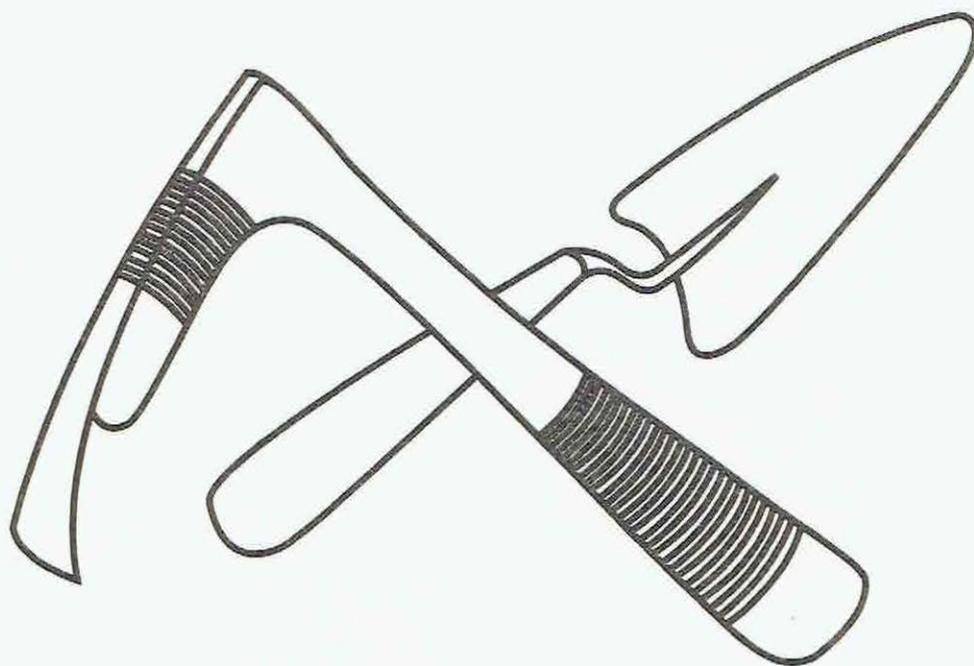


46th Annual Conference/46^{ième} Réunion Annuelle

**CANADIAN ARCHAEOLOGICAL ASSOCIATION
ASSOCIATION CANADIENNE D'ARCHÉOLOGIE**



CAA/ACA Whistler 2013

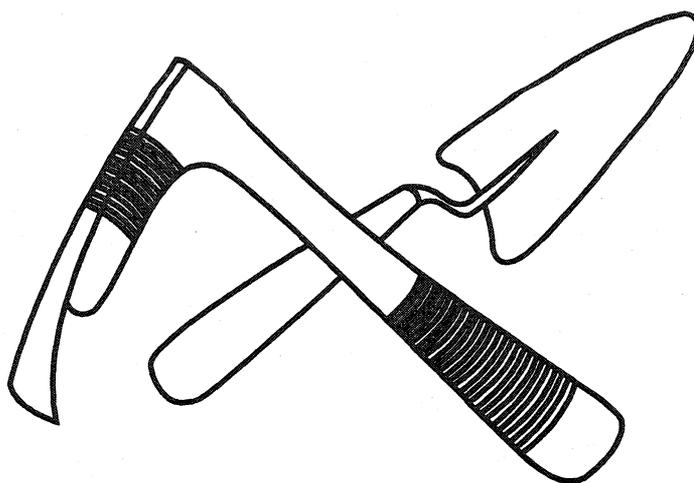
Whistler, British Columbia
May 15 - 19, 2013

Platinum Level Sponsor
Minimum Donation: \$3000.00



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CAA/ACA 2013
46th Annual Conference/
46^{ième} Réunion Annuelle



Whistler, British Columbia

WELCOME MESSAGE

On behalf of the organizing committee, welcome to Whistler, B.C., for the 46th Annual Conference of the Canadian Archaeological Association (CAA). After twenty-five years the CAA returns to Whistler, B.C., in the traditional territory of the Squamish and Lil'wat nations. Given the west coast setting of our conference, there is a large session to honour the contributions of Dr. Roy Carlson. New this year is an archaeology film night that showcases the work of independent filmmakers who document their fieldwork so that their colleagues can get an idea of their research. In addition we have a special guest lectures scheduled for Friday evening to highlight the significant forensic investigation of a king. Delegates are invited to attend the opening of a new exhibit at the Squamish-Lil'wat Cultural Centre on Thursday at 1:00 PM. There is a tour of the Britannia Beach Mining Museum planned for Sunday. The banquet will feature our keynote speaker, Mireille LaMontagne and the CAA awards.

I would like to take this opportunity to thank all the committee members, sponsors and volunteers for making this meeting so special. Thank you for travelling to Whistler and I hope you have wonderful time during you stay.

This volume has been compiled and edited by
Eldon Yellowhorn and Karen Church

Silver Level Sponsor
Minimum Donation: \$2000.00



CAA 2013 CONFERENCE ORGANISING COMMITTEE

Chair: Eldon Yellowhorn

Abstracts & Compilation: Karen Church

Translation: Mariane Gaudreau

Banquet Host: Rudy Reimer

CAA EXECUTIVE

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Past-President/Président-sortante: Eldon Yellowhorn

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GENERAL INFORMATION

Registration & Reception: Grand Foyer of the Whistler Conference Centre from 6:00 – 9:00 PM (PDT).

Book room

The book room will be open throughout the conference in the Fitzsimmons room. There will be a variety of archaeology and related books and products. The provincial archaeological society will be represented.

Special Meetings – Wednesday, May 15

9:00 – 16:30 CAA Executive Meeting, Soo Valley Room, Whistler Conference Centre

Posters

Posters will be on display in the Tantalus Room on Thursday, May 16, 13:00 – 14:30. See schedule for details.

SPECIAL EVENTS

Opening Reception – Wednesday, May 15: 6:00–9:00 PM (PDT)

The registration desk will be open in the Grand Foyer of the Whistler Conference Centre from 6:00 – 9:00 PM. The reception will feature banquet service between 6:00 – 8:00. A cash bar will be available between 6:00 – 9:00 PM.

Exhibition Opening – Thursday, May 16: 1:00–3:00 PM (PDT)

There will be an opening reception for a new exhibition at the Squamish–Lil'wat Cultural Centre PM. The ceremony will feature drummers and singers as well as displays of cultural objects.

Archaeology Film Night – Thursday, May 16, 7:00 – 8:30 PM (PDT)

Join indie filmmakers from different regions of Canada as they showcase their research to document archaeology for its varied publics. Videographers feature footage captured along the Yukon/Alaska border, southern Alberta and Fraser Valley, British Columbia and construct the outlines of research in their local areas. These short documentaries relate the work of Aboriginal people and archaeologists who use broadcast media to extend the reach of their research.

Special Guest Lecture – Friday, May 17, 7:00 – 8:30 (PDT)

Three visiting scholars from the U.K. present their research on their work on the King Richard III excavation under a parking lot in Leicester.

Annual General Meeting – Saturday, May 18, 3:00 – 5:00 PM

The CAA Annual General Meeting will be held in Wedgemont A&B in the Whistler Conference Centre, 3:00 – 5:00 PM on Saturday, May 18. All members are encouraged to attend.

Banquet Evening – Saturday, May 18, 6:00 PM onward

In order to attend this year's banquet, you must purchase a ticket before hand. The banquet will be held at the Squamish–Lil'wat Cultural Centre.

Dr. Rudy Reimer, Squamish Nation & Department of First Nations Studies, SFU, will be the host for the evening.

6:00 PM – 12:00 AM Cash bar

6:00 – 7:00 Reception & cash bar

7:00 PM A buffet meal will feature wild B.C. salmon, butternut squash cannelloni, locally grown vegetable, quinoa salad and homemade pies, and coffee and tea.

8:00 – 8:30 PM Awards

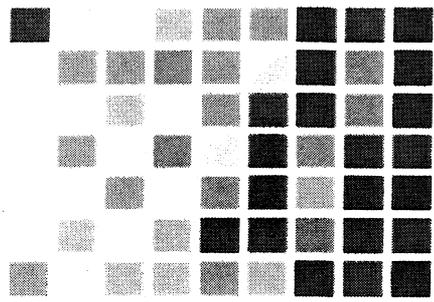
8:30 – 9:30 PM – Keynote Speaker

9:30 Announcements and final remarks

Field Trip – Sunday, May 19: 12:00 PM

Tickets for this field trip to the Britannia Beach Mining Museum may be purchased on-site. The Britannia Beach Mining Museum is a short drive south of Whistler. Participants are asked to arrive at 11:30 AM and to identify themselves as members of the CAA at the ticket counter.

Bronze Level Sponsors
Minimum Donation: \$1000.00



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CAA/ACA Whistler 2013 – SCHEDULE OF PRESENTERS

All sessions will be held in the Whistler Conference Centre. All of the abstract information here has been included in the language that it was submitted.

Wednesday, May 15/Mercredi le 15 mai

Whistler Conference Centre

Executive Meeting: 9:00 – 16:30, Soo Valley Boardroom

Registration & Reception: 18:00 – 21:00, Grand Foyer

Thursday, May 16/Jeudi le 16 mai

Plenary/Plénière

Title/Titre: Whither the Heritage Conservation Act: Renewal or Funeral?

Moderator/Modérateur: Eldon Yellowhorn (Simon Fraser University)

Room/Salle: Harmony A&B

8:30 – 8:50 Opening Address

Squamish Nation and Lil'wat Nation Welcome

8:50 – 9:10 Moderator: Introduction of Panel

9:10 – 9:30 Chief Lucinda Phillips, Lil'wat Nation

9:30 – 9:50 Wade Grant, Musqueam Nation

9:50 – 10:10 Alan Davidson, Haida Nation

10:10 – 10:30 Chief Judith Sayers, Union of B.C. Indian Chiefs

10:30 – 11:00 Coffee Break/Pause café

11:00 – 11:20 Rudy Reimer, Squamish Nation,
Department of First Nations Studies & Archaeology

11:20 – 11:40 Nola Markey, Golder Associates

11:40 – 12:00 Discussant: Rich Hutchings, University of British Columbia

Hard times bring hard questions: Is archaeology pro-development? Is it classist?
Colonialist? Imperialist? Racist?

12:00 PM – 13:00 Lunch Break/Dîner

Thursday, May 16/Jeudi le 16 mai

Title/Titre: Whistlin' Dixie: Cognitive Archaeologies with a Southern State of 'Mind'

Moderators/Modérateurs: Meaghan Peuramaki-Brown (Brandon University) and Geoffrey McCafferty (University of Calgary)

Room/Salle: Wedgemont A/B

13:00 – 13:10 Opening Statements

13:10 – 13:30 Chocolate Soup for the Soul: Cacao Symbolism in Ancient Nicaragua by Sharisse and Geoffrey McCafferty (University of Calgary)

13:30 – 13:50 Vessels of Meaning: Feathered Serpent Imagery on Postclassic Nicaraguan Ceramics by Geoffrey McCafferty, Jessica Manion, and Sarah Keller (University of Calgary)

13:50 – 14:10 Music and Symbols: Ancient Aerophones of Pre-Columbian Costa Rica and Pacific Nicaragua by Carrie L. Dennett, Katrina Kosyk, and Geoffrey G. McCafferty (University of Calgary)

14:10 – 14:30 Mental Maps in the Operational Sequence of Central American Metate-Like Sculpture by Adam K. Benfer (University of Calgary), Matthew Abtosway, and Tiana Christiansen

14:30 – 15:00 Coffee Break/Pause café

15:00 – 15:20 Theorizing Ancient Mesoamerican Sexualities by James Aimers (SUNY Geneseo)

15:20 – 15:40 Obsidian Blades as "Things": The Entanglements of Ancient Maya Blood-letting by W. James Stemp (Keene State College) and Meaghan Peuramaki-Brown (Brandon University)

15:40 – 16:00 The Dynamics of Maya Urban Planning: Methods for modelling movement in ancient civic-ceremonial centres by Meaghan Peuramaki-Brown (Brandon University), Shawn Morton (University of Calgary), and Peter Dawson (University of Calgary)

16:00 – 16:20 Substantiating the Known World: Middle Formative Landscape at Yaxnohcah by Kathryn Reese-Taylor (University of Calgary)

16:20 – 16:40 Memories in Clay: Cognition and the 'Sonrientes' of Veracruz, Mexico by Stephanie Rivadeneira (University of Calgary)

16:40 – 17:00 Architectural orientations at Izapa: Lidar mapping reveals the dual roles of Tacaná Volcano and winter solstice sunrise during the Formative Period by Michael Blake (UBC-Vancouver), Robert M. Rosenswig (University at Albany-SUNY) and Nicholas Waber (UBC-Vancouver)

17:00 – 17:20 Closing Remarks: Meaghan Peuramaki-Brown (Brandon University) and Geoffrey McCafferty (University of Calgary)

Thursday, May 16/Jeudi le 16 mai: 13:00 – 17:00

Title/Titre: Archaeology of Coastal and Interior British Columbia: Papers in Honour of Dr. Roy Carlson, Professor Emeritus, Simon Fraser University

Moderators/Modérateurs: Duncan McLaren (University of Victoria, Hakai Beach Institute), Farid Rahemtulla (University of Northern British Columbia), and Rudy Reimer (Simon Fraser University)

Room/Salle: Harmony A & B

13:00 – 13:10 Introduction: Farid Rahemtulla, Duncan McLaren and Rudy Reimer

13:10 – 13:30 Dr. Roy Carlson as Northwest Coast Wet Site Advocate—from Ozette, WA. to Triquet Island, BC - Dale Croes

13:30 – 13:50 Preliminary results of the 2012 field season at the 10,700 year old wet site Kilgii Gwaay, Haida Gwaii, B.C. - Quentin Mackie (University of Victoria), Jenny Cohen (University of Victoria), and Daryl Fedje

13:50 – 14:10 Paleoethnobotanical evidence from Kilgii Gwaay, a 10,700 wet site on the Northwest Coast of North America – Jenny Cohen (University of Victoria)

14:10 – 14:30 Archaeological Inventory and Testing of Early Period Archaeological Sites on the Central Coast of Canada's Pacific Margin – Duncan McLaren (University of Victoria and Hakai Beach Institute)

14:30 – 15:00 Coffee Break/Pause café

15:00 – 15:20 Identification, analysis and conservation of wood artifacts from Triquet Island (EkTb-9) by Kathleen Hawes and Tracey Arnold (Pacific Northwest Archaeological Services)

15:20 – 15:40 Early Holocene Marine-Based Subsistence on the Central Coast of B.C.: An Analysis of Fauna from EkTb-9 (Triquet Island) by David Fargo (University of Victoria)

15:40 – 16:00 Prepared Core Technology from Early Period Sites on the Northwest Coast by Daryl Fedje

16:00 – 16:20 Re-envisioning the Early Period on the Northwest Coast by Farid Rahemtulla (University of Northern British Columbia)

16:20 – 16:40 The Biface Sequence from the Little John Site (KdVo-6), Yukon Territory, Canada: More of the Same But Different by Norman Alexander Easton (Yukon College)

Thursday, May 16/Jendredi le 16 mai: 13:00 – 15:00

Title/Titre: Poster Session

Moderator/Modérateur: Kasia Zimmerman

Room/Salle: Tantalus

13:00 – 14:20 The following posters will be on display:

Effects of seasonal aggregation and learning opportunities on unbiased cultural transmission: A network based agent model by Adam N. Rorabaugh (Washington State University)

Being a “good” girl: Crafting gender in Indian residential schools by Sandie Dielissen (Simon Fraser University)

Origins and animal husbandry of salt-meat cargo from the *William Salt House*: Stable isotope evidence from an Australian shipwreck faunal assemblage by Eric Guiry^{1,2}, Bernice Harpley², Olaf Nehlich^{1,3}, Vaughn Grimes^{3,4}, Colin Smith² & Michael Richards^{1,3} (University of British Columbia, La Trobe University, Max Planck Institute, Memorial University)

Wintering on Pigeon Lake by Janet Blakey and Brian Vivian (Lifeways of Canada, Ltd.)

The presentation of Indigenous heritage in Canadian and American museums: Exploring collaborative methods by Sarah Carr-Locke (Simon Fraser University)

High-resolution stable oxygen isotope analysis to determine the season of mussel collection at Schooner Cove, St. Michael's Bay, Canada by Meghan Burchell¹, Marianne Stopp², Aubrey Cannon¹, Nadine Hallman³ & Bernd R. Schöne³ (McMaster University, Parks Canada, University of Mainz)

What does collaborative archaeology mean to you? The effectiveness of engagement in field schools, research projects, and consulting Erin A. Hogg & John R. Welch (Simon Fraser University)

14:30 – 16:00 The following posters will be on display:

A preliminary analysis of bone and antler tools from EjTa-4, central coast of British Columbia by Brigitte Aubertin, Delaney Prysuk & Farid Rahemtulla (University of Northern British Columbia)

Diet and mobility in the mid-Fraser: Isotopic analysis of canids from the Keatley Creek site by Alejandra Diaz¹, Michael Richards¹, Suzanne Villeneuve² & Brian Hayden² (University of British Columbia, Simon Fraser University)

Yukon College's field school in subarctic archaeology and ethnography by Norman A. Easton (Yukon College)

Analytical developments in interpreting the Little John site, 2013 update by Norman A. Easton (Yukon College)

Taphonomic study of the Bluefish Caves, Yukon: Preliminary results (Cave II) by Lauriane Bourgeon (Université de Montréal)

Dog bone artifact from DhRx-16, Departure Bay Nanaimo, B.C. by John Somogyi-Csizmazai (Consulting Archaeologist) & Rebecca Wigen (Pacific ID)

Mixtecan Writing Systems: Understanding Ecologically Distinct Water Formations within the Zouche-Nuttall Codex by Gina Carroll (University of Calgary)

Thursday, May 16/Jeudi le 16 mai

Room/Salle: Harmony A&B

19:00 – 21:00 Archaeology Film Night

Moderator/Modérateur: Deanna Reder

“Little John Country” by Norman Alexander Easton

“Digging up the Rez: Piikani Historical Archaeology” by Eldon Yellowhorn

“T’xwelátse Is Finally Home” Introduced by Dave Shaepe



The Office for Aboriginal Peoples at Simon Fraser University

“Welcome” delegates to the 46th Annual Meeting of the Canadian Archaeological Association

Friday, May 17/Vendredi le 17 mai

Title/Titre: Student Publishing Workshop

Moderator/Modérateur: Eric Guiry, with Gerald Oetelaar and Gary Coupland

Room/Salle: Wedgemont A & B (10:30 – 12:00)

Friday, May 17/Vendredi le 17 mai

Title/Titre: Archaeology of Coastal and Interior British Columbia: Papers in Honour of Dr. Roy Carlson, Professor Emeritus, Simon Fraser University

Moderators/Modérateurs: Duncan McLaren (University of Victoria, Hakai Beach Institute), Farid Raheemulla (University of Northern British Columbia), and Rudy Reimer (Simon Fraser University)

Room/Salle: Harmony A & B

8:30 – 8:40 Opening Remarks

8:40 – 9:00 Obsidian from Southeast Alaska and British Columbia: Travel, Trade and Exchange, or Geochemical Overlap? by Madonna L. Moss (University of Oregon), Susan M. Karl (USGS), and James F. Baichtal (US Forest Service)

9:00 – 9:20 Go Tell it on the Mountain: Defining the Central Coast A Obsidian Source by Jim Stafford (Coast Interior Archaeology), Mike Willie (Dzawada'enuxw First Nation) Craig Skinner (Northwest Research Obsidian Studies Lab)

9:20 – 9:40 The Role of Seasonality in Archaeological Interpretation: Insights from the Central Coast by Meghan Burchell (McMaster University)

9:40 – 10:00 Beyond Salmonopia: The Multiplicity of the Saratoga Beach Fish Traps by Deidre Cullon and Heather Pratt

10:00 – 10:20 Gone Fishing: Collaboration on the Edge by Heather Pratt and Deidre Cullon

10:30 – 11:00 PM Coffee Break/Pause café

11:00 – 11:20 Working in the Extreme Northwest Coast: Adak Island, the Aleutian Islands of Alaska by Diane K. Hanson (University of Alaska Anchorage)

11:20 – 11:40 A Northwest Coast Village Landscape at Kitwancool Lake by Paul Prince (Grant MacEwan University)

11:40 – 12:00 Nuu-chah-nulth Whaling Chiefs in the Archaeological Record of Barkley Sound by Alan McMillan (Simon Fraser University)

12:00 – 13:10 Lunch Break/Dîner

13:10 – 13:30 The Construction of Landscapes and Histories in the Southern Gulf Islands of

British Columbia by Colin Grier (Washington State University)

13:30 – 13:50 The Evolution of Northwest Coast Houses: The place of small houses by R.G. Matson (University of British Columbia)

13:50 – 14:10 Evaluating the Degree of Proto-Historic Craft Specialization on the Lower Columbia River by Cameron Smith (Portland State University)

14:10 – 14:30 Salvaging the past, bridging the present at Cedarvale, BC by Jennifer Lewis and Amanda Marshall (Kleanza Consulting Ltd.)

14:30 – 15:00 Coffee Break/Pause café

15:00 – 15:20 The inland Lifeways of the Larger Islands of Haida Gwaii / xáadláa gwaayee, ca. 500 – 1700 CE by Karen Church (University of Calgary)

15:20 – 15:40 Saw-whet (pigmy owl) Stone Bowl Found In-Situ at Skw'emp: Along the Squamish River Southwestern British Columbia by Rudy Reimer, Pierre Freile, Jarred Fath and John Clague (Simon Fraser University)

15:40 – 16:00 Memaloose Ilahie pi Saghalie Ilahie: Stone Features and Archaeology, Okanagan-Similkameen Valleys, British Columbia by Stanley A. Copp, Ph.D (Langara College)

16:00 – 16:20 The archaeology of 1858: The Fraser Canyon War by Brian Pegg (Kwantlen Polytechnic University)

16:20 – 16:40 Archaeology of Japanese Camps in the Seymour Valley, Southwest British Columbia by Robert Muckle (Capilano University)

16:40 – 17:00 Discussant: Aubrey Cannon (McMaster University)

17:00 – 17:20 Discussant: Madonna Moss (University of Oregon)

17:20 – 17:40 Conclusion: Farid Rahemtulla, Duncan McLaren and Rudy Reimer

Friday, May 17/Vendredi le 17 mai

Room/Salle: Wedgemont A/B

Title/Titre: Human Evolution: The Last Half Million Years

Moderators/Modérateurs: Mark Collard, Dennis Sandgathe, and Lia Tarle (Simon Fraser University)

8:30 – 8:40 Opening Statements: Mark Collard (Simon Fraser University)

8:40 – 9:10 Implications of fossil specimens from the Southeast of the continent for our understanding of human evolution in Europe, with emphasis on the Middle Pleistocene by Mirjana Roksandic (University of Winnipeg)

9:10 – 9:40 Three-Dimensional Geometric Morphometric Analysis of Late Pleistocene Femora by Vance Hutchison (Tulane University)

9:40 – 10:10 A reassessment of Bergmann's Rule in humans by Mark Collard and Frederick Foster (Simon Fraser University)

10:10 – 10:40 A re-examination of the human fossil specimen from Bački Petrovac by Joshua Lindal (University of Manitoba), Predrag Radović (University of Belgrade) and Mirjana Roksandić (University of Winnipeg)

10:30 – 11:00 Coffee Break/Pause café

11:00 – 11:30 Adaptations to Marginal Environments in the Middle Stone Age by Genevieve Dewar (University of Toronto)

11:30 – 12:00 The Middle Stone Age archaeological record of Magubike, Tanzania by Pam Willoughby (University of Alberta)

12:00 – 13:00 Lunch Break/Dîner

13:00 – 13:30 Childhood, Play and the Evolution of Cultural Capacity in Neandertals and Modern Humans by April Nowell (University of Victoria)

13:30 – 14:00 The final Middle Stone Age occupation from Sibudu Cave, South Africa, in regional context by Ben Collins (McGill University)

14:00 – 14:30 Developing a method for assessing the skillfulness and practice time of Upper Paleolithic artists by Jenifer Gustavsen (Simon Fraser University), Laura Dane (Douglas College) and Mark Collard (Simon Fraser University)

14:30-15:00 Coffee Break/Pause café

15:00 – 15:30 Change in Raw Material Selection Criteria Through Time at a Middle Palaeolithic Site in Southern France by Lucy Wilson and Constance L. Browne (University of New Brunswick)

15:30 – 16:00 Faunal evidence for clothing among Neanderthals and early modern humans by Lia Tarle, Dennis Sandgathe and Mark Collard (Simon Fraser University)

16:00 – 16:30 The Appearance of 'Habitual' Fire Use in the Upper Pleistocene of Western Europe by Dennis Sandgathe (Simon Fraser University), Harold L. Dibble (University of Pennsylvania), Paul Goldberg (Boston University), Shannon P. McPherron (Max Planck Institute, Germany), Alain Turq (Musée National de Préhistoire, France) and Vera Aldeias (Max Planck Institute, Germany)

16:30 – 17:00 Evidence of Early Acheulean fire at Wonderwerk Cave, South Africa by Francesco Berna (Simon Fraser University), Goldberg Paul, Boston University (Boston University), Liora Kolska-Horwitz, (Hebrew University), James Brink, (National Museum of South Africa), Marion Bamford (Witwatersand University) and Michael Chazan (University of Toronto)

Friday, May 17/Vendredi le 17 mai

Title/Titre: Archaeology in the Heartland

Moderator/Modérateur: Eldon Yellowhorn (Simon Fraser University)

Room/Salle: Tantalus

8:30 – 8:50 Akiipiskanistsi: A tale of two Women's Buffalo Jumps by Lindsay Amundsen-Meyer (University of Calgary)

8:50 – 9:10 Calling the moose: An early contact period example of northern Tutchone art from Fort Selkirk, Yukon by Victoria Castillo (Yukon College)

9:10 – 9:30 Barking up the right tree: Understanding birch bark artifacts of Canadian Plateau peoples in British Columbia by Shannon Croft and Rolf Matthews (Simon Fraser University)

9:30 – 9:50 Origin and age of raised landforms in the Cree Burn-Kearl Lake lowland and setting of Alberta oil sands region archaeological sites by Robin Woywitka (Archaeological Survey of Alberta), Duane Froese (University of Alberta) and Stephen Wolfe (Geological Survey of Canada)

Friday, May 17/Vendredi le 17 mai

Title/Titre: Archaeology of the Pacific Rim

Moderator/Modérateur: Ian Sellers (Simon Fraser University)

Room/Salle: Black Tusk

8:30 – 8:50 The archaeology of economic change in historic Barkley Sound by Ian Sellers (Simon Fraser University)

8:50 – 9:10 Uncovering Nass Chick: Historic analysis of a pre-contact Lake Babine Nation fishing village by Cory Hackett (University of Northern B.C.)

9:10 – 9:30 Ancient DNA investigations into the use of local and non-local fish at EeRb-77, British Columbia by Thomas C.A. Royle, George P. Nicholas, Antonia T. Rodrigues, Kaisa Zimmerman and Dongya Y. Yang (Simon Fraser University)

9:30 – 9:50 Underwater archaeology in SE Alaska: Exploring the continental shelf of the Alexander Archipelago for submerged archaeological sites by Kelly Monteleone and E. James Dixon

9:50 – 10:10 Preliminary findings from an early Holocene waterlogged shell midden from Prince of Wales Island, AK. by Mark R. Williams

10:10 – 10:30 Foundations of Jomon male symbolism represented on vessels with phallic spouts by Takashi Sakaguchi (Hokkaido University)

10:30 – 11:00 Coffee Break/Pause café

11:00 – 11:20 Running hot and cold: Climate change and Nuu-chah-nulth historical ecology by Gregory Monks (University of Manitoba)

11:20 – 11:40 A temporal analysis of site connectivity and marine travel corridors among settlement of the Salish Sea by Kristin N. Safi and Patrick Dolan (Washington State University)

11:40 – 12:00 Forensic Archaeology as a Human Rights Tool: Using Forensic Archaeology to Uncover the Troubled Past of Two Continents by Christian Silva (Equipo Peruano de Antropología Forense EPAF/Peruvian Forensic Anthropology Team)

12:00 – 12:20 Identifying ancient northwest coast basketry trade by Danielle Cone (South Puget Sound Community College)

Friday, May 17/Vendredi le 17 mai

Title/Titre: Cultural transformations in the northern Salish Sea: Understanding Tla'amin heritage through archaeology, ethnohistory, and modern perceptions

Moderator/Modérateur: Chris Springer (Simon Fraser University)

Room/Salle: Black Tusk

13:00 – 13:20 An Introduction to the Tla'amin-SFU Heritage and Archaeology Project by Dana Lepofsky, John Welch (Simon Fraser University) and Michele Washington (Tla'amin First Nation)

13:20 – 13:40 Territoriality and tenure in transformed landscapes and seascapes: Linking residences and marine management by Chris Springer (Simon Fraser University), Megan Caldwell (University of Alberta) and Dana Lepofsky (Simon Fraser University)

13:40 – 14:00 Enduring landscapes: The histories of Klehkwahnnohm and Cochrane Bay by Nyra Chalmer and Julia Jackley (Simon Fraser University)

14:00 – 14:20 From cultural keystone to threatened species: The place of pacific herring among the Tla'amin by Alisha Gauvreau, Michele Washington (Tla'amin First Nation) and Dana Lepofsky (Simon Fraser University)

14:20 – 14:40 “A part of the people”: Hunting dogs at Sliammon, British Columbia by Kasia Zimmerman (Simon Fraser University)

14:40 – 15:00 Rooted in the past and looking to the future: Tla'amin perspectives on heritage research by Siemthlut (Michele Washington) (Tla'amin First Nation)

Friday, May 17/Vendredi le 17 mai

Title/Titre: New Directions in the Mid-Fraser Canyon

Moderator/Modérateur: Bill Angelbeck PhD (University of British Columbia)

Room/Salle: Spearhead A&B

13:10 – 13:30 Archaeology of the Kwoiek Creek Valley in the Mid-Fraser Canyon by Bill Angelbeck

13:30 – 13:50 The bounty of the ancient Nlaka'pamux: Evidence for plant & animal use at Kwoiek Creek, British Columbia by Natasha Lyons & Ian Cameron

13:50 – 14:10 The settlement patterns of Kwoiek Creek in relation to the greater Mid-Fraser Region: A statistical analysis of housepit and village size by Jon Sheppard

14:10 – 14:30 Near-infrared (NIR) spectrometry of stone celts reveals interaction spheres in pre-contact British Columbia, Canada by Jesse Morin

14:30 – 15:00 Coffee Break/Pause café

15:00 – 15:20 After the Gold Rush: Archaeology, history and transformation in the Fraser Canyon by Brian Pegg

15:20 – 15:40 Material and non-material site formation processes at two Nlaka'pamux rock art landscapes by Chris Arnett and Adrian Sanders

15:40 – 16:10 Cultural landscape approaches to heritage in St'át'imc Territory by Nadine Gray

16:10 – 16:30 A bead is a bead is a bead: Exploring dimensions of meaning by Mike Wanzenried

16:30 – 16:50 Heterarchy and egalitarianism as structuring principles in the aggregated Mid-Fraser villages, ca. 2000-500 BP by Lucille Harris

Friday, May 17/Vendredi le 17 mai

Title/Titre: The life and times of lithic raw materials: Smashing adventures in the hard world of Rock'n'Roll

Moderators/Modérateurs: Laura A. Roskowski (Stantec Consulting Ltd.) and Elizabeth Robertson (University of Calgary)

CAA Quarry Special Interest Group

Room/Salle: Tantalus (13:00 – 17:00)

13:00 – 13:10 Opening Remarks

13:10 – 13:30 Bipolar Technology of the Beaver River Complex in and around the Quarry of the Ancestors, Northeastern Alberta by Christy de Mille, Brian Reeves, Michael Turney (Golder Associates Ltd)

13:30 – 13:50 Middle Prehistoric occupations of HhOv 528: new insight into the Quarry of the Ancestors, Northeastern Alberta by Michael Turney (Golder Associates Ltd)

13:50 – 14:10 Taking a Walk on the Wild Side: Possible Travel Corridors in the Forests of Northern Alberta by Laura Roskowski and Morgan Netzel (Stantec Consulting Inc)

14:10 – 14:30 Lithic Technology and the Construction of Culture History in the Boreal Forest of Alberta by Elizabeth Robertson (University of Saskatchewan)

14:30 – 15:00 Coffee Break/Pause café

15:00 – 15:20 Hunter Gatherers: Moving to the Rhythm of Lithic Raw Material Distribution by Julie Martindale (University of Saskatchewan)

15:20 – 15:40 A Comparative Analysis of Heat-Treated Swan River Chert and Beaver River Sandstone: Implications for Precontact Technological Organization and Knowledge by Brent Kevinsen and Elizabeth Robertson (University of Saskatchewan)

15:40 – 16:00 The “background effect”: Investigations on geochemically isolating mineral pigments in rock art by Elizabeth Velliky (Simon Fraser University)

16:00 – 16:20 Concluding statements

Friday, May 17/Vendredi le 17 mai

19:00–21:00 Guest Lectures – Harmony A&B

From Bronze Age logboats to a Roman Harbour: Twenty years of extraordinary finds in the Cambridgeshire Fenlands, UK by Grahame Appleby (University of Cambridge)

Unearthing a king: The discovery of Richard III by Dr. Jo Appleby and Dr. Turi King (University of Leicester)

Saturday, May 18/Samedi le 18 mai

Title/Titre: Applying for Graduate School Workshop

Moderators/Modérateurs: Lisa Ferguson and Eric Guiry

Room/Salle: Tantalus (10:30 – 12:00)

Saturday, May 18/Samedi le 18 mai

Title/Titre: Community-oriented Archaeology

Moderator/Modérateur: Andrew Martindale (University of British Columbia) and Natasha Lyons (Ursus Heritage Consulting)

Room/Salle: Harmony A&B

8:30 – 8:40 Opening Remarks

8:40 – 9:00 Pursuing collaborative archaeology in applied contexts: Occupying the space between legislative requirements, developer objectives, and community interests by Bill Angelbeck

9:00 – 9:20 A means to a beginning: Hybridized agency and community-oriented archaeology by Chris Arnett (University of British Columbia)

9:20 – 9:40 Nicole 'likes' Archaeology. Evaluating the potential of social media for community archaeology by Nicole Beale (University of Southampton)

9:40 – 10:00 The tides they are a changing: Community archaeology in the face of global sea level rise by Colin Grier (Washington State University)

10:00 – 10:20 Rectifying loss: The use of archaeology in specific claims by Kristina Hannis

10:20 – 10:40 The trouble with 'co-' by Marina LaSalle (University of British Columbia)

10:30 – 11:00 Coffee Break/Pause café

11:00 – 11:20 Partners with Maci Manitou by Eva Linklater

11:20 – 11:40 Localized Critical Theory: An Expression of Community Archaeology Practice by Natasha Lyons (Ursus Heritage Consulting)

11:40 – 12:00 Serious Consequences: The Vulnerability of Archaeological Logics in Aboriginal Rights and Titles Cases by Andrew Martindale (University of British Columbia)

12:00 – 13:00 Lunch Break/Dîner

13:10 – 13:30 Making a Difference: feminist and indigenous perspectives by Yvonne Marshall (University of Southampton)

13:30 – 13:50 Co-operating in the present - erasing the past: Lessons learnt in collaboration by Peter Merchant (University of British Columbia)

- 13:50 – 14:10 Increasing first nations self-identity and education through archaeology by Perry Moulton (Dene Tha First Nation)
- 14:10 – 14:30 Community archaeology, media and the politics of participation in the UK by Angela Piccini (University of Bristol)
- 14:30 – 15:00 Coffee Break/Pause café**
- 15:00 – 15:20 Archaeology as an aspect of holism in heritage at Stó:lō Nation by David Schaepe (Stó:lō Nation)
- 15:20 – 15:40 Archaeology as Social Critique: Exploring the barriers to and consequences of collaborative, community-oriented archaeology by Kishsa Supernant (University of Alberta)
- 15:40 – 16:00 The Politics and Ethics of Community-Oriented Archaeology at Six Nations of the Grand River, Ontario by Garry Warrick (Wilfred Laurier University)
- 16:00 – 16:20 Consulting with Community: Musqueam and UBC by Jordan Wilson, Terry Point (Musqueam Indian Band) and Susan Rowley (University of British Columbia)
- 16:20 – 16:40 Using Archaeology to Find the Story in History by Eldon Yellowhorn (Simon Fraser University)
- 16:40 – 17:00 Discussant – George Nicholas (Simon Fraser University)

Saturday, May 18/Samedi le 18 mai

Title/Titre: Northern Archaeological Research

Moderator/Modérateur: Todd Kristensen

Room/Salle: Wedgemont A & B

- 8:30 – 8:50 Eroding shorelines, endangered sites: GIS threat modeling in the Mackenzie Delta region, NWT by Mike O'Rourke (University of Toronto)
- 8:50 – 9:10 Characterizing a "Transitional" Palaeo-Eskimo site on northern Banks Island, N.W.T. by Lisa Hodgetts, Edward Eastaugh (University of Western Ontario) and Henry Cary (Town of Lunenburg)
- 9:10 – 9:30 Roaring louder than the sea or weather: Relational ontology and the ancient Dorset-Polar Bear connection by Matthew W. Betts (Canadian Museum of Civilization), Mariane Hardenberg and Ian Stirling
- 9:30 – 9:50 Toolstone availability near Frobisher Bay, NU, and its implications for Palaeo-Eskimo lithic technological organization by S. Brooke Milne¹, Robert W. Park², Mostafa Fayek¹, Douglas R. Stenton³, and David B. Landry¹ (University of Manitoba, University of Waterloo, Government of Nunavut)
- 9:50 – 10:10 Pendant grave goods of the Newfoundland Beothuk and bird spirit messengers to the afterlife by Todd J. Kristensen (University of Alberta) and Donald H. Holly, Jr. (Eastern Illinois University)

10:10 – 10:30 Fieldwork at Snooks Cove (GaBp-7): Reassessing the Inuit presence in the Narrows region of Labrador during the late contact period by Brian Pritchard (Memorial University of Newfoundland)

10:30 – 11:00 Coffee Break/Pause café

11:00 – 11:20 Trading and raiding in southern Labrador: French and Inuit entanglement in the 18th century by Lisa Rankin and Amanda Crompton (Memorial University of Newfoundland) 

11:20 – 11:40 Fire and brimstone – the White River ash and late prehistoric Yukon by Gregory Hare, Christian D. Thomas and Ruth M. Gotthardt (Yukon Government)

Saturday, May 18/Samedi le 18 mai

Title/Titre: Evenflow: Managing the perspectives of development, communities, and archaeology

Moderator/Modérateur: Heather Kendall (Stantec Consulting Ltd)

Room/Salle: Black Tusk

8:30 – 8:50 Remote conditions: Communities, corporations, and the consulting archaeologist by Heather Kendall

8:50 – 9:10 CRM and Collaborations: Problems, Issues, and Solutions(?) - Lessons learned on collaboration from the ground up by James Herbert and Sean P. Connaughton

9:10 – 9:30 Collaboration for the Protection of Cultural and Heritage Sites in the Sunshine Coast by Kim Meyers and Erik Blaney

9:30 – 9:50 Wet site archaeology 101: Law, culture, and society in BC by Genevieve Hill

9:50 – 10:10 A Consulting Archaeologist's responsibility to First Nations Communities, their Heritage, and the Public by Morgan Ritchie

10:10 – 10:30 Rooted in the past and looking to the future: Tla'amin perspectives on heritage research by Siemthlut (Michele Washington)

Saturday, May 18/Samedi le 18 mai

Title/Titre: Historical Archaeologies

Moderator/Modérateur: Sandie Dielissen

Room/Salle: Black Tusk

13:10 – 13:30 Habitants in the bays and on the headlands: French Settlement in Newfoundland and Labrador during the 17th and 18th centuries by Amanda Crompton (Memorial University of Newfoundland)

- 13:30 – 13:50 Pottery production and seasonality in a Wendat Village, Ontario by Wen Yin (Elaine) Cheng (University College London)
- 13:50 – 14:10 Past and present boundaries: Revealing identity and cultural interaction from prehistoric ceramic remains by Dana Millson (Durham University)
- 14:10 – 14:30 Possible new (old) evidence on the fate of Franklin's ships? A piece of ship's deck planking from Franklin Point, King William Island by Karen Ryan (Canadian Museum of Civilization)
- 14:30 – 15:00 Coffee Break/Pause café**
- 15:00 – 15:20 Recent investigations of Franklin Expedition archaeology sites in the King William Island area by Nunavut by Douglas R. Stenton (Government of Nunavut) and Robert W. Park (University of Waterloo)
- 15:20 – 15:40 Archaeological conservation – Uncovering the hidden secrets in artifacts by Clifford Cook and Tara Grant (Canadian Conservation Institute)
- 15:40 – 16:00 The 1812 period Naval Hospital at Point Frederick, Royal Military College, Kingston, Ontario by Jeff Seibert and Ashley Mendes (Cataraqui Archaeological Research Foundation)
- 16:00 – 16:20 The potential use of radiocarbon dating to establish the age of modification of culturally modified tree by Rob Commisso (Stantec Consulting Ltd.)
- 16:20 – 16:40 Teaching a school to talk: Archaeology of the Queen Victoria Jubilee Home for Indian children by Sandie Dielissen (Simon Fraser University)

Saturday, May 18/Samedi le 18 mai

15:00 – 17:30 Annual General Meeting

Room/Salle: Wedgemont A & B

Saturday, May 18/Samedi le 18 mai

18:00 Banquet

Squamish-Lil'wat Cultural Centre

Keynote Address: Mireille Lamontagne, Manager, Education Programming, CMHR

Title/Titre: Beneath the Canadian Museum for Human Rights (Winnipeg): Dramatic new insights into Late Woodland Developments on the Northeastern Plains

Sunday, May 19/Dimanche le 19 mai

12:00 Tour of the Britannia Beach Mining Museum - Guided Tour: Entrance Fee is \$20.00 to be paid at the museum

CAA 2013 PAPER ABSTRACTS

James Aimers

SUNY Geneseo

Theorizing Ancient Mesoamerican Sexualities

The archaeological study of sex and sexuality has emerged relatively recently out of feminist and gender studies. In this paper I survey the current state of sexuality studies in archaeology generally and in Mesoamerica specifically. How have these studies helped us to understand the lives of people in the Mesoamerican past? I will highlight some elements of sexuality studies that have changed the way we see the lives of ancient Mesoamericans, and areas where work remains challenging and incomplete. The paper will end with a consideration of evidence for non-heteronormative behaviors and identities in ancient Mesoamerica. This is a topic which is ignored by many archaeologists, but is essential if we are to people the Mesoamerican past with something other than versions of ourselves.

Lindsay Amundsen-Meyer, PhD Candidate

Vanier Canada Graduate Scholar

University of Calgary

Akiipiskanistsi:

A Tale of Two Women's Buffalo Jumps

The Old Women's Buffalo Jump near Cayley, excavated by Richard Forbis in the 1950s, is one of the best known archaeological sites in Alberta. Forbis' Blackfoot informants told him there were two Women's Jumps; one near Cayley and one on Willow Creek. The Cayley jump was called "Old" due to its association with Napi in the long ago. Using information provided by Forbis' report, landowners and an 1878 map of southern Alberta, we began a search for the second Women's Jump in 2012 along Pine Coulee near its confluence with Willow Creek. During this field programme, we located the site we believe to be the Women's Jump, EbPk-4, a large, deeply stratified buffalo jump on the eastern slopes of the Porcupine Hills northwest of Stavely. This paper will discuss this site and the evidence that this is, in fact, the second Women's Jump.

Bill Angelbeck, PhD

University of British Columbia

Investigating the Array of Sites in the Kwoiek Creek Valley: An Overview and Some Implications for Mid-Fraser Archaeology

Kwoiek Creek is the traditional territory of the Kanaka Bar Nlaka'pamux peoples, located midway between Boston Bar and Lytton on the west side of the Fraser River. The valley had largely been unexplored archaeologically, with only a superficial studies of a few sites along its confluence with the Fraser, while no sites had then documented in the valley itself. Here, I will present results from over four seasons of investigations, initiated by and conducted with the Kanaka Bar First Nation. In so doing, we have recorded over thirty-three archaeological sites, including a range of sites: large winter villages, mat lodge camps, isolated housepits, hamlets, rock shelter camps, roasting pits, pictograph panels, and a series of culturally modified tree sites. These sites reveal an intense occupation of the valley during the Kamloops Horizon (1100 to 200 BP). I'll summarize these findings as well as consider some implications from Kwoiek Creek for archaeology of the broader Mid-Fraser Canyon.

Bill Angelbeck, Presentation 2:

Pursuing Collaborative Archaeology in Applied Contexts: Occupying the Space between Legislative Requirements, Developer Objectives, and Community Interests

In many ways, collaborative archaeology has greater flexibility in approach when the projects initiate from academic contexts, whether for archaeological field schools, thesis research, or grant-funded investigations. Academic endeavors can be as varied in approach as their research questions, which provides a setting conducive to negotiating those aims with descendant communities. In applied contexts, however, there are greater constraints upon the archaeologists' tasks, as stipulated in institutional regulations that aim for a baseline of coverage and results. In several respects, heritage legislation limits the ability of archaeologists to negotiate the aims of

archaeological projects with indigenous communities. In turn, the developers, with budgetary concerns, can curb such efforts to meet the permitted objectives. In this paper, I explore ways to occupy the space between these often contending concerns and requirements, to gain more ground for collaborative archaeology in applied contexts. I also discuss some principles for meeting the mutual needs and interests of those brought together for those projects. In so doing, I highlight a few cases where these have been put into practice with Dena'ina, Nlaka'pamux, and Lil'wat communities. Since much more archaeology is done in applied rather than academic contexts, the benefits of expanding collaborative approaches could yield greater results for indigenous communities. This becomes especially important when the results of such efforts concern the protection or mitigation of indigenous heritage against the pressures towards "alteration" of those archaeological sites.

Grahame Appleby

University of Cambridge

From Bronze Age logboats to a Roman Harbour: Twenty years of extraordinary finds in the Cambridgeshire Fenlands, UK

Join the author as he describes his spectacular finds from the bogs and fens around Cambridge, UK. His research shed light on the people who occupied this land in the Bronze age. Hear of the artifacts revealed by his fieldwork as he shares the details of his discoveries of Roman's overseas colonies.

Jo Appleby, PhD

University of Leicester

Turi King, PhD

University of Leicester

Unearthing a king:

The discovery of Richard III

Join archaeologists involved in the excavation and analysis of the notorious king immortalized by William Shakespeare. Discover the story unearthed as researchers from the University of Leicester dug out a skeleton from

under a Leicester parking lot. Learn of the grim fate that ended his reign only 26 months after his coronation.

Chris Arnett,

University of British Columbia

Adrian Sanders

Transmountain Cultural Heritage Research and Consulting Ltd.

Material and Non-material Site Formation Processes at Nlaka'pamux Rock Art Landscapes

This presentation explores how Middle Fraser Nlaka'pamux landscapes with rock art present

unique challenges, and opportunities, for an archaeological inquiry that incorporates materialist and non-materialist perspectives. The authors believe the primary challenge confronting rock art interpretation lies in understanding the transformation processes affecting site formation. Methodology, employing a variety of technological tools and processes, and theory, is approached through the guiding principle of interconnection. Our analysis integrates material based approaches with interpretations of non-material site formation processes, including the phenomenology of the setting and its significance within Nlaka'pamux worldview. Accordingly, the significance of geomorphology predates the cultural deposits which are historically contingent. Ergo, geology, environment, Origin Stories, archaeology, ethnohistories, ethnographies, biology and the phenomenology of field experience constitute spatial and temporal data. Within this worldview, material culture is a reflection of non-material realities. Understanding non-material realities requires a close study of the ethnography and extensive field experience in landscape and community.

Chris Arnett, Presentation 2:

A Means to a Beginning: Hybridized Agency and Community-oriented Archaeology

In this presentation I will draw on my experience with First Nations communities over the past 25 years, and argue that it is incumbent

upon archaeologists to be thoroughly acquainted with the established ethnographies, and oral traditions prior to initiation of their fieldwork, and not as an afterthought. As a political jurisdiction, British Columbia is unique in North America, because of the unresolved issue of title to lands, claimed by both indigenous polities and the more recent settler state. In this politically charged arena, dominated by treaty negotiations and litigation, archaeology has developed an important role in supporting indigenous claims to ancestral lands. Archaeologists, trained in the traditions of Western science and humanities, are often poorly equipped to deal with indigenous historical consciousness in the course of their obligated engagement with indigenous communities. This is due, primarily, to Western ideas of multiculturalism based on ontological assumptions regarding distinctions between culture and nature that privilege and reproduce Eurocentric, material and anthropocentric views of the world, that recognize no absolute reality. This is contrary to traditional indigenous worldviews which do not limit social relations to humans, but include all creation (non-humans) as being within a single reality (multi-naturalism) that is not limited to the material world, but also recognizes an all subsuming spiritual (non-material) dimension. To overcome these divergent perspectives, I suggest an approach that employs a hybridized agency, broadly defined as a dynamic network of material and non-material agents, that can accommodate Western and non-western epistemologies in community oriented archaeology, thus transforming the construction of knowledge.

Brigitte Aubertin

University of Northern British Columbia

Delaney Prysnuik

University of Northern British Columbia

Farid Rahemtulla, PhD

University of Northern British Columbia

Poster: A preliminary analysis of bone and antler tools from EjTa-4, central coast of British Columbia

Over the last two summers the University of Northern British Columbia's archaeology field school has been excavating a large shell midden on Calvert Island. Cores from basal midden

deposits date to the early Holocene, but so far major excavations have concentrated on later Holocene deposits closer to the surface. In addition to large volumes of fauna, typical artifacts consist of ground and chipped stone, and modified bone and antler. The latter display an interesting diversity, and especially a significant number of minimally worked elements. It is likely that many of the bone and antler artifacts were worked on site.

Nicole Beale

University of South Hampton

Nicole 'likes' Archaeology. Evaluating the potential of social media for community archaeology

This paper will give an overview of research into the potential for using social media platforms and tools to extend the reach of community archaeology. Social media has had an exponential uptake by internet users, and its use is increasing at a high rate. The typical social media user is aged between 18-29, and this demographic, although there are few reliable statistics about participation in archaeology, is that which is considered to be most challenging to engage in archaeology. There is a challenge for community-oriented archaeology, to identify ways to present scientific and therefore difficult to access information. Although there are obvious gaps in access to the web, these are ever shrinking. Simon's recent publication, *The Participatory Museum*, (2010) describes the future for museum exhibition design lies in co-creative community projects that can give voice to local community members and provide a place for community dialogue. The same is true for archaeology. The web, and in particular social media platforms and tools, can provide a mechanism for staging co-creative community-oriented archaeology. I plan to discuss ways to ensure successful implementation of social media use that is aligned closely to aims of the community-oriented archaeology and embedded in strategies for web adoption. There is an opportunity to learn from participative media, to create opportunities for heritage creation by communities rather than authorities, as discussed by Fairclough (2011). This paper will introduce and critically analyse a selection of case studies of community-oriented archaeology projects,

implemented by authorities, but engaged with by communities through social media.

Adam K. Benfer

University of Calgary

Matthew Abtosway

University of Calgary

Tiana Christiansen

University of Calgary

Mental Maps in the Operational Sequence of Central American Metate-Like Sculpture

Skilled artisans carved igneous rock into elaborately decorated metate-like sculptures throughout southern Central America from ca. 500 B.C. to A.D. 1500. These artifacts exhibit great variety in iconographic depiction and design complexity, elements of which have captured the attention of art historians for several decades. Archaeologists have mainly addressed the possible functions of these seemingly non-utilitarian artifacts, concluding that they were ceremonial. Using a combination of ethnographic, ethnohistoric, and archaeological data, we explore the operational sequence of these tools to understand the sociocultural acts involved in the production, use, and disposal of these metate-like sculptures from both functional-processual and cognitive processual perspectives. In this process, we give special attention to the evolution and diversity in the mental maps (i.e. *mappas*) of the *metateros* who expertly crafted these “art-tools” for two millennia. Mental maps are integral in the production process of these sculptures, because the metateros derived the specific combination of constructive techniques and aesthetic attributes incorporated into these artifacts from the organized pattern of thought and behavior (i.e. schemata) determined by their respective worldviews. Furthermore, mental maps help explain the intended use-life and eventual discard of these artifacts.

Francesco Berna

Simon Fraser University

Paul Goldberg

Boston University

Liora Kolska-Horwitz

Hebrew University

James Brink

National Museum, South Africa

Marion Bamford

Witswatersand University

Michael Chazan

University of Toronto

Evidence of Early Acheulean fire at Wonderwerk Cave, South Africa

Controlled use of fire is a major turning point in hominin evolution, which provided fundamental means of adaptation and social aggregation. Whereas extensive deposits of ash, charcoal, and burnt lithics from sites dating to the last 400 ka are well documented, efforts to pinpoint the initial appearance of fire in archaeological contexts remain inconclusive. In fact, the evidence at lower Paleolithic sites in Africa and Middle East data sets originated from open-air sites and thus do not provide conclusive distinction between natural (e.g. bush fires) and anthropogenic sources of fire.

On the other hand at Wonderwerk Cave, we identified clear evidence of fire in an Acheulean context, by integrating microscopy and infrared spectroscopy (FTIR). Results revealed in situ combusted plants and bone associated with heated lithics in Stratum 10, Excavation 1.

Matthew W. Betts, PhD

Canadian Museum of Civilization

Mariane Hardenberg

Ian Stirling

Roaring Louder Than the Sea or Weather: Relational Ontology and the Ancient Dorset-Polar Bear Connection

Carvings that represent polar bears (*Ursus maritimus*) are commonly found in Dorset archaeological sites across the Eastern Arctic. Relational thinking, framed by Amerindian Perspectivism, provides a means to comprehensively assess the connections between Dorset and polar bears. Grounded by the premise that most of the carvings depict real, not fantastical, creatures engaged in anatomically accurate movements and actions, this research reconstructs the nature of actual interactions between humans and polar bears. At the same time, it considers the socioeconomic,

environmental, and historical context of human/bear interaction. In this way, we are developing a Dorset ethnoecology of polar bears and reveal the importance of these creatures in Dorset ritual and spiritual life. To the Dorset, these carvings were simultaneously tools, used to gain access to the predatory abilities of polar bears, and symbols, signaling how the Dorset conceptualized themselves and their place in the spiritual and physical worlds.

Michael Blake

University of British Columbia

Robert M. Rosenswig

University at Albany-SUNY

Nicholas Waber

University of British Columbia

***Architectural Orientations at Izapa:
Lidar Mapping Reveals the Dual Roles
of Tacaná Volcano and Winter Solstice
Sunrise during the Formative Period***

New lidar (light detection and ranging) mapping of Izapa allows us to determine the precise orientations and alignments of major mounds and platforms at the site's Late Formative period (300 BC – AD 100) monumental center. The original contour map of the site, surveyed in the 1960s, is excellent, but because the site is covered in dense forest and orchards (primarily cacao) the representations of the main constructions were smoothed and rounded, and do not allow accurate measures of sight lines to distant landscape features such as volcanoes or to astronomical features on the horizon. By overlaying the new lidar hillshade depiction of Izapa's mounds on Google Earth, we were able to use its satellite imagery and "Sun" feature to superimpose orientation lines. One primary axis of the site orients precisely to the peak of Tacaná Volcano, 18 degrees NNE, and 25 km distant. The other primary axis orients to winter solstice sunrise, 114.2 degrees ESE. The fact that these two orientations do not meet at right angles accounts for our observation that some of the major platforms are up to 6.2 degrees offsquare. Orientation to significant features (landscape and solar orientation) appears to have superseded symmetrical precision during site planning and layout.

Janet Blakey

Lifeways of Canada Limited

Brian Vivian

Lifeways of Canada Limited

Poster: *Wintering on Pigeon Lake*

An archaeological survey conducted by Lifeways of Canada Limited in 2011 around the south shore of Pigeon Lake in Pigeon Lake Provincial Park, Alberta located a series of Precontact sites. In 2012 mitigative excavations were undertaken at one of these sites, FgPm-5. These excavations revealed a rich and diverse artifact assemblage complete with fire-broken rock, faunal remains, and stone tools from a Late Precontact occupation. Closer analysis of these materials from FgPm-5 has revealed a complex artifact distribution which we suggest is characteristic of lodge representing a winter camp along the lake shore.

Lauriane Bourgeon, Doctorante
en archéologie

Université de Montréal

**Poster: *Taphonomic study of the
Bluefish Caves (Yukon): preliminary
results (Cave II)***

The Bluefish Caves (northern Yukon) are known by the presence of stone tools and a large and well-preserved bone collection bearing evidence of human hunting activities. However the precise dating of the human occupation of the site is very controversial: estimated between 10 000 and 25 000 BP, it could far exceed the well-accepted date of the first peopling around 13 000 BP. Taphonomic study of the faunal remains will help demonstrate whether the timing of the human occupation of the site is supported and therefore, if a very early entry into the New World is possible. Preliminary results from Cave II show only one cut mark on a bone fragment but a pattern of extensive bone fragmentation which could be explained by human exploitation of grease and marrow under severe weather conditions. The next step will be to complete a taphonomic analysis of Cave II, to include Caves I and III and eventually, extend the analysis to other sites, such as Little John, as comparata.

Meghan Burchell
McMaster University

***The Role of Seasonality in
Archaeological Interpretation: Insights
from the Central Coast***

Seasonality research on the central coast of British Columbia has used a variety of methods, including shell growth line analysis, presence/absence of migrating faunas, and DNA of salmon to understand the season of resource acquisition. High-resolution stable isotope sclerochronology to determine a precise season of shellfish collection is a novel approach that has provided new insights into seasonal patterns of shellfish gathering at eight sites in the vicinity of the village site of Namu. Results show an emphasis on spring and autumn collection at some residential locations, more specific seasonal focus at one village site, and seasonally dispersed collection at a range of smaller camps. Radiocarbon dates of shells analyzed for seasonality show that shellfish were collected year-round at Namu for at least 4500 years, supporting interpretations that it was a sedentary community. Understanding the nature of seasonal patterns and their relationship to subsistence-settlement systems is only the beginning for appreciating the role of seasonality in archaeological interpretation for the central coast.

Meghan Burchell
McMaster University

Marianne Stopp
Parks Canada

Aubrey Cannon
University of Mainz

Nadine Hallmann
University of Mainz

Bernd R. Schöne
University of Mainz

***Poster: High-resolution stable oxygen
isotope analysis to determine the season
of mussel collection at Schooner Cove,
St. Michael's Bay, Canada***

Stable oxygen isotope ($\delta^{18}\text{O}$) analysis of *Mytilus edulis* (blue mussel) from a 16th - 18th-century Inuit site in southern Labrador has shown promising results for seasonality and paleoclimate studies. As bivalves grow, their shells retain a record of local environmental

conditions. By applying high-resolution $\delta^{18}\text{O}$ sampling and analysis it was possible to interpret precise seasons of mussel collection. Live-collected specimens obtained from the site's immediate vicinity were analyzed and used as analogue data to interpret results from the archaeological shells. We also assessed two additional and separate methods to determine season-of-death for *M. edulis*, specifically thin-section analysis and Mutvei's solution staining. These methods permit the visualization of micro- and macro-shell growth structures. Of the three approaches, $\delta^{18}\text{O}$ analysis proved to be the most reliable for determining seasonality, and showed that Inuit in Schooner Cove harvested blue mussels primarily during the spring months, with some harvesting also evident in the winter and autumn.

Sarah Carr-Locke, PhD Student
Simon Fraser University

***Poster: The Presentation of Indigenous
Heritage in Canadian and American
Museums: Exploring Collaborative
Methods***

In recent years, increasing attention is being paid to Indigenous rights to be involved in activities pertaining to their cultural heritage. This interest has increased academic discussion about the importance of involving Indigenous peoples in research and public presentations of their heritage within museums (e.g., Watkins and Beaver 2008). If museums have a responsibility to work closely with Indigenous peoples in order to present their culture from an emic point of view, how has this been accomplished? More broadly, How does the history of the development of museum / Indigenous collaborations reflect changing views about Indigenous heritage rights? My dissertation will offer an historical overview of the development of collaborative practices, as well as looking at collaborative practices in the context of several current exhibits. This poster will showcase my PhD dissertation research plan and will present my preliminary results.

Gina Carroll, B.A.

University of Calgary

Poster: *Mixtecan Writing Systems: Understanding Ecologically Distinct Water Formations within the Zouche-Nuttall Codex*

The study of Mesoamerican writing systems, and the ways in which they articulate the Pre-Columbian past, has become an important area of research within archaeological and linguistic communities. One such writing system, developed in the regions of Oaxaca, Guerrero and Pueblo in Central Mexico during the Post-Classic period, exemplifies the complex dialectic between recorded language and lived experience. Embodied within the Mixtec codices, this logographic writing system details the ideological and socio-political constructs of the Mixtecan people. The purpose of this poster is to analyse the *Zouche-Nuttall Codex*, one of the eight surviving Mixtecan codices, for information concerning topographical and toponymical information, with particular regard to the portrayal of water systems. By systematically analysing both the differences between water glyphs, and the pictographic and ideographic images shown in tandem with them, it is possible to garner a more accurate understanding of how the *Zouche-Nuttall Codex* delineated between specific ecological water formations such as lakes, rivers and springs. This information may help elucidate the specific geographical locations mentioned within this, and other, Mixtecan codices.

Victoria Castillo, PhD

Yukon College

Calling the Moose: An Early Contact Period Example of Northern Tutchone Art from Fort Selkirk, Yukon

Mid-19th century Northern Tutchone of north central Yukon practiced a hunter-gatherer way of life that also included participation in trade with the Hudson's Bay Company at Fort Selkirk. Archaeological excavations at the fort over two seasons recovered a variety of European and Indigenous-use artifacts including those made from bone and antler. Most of these artifacts were utilitarian in nature but one object, a decorated moose (*Alces alces*) scapula, provides evidence of early contact period Northern

Tutchone art, which up until now, has been minimally represented in the archaeological record. An etching on the surface of the scapula depicts a large ungulate, probably a moose, along with a possible arrow in flight. Comparisons with ethnographic research of the Tutchone conducted by Catharine McClellan in the 1960s and 1970s suggest this etched motif may be evidence for spiritual practices amongst the Northern Tutchone, including the practices of moose calling and scapulimancy. This is among the few archaeological examples of art or spiritual artifacts from the interior boreal forest of the Yukon.

Nyra Chalmer

Simon Fraser University

Julia Jackley

Simon Fraser University

Enduring Landscapes: The Histories of Klehkwhannohm and Cochrane Bay

Klehkwhannohm and Cochrane Bay are important cultural landscapes in Tla'amin territory. For thousands of years, these landscapes have been transformed through human activities. Through the integration of diverse sources, we explore their deep histories to illuminate how these sites have been used to facilitate education and heritage resource management strategies.

Wen Yin (Elaine) Cheng

UCL Institute of Archaeology

Seasonality of Wendat's Pottery Production in Damiani

In Ontario archaeology, pottery productions are generally believed to occur during the summer months due to the dry and warm weather, ideal for pottery manufacturing. But pottery production is labour intensive and may compete with the time required for other subsistence necessities such as food procurement and trade. What conditions and environment the vessels were produced in maybe difficult to determine, if the vessels were executed flawlessly. There are however tell tale signs within the vessels at Damiana (a Wendat village site found in southern Ontario) that suggest the production were done under less than ideal conditions. By considering when the pottery sequence of production were executed in their

annual subsistence strategy, the Wendat's way of life may be further understood. With the help of scientific analysis, experimental archaeology, ethnohistory and ethnoarchaeology the season and condition of vessel production will be discussed.

Karen Church, BGS, Masters Student
University of Calgary
*The Inland Lifeways of the Larger
Islands of Haida Gwaii / xáadláa
gwaayee,
ca. 500 – 1700 CE*

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 historic maps. 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 registered site locations, ethnographic information, historic maps, and cultural / environmental data to begin to create a methodology for testing where these trails and related archaeological sites lay, thereby refining the archaeological potential model for the inland region.

Jenny Cohen
University of Victoria
*Paleoethnobotanical evidence from
Kilgii Gwaay, a 10,700 wet site on the
Northwest Coast of North America*

Kilgii Gwaay is an intertidal waterlogged archaeological site dating to 10,700 cal. BP, located in southern Haida Gwaii, British Columbia. Excavations in 2001 and 2002 revealed the site's significance as one of the earliest known examples of preserved plant usage on the Northwest Coast. Further work in 2012 has added considerably to known plant technologies and paleoecology from the site.

Evidence of woodworking, cordage and wooden tools provide a deep temporal context for Northwest Coast plant technologies. Palaeoenvironmental data from plant-based artifacts and seed remains will be the focus for discussing ancient human activity on the landscape. The implications of these data classes for archaeological research on the early occupation on the Northwest Coast will also be discussed.

Mark Collard
Simon Fraser University
Fredrick Foster
Simon Fraser University
*A reassessment of Bergmann's Rule in
humans*

According to Bergmann's Rule, body size in endothermic species varies such that individuals occupying colder environments tend to be larger than individuals living in warmer environments. Over the last 50 years, anthropologists have come to accept that humans conform to Bergmann's Rule. Today, this idea is so widely accepted that it is presented as a fact in many anthropology textbooks. It has also had a major impact on how we interpret the hominin fossil record. However, there are reasons to question the reliability of the findings on which the consensus is based. One of these is that the main studies that have found the correlation between human body mass and temperature predicted by Bergmann's Rule have employed samples that contain a disproportionately large number of warm-climate and northern hemisphere populations. With this in mind, we used latitudinally-stratified and hemisphere-specific samples to re-assess the relationship between human body mass and mean annual temperature. We found that when populations from north and south of the equator were analyzed together, Bergmann's Rule was supported. However, when populations were separated by hemisphere, Bergmann's rule was supported in the northern hemisphere, but not in the southern hemisphere. In the course of exploring these results further, we found that a correlation between body mass and mean annual temperature is only found in the northern hemisphere if the sample spans more than 40 degrees of latitude. Thus, our study suggests that humans do conform to Bergmann's

Rule but only when there are major differences in temperature.

Benjamin Collins

McGill University

The final Middle Stone Age occupation from Sibudu Cave, South Africa, in regional context

Recent research focusing on the African Middle Stone Age (MSA) has demonstrated that anatomically and behaviourally modern humans have been around for at least the past 100,000 years (ky). This information has challenged the notion that the Middle-to-Later Stone Age (LSA) transition reflects advances in cognition and, therefore, the transition must be considered anew. One of the major problems for understanding the transition is a lack of well-dated archaeological sites from this period that have been subjected to modern excavation techniques. The final MSA assemblage from Sibudu Cave, South Africa, dating to ~38kya, provides such a context to assess the technologies and behaviours that were present immediately prior to the transition. Moreover, Umhlatuzana Rockshelter (with a transitional MSA-LSA occupation dating between 35kya and 40kya) and Border Cave (with an early LSA occupation dating to ~44-41kya), can be used in conjunction with Sibudu to generate a regional framework for interpreting the context surrounding the MSA-LSA transition, and emphasise the similarities and differences in foraging strategies, technology and culture. This comparison demonstrates strong technological similarities in the occupations from Sibudu and Umhlatuzana. However, the early LSA occupation from Border Cave is substantially different, indicating that there may have been two substantially different, but coeval cultural groups in this region of southern Africa.

Rob Commisso

Stantec Consulting Ltd.

The Potential Use of Radiocarbon Dating to Establish the Age of Modification of Dead Culturally Modified Trees

Determining the age of cultural modification on living culturally modified trees (CMTs) is a straightforward process of counting the annual

tree rings back from the outside of the tree to the ring-year of the injury. This can sometimes establish the age of cultural modification to the year or even the season of a particular year. However, when archaeologists want to date dead CMTs, this method is less accurate. Unless it is known when the tree had died, the simple method of counting tree rings back is not applicable as there is no established date to count back from. This proof of principle study examines the usefulness of the radiocarbon bomb pulse to establish chronological markers in the tree rings that can be used to age of cultural modification on dead CMTs.

Danielle Cone

South Puget Sound Community College

Identifying Ancient Northwest Coast Basketry Trade

Of all of the wet sites that have been excavated throughout the Pacific Northwest, basketry has been the most technologically sensitive type of artifact recovered. Basketry styles often reflect the cultural community or family origins. Before they are found in the wet site context, these items were sometimes gifted, traded, or even sold. A basket weaver's work has the possibility of having traveled hundreds of miles before being found. I will be presenting research on the ability to identify basketry trade based on the styles, techniques, and designs used to weave baskets, mats, and hats excavated from different wet sites throughout the Northwest.

Clifford Cook

Senior Conservator, Canadian Conservation Institute

Tara Grant

Senior Conservator, Canadian Conservation Institute

Archaeological Conservation - Uncovering the Hidden Secrets in Artifacts

When conservation processes and techniques are applied to archaeological material there can be many opportunities to recover hidden information from the object being treated.

Generally, archaeological objects that are chosen for conservation treatment are composed of organic materials or corroded metals in very poor states of preservation. The cleaning,

consolidation, drying and analysis of these materials can reveal previously unknown or undecipherable information, adding to the historical record associated with the objects and the site from where it was excavated. Reproduction of missing elements or the complete object can aid in the interpretation of the object, and in so doing enhance the exhibition qualities of sometimes fragmentary finds.

This paper will use case histories to highlight some of the discoveries that have been made at the Canadian Conservation Institute and other laboratories in Canada. These include the analysis of the dye used to colour the fabric in the remains of a uniform likely worn at the 1814 Battle of Lundy's Lane in Ontario, the scanning and reproduction of the Ferryland Cross from Newfoundland and the elucidation of the handwritten notes wrapped around geological samples found at SbJk-1 near Cape Southwest on Axel Heiberg Island.

Stanley A. Copp, Ph.D

Langara College

Memaloose Ilahie pi Saghalié Ilahie: Stone Features and Archaeology, Okanagan-Similkameen Valleys, British Columbia

Stone features of several types have been recorded in the Similkameen and Okanagan Valleys of south-central British Columbia. These include pits excavated into talus slopes (talus pits), cobble alignments on large flat boulders, and linear or piled arrangements of cobbles and boulders located on talus or debris-flow fans. Ethnohistoric and archaeological investigations indicate that these features are associated with culturally-sensitive activities— notably inhumation of human and animal remains (memaloose ilahie) and/or the Spirit (Vision or Guardian) Quest (saghalié ilahie).

Dale Croes

Dr. Roy Carlson as Northwest Coast Wet Site Advocate - from Ozette, WA. to Triquet Island, BC

As a wet archaeological site specialist, I have always appreciated Dr. Roy Carlson's support for this direction in Northwest Coast

archaeological research, both through his own work with Dr. Philip Hobler at the Axeti wet site (near the new discoveries on Triquet Island, B.C.), to his first year (1977) visits to my initial effort to direct a wet site at Hoko River, Washington. I will chronicle my journey in focusing on wet site archaeology and ancient basketry artifacts, and how important it was been to have leaders in the Northwest encourage this direction. Though still not a mainstream part of the Northwest archaeological learning traditions, wet site work has been recognized as an important kind of fieldwork that should be pursued to add the ancient and predominant wood and fiber material culture component to our understanding of the distinctive cultural evolution on the Northwest Coast. Recent discoveries such as Kilgii Gwaay, BC, Labouchere Bay, AK (both dating to 10,700 BP) and Triquet Island, BC show that wet sites will contribute to the early range of Northwest Coast occupation—of great interest and focus to Dr. Roy Carlson.

Shannon Croft, MA

Simon Fraser University

Rolf R. Mathewes, PhD

Simon Fraser University

Barking up the Wrong Tree,

Understanding Birch Bark Artifacts of Canadian Plateau Peoples in British Columbia

Several birch bark containers and other birch bark artifacts made by prehistoric First Nations have been encountered during archaeological excavations on the Canadian Plateau of British Columbia. From these discoveries, it is apparent that birch bark technologies were of major importance to First Nations, yet little attention has been paid to them as a category of artifacts. Ethnographic records from the Canadian Plateau indicate that birch bark basketry was made by women. Thus, birch bark baskets provide a tool with which to make women and their work visible in the archaeological record. Here we describe two birch bark baskets and show how birch bark was closely associated with women, both economically and spiritually.

Amanda Crompton, Visiting Assistant Professor

Memorial University

Habitants in the Bays and on the Headlands: French Settlement in Newfoundland and Labrador during the 17th and 18th Century

From the 1660s to the 1760s, the island of Newfoundland and the southern coast of Labrador were settled by a small but steadily increasing number of French residents (or *habitants*). However, the structure and form of French settlements varied dramatically across the landscape. The structure of French settlements was guided generally by French administrative structures and vernacular traditions, but was also influenced by local adaptations and individual experiences. Site selection was governed in part by personal choice, regional settlement history, and also by the dictates of primary economic activities (the cod fishery in Newfoundland, and sealing and furring in Labrador). Different systems of land tenure also played a role in shaping settlements, as did the proximity to or distance from colonial administrations. Furthermore, interaction with the Inuit in Labrador played a prominent role in shaping French settlement choices. This paper emphasizes the diversity of the French experience in Newfoundland and Labrador, and the roles that flexibility and adaptability played in the process of colonization.

Deidre Cullon

University of Victoria and Laich-Kwil-Tach Treaty Society

Heather Pratt

Golder and Associates

Beyond Salmonopia: The Multiplicity of the Saratoga Beach Fish Traps

Fish trap technology, one of the oldest for procuring large numbers of fish, appeared on the Northwest Coast as early as 4590 ± 50 C14 BP (Eldridge and Acheson 1992:113). In 2008, we began a study at Saratoga Beach, which culminated in the recording of 15 fishing features and 11 radiocarbon dates. Long believed to be salmon-focused, cross-cultural research and faunal analysis from other sites suggests that fish traps caught many species of fish and marinelife. Considering local fish

availability and behaviour in connection with these traps, which are unique in their lack of association with an estuary and their placement outside of a river or creek, the Saratoga Beach features remind us that fish trap research must not be salmonopic, but should consider all available fish species. Such research can inform our understanding of traditional resource use and help us refine our interpretation of traditional resource management.

Christy de Mille

Lifeways of Canada

Brian Reeves

Lifeways of Canada

Michael Turney

Golder Associates Ltd.

Bipolar Technology of the Beaver River Complex in and around the Quarry of the Ancestors, Northeastern Alberta

Bipolar technology is an important reduction strategy at many Beaver River Complex (Middle Prehistoric Shield Archaic) sites in the Lower Athabaskan Basin in the Northeastern Alberta. In a number of sites in and around the significant Quarry of the Ancestors quarry/workshop complex, it is the dominant technology. This reduction strategy was employed as a technique to produce a wide range of tool blanks and tools. A description of the characteristic Beaver River Complex application of bipolar technology is provided by a comparison of the assemblages from two large Beaver River Complex sites: HhOv-193 a site located on the edge of the Athabasca River, and the anvil-rich HhOv-528 which is a northern extension of the Quarry of the Ancestors itself.

Carrie L. Dennett

University of Calgary

Katrina Kosyk

University of Calgary

Geoffrey G. McCafferty

University of Calgary

Music and Symbols: Ancient Aerophones of Pre-Columbian Costa Rica and Pacific Nicaragua

Archaeologists are only now beginning to substantially reconstruct the basic culture history for much of southern Central America. One notable aspect emerging is the strong presence

of 2 musical instruments; especially the well-made, hand-modeled ceramic ocarinas, whistles, and flutes that date from roughly A.D. 1 until the time of European conquest in the early sixteenth century. Drawing on both archaeologically recovered and museum collections, we describe the decorative symbolism, spatial distribution, and chronological variation of ocarinas from throughout Pre-Columbian Costa Rica and Pacific Nicaragua. This is followed by a cursory comparison with pre-Columbian aerophones from neighbouring archaeological regions including northeast Honduras, El Salvador, and Panama. Finally, we conclude with a consideration of their use and the symbolic metaphors inherent in these beautiful wind instruments

Genevieve Dewar
University of Toronto

***Adaptations to Marginal Environments
in the Middle Stone Age***

Mounting evidence suggests that the evolution of modern human behavioural complexity occurred gradually within Africa over a timeframe of 200 millennia or longer. The fragmentary nature of the Middle Stone Age (MSA) archaeological record contrasts sharply with the florescence of European Upper Palaeolithic sites after the Out of Africa II event(s). Within as little as 10,000 years, modern humans had covered and competently adapted to an astounding array of previously unknown and often challenging environments from India to Australia. The speed with which our species were able to adjust to unknown landscapes suggests that our capacity for adaptive plasticity developed within Africa itself, and therefore, that its roots must be teased from the often intractable MSA archaeological record. This paper presents some preliminary results of a project that takes a biogeographical approach to this problem, by investigating early modern human responses to two marginal environments in southern Africa: the highland plateaux of

Lesotho and coastal deserts of Namaqualand. It is suggested that such an approach – which emphasizes behavioural variability over modernity – may be more productive than searching for difficult to find indicators of symbolic culture or other similar trait-list milestones.

Alejandra Diaz
University of British Columbia

Michael Richards
University of British Columbia

Suzanne Villeneuve
Simon Fraser University

Brian Hayden
Simon Fraser University

Poster: Diet and mobility in the Mid-Fraser: Isotopic analysis of canids from the Keatley Creek site

This study reports on carbon, nitrogen, and sulphur isotope analyses of dog remains and other fauna from the Keatley Creek site. We discuss these results in relation to dietary variability and resource mobility through time and in the relationships between dogs and humans. While 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. Similarly, evidence of dog mobility reflects the spatial interactions between human groups and resources. Dietary results demonstrate that while salmon played an important part of dog diet at Keatley Creek, variability occurs across age groups and culture periods. Mobility of dogs and potential differences in origin through time is also demonstrated, indicating that prehistoric and proto-historic diet and mobility in British Columbia requires further investigation and a deeper understanding of the interactions between human groups and the resources they utilize.

Sandie Dielissen, Ph.D. Student
Simon Fraser University
Teaching a School to Talk: Archaeology of the Queen Victoria Jubilee Home for Indian Children

Canada's Indian residential school system left a deep and lasting impact on Aboriginal people. The Queen Victoria Jubilee Home on the Piikani

Reserve in southern Alberta was one of the many residential boarding schools with the mandate to assimilate and civilize Aboriginal children. It operated from 1897-1926 under the auspices of the Church of England, Anglican Diocese. While many studies have been undertaken to examine the social, political, and economic contexts in which these schools resided, little research has been done that concentrates specifically on the material culture of these institutions. Historical archaeology, with its interrogation of multiple sources, is well suited for understanding the material and physical daily life of the students and staff who lived within the confines of the residential school. This project was part of an initial endeavour to fill the gaps in the history of the Piikani First Nation as they transitioned to a reserve lifestyle. Teaching a school to talk by emphasizing the material culture, revealed that although the material culture itself may be considered as mundane, it is the complex history of the Victoria Jubilee Home that reflects the meaning of these objects for the Piikani.

Sandie Dielissen

Simon Fraser University

Poster: *Being a "Good" Girl: Crafting Gender in Indian Residential Schools*

There is a growing interest in exploring the feminine and sexual attributes of colonialism, particularly in an effort to unravel the often hidden, complex, and contradictory history of Aboriginal women's lives during colonization. Institutions such as the Indian residential schools shaped the lives of Aboriginal girls by embedding western ideals of femininity in habitus. Modelled behaviour, appearance and clothing, personal possessions, and household goods informed respectability, and Aboriginal girls were taught a Christian home life geared towards removing them from their otherwise savage, morally degraded, and uncultured behaviour. This poster introduces how emphasis on the materiality of residential schools changed notions of femininity among Aboriginal girls. Specifically, this research examines customary gender roles and identities of Aboriginal girls and women, including alternative identities (eg. manly-hearted women and two-spirited) to understand how gender was created and shaped

through the Christian-run Indian residential schools, transforming Aboriginal girls into "good" girls and "proper" womanhood.

Norman Alexander Easton

Yukon College

The Biface Sequence from the Little John Site (KdVo-6), Yukon Territory, Canada: More of the Same But Different

Late in 2007 Roy Carlson contacted me to ask if I would be interested in submitting a review of the early bifaces from the Little John site for inclusion in *Projectile Point Sequences in Northwestern North America* (2008) which he was editing with Marty Magne – of course I accepted and then he informed me he needed it within a month; it was early December. Nevertheless, my colleague Glen MacKay and I prevailed; the paper was the first major academic publication describing the late Pleistocene components of the Little John site, at the time confidently dated to 9500 YBP. This paper will update the biface sequence of Little John derived from our continued excavations over the past seven years which has identified even earlier components that now date to as early as 14,000 Cal BP. The presence of exceptionally preserved culturally modified fauna provides additional insight into the subsistence adaptations of these early "first Canadians" who Roy has suggested may be the ancestors of his basal occupants at Namu.

Norman Alexander Easton

Yukon College

Poster: *Yukon College's Field School in Subarctic Archaeology and Ethnography*

The Yukon College Field School in Subarctic Archaeology and Ethnography is a six week, six credit university transfer course designed as a multi-disciplinary introduction to community based anthropological research as it is currently practiced in the Yukon. We work closely with members of the local *Dineh* community to document their prehistory, traditional culture, and contemporary life. Archaeological survey and excavation is combined with ethnographic enquiry, including oral history, language and place-names documentation, kinship and social relations, subsistence and other land-use patterns, traditional technology, and

contemporary adaptations of indigenous aboriginal society to state structures and capitalist culture. The field school operates in the territory of the White River First Nation, near the Yukon-Alaska border along the Alaska Highway

Norman Alexander Easton

Yukon College

Michael Grooms

University of New Mexico

Jordan Handley

Simon Fraser University

Vance Hutchinson

Tulane University,

David Yesner

University of Alaska Anchorage

Poster: Yukon College's Field School in Subarctic Archaeology and Ethnography Analytical Developments in Interpreting the Little John Site, 2013 Update

Several analytical projects are currently being pursued to develop further our understanding of the cultural history of the Little John site (KdVo-6) near Beaver Creek, Yukon Territory, Canada. Michael Grooms of the University of New Mexico is pursuing a more detailed understanding of the geomorphology of the site under the direction of Jim Dixon. Jordan Handley of Simon Fraser University is analyzing lithic materials using XRF technology under the direction of Rudy Reimer. Distributional analysis of fauna and lithic components is being developed by Easton, Hutchinson, and Yesner. This poster will present some of the methods and initial results being generated by these efforts.

David Fargo

University of Victoria

Early Holocene Marine-Based

Subsistence on the Central Coast of B.C.: An Analysis of Fauna from EkTb-9 (Triquet Island)

Recent archaeological investigations on Triquet Island have revealed the presence of a shell midden and wet site with an associated faunal assemblage. A diverse array of marine animal species dating to the early Holocene period was identified. Although the range of species present suggests that a number of marine habitats, including intertidal zones and inshore

rocky reefs, were exploited by the site's inhabitants, the relative proportion of different species in the assemblage shifted markedly over time. A comparison of this assemblage with other early Holocene sites along the Northwest Coast reveals that a similar range of species was being targeted up and down the coast, underscoring that marine-based subsistence traditions in the Pacific Northwest were well established during this time period.

Daryl Fedje

Prepared Core Technology from Early Period Sites on the Northwest Coast

Preliminary investigation of Early Period lithic assemblages from Haida Gwaii suggests that people produced stone tools using a combination of prepared core technologies. The earliest assemblages include blade-like core and discoidal core reduction. These reduction approaches can be seen at a number of other sites on or near the Pacific Coast of the Americas. Further investigation will be needed to ascertain the origin of these reduction technologies, their relation to other early North American prepared core technologies and their temporal scope.

Alisha Gauvreau

Tla'amin First Nation

Michele Washington

Tla'amin First Nation

Dana Lepofsky

Simon Fraser University

From cultural keystone species to threatened species: the place of Pacific Herring among the Tla'amin

The loss of biological and cultural diversity is tightly linked. We explore this connection with one cultural keystone species – Pacific Herring. Archaeological, ethnographic, and current memories demonstrate the importance of this species to the Tla'amin, as well as the social-ecological transformations experienced by the Tla'amin as a result of the now decimated herring stocks.

Nadine Gray
GWR Heritage Consulting
*Cultural Landscape Approaches to
Heritage in St'at'imc Territory*

Recent work in St'at'imc Territory has highlighted a concern about archaeology and site protection efforts. A common approach to site preservation and mitigation processes is to view archaeological sites with defined and discrete boundaries. This approach becomes problematic because

St'at'imc lands and resources are not viewed as isolated or disconnected, they are integrated and they are evidence of the continual occupation. Through a discussion of heritage resources in Xaxli'p and Xwisten, this paper will discuss the need to integrate a cultural landscape approach to archaeological mitigation projects.

Colin Grier
Washington State University
*The Construction of Landscapes and
Histories in the Southern Gulf Islands of
British Columbia*

In Northwest Coast research, "the environment" has typically been operationalized as a set of enabling and constraining natural conditions that promote, curtail or allow for social change. Rarely have analyses of precontact Northwest Coast history broken with a strictly ecological notion of "the environment" to consider how coastal landforms were essentially human-constructed in both a conceptual and very practical sense. I draw on settlement pattern, chronological and coastal geomorphological data from my research in the southern Gulf Islands to outline the ways in which the coastal landforms that developed over the last 5000 years on island shores can be considered anthropogenic constructions. This approach allows for the formulation of a unique history for the southern Gulf Islands, which has been (for somewhat different reasons) an important element of Roy Carlson's characterization of the relationship between island and mainland locales on the southern BC coast over the latter half of the Holocene.

Colin Grier, Presentation 2:
*The Tides They are a Changing —
Community Archaeology in the Face of
Global Sea Level Rise*

My long-standing concern has been with resolving the incongruities between the time scale at which academic scholars and professional practitioners pursue community-oriented archaeology and the temporal realities appropriate to building meaningful relations within indigenous communities. Archaeological research (meaning scholarly production) happens under quite rapid timelines and output demands, but meaningful relationships within Coast Salish communities are traditionally the product of much longer investments, negotiations and realizations of shared objectives. I outline my own efforts at building a community-based archaeology with and for Hul'qumi'num peoples over the last 15 years, focusing on how temporal incongruities in practice can be approached. I argue that long term investments in communities and places present a best fit model for both archaeological research design and the realization of community benefits. Encouraging as this concordance may be, its implementation is being rudely interrupted by global sea level rise, which is and will be nothing short of catastrophic for both the coastal archaeological record and the viability of modern indigenous coastal communities. In that all our hands are being forced by this reality, how do we reinvent practices and reformulate relationships so that our shared interests serve as a basis for meaningful collective and collaborative action on a much larger scale?

Eric J. Guiry
Bernice Harpley
Olaf Nehlich
Vaughan Grimes
Colin Smith
Micheal Richards
University of British Columbia,
La Trobe University, Australia,
Max Plank Institute for Evolutionary
Anthropology, Germany
Memorial University
*Poster: Origins and Animal Husbandry
of Salt-Meat Cargo from the William*

Salt House: Stable Isotope Evidence from an Australian Ship Wreck Faunal Assemblage

The William Salt House (WS725), a British trading vessel, was wrecked in 1841 in Port Philip Bay while attempting the first ever direct trade between Canada and Australia. In contravention of the British Navigations Acts, she carried a substantial cargo including salt-pork and -beef procured in Montreal with the intention of delivery to the developing colony of Melbourne. Faunal remains recovered from individual barrels (preserved in situ) provided a rare opportunity to study historically contextualized nineteenth century Canadian meat packaging and trade practices. We present collagen stable carbon, nitrogen, and sulfur isotope analysis of pig (n=16) and cow (n=2) remains recovered from the wreck in order to assess the capacity of these techniques to: 1) identify and characterize variation in early Canadian animal husbandry practices, and 2) differentiate regional variability of salt meat origin in the St. Lawrence region. Results demonstrate the applicability of stable isotope analyses to questions of historic animal husbandry practices and trade.

Jenifer Gustavsen

Simon Fraser University

Laura Dane

Douglas College

Mark Collard

Simon Fraser University

Developing a method for assessing the skillfulness and practice time of Upper Paleolithic artists

Archaeologists have, to date, tended to approach Upper Paleolithic art in the same way art historians and critics approach modern art, with a focus on meaning. While this approach has yielded interesting results, its dominance has led to the neglect of another important aspect of art—the skill required to produce it. Research on the acquisition of skill across a wide range of activities suggests that an individual's level of skill in a given activity is primarily determined by the number of hours they have practiced that activity. With this in mind, we developed an

experimental approach for the evaluation of skill in representative drawing, a common form of Upper Paleolithic art. First, we developed a set of criteria that can be used to evaluate drawing skill. Then, we asked 30 subjects with varying amounts of experience to produce drawings and to provide an estimate of their hours of practice. Next, the subjects' drawings were scored with the evaluation criteria. Lastly, we regressed the scores for the drawings on hours of practice. We found a strong, significant relationship between drawing skill and number of hours of practice. Thus, we now have a tool with which to infer the skillfulness and practice time of Upper Paleolithic artists.

Cory Hackett, MA Student

University of Northern British Columbia

Uncovering Nass Chick: Historic Analysis of a Pre-contact Lake Babine Nation Fishing Village

Until recently, there has been a relatively sparse amount of archaeological research on pre-contact life-ways of indigenous peoples in the northern interior of British Columbia. As part of a long-term project in the Babine Lake/Babine River corridor, historical documentation is used to illuminate indigenous lifeways at Contact, and challenge long held assumptions that the Lake Babine people were non-complex egalitarian foragers prior to European contact. Data gathered from the Hudson's Bay Company Archives support the hypothesis that prior to European contact, the Babine people at the fishing village of Nass Chick had a high degree a social complexity and sedentism. These documents also uncover the misplaced traditional name for this abandoned village, identify the pre-contact village chief, and provide insight into local politics and economy. This proto-historic emergence of social complexity parallels the increase in social complexity for the neighbouring Gitksan and distant Tsimshian societies further down the Skeena River.

Kristina Hannis

***Rectifying Loss: The Use of
Archaeology in Specific Claims***

Canadian specific claims are a type of land claim that address First Nations' historical grievances. Specific claims deal with cases in which the federal government failed to meet its legal obligations either under the Indian Act or the terms of treaties. First Nations communities may choose to file specific claims to redress historical wrongdoings such as the failure to protect their village sites, fishing grounds, graveyards, and cultivated fields from alienation. For these claims First Nations and their agents rely on archival records, oral history, and archaeological evidence. This presentation examines the varied role of archaeological evidence in specific claims research process using case studies from British Columbia. I posit this process has the ability to create a valuable dialogue between archaeologists and descendent communities that may have useful outcomes for all participants.

Diane K. Hanson

University of Alaska Anchorage

***Working in the Extreme Northwest
Coast: Adak Island, the Aleutian Islands
of Alaska***

Unlike other cultures of Northeast Pacific, the Aleutian archipelago has no trees, no land mammals, and no adjacent continent from which to acquire resources or establish trade networks. There is no evidence that they brought domesticated animals or accidentally introduced terrestrial mammals to the islands. The Unangan people are nearly exclusively marine focused. With the occasional exception, archaeologists assumed that sites ringed the coastline of the small islands and upland areas were ignored. Recent surveys and excavations on Adak Island demonstrate that upland sites are common and that so far they date to at least 3400 rcybp. Tests of coastal sites at higher elevations also increased the number of pre-2500 year old sites raising speculation of higher populations during the Neoglacial period in the Central Aleutian Islands.

P. Gregory Hare

Christian D. Thomas

Ruth M. Gotthardt

Yukon Government, Department of Tourism and Culture, Cultural Services Branch

***Fire and Brimstone – The White River
Ash and Late Prehistoric Yukon***

The Late Prehistoric period of the southern Yukon is characterized by the sudden appearance of bow and arrow technology, copper metallurgy, florescence of bone and antler technology and general shift in chipped stone tool production. Late Prehistoric components are also universally located above a tephra from the "colossal" eighth century eruption of Mount Churchill/Bona. But are these changes in technology directly related to the ashfall?

This paper explores the technological changes that occurred in southern Yukon at 1200 BP and discusses whether such changes were a consequence of the pyroclastic event or an inevitable manifestation of broader technological change that was taking place throughout the northwest at the same time.

Lucille Harris

***Heterarchy and Egalitarianism as
Structuring Principles in the Aggregated
Mid-Fraser Villages, ca. 2000-500 BP***

This paper explores the changing nature of social organization associated with the growth and breakup of large nucleated hunter-gatherer winter settlements in the Mid-Fraser region of southcentral British Columbia, ca. 2000-300 cal. B.P. These communities are frequently cited as textbook examples of socially stratified hunter-gatherers with wealth-based forms of social inequality. However, this study, which is based on the largest dataset yet compiled from the Mid-Fraser region, finds little evidence to support this interpretation and offers an alternative heterarchical framework for understanding social and political dynamics in these communities. It is argued that the formation and breakup of aggregated villages is indicative of a shifting balance of power between band political structures and extended family autonomy. In this interpretation, band political structures are argued to have predominated during the aggregated village

period and operated to maintain relative equality between families by ensuring equal access to resources. The breakup of these communities is then indicative of the reassertion of extended family autonomy during a period of highly stressed resource conditions. It is during periods when extended families operate more independently of band political structures that the opportunity for unequal access to resources and wealth emerges.

Kathleen Hawes

Pacific Northwest Archaeological Services

Tracey Arnold

Pacific Northwest Archaeological Services

Identification, analysis and conservation of wood artifacts from Triquet Island (EkTb-9)

During test excavations in 2012 at EkTb9 on Triquet Island, Central Coast of BC, early Holocene wet site deposits were found. The excavations recovered several wooden artifacts as well as plant macrofossils and charcoal. The artifacts, including a carved wooden knob, a wooden mat or net needle, and a carved wooden object, possibly the lower arm of a compound halibut hook have been analyzed and microscopically identified by cellular analysis prior to conservation. The plant material and charcoal were also examined and identified. This presentation will talk about identification and conservation techniques and the results of identification from this pre-5,000 14CBP site.

James Herbert, BA

Stantec Consulting Ltd

Sean P. Connaughton, PhD Candidate

Stantec Consulting Ltd

CRM and Collaborations: Problems, Issues, and Solutions(?) - Lessons learned on collaboration from the ground up

Incorporating community involvement and collaboration in archaeological research is difficult in the best of situations. When attempting to apply these principles to Cultural Resource Management, with its multiple stakeholders, time and budget constraints, narrow work parameters, and other intricacies, it becomes much more challenging. Using

examples taken from a year-long major excavation in British Columbia's Lower Mainland, we suggest methods and techniques for bridging the gap between the academic model of Community Based Participatory Research and the more practical considerations required of Consulting Archaeology. This paper offers a look at the first steps taken towards greater collaboration between developers, archaeologists and Indigenous communities. These examples represent the first small steps in moving towards a future where CRM helps facilitate the development of more sustainable partnerships.

Genevieve Hill

Wet Site Archaeology 101: Law, culture, and society in BC

Wet sites have yielded some of the most impressive archaeological discoveries in the world, and despite several spectacular examples from the Northwest Coast, these sites are still not afforded appropriate concern in BC. This paper explores the reasons why such sites are at once revered and dreaded, how they are covered by the Heritage Conservation Act and associated guidelines, and why the cultural resource management sector is still unprepared to deal with them.

Lisa Hodgetts

Western University

Edward Eastaugh

Western University

Henry Cary

Town of Lunenburg, UNESCO World Heritage Site

Characterizing a "Transitional" Palaeo-Eskimo site on northern Banks Island

Recent surface survey work by Parks Canada archaeologists at the site of QaPv-5 on the north coast of Banks Island indicates that it was occupied during the transition from Pre-Dorset to Dorset Periods (which occurred between roughly 2800 and 2500 BP). Artifact

assemblages from the transitional period display a great deal of regional variability, which has led to debates about the timing and nature of the transition. In the far western Canadian Arctic, sites from this period display traits not just of Pre-Dorset and Dorset, but also Norton complex groups from Alaska, and have been attributed to a distinct cultural episode known as the Lagoon Phase. Here, we outline the architectural evidence from QaPv-5, characterize the lithic assemblage and attempt to place the site within the broader context of the Pre-Dorset to Dorset transition.

Erin A Hogg

Simon Fraser University

John R Welch

Simon Fraser University

Poster: *What does Collaborative Archaeology Mean to You?*

The Effectiveness of Engagement in Field Schools, Research Projects, and Consulting

Collaboration with descendant communities has become an essential part of doing archaeology in North America, but community engagement remains understudied. In British Columbia, court decisions and federal and provincial policies require consultation with First Nations and accommodation of their interests, but there are no widely recognized or easily applicable frameworks to guide archaeologists' efforts to work with First Nations. Legal authorities aside, archaeologists are obliged by professional standards to collaborate and share broadly, as well as to protect and conserve the archaeological record, an interest generally shared with descendant communities. If archaeologists are to be effective collaborators, we need to know more about how and under what circumstances collaboration works well and less well. By creating measurable attributes of collaborative practices, we will assess the extent and range of collaboration in archaeology projects in BC and gain insight into recommended and less recommended practices in community engagement, affording glimpses of what the future may hold.

Rich Hutchings

University of British Columbia

"Hard Times Bring Hard Questions"—Is Archaeology Pro-Development? Is it Classist? Colonialist? Imperialist? Racist?

Archaeology has played and continues to play a dominant role in the production and management of heritage. What role has it played in our current global heritage crisis? What role might it play in resolving that crisis? To address these important questions in a meaningful way, historical and critical perspective is needed, especially when it comes to defining key baselines. Properly fixing such benchmarks, however, demands confronting uncomfortable yet persistent critiques: Is archaeology pro-growth, development and progress? Is it biased towards certain economic classes? Does it discriminate against certain ethnicities? Is it imperialist? Colonialist? Such considerations invariably lead back to one essential question: What exactly *is* archaeology?

Vance Hutchinson

Tulane University

Three-Dimensional Geometric Morphometric Analysis of Late Pleistocene Femora: Taxonomy and Functional Morphology

FH Smith has elegantly described the distinctive craniofacial morphology of the Neandertals as a 'gestalt' of additive variation in numerous morphometric features that does not include unequivocal taxonomically relevant autapomorphies. Three-dimensional geometric morphometric analysis of 46 landmarks describing the complete femur identified a similar pattern of low-level variation among Neandertal and Late Pleistocene Eurasian and recent modern human femora. Individual shape components did not discriminate the Neandertals as a group from modern humans and thus cannot be considered useful for taxonomic assignment of isolated partial femora. However, discriminant function analysis successfully identified Neandertal femora based on subperiosteal shape differences in complete femora from comparative samples representing modern humans spanning the Eurasian Upper Paleolithic to the present. Thus the cumulative

variation in the complete femur does provide some taxonomic information. Alternatively, the patterns of variation in the geometric relationships of shape components of partial and complete femora are consistent with morphological trajectories resulting from some combination of body mass and activity level differences in *in vivo* mechanical loading. Thus three-dimensional geometric morphometric methods are robust for investigation of functional geometries in the human locomotor skeleton.

Heather Kendall, MA Candidate
Stantec Consulting Ltd.

Remote Conditions: Communities, Corporations, and the Consulting Archaeologist

Most Canadians live in urban centers and are not exposed to the industrial development (i.e., oil and gas, forestry) taking place in Canada's expansive, remote wilderness. However, consulting archaeologists often work in these areas with Indigenous representatives from remote communities on large projects, which can span tremendous expanses of land. This paper examines the strong relationships that form between archaeologists and Indigenous communities during fieldwork. Using examples taken from projects across British Columbia, I explore the challenges facing archaeologists when reconciling the expectations and requirements of provincial legislation, corporate deliverables, and those of the communities affected by these developments.

Brent Kevinsen
University of Saskatchewan

Elizabeth Robertson
University of Saskatchewan

A Comparative Analysis of Heat-Treated Swan River Chert and Beaver River Sandstone: Implications for Precontact Technological Organization and Knowledge

Archaeologists suspect that many stone-tool-using groups facilitated stone tool production by

improving the flaking characteristics of their lithic raw material through controlled exposure to heat. In fact, some researchers have argued that this process is so crucial to increasing the workability of lithic raw material that it was likely applied to the vast majority of these materials. With this in mind, we undertook a series of heat treatment and flintknapping experiments to assess the effects of this process on two lithic raw materials that were widely used by precontact groups in Saskatchewan and Alberta: Swan River Chert (SRC) and Beaver River Sandstone (BRS). Our experiments indicated that the workability of both materials was vastly improved by exposure to heat, suggesting that the region's precontact populations were likely to have regarded heat treatment as an integral step in stone tool production. We also determined that, whereas BRS responds positively to a wide range of temperature levels and durations, SRC's working characteristics are easily compromised by under- and over-heating, suggesting that the many precontact groups who used this particularly widespread lithic raw material would have best been able to do so had they possessed sophisticated knowledge of optimal heating conditions and methods.

Todd J. Kristensen, PhD Student
University of Alberta

Donald H. Holly, Associate Professor
Eastern Illinois University

Pendant Grave Goods of the Newfoundland Beothuk and Bird Spirit Messengers to the Afterlife

Drawing on available ethnohistoric records, an analysis of burial site locations and funerary objects, we offer an interpretation of Beothuk sacred cosmology that places birds at the centre of their belief system. Bone pendants depict various forms of bird movement that may reference a belief in the use of birds as spiritual messengers that carried souls of the dead through aerial and aquatic realms to an island in the afterlife. We briefly discuss religious aspects of contemporary Labrador and Nova Scotia First Nations and of the much older Palaeoeskimo and Maritime Archaic people in order to place Beothuk religion in a broader historical and regional context.

Marina La Salle
University of British Columbia
The trouble with 'co-'

In 2010, I published a paper discussing Community Collaboration and Other Good Intentions in archaeology. Drawing on my personal experiences, I sought to understand the motivations behind this movement, and compared its supporting theory with its often quite different application in practice as I have witnessed it. I expressed doubt that collaboration represents a real break with archaeology's past and instead suggested that this shift in language simply makes everyone feel better about exploitation. Since 2010, collaboration and community-based archaeology have continued to rise in popularity, yet my doubts have sedimented rather than dissipated. I would like to use this opportunity to raise some of the lingering questions that I have about this growing endeavour and hope to draw upon the collective experience of all present at the session for guidance on what seems more and more likely to be the 'future' of archaeology.

Mireille Lamontagne
Manager, Education Programming,
Canadian Museum of Human Rights (CMHR)
*Beneath the Canadian Museum for
Human Rights (Winnipeg): Dramatic
new insights into Late Woodland
Developments on the Northeastern
Plains*

Two archaeological mitigation projects were undertaken at the site of the Canadian Museum for Human Rights at the Forks of the Red and Assiniboine rivers in Winnipeg. The first, by Quaternary Consultants Ltd. in 2008, consisted of a large block excavation. The second, by Stantec Ltd., consisted of monitoring the rest of the construction site, requiring site drainage and some excavation, between 2009 and 2011. Key findings and insights will be shared (in advance of public release), including: dramatic shifts in pottery manufacture, resource utilization, and cultural and trade interactions, as well as important new evidence on plant cultivation and use at The Forks.

The archaeological materials recovered from eight cultural layers appear to demonstrate rapid

cultural change over a very brief 200-year period during the Late Woodland Period (700 to 1600 CE). They also represent three as-yet unnamed and undefined new cultural complexes of Rainy River Composite, which provide information to define new Late Woodland Precontact First Nations cultures for the Red River Valley. If these Rainy River complexes prove to be ancestral Anishnaabe, it would refute the theory that the Anishnaabe did not move into the area until the Fur Trade Period. This would provide a rich record for understanding the cultural history and developments of the Anishnaabe peoples and their interactions with other groups, particularly to the south.

Dana Lepofsky
Simon Fraser University
John Welch
Simon Fraser University
Michele Washington
Tla'amin First Nation

*An Introduction to the Tla'amin-SFU
Heritage and Archaeology Project*

The goals of our project are to document and educate about the rich and deep history of the Tla'amin-Northern Coast Salish people. The project builds on a foundation of trust, shared vision, and on-going communication among researchers from the university and Tla'amin communities, and brings together archaeology, ethnohistory, and ethnography to understand the Tla'amin past and to situate this past in the present and the future.

Jennifer Lewis
Kleanza Consulting Ltd
Amanda Marshall
Kleanza Consulting Ltd
*Salvaging the past, bridging the present
at Cedarvale, BC*

This paper will present the results of salvage excavation of a large prehistoric site located on the Skeena River, near Cedarvale, BC. The

excavation was undertaken in conjunction with the Gitksan First Nation, and involved a team of people from diverse backgrounds: students, community members, volunteers and consulting archaeologists. In this presentation, we will discuss the significance of this site, both scientifically, as well as culturally. The unique educational and team-building aspects of the project will also be discussed, and suggestions will be made for how similar projects may have an important role to play in the future of consulting archaeology in BC. The results of this study will be discussed in relation to their relevance to Roy Carlson's pioneering work on the culture-history of this region.

Joshua Lindal

University of Manitoba

Predrag Radović

University of Belgrade

Mirjana Roksandić

University of Winnipeg

A re-examination of the human fossil specimen from Bački Petrovac

In 1952 a local teacher and amateur archaeologist uncovered a partial calotte associated with Paleolithic artefacts at a site in the vicinity of Bački Petrovac, in Vojvodina, Northern Serbia. The find was briefly mentioned by Dr. M. Grbić, an archaeologist, and presented by S. Živanović at the Anthropological Society of Yugoslavia meeting in Ljubljana in 1960. Subsequently, Živanović published a preliminary report in 1964-65 providing a very brief description and 10 measurements. The specimen could not be found in recent years, and we have undertaken a re-analysis of the skull based on provided measurements. Here we present results of a comparative analysis based on the published data. The skull consistently groups with anatomically modern humans, and seems to fit well within the range of the Upper Paleolithic specimens from Europe. It also clusters closely with the African premodern human specimens of a slightly earlier date.

Eva Linklater

Partners with Maci Manitou

On August 11, 2006, the Nisichawayasihk Cree Nation of Nelson House, Manitoba, signed the "Agreement for a Protocol for the Protection

of Heritage Resources and Aboriginal Human Remains Related to the Wuskwatim Generating Project" with the Province of Manitoba, as represented by the Minister of Culture, Heritage and Tourism and 5022649 Manitoba Ltd. (the General Partner of the Wuskwatim Power Limited Partnership on behalf of the Wuskwatim Power Limited Partnership). The Partners were Manitoba Hydro and the Nisichawayasihk Cree Nation. A variety of issues emerged during the implementation of the Agreement which was to address heritage protection in the entire Nelson House Resource Management Area. A brief history of the Partnership, the Agreement, the issues, positive and negative outcomes, and lessons learned will be presented.

Natasha Lyons

Ursus Heritage Consulting

Localized Critical Theory: An Expression of Community Archaeology Practice

Critical theory has been little used in archaeology, despite its exceptional ability to understand social relations and circumstances, both past and present. This paper develops the concept of a localized critical theory which connects broad scale ideologies, such as colonialism and capitalism, to cultural processes that occur at the local level. This expression of archaeological practice has the power to hear, cultivate, and share the voices of individuals and communities as they speak about their respective histories, while recognizing and acknowledging their broader social context. This paper explores how individual Elders' memories are portrayed within the Inuvialuit Living History project, and how their distinctive perspectives and experiences articulate with and comment on wider historical processes and the agendas of the Canadian nation-state in the mid-20th century.

Natasha Lyons

Ursus Heritage Consulting

Ian Cameron

Ursus Heritage Consulting

The Bounty of the Ancient

Nlaka'pamux: Evidence for Plant & Animal Use at Kwoiek Creek, British Columbia

Contemporary Nlaka'pamux communities of the Fraser Canyon of British Columbia refer to their respective watersheds as their *nwha'bet'n*, a treasure chest that in traditional times contained everything they needed. The Kwoiek Creek watershed is the *nwha'bet'n* of the Klukkanktan and Hoy-een villages which housed the Kanaka Bar people until the colonial era. Recent archaeological excavation and research in the Kwoiek Creek drainage has uncovered a dense aggregate of sites yielding a remarkable diversity of plant and animal remains. This paper describes the floral and faunal data from these sites, comparing this evidence to oral and written knowledge of Nlaka'pamux hunting, gathering, and preservation practices.

Quentin Mackie
University of Victoria
Jenny Cohen
University of Victoria
Daryl Fedje

Preliminary results of the 2012 field season at the 10,700 year old wet site Kilgii Gwaay, Haida Gwaii, B.C.

Kilgii Gwaay is a an intertidal site in southernmost Haida Gwaii with patchy intact cultural deposits from 5 to 125 cm below modern beach level. Stone tools are abundant on the surface while subsurface ones are frequently sharp and pristine, showing no evidence of water-rolling. In isolated patches, preservation conditions allow for bone and plant material to preserve. Abundant faunal remains testify to a robust maritime economy including fish, sea mammal and marine birds in addition to black bear. Plant remains show wood-splitting technology, use of wooden stakes, wooden hafting elements, and split root technology including wrapping similar to basketry. Bone technology is also present. Analysis of floral remains is underway, including those from an intact hearth complex. Over 20 radiocarbon dates securely date this site to a brief period around 10,700 cal BP during a period of rapid sea level rise. The site subsequently spent almost the entire Holocene deeply drowned, to be re-exposed in recent centuries by slow marine regression. This talk focuses on the preliminary results of the 2012 excavations.

Yvonne Marshall
University of South Hampton
Making a Difference: feminist and indigenous perspectives

This paper takes up the concept of difference in two ways. Firstly in the sense of praxis, as used by Randy McGuire in *Archaeology as Political Action*, that the practices and products of archaeology can make a difference in the world. They can be transformative. Secondly, in the sense that a difference is something we make, create, draw out, and constitute as opposed to being something intrinsic to the people & materials we study and which archaeologists merely identify and name. My argument is that conventional archaeology, because it is founded in an assumption of intrinsic difference, produces and perpetuates colonialist and traditionalist persons and objects. But when we practice archaeology within a framework of difference as constitutive rather than intrinsic, a move which lies at the heart of many feminist and indigenous calls for change in archaeology, our discipline is remade as praxis, as transformative. I will illustrate this reframing of difference using examples from New Zealand and Lapita archaeologies.

Andrew Martindale
University of British Columbia
Serious Consequences: The Vulnerability of Archaeological Logics in Aboriginal Rights and Titles Cases

The history of archaeological evidence and logic in Aboriginal rights and titles cases in Canada illustrates a fundamental vulnerability in archaeological knowledge. The orthodox pursuit of universal principles framed via deductive logic creates a dissonance between archaeological claims of knowledge and our capacity to understand history. In the former, we privilege the archaeological view as the most authoritative perspective on the past but in the latter we have a legacy of acknowledging that archaeology cannot reveal the history of particular peoples. Crown advocates and expert witnesses seeking to undermine indigenous claims to historical rights and titles have exploited this contradiction. Recent, post-Delgamuukw court cases suggest that such arguments have successfully restricted

archaeology's role to that of refuting evidence from indigenous oral records while eliminating the possibility that archaeology can itself reveal history. Though few archaeologists would support such a conclusion, the crown has simply marshaled existing archaeological arguments that are founded upon a common archaeological prioritization of explanation over description. In this paper I argue the value of inductive logic and suggest that mis-placed confidence in specific forms of deduction has created both superficial understandings of history and a tolerance for non-representative sampling. Both of these are expressions of intellectual naïveté that render archaeology vulnerable to ethnocentrism of many forms that are easily exploited by opponents of aboriginal rights and titles.

Julie Martindale

University of Saskatchewan

Hunter Gatherers: Moving to the Rhythm of Lithic Raw Material Distribution

In contexts where there were issues with the availability, quality and abundance of lithic raw materials, the mobility of pre-contact hunter gatherers may have been strongly influenced by the distribution of lithic sources. However, the availability of food resources may have been the primary influence over mobility patterns in circumstances where these lithic raw material issues were less marked. In the boreal forests of northeastern Alberta, one of the most abundant and reliable sources of lithic material was the Quarry of the Ancestors; other lithic material was accessible in gravel and glacial tills and in lakeshore and river beds scattered across northern Alberta and Saskatchewan. The analysis of stone tools from 31 archaeological sites spanning 260km from the Quarry into the Deschambeau River system in northwestern Saskatchewan, suggests that as people moved across the landscape and away from the Quarry, they maintained and recycled their tools and used whatever other lithic resources were available. Although mobility patterns were heavily influenced by the Quarry as a primary lithic source, site locations along rivers and lakes coupled with the seasonal availability of barren-ground caribou in some areas of my study

region suggests a necessity to be close to aquatic and terrestrial resources. In addition to environmental considerations, the procurement of food resources and the availability and distribution of raw lithic materials would have all contributed to the strategies of mobility employed by early hunter gatherers.

R.G. Matson

University of British Columbia

The Evolution of Northwest Coast Houses; The place of small houses

The Northwest Coast is known for its winter villages of large rectangular planked houses, particularly in its central and northern parts. Recent investigations show that the preceding pattern was one of small isolated structures which were occupied in the winter. In some areas without abundant salmon resources that could be obtained with simple technologies, this small house pattern continued into the last 2000 years. Because large rectangular houses existed well before this date, we have the development of the large houses in areas adjacent to locations apparently without "villages" and very much smaller houses. This paper discusses the current evidence about these small houses, including their apparent origin and their relationship to the later large houses.

Sharisse McCafferty

University of Calgary

Geoffrey McCafferty

University of Calgary

Chocolate Soup for the Soul: Cacao Symbolism in Ancient Nicaragua

Among significant changes in the material culture of Postclassic Pacific Nicaragua, beginning about AD 800, is the introduction of large ovoid shaped funerary urns and polychrome periform vases. A close similarity exists between the periform vessels and gourd *jicaras* used for consuming a cacao drink known as *pinolillo*, and regarded as the 'national drink' of Nicaragua. Similarly, the ovoid 'shoe-shaped' urns resemble cacao pods in form, an identification supported by appliqué decoration on the exterior surface of these vessels. In this paper we suggest the introduction and/or transformation of a cacao cult coterminous with the arrival of migrant groups from Mesoamerica.

This hypothesis will be developed using ethnographic and ethnohistorical evidence of cacao symbolism used in Maya and Nahua cultures.

Geoffrey McCafferty

University of Calgary

Jessica Manion

University of Calgary

Sarah Keller

University of Calgary

Vessels of Meaning: Feathered Serpent Imagery on Postclassic Nicaraguan Ceramics

Polychrome ceramics are one of the distinctive elements of Postclassic material culture from Pacific Nicaragua. They have attracted the attention of archaeologists and art historians since the 19th century for their beauty as well as similarities to the Mixteca-Puebla stylistic tradition of central Mexico. Of particular interest are those vessels displaying feathered serpent imagery similar to iconography associated with the Nahua deity Quetzalcoatl. This paper will consider the function and symbolic meanings associated with these vessels, based on both excavated examples as well as objects from the University of Calgary museum collection.

Duncan McLaren

University of Victoria and Hakai Beach Institute
Archaeological Inventory and Testing of Early Period Archaeological Sites on the Central Coast of Canada's Pacific Margin

I was privileged to have been a student of Roy Carlson's during the 1994 Simon Fraser University archaeological field school at Namu. I was enchanted by the Central Coast region during that time and have been fortunate to return to the same region to lead the Tula Foundation funded 'Hakai Ancient Landscapes Archaeology Project'. One of the primary goals of this project is to look for and test early period archaeological sites in the Fitz Hugh Sound and Hakai Pass regions. Methods employed to aid in achieving this goal included the use of LiDAR bare earth models, sea level history reconstruction, archaeological inventory, and subsurface sampling using cores, augers, and test

excavations. Field work has been based out of the Hakai Beach Institute on Calvert Island and conducted with individuals from the University of Victoria, Simon Fraser University, Heiltsuk First Nation, and Wuikinuxv First Nation. This research has resulted in the uncovering of four archaeological sites with cultural material associated with late Pleistocene or early Holocene radiocarbon dates: EjTa-15 (Calvert Island), EkTb9 (Triquet Island), ElTa18 (Kildidd Narrows), and ElSx4 (southwestern King Island). Similar to the span of archaeological deposits at Namu, all of these sites also have mid and/or later Holocene components overlying the early period deposits. Overall, this pattern reveals that the relative sea level of this region has been more stable than at other localities on the Northwest Coast such as the Salish Sea or Haida Gwaii, at least during the Holocene epoch. This stability provided for unique conditions that have allowed for the development of stratified and deep accumulations of archaeological materials at multiple site locations in close proximity to the current shoreline.

Alan McMillan

Simon Fraser University

Nuu-chah-nulth Whaling Chiefs in the Archaeological Record of Barkley Sound

This paper reviews the archaeological evidence involving precontact whaling among the Nuu-chah-nulth people of Barkley Sound, western Vancouver Island. Extensive ethnographic accounts for this area, stressing the link between whaling and chiefly power, provide perspectives through which the archaeological data can be assessed. Inferences are drawn from the ubiquity of cetacean remains at excavated sites, the species composition of those assemblages, the uses of whale bones in the sites, and evidence for ritual behavior or status markers involving whaling. Although elements of the ethnographic whaling gear appear relatively late in the archaeological record, evidence is advanced that active whaling (as opposed to scavenging drift animals) is much more ancient.

Peter Merchant

University of British Columbia

Co-operating in the Present - Erasing the Past: lessons learnt in collaboration

Mutually beneficial collaboration between First Nations and the discipline of archaeology began in British Columbia over six decades ago. The benefits of a collaborative approach are evidenced in the increased role First Nations have taken in the production of their history, the general decolonizing of the discipline, and the vast quantity of archaeological data collected. The objective of this paper, however, is not to discuss the benefits of collaboration; rather it is to highlight and explore some of the negative consequences of the collaborative process. Through, a self-reflexive exploration, and a case study, drawn from the territory of the shishalh Nation, situated on Canada's west coast, we can observe how a collaborative archaeology and the production of history, situated within the framework of the struggle for indigenous rights, can erase the history of those indigenous people lying beyond the boundaries of the collaborative process, thereby affecting their claims to ancestral lands.

Kim Meyers, RFT

Ministry of Forests Lands and Natural Resources

Erik Blaney

Tla'amin First Nation

The Collaboration for Protection of Cultural and Heritage Sites

This presentation begins by sharing the history of the area and some of the challenges Sliammon's guardian watchman (Erik) has faced trying to protect archaeological sites. As part of this role, Erik has worked closely with BC Parks in Desolation Sound developing a plan to move camp sites to better suited locations, away from archaeological resources. These challenges inspired the formation of a multi-agency team focused on protecting cultural and heritage sites; all of the agencies involved in this project face managing their program with fewer human and fiscal resources. This paper explains the steps taken to create this collaborative program, and outlines our accomplishments and our future plans for 2013.

Dana Millson

Durham University

Past and Present Boundaries: Revealing Identity and Cultural Interaction from Prehistoric Ceramic Remains

Since the beginnings of archaeology, concepts of social boundaries and the ways in which past cultural groups organized and identified themselves have pre-occupied those in pursuit of past realities. The nature of identity and boundaries continues to be debated, however, and it has become apparent that our focus on these notions in the past has created a body of concepts in the present that can sometimes act as boundaries in our research. Thus, there exists a two-fold structure of boundaries in archaeology. The research presented in this paper was designed to address modern boundaries that act as biasing agents (core areas, modern political borders, typology), whilst attempting to recognize cultural regions and activity areas in a traditionally 'peripheral' area on the Anglo-Scottish border (UK). Through the material medium of pottery, the study area was considered in relation to the wider traditions of the Late Neolithic and Early Bronze Age of northwest Europe, but also as an independent region. The result was the recognition of a vibrant, individual region of culture and a theoretical framework within which studies of past identity in 'peripheral' areas may be placed.

S. Brooke Milne

University of Manitoba

Robert W. Park

University of Waterloo

Mostafa Fayek

University of Manitoba

Douglas R. Stenton

Government of Nunavut

David B. Landry

University of Manitoba

Toolstone availability near Frobisher Bay, NU and its implications for paleo-eskimo lithic technological organization

In 2012, a small-scale geological survey near Frobisher Bay, NU was carried out to explore local toolstone diversity and relative abundances. This information is important to our ongoing research on Palaeo-Eskimo lithic

technological organization and chert provenance on southern Baffin Island. To date, our efforts have concentrated on characterizing inland sources of chert; however, our survey of this coastal region, where numerous Palaeo-Eskimo sites have been identified, provides some interesting contrasts to our inland data. Specifically, in the areas that were surveyed, there are no naturally occurring sources of chert meaning site occupants at places like Crystal II (KkDn-1) and Shaymark (KkDn-2) imported chert tools from outside this region since they would not have found exploitable source areas nearby. This observation is supported by a detailed analysis of the Shaymark assemblage, which exhibits evidence of intense toolstone conservation and raw material stress. This paper discusses the geological survey, the rock formations identified, and the implications of this information for lithic toolmakers in this area.

Gregory G. Monks
University of Manitoba

Running Hot and Cold: climate change and Nuu-chah-nulth historical ecology

The west coast of Canada has experienced ongoing climatic variability that is driven by global atmospheric and marine processes. These variations occur at varying magnitudes and over varying time scales. This paper explores these variations as they affected the west coast of Vancouver Island and explores through time the interaction of humans and their prey species as seen in a Nuu-chah-nulth zooarchaeological assemblage.

Kelly Monteleone

E. James Dixon

Underwater Archaeology in SE Alaska: Exploring the continental shelf of the Alexander Archipelago for submerged archeological sites

The coastline of SE Alaska was submerged by post-Pleistocene sea level rise from at least 16,000 cal yrs BP until it stabilized about 10,600 cal yrs BP. The submerged continental shelf was modeled using bathymetry and other data to identify areas exhibiting high potential for the occurrence of archaeological sites. An archaeological settlement model employed ESRI

ArcGIS to identify survey areas. Two seasons of underwater archaeological survey have been conducted (NSF OPP #0703980 and 1108367), using multibeam sonar, side-scan sonar, sub-bottom profiler, real time video from remotely operated vehicle (ROV), and sea floor sampling using a van veen grab sampler, and sediment screening.

Jesse Morin

Tsleil-Waututh Nation

Near-Infrared (NIR) Spectrometry of Stone Celts Reveals Interaction Spheres in Pre-Contact British Columbia, Canada

Aside from one large scale obsidian sourcing study, there has been very limited research into broad patterns of trade and exchange in pre-contact British Columbia, Canada. This paper addresses that shortcoming by summarizing the results of mineralogical study of 1374 stone celts from 131 archaeological sites across British Columbia. These artifacts were an integral part of the woodworking toolkits of aboriginal peoples in this region from about 3500 BP to A.D. 1770. The mineralogy of these artifacts was determined using a portable near-infrared (NIR) spectrometer, and the resulting data mapped using GIS. The results of this study indicate that celts were exchanged primarily within six discrete regions, each approximately 250-400 km in diameter, that are interpreted here as interaction spheres. The Mid-Fraser region was a major production centre for nephrite celts, supplying both the Salish Sea and Canadian Plateau interaction spheres. These six interaction spheres each display a unique pattern of reliance on a particular raw material or suite of raw materials for making celts. Only in one case – on the Canadian Plateau – do celts appear to have been used in a primarily social role as prestige goods, rather than as functional tools. These results challenge the common assumption that cultures on the Northwest Coast had a greater emphasis on ranking and disparities of wealth compared to the adjacent Canadian Plateau.

Madonna L. Moss
University of Oregon
Susan M. Karl
USGS

James F. Baichtal
US Forest Service

Obsidian from Southeast Alaska and British Columbia: Travel, Trade and Exchange, or Geochemical Overlap?

Obsidian artifacts from archaeological sites in the Alexander Archipelago of southeast Alaska have been used as evidence for exchange systems across the Northern Northwest Coast dating to >7000 BP. Obsidian artifacts have been assigned to sources on Suemez Island in the outer archipelago, or to sources on Mount Edziza in interior British Columbia, based on trace element geochemistry. The spatial distribution of different obsidians has important implications for understanding the early occupants of the Northwest Coast, their maritime mobility and social relationships, both along the coast and in the interior. Differences in the geochemical signatures of obsidian artifacts were inferred to indicate Early Holocene travel or trade/exchange across hundreds of kilometers. The logistics of travel to source areas and the colors of obsidian in artifacts and sources are also assessed. We review the geochemical data to evaluate whether Suemez and Edziza sources have been reliably distinguished. Previous analyses and new data show that obsidian from Aguada Cove (Suemez), and from Mount Edziza are indistinguishable, and the obsidian from Cape Felix (Suemez), has a geochemical signature different from Aguada and Edziza. Obsidian artifacts previously assigned to Edziza sources may alternatively have been sourced at Aguada Cove. Previous archaeological interpretations require revision.

Perry Moulton, BA, B.Ed
Director of Education, DeneTha first Nation
Increasing First Nations Self- identity and Education through Archaeology

The positive relationship between independent, progressive learning and self-identity has been recognized by many researchers in the fields of psychology and social science. Impacting and increasing that identity is much less researched and less

guidance is available to those desiring that outcome. Archaeology may very well be one of the most effective methods to re-connect indigenous students with their heritage and foster greater self-confidence and identity. This project proposes to survey key areas on the traditional lands of the Dene Tha First Nation in NW Alberta during the summer of 2013. This will be followed by excavations of sites in following field seasons. The goal of the presenter is to attract scholars wishing to conduct research in these areas and to make them aware of the supports the Dene Tha First Nation will provide to this program that will benefit them, archaeological research and the students of the nation.

Robert Muckle
Capilano University
Archaeology of Japanese Camps in the Seymour Valley, Southwest British Columbia

Archaeological research in the heavily forested Seymour Valley near Vancouver has led to the discovery of a largely unknown Japanese presence in the valley in the early 1900s. Survey and excavations have revealed evidence of undocumented camps. Artifact assemblages at different logging camps are similar but features are indicative of a shift in adaptive strategies. One site has a typical Japanese layout, with a bathhouse, garden, possible shrine, and many small cabins. Another site, likely occupied by the same loggers when the operation moved, has a more typical Pacific Northwest logging camp layout with a single bunkhouse and mess hall. Excavations at one camp suggest that after its initial use as a logging camp about 1920, a small group of Japanese continued to secretly live in the camp until 1942. Research at the camps is part of a larger project involving an archaeology field school, public education, and collaboration with local government.

April Nowell
University of Victoria
Childhood, Play and the Evolution of Cultural Capacity in Neandertals and Modern Humans

The life history pattern of modern humans is characterized by the insertion of childhood and

adolescent stages into the typical primate pattern. It is widely recognized that this slowing of the maturational process provides humans with additional years to learn, transmit, practice and modify cultural behaviors. In both human and non-human primates a significant amount of their respective dependency periods are spent in play. In contrast to modern humans, Neandertals experienced shorter childhoods. This is significant as there is extensive psychological and neurobiological evidence that it is during infancy, childhood and adolescence that milestones in social and cognitive learning are reached and that play and play deprivation have a direct impact on this development. Faster maturation rates and thus shorter childhoods relative to modern humans lessen the impact of learning through play on the connectivity of the brain. In the context of play behavior, humans are unique in that adult humans play more than adults of any other species and they alone engage in fantasy play. Fantasy play is part of a package of symbol-based cognitive abilities that includes self-awareness, language, and theory of mind. Its benefits include creativity, behavioral plasticity, imagination, apprenticeship and planning. Differences in the nature of symbolic material culture of Neandertals and modern humans suggest that Neandertals were not capable of engaging in human-grade fantasy play.

Mike O'Rourke

University of Toronto

***Eroding shorelines, endangered sites:
GIS threat modelling in the Mackenzie
Delta Region, NWT***

Coastally situated sites in the Mackenzie Delta region are at substantial risk of damage or outright destruction by a wide range of factors. These factors have been forecast to increase in severity and scope as climatic conditions continue to change. The cumulative effects of rising sea level, melting permafrost, accelerating rates of shoreline erosion and more human activity in the region can potentially lead to substantial impacts on the stability of the Mackenzie Delta archaeological record. This paper outlines the progress to date in establishing a GIS threat model for the East Channel of the Mackenzie Delta and adjacent

Tuktoyaktuk Peninsula, Northwest Territories, Canada. This model is being established as an early stage of the Arctic Cultural Heritage at Risk (Arctic CHAR) project, directed by Dr. Max Friesen of the University of Toronto in collaboration with the Inuvialuit Cultural Resource Centre. The threat model will ultimately direct subsequent efforts to document and monitor heritage resources most at risk and prioritize targets for mitigation excavation where necessary. The model has been created using ArcGIS 10.1, making use of the Northwest Territories archaeological site inventory, archival air photos and public domain data sets accessed through Natural Resources Canada and the Northwest Territories Government data portals.

Brian Pegg

Kwantlen Polytechnic University

***The archaeology of 1858 - The Fraser
Canyon War***

The Fraser Canyon War of 1858 was a signal event which led to the imposition of colonial British authority over mainland British Columbia. This war began when thousands of gold miners, mostly American, entered into Nlaka'pamux territory. They brought with them colonial ideas such as monetization of the landscape and disregard for indigenous law and land ownership. A short but vicious war was fought, centred primarily on the Fraser Canyon. Miners' writings speak of burning of Nlaka'pamux settlements. Kwantlen University's archaeology field school had documented the first archaeological evidence related to the Fraser Canyon War, including buttons from US military uniforms within indigenous dwellings, and evidence that Kopchitchin, a large Nlaka'pamux village located just above the Fraser Canyon, was burned by miners in 1858.

Brian Pegg, Presentation 2:

***After the Gold Rush: Archaeology,
History and Transformation in the
Fraser Canyon***

The mid- to late-1800s was a critical time for the formation of modern British Columbia. This

time period saw a transformation from indigenous power to Euro-Canadian (and Euro-American) political, military, and economic forces. Indigenous law and property rights were displaced by those introduced by the British Crown, and later the province of British Columbia. This process occurred in the Fraser Canyon based on a specific series of events, including the gold rush and war of 1858, introduction of the cash economy, construction of the Cariboo Wagon Road, and the imposition of the reserve system and the federal Indian Act. We can trace the impact of these events through the written record, but the potential of archaeology to address the same issues has been underutilized. Most Nlaka'pamux people during this time period did not read or write, meaning the written historic record reflects Nlaka'pamux perspectives either imperfectly or not at all. Archaeology, however, is not constrained by dependence on the written record. Kwantlen University has been investigating this time period via a combination of archaeological and historic research methods for two field seasons. We have identified the first ever direct archaeological evidence for the war of 1858, and may have identified one of the Nlaka'pamux settlements burned during this conflict. We have also managed to illuminate some of the impacts of these historic events upon Nlaka'pamux cultural systems, such as the cedar economy and pot-latching, leading to a more holistic view of the history of the Fraser Canyon, and the genesis of modern British Columbia.

Meaghan Peuramaki-Brown

Brandon University

Shawn Morton

University of Calgary

Peter Dawson

University of Calgary

***The Dynamics of Maya Urban Planning:
Methods for modelling movement in
ancient civic-ceremonial centres***

Most approaches to the study of ancient civic-ceremonial site plans adopt a 'static' approach. Though diachronic studies that emphasize the historical development of structures or groups of structures, the ideological principles referenced in their design, or

technological innovations/ limitations that may have underlain their formal characteristics are common, they are apt to produce a view of Maya architecture in which the day-to-day interactions of people and spaces that animate city life are rarely considered. Further, while individual structures may serve as an interactive setting for activities spanning the secular to spiritual, the site plan as a whole is rarely woven together through the planned and resultant *movement of actors* as a 'dynamic', functioning, quotidian space. From space syntax to agent simulation, in this paper we examine a number of methodological techniques with origins well outside the Mayanist mainstream that may be applied in the creation of models for socio-spatial interaction. Within Maya studies these models might aim to provide inspiration for a deeper understanding of urban design concerns and how the ancient Maya may have actually planned and lived within the monumental built environments that so strongly define them in both popular and professional consciousness.

Angela Piccini

University of Bristol

***Community archaeology, media and the
politics of participation in the UK***

Within the past decade the UK has witnessed an extraordinary 'turn' across business, politics, research and the cultural industries towards the idea of community. No archaeological contract, fieldschool or research project is now without its engagement strategy and artist-in-residence. The UK Research Councils launched their Connected Communities strategic funding stream in 2009 and more than 100 major projects, workshops and networks are being funded. Community groups have been quick to recognise the opportunities and challenges that this new interest in participation and co-production creates, particularly as these initiatives rapidly produce new inclusions and exclusions. In this paper I'd like to discuss examples of how different communities in the city of Bristol are working with planners, archaeologists, artists and academics. Using a range of media platforms and artefacts, communities are challenging conventional understandings of archaeological and heritage value. These projects complicate important questions of

appropriation, belonging, authority and recuperation.

Heather Pratt

Golder and Associates

Deidre Cullon

University of Victoria and the Laich-Kwil-Tach Treaty Society

Gone Fishing: Collaboration on the Edge

An opportunity was provided in 2010 for a research project involving an intensive survey of several estuaries on and near Vancouver Island. This survey was a collaborative effort with the Laich-Kwil-Tach Treaty Society (LKT) based in Campbell River. An important component to this project was the training of the LKT survey crew who were responsible for surveying and identifying cultural features in the estuaries. The unique nature of the project and the unexpected results, including the retrieval of dozens of dates, have provided us with an excellent overview of estuary use and has enriched our understanding of how intensely and over what period of time the coastal estuaries supported intensive fisheries.

Paul Prince

Grant MacEwan University

A Northwest Coast Village Landscape at Kitwancool Lake

This paper presents evidence for village settlement at Kitwancool Lake including archaeological survey and excavation data on groupings of houses and the fish weirs that supported them, along with historical photographs, maps and written accounts of the use of the lake. I discuss the relationship between this evidence and aspects of the perception of settlement at this location contained in the oral traditions of the Gitanyow First Nation. I argue that a significant fit can be found between the data sets at several levels when the broader cultural meanings of oral traditions are considered.

Brian Pritchard, PhD Candidate
Memorial University

Fieldwork at Snooks Cove (GaBp-7): Reassessing the Inuit presence in the Narrows region of Labrador during the late contact period

Much is known about the effects of colonialism on traditional Labrador Inuit lifeways during the contact period (16th to 19th centuries) from both the historical and archaeological records. This is especially true for the south coast where the bulk of Euro-Canadian activities occurred, and on the central and north coasts, where the Moravians established a series of missions beginning in 1771. Geographically removed from the Moravian missions and settler communities, Inuit and settler interaction in the Narrows region of Labrador is less understood. Although previous research has established a local sequence for the Inuit occupation of the Narrows, the results of recent fieldwork at the site of Snooks Cove (GaBp-7) challenges the timing of Inuit re-settlement of this area at the end of the 18th century as well as some of the assumptions about the effects of contact on traditional Inuit lifeways here.

Farid Rahemtulla, PhD

University of Northern British Columbia

Re-envisioning the Early Period on the Northwest Coast

Over the last few decades our understanding of the Early Period has expanded greatly due to the efforts of Roy Carlson. Although culture histories have been established and continue to be enhanced, substantial evidence of lifeways beyond this is lacking. One outcome of limited data is our inability to construct interpretations beyond ecological and functional mechanics. As a result, we still know very little about the people and social landscapes at this time. A major factor in this scenario is the lack of suitable analogues with which to model such communities. The lack of direct ethnographic or historic analogues means that researchers have to be extremely judicious in their use of analogy to interpret Early Period coastal communities. Building on important foundations laid by Carlson and others, I explore conceptual notions borrowed from elsewhere and suggest that we

can cautiously formulate more contextual cultural histories for this relatively remote period.

Lisa Rankin

Memorial University

Amanda Crompton

Memorial University

Trading and Raiding in Southern Labrador: French and Inuit Entanglement in the 18th Century

The eighteenth century brought increased contact between the French and the Inuit in Labrador. French settlers developed large land concessions, which were granted for the purposes of sealing, furring, and trading, and these spread up the Strait of Belle Isle from the early eighteenth century. Crews on French seasonal cod fishing ships also continued their use of harbours in southern Labrador during the summer fishing season. As a result of their expanded activities in Labrador, French-Inuit interactions became increasingly commonplace. The Inuit had settled in southern Labrador in the sixteenth century, as a deliberate strategy to obtain European materials, which they repurposed to suit their own cultural needs. This paper will present documentary research and archaeological evidence that illuminates the nature and extent of this interaction, and the degree to which French and Inuit were drawn into an increasingly dense set of connections.

Kathryn Reese-Taylor

University of Calgary

Substantiating the Known World: Middle Formative Landscape at Yaxnohcah

The early settlers in the Central Karst Uplands of the Maya region inhabited dense expanses of rainforest, pockmarked by extensive wetlands. Like other Middle Formative (900-400 BCE) inhabitants of western Mesoamerica, people of the Central Karst Uplands settled in dispersed communities and cultivated the soil, transforming the landscape in the process. They

built large platforms within these communities and eventually constructed E-groups to mark the passage of the solar year. At Yaxnohcah, located in southern Campeche, Mexico, the spatial relationships among the platforms, the E-group, and the surrounding house lots and agricultural fields suggest an underlying conceptual model. In this paper, I explore the notion that these early pioneers were substantiating in the landscape their evolving beliefs regarding the organization of the known world. I further hypothesize that these tenets transformed throughout the Middle Formative, at least partially, in response to developments in socio-political complexity

Rudy Reimer, PhD

Simon Fraser University

Pierre Freile

Simon Fraser University

Jarred Fath

Simon Fraser University

John Clague

Simon Fraser University

Saw-whet (pigmy owl) Stone Bowl Found In-Situ at Skw'emp: Along the Squamish River Southwestern British Columbia

A recent find of a zoomorphic stone bowl along the Squamish River, southwestern British Columbia offers unique insight to the role of the regional stone bowl complex. We focus first on establishing the context of the find and then insist the requirement of local Indigenous knowledge to fully understand the find, in this case place names, oral history and the First Salmon ceremony. We proffer this bowl and its context offer insights into the ancient Squamish Nation/coast Salish worldview.

Stephanie Rivadeneira

University of Calgary

Memories in Clay: Cognition and the 'Sonrientes' of Veracruz, Mexico

Archaeological research on memory has come to emphasize the selective and exclusive nature of memory, and/or the symbolic mechanisms of memory work and even their manipulation. Since people construct social memories through their interactions with other people, it is also possible that they may be able to do so through their interaction with material

culture such as figurines. Therefore, figurines are not only valuable for their reconstruction of ancient social organization, but also for their possible role as memory devices. In this discussion, the Late Classic period figurines of the Mixtequilla region of Veracruz known as the 'Sonrientes' or 'Smiling Figurines' are examined. These figurines provide a promising case study for our understanding of how social identities could have been constructed in this society and how the "Sonrientes" may have spurred social memory.

Elizabeth Robertson, PhD
University of Saskatchewan

Lithic Technology and the Construction of Culture History in the Boreal Forest of Alberta

The challenges of archaeological investigation and interpretation in the boreal forest of western Canada continue to pose substantial obstacles to the creation of a widely accepted culture history for this region. Notably, it has experienced a Holocene landscape history that combines limited deposition of sediment with high levels of bioturbation related to forest growth and turnover. As a result, it is difficult to distinguish single from multiple component sites and to identify unmixed assemblages of the type required to define archaeological cultures. Even in contexts where single occupations are likely, the poor stratigraphy, coupled with the destruction of organic materials by the region's acid soils, preclude chronological control. These soil conditions also necessitate construction of culture-historical units based almost exclusively on lithic analysis. In certain regards, efforts to do so in this region are somewhat facilitated by the presence of the Quarry of the Ancestors, a lithic raw material source in northeastern Alberta that was extensively exploited by precontact groups; this left an exceptionally rich record of debris reflecting lithic production strategies, if not the tools that were the end goals of these strategies. However, culture histories that make extensive use of lithic evidence typically focus on their final products, rather than the technological sequences that generated them. For this reason, new strategies oriented toward the characterization of similarity and difference in lithic production sequences will need to be

devised and employed if the construction of a more secure culture history for this region is to be accomplished.

Mirjana Roksandic
University of Winnipeg

Implications of fossil specimens from the Southeast of the continent for our understanding of human evolution in Europe, with emphasis on the Middle Pleistocene

Our understanding of human evolution in Europe has been strongly influenced by the history of paleoanthropological research which favoured the west of the continent (France in particular), the Upper Pleistocene, and the abundance of Neandertal fossils. Fossil human remains from the South and especially Southeast of Europe, have a potential to provide a counterbalance, especially in critical periods such as Middle Pleistocene – when most of the behavioural and critical morphological changes start to appear – and the last glaciation, associated in Europe with the arrival of new technologies. Shaped by repeated glaciations events throughout the Pleistocene, the West of the continent experienced periods of isolation that ultimately resulted in a very specific Neandertal morphology. The eastern part of the continent did not experience isolation and consequently, evolutionary forces need not have resulted in a morphologically distinct group. The hominin mandible BH-1 (Balanica, Serbia) is the first specimen from the Central Balkan unearthed during controlled and well documented archaeological excavations. With its Middle Pleistocene date and primitive morphology, it supports the notion of different evolutionary trajectories for the East of the continent. I will examine the implications of this and other specimens from the larger area of Southeast Europe, the Anatolia and the Apennine Peninsula, with emphasis on the Middle Pleistocene.

Adam N. Rorabaugh, PhD Candidate
Washington State University

Poster: Effects of Seasonal Aggregation and Learning Opportunities on Unbiased Cultural Transmission: A Network Based Agent Model

Few studies have examined the impacts of nested seasonal social networks on cultural transmission. Furthering our understanding of the relationships between seasonal social networks and cultural trait diversity is crucial for examining the production and reproduction of knowledge among complex foraging societies such as those of the Pacific Northwest Coast and Plateau. This agent-based model expands on Safi and Dolan (2012), which examines the impact of seasonal aggregation and dispersion on the richness and evenness of cultural traits under unbiased transmission. This model removes the spatial aspects of their approach and focuses impact of seasonal social networks on cultural trait diversity. Another key assumption of the Safi and Dolan model, limiting learning opportunities, is also examined. The results of these simulations suggest that the relationship between learning opportunities and innovation rate has more impact on trait richness and evenness than seasonal networks. Seasonal aggregation does appear to result in a higher amount of one-off rare variants, but this effect is not statistically significant when learning is through differentially sized seasonal social networks and not spatially restricted. Overall, the restriction of learning opportunities appears more crucial in patterning cultural diversity among complex foragers than the potential impacts from individuals drawing on different seasonal social networks.

Laura Roskowski

Stantec Consulting Inc,

Morgan Netzel

Stantec Consulting Inc,

Taking a Walk on the Wild Side:

Possible Travel Corridors in the Forests of Northern Alberta

Much of the research in the Athabasca Oilsands region has focused on Beaver River Sandstone and the quarry locations of this raw material. The assemblages recovered are often compared to any available assemblage exhibiting similar characteristics. Little attention however, has been paid to the travel routes of the precontact inhabitants who exploited the

quarries for this lithic raw material. Through the examination of site locations, site types and a variety of lithic raw materials this paper will explore a few of the possible travel corridors through which precontact people likely gained access to the Quarry of the Ancestors. Sites will be selected from within the Quarry, satellite sites surrounding the Quarry, the CreeBurn Lake gathering area, and sites within the Fort Hills, along Joslyn Creek, and near the Birch Mountains. Knowing the locations from which precontact people originated prior to travelling into the region will help to determine which culture groups may have occupied the Athabasca Oilsands region over the past 10,000 years and may result in a stronger cultural chronology through comparison to more appropriate artifact assemblages.

Thomas C.A. Royle

Simon Fraser University

George P. Nicholas

Simon Fraser University

Antonia T. Rodrigues

Simon Fraser University

Kasia Zimmerman

Simon Fraser University

Dongya Y. Yang

Simon Fraser University

Ancient DNA Investigations into the Use of Local and Non-Local Fish at EeRb-77, British Columbia

EeRb-77 is a large multi-component (Middle to Late Period) archaeological site located on the north bank of the South Thompson River near Kamloops, British Columbia. Extensive excavations of the site in 2002 and 2004 recovered a large number of faunal remains. To determine the taxonomic composition of the fish from this assemblage, species identifications were assigned to a sample of fish remains tentatively dated to the Late Period (4500-200 BP) using ancient DNA (aDNA) analysis. This analysis revealed that chinook, chum, and sockeye salmon, mountain whitefish, and an unknown cyprinid are all present in the sample. These identifications suggest EeRb-77's Late Period inhabitants were exploiting local stocks of chinook and sockeye salmon, and mountain whitefish. In addition, the presence of chum salmon at the site suggests they also utilized

non-local fish as chum are not known to have run in the Thompson River basin. While the faunal analysis is still ongoing, the presence of locally and non-locally available fish at EeRb-77 suggests its Late Period inhabitants, like their ethnographic counterparts, exploited multiple fish stocks. By providing a means of identifying the species of otherwise unidentifiable fish remains, a DNA analysis has made it possible to obtain a more nuanced understanding of fish use at EeRb-77.

Karen Ryan, Ph.D

Canadian Museum of Civilization Corporation
Possible new (old) evidence on the fate of Franklin's ships? A piece of ship's deck planking from Franklin Point, King William Island

HMS *Erebus* and *Terror*, the vessels of the Third Franklin Expedition, were abandoned in heavy ice west of King William Island in 1848. Although miscellaneous equipment has been found, the ships themselves have not. However, an approximately four foot long fragment of deck planking was recently relocated in the collections of the Canadian Museum of Civilization. This piece was found at Franklin Point, King William Island, approximately 30 km from the last known position of Franklin's ships, in an area where Inuit reported a ship was crushed by ice and sunk in deep water. Records detailing how the ships were outfitted prior to the Franklin Expedition indicate that this plank's size and wood species are consistent with those used on the upper decks of *Erebus* and *Terror*. This, together with the nature of damage evident on the broken plank, may provide a tantalizing clue about the fate of Franklin's vessels.

Kristin N. Safi

Washington State University

Patrick Dolan

Washington State University

A Temporal Analysis of Site Connectivity and Marine Travel Corridors Among Settlements of the Salish Sea

This analysis examines settlement patterning and marine travel networks within the Salish Sea. For much of the Holocene, canoes would have been the dominant mode of travel across the coastscape created by inland waterways of southwestern British Columbia and northwestern Washington. We draw upon site records from both regions and assess patterns of site distribution, connectivity, and marine travel spanning the mid to late Holocene. We utilize GIS-based pathway analyses to generate marine travel corridors between temporally segregated known site locations that minimize travel costs. We then utilize multiple clustering algorithms to evaluate the degree to which site location and site centrality are functions of neighboring site distributions, potential resource access, and marine travel networks between clusters and centralized sites.

Takashi Sakaguchi, PhD

Hokkaido University, Sapporo, Japan

Foundations of Jomon male symbolism seen from vessels with phallic spout

This paper explores male symbolism focusing on the analysis of vessels with phallic spout, which were produced from the middle of the Late to the beginning of the Final Jomon (ca. 3820-3120 cal BP). The analysis is based on three sources of information: 1) temporal and spatial distribution, 2) stylistic analysis, and 3) archaeological contexts. For the analysis, a database consisting of attributes, such as archaeological context, vessel form, pottery sequence and presence/absence of decoration, extracted from published sources was created. This database provides invaluable information to assess the number, type and context of vessels with phallic spout throughout the Japanese archipelago. Although the many vessels represent secondary deposition, cases found in housepit floors, burials, large and small pits, and elsewhere suggest that temporal and spatial variability of Jomon male symbolism.

Dennis M. Sandgathe

Simon Fraser University

Harold L. Dibble

University of Pennsylvania

Paul Goldberg

Boston University

Shannon P. McPherron
Max Planck Institute, Germany

Alain Turq
Musée National de Préhistoire, France

Vera Aldeias
Max Planck Institute, Germany

***The Appearance of 'Habitual' Fire Use
in the Upper Pleistocene of Western
Europe.***

Although research relating to Palaeolithic fire use has a long history, it has become particularly popular in the last decade. This has been fuelled in part by improved analytical techniques, improved standards of data collection and reporting, and the discovery of new sites with important fire residues from South Africa, the Middle East, and Europe. A major component of this new research has been to determine when "controlled use" and "habitual" use of fire developed among Pleistocene hominins. Various researchers have presented conflicting arguments about when these important technological/adaptive steps occurred. However, an important starting point of this debate is defining what is meant by "controlled use" and "habitual": this will be briefly discussed here. Evidence will also be present from several Middle Palaeolithic sites in SW France (Pech de L'Azé IV and Roc de Marsal) that suggests that fire use was not a constant component of Neandertal adaptations in Western Europe even as recently as the late Upper Pleistocene.

Dave Schaepe
Stó:lō Nation

***Archaeology as an Aspect of Holism in
Heritage at Stó:lō Nation***

This presentation focuses on the role and practice archaeology at Stó:lō Nation as it applies to addressing needs of the Stó:lō community. Archaeology is conceptualized within a Halq'eméylem context as an integrated practice linked by language to health, research, resource management, curation, repatriation and education in the context of contemporary aboriginal rights and title issues. I aim to describe how the archaeological program at Stó:lō Nation developed as a holistic operation responding to and benefiting the community in a variety of ways – some of which, like health, are

not commonly linked to this discipline. Archaeology, here, is practiced as an element of a broad ranging approach to heritage operations linking the present with the past and the future, among a field of aboriginal rights and title issues.

Jeff Seibert, Senior archaeologist
Catarqui Archaeological Research Foundation
Ashley Mendes, Curator
Catarqui Archaeological Research Foundation
***The 1812 period Naval Hospital at Point
Frederick, Royal Military College,
Kingston, Ontario***

Over the last five years, archaeologists' understanding of the War of 1812 Naval Establishment at Point Frederick / Royal Military College, Kingston, Ontario has undergone some profound changes. Among these is the recognition that the 1812 period naval hospital does not correspond with the current Commandant's house, but instead represents an entirely separate and ruined structure associated within the same area of the complex as the Commandant's house but distinct from it. Through the collaborative work of archaeologists, historians and members of the Canadian Forces, archaeologists at the Catarqui Archaeological Research Foundation in Kingston Ontario have located and begun to investigate this important piece of the early military complex on site. This finding has ramifications for our understanding of the complex as a whole in addition to our understanding of the War of 1812 on the Upper St Lawrence and Lake Ontario.

Ian Sellers, Graduate Student
Simon Fraser University
***The Archaeology of Economic Change
in Historic Barkley Sound***

During the course of the nineteenth century, the Nuuchahnulth in Barkley Sound were severely reduced by disease and constrained through reserve allocation, conflict, and political amalgamation. Trade waxed and waned in extremes through fur, logging, and fishing industries. Yet, throughout this episodic change, the Nuuchahnulth have maintained a strong presence in the Sound and continue to use their territories and resources in creative ways.

Although we have considerable ethnographic and historical sources that document pre-contact economy and the earliest years of the Maritime Fur Trade, the intricacies of material use in nineteenth century Barkley Sound remain poorly understood. This project gathers contact-period archaeological assemblages from six sites in the area to bring this turbulent period to the fore. By tracking material change at the village level, I explore the creative use of new manufactures for local purposes and distil patterns of trade that reflect wider shifts in Nuu-chah-nulth social organization.

Jon Sheppard

Arrowstone Archaeological Research and Consulting / Simon Fraser University

The Settlement Patterns of Kwoiek Creek in Relation to the Greater Mid-Fraser Region: A Statistical Analysis of Housepit and Village Sizes

This paper presents the relative size distribution of housepits and villages along the Fraser Valley between Yale and Big Bar, exploring how the settlement patterns of the Kwoiek Creek area compare to the greater Mid-Fraser Region. While the Bell, Bridge River, and Keatley Creek housepit village sites have been the focus of much archaeological research for over forty years, comparatively little research has been conducted on other housepit sites in the region. This is especially true of village sites south of the town of Lillooet. Investigating housepit and village size is important as theories of the evolution of complex cultures are many and varied, but one factor that is usually considered prominently is population size. The growth of human populations on all scales (household, community, and regional) are all recognized to be important aspects of the development of complex societies. Whether population growth is a cause or effect of complexity is debatable, but either way it is important to have some means of evaluating the scale of human populations. One obvious proxy for population size is settlement size. Clearly it is a reasonable assumption that a larger house was capable of housing a larger family (or

corporate group), similarly it could be argued that a larger number of houses suggests a larger community size. In this paper the topic of relative size distribution of housepit and village sizes of the Kwoiek Creek area are discussed in relation to the greater Mid-Fraser region.

Siemthlut (Michelle Washington)

Tla'amin First Nation

Rooted in the Past and Looking to the Future: Tla'amin Perspectives on Heritage Research

Tla'amin has adopted the province's admittedly imperfect Heritage Conservation Act and is making the most of it. Our work with SFU and at treaty tables has highlighted ethical and practical mandates to identify, evaluate, and protect places important in our history on the basis of Tla'amin values and interests.

Cristian Silva, BA, MA

Equipo Peruano de Antropología Forense EPAF (Peruvian Forensic Anthropology Team), Lima, Perú

Forensic Archaeology as a Human Rights Tool: Using Forensic Archaeology to Uncover the Troubled Past of Two Continents

The genesis of forensic archaeology in cases of gross human rights violations is rooted in Latin America. Despite multiple challenges in the field, forensic archaeology is an essential component in revealing historical mass graves, genocide and extra-judicial killing in a global context. Forensic anthropology organizations like the Peruvian Forensic Anthropology Team (EPAF) and the Guatemalan Forensic Anthropology Foundation (FAFG) use multi and interdisciplinary means to collect ante-mortem information such as *testimonios* from survivors. Together with scientific data collected during the exhumation process, these organizations hold strong evidence that can be used to bring perpetrators of Human Rights violations to justice, and assist in bringing restitution to surviving family members of the victims.

Cameron Smith
Portland State University
*Evaluating the Degree of Proto-Historic
Craft Specialization on the Lower
Columbia River*

Like social ranking, the use of slaves and near- to full residential sedentism, craft specialism is not anthropologically expected of non-agricultural peoples, but is evident in at least the later precontact, or protohistoric, period on the Lower Columbia River. I evaluate the kinds and degree of such specialization and characterize it in relation to specialization in other cultures including states (e.g. Mexica) and chiefdoms (e.g. Maori).

John Somogyi-Csizmazai, B.A.
Consulting Archaeologist, Victoria B.C.
Rebecca Wigen M.A
Pacific ID

Poster: Dog Bone Artifact from DhRx-16, Departure Bay Nanaimo B.C.

During a salvage excavation in the summer of 2007 an unassuming medium sized piece of worked bone artefact (awl) was found on traditional winter village of the *Snuneymuxw* First Nations (DhRx-16), also known as the Departure Bay Site in the city of Nanaimo, British Columbia. Later faunal analysis revealed this artefact as coming from a dog's ulna. Based on ethnographic records, dogs in Coast Salish cultures were traditionally divided into two groups; one bred specifically for fibre production (the wool dog" and the other whose breeding was not controlled (the village dog). However, the region's ethnographic records are not clear if dog was used for other specific purposes. Dogs have been viewed as a hunting companion, beast of burden, source of fibre and sometimes as a source of food. Very few examples exist of dog being used as a source for artefact manufacturing and it is unclear whether this artefact was used as a utilitarian tool or had a more ritualistic/spiritual purpose. The

appearance of this artefact may require that dog should also be considered as a source for bone tool manufacturing when conducting artefact analysis.

Chris Springer
Simon Fraser University
Megan Caldwell
University of Alberta
Dana Lepofsky
Simon Fraser University
*Territoriality and Tenure in
Transformed Landscapes and Seascapes:
Linking Residences
and Marine Management*

The archaeology of territoriality and tenure typically emphasizes economic concerns in the human-land relationship. Considering past terrestrial and intertidal transformations as the physical components of a place network, this paper highlights the social, political, and economic nature of land use and ownership in Tla'amin First Nation traditional territory.

Jim Stafford
Coast Interior Archaeology
Mike Willie
Dzawada'enuxw First Nation
Craig Skinner
Northwest Research Obsidian Studies Lab
*Go Tell it on the Mountain: Defining the
Central Coast A Obsidian Source*

In 2008 an expedition, funded by the Dzawada'enuxw First Nation, to the Kingcome Glacier on the south Central Coast of BC resulted in the collection of obsidian samples for analysis. This paper relates the context and an account of the expedition as well the subsequent geochemical analysis of the volcanic glass.

W. James Stemp
Keene State College
Meaghan Peuramaki-Brown
Brandon University
*Obsidian Blades as "Things": The
Entanglements of Ancient Maya Blood-
letting*

In his new book *Entangled*, Ian Hodder (2012) explores 'thing-thing' relationships and the dependence and dependency between humans, the environment, other organisms, and

materials. In this paper, we examine the threads that both connect and entangle obsidian blades into the cultural practice of ritual blood-letting. The intricate dependences and dependencies that require humans to use blades to let blood and that create blades as blood-letters are documented in order to develop a better understanding of the complexity of ancient Maya blood-letting. In so doing, we focus on tracing everything that 'entangles' the blade as both 'object' and 'thing', from procurement of the raw material from which it was made to successful communion with the gods and ancestors. We also use materials science to develop methods to identify blades that were actually used to let blood in the past. Knowing which blades were used to let blood helps us to better understand the social contexts of both actual and symbolic blood-letting. These ideas are couched within larger theoretical frameworks that include agency, cognitive archaeology, materiality, and behavioral/operational chains.

Douglas R. Stenton

Culture and Heritage, Government of Nunavut

Robert W. Park

University of Waterloo

Recent Investigations of Franklin Expedition Archaeology Sites in the King William Island Area, Nunavut

This paper presents the results of archaeological surveys and site assessments conducted on and near King William Island, Nunavut, between 2009 – 2012. The research was conducted as part of an inter-agency and multi-disciplinary project investigating the 1845 John Franklin Expedition. The results of the work completed to date are discussed and suggestions for future investigations are outlined.

Kisha Supernant

University of Alberta

Archaeology as Social Critique: Exploring the barriers to and consequences of collaborative, community-oriented archaeology

Collaborative research in archaeology has begun to approach a critical mass, with developments in theory, practice and training.

Articles and edited volumes are appearing with greater frequency and a new generation of post-NAGPRA scholars are working closely with indigenous communities, leading to an engaged archaeology that is making a strong positive contribution and transforming the practice of archaeology as a whole. The question I address in this paper what happens to the knowledge we generate by engaging in community-oriented archaeology; specifically, what are the consequences of giving power back to a community, not for archaeologists, but for *other communities*? I examine the answer to this question in the context of indigenous struggles for recognition of rights and title. When we collaborate with a First Nation or Native American group, what happens when we publish in academic contexts about history, territory, and belonging from that perspective? My own work in attempting to work collaboratively has pushed me to explore the broader structures influencing the collaborative process, casting light on the interconnectedness of collaboration and social critique. Despite our best intentions, our work can sometimes become a tool used to disenfranchise indigenous communities or set indigenous communities against one another within an ongoing neo-colonial structure of government, law, and oppression. As part of the field of anthropology, one of our unique contributions is to relate the contextual, historically particular elements of a specific social milieu to large-scale national, cultural, and global processes of politics and power. We must, therefore, apply our experiences within a community-oriented archaeology to a broader critique of the structures of the neo-colonial state, not just to the practice of archaeology.

Lia Tarle

Simon Fraser University

Dennis Sandgathe

Simon Fraser University

Mark Collard

Simon Fraser University

Faunal evidence for clothing among Neanderthals and early modern humans

Between 40,000 and 25,000 years ago, during the cold, dry period known as Oxygen

Isotope Stage 3, modern humans migrated into Europe and replaced the Neanderthals. Here, we report a two-part study in which we investigated whether clothing could have played a role in this replacement event. In the first part of the study, we carried out a systematic review of the use of mammals for clothing among mid-to-high latitude non-industrial societies in order to identify taxa whose remains can be interpreted as evidence for utilitarian clothing. In the second part of the study, we statistically compared the relative frequencies of the above taxa in Neanderthal-associated and early modern human-associated archaeological occupations from Europe. The results of the analyses suggest that modern humans made utilitarian clothing out of a wider range of taxa than Neanderthals. They also suggest that the clothing produced by modern humans was more thermally effective than the clothing made by Neanderthals. Fur ruffs, which are important in polar environments today, may have been a modern human innovation. These findings are consistent with the idea that clothing played a role in the replacement of Neanderthals by modern humans.

Michael Turney

Golder Associates Ltd.

Middle Prehistoric occupations of HhOv 528: new insight into the Quarry of the Ancestors, Northeastern Alberta

The Quarry of the Ancestors in the Lower Athabaskan Basin is one of the most significant complexes of sites in Northeastern Alberta. Although composed of numerous sites, the Quarry of the Ancestors is dominated by two large activity areas, HhOv 305 and HhOv 319, both of which have been protected as part of "archaeological preserve" under Provincial Notation PNT 050083 since 2006. Work conducted over the past three field seasons has focused on a northern lobe of HhOv 319 which extends past the Quarry of the Ancestors protected boundary. New data from these investigations is presented, including temporally/cultural diagnostic artifacts, radiocarbon assays, geomorphological data, and new interpretation of tools and lithic debitage distributions to allow new insight into the Middle Prehistoric occupation of the Quarry of the Ancestors.

Elizabeth Velliky, MA Candidate

Simon Fraser University

The "Background Effect": Investigations on Geochemically Isolating Mineral Pigments in Rock Art

This project uses geochemical data from ochre pigments in rock paintings (pictographs) in Squamish, British Columbia, gathered with portable X-ray fluorescence spectrometry (pXRF) in order to assess if it is possible to isolate the geochemical make-up of the pigment from the background rockwall. The chemistry of the background rockwall heavily influences pictograph analysis with pXRF, which alters the elemental reading of the pigment. This project explored the data and determined that though the much of the variance between pictograph chemistry is due to the rockwall (control) readings, it is still possible to parse out this "background" effect using ANOVA tests and multivariate statistics to obtain an elemental fingerprint of the ochre pigments. This methodology was applied to three pictographs in Squamish, and found that it is likely all three were painted with different ochre minerals. This research established methodology for analyzing pictograph pigments with pXRF, and provides a benchmark for future geochemical research in rock art.

Michael Wanzanried

Boise State University

A Bead is a Bead is a Bead: Exploring Dimensions of Meaning

The goal of this paper is to examine how archaeologists use certain artifact classes as evidence for the presence of social hierarchies in the Middle Fraser region of British Columbia ca. 2000-800 B.P. In particular, a close look at how beads have been used as proxy measures for the presence of elites, or minimally as indicators for elevated social status, reveals that current interpretative frameworks should be revisited to avoid instances of circular reasoning. Although this paper does not deny the presence of social stratification in pre-contact Middle Fraser villages, it critiques the way meaning and values have been assigned to certain aspects of material culture. The limitations associated with using beads as a marker of elites is synecdochically

related to issues of artifact interpretation in general. One of these issues is that the materials of human existence and society cannot be neatly categorized as being 'either/or.'

Gary Warrick

Wilfred Laurier University

The Politics and Ethics of Community-Oriented Archaeology at Six Nations of the Grand River, Ontario

The Six Nations of the Grand River, Ontario is one of the most populous and most diverse Indigenous communities in North America. Each Six Nations person has multiple socio-political identities (e.g. clan, nation, reserve or urban, traditional or progressive, Haudenosaunee Confederacy or elected Band Council supporter, activist or non-activist). Attitudes of the members of the Six Nations community to archaeology and archaeologists vary widely depending on political orientation, from opposition to active support. Those who oppose archaeology claim that it is colonial, disturbs the graves of buried ancestors, and supplants Indigenous ways of knowing their past. Supporters claim that archaeology sheds light on their ancient past and affirms rightful ownership and management of their territories, resources, and heritage. An ethical community-oriented archaeologist working with Six Nations must defer to community values and knowledge about heritage but also strive to uphold the highest standards of archaeological practice without becoming involved in Six Nations politics, honouring the centuries-old Two Row wampum of non-interference in Six Nations' affairs. However, because of the multiple sub-communities created by multiple interest groups based on identity politics at Six Nations, it is exceedingly difficult to do archaeology without being perceived by some members of Six Nations as a colonial agent and political interloper. An ethical dilemma confronts any archaeologist doing community-oriented research with Six Nations because the community is comprised of a number of conflicting political factions and voices. This paper offers a critical examination of the political and ethical challenges of engaging in community-oriented archaeology with Six Nations of the Grand River, Ontario.

W. Jesse Webb

University of New Brunswick

Say! What a Lot of Fish There Are: Recent Investigations into an Archaeological Fishery from the Quoddy Region, Southwestern New Brunswick

In spite of a long history of research, the role of Aboriginal fisheries and their relation to subsistence economies, seasonal mobility, and cultural change remain relatively underdeveloped in the archaeology of the Quoddy Region. This can be attributed to a number of factors, including unevenness in the regional dataset, differential preservation, recovery bias, and a tendency to privilege mammals in zooarchaeological analyses. This paper presents a preliminary analysis of the vertebrate faunal remains from BgDs-15, a shallow shell-bearing site from the Passamaquoddy Bay mainland, including more than 1100 fish remains recovered from column samples. These data underscore the importance of fisheries to ancestral Peskotomuhkati lifeways and are considered in light of broader regional patterns during the Late Maritime Woodland period (ca. 1500-500 B.P.)

Mark R. Williams

University of New Mexico

Preliminary Findings from an Early Holocene Waterlogged Shell Midden on Prince of Wales Island, AK

Initial survey of a shell midden on Prince of Wales Island, Alaska indicates that anaerobic waterlogged deposits extend at least 2m below the surface. This has yielded excellent preservation of botanical remains and small fauna, which tentatively date to roughly 10,700 calBP. Consequently, this site has a high potential to address questions of early Northwest Coast resource management and maritime specialization. This presentation reports initial findings from the 2012 survey and outlines the direction of future research at the site.

Pamela R. Willoughby

University of Alberta

The Middle Stone Age archaeological record of Magubike, Tanzania

Iringa is a Region (province or state) in the Southern Highlands of Tanzania. It is well known for its striking rock outcrops, some of which contain caves or shelters. These contain an archaeological record extending from the early Middle Stone Age up to historic and modern times. Over the last 6 years, members of the Iringa Region Archaeological Project (IRAP) have excavated at two rockshelters, Magubike and Mlambalasi, and have identified many more rockshelter and open air archaeological sites. Both sites have yielded Stone Age human skeletal remains, as well as thousands of flaked stone artifacts, ostrich eggshell beads, and faunal remains.

Excavations at Magubike rockshelter have shown that it was first occupied early in the Middle Stone Age (MSA), then more or less continuously afterwards. Especially striking is the fact that it may have been occupied during the late Pleistocene, prior to the Out of Africa 2 migration of modern humans. This is at a time when cold, dry conditions led to the reduction of human and animal populations throughout the African continent. This population bottleneck or reduction is seen in the mitochondrial DNA sequences of living people, and may explain the absence of modern humans outside of Africa until around 50,000 years ago. This paper presents the archaeological sequence of Magubike and how it documents a possible Ice Age refugium for modern humans.

Lucy Wilson

University of New Brunswick

Constance L. Browne

University of New Brunswick

***Change in Raw Material Selection
Criteria Through Time at a Middle
Palaeolithic Site in Southern France***

By applying a resource selection model to the lithic assemblages from eleven archaeological layers at a Middle Palaeolithic site in southern France, the Bau de l'Aubesier, we demonstrate a very clear change in the importance of selection criteria over time at this site. The model uses ten variables related to the characteristics of the raw materials themselves (quality, size of pieces available), and to the characteristics of the sources (extent, abundance of raw material) and of the landscape around them (terrain difficulty,

etc.). Running the model with subsets of variables shows that the terrain variables always provide a better match to raw material use than do the raw material variables taken by themselves, but the best model is always the overall (ten-variable) model. This means that terrain is most important in every case, but raw material properties also matter. Comparing the percentages of each subset within the overall model, however, shows a clear change in emphasis in the upper layers versus the lower layers of the site. In the lower six layers, the percent contribution of the terrain variables is always greater than that of the raw material variables, but in the upper five layers the reverse is true: terrain still matters, but raw material becomes more important. This change happens near the end of the Middle Pleistocene, and raw material characteristics remain more important at this site throughout the rest of the Pleistocene.

Jordan Wilson

Musqueam Indian Band

Terry Point

Musqueam Indian Band

Susan Rowley

University of British Columbia

***Consulting with Community: Musqueam
and UBC***

We will present findings from a project seeking to gain Musqueam perspectives on both the Musqueam-UBC Archaeological Field School, a course which has taken place annually on the Musqueam reserve since 2007, and on the discipline of archaeology in general. We attempted to establish a consultation plan to effectively listen to Elders' and Musqueam Band members' perspectives and concerns, and in order to provide recommendations to the Field School's Steering Committee. Results indicate that the Field School cannot be considered without thinking and talking about Musqueam and Coast Salish culture. The concepts of archaeology, history, community, land and land use, oral history, colonialism, family history, Coast Salish cultural practice, and other concepts are all viewed as interconnected

components of a larger picture. We continue to explore ways to create a more inclusive and open-ended approach in order to gain a Musqueam perspective of the Field School and archaeology.

Robin Woywitka

Archaeological Survey of Alberta

Duane Froese

University of Alberta

Stephen Wolfe

Geological Survey of Canada

Origin and age of raised landforms in the Cree Burn – Kearl Lake lowland and setting of Alberta Oil Sands region archaeological sites

A large number of known archaeological sites in the oil sands region of Alberta are found on raised landforms in the Cree Burn - Kearl Lake lowland located east of the Athabasca River and south of Fort Hills. The origin and age of these landforms is examined using LiDAR image interpretation, analysis of landform shape, orientation, and sedimentary observations. We demonstrate that the majority of these features were formed as gravel bedforms related to catastrophic flooding during deglaciation. The bedforms are frequently mantled with eolian sand, indicating that windy, dry conditions prevailed following flood sedimentation. It is possible that humans occupied the area during this period, although the precise age remains unclear due to the lack of directly-dated archaeological sites. Peat accumulation in the intervening lowlands followed eolian sedimentation, and it is assumed that a stable, vegetated surface was established on the raised landforms by this time, likely precluding significant eolian sedimentation. The co-occurrence of a burgeoning wetland community and stable uplands would have provided suitable habitat for human occupation.

Eldon Yellowhorn

Simon Fraser University

Using Archaeology to Find the Story in History

Communities use narratives of history and place to strengthen their identities, but vernacular histories tend to rely on impressions rather than data and contain misinformation

when a better understanding is needed. My experience in constructing a community history for the Piikani First Nation demonstrated that using those elements as the starting point could rectify this situation. Rather than dismissing these narratives as false, the approach I take is to interview a number of people to determine the origin of such stories and why persist. More often than not, the response is that an elder was the source of that knowledge and therefore it should not be questioned. Thus the objective of my research, which is community based and is cognizant of including the voices of citizens, is to illustrate that events that unfolded beyond living memory are open to interpretation because local history is so poorly documented and that several modes of research must be deployed to achieve a better understanding of it.

Kasia Zimmerman

Simon Fraser University

Cultural transformations in the northern Salish Sea

People and dogs share a fascinating relationship that has taken many forms over the course of human history. Archaeological investigations, ethnographic records, and oral histories indicate that Coast Salish peoples once maintained two types of dogs: the hunting (or village) dog, and the wooly dog. Tla'amin First Nations, who are part of the Northern Coast Salish peoples, had a unique type of hunting dog that was specifically trained to hunt deer. Members of the Sliammon community shared their knowledge about the Tla'amin hunting dogs with me over the course of the ethnohistory-archaeology fieldschool conducted in the summer of 2012. This knowledge is integrated with archaeological data about dog remains recovered from Tla'amin territory to understand the nature of the human-dog relationship at Sliammon, BC and how this relationship has shifted along with changing ways of life. This study provides insights into the nature of the relationship between Tla'amin people and hunting dogs and how we might recognize that relationship archaeologically.

Friends of CAA/ACA Whistler 2013

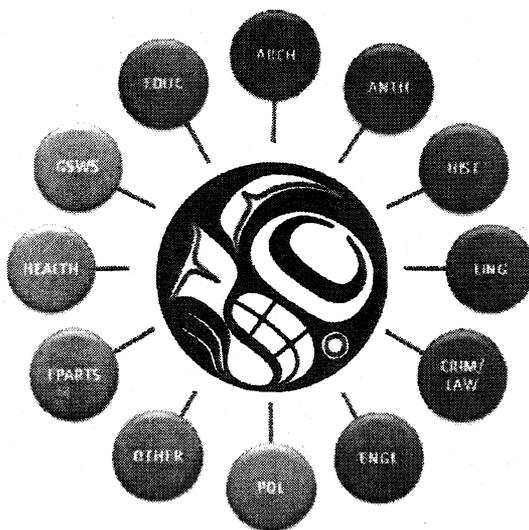
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Date	Soo Valley	Grand Foyer						
Wed, May 15	Executive Meet	Reception						
	9:00 – 16:00	18:00 – 20:00						
Thurs, May 16	Valley Foyer	Fitzsimmons	Harmony A&B	Spearhead A&B	WedgemontA&B	Black Tusk	Tantalus	
8:30 – 12:00	Coffee Breaks	Books/Products for conference	Plenary Session: Whither HCA?					
12:00 – 13:00								
13:00 – 18:00			Roy Carlson Session		Whistlin' Dixie: Cognitive Arch		Poster Session	
19:00 – 20:30			ArchaeoFilms					
Fri, May 17								
8:30 – 12:00			Roy Carlson Session	Human Evolution:	Student Wkshp Publishing	Pacific Rim Archaeology	Archaeology in the Heartland	
12:00 – 13:00								
13:00 – 18:00			Roy Carlson Session	The last half million years	Mid-Fraser Arcaheology	Tla'amin Heritage	CAA Quarry SIG	
19:00 – 21:00			Guest Lectures					
Satur, May 18								
8:30 – 12:00			Community Oriented Arch		Northern Archaeology	Evenflow: Perspectives	Applying for Grad School	
12:00 – 13:00								
13:00 – 18:00			Community Oriented Arch		CAA-AGM 15:00–18:00	Historical Archaeologies		
18:00 – 24:00			Banquet at Squamish Lil'wat Cultural Centre					