au cœur du Vieux-Montréal, le site de la place D'Youville constitue l'un des lieux centraux des activités économiques, sociales et politiques de la ville au XIX<sup>e</sup> siècle. Le projet d'agrandissement du musée Pointe-à-Callière a entraîné la réalisation en 2011 des fouilles archéologiques, parmi les plus importantes effectuées à Montréal au cours des 25 dernières années. Le site touché par les travaux renferme les vestiges du premier marché Sainte-Anne (1832-1844) articulé avec le collecteur William (1832-1989) qui canalisait les eaux de l'ancienne Petite rivière Saint-Pierre. Le marché fut converti en parlement du Canada-Uni en 1844 et Montréal fut la capitale des Haut et Bas-Canada, jusqu'à ce que des manifestants incendient le bâtiment en 1849. Par la suite, un nouveau marché Sainte-Anne sera construit au même emplacement et sera en activité jusqu'à sa démolition en 1901. Les fouilles archéologiques effectuées en 2011 ont permis de recueillir plus de 100 000 artefacts et écofacts et de documenter une part importante des vestiges architecturaux toujours en place.

Under place D'Youville are the remains of St. Anne market, erected in 1832 and transformed into a parliament in 1844; burned in 1849, the building was rebuilt in 1851 as a market and destroyed in 1901. Among the most intensive in Montréal since the 1980s, archaeological excavations conducted in 2011 revealed a major part of the remains of the market/parliament, along with more than 100 000 artifacts and ecofacts.

**Landry, Daniel (Université de Montréal) • *Le paysage végétal de la pointe à Callière et son évolution du XVI<sup>e</sup> au XVIII<sup>e</sup> siècle* [6]**

Depuis quelques années dans le Vieux-Montréal, des études paléobotaniques basées sur le contenu pollinique des sols archéologiques permettent peu à peu d'appréhender l'aspect et la diversité des différents groupements végétaux qui composaient le paysage ancien du secteur. Le site de l'îlot Callière s'inscrit dans ce cadre d'études paléoécologiques et permet de bâtir une chronologie des peuplements végétaux. D'un environnement local particulier de prucheraie avant l'arrivée des Européens, on y observe plusieurs étapes locales, périlocal et régionales de transformation de l'espace écologique, avant l'aménagement du fort de Ville-Marie en 1642 puis après, durant les périodes de vie active et d'abandon du fort. Nous présenterons le rythme de ces changements ainsi que des parallèles entre événements botaniques et activités anthropiques du XVI<sup>e</sup> au XVIII<sup>e</sup> siècle à la pointe à Callière.

*The Pointe-à-Callière vegetal landscape and its evolution from the 16<sup>th</sup> to 18<sup>th</sup> centuries*

Palaeo-botanical studies in Old Montreal, based on the pollens found in archaeological soils, provide a fuller picture of different vegetal groupings that made up the former landscape. The Îlot Callière site has contributed extensively to these studies, revealing a chronology of vegetal communities. From its beginnings as a spruce grove before the arrival of Europeans, this site shows several transformations of the local, perilocal and regional ecologies before the construction of Ville-Marie's old fort and, subsequently, during the phases of the fort's active life and its abandon. We present these changes as well as links between botanical events and human activities at Pointe-à-Callière from the 16<sup>th</sup> to the 18<sup>th</sup> centuries.

**Lapensée-Paquette, Manuel (Groupe de recherche archéologique de l'Outaouais) • *La recherche archéologique au Parc de Plaisance. La localisation et l'évaluation d'établissements historiques* [30]**

Au cours de l'été 2011, un programme de recherche archéologique et de mise en valeur a été mis en œuvre au Parc national de Plaisance, en Outaouais, après quatre ans de travaux archéologiques initiés lors d'un projet de construction de piste cyclable régionale. Notre présentation exposera les premiers résultats des travaux de localisation et d'évaluation de quatre établissements historiques notoires : un poste de traite aussi appelé "Fort de la Petite-Nation" (seconde moitié 18<sup>e</sup> siècle), la "Maison de la Petite-Nation" et la métairie Valcourt, deux établissements du début du 19<sup>e</sup> siècle reliés au développement initial de la seigneurie de la Petite-Nation, ainsi qu'un établissement de nature incertaine identifié comme le "Grand Campement" dans des documents du 18<sup>e</sup> et du 19<sup>e</sup> siècle. Les résultats présentés proviennent d'un vaste inventaire archéologique du parc et de travaux d'évaluation de sites connus.

**LaRoche, Daniel (Parcs Canada/Parks Canada) • *Challenges in the Management of Underwater Cultural Heritage in Canada* [9]**

Parks Canada has been an active and important player in underwater archaeology for very many years in Canada. Numerous underwater archaeological sites have been investigated across Canada but in many instances data has not been compiled and organized in a format allowing local managers of Heritage Places and their partners to access data through adapted management tools. In order to remediate such situation, it was decided to test a specific type of Underwater Cultural Heritage Management Plan (UCHMP) model for two sites. The model provides a standardized framework including sections on approaches for communicating with diving and non-diving visitors and the general public. The presentation will also talk about the context of the experiment, the process and the anticipated benefits of UCHMP.

**Larocque, Robert, Bioarchéologue indépendant • *Les sépultures du cimetière St. Matthew: reflet de la diversité de la communauté protestante de Québec* [24]**

Trois campagnes de fouilles conduites par la Ville de Québec et Ethnoscop ont mené à l'exhumation des restes de plus de 200 défunts du cimetière St. Matthew (1771-1860), premier lieu d'inhumation protestant de la ville de Québec. Classés monuments historiques en 1978, le cimetière et l'église, qui fut construite en 1848 puis agrandie à plusieurs reprises, furent acquis par la Ville de Québec en 1979. Dès lors, ils ont été convertis en cimetière-jardin et bibliothèque. Les sépultures, qui proviennent de deux secteurs du cimetière, présentent des similitudes, mais aussi des particularités et différences notables dans les variables qui permettent de caractériser les modes d'inhumation et attentions apportées aux défunts : le type d'ensevelissement (caveau, cercueil, pleine terre), la distribution spatiale des défunts, les artefacts qui leur sont associés, les âges au décès et la disposition des os. Nous proposerons certaines interprétations de ces différences, relatives notamment au statut socio-économique des défunts.

**Laroque<sup>1</sup>, Colin P., André Robichaud<sup>2</sup> and Mike Dillon<sup>3</sup> (Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University; <sup>2</sup>Université de Moncton, campus de Shippagan; <sup>3</sup>Parcs Canada, Cultural Resource Specialist, Jasper National Park, Jasper) • *Who lobbed the lobstick? Dating the Jasper Lobstick, Jasper National Park, Alberta* [13]**

A lobstick tree was an important cultural or navigational symbol positioned along the banks of rivers at the height of the fur trade. They were created by the removal of lower branches, leaving a tree topped with a distinct tuft, indicating an obvious cultural modification. For years, the prominent Jasper lobstick was visible along the banks of the Athabasca River. It had been attributed to a meeting of the early railroad surveyors for much of its written history, but in recent years, two other possible explanations came to light. Parks Canada was set to build a roadside pull-out near the lobstick, when the tree fell over into the river in the spring of 2007. Two samples of the lobstick were provided to the MAD Lab by Parks Canada and we dated where the lobbing activity fit in time, and in doing so ended the debate as to who lobbed the lobstick.

**Lavergne, Marie-Geneviève (Ville de Montréal) • *Les vestiges archéologiques du Champ-de-Mars - Restaurer un projet de mise en***

valeur... selon les règles de l'art [27]

Situé à l'arrière de l'hôtel de ville, le Champ-de-Mars constitue une porte d'entrée du Vieux-Montréal, un lieu unique de l'identité de Montréal. En 1992, un front complet des fortifications qui entouraient Montréal au 18<sup>ème</sup> siècle y était mis en valeur. Force fut de constater qu'une quinzaine d'années plus tard, l'état de dégradation des vestiges était préoccupant et que des travaux de stabilisation étaient nécessaires. L'approche proposée devait tenir compte des grands principes énoncés dans les chartes internationales traitant de la conservation du patrimoine archéologique. Sur ces bases, un concept de protection résolument contemporain, privilégiant la lumière pour mettre en valeur et assurer la lisibilité de ce patrimoine exceptionnel, a été développé.

Located at the rear of Town Hall, Champ-de-Mars is a gateway to old Montreal, a unique place contributing to the identity of Montreal. In 1992, a full front of the 18<sup>th</sup> century enclosure wall was enhanced. Fifteen years later, the state of degradation of these remains was worrying and stabilization work was necessary. The proposed approach was to take into account the principles set out in international charters dealing with the conservation of archaeological heritage. On these bases, a resolutely contemporary protection concept, focusing on light to enhance this exceptional heritage and ensure its legibility, was developed.

**Legua, Éric, Mathieu Mercier Gingras, Marcel Goulet and Brad Loewen, Université de Montréal • Archéologie de la flotte française de 1759 [9]**

Automne 1759, période décisive de la Guerre de Sept Ans. Cent-vingt voiles britanniques remontent le Saint-Laurent vers Québec, obligeant les 40 bâtiments français qui y mouillent à se retirer en amont des rapides de Richelieu. La chute de la capitale coloniale emprisonne la flotte française, qui se sépare en petites escadres pour filer devant les canons britanniques et gagner l'Atlantique avant l'hiver. Le 22 novembre, quatre vaisseaux, surpris par une tempête pendant leur fuite, échouent sur la côte de Lévis. La catastrophe entre dans la mémoire locale et, 250 ans plus tard, inspire une campagne de prospections par l'Université de Montréal. Les vestiges d'un navire, découverts en 2009 puis photographiés en 2011, montrent des éléments de carène d'un vaisseau de taille intermédiaire, possiblement le Duc de Fronsac ou le Maréchal de Senneterre.

Autumn 1759: a decisive moment in the Seven Years' War. One hundred twenty British sails advance up the St. Lawrence toward Québec City, forcing the 40 French warships stationed in the port to retreat upstream of the Richelieu Rapids... The fall of the colonial capital imprisoned the French fleet, which broke into squadrons to slip past the British cannons and gain the Atlantic before the onset of winter. The 22nd of November, a storm surprised four escaping vessels, driving them onto the Lévis shore. The disaster lives on in local memory and, 250 years later, inspired a campaign to find the wrecks by the Université de Montréal. The remains of one vessel, found in 2009 and photographed in 2011, include the floor of a medium-sized warship, possibly the Duc de Fronsac or the Maréchal de Senneterre.

**Lemaître, Serge (Chercheur postdoctorant du Célat, UQAM) • Pour une macro-vision des peintures rupestres du Bouclier canadien [22]**

En 1971, Kenneth Kidd déclarait, à propos de l'art rupestre canadien, « We are still in the recording stage – analysis will come later ». Où en sommes-nous 40 ans plus tard? Des analyses iconographiques ont été réalisées, le support et le rocher ont été pris en compte, la localisation et le paysage environnant font désormais partie de l'étude et l'ethnographie fut sollicitée pour contextualiser cette production culturelle. On peut donc se réjouir des résultats. Cependant, il me semble que l'on se soit encore trop concentré sur un vestige archéologique particulier, l'art rupestre, et que nous avons ainsi perdu une vue d'ensemble. Depuis longtemps, l'art rupestre du Bouclier canadien est perçu comme un vaste ensemble homogène mais est-ce vraiment le cas? N'existe-t-il pas des particularismes régionaux? Peut-on mettre en parallèle la localisation des sites avec ce que nous savons des autres vestiges archéologiques?

**Léouffre, Delphine, et Monique Laliberté (Ethnoscop inc., Montréal) • Vendre et gouverner. Coup d'oeil sur la collection de la place D'Youville [31]**

En 2011, Pointe-à-Callière, Musée d'archéologie et d'histoire de Montréal, a mandaté la firme Ethnoscop inc., pour réaliser des fouilles archéologiques sur le site de la place D'Youville à Montréal. Ces fouilles ont généré plus de 116 000 objets ou fragments d'objets de toutes catégories. Nous présenterons l'essentiel des découvertes faites à travers les artefacts provenant des couches d'occupation du premier marché Sainte-Anne/Parlement du Canada-Uni (1832-1849) et du troisième marché (1851-1901). Parmi les lots appartenant aux sols d'occupation du marché Sainte-Anne et du Parlement, il va de soi que ceux de l'incendie de 1849 témoignent des derniers jours du Parlement. Qu'en est-il des lots situés en dessous de la couche d'incendie: appartiennent-ils au marché ou au Parlement? Voilà une question à laquelle nous tenterons de répondre. Le troisième marché érigé moins de dix ans après la fin de l'utilisation du premier, se distingue par une vaste collection illustrant son aménagement et sa vocation. On peut dire que la récolte de 2011 a été grande, mais aussi de qualité et qu'elle illustre une période charnière de Montréal.

**Lerner, Harry J. (Université Laval) • From data to interpretation: What does measuring use-wear have to do with past human behaviour? An example from Chicoutimi, Quebec [25]**

A reliable and systematic way to quantify use-wear on stone tools has been a long-standing goal among archaeologists and it has proven elusive for just as long. Equally elusive has been a consistent way of translating such quantitative data into insightful information about past human behaviour and its cultural underpinnings. As important as what and how we measure is why we measure and what our measures ultimately mean. A brief discussion of image analysis as applied to both experimental and archaeological use-wear, followed by a consideration of how the resulting data should and should not be used to gain greater insight into past human behaviour will be presented.

**Letendre, Myriam (Arkéos inc.) • Répartition et variabilité des sites préhistoriques situés sur le territoire touché par les travaux de EM-1A et dérivation Rupert, bief « aval » [18]**

Plusieurs années de recherches sur le terrain menées sur le territoire touché par les travaux de EM-1A et dérivation Rupert, ont conduit à la découverte de plus d'une centaine de sites archéologiques dont une bonne part est attribuée à la période préhistorique. Le secteur du bief « aval » regroupe les terres et marges fluviales comprises entre le cours des rivières Lemare et Nemiscau, en incluant ces dernières. Un premier regard sera jeté sur les différentes manifestations de l'occupation de ce territoire en s'attardant aux répartitions spatiale et temporelle des sites répertoriés. L'examen des données intrasites permettra d'élaborer une typologie des sites qui, mise en relation avec les schèmes d'établissement et d'exploitation qui prévalent dans cette région du subarctique, permettra de reconstituer la dynamique de l'occupation du territoire à l'étude et de rendre visible tout un lot de facteurs de variation.

*Distribution and variability of prehistoric sites in the "lower" Rupert reservoir area*

Several years of research in the territory affected by the EM-1A—Rupert Diversion project have led to the discovery of over 100 archaeological sites, many dating to the prehistoric period. The "lower" Rupert Reservoir includes lands and riverine zones between and including the Lemare and Nemiscau Rivers. This paper will provide a first look at the different manifestations of the occupation of the territory, focusing on the spatial and temporal distribution of the sites. An examination of the inter-site data allows us to propose a site typology, which—in relation with settlement and resource-use patterns common to this subarctic region—allow a reconstruction of the dynamics of occupation in the study area, and brings to light a series of factors responsible for the variability.

**Letourneau, Marcus (Golder Associates Ltd.) • Planning for Archaeology: Reflections on the municipal management of archaeological resources in Kingston, Ontario [16]**

This presentation will reflect upon a multi-year archaeological planning project undertaken by the Corporation of the City of Kingston, Ontario. This project was developed to integrate archaeology into not only the land-use and heritage approvals processes, but also into municipal operations. Stemming from changes to the Ontario Heritage Act and the Ontario Provincial Policy Statement, this project was initiated in 2006 and included the development of policies, by-laws,

an Archaeological Master Plan, new municipal processes, and a draft Urgent Archaeological Protocol. It also required significant public and staff consultation on the development and implementation of the program. This presentation will discuss the origins of the project; some of the challenges and opportunities of the process; the products and innovations; and, outline key learning points.

**Limoges, Sophie (Musée Pointe-à-Callière) • L'École de fouilles sur le lieu de fondation de Montréal, 10 ans d'une collaboration fructueuse entre un musée et une université ! [6]**

En 1998, Pointe-à-Callière qui conserve en son sous-sol le premier cimetière catholique de Montréal (1643-1654), s'intéresse à une propriété voisine. Le Musée y croit possible que des vestiges anciens – peut-être ceux du fort de Ville-Marie et du château de Callière – soient toujours préservés. Des sondages exploratoires confirment le potentiel archéologique du site. Le Musée se porte donc acquéreur en 2002 du vieil entrepôt, sis au 214 place D'Youville. L'École de fouilles qui y est menée conjointement par le Musée Pointe-à-Callière et l'Université de Montréal célèbre, en 2012, ses dix ans ! Plus que jamais, l'importance du site, l'intérêt des collections archéologiques qui en proviennent et le rayonnement que génèrent ces découvertes à l'échelle continentale en font un lieu de connaissances et de diffusion incontournable. C'est la première fois au Québec qu'un musée s'associe à une université pour créer une école de fouilles en milieu urbain, offrant ainsi une occasion unique de réaliser un programme de recherche multidisciplinaire commun.

*The Field School at Montréal's birthplace: 10 years of Museum-University collaboration!*

In 1998, the Musée Pointe-à-Callière, which harbours the remains of Montréal's first Catholic cemetery (1643-1654), set its sights on a neighbouring property. The Museum believed that the site could hold remains of Ville-Marie's old fort and the so-called Château de Callière. Testing confirmed the site's potential and in 2002 the Museum purchased the aging warehouse at 214, Place d'Youville. The field school conducted jointly by the Musée Pointe-à-Callière and the Université de Montréal celebrates its tenth anniversary in 2012. Excavation continues to reveal the site's importance, and the growing collection has made this study a reference for early colonisation in North America. The joint Museum-University model reinforces links between the creation and the diffusion of archaeological knowledge. For the first time in Québec, a museum and a university combine to create a field school in an urban setting, opening doors to multidisciplinary research.

**Limoges, Sophie (présidente réseau Archéo-Québec et Pointe-à-Callière, musée d'archéologie et d'histoire de Montréal) et Nathalie Barbe (coordonnatrice du réseau Archéo-Québec) • Le réseau Archéo-Québec: Bilan et projets d'avenir [27]**

Le réseau Archéo-Québec œuvre depuis 1999 à sensibiliser les publics à l'importance du patrimoine archéologique québécois. Depuis sa fondation, il a su mobiliser le milieu en favorisant des synergies entre les intervenants des domaines culturels et touristiques. Regroupant aujourd'hui les forces vives de l'archéologie au Québec, Archéo-Québec compte une centaine de membres institutionnels et individuels voués à la conservation, à la recherche et à la mise en valeur du patrimoine archéologique. Archéo-Québec offre support et conseils à ses membres et coordonne des activités fédératrices et de qualité dont le Mois de l'archéologie qui offre une vitrine exceptionnelle aux projets de recherche et aux lieux de diffusion aux quatre coins du Québec. Après la mise en œuvre de différents projets (formations, troussees éducatives pour les écoles, guide en matière d'archéologie destiné aux municipalités, etc.) Archéo-Québec est devenu un acteur incontournable de l'archéologie au Québec. Cette conférence présentera les bons coups du regroupement ainsi que ses projets d'avenir.

Since 1999, the Archéo-Québec network has been working to raise public awareness of the importance of Québec's archaeological heritage. Since the beginning, it has managed to engage the community by promoting synergy between various stakeholders in the cultural and tourism sectors. Now comprised of the driving forces in Québec archaeology, Archéo-Québec has some one hundred institutional and individual members dedicated to conservation, to research, and to highlighting our archaeological heritage. Archéo-Québec offers support and advice to its members, and coordinates unifying, high profile activities such as Quebec Archaeo Month, which offers an exceptional showcase for research projects and presentation venues throughout

Québec. With the implementation of a variety of projects (training, education kits for schools, archaeological guides for municipalities, etc.), Archéo-Québec has become a key player in the field of archaeology in Québec. This lecture will provide a glimpse of the group's achievements, as well as its upcoming projects.

**Lindala<sup>1</sup>, Joshua, Dusan Mihailovic<sup>2</sup>, and Mirjana Roksandic<sup>1</sup> (<sup>1</sup>Department of Anthropology, University of Winnipeg; <sup>2</sup>University of Belgrade Department of Archaeology) • Balanica field school: student to TA perspective [28]**

The presentation will revolve around contrasting experiences of a fieldschool: one of a participating student and one of a teaching assistant happily reunited in the same person. After a brief introduction to the fieldschool through a video and a short outline of the project, we will discuss the expectations and challenges faced by a student not versed in international collaborations, and how these look once the student found himself in the role of a teaching assistant. The most important issues discussed will be cross-cultural communication, different approaches to the learning process by Serbian and Canadian/American students, expectations and concerns of instructor and principal investigator and how these roles are negotiated. Some reflections of personal growth will be offered.

**Loewen, Brad (Université de Montréal) • Dîner au travail. Rapports alimentaires en milieu industriel à la pointe à Callière au XIX<sup>e</sup> siècle [6]**

À l'Îlot Callière, une dizaine de contextes stratifiés du XIX<sup>e</sup> siècle mettent en scène une dense suite d'aménagements et d'activités. Dans ces années, le site se transforme au gré de l'évolution socio-économique du quartier portuaire qu'il occupe, tout en conservant son caractère industriel. Il est donc intéressant d'y retrouver d'abondants témoins d'activités « domestiques », sous la forme de restes de repas et de vaisselle alimentaire qui suivent fidèlement l'évolution des modes, mœurs et marché alimentaires du XIX<sup>e</sup> siècle en même temps qu'ils mettent en scène les rapports socio-alimentaires qui se construisent en milieu de travail. La mise en rapport de ces vestiges avec l'idée de « dîner au travail », sous ses aspects de sociabilité et de socialisation, nous permet d'explorer un thème qui est toujours d'actualité, mais qui plonge ses racines culturelles dans un passé industriel très lointain.

*Eating at work. Food, drink and social relations in the industrial context of Pointe-à-Callière in the 19<sup>th</sup> century*

At the Îlot Callière site, about ten stratified contexts from the 19<sup>th</sup> century reveal a dense sequence of buildings and activities. Over the course of the century, the site was transformed rapidly in step with the socio-economic evolution of the port quarter that surrounded it, without ever losing its industrial vocation. Interestingly, these contexts hold an abundance of "domestic" artefacts in the form of food remains and vessels that closely follow the culinary fashions, habits and markets of the 19<sup>th</sup> century, and create a setting for the socio-culinary relations that were constructed in the workplace. By combining these artefacts with the idea of "eating at work", as seen through its aspects of sociability and socialisation, this paper explores a theme that remains current despite its cultural origins in a distant industrial past.

**Lofthouse, Susan (Avataq Cultural Institute) • Shifting Dorset subsistence strategies in northern Foxe Basin: Early to Late Dorset at Needle Point [7]**

Previous studies on Dorset subsistence have indicated a distinct increase in the importance of walrus hunting in the Early Dorset period, followed by what appears to be a gradual decline in importance by the Late Dorset period. Needle Point, on Rowley Island in northern Foxe Basin, features a sequence of eight Dorset sites spanning from Early to Late Dorset. Excavations at the upper-most five sites, which cover a time period from 2100 B.P. to 940 B.P., have yielded well-preserved faunal assemblages. One of the earlier sites features an ivory extraction area containing a substantial number of walrus skulls. The presence of walrus bone appears to decline over time, although ivory flake debitage and skull fragments maintain an important presence throughout the occupation sequence. This provides an ideal opportunity to evaluate suggested changes in Dorset walrus exploitation through the evidence found at one location in the central 'Core Area'.

**Losier, Catherine (Université Laval) • Commercer à Cayenne au cours du XVIII<sup>e</sup> siècle [12]**

Cette présentation vise à documenter la manière dont les habitants de la Guyane s'inséraient dans l'économie mondiale du 18<sup>e</sup> siècle par l'étude des réseaux commerciaux. Au cours de l'Ancien régime, le politique économique du mercantilisme désignait la France comme partenaire commercial unique pour la Guyane. Cependant, il est attesté par les documents historiques que des entorses au mercantilisme n'étaient pas rares, car la métropole négligeait trop souvent sa colonie sud-américaine laissant les habitants démunis. Les données archéologiques recueillies sur divers sites de la Guyane et les documents archivistiques autorisent la mise en perspective du protectionnisme économique de la France et de l'apport du commerce international, intercolonial, et des échanges illicites quant à l'approvisionnement guyanais. La mise en commun de ces données permet de dresser le portrait du réseau commercial associé à la Guyane au cours du 18<sup>e</sup> siècle et de suivre ses fluctuations en conjonction avec les différents événements qui ont ponctué l'histoire de la colonie de Cayenne.

**Lucas, Simon<sup>1</sup>, Elsa Leboff, Loïc Mourlane, Fanny Morland, Olivier Dutour, Isabelle Ribot, Anne-Marie Grimoud (l'École Pratique des Hautes Études, Paris) • Apports de l'usure dentaire en bioarchéologie: comparaison de populations historiques française et québécoise [24]**

Le rôle des aliments (consistance, composition) étant lié à l'usure dentaire, notre objectif est de comparer cet aspect dans deux populations transatlantiques d'origine Française des XVII<sup>e</sup> et XVIII<sup>e</sup> siècles. Les sites étudiés sont: Notre-Dame (Montréal, Québec) et St Pierre-Darnétal (Caen, France). Nous avons analysé les maxillaires conservés à au moins 50%, selon une échelle de six degrés de sévérité et quatre types d'usure et construit des courbes d'usure, selon le schéma de la Fédération Dentaire Internationale. Les résultats montrent des différences dans la répartition bilatérale de l'usure (degré, type) au maxillaire et à la mandibule en lien avec le morphotype dentaire, l'âge et le sexe; ils suggèrent des variations dans les habitudes de vie et mesurent le potentiel infectieux à partir des abcès alvéolaires péri-dentaires et l'impact sur la santé. Cette étude explore l'adaptation de groupes de même origine, l'un supposé ancestral et l'autre migrant dans un nouvel environnement.

**Ly, Yvonne (Archéotec inc.) • Essai d'identification de la provenance de la poterie jamésienne selon leurs caractéristiques chimiques [18]**

Les interventions archéologiques dans le cadre des travaux hydro-électriques de la rivière Rupert a permis de mettre au jour une collection importante de poterie amérindienne. Dans le but, entre autres, d'en étudier la provenance, des tessons de poterie ont été soumis à une analyse à l'aide d'un spectromètre PXRf (Field-portable X-ray fluorescence). Les résultats obtenus ont ainsi été comparés avec des données chimiques déjà existantes de plusieurs échantillons d'argile prélevés en Ontario, au Québec et dans les provinces atlantiques.

*Assessing James Bay pottery provenance by its chemical characterization.*

The archaeological fieldwork made within the context of the Rupert River Diversion Hydropower Project has uncovered an important ceramic assemblage. By using a field portable X-ray fluorescence spectrometer (PXRf), 60 pottery shreds were analysed in order to try to determine their origin by using their chemical signature. The elemental composition data obtained were then compared to existing clay sample data from Ontario, Quebec and the Atlantic provinces.

**Lynch, Sean C. (University of Alberta) • Burning Rocks and Taking Samples: An actualistic experimental approach to identifying thermally altered quartz [25]**

Experimental approaches in archaeology aim to reconstruct the archaeological record by replicating the practices of prehistoric peoples. Archaeologists who attempt to reproduce prehistoric technologies often confine their research to laboratories, without recreating similar conditions (e.g., environmental, social dynamics) to those that would have been present in the past. In this paper, an actualistic experimental approach was used to produce thermally altered quartz, as seen archaeologically in the James Bay Region. This experiment sought to replicate the similar environmental and social dynamics of thermal alterations by heating quartz in and around an open wood-burning fire. Thermally altering stone is known to improve the processes of tool production. However, in this region, thermal alterations have potentially variable purposes. The findings of this project demonstrate that when archaeologists attempt to emulate the past, the dynamics

of an experimental approach must first be assessed to ensure its relevance to the reconstruction of prehistoric practices.

**MacDonald, Robert I. (Archaeological Services Inc.) • Paleo-environmental Reconstruction for Archaeological Potential Models: Validation from the Sault Ste. Marie Master Plan [16]**

Modeling the potential for discovering pre-contact Aboriginal archaeological sites within a particular study area may employ a variety of inductive and deductive techniques, the selection of which depends on the context of investigation. Frequently, this includes the reconstruction of past environments at various key time horizons. These reconstructions provide important contextual information for interpreting human paleoecology and land-use patterns. Additionally, they may provide crucial evidence regarding environmental processes, such as erosion, inundation, and sedimentation, which can affect the preservation, integrity, or visibility of archaeological sites. The potential model recently completed for the Sault Ste. Marie archaeological master plan illustrates the utility of bringing geographical information systems (GIS) technology to bear on such questions and provides a particularly clear reminder of the importance of including paleo-environmental reconstruction in any modeling exercise.

**MacEachern, Scott (Bowdoin College) • Rooting the San: Reinscribing African Foragers in Human Genetic History [17]**

Over the last two decades, research in African historical genetics has focused on two issues: the origins of modern humans on the continent, and secondarily the Bantu expansion. Only the former research question has attracted widespread Western attention beyond academia, for obvious reasons. A significant element in this historical genetic research on modern human origins involves the rooting of genetic lineages, both mitochondrial and y-chromosomal, with African foraging populations, especially southern African San-speaking populations. Both academic and media representations of this research have portrayed these present-day African foraging populations as in some fashion ancient, more closely related to the ancestors of all modern humans and so divorced from the flow of time. This accords with 20th-century stereotypes of these groups, but raises fundamental issues of evolutionary understanding. In this paper, I will examine genetic representations of African foraging groups, and the ways in which we understand 'modernity' in modern populations.

**MacKay, Glen (Prince of Wales Northern Heritage Centre), Adrian L. Burke (Université de Montréal), Gilles Gauthier (Université de Montréal), Charles Arnold (University of Calgary) • Assessing the Long-Distance Procurement of Thunder River Chert by the Mackenzie Inuit Using Non-Destructive Polarized Energy Dispersive X-Ray Fluorescence [2]**

In his journal entry of July 24, 1789, Alexander Mackenzie noted that his party had passed a small river at each side of which the Natives and Esquimaux get flint. This location has been identified as the mouth of the Thunder River in the lower Mackenzie Valley. In this paper, we evaluate Mackenzie's observation that Inuit groups obtained raw material from this source. We use polarized energy dispersive X-Ray Fluorescence (P-ED-XRF) to compare the geochemical profiles of lithic raw materials from Thunder River and Kuukpak, a Mackenzie Inuit winter village located more than 400 km downriver of the Thunder River Quarry. Our results confirm that the Kuukpakngmiut obtained raw material from Thunder River. As immovable resources, quarries are fixed places in often shifting social landscapes. We draw on several historic references to examine the social context of Mackenzie Inuit use of the Thunder River Quarry, which appears to have involved long-distance travel into the territory of neighbouring groups.

**Mantha, Alexis (Champlain College, Saint-Lambert) • La vallée de Rapayán lors de périodes tardives de la préhistoire andine: Reconnaissance de terrain VS Google Earth [1]**

Cette présentation porte sur les groupes préhistoriques de la vallée de Rapayán dans les Andes centrales du Pérou lors de la période de l'Intermédiaire Récent (1000 à 1450 après J.-C.) et de l'Horizon Inca (1450 après J.-C. à 1532 après J.-C.). Depuis près d'une décennie, mon équipe et moi-même avons été en mesure d'identifier et d'étudier l'architecture de surface de quelques 80 sites distribués verticalement entre 2000m et 4500m d'altitude. Lors de nos maintes reconnaissances de terrain, les images satellites à haute résolution mises en ligne par Google Earth n'étaient pas encore disponibles pour cette zone des Andes centrales. Depuis lors, l'accès à ces images satellites

m'a permis de comparer et de corriger certaines informations colligées sur le terrain ainsi que d'approfondir certaines questions de recherche, notamment en ce qui a trait à l'occupation Inca de la vallée de Rapayán. Dans cette présentation, j'entends évaluer la contribution de Google Earth à la collecte de données par rapport aux méthodes de terrain plus traditionnelles.

**Marcoux, Francis (Cree Regional Authority), James Chism (Waskaganish Cultural Institute) • Nuutameshaanan, State of Knowledge of the EiGo-1 Site [18]**

This paper provides an overview of the ethnographic and archaeological knowledge of Nuutameshaanan (Smoky Hill), a Cree traditional fishing site of historical importance, attended for nearly 1500 years in the area of Waskaganish. For centuries, the Cree have been coming to the site in the fall to catch cisco by an ingenious system of fish weirs. The fact that eleven areas of the site were located may reflect the abundance and reliability of this resource. On such area, EiGo-1.10, is located on the 15 m terrace, on the portage trail. Its excavation has revealed a large quantity of stone tools and potsherds from the Middle Woodland. An occupation of the historical period with typical artifacts of the 18<sup>th</sup> and 19<sup>th</sup> century was also identified. The site is significant for the Crees of Waskaganish who consider it a landmark of their cultural identity.

*Nuutameshaanan : État des connaissances du Site EiGo-1*

Cette communication brosse un tableau des connaissances ethnographiques et archéologiques du site Nuutameshaanan (Smoky Hill), un lieu de pêche traditionnel cri d'importance historique, fréquenté depuis près de 1500 ans dans la région de Waskaganish. Depuis des siècles, les Cris se rendent sur le site à l'automne pour y prendre le cisco par un ingénieux système de trappes à poissons. Le fait que onze stations ont été localisées reflète peut-être l'abondance et la fiabilité de cette ressource. Une en particulier EiGo-1.10 se trouve sur la terrasse de 15 m, sur le sentier du portage. La fouille de cette station a révélé un riche outillage lithique ainsi que des tessons de céramique du Sylvicole moyen. Une occupation de la période historique avec des artefacts typiques du 18<sup>e</sup> et du 19<sup>e</sup> siècle a également été identifiée. Le site est significatif pour les Cris de Waskaganish qui y perçoivent un point de repère de leur appartenance culturelle.

**Markham, Samantha (Lakehead University, Thunder Bay) • Projectile Point Assemblage Variability at the Paleo-Indian Mackenzie 1 Site [19]**

The Mackenzie Sites appear to form part of the late Paleo-Indian Lakehead Complex that occupied the unglaciated peninsula between Glacial Lakes Agassiz and Minong at the end of the Pleistocene. While a number of archaeological sites and isolated Plano finds have been made throughout the region, most excavated collections are from large-scale quarry workshops, and have yielded vast assemblages of lithic debitage with comparatively few diagnostic tools. In contrast, the Mackenzie 1 Site appears to be an extensive and repeatedly used stream mouth habitation place exhibiting a broad range of stylistic influences represented in the projectile point assemblage. This paper will revisit the work introduced last year and preliminary results of the specific attribute analysis can be revealed. The thesis analysis will permit identification of statistically significant patterned variation that will challenge or support the definition of the Lakehead Complex. The surprisingly large sample of 370 points will in turn enable more credible comparison to late Paleo-Indian projectile point typologies developed in other regions.

**Martindale, Julie (University of Saskatchewan) • Bugged down: Mobility and the Exploitation of the Quarry of the Ancestors [2]**

Quarries are permanent fixtures on the landscape, and the importance of accessing them is often reflected in the mobility patterns and to some degree the organization of lithic technology among mobile hunter-gatherers. The scarcity of lithic resources in the northern boreal forest of Alberta would have posed a particular problem for mobile hunter-gatherers, especially given the challenges to mobility that were imposed by its rugged environment. Due to the limited raw material availability, when a lithic resource was located, it likely would have been heavily exploited, as is the case at the Quarry of the Ancestors. However, access and utilization patterns of such resources would have been impacted by seasonal conditions. In the winter, expansive muskeg and swamps would have frozen over, making mo-

bility and transportation in every direction easier. In the summer, long distances could be travelled by canoe on the various tributaries, streams, and rivers that spill into the Athabasca River, opening up the possibility of bulk transportation over longer distances. Acidic soils have destroyed organic materials that would have provided us with more information on subsistence patterns associated with the utilization of the Quarry, but it is useful to question whether hunter-gatherers organized their seasonal mobility around food resources or this permanent lithic resource or some combination of these depending on the time of year.

**Mason, Andrew (Golder Associates Ltd.) and Doris Zibauer (Golder Associates Ltd.) • Heritage Site Management Planning in British Columbia: Challenges and Opportunities [16]**

Using Vancouver as a backdrop, this presentation examines the current state of heritage site management planning in British Columbia. Specifically, shortcomings of the BC Heritage Conservation Act and the role of local government planning departments are outlined. Recent initiatives by the provincial Archaeology Branch and some municipal governments to address this issue are reviewed. The presentation concludes by looking at private sector planning tools used to manage heritage resources as part of an overall environmental management system or corporate social responsibility policy.

**Massé, Jessica (Archéotec inc.) • L'analyse taphonomique des ossements animaux. Exemples provenant des sites EjFt-003 et EjFu-010 [18]**

Selon Behrensmeyer et Kidwell, la taphonomie peut être définie comme l'étude des processus de conservation et de la façon dont l'information que contiennent les données fossiles peut être affectée (traduction libre). Ces processus sont conditionnés par les différents agents taphonomiques qui altèrent les assemblages osseux, tant avant qu'après l'enfouissement des vestiges. L'analyse des surfaces osseuses a pour but d'associer l'altération observée à l'agent qui en est responsable. Ces observations permettent ainsi de reconstituer l'histoire taphonomique de l'assemblage étudié, afin de comprendre son origine, ainsi que les conditions de son accumulation et de ses modifications. Par cette reconstitution, il est possible d'estimer la validité des informations en déterminant si la composition quantitative de l'assemblage archéologique mis au jour est représentative des faunes originellement exploitées. Divers exemples illustrent la contribution des analyses taphonomiques à l'interprétation des sites EjFt-003 et EjFu-010.

*The taphonomic study of animal bones. Examples from EjFt-03 and EjFu-10 sites*

According to Behrensmeyer and Kidwell the definition of taphonomy is «the study of processes of preservation and how they affect information in the fossil record». Those processes are caused by different taphonomic agents that deteriorate fossil assemblages, before and after burial. The principal goal of the analysis of bone surface is to link recognizable modification patterns to its taphonomic agent. These observations are then useful to reconstruct the taphonomic history of fossil assemblages and to understand their origin, formation and modification. The taphonomic reconstruction seeks to evaluate how faithfully original faunal assemblages have been recorded. Examples from EjFt-003 and EjFu-010 illustrate how taphonomic analysis can contribute to site interpretation.

**McClellan, Laurie (Burnside Heritage Foundation Inc.) • Recent Research at the Bloody Bay Cove Summit (DeAl-09), Part of the Bloody Bay Cove Quarry [2]**

Many pre-contact assemblages from northeast Newfoundland primarily, or completely, consist of rhyolite artifacts. The source for this stone was discovered in Bloody Bay Cove during the Burnside Heritage Foundation Inc.'s 1990 archaeological survey. While a few diagnostic artifacts have been found at small reduction stations skirting the rhyolite outcrops, the great majority of the assemblages recovered to date consists of undiagnostic flakes, cores, performs and hammerstones recovered from mixed context. Learning who made these unfinished artifacts is one of the goals of ongoing research in Bloody Bay Cove. Discrete activity areas throughout the Bloody Bay Cove Summit site (DeAl-09) suggest deposition during single knapping episodes or a few repeat visits. Recent partial excavation of one of these small sites suggests a Paleoeskimo activity area.

**Méhault, Ronan (Département d'anthropologie, Université de Montréal)** • *Regard macroévolutionniste sur la poterie du Sylvicole moyen ancien (400 avant notre ère. – 500 de notre ère) à la pointe du Buisson (BhFl-1d), Haut-Saint-Laurent, Québec* [20]

Cette communication permettra de présenter un projet de doctorat qui vise à identifier les caractéristiques technofonctionnelles et stylistiques des poteries produites au cours du Sylvicole moyen ancien au Québec. Un regard nouveau, inspiré du macroévolutionnisme, sera jeté sur un riche corpus archéologique. Ce canevas théorique réconcilie approche typologique et approche évolutionniste (ou populationnelle), qui mettent respectivement en évidence deux dimensions de la variabilité culturelle, 1 : Comportements propres aux artisans de cette période (optique synchronique); 2 : Interprétation sur le plan adaptatif (coût ou payoff) du processus évolutif qui oriente la variabilité de ces productions au fil du temps (optique diachronique). La transmission culturelle renvoie davantage à des mécanismes lamarckiens qui supportent la possibilité d'un changement brusque et transformationnel (saltationnisme). Ces mécanismes correspondent donc à une acception normativiste de l'évolution culturelle. Ils suggèrent en outre la possibilité que ce processus soit influencé par l'intentionnalité des artisans (explications téléologiques).

*Macroevolutionary insight on Early Middle Woodland (400 BCE-500 CE) pottery at Pointe-du-Buisson (BhFl-1d), Upper St. Lawrence, Quebec*

This communication will allow for the presentation of a PhD research project that aims to identify the technofunctional and stylistic characteristics of pottery manufactured during the Early Middle Woodland subperiod in Quebec. New insight, drawn from a macroevolutionary perspective, will be applied to a rich archaeological assemblage. This theoretical framework reconciles both the typological and the evolutionist (or population-thinking) approaches, which respectively outline two dimensions of cultural variability; 1: Behaviours favoured by pottery manufacturers (synchronic perspective); 2: Interpretation, in terms of adaptive responses, of the evolutionary process orienting the variability of these productions through time (diachronic perspective). Cultural transmission is better understood via Lamarckian mechanisms which support the possibility for evolutionary leaps (saltations) or transformations. These mechanisms therefore correspond to a normativist understanding of cultural evolution. They also suggest that this last process is likely to be influenced by the craftsman's intentionality (teleological explanations).

**Millaire, Jean-François et Edward Eastaugh (The University of Western Ontario)** • *Morphologie urbaine d'une cité ancienne du Pérou: une approche de télédétection intégrée* [1]

Nos travaux de prospection au Groupe Gallinazo (100 AEC – 700 EC), dans la vallée de Virú, ont mis en évidence les avantages d'une approche intégrée de différentes techniques de télédétection pour les sites archéologiques de la côte désertique du Pérou septentrional. Le Groupe, un site de 40 ha formé d'un réseau de maisons agglutinées, de places, de bâtiments civiques et de rues, était la capitale d'un état archaïque où vivait une population de plus de 10,000 personnes. En 2008, nous avons entrepris une analyse détaillée du paysage urbain de cette cité préhispanique utilisant le carottage, le magnétomètre et le géoradar. Nous présentons ici les principaux résultats de ce travail de terrain ainsi que le potentiel et les limites de chaque méthode utilisée.

**Miller, André (Groupe de recherche archéologique de l'Outaouais)** • *Variation stylistique de la céramique de la culture Pointe Péninsule et le changement culturel au Sylvicole moyen en Outaouais* [20]

Cette présentation explore les changements culturels, qui s'expriment à travers la céramique du Sylvicole Moyen, sur le site BiFw-6 du Parc du lac Leamy à Gatineau, en particulier le passage de l'homogénéité stylistique de la céramique au Sylvicole moyen ancien (AD 0-400/500) à une hétérogénéité stylistique de la céramique lors du déclin de la sphère d'influence de la culture Pointe Péninsule au Sylvicole moyen tardif (AD 400/500-1000). Notre étude a porté sur un échantillon constitué de près d'une centaine de vases décorés de styles décoratifs récurrents au Sylvicole moyen, notamment l'empreinte dentelée quadrangulaire, qui est une des principales techniques d'impression employée tout au long de la séquence du site, mais aussi de la composition globale des décors laquelle suit une ligne évolutive.

**Moloney, Mike (University of Calgary)** • *Applications of Space Syn-*

*tax in Maritime Archaeology* [9]

Space syntax – a methodology developed for analyzing the relationship between spatial structure and social processes – has been applied to architectural and settlement remains at several terrestrial archaeology sites, in an effort to better understand the socio-spatial dynamics at play. Such an approach has never been applied to ship structures. This paper will describe modern applications of space syntax to the architectural analysis of buildings and homes, and discuss the potential benefits of applying this type of analysis to better understand the social dynamics aboard ship structures of the past.

**Monchot, Hervé (Université Paris Sorbonne-Paris IV)** • *Cinquante ans après Taylor, la faune du site dorsétien de Tayara (KbFk-7) : état des lieux* [7]

Le site de Tayara a livré un assemblage faunique très bien conservé qui nous renseigne sur le comportement et les habitudes des Dorsétiens il y a plus de 2000 ans sur la rive sud du détroit d'Hudson. Cet assemblage est largement dominé par les mammifères marins, phoque annelé, phoque barbu et morse et à un degré moindre le béluga. Les mammifères terrestres sont dominés par les renards (roux et arctique) et le caribou. Enfin, signalons que les oiseaux, essentiellement des eiders, représentent une part non négligeable dans l'alimentation. Les études archéozoologiques et taphonomiques montrent que nous sommes en présence de petites occupations d'un groupe humain (certainement une ou deux cellules familiales) très opportuniste, qui s'est établi en un endroit stratégique sur l'île de Qikirtaq (i.e., terrain sableux, accès à l'océan), lieu de passages de nombreuses migrations animales (morse, beluga, eider...) durant la belle saison.

**Monchot, Hervé (Université Paris Sorbonne-Paris IV), Elspeth Ready (Stanford University), Elsa Cengic (Avataq Cultural Institute), Jennifer Bracewell (McGill University), and Daniel Gendron (Avataq Cultural Institute)** • *Saunitarlik (JiEv-15, Nunavik), a winter walrus kill-butchery site* [7]

The fauna from Saunitarlik is dominated by walrus, followed by ringed seal, bearded seal, and caribou. Dog, polar bear, beluga and a small rorqual (baleen) whales are also present in the assemblage. Osteometric study of the walrus mandibles indicates that the hunted population was essentially composed of juveniles, followed by females, and a few males. In view of walrus ethology and biology, this age structure suggests that JiEv-15 corresponds to a kill-butchery locale where walrus living on the northern side of the peninsula were hunted during the winter. Inuit groups occupied igloos near the butchery site and hunted walrus for ivory and blubber (possibly for commercial ends), as well for human consumption (of both fresh meat and igunak), and, in all likelihood, for dogfood. However, human diets at the site may have largely consisted of seals hunted in the vicinity as well as portions of caribou brought to the site.

**Monette, Yves (Musée canadien des civilisations)** • *Vingt fois sur le métier, remettez votre ouvrage* » disait Boileau ? [21]

Pour faire de la Science, il faut trois ingrédients : de la rigueur, de la rigueur et encore de la rigueur. Et comme n'importe quelle science moderne, l'archéométrie n'y échappe pas ! Reconstituer les comportements et activités des populations humaines passées à partir de l'analyse scientifique artefacts, de restes organiques ou de traces diverses est le défi que tente constamment de relever l'archéologue. Mais aux difficultés inhérentes au matériel étudié s'ajoute une panoplie de limites et de contraintes imposée par les techniques analytiques mises à contribution en archéométrie. Cette présentation cherche à faire le point sur la pratique de cette science et surtout à relever certains pièges en puisant dans son abondante littérature. Assistons-nous à une nouvelle génération d'alchimistes ?

**Mood<sup>1</sup>, Bryan J., Colin P. Laroque<sup>1</sup>, and André Robichaud<sup>2</sup>** (Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University; <sup>2</sup>Secteur des Arts et des sciences humaines (géographie et gestion intégrée des zones côtières), Université de Moncton, campus de Shippagan, Shippagan) • *Dendroarchaeological investigations at the Campbell Carriage Factory, Sackville, NB.* [13]

The Campbell Carriage Factory is of particular interest to a Sackville-based restoration society that refurbished the building, and reopened it to the public as a historical museum. The building was known to originally be a tannery, but was later converted to the carriage factory. The earliest dates of transactions at the carriage factory were known

to be from the mid-1850s, but the date of construction of the original tannery building remained a mystery. To end the mystery, we sampled beams from within the structure and compared them with other beams from a church at Barachois, NB. The beams from the nearby church were well documented from parish records indicating exactly when they were cut. Our dendroarchaeological study indicates that the original building was constructed between 1844 and 1845, only five to seven years before it was sold to the Campbell family to be turned into a carriage factory.

**Morin, Marie-Claude (Ville de Montréal) • *Trois places publiques, trois échelles d'interventions* [27]**

La Place D'Armes, le Quartier des Spectacles et la Place du Village sont des projets du domaine public qui supposent plusieurs phases de réalisation. Outre l'aménagement des lieux, ces projets impliquent des travaux de démolition, de nivellement, de réfection et de construction d'infrastructures où la ressource archéologique doit être prise en compte. Dans certains cas, la présence de cette ressource permet même d'orienter les concepts d'aménagement. Cette communication sera l'occasion de présenter les outils et moyens qui ont permis la planification de ces interventions ainsi que le cheminement de chacun des projets.

Place D'Armes, the Quartier des Spectacles, and Place du Village are projects located on public land involving several phases of achievement. In addition to the urban development of those tree locations, the projects will necessitate works of demolition, levelling, rehabilitation, and construction of new infrastructures where archaeological resources may be present, and must be taken into account. In some cases, such archaeological resources have even been used in the definition of the development concepts. This communication is an occasion to present the tools and means that allowed an appropriate planning of the projects, as well as the progression of each of these.

**Moss, William (Ville de Québec), Daniel Simoneau (Ville de Québec), and Michel Plourde (consulting Archaeologist) • *Québec City's archaeological master plan, a work in progress* [16]**

The City of Québec is developing an archaeological master plan for its territory which includes four legally-defined historic districts, one of which is a UNESCO world heritage site. The plan is being developed in the context of renewed provincial heritage legislation that will come into force in October 2012 and of the adoption of a revised urban master plan required under provincial legislation. The archaeological master plan will be accompanied by policy and programmes designed to foster public and promoter participation in the process. This paper will examine the methodology developed for the predictive modelling and will address challenges to policy and programme development.

**Nadeau, Jaclyn (University at Albany, New York State Museum) • *Typologies, Chronologies, and Cultural Markers: Reevaluating Transitional Archaic Broad-Bladed Bifaces* [25]**

This paper is the result of an ongoing research project into the technological and social changes of the Transitional Archaic of northeastern North America. This dynamic period in the region's prehistory is traditionally marked as the boundary between Archaic mobile hunter-gatherer-fishers and Woodland ceramic-producing, horticulturalists. Broad-bladed bifaces, one of the dominant point types at this time, are recognized throughout the Eastern Woodlands under a variety of classifications. Associated forms include: Savannah River, Koens-Crispin, Lehigh, Snook Kill, Perkiomen, Atlantic, Wayland Notched, Coburn, Dry Brook, Mansion Inn, and Orient Fishtail varieties (Pagoulatos 2009:222). Functionally, these are thought to be spearpoints, knives, and/or fishing implements and investigating their use and distribution has been a major focus of research into the Transitional Archaic. It is still unclear, however, whether their appearance is the result of adaptation, migration, or diffusion. I argue that we must couple this technologically oriented research with a renewed interest in the cultural context of these finds. Combining both functionally and ideologically based methods and theories should offer further insight into changing social and economic patterns.

**Neilsen, Scott (Labrador Institute of Memorial University) • *Regrettably, still implicit...* [3]**

In recent decades there has been a conjoint effort to develop the discipline of archaeology, both through advancements in theory and

in practice. Survey, excavation and laboratory techniques (e.g. GIS, paleo-botany and residue analysis) grow more advanced with the passing of each season, and sophisticated paradigms (e.g. critical theory, optimal foraging theory, feminism, and settlement analysis) are increasingly applied to the recovery and interpretation of archaeological data. Assuming these developments continue, it seems evident that archaeology will, and some would argue already has, become an academic discipline unto itself, outside the boundaries of anthropology. In this paper I argue that for this to be the case, for Academia and society to accept this as true – we must step back from the assertion of independent archaeological theories, which can be more simply considered methods for constructing archaeological narratives, and work to solidify a single framework and theory of archaeology.

**Noël, Stéphane (Université Laval) • *Eating like a Fisher Man: Faunal Remains as Social Markers in a French Seasonal Cod Fishing Site on the Petit Nord of Newfoundland* [8]**

From the early 16<sup>th</sup> century to 1904, exclusively male fishing crews ventured every year from France to the coast of Newfoundland, to catch and process codfish. They lived in seasonal fishing rooms established on the coast, sharing living space, food and most of their time with their fellow crew members. These fishing crews were socially stratified and one's position in the hierarchy could influence, for example, access to food. Moreover, tasks were clearly delineated and some men would do work that was then assumed to be part of the women's realm, such as cooking and serving food. By using historical accounts and zooarchaeological data from the fishing room of Champs Paya (EfAx-09), this paper explores the role of food and food consumption in the construction and negotiation of class and gender identities in a male-only community.

**Norder, John (Michigan State University) • *Sacred Places and Social Landscapes in Northwestern Ontario* [22]**

The rock art of northwestern Ontario, part of the larger Canadian Shield Rock Art Tradition, forms a corpus of sites that constitute one of the few remaining visible components of the ancestral social landscape of Algonquian-speaking peoples. The placement of these sites on the landscape not only mark locations of sacred significance, their spatial distributions contribute to a pattern of social organization and structure that have served to guide the behaviors and beliefs of the descendant peoples for generations through European contact and up to the present. This paper explores the idea that the placement of rock art sites is an act that transcends relatively simply interpretations of religious and spiritual performance and is one that is, instead, deeply imbedded within ideologies and practices associated with the maintenance of broader social order.

**Norman, Lauren (University of Toronto) • *Seasonal Spaces: An archaeofaunal spatial comparison between cold- and warm-season dwellings at the Pembroke Site, Nunavut* [7]**

The Pembroke Site is a short-term Thule Inuit habitation site located on Victoria Island, Nunavut. In 2009, two cold-season dwellings and one warm-season dwelling were excavated. These dwellings were originally assigned warm- or cold-season designations based on their architecture; these designations were further validated by the faunal data. Additional analyses of the faunal data highlight the differences of spatial patterning in seasonal dwellings. The short-term nature of the occupation (one or two years) and the excavation of well-preserved cold- and warm-season faunal assemblages facilitated the intra-feature spatial analysis and enabled comparisons of the seasonal dwellings. In this paper, I compare and contrast the spatial patterning in the seasonal dwellings. Both dwellings have similar species representations and a distinct platform/living surface division; however, the warm-season dwelling had much less distinct activity areas than the cold-season dwellings.

**Norris, Dave (Western Heritage, Winnipeg) • *Archaeology in Northern Ontario: How Modern Day Roads are Discovering Ancient Travel Corridors* [19]**

The twinning of the TransCanada highway (Hwy #11/17) in northern Ontario has led to the discovery of several Paleo-Indian sites along ancient Minong beach strand lines. One site in particular, the Mackenzie 1 site, has yielded significant amounts of artifacts, including projectile points, scrapers, drills and bifaces. These artifacts shed light on past paleo lifeways on a scale not seen previously in northern

Ontario. This presentation focuses on the assemblage and preliminary site analysis from the viewpoint of a consulting archaeologist. It will also offer introspective thoughts from the lead archaeologist regarding items found in the artifact assemblage and preliminary ideas of site function.

**Oetelaar, Gerald (University of Calgary) • *Theory and Evidence: The Tyranny of Scientific Objectivity in Archaeological Practice* [3]**

Although humans interpret and explain the world around them from a variety of different perspectives, they all rely on empirical evidence to validate their explanations of phenomena. Approval of the evidence as support for a particular interpretation requires an acceptance of alternative worldviews and their respective theoretical frameworks. Archaeologists trained in the western scientific tradition accept as evidence only those data that are consistent with their theoretical constructs and reject as metaphysical all explanations of the world proffered by indigenous populations. In fact, indigenous interpretations and explanations of natural or cultural phenomena are supported by empirical data and are capable of being subjected to rigorous scientific testing. However, researchers must be willing to accept alternative worldviews and the associated theoretical frameworks to evaluate the relevance and admissibility of the evidence rather than simply privileging the data that is consistent with their western worldview. In this paper, I challenge the supposed scientific objectivity of current archaeological practice by exploring the nature of the relationship between theory and evidence in western and indigenous science.

**Oliver, Jeff (University of Aberdeen) • *Archaeological Theory and the Indigenization of Canada's past* [3]**

In an age of theoretical awareness (or at least its aspiration), the development of an Indigenous perspective is now widespread, if not de rigor, in Canadian archaeology. Largely as a consequence of the increasing global influence of postcolonial thought, 'doing' the archaeology of decent communities carries the responsibility of seriously engaging with contemporary Indigenous voices and identities. More controversially, it is also often concerned with transposing contemporary value systems on people in the past. This paper briefly traces the historical development of archaeologies of Indigenous identity in Canada by connecting the role of diverse influences, from movements within the colonial and post-colonial state to the condition of postmodernity. Through outlining the contours of an emerging intellectual climate, it asks the question: are we closer to understanding the past?

**Orchard, Trevor J. • *Salmon or Herring, Clams or Mussels?: Regional Trends and Local Variations in Fisheries and Shell-fisheries during the late Holocene in Southern Haida Gwaii, British Columbia* [14]**

Traditional Northwest Coast fisheries are often stereotyped as having a primary focus on salmon, with regional variations in secondary fish resources largely tied to particular cultural groups, and with shellfish forming a low-level staple to be consumed in periods of hardship. Ongoing research in southern Haida Gwaii points to a much more subtle pattern of local and temporal variability. Salmon, while undoubtedly an important resource in the region, shows striking trends in relative abundance across temporal (millennial) and geographic scales, with other fish taxa, most notably herring and rockfish, sometimes dominating late Holocene faunal assemblages. Likewise, shellfish use is highly variable, and seems to be structured by geographic and ecological variations. As a whole, these patterns point to highly flexible approaches to fisheries and shell-fisheries in late Holocene southern Haida Gwaii, with populations focusing on local resources and responding to local and temporal variations in resource availability.

**Owen, J. Victor (Department of Geology, Saint Mary's University), Nick Panes (Sanderstead) • *Microstructures of 1<sup>st</sup> patent Bow porcelain (c. 1744-1749): evidence for the behaviour of alkali-lime glass frit during the firing of siliceous-aluminous-calcic ceramics and implications for melt fertility* [21]**

Microstructures and phase compositions reveal the behaviour of alkali-lime glass frit during the kiln firing of an S-A-C porcelain artifact with a composition consistent with 1st patent (1744) Bow porcelain. The frit behaved as an alkali delivery system to the clayey (metakaolin) matrix. Alkalis diffused at subsolidus temperatures, rendering the frit relatively refractory. Partial melting subsequently occurred at the frit/metakaolin interface, creating siliceous coronas on the frit, which subsequently devitrified to symplectic intergrowths of

silica polymorphs, diopside + pseudowollastonite. Corona margins served as a crystallization front from which calcic plagioclase grew, extracting lime from the coronas as they advanced into metakaolin domains, gradually consuming them. The resultant feldspathic matrix is porous, suggesting that this was a subsolidus process. Unlike soluble alkali carbonates used in some other porcelain pastes, the frit represented a point source of fluxing components that controlled the melt fertility of the porcelain paste on a domain scale.

**Parent, Caroline (Université Laval) • *L'hygiène au XVIII<sup>e</sup> siècle : une étude des latrines du second palais de l'intendant à Québec* [12]**

Le XVIII<sup>e</sup> siècle est un contexte intéressant pour étudier l'hygiène, particulièrement car il marque un tournant dans l'histoire des mentalités : c'est une époque de transition vers l'époque contemporaine. Ainsi, plusieurs changements ont lieu dans toutes les sphères de la société, notamment dans le domaine de l'hygiène. Il sera question dans cette communication de l'hygiène dite publique (infrastructures et législation) et celle dite domestique (utilisation de lieux à vocation sanitaire comme des latrines). Les latrines du second palais de l'intendant à Québec, construites vers 1719/1722, s'inscrivent dans un cadre normatif établi. Quand est-il de leur construction à proprement dite? Est-ce que les différents éléments structurels qui composent ce complexe sanitaire respectent les normes architecturales de l'époque? Comment s'effectuait l'entretien? La découverte de plusieurs conduits d'évacuation des déjections suppose un mode de fonctionnement propre. Le recours à une modélisation 3D s'est avéré nécessaire pour répondre à toutes ces questions et avoir une meilleure idée de leur utilisation.

**Patenaude, Benjamin (Avataq Cultural Institute) • *Preliminary Results of the 2010 and 2011 Excavations at Point Ford (Kangiqsujuaq, Nunavik)* [7]**

The area that surrounds the present day community of Kangiqsujuaq (Nunavik, Quebec), has been witness to extensive occupation by human groups throughout the pre-historic and historic periods. Situated approximately 2.5 km to the Northwest of Kangiqsujuaq, Point Ford is one location that demonstrates this history of occupation for the area. The Quarrait site (JjFa-1) is situated along the Northern side of Point Ford. The first formal excavations at Quarrait were conducted by Avataq Cultural Institute during the summer of 2010 and 2011 at the request of the Nunaturlik Landholdings Corporation of Kangiqsujuaq. These investigations were carried out within the context of a field school aimed at promoting local history and the continued development of a cultural tourism package for the area. This paper presents the preliminary results of these excavations.

**Patton, A. Katherine, Trevor J. Orchard and David Bilton • *Reconciling irreconcilable differences: the variable importance of fisheries and shellfisheries on the Northwest Coast* [14]**

Prior to recent decades, research into Northwest Coast subsistence consistently emphasized the role of vertebrates in pre-contact economies, with shellfish commonly viewed as "background noise". In contrast, more recent work has begun to more systematically examine shellfish use, with a number of important studies exploring how shellfish harvesting practices were incorporated into regional settlement and economic systems. None of these studies, however, have tried to integrate vertebrate and invertebrate data systematically. In this paper, we compare the abundance of vertebrate and invertebrate data from archaeological sites in three British Columbia locations: Prince Rupert Harbour, Haida Gwaii, and northern Gulf of Georgia. We consider how the abundance of shellfish remains in relation to fish remains differs between these regions and what this patterning reveals about the relative importance of these resources in three key areas of the Northwest Coast. We also discuss the methodological problems that archaeologists have encountered trying to integrate these data sets.

**Paxton-MacRae, Mark (Western Heritage, Winnipeg) and Terrence Gibson (Western Heritage, St Albert) • *Excavation and Preliminary Interpretation of the Hodder East Site, Thunder Bay* [19]**

During the summer of 2011 excavations took place at Hodder East, DcJh-44, at an apparent Lakehead Complex site on a rise of land less than a kilometre from the Current River on the eastern edge of Thunder Bay. Originally discovered in 1993, the site sits less than half a kilometre to the east of the Naomi site, DcJh-42, of apparently similar

age. The site's recoveries consist of a mixture of early manufacturing stage bifaces, some tools, cores and a great deal of debitage. The site is close to a number of other small sites and may represent an early stage lithic reduction location within a localized region containing several possible taconite quarry sites. This paper examines the artifactual and stratigraphic data collected, and discusses the site's internal character and how it compares to other Lakehead Complex archaeological sites in the Thunder Bay region.

**Pépin, Yoann (Université de Montréal) • *La production et l'organisation technologique de la pierre polie dans les campements de la moyenne vallée du Saint-Laurent, 5500-3000 AA* [25]**

C'est bien connu, l'archaïque terminal se distingue des périodes précédentes par sa complexification, et des suivantes par l'absence de poterie amérindienne. Une complexité qui se prolonge au travers des sous-systèmes sociaux, économiques et technologiques. En mettant de l'avant l'organisation et la production des objets polis bouchardés provenant des fouilles du site CeEt-481, il est possible de nuancer ces affirmations. Situé à l'entrée de la moyenne vallée du Saint-Laurent, le site rassemble plusieurs occupations de la fin de l'Archaïque supérieur (5500 à 3800 AA. (non cal.) et de la période terminale 3800-3000 AA. (non cal.). Les défis inhérents face à l'analyse des objets polis, encouragent fortement les lithiciens à s'attarder aux processus qui déterminent la formation des assemblages et les modes d'occupation du territoire. Ces facteurs sont ainsi déterminants sur la composition, l'état et l'apparente complexité de l'outillage poli, servant encore parfois d'étiquette pour une culture entière.

*Production and technological organisation of ground stone artefacts in the central valley of the St. Lawrence River during the Archaic period*

From the archaeologist's perspective, the end of the archaic period is a blend of social, economic and technological complexity. If placing at the foreground the organisation and production of ground stone artifacts, this complexity is much less obvious. In fact ground stone objects, tool or production debris are particularly subject to be influenced by formation process of archeological sites and by individuals' settlement patterns. These factors are determinant to the composition, state and complexity of the overall ground stone organisation. Situated in the central valley of the St. Lawrence River, CeEt-481 is a multicomponent site mainly occupied from late to terminal archaic. A wide variety of ground stone objects has been discovered and is used to understand the formation of this category of the lithic assemblage and the general organisation in ground stone technology for those people.

**Perreault, Christine (Université de Montréal) • *Conservatisme et innovation chez les potières iroquoiennes du site Droulers-Tsiionhiakwatha* [5]**

La tradition céramique du site Droulers, daté de la fin du 15<sup>e</sup> siècle de notre ère et situé dans la région de Saint-Anicet, reflète autant les tendances stylistiques générales du Sylvicole supérieur que celles des Iroquoiens du Saint-Laurent. Elle se présente sous des formes et des styles décoratifs à la fois variés et récurrents. Toutefois, les tendances qui en découlent ne semblent pas conformes à l'évolution stylistique des vases iroquoiens du Saint-Laurent de la province occidentale. En effet, le décor au dentelé, style décoratif qui remonte à la période du Sylvicole moyen, est présent en quantité importante dans tous les secteurs du site, et parfois en combinaison avec des motifs et des formes considérés récents. Ces vases exprimeraient à la fois un certain conservatisme des traditions décoratives et un souci d'innovation en associant ce décor à des formes nouvelles et progressives. Ainsi, nous cherchons à savoir pourquoi le décor au dentelé est aussi important sur un site considéré récent et en quoi cela nous informe-t-il sur les familles et les clans ayant habité ce site villageois. Nous croyons que les caractères conservateurs et innovateurs des vases décorés au dentelé ont joué un rôle dans la reconnaissance d'une identité villageoise, mais que ce décor peut poser problème pour la datation de notre assemblage.

*Conservatism and innovation in the decoration of Iroquoian pottery at the Droulers-Tsiionhiakwatha site*

Located in the Saint-Anicet area, the Droulers site ceramic tradition reflects the stylistic trends of the Late Woodland period and of the St. Lawrence Iroquoians who inhabited this site during the late 15<sup>th</sup> century. The pottery from this site has variable but recurrent shapes and

decorative styles. These decorative and stylistic trends do not however seem to follow the same stylistic evolution that many authors attribute to typical St. Lawrence Iroquoian vessels of the Western Province. In fact, the dentate stamp that originated during the Middle Woodland period is seen in important quantities in all areas of the site. This particular motif is often seen in combination with more recent pottery shapes and styles. This pottery therefore expresses a certain conservatism of decorative traditions and innovation by associating this motif to new and progressive forms. The purpose of this presentation is to examine why the dentate stamp is so widely used at the Droulers site and what this can teach us about the families and clans that inhabited this village. We believe that the conservative and innovative characteristics of the dentate stamped pottery play a role in the cultural identity of a village, but that this decor may however pose a problem when dating our ceramic collection.

**Phaneuf, Erik (AECOM) • *Beach shipwreck assessment in Douglstown, Gaspésie, Québec (DeDc-6)* [9]**

On the 6 of December 2010, the shores of the Gaspé Peninsula and the North-Coast of the province of Quebec were battered by a vicious storm. Destroying many houses along the coast, it also unearthed part of the hull of a ship on a distant section of the Douglstown beach in Gaspé town. After it was published in the local newspaper, the Ministère de la Culture, des Communications et de la Condition féminine du Québec, Direction de Gaspésie-les-Îles-de-la-Madeleine, mandated an assessment of the remains. Lying on its starboard side with its stern pointing towards the bay, the remains included 16 metres of tips of frame timbers protruding from the beach with a section of the portside left hanging in mid-air. Many artefacts littered the inside of the wreck. This presentation outlines the assessment of what seems to be a locally constructed mid-19<sup>th</sup> century 50-ton vessel.

**Pisarcic, Michael FJ., Trevor J. Porter, Peter de Montigny, Melissa Dick, Joelle T. Perrault, Kerry-Lynn Robillard and Ève Wertheimer (Carleton University, Ottawa) • *The use of salvaged white pine river logs for dendroarcheological dating in eastern Ontario, Canada* [13]**

Ottawa, Canada was an important centre in the timber trade of the 19<sup>th</sup> and 20<sup>th</sup> centuries. Old-growth white pine (*Pinus strobus*) was abundant and valued for shipbuilding. Because of high demand, the timber trade removed most old-growth white pine in eastern Ontario. Therefore, the potential to develop long, regionally representative tree-ring records is limited. However, logs lost to the bottom of rivers during log drives are being recovered and provide a unique opportunity to develop tree-ring records. Using recovered white pine logs and living trees, we developed a well-replicated chronology spanning AD 1670-2009. The utility of our multi-centennial white pine chronology for dating historic structures was also tested. We successfully dated several structures that previously had no historic timeline associated with them, while also corroborating or refining the history of a number of others including buildings on the grounds of the Governor General's residence.

**Plourde, Michel (Archéologue consultant) • *L'exploitation du phoque dans le secteur de l'embouchure du Saguenay (Québec, Canada) par les Iroquoiens au Sylvicole supérieur (1000-1534 de notre ère)* [5]**

Au cours de la période comprise entre les années 1000 et 1500 de notre ère, le secteur de l'embouchure du Saguenay aurait été exploité par des groupes Iroquoiens du Saint-Laurent en quête de ressources marines, et plus particulièrement du phoque. Ces groupes provenaient vraisemblablement de la région de Québec où se trouvaient leurs camps de base et auraient ainsi développé une forme d'adaptation aux ressources marines de l'estuaire, faisant d'eux les groupes iroquoiens les plus mobiles de toute la vallée du Saint-Laurent. Nous proposons que l'exploitation des mammifères marins fût pratiquée en deux temps, d'abord au printemps, lors de courtes périodes par des groupes de chasseurs masculins attirés par le phoque du Groenland et puis en été, par des familles entières profitant de la présence de phoques gris et commun. Les pinnipèdes étaient probablement traqués sur la batture ou sur les glaces et abattus à la hache ou au gourdin. Puisque les résidus alimentaires retrouvés dans les vases de cuisson étaient surtout composés de poissons et de mammifères terrestres, il est supposé que des sous-produits de la chasse au phoque aient été rapportés dans la région de Québec et utilisés comme réserve de nourriture, comme matière première ou comme monnaie d'échange. Nous défendons également l'hypothèse que ces

excursions dans l'estuaire n'étaient pas nécessairement liées à la précarité de l'agriculture dans la région de Québec puisque cette pratique aurait été adoptée tardivement, soit après 1300 de notre ère et peut être même à partir de 1400 de notre ère. Les données sont issues de six sites ayant fait l'objet de fouilles et qui sont répartis sur une bande littorale de 40 km de long comprise entre Baie-Sainte-Catherine et Les Escoumins.

**Pokotylo, David (UBC, Vancouver), Nicholas Waber (University of British Columbia, Vancouver), Sandra Peacock (University of British Columbia, Okanagan) and Brian Kooyman (University of Calgary)** • *Dating a Stratified Microblade Component at the White Rock Springs Site, Southern Interior British Columbia* [11]

The antiquity and duration of microblade technology on the British Columbia Southern Interior Plateau has been problematic due to a minimal number of securely dated contexts, particularly in upland areas. We report the occurrence of a microblade assemblage stratified below radiocarbon dated toss-zone deposits of an earth oven feature at the White Rock Springs site in Upper Hat Creek Valley, BC. On the basis of earth oven usage history, we propose that microblades could have been made and used at this site as late as ca. 1860 BP. This dated context supports the hypothesis of the persistence of microblade technology at logistical camps with mobile settlement strategies in upland areas of the Plateau into the late pre-contact period.

**Ponomarenko, Elena V. (Ecosystem Archaeology Services, Ottawa)** • *Human Visibility in Maritime Landscapes: Anthropogenic Ignition of Hurricane Debris* [31]

According to our findings, tree uprooting caused by hurricane-speed winds creates in the soil a specific signature (trace fossil) that enables site-specific reconstruction of past hurricanes. Trace fossil analysis of soils in Kejimikujik National Park (Nova Scotia) revealed presence of three to four generations of hurricane-caused tree uprooting structures in each of 40 study sites within the area of 400 square kilometers. Many paleo-hurricanes were followed by fires. Timing of the hurricane events was determined by radiocarbon dating of charcoal associated with coupled hurricane-fire events. During the time period from 300 to 10000 years ago, the study area has been affected by 18 hurricanes, with the average frequency of the events peaking in the last millennium (~every 200 years). Prolonged breaks in fires that followed the hurricanes (e.g., between AD500 and AD1100) were attributed to the lack of camp sites/open hearths in the area during the breaks.

Visibilité humaine dans les paysages maritimes. La mise au feu anthropogène des débris d'ouragan. Selon nos recherches, le déracinement d'un arbre par un vent d'ouragan laisse une « signature » typique (chablis fossile) dans le sol, permettant la reconnaissance d'épisodes d'ouragan dans le passé. L'analyse des chablis fossiles au Parc national de Kejimikujik en Nouvelle-Écosse révèle la trace de trois à quatre chablis cycloniques à chacun des 40 sites étudiés dans une aire de 400 km<sup>2</sup>. Le feu a suivi plusieurs paléocyclones : il en reste des charbons permettant la datation radiocarbone des tempêtes. Entre 10 000 et 300 AA, 18 ouragans se sont abattus sur l'aire à l'étude (~ à tous les 200 ans), avec un pic de fréquence au dernier millénaire. Nous recensons aussi des pauses prolongées du rythme d'incendies post-cycloniques (par ex., entre 500 et 1100 de notre ère), que nous attribuons à l'absence de feux de camp ou d'autres incendies anthropogènes dans la région.

**Pope, Peter E. (Department of Archaeology, Memorial University)** • *Fisher Men at Work: the Material Culture of the Champs Paya Fishing Room, as a Gendered Site* [8]

The migratory salt cod fishery created archaeological sites along North America's Atlantic coasts which are gendered: the material expression of men living, temporarily, without women. By 1541, European fishermen were using Cape Rouge Harbour in northern Newfoundland as a seasonal shore station. By 1640, one of the fishing rooms there was known to Breton crews as Champs Paya, a choice location which remained in seasonal use until the end of the 19<sup>th</sup> century. As part of the research project An Archaeology of the Petit Nord, a Memorial University team excavated this site, between 2006 and 2011. This paper asks how the gendered character of the site is expressed in the material record, with special attention to site features and to ceramic finds, including the brown faïence, Breton and Liguarian earthenwares and Normandy stonewares recovered.

**Popkin, Peter and Thanos Webb** • *Re-examining deer populations in ancient Huronia* [4]

The territory of Huronia, between Lake Simcoe and Georgian Bay, was home to a population of Iroquois for several centuries prior to contact with Jesuit missionaries, French traders, and Samuel de Champlain in the 17<sup>th</sup> century. Archaeologists claim that while deer, particularly white tailed deer (*Odocoileus virginianus*), was an important source of meat, hide and bone for the Native population, the territory of Huronia was poor in this resource relative to neighbouring territories particularly those occupied by Neutral and Petun. We assess the veracity of this claim by determining the potential for deer populations in ancient Huronia through an analysis of numerous sources including ethnographic data, faunal studies and modern deer population estimates.

**Porter, Meaghan (Stantec Consulting Ltd.)** • *Why on earth would you want to knap this? A preliminary assessment of site FbPi-8 and the use of Red Deer Mudstone* [2]

Archaeological workshop and campsite FbPi-8 is over 600 m long east-west along the upper terrace of the Red Deer River. The initial excavations occurred in 2011 resulting in the recovery of over 30,000 artifacts including lithic material, faunal remains and fire broken rock. The principal lithic material used is a highly variable local mudstone which has vertebrate fossil inclusions throughout (including freshwater sponges). A recorded quarry source for this material (called Red Deer Mudstone, 'bog' material and Paskapoo Chert) is located on the south side of the river just across from FbPi-8. This presentation will explore this unique yet challenging material type and provide a preliminary discussion of the site.

**Poudret-Barré, Alexandre (Association Adramar)** • *L'Atlas archéologique des 2 Mers : un projet archéologique transfrontalier The Archaeological Atlas of the 2 Seas: a cross-border archaeological project* [9]

L'Atlas archéologique des 2 Mers (A2S) est un projet européen de valorisation du patrimoine sous-marin de la Manche et la Mer du Nord. Il regroupe trois partenaires : l'Adramar, Héritage Flandres et le HWTMA. La volonté de ce partenariat est de mettre en commun les ressources et les savoir-faire nationaux afin de promouvoir la recherche en archéologie sous-marine. Cette collaboration est soutenue par trois des principaux organismes de recherches et de gestion de l'archéologie sous-marine en Europe et s'appuie sur l'implication active de bénévoles passionnés. Le projet A2S a pour objectif de rassembler à travers une interface cartographique en ligne des informations issues de recherches documentaire et d'opérations archéologiques sous-marines afin de les diffuser à un large public. De plus les partenaires développent des actions de médiation du patrimoine archéologique sous-marin vers les scolaires.

**Poulin, Daniel (Arkéos inc.)** • *Les occupations du site EkFs-03 à la fin du XIII<sup>e</sup> siècle de notre ère* [18]

Le site EkFs-003, sur la rivière Lemare, constitue le site le plus imposant, mis au jour dans la portion des biefs aval de la dérivation Rupert, tant par le nombre de structures (23) que la quantité d'objets témoins lithiques (16213). Les datations radiocarbone, au nombre de 13, s'échelonnent de 4580-4420 ans BP pour la structure 14 à 0 ans BP pour la structure 2 couvrant la période connue pour l'occupation du territoire du projet EM-1A. Plus particulièrement, cette étude s'intéresse à la période comprise entre 1170-1280 ans de notre ère à laquelle cinq foyers (ST-1, ST-5, ST-9, ST-12 et ST-18) du site EkFs-003 sont rattachés par la datation radiocarbone.

*The occupations at the EkFs-03 site at the end of the 13<sup>th</sup> century CE*

The EkFs-003 site, located on the Lemare River, is the largest site brought to light in the lower reservoir of the Rupert diversion area, whether measured by the number of structures (23) or number of lithic artifacts (16,213). The 13 radiocarbon dates range from 4580-4420 BP for structure 14 to 0 BP for structure 2, covering the whole period of known occupation of the EM-1A project area. This paper focuses on the period between 1170-1280 CE, during which five hearths can be associated by radiocarbon dating.

**Prince, Paul (Grant MacEwan University) and Deanna McAvoy (Grant MacEwan University)** • *Where Are the Deer? Prey Selection and Taxonomic Representation in Faunal Assemblages From Central*

### British Columbia [11]

Faunal assemblages from several late prehistoric sites in the central interior of BC are evaluated against prey selection models, which typically emphasize that body size and abundance govern forager's subsistence choices. In the central interior of British Columbia, the historic staple of Carrier populations was sockeye salmon, which fluctuated cyclically in abundance and were complemented with a wide range of terrestrial fauna. These game animals are difficult to rank according to most prey selection criteria, which predict cervids should be favoured. In the archaeological assemblages, few salmon elements are preserved, and a wide range of terrestrial fauna are represented, but not many cervids. This leads us to explore the possibilities that taphonomic factors have biased the representation of cervids, that body size is not a good predictor of prey choice in this case, or that prey selection models are just not applicable.

**Quann<sup>1</sup>, Sarah L., Amanda B. Young<sup>1</sup>, Colin P. Laroque<sup>1</sup>, Howard J. Falcon-Lang<sup>2</sup> and Martin R. Gibling<sup>3</sup>** (<sup>1</sup>Mount Allison Dendrochronology Laboratory, Department of Geography, Mount Allison University; <sup>2</sup>Department of Earth Sciences, Royal Holloway, University of London, Egham; <sup>3</sup>Department of Earth Sciences, Dalhousie University) • *Dendroarchaeological evidence of coal extraction time periods, Joggins Fossil Cliffs, Nova Scotia, Canada* [13]

Joggins, Nova Scotia, was one of the first places in North America where coal was mined. Remnants of these underground mines are now being exposed by cliff retreat, allowing for investigation into past mining activity. Dendrochronological methods were employed to date exposed timber pit props from 14 openings preserved within the relic coal mine workings on the adjacent Fundy and Dirty seams. Of the 73 samples collected, 48 were successfully cross-dated against a local red spruce (*Picea rubens* Sarg.) master chronology, thereby establishing the year in which each individual sample was cut as a live tree. Results indicate cut dates of 1849-1875 and differentiate two distinct phases of mining, which are generally consistent with written archival records of mining activity on these coal seams. Findings improve knowledge of the industrial archaeology of the UNESCO World Heritage Site and help refine the regional master red spruce chronology for future dendrochronological studies.

**Ramsden, Peter (McMaster University (Retired))** • *A Reconsideration of St. Lawrence Iroquoian Artifacts in the Trent Valley and Beyond* [5]

This presentation examines the significance of St. Lawrence Iroquoian pottery and other artifacts on sites in the Trent Valley, as well as in parts of Huronia and the adjacent Canadian Shield. While some of these occurrences are indicative of the presence of St. Lawrence Iroquoian populations, in other cases they may simply reflect the eclectic nature of material culture in the Late Woodland Northeast.

**Rankin, Lisa K. (Memorial University)** • *Wishful Thinking* [23]

What does it take to pull together the kind of controversial, interest-peaking, plain language paper that we have come to expect from Peter Ramsden? According to the man himself it is a matter of deciding what figures to use and explaining your way around them. However, archaeological theory would suggest that in order to understand the ideas developed by a specific individual we must also understand the context in which the ideas were created. This paper will fuse both processes by first selecting the images and then attempting to contextualize the Ramsden brain.

**Read, Christopher (Institute of Technology Sligo, Ireland)** • *Deviant burials and the Undead in Medieval Ireland: Evidence from The Bishop's Seat Kiltasheen Co. Roscommon* [23]

The excavation of a number of Early Medieval (8<sup>th</sup>/9<sup>th</sup> century AD) deviant burials at The Bishop's Seat, a high status, Gaelic ecclesiastical site in the Northwest of Ireland has shed light on the likely belief in Revenants, an undead reanimated corpse. A deviant burial is simply one that deviates from the standard Christian rite and with these examples, deliberate steps were taken to insure the bodies did not come back to life. This paper will present the excavation and analysis of these burials within the wider context of the site and deviant burials from other parts of Ireland and Europe, demonstrating a belief in and a fear of the undead several centuries before the vampire scares of the Later Medieval period. The Kiltasheen Archaeological Project is an international, interdisciplinary project funded by the Royal Irish Academy.

**Ribot, Isabelle (Université de Montréal) et Fanny Morland (Université de Montréal)** • *Bilan des recherches récentes en paléonutrition au Québec* [24]

Afin de mieux comprendre l'évolution de l'alimentation en milieu urbain entre les 17<sup>e</sup> et 19<sup>e</sup> siècles, les isotopes stables du carbone et de l'azote (collagène de fragments de côtes, n=132) ont été analysés pour deux populations: Notre-Dame (Montréal, 1691-1796); et Saint-Matthew (Ville de Québec, 1771-1860). D'après les valeurs obtenues ( $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$ ), les Euro-Québécois consommaient des aliments variés comme chez les Européens et Nord Américains d'origine européenne: des ressources C3 (céréales, légumes, fruits), quelques aliments riches en protéines (viande, poisson) et occasionnellement des ressources C4 (maïs, canne à sucre). Des différences nutritionnelles significatives ont été notées entre plusieurs groupes d'âge (0-2 ans; >2-11 ans; >11 ans), suggérant une phase de sevrage (1½-2 ans) et des variations entre adultes et non adultes. En particulier pour les enfants de St-Matthew, le déroulement de ces changements alimentaires et leur impact possible est exploré en lien avec la croissance et la sévérité des paléopathologies.

**Richard, Pierre J.H., Tamyia Elkadi et Louis-Philippe Roy (Laboratoire Jacques-Rousseau, Département de géographie, Université de Montréal)** • *Paléogéographie post-champplainienne de la région de Bécancour, Laurentie trifluvienne* [29]

Les sédiments des lacs Saint-Paul (1,8 m) et aux Outardes (3,3 m), et les couches de la tourbière (1,15 m) dans la Réserve écologique Léon-Provancher (à 6-7 m d'altitude) près de Bécancour, furent caractérisés par pyrolyse. Des macrorestes végétaux furent datés au <sup>14</sup>C (n=11). La tourbière est récente (1800 A.D.). Les dépôts sous-jacents et les sédiments des lacs sont des alluvions silteuses charriées par les eaux du fleuve et celles de la rivière Bécancour. Elles remontent à 3000 ans au lac Saint-Paul. Les sédiments au lac aux Outardes se sont accumulés entre 9700 ans et 7000 ans avant l'Actuel, et depuis 3500-3000 ans. Entre les deux périodes, il y eut un arrêt des apports sédimentaires sans doute causé par une inondation de la vallée corrélative de la Seconde Transgression laurentienne identifiée dans l'estuaire maritime du Saint-Laurent entre 7000-6750 et 3250 ans avant l'Actuel. Cela indique une longue inversion dans le processus d'exondation postglaciaire des basses terres laurentines durant l'Archaïque récent.

**Richmond, Thomas A. (Cornell University, Ithaca)** • *The Bennett Tavern and La Chasse-galerie... (The Flying Canoe)* [13]

Nestled literally in the middle of nowhere on the Unadilla River, between Oneonta and Utica, there is a historic tavern outside of New Berlin, New York. Dating back to the period 1783-1789, the building was moved and merged with a newer building between 1790 and 1810, and its present condition no longer belies its spirit-tinged past. An adjacent Hop-Barn, however, is on the National Register of Historic Places. Now, based on research by Dr. Carol Griggs, the pine used in the construction of the tavern has been tied by the use of dendrochronological methods to another historic artefact: a huge 27.4 ft (8.35 m) dugout canoe found in the 1890s buried in the silt of the Susquehanna River, outside of Binghamton NY, 70 miles (112 km) away, one originally rumoured to have been used in the Sullivan campaign of 1779. We are pretty sure it did not fly there, but we haven't found any evidence to tell us whether the occupants sold their souls along the way!

**Robichaud<sup>1</sup>, André and Colin P. Laroque<sup>2</sup> (Université de Moncton) and Colin P. Laroque (Mount Allison University)** • *Anneaux et aboiteaux : comment se servir du bois pour étudier le passé* [13]

L'intérêt de déterminer l'âge exact des aboiteaux remonte aux débuts des études acadiennes. Jusqu'à récemment, le moyen de le faire était limité à quelques approches traditionnelles, notamment l'utilisation des documents d'archives souvent fragmentaires. Après l'arrivée dans les Maritimes d'un laboratoire spécialisé en dendrochronologie (le Mount Allison Dendrochronology Laboratory - MAD Lab), la nécessité scientifique d'utiliser le bois archéologique pour construire de longues chronologies de cernes en raison de la rareté des vieux arbres et la relative abondance de structures anciennes ont favorisé le développement de la dendroarchéologie dans la région. De nombreuses structures en bois ont ainsi été datées par le MAD Lab depuis 2004, y compris quelques dalles d'aboiteaux. Dans cette communication, on présente les techniques utilisées (mesure de cernes, interdatation et identification du bois) et quelques études de cas en faisant

un bref bilan des aboiteaux datés par la dendroarchéologie.

*Tree-Rings and Ring-Dykes: Using wood to study the human past*

An interest for dating early land reclamation dykes goes back to the first studies of Acadian settlement. Until recently, only historical methods were available, using archival material that was often fragmentary. With the founding of a specialised tree-ring laboratory in the Maritimes (Mount Allison Dendrochronology Laboratory – MAD Lab), the need for archaeological wood to build long chronologies, in light of the rarity of old trees and the relative abundance of old structures, led to a regional emphasis on dendroarchaeology. The MAD Lab has dated numerous wooden structures since 2004, including historical dyke sluices. In this paper, we present the results of the dyke study, along with case studies and applied methods of measuring, interdating and wood identification.

**Robinson IV, Francis (University at Albany-SUNY and The University of Vermont Consulting Archaeology Program) • *The Unrealized Periphery: a Multiscalar Investigation of the Native Americans of the Early Middle Woodland in Vermont and Beyond* [20]**

The archaeological signatures of the Early Middle Woodland Native groups of Vermont and surrounding areas exhibit a number of seeming contradictions. On one hand, the pottery they produced represents an early apogee in terms of skill and aesthetics, and populations apparently grew markedly from the previous period. On the other, the burial elaboration and long-distance exchange conducted during the Early Woodland period seems for a time to have been abandoned or actively rejected. This phenomenon is especially intriguing when one considers that Native groups in most of the rest of the Eastern Woodlands participated to some degree in the Hopewell Interaction Sphere. Beginning with a survey of notable sites in Vermont, I will expand outward and explore some of the possible reasons for this technological and ceremonial disjuncture. I will conclude by noting areas of continuity and briefly discuss the resurgence of limited non-local exchange during the Jack's Reef horizon.

**Roskowski, Laura and Morgan Netzel (Stantec Consulting Ltd.) • *Finding the Needle in the Haystack: Using bone to understand pre-contact mobility within and around the Quarry of the Ancestors* [2]**

The Quarry of the Ancestors is a well-known site complex in the Athabasca Oilsands region of Alberta. However, although the cultural deposits at this site complex are abundant, little chronological data has been recovered from the excavations conducted within the Quarry and its adjacent satellite sites. Projectile points are not commonly recovered and often do not correlate stylistically with known, diagnostic typologies. Until recently, it was assumed that the preservation of bone in the boreal forest of Alberta was rare, and recovering bone was likened to finding a needle in a haystack. However, recent improvements in both survey and excavation field methods has resulted in the identification of over 60 sites yielding calcined bone in the Oilsands region. The radiocarbon dates and subsistence information obtained from these bone concentrations will be invaluable for understanding the nature of Precontact use of the Quarry and the evolution of its use through time.

**Ross, William (Ross Archaeological Research Associates, Thunder Bay) • *Discussant* [19]**

**Rousseau, Gilles (Arkéos inc.) • *La géographie du secteur Rupert-Eastmain et son incidence sur l'occupation humaine* [18]**

La communication présentera les caractéristiques biophysiques du territoire qui a été l'objet d'interventions archéologiques dans le cadre du détournement de la Rupert vers le bassin de l'Eastmain. Le territoire étudié correspond à une bande de terrain faisant partie du versant nord du bassin de la Rupert. Il recoupe successivement le cours des rivières Lemare et Némiscau avant de rejoindre le versant sud du bassin de l'Eastmain. Ce territoire se situe dans la bordure nord des forêts fermées dominées par les pessières à mousses hypnacées. Les conditions écologiques favorables à un établissement humain se sont établies entre 7000 et 6000 ans BP, environ 1000 ans après que le front glaciaire eut commencé à retraiter de la position Sakami. Ce territoire est notamment marqué par une incidence élevée des feux de forêt, un facteur de renouvellement de la végétation, mais aussi une contrainte pour les populations qui l'habitent.

*The geography of the Rupert-Eastmain sector and implications for human occupation*

This paper will present the biophysical characteristics of the territory studied archaeologically in connection with the diversion of the Rupert River into the Eastmain drainage basin. The study area consists of a band within the northern part of the Rupert catchment which intersects first the Lemare and then the Némiscau Rivers before joining with the southern part of the Eastmain River drainage basin. This area is at the northern edge of the closed-crown, spruce-moss forest. Favourable conditions for human occupation developed between 7000 and 6000 BP, about 1000 years after the retreat of the glacial front to the Sakami position. This territory is distinguished by a high frequency of forest fires, resulting in the renewal of the vegetation, but also introducing constraints for human populations living in the vicinity.

**Roy, Louis-Philippe, Pierre J.H. Richard et Tamylia Elkadi (Laboratoire Jacques-Rousseau, Département de géographie, Université de Montréal) • *Végétation holocène autour des lacs aux Outardes et Saint-Paul, Bécancour* [29]**

L'analyse des sédiments des lacs Saint-Paul (22 spectres) et aux Outardes (40 spectres) livre des assemblages polliniques qui, comparés à ceux de diagrammes bien datés dans les régions voisines de Lanoraie et de Saint-Flavien, corroborent la chronologie <sup>14</sup>C des sites. La végétation du Domaine bioclimatique de l'Érablière à tilleul s'est mise en place il y a 8000 ans. La composante coniférienne (sapin, épinette, pin blanc, pruche) était élevée entre 2700 et 1500 ans avant l'Actuel, chutant fortement depuis lors au profit des bouleaux. Les marais se sont développés depuis 1250 ans autour du lac aux Outardes, mais pas autour du lac Saint-Paul. Les assemblages polliniques indicateurs des défrichements euro-canadiens sont manifestes depuis 1765 A.D. : apophytes, céréales, Zea mays et changements dans l'abondance et la composition des peuplements forestiers. Ceux traduisant une présence amérindienne antérieure sont rares et ambigus : quelques grains de pollen d'apophytes ou ressemblant au maïs durant le Sylvi-côle supérieur.

**Royer, Emily • *L'importance de l'art rupestre autochtone dans l'enseignement de l'histoire de l'art canadien* [22]**

L'histoire de l'art canadien tend à résumer la préhistoire à celle de l'art paléolithique européen. Il en est ainsi de la matière qui est enseignée au cégep et dans les universités québécoises. La présence d'un phénomène visuel millénaire et redevable aux cultures autochtones demeure ainsi méconnue. Pourtant, l'art rupestre témoigne de la diversité culturelle qui distingue le territoire canadien depuis avant même l'arrivée des premiers colons européens. Toutefois, l'enseignement de l'histoire de l'art canadien préfère se consacrer aux arts de traditions occidentales. Malgré la reconnaissance de la contribution de certains créateurs autochtones contemporains, ceux des époques coloniale et antérieures sont encore trop souvent réduits à des sociétés sans histoire, sans histoire de l'art. Depuis quelques décennies, des chercheurs s'efforcent pourtant de détruire les figures de l'«Indien» «sauvage» et «noble». Comment l'intégration des arts autochtones à l'enseignement de l'histoire de l'art est-elle une voie vers la pleine reconnaissance des cultures autochtones?

**Royer, Martin (Ethnoscop inc.) • *Inventaires archéologiques dans le cadre de la conception d'une place publique dans le Vieux-Pointe-aux-Trembles* [27]**

Occupé depuis le dernier tiers du XVII<sup>e</sup> siècle, le village palissadé de Pointe-aux-Trembles s'est développé jusqu'à son incendie en 1912. Par la suite, l'ouverture du boulevard Saint-Jean-Baptiste a redonné un certain faste au secteur mais celui-ci, malgré l'existence de bâtiments patrimoniaux, est en déclin. Pour revitaliser et bien marquer le cœur du Vieux-Pointe-aux-Trembles, l'administration municipale prévoit aménager une place publique, la Place du Village. Des inventaires ont été effectués en 2009 et 2010 afin de vérifier la présence de ressources archéologiques dans le boulevard et le noyau institutionnel. Le front bâti du Régime français et du Régime anglais, le tracé de l'ancienne rue Saint-Jean, un dépôt pouvant témoigner d'activités de traite, des segments de la courtine nord de 1690, les vestiges de l'église de 1710 et des sépultures rattachées aux cimetières de 1710 et de 1843 figurent parmi les découvertes.

Occupied since the 1670s, the fortified village of Pointe-aux-Trembles

has developed itself until the great fire of 1912. Thereafter, the opening of Saint-Jean-Baptiste Boulevard has restored a certain pomp to the area but it is now in decline, despite the presence of heritage buildings. To revitalize and clearly mark the heart of Vieux-Pointe-aux-Trembles, the Borough plans to build a public square. Archaeological digs were done in 2009 and 2010 to establish if archaeological resources were preserved in the boulevard and the surroundings. Domestic buildings of the French and English Regimes, the course of Saint-Jean street, artifacts bearing witness to some trade with Native Americans, segments of the first north curtain, remains of the church of 1710 and burials from the 1710 and 1843 cemeteries were found.

**Sawatzky, Roland (The Manitoba Museum and Mennonite Heritage Village) and Valerie McKinley (Department of Anthropology, University of Winnipeg) • *The Quiet in the Land? Field School in a Mennonite Context* [28]**

Multiple partnerships and funding sources have been relied upon to complete three seasons of excavations at a Mennonite site in southern Manitoba, with a fourth season planned. It has become apparent that public involvement through volunteerism, exhibits, lectures and tours is essential to the success of the field school and research. Integrated fully from its inception, the public is more than a component of the project; it is the purpose of the project. This presents some challenges for directors and students, but it also provides numerous opportunities that strengthen research, student learning and funding possibilities.

**Scardera, Francis (Fort Drum Cultural Resources) • *Using Squier to Help Identify Remnants of St. Lawrence Iroquoian Earthworks in Jefferson County, New York* [5]**

During the late fall of 1848, Ephraim Squier was one of the first to systematically document over one hundred native earthworks in the State of New York. Motivated by a preoccupation that modern development would soon alter the cultural landscape, Squier focused his efforts on the recording and mapping of earthen enclosures and mound features, consequently placing less emphasis on the cultural affiliation of the architects who built them. This paper will illustrate how a holistic approach in landscape archaeology can be employed in re-locating earthworks noted by Squier, thus providing an opportunity to identify and confirm remnants of St. Lawrence Iroquoian occupation. The holistic model proposes that the cross-referencing of data obtained from several sources, including environment and landscape attributes, archival sources, the use of oral history and non-intrusive geophysical prospecting such as ground penetrating radar and a resistivity meter, can be employed in detecting cultural earthen structures more effectively than a field survey that is predominantly reliant on data collected from shovel test pits. Although this paper focuses specifically on the Jefferson County area, it is hoped that the proposed approach incites a renewed interest in re-locating other earthworks documented by Squier as part of a process towards confirming sites occupied by the St. Lawrence Iroquois.

**Schumacher, Jennifer (McMaster University) • *Ontario Ceramic Analysis: Moving Forward Through Projects of the Past* [3]**

Ceramic research in Ontario archaeology has reached a crucial point with a growing need to adopt new theories and adapt past frameworks. In this paper I suggest that the re-appraisal of past and current approaches through use of extent collections can produce new understandings of Ontario's archaeological record. I will discuss the methodological and theoretical approaches that can be applied to demonstrate the value of such reassessment by using the Early Late Woodland of Van Biesien site as a case study. Using theoretical concepts of technological style and attribute analysis I demonstrate the value of utilizing extent collections and the pragmatic issues concerning their use. The future of Ontario archaeology lies not only in further excavation but also in revisiting past research and excavations using emerging methodological techniques and theory.

**Sénécal, Amélie (Pointe-du-Buisson/Musée québécois d'archéologie) • *Originalité culturelle au Sylvicole moyen sur le site de Pointe-du-Gouvernement, Haut-Richelieu, Québec* [20]**

Le site de Pointe-du-Gouvernement, situé dans la région du Haut-Richelieu, a fait l'objet de plusieurs interventions archéologiques. Les analyses morphostylistiques de la poterie de Pointe-du-Gouvernement ont révélé que le site est occupé depuis l'Archaïque ancien jusqu'au Sylvicole supérieur récent avec une intensification des occu-

pations au Sylvicole moyen. Dans le but de comprendre un peu mieux la nature des liens unissant les groupes entre 2 400 et 1 000 ans avant aujourd'hui et de contribuer à l'amélioration de nos connaissances des populations ayant vécues au Sylvicole moyen, une étude comparative fut menée il y a quelques années. La production céramique des régions suivantes fut comparée à celle de Pointe-du-Gouvernement pour la période du Sylvicole moyen : la région de Montréal, la MRC de Brome-Missisquoi et la région de Québec. Cette étude comparative a pour but de mettre en lumière l'originalité culturelle des potières de Pointe-du-Gouvernement au cours du Sylvicole moyen.

**Shults, Christine (Lakehead University, Thunder Bay) • *Geoarchaeological Investigation of Five Paleoindian Sites in the Northwestern Lake Superior Basin* [19]**

A group of Paleoindian (Lakehead complex) sites have recently been identified along the northern Lake Superior basin, near Thunder Bay, Ontario. A reconstruction of the depositional setting prior to, during, and after occupation at five of these archaeological sites is being conducted in order to reconstruct the paleogeography of the region shortly after deglaciation. In general, I suggest that all five sites were occupied when proglacial Lake Minong was at, or below, the Minong level (~230m asl) that, based on regional radiocarbon dating suggests a time between 9400 and 8300? <sup>14</sup>C BP. More specifically, site stratigraphy suggests that three archaeological materials are contemporaneous with either active beach formation, or adjacent to an active river. The fourth archaeological site remains under investigation. Initial data and conclusions will be presented.

**Sifontes, Sarah (York University) • *Developing a Fossil and Limestone Index using the UV and Red Ranges of the Spectrum* [17]**

Archaeology has been quickly adapting to include remote sensing to their array of analysis techniques and within these new technologies spectroradiometry has been known to be a great tool for nonintrusive applications but there are only a few records to date of fossil spectroradiometry. And this article aims to initially explore the development of a Normalized Difference Fossil Index (NDFI) that, like NDVI, looks at two different bands or ranges of the spectrum in order to better differentiate fossils from their limestone matrix. In this project, 16 Cambrian period marine fossil samples and 16 limestone samples from the Kawartha area of Lakefield, Ontario are examined through their spectral signatures in the UV (350-380 nanometres) and Red (600-650 nanometres) ranges of the electromagnetic spectrum where only two samples show low levels of noise and are capable of accurately portraying fossil signatures for a Cephalopod and a Brachiopod as well as the two limestone matrices surrounding them. This experiment should be regarded the base for future studies in the field of remote sensing for archaeological applications and more specifically spectroradiometry for fossil analysis, where the UV and Red range are key to understanding the spectral variations of marine fossils on a limestone surface.

**Swinart, Lindsay (Université Laval) • *Bones in the Home: Depositional Practices Among the Labrador Inuit* [10]**

Historic Inuit ethnographies record that various taboos and rituals existed for the appropriate treatment of hunted animals. For example, the remains of sea and land mammals were to be consumed separately in order to prevent contamination. If the patterning of such behaviour could be visible in the archaeological record, zooarchaeologists could explore broader facets of human-animal relationships. To this end, one approach is to examine the spatial relationships of faunal remains within a dwelling, as the placement allotted to particular animal remains, in relation to other animal remains and to the dwelling architecture, may reflect elements of the social rules that regulated animal acquisition, consumption and discard. This presentation examines the spatial relationships among the various taxa represented in the faunal assemblage and the architecture of a 17<sup>th</sup>-18<sup>th</sup> century Inuit dwelling at the winter village site of Nachvak Village (IgCx-3), Nachvak Fjord, Labrador.

**Szpak, Paul (The University of Western Ontario) • *Molecular Perspectives on the Taphonomy of Fish Bone* [14]**

A thorough understanding of the taphonomic processes that structure zooarchaeological assemblages is essential for their interpretation. From a comparative perspective, this paper reviews the chemical and structural composition of fish bone, and the role that they play

in the survival of fish bone in archaeological assemblages. Fish are characterized by several important differences in comparison with other vertebrates, specifically: (1) a less stable organic component, (2) weaker mineral-organic interactions, (3) loosely packed and poorly mineralized collagen, (4) a higher concentration of skeletal lipids. All of these factors make fish bone, in comparison to mammalian or bird bone, more prone to biotic and abiotic degradation in the burial environment.

**Szpak, Paul, Jean-Francois Millaire, Fred J. Longstaffe, Christine D. White (The University of Western Ontario) Llama Dung and Seabird Guano: Isotopic Perspectives on Andean Fertilizers from Field and Growth Chamber Studies [1]**

This study presents stable isotope (d15N) data for maize (*Zea mays*) fertilized with Peruvian seabird guano and llama dung; plants were grown under field (agricultural plots near Guañape, Peru) and controlled (growth chamber) conditions. A very large enrichment in 15N characterized both the growth chamber and field grown plants fertilized with seabird guano (>20‰), while the llama dung fertilized plants are characterized by a more moderate enrichment in 15N (2–5‰), similar to what has been observed for European crops fertilized with livestock manure. We discuss these results in light of the interpretation of human dietary practices in the Andes, as well as the potential of detecting these fertilization practices using various kinds of isotopic data.

**Taché, Karine (University of York) • Contribution d'une analyse de résidus organiques à l'étude de la poterie Vinette I dans la vallée moyenne du Saint-Laurent [29]**

Le début du Sylvicole est une époque de changements dans le Nord-Est américain, associée à l'émergence d'une plus grande complexité sociale, la création de vastes réseaux d'interaction, et à l'adoption de nouvelles technologies. La moyenne vallée du Saint-Laurent a livré des témoins d'une occupation humaine importante à cette période, et est donc une région particulièrement propice à l'étude de ces développements culturels. Dans cette présentation il est question de données inédites découlant de l'analyse de résidus organiques de tessons Vinette I trouvés au site CcFb-4 (Parc-des-Pins) en 2011. Ces données proviennent d'une analyse de lipides par chromatographie gazeuse-spectrométrie de masse (GC-MS) et par chromatographie gazeuse combinée à l'analyse du rapport isotopique par spectrométrie de masse (GC-IRMS). Les vases Vinette I sont les tous premiers contenant en céramique dans le Nord-Est, mais leur contexte d'origine et les conditions ayant favorisé leur adoption demeurent méconnus. Documenter comment on utilisait la poterie Vinette I, grâce à l'analyse des résidus organiques préservés à l'intérieur de ses parois, fournit une base solide pour mieux comprendre pourquoi les groupes humains ont commencé à produire et employer des vases en céramique au début du Sylvicole.

**Taschereau, Étienne (Université Laval, Ville de Québec) • Âge, stress et croissance: test de méthodes nouvelles et anciennes sur des individus immatures exhumés du cimetière protestant de l'église St. Matthew, rue St-Jean à Québec, QC [24]**

Très souvent, les bioarchéologues ont recours à des méthodes standardisées afin de favoriser la comparabilité de leurs résultats. C'est notamment le cas pour estimer des paramètres démographiques ou épidémiologiques. Le fait que ces méthodes fassent autorité dans le domaine laisse croire qu'elles sont toutes valables et presque interchangeables. Chacune d'elles repose pourtant sur des fondements méthodologiques qui leur sont propres. Les interprétations sont donc susceptibles de varier en fonction des méthodes choisies. Pour chaque paramètre étudié, nous présenterons certaines méthodes usuelles et observerons leur degré de divergence lorsque appliquées à notre échantillon. Leurs résultats seront aussi confrontés à des méthodes sur mesure que nous avons échauffées en fonction des limites des méthodes usuelles et des différents biais méthodologiques inhérents à notre échantillon. Nous évaluerons ensuite l'impact d'un choix de méthode pour un paramètre préalable (âge au décès) à l'estimation d'un autre paramètre (âge au développement de troubles de croissance).

**Taschereau, Étienne (Université Laval, Ville de Québec) • La pensée bioarchéologique québécoise: confusion récente et perspectives d'avenir [24]**

La définition de bioarchéologie est tributaire d'une pluralité de phé-

nomènes structurels, conjoncturels, de nature historique, ponctuels, sociaux, individuels, etc. Elle est changeante et à géométrie variable. Au Québec, on peut retracer ses principales influences relativement facilement. Nous mettrons en perspective le sens et la forme qu'a pris la bioarchéologie québécoise dans les années 1980 à 2000 avec : 1- des changements survenus antérieurement dans les sociétés québécoise et occidentale, 2- ce qui s'est fait ailleurs durant ces deux décennies, et 3- les changements survenus ici depuis une dizaine d'années. La bioarchéologie d'ici est, à l'image de la culture québécoise, un modèle hybride et unique de plus en plus ouvert aux influences extérieures. Le temps est venu de faire le point et de la redéfinir d'une manière qui actualise l'histoire récente et qui est cohérente à la fois avec le contexte québécois et avec un cadre global.

**ten Bruggencate, Rachel (University of Manitoba, Department of Anthropology), and Mostafa Fayek (University of Manitoba, Department of Geological Sciences) • A combined visual-geochemical approach to establishing provenance for pegmatitic quartz artifacts [21]**

Relatively high-quality pegmatitic quartz is a common lithic raw material where it occurs naturally. Provenance analysis of this material holds considerable potential for reconstructing technological and social strategies in areas where higher quality raw materials – such as chert or obsidian – are scarce. We have combined SIMS Pb isotope and trace element analysis with qualitative macroscopic categorization to arrive at a sourcing technique for this analytically challenging raw material. The utility of this technique is demonstrated through application to pegmatitic quartz samples from archaeological quarries in the Granville Lake district of northern Manitoba.

**Tessier, David (Archéotec inc.) • EjFt-003 : 4000 ans d'occupations humaines à la confluence des rivières Kamistikawesich et Rupert. Mise en contexte et résultats [18]**

L'impressionnante collection d'artéfacts mise au jour au cours des six années d'interventions archéologiques menées par la firme Archéotec inc. sur les 19 aires comprises dans le site EjFt-003 permet aujourd'hui de dresser un portrait fiable de son utilisation par les groupes humains qui ont très tôt reconnu le fort potentiel de cet espace. Une brève description de l'environnement du site, de ses particularités physiographiques ainsi qu'un aperçu des découvertes et des interprétations servira à dresser la table aux communications suivantes portant sur cette portion du territoire. La présentation s'insérera à l'intérieur d'un cadre chronologique basé sur les datations <sup>14</sup>C obtenues lors de ce projet, situant ainsi les événements discutés à l'intérieur des différentes périodes d'occupations humaines identifiées. Ces travaux ont été réalisés dans le cadre de mandats obtenus de la Société d'Énergie de la Baie James par Archéotec inc.

*EjFt-003: 4000 years of human occupation at confluence of the Rupert and Kamistikawesich rivers.*

During the six years campaign, Archéotec inc. led the excavation of 19 operations on site EjFt-003 situated at the confluence of the Rupert and Kamistikawesich rivers. According to the impressive collection of recovered artefacts, it is assumed that this site rapidly became an area of strategic importance for the various hunting groups. We will facilitate the next lectures pertaining to EjFt-003 by providing a brief description of the site's environment and physiographical characteristics, while commenting and interpreting a number of discoveries. Using the available radiocarbon dates, we will present a chronological framework for the different periods that will be discussed. All these projects have been carried out under contracts with the Société d'Énergie de la Baie James.

**Tessier, David (Archéotec inc.) • Étude de potentiel archéologique et intervention dans l'emprise d'une ligne de transport d'Hydro-Québec reliant le poste de Francheville (Trois-Rivières) à celui de Sorel [29]**

Le corridor considéré pour ce projet inclut la colline de l'aéroport de Trois-Rivières, la rive nord du lac Saint-Pierre, les îles du lac Saint-Pierre et l'embouchure de la rivière Richelieu à Sorel. Le fort potentiel archéologique de ces régions est indéniable. Une première intervention a été menée l'automne dernier sur le sommet de la colline de l'aéroport de Trois-Rivières par une équipe d'archéologues de la firme Archéotec inc. Les trois zones inventoriées offraient une possibilité d'y découvrir des témoins d'une occupation ancienne sur ce qui était d'abord une île émergente dans les eaux d'une Mer de Champlain en pleine régression, à l'embouchure du Saint-Maurice. La communica-

tion se fera donc sur deux volets. Le premier portera sur l'étude de potentiel et la seconde sur l'intervention archéologique faite sur trois zones identifiées comme offrant un fort potentiel archéologique.

**Thériault, Christian C. L. (University of New Brunswick) • *The Potential Significance of Selected New Brunswick's Ordovician Cherts into the Regional Archaeological Record* [2]**

Ordovician cherts are present in the archaeological record throughout the Maritime Peninsula. Those materials have so far been associated with a few locations where quarries have been discovered and explored. While no such quarries have yet been found in New Brunswick, these materials do occur in geological formations. This paper will describe chert-bearing rock formations from three Ordovician volcanic arcs: the Popelogan Formation (Popelogan arc), located between the Upsalquitch and Charlo Rivers; the Boucher Brook Formation (Tetagoche back-arc), located alongside the Nepisiguit, Tetagoche and Upsalquitch Rivers; the Oak Mountain Formation (Meductic remnant arc), located alongside Eel River near the Saint-John River/Maliseet Trail. Samples from those formations will be described, analysed and macroscopically associated with regional archaeological specimens. This study will provide a glimpse into the potential exploitation of Ordovician lithics from New Brunswick as well as their significance for our understanding of the regional geoarchaeological record.

**Timmins, Peter (Western University/Timmins Martelle Heritage Consultants Inc.), Amanda Diloreto (Timmins Martelle Heritage Consultants Inc.) • *Beaverbrook: An Early Woodland (Meadowood) Habitation Site in Southwestern Ontario* [20]**

The Beaverbrook site (AfHh-386) was subject to mitigative excavations by Timmins Martelle Heritage Consultants Inc. in the summer of 2009. The site is located in London, Ontario, on a sandy plateau overlooking the Thames River. Beaverbrook is a relatively large Meadowood component, extending over .5 hectares. The site was plough-disturbed in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, but was fortuitously protected as urban development engulfed the surrounding area in the last half of the 20<sup>th</sup> century. Hand excavation of 558 one-metre units, followed by mechanical topsoil stripping around the periphery of the site, yielded over 29,000 artifacts and a complex settlement pattern involving 100 subsurface cultural features. The lithic and ceramic assemblages are among the largest recovered from southern Ontario Meadowood contexts, and the settlement patterns, although challenging, hold potential for intra-site spatial analysis including the definition of inferred house structures. This paper presents the results of our preliminary analysis of the Beaverbrook data.

**Tremblay, Roland (Archéologue consultant) • *L'occupation iroquoise du côté sud de l'estuaire du Saint-Laurent. Chronologie, adaptation, identité: constat et perspectives / The Iroquoian Occupation on the Southern Side of the St.-Lawrence Estuary. Chronology, Adaptation and Identity : Assessment and Future Research* [5]**

La question de la présence des Iroquoiens du côté sud de l'estuaire du Saint-Laurent a été amorcée avec une approche académique par Charles Martijn au cours des années 1960, à la suite de ses interventions à l'île aux Basques et à l'île Verte. Au cours des décennies subséquentes, de nouveaux éléments régionaux se sont amalgamés à l'essor des recherches iroquoianistes dans la vallée du Saint-Laurent, ce qui a permis d'alimenter cette étude spécifique sur différents aspects. À la lumière des plus récentes contributions de l'archéologie, notre présentation examine le chemin parcouru en faisant la mise au point sur l'état actuel de nos connaissances de l'occupation iroquoise au sud de l'estuaire du Saint-Laurent. Cet exercice débouche sur l'identification de pistes de recherches spécifiques qui nous semblent fondamentales pour la suite des choses.

**Treyvaud, Geneviève (Laboratoires d'archéologie de l'Université Laval et INRS, Eau, Terre et Environnement) • *Archaeological materials and CT Scan application* [21]**

The use of tomography analysis in Archaeology allows us to image the structural aspect of an artefact. The non-destructive and accuracy of this technique opens new perspectives in the archaeological field, allowing us to study the technological objects through corrosion or other stratigraphic formwork. It also allows us to define and understand the internal structures of the object, the « chaîne opératoire » and characterize the materials used and the stratigraphic distribution of objects. This method provides quantitative and qualitative parameters of the materials used and their environment. CT Scan analysis

enables us to recognize the different types of formatting to metals, to characterize the inclusions or the provision of other equipment at recycling or handling. Its application on ceramic or glass has enhanced manufacturing methods, weaknesses in the structures, different pasta or degreasers used. As far as stone tools results have identified the procedures used in the manufacture of the object and to recognize the traces left by other tools.

**Treyvaud, Geneviève (Université Laval) et Michel Plourde (Archéologue consultant) • *Les Abénakis de la rivière Saint-François au XVIII<sup>e</sup> siècle et la question du fort d'Odanak* [29]**

Depuis 1979, le Grand Conseil de la Nation Wabanaki, mandaté par deux conseils de bande d'Odanak et de Wôlinak et le Musée des Abénakis, a comme mission d'assurer un avenir à la nation Abénakise en proposant différentes études reliées à la documentation de son passé et la valorisation de sa culture. Il semble ainsi tout naturel d'intégrer l'archéologie à ce processus. En collaboration avec le conseil de bande d'Odanak et le Musée des Abénakis ainsi que Patrimoine canadien, nous avons mis sur pied un projet de recherche archéologique visant à participer à cette mission. Plusieurs objectifs ont été mis de l'avant tel que la découverte du fort des Abénakis et par extension, une meilleure connaissance de leur mode vie aux périodes de « Transition » et « Coloniale », et l'analyse documentaire de la collection archéologique actuellement entreposée dans la réserve du Musée. Cette présentation porte sur les premiers résultats des interventions archéologiques de 2010 et de 2011.

**Treyvaud, Geneviève (Université Laval) • *Fer, cuivre et minerais. Les activités métallurgiques au fort de Ville-Marie, 1642-1688* [6]**

L'étude tomographique des scories, des résidus et des échantillons de sols provenant du site du fort Ville-Marie a montré que les occupants du site procédaient à différents travaux métallurgiques de forge, mais surtout à des essais d'obtention de produits métalliques. Cette étude a permis de caractériser les matériaux utilisés et la chaîne opératoire mise en œuvre par les forgerons travaillant sur le site. Cette étude par l'équipe de recherche de l'Université de Montréal et du Musée Pointe-à-Callière a généré de nouvelles données sur les processus métallurgiques utilisés en Nouvelle-France.

***Iron, copper and ores: Metallurgy at Ville-Marie's old fort, 1642-1688***

The CT scan study of slag, tailings and soil samples from the site of Ville-Marie's old fort shows that the occupants of the site work carried out different metalworking procedures including forging and especially assaying for heavy and precious metals. This study allowed us to characterize the materials involved and the chaîne opératoire followed by 17th-century smiths working at the site. This study by the research team from the Université de Montréal and the Musée Pointe-à-Callière has generated new data on metallurgical processes used in New France.

**Treyvaud, Geneviève (Université Laval/ Université de Genève) • *Reconstitution des technologies employées par les artisans amérindiens et européens de la Nouvelle France aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles* [25]**

Les sujets spécifiques du traitement des minerais, de l'application des technologies et des mises en forme des objets métalliques n'ont été que sommairement décrits dans les études sur la culture matérielle en Amérique du Nord. Cette étude réalisée dans le cadre d'une thèse de doctorat met à jour les connaissances sur le travail des artisans du métal de même que l'impact social et économique de cet art au cours de la période de contact puis de la fondation de la Nouvelle France au XVII<sup>e</sup> et XVIII<sup>e</sup> siècles. Les analyses spécifiques réalisées sur les assemblages archéologiques métalliques provenant de sites urbains, Montréal et Québec, et de sites régionaux, Fort Temiscamingue, les postes de traite de Chicoutimi, de la Metabetchouan et de Pano documentent la chaîne opératoire métallurgique pendant la colonisation de la Nouvelle France.

The processing of metals, the manufacture of objects and the influence of technology have only been briefly described in studies of material culture in North America. Thus, our knowledge of the metalworkers as well as the social and economic impact of this art during the 17<sup>th</sup> and 18<sup>th</sup> centuries remains limited. This study, conducted as part of a doctoral thesis, aims at documenting the environmental context in which metallurgy occurred during the colonization of Nouvelle France and, through the application of theoretical concepts, at pro-

viding a better understanding of an important period in the colonial history of North America. This research focuses on the chaînes opératoires of metallurgical techniques employed by European and Native American artisans of Nouvelle France, as well as on the technological choices concerning the process of metal production during the technological adaptation of people to their environment.

**Trottier, Stéphanie (Université de Montréal) • De l'importance du maïs et autres cultigènes au site Droulers [5]**

Notre projet de recherche porte sur le site Droulers, le plus imposant village iroquoien du complexe de villages de Saint-Anicet. L'objectif principal de cette communication est de présenter les principaux indices liés à l'agriculture. Les éléments possibles permettant de proposer la prépondérance de ce mode de subsistance seront discutés. La présentation se concentrera sur les résultats préliminaires des restes végétaux recueillis à Droulers lors des campagnes de 2010 et de 2011. Il nous importe de savoir si les résultats reflètent la place de l'agriculture telle que suggérée par les écrits ethnohistoriques. Quelles espèces de plantes y ont été trouvées et dans quelle mesure peut-on confirmer l'importance du maïs? Que nous dit leur répartition spatiale (horizontale) et verticale (terreau vs structure) à l'échelle du site et plus particulièrement à l'échelle des maisons-longues?

**Tudor, Corina and M.A.P. Renouf, (Department of Archaeology, Memorial University) • Geophysical Investigation at Phillip's Garden, Northwestern Newfoundland [21]**

Geophysical investigations at Phillip's Garden are presented. Phillip's Garden is the largest Dorset Palaeoeskimo settlement in Newfoundland, with the remains of over 67 dwellings identified. We use two complementary geophysical methods, Ground Penetrating Radar and Magnetometry to survey several excavated and one unexcavated dwellings. The purpose of this study is to test the efficacy of geophysical methods at Phillip's Garden, which could non-intrusively identify dwellings at the site as well as their associated features. While geophysical methods have been previously used in North America, our research furthers their use by operating at a much higher resolution, collecting data along transects 10-25 cm apart. We concluded that geophysical methods are useful in identifying house layout and some interior features, such as pits.

**Tulloch, Heather (Agence Parcs Canada, Cornwall) • Discovering the Officers' Barracks from the 1812 Fort on Point Henry, Kingston, Ontario [31]**

Prior to the stone fort that was constructed on Point Henry in the 1830s, military structures were erected to protect the Royal Naval Dockyard and supply routes in Kingston. One of the most impressive early structures was the two-storey, limestone, officers' barracks. The barracks were constructed in 1820 and demolished in the early 1840s when the Advanced Battery of the second fort was completed. In 2004 archaeological excavations revealed the southwest corner of the barracks foundations on the exterior of the current fortifications, from that archaeologists were able to project the location of the barracks, as well as other structures from the 1812 fortification, on the interior of the Advanced Battery. In 2011 several units were excavated inside the current fort to locate remains of 1812 features. Four of these units revealed the officers' barracks stone foundations as well as material culture associated with the occupation of the structure.

**Turney, Michael H.J. (Golder Associates Ltd.) • Not Quite Written in Stone: Rock Art Monitoring at Writing-on-Stone Provincial Park, Alberta [22]**

Writing-on-Stone Provincial Park, located astride the Milk River in Southern Alberta is a 'special place' in every sense of the word. In recognition of the special nature of this park, Alberta Parks is spearheading a project to nominate the Park for UNESCO World Heritage Site status. Towards this goal, for the last two years at the tail end of the tourist season, the rock art panels at the Park have been systematically monitored, possibly the only program of its kind in Canada. Comparison of current conditions at these rock art sites with historic baseline data allows the impact of human visitation and natural deterioration to be determined. The establishment of systematic baseline data and the regular monitoring of the rock art panels allows those charged with management of such sensitive cultural resources to determine where and from what direction the impacts are likely to come, and how best to protect them.

**Véronneau, François et Claude Joyal (SACL inc.) • Le site de la maison Nivard-de-Saint-Dizier à Verdun, un bijou du patrimoine archéologique préhistorique et historique montréalais [27]**

Le site Nivard occupe un emplacement archéologique exceptionnel à Montréal. Il est localisé stratégiquement à la sortie des rapides de Lachine, lieu inévitable de passage et dernier obstacle à la navigation sur le fleuve Saint-Laurent. Les travaux archéologiques menés depuis 2005 par la SACL ont permis de retracer des occupations amérindiennes et euro-québécoises qui s'échelonnent sur environ 5 000 ans. Sous les remblais du parc Georges O'Reilly en périphérie de la Maison Nivard, des milliers de vestiges archéologiques sont préservés sur une aire évaluée à 6 780 m<sup>2</sup>: tessons de poteries; outils lithiques exotiques; harpon en os; cuivre natif; fosses; foyers (dates radiocarbone); traces de piquets... On y reconnaît des visiteurs depuis la fin de l'Archaïque laurentien (6 500 à 4 000 A.A.) jusqu'au Sylvicole supérieur (1 000 à 450 A.A.). La période historique a également livré un riche corpus de données témoignant de l'occupation de la Maison Nivard construite en 1710, et possiblement celles laissées par le fort de Verdun au XVII<sup>e</sup> siècle.

The Nivard site is located in Verdun at the bottom of the last rapids of St. Lawrence river. This is one of the most famous archaeological discoveries on the island of Montreal. Join us to learn about the pre-historical remains, the artefacts collection and the dates who give an hypothetical location of the Verdun fort built in 1665.

**Vidal, Violette, Pascale Vaillancourt et Hélène Buteau (Archéotec inc.) • Un aperçu du développement du faubourg Saint-Laurent dans le cadre du projet Quartier des Spectacles [27]**

L'intégration de la protection des ressources archéologiques dans l'aménagement du Quartier des Spectacles a permis la réalisation d'études de potentiel archéologique afin de définir les secteurs les plus susceptibles de livrer des données archéologiques. En tenant compte de la nature et de l'emplacement des travaux de réaménagement du Quartier des Spectacles, des interventions archéologiques de surveillance et d'inventaire ont été réalisées dans les secteurs à haut potentiel archéologique. Les résultats ont permis de documenter le développement de la partie nord-ouest du faubourg Saint-Laurent qui s'amorce à la fin du dix-huitième siècle, ainsi que la nature des occupations, principalement résidentielles, artisanes et commerciales.

The integration of archaeological resources protection within the Quartier des Spectacles project allowed the realization of archaeological potential studies that defined areas most susceptible to deliver archaeological data. By taking into account the works that were being done within the Quartier des Spectacles, archaeological supervisions and surveys were realized in high archaeological potential areas. The results allowed to better understand the development of the northwest part of the Saint Lawrence suburb which began at the end of the eighteenth century.

**Vigeant, Jacinthe (Université de Montréal) • Immigration et alimentation à Montréal au 17<sup>e</sup>-18<sup>e</sup> siècle: essai d'interprétation des analyses d'isotopes du carbone et de l'oxygène de populations archéologiques [24]**

À ce jour, les analyses isotopiques entreprises sur des collections ostéologiques euro-québécoises ont été effectuées sur le collagène (carbone et azote) des os. Ce projet ajoute au corpus de données en analysant le carbonate (carbone et oxygène) des os et des dents. L'objectif est double : étudier le  $\delta^{13}\text{C}$  de la nourriture et le  $\delta^{18}\text{O}$  de l'eau consommée durant le cours de la vie d'individus enterrés au cimetière Notre-Dame (1691-1796). Sur l'ensemble des squelettes, 56 ont été sélectionnés en raison de la présence d'une prémolaire, 45 de ces dents sont associées à l'os de la mâchoire, et 34 possèdent aussi une troisième molaire. Cela permet d'étudier les variations isotopiques intra-individuelles ( $\pm 2$  ans, 10-15 ans et avant le décès). Les résultats obtenus affinent la connaissance du régime alimentaire à Montréal à cette époque (incorporation du maïs, proportion de différentes sources de protéines) et permettent d'aborder le sujet de la mobilité.

**Warrick, Gary (Wilfrid Laurier University) • Ontario Archaeology and Bruce Triger [3]**

The archaeology of Aboriginal people in Ontario is based on a strong scientific approach to data collection and analysis, a materialist and

systemic approach to interpretation of data, and a humanist approach to writing ancient history. It will be argued in this paper that the theoretical approach to Aboriginal archaeology in Ontario has been heavily influenced by and reflects the ideas and writings of Bruce Trigger. The widespread adoption and application of Trigger's theoretical perspective in Ontario is the result of a rich database (i.e. abundance of archaeological sites and historical and ethnographic records), historical factors (history of training of senior archaeologists in Ontario and an emphasis on the archaeological investigation of Iroquoian sites, settlement patterns, and explanations for socio-cultural change), and politically active Aboriginal communities.

**Weeks, Rex (University of Arkansas) • *Seeing Mide Rock-Paintings: Perspectives on the Midewigwaanan* [22]**

The midewigwaanan is probably the most distinctive symbol of the Midewiwin, or the Grand Medicine Society, of the Anishinaabeg (original people). A midewigwaanan is a long, rectangular-to-ovular building of brush-arbor latticework for the Mide initiation and healing ceremonies. I find depictions of the midewigwaanan among the Canadian Shield rock-paintings by the formal comparison with the illustrations from the midewigwaanan (Mide birchbark scrolls) and from the ethnographic photos of the structures. The rock-paintings appear to represent the midewigwaanan from four vantage points. They are represented in the planview, in the profile lengthwise, in the facing of the entrances, and in looking at the midewigwaanaak (midewigwaanan latticework) itself. A total of sixteen plausible examples are identified at Shield rock-painting sites. From this study, archeologists may be able to establish the significance of some of the Canadian rock-art through the identification of the midewigwaanan as a diagnostic sign of the Midewiwin, which is vital to many First Nations' communities.

**Wells, Patty (Memorial University of Newfoundland), Tim Rast (Elfshot), M.A.P Renouf (Memorial University of Newfoundland) • *Techniques of Osseous (Bone, Antler and Ivory) Tool Manufacture at the Dorset Site of Phillip's Garden, Northwestern Newfoundland: Some Insights from Experimentation* [7]**

The experimental manufacture of a number of osseous implements using reproduction lithic tools informs a study of Dorset osseous material culture from Phillip's Garden (EeBi-1), northwestern Newfoundland. A barbed point, harpoon head, needle and foreshaft-like tool unique to Phillip's Garden were made using microblades, unifacially and bifacially retouched flakes, scrapers, burin-like tools and abraders. The performance of the lithics was variable; some were unsuitable, while others, sometimes used together, were excellent for cutting, particularly through thick bone. These results aid in the interpretation of techniques employed by Dorset toolmakers in the manufacture of 23 osseous tool types consisting of over 2800 pieces from Phillip's Garden. This presentation will summarize the experimental work and present results of the archaeological analysis.

**Wolff, Christopher B., Marné Timon, and Jesse Crosier (SUNY Plattsburgh) • *Analysis of Dorset Paleoeskimo Stone Tool Production at the Stock Cove Site (CkAl-3), Newfoundland* [31]**

The Stock Cove Site (CkAl-3) is a well-known multicomponent site at the base of Trinity Bay in eastern Newfoundland. It is perhaps best recognized for its Dorset Paleoeskimo architecture, including features that have been interpreted as the only Dorset longhouse on the island. The Dorset lithic assemblage from the site has been described in some detail; however, virtually none of the analysis has focused on the production sequence and manufacturing techniques of the assemblage. This poster discusses recent lithic analyses of stone artifacts recovered from Stock Cove, with a focus on harpoon endblade production methods used by the Dorset in Trinity Bay.

**Woods, Audrey (Université de Montréal) • *Le village iroquoien de Mailhot-Curran, Saint-Anicet* [31]**

Cette affiche porte sur l'étude d'un petit groupe d'Iroquoiens du Saint-Laurent qui habitait la région de Saint-Anicet au cours du XVI<sup>e</sup> siècle. Il s'agit de présenter les résultats de mon mémoire de maîtrise qui traite de l'occupation villageoise de Mailhot-Curran (BgFn-2) et, plus particulièrement, d'une analyse morpho-stylistique de la poterie. Nous avons défini les caractéristiques de la tradition céramique des potières de Mailhot-Curran afin d'identifier les tendances singulières et propres au site. En confrontant notre collection à celles d'autres sites, nous avons tenté de comprendre comment elle cadrait avec les tendances de sa région immédiate (Saint-Anicet), avec celles de sa

province culturelle iroquoienne (région occidentale) et avec celles de sa province voisine (région centrale). Ceci nous a permis de connaître, en tenant compte de la variabilité culturelle des occupants de Mailhot-Curran, ses associations sous-régionales, régionales et inter-régionales avec d'autres sites villageois de la vallée du Saint-Laurent. Nous avons aussi défini la place temporelle qu'occupait Mailhot-Curran dans la grande séquence iroquoienne du Saint-Laurent.

**Woollett, James (Département d'histoire and Centre d'études nordiques, Université Laval) • *Discussant* [10]**

**Woollett, James<sup>1</sup>, Najat Bhiry<sup>2</sup>, Andréanne Couture<sup>2</sup>, Isabelle Lemus-Lauzon<sup>2</sup>, Natasha Roy<sup>2</sup>, Lindsay Swinarton<sup>1</sup>, Cynthia Zutter<sup>3</sup> (1Département d'histoire and Centre d'études Nordiques, Université Laval; 2Département de géographie and Centre d'études Nordiques Université Laval; 3Department of Social Sciences, McEwan College) • *Soil, ice, forest and seals: An interdisciplinary landscape history of the Dog Island region, Nunatsiavut* [10]**

Collaborative archaeometric research strategies have considerable potential research into human-environment interrelationships. These approaches provide means of obtaining diverse and precise data pertinent to the reconstruction of physical, ecological and cultural landscapes. As well, these methods have proved essential for the identification of human landscape impacts and the examination of landscapes as artifacts. This paper presents a synthesis of current interdisciplinary research in this vein regarding the landscape history of the Nain and Okak regions of Labrador. Results of fieldwork and laboratory research regarding diverse aspects of environmental change and land use will be presented, including geoarchaeology, zooarchaeology, archaeobotany, forestry and paleoclimatology. These studies demonstrate trends in environmental change during the so-called Little Ice Age and the diversity and resilience of Inuit land use activities during this time. They demonstrate, as well, the impacts (both subtle and not so subtle) that Inuit occupancy had on the coastal ecosystem of north-central Labrador.

**Woollett<sup>1</sup>, James, Martin Fields, Lindsay Swinarton, Céline Dupont-Hébert (1Département d'histoire, Université Laval) • *Modeling the sea ice landscape of the Labrador Inuit through zooarchaeological, climatological and historical proxies* [26]**

Coastal land-fast sea ice represents a critically important environment for the Labrador Inuit, in terms of hunting territory, travel routes and cultural landscape used and occupied from fall freeze up to spring melt. It is however a temporary and very dynamic environment that leaves only indirect archaeological traces. This paper attempts a reconstruction of local sea ice conditions in the Nain region of Nunatsiavut (Labrador) through the use of zooarchaeological, climatological and historical proxies. Chronological variability in general sea ice conditions is addressed through the palaeoclimatological data sources and species abundance and seasonality of ice-sensitive marine mammal species. The geographical structure of Inuit hunting territories will be investigated through a fine-grained analysis of zooarchaeological analyses of seal life history, settlement patterns and sea ice distribution.

**Woolsey, Cora (Vanier Canada Graduate Scholar, McMaster University) • *That's The Way the Cookie Doesn't Crumble: The Deliberate Use of Decorative Impressions to Reduce Surface Cracking on Pre-Contact Cooking Pots from New Brunswick* [10]**

The concept of style is fraught with contention, ambiguity, and ad hoc theoretical construction. That style is a fundamental dichotomy, the other half of which is function (Dunnell 1978), has implicitly or explicitly been assumed by many archaeologists up to the present without any empirical basis or epistemological justification. More recent studies of pottery (e.g., Schiffer et al. 1994) have asserted that surface modifications, such as impressed designs, may have technological as well as decorative functions, showing that style is not the opposite of function. However, such a perspective has not been widely adopted, and decorations continue to be seen as changing through time and across space because of factors distinct from function or from conscious effort by craftspeople. Preliminary research in a multi-stage programme will be presented showing a correlation between surface decorations and a decreased rate of surface cracking in pre-contact cooking pots from New Brunswick.

**Wren, Colin D., and André Costopoulos (McGill University) • *The***

*role of foresight and information sharing on spatio-temporal patterns of heterogeneous habitat occupation* [26]

We explore the spatio-temporal patterns of populations colonizing a new resource landscape. In particular, we look at the relationship between environmental variables and behaviour in constraining the pattern of occupation. In previous work, we used an agent-based model to show that the ability to assess and make predictions about resources in a local environment, which we call foresight, is only beneficial at intermediate levels in realistic resource landscapes. Here we extend this model to explore the role of different systems of information sharing between agents on the overall success and spatio-temporal patterning of habitat occupation. We show that even without complex models of spatial memory, cognition, or cultural transmission, low levels of information sharing on a small scale have a significant impact on agent success and spatial patterning of populations.

**Yellowhorn, Eldon (Simon Fraser University) • First Nations Historical Archaeology** [3]

Theorising material culture is one of the pillars supporting scientism in archaeology. However, historical archaeology goes against this trend because its objectives keep it closer to its roots in the humanities. Rather than seeking explanation, the motive for historical archaeology is to understand the era and context of the places under investigation. Rather than constructing theories about those sites, the immediate goal is to find the narrative associated with them. My experience conducting a historical archaeology project on the Piikani First Nation demonstrated to me that residents there were disinterested in theories of place or agency. Instead, their main interest was in the stories that such places and artifacts elicited. Piikani people could recall who occupied a house or whose labour was invested at specific locales. This framed my conclusion that theorizing material culture, much of which is recognizable, was subordinate to the narratives drawn from places.

**Young, Penny and Joseph Muller • Regional Analyses and Preceramic Site Distribution Patterns: A Paper Honouring the Research of Peter Ramsden** [23]

P. Ramsden conducted and fostered archaeological studies of preceramic occupations across southern Ontario, broadening the scope of this research to the level of regional analyses, in part manifested through the work of these authors on their respective projects under and subsequent to his guidance. This paper provides a synopsis of preceramic site distribution patterns in general, and some results this work has yielded: as this session is in honour of Peter Ramsden, our focus is on preceramic sites that he has studied, or were subject to research by students under his tutelage. In summarizing his legacy of work in the field of southern Ontario preceramic archaeology, recent insights into historical factors that have shaped both archaeological potential modeling and sampling strategies are introduced, with the intent that future research designs may afford testing of the proposed hypotheses.

**Zawadzka, Dagmara (Université du Québec à Montréal) • Rock art and territoriality: An example from the Canadian Shield** [22]

Canadian Shield rock art is most often viewed as a manifestation of the spiritual beliefs of Algonquian-speaking peoples couched within their cultural landscapes. Though usually interpreted as markers of sacred places, these images painted on river and lake-side cliffs can also shed light on other cultural roles, such as trail markers associated with travel routes. Rock art might have also been of importance as a territorial marker, participating in the socialisation of landscape and reflecting a concern with identity that was communicated visually through rock art distributed within the landscape. Rock art brings an order to the landscape through the shared group symbols. By examining the distribution of rock art sites in the Temagami area (Ontario) in relation to hunting territories, more light can be shed on rock art, as well as Indigenous peoples' perception of cultural landscapes.

**Zeeshan Abedin (Archaeological Services Inc.), Ron Williamson (Archaeological Services Inc.), Barbara Jeffrey (York Region), and Laura Atkins-Paul (York Region) • A 21st Century "Kettle with One Spoon": Aboriginal Engagement Program for the York Region Archaeological Management Plan** [16]

The Region of York is undertaking an Aboriginal Engagement Program in conjunction with their Archaeological Management Plan.


The Program has involved a number of Aboriginal communities (Anishnaabe, Iroquoian and Métis) who have an interest in the Region's archaeological record. The Region has taken key steps to ensure that there are no barriers to participation. From day trips to Georgina Island to evening meetings with the Métis, the Program has excelled at providing a voice to each community. This is particularly evident in the evolving policies of the Archaeological Management Plan and the Aboriginal Engagement Protocol that will set best practice standards for such plans and protocols in Ontario. Ongoing for over two years, the success of the Program can be attributed to the Aboriginal communities who have come together to embody the ideology of the "kettle with one spoon."

**Zinck, June (Memorial University of Newfoundland) • Bringing Archaeology into the New Dimension: the benefits of using CAD programming to create virtual 3D reconstructions of Canadian archaeological sites** [7]

The main objective of this paper is to discuss how 3D reconstructions using Computer Aided Design (CAD) programs can benefit the analysis of Canadian archaeological sites. Beginning first with an explanation CAD technology, I will present Inuit sod-houses from Labrador that were reconstructed using points collected from the 2011 field season. I will argue that the use of computer programming and virtual 3D reconstructions provides a new avenue for preservation, and that these reconstructions can offer a new way to engage with 1) the dissemination of knowledge both within academic and public forums, and 2) bodily engagement with space, potentially providing a deeper understanding of what it would be like during daily practices at this time. Using these 3D models, one can look at how different spatial features were perceived and experienced by men, women, children, etc, during its various uses (i.e. worship, rituals, and social gatherings).

**Zutter, Cynthia, and Claire Earley (MacEwan University, Edmonton) • Starch Grain Analysis of Organic Residue from 18<sup>th</sup> Century Inuit Soapstone Vessels in Northern Labrador** [31]

To date, little research has been published regarding the analysis of starch grains in relation to Inuit diet and plant utilization (Hartery 2006). Our research will attempt to fill this gap in Inuit plant use while adding to the comprehensive archaeological knowledge of the 18<sup>th</sup> century Oakes Bay site (HeCg-08) on Dog Island, Northern Labrador. Carbonized food residue recovered from thirteen soapstone vessel fragments retrieved from Dog Island was subjected to starch analysis following various accepted methodologies, including Horrocks' (2005). The results were compared to a reference collection created from ten economically important plant species that were likely to have been used by the Inuit in antiquity. This study will compliment, and add to, recent research done on Inuit archaeobotanical remains, including macro botanicals and phytolith analysis (Zutter & Pigford 2010; Zutter 2009).



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