CAA/ACA 2021

Many Voices, Multiple Pasts

Conference Program and Abstracts

May 5-8, 2021

Land Acknowledgement and Welcome

As we come together on a virtual platform, please join the conference organizing committee in acknowledging the Indigenous Peoples of all the lands conference participants are joining from. Please take a moment to recognize the importance of the land on which we are each located, and the rights and responsibilities that flow from Indigenous Peoples' role as the original caretakers of the land. From coast to coast to coast, we acknowledge the ancestral and unceded territory of all First Nations, Métis and Inuit peoples, past and present. As archaeologists, we must acknowledge the harms and mistakes of the past and the ongoing injustices of the many colonial structures that permeate our society. Let us consider how we are and can each, in our own way, work to move forward in a spirit of collaboration, reconciliation, and decolonization.

The conference organizing committee is excited to welcome you to our virtual conference venue on Gather.town. Just like at an in-person conference, you can navigate the space to attend the live sessions and meet up with friends in a less formal setting. Take in a session in one of the presentation rooms, then stroll down to the picnic area where you might run into someone you know. Pre-recorded presentations will be available to view on YouTube beginning several days before the conference. Live sessions during the conference will feature short summaries by the presenters, followed by discussion. Roundtables will be live, and focus on identifying ways to support and enhance the diversity of archaeologists in Canada. Several workshops and social events will take place in the evenings, or before the sessions start for the day.

In keeping with the conference theme, the CAA board of directors is launching a fundraising drive for two new scholarships. One will support Indigenous students studying archaeology. The other will support students from other historically excluded groups including racialized groups, people with disabilities, and LGBTQIA+. If you'd like to contribute, you'll find a donation button on the conference website. Help us take this small but important step to support the training of students who will help us build a more diverse and inclusive Canadian archaeology community.

As chair of the conference committee, I'd like to thank the many people who helped make this conference a reality on a tight timeline, at a time when we were all juggling the competing demands of lockdown life and battling COVID fatigue. A special shout out to Trevor Orchard and Katherine Patton, the Program Committee co-chairs, Maryssa Barras, our conference intern, and Cheryl Takahaski, our webmaster, for devoting many, many hours to make this a successful event.

Welcome everyone – enjoy the conference!

Lisa Hodgetts

CAA Conference Committee Chair and CAA President

Conference Theme and Logo

Conference Theme

The theme for the 2021 CAA annual meeting is “Many Voices, Multiple Pasts: Identity and Diversity in Canadian Archaeology”. The theme can be interpreted in many ways. It refers to both the people we study in the past and the community of archaeologists currently practicing in Canada. How do our diverse and intersecting identities as archaeologists shape how we do archaeology in the present? How do multiple individual and group identities shape people’s lives in the past? How can archaeologists and descendant communities come together to tell these stories? Join us to explore these questions.

CAA/ACA 2021

Many Voices, Multiple Pasts

About the Logo

This year, we invited all CAA members to submit designs to a logo competition. The winning entry was designed by Tekla Cunningham, a first-year master’s student in the Department of Geological Sciences at the University of Manitoba. The three figures in primary colours represent the different perspectives and diverse backgrounds of archaeologists in Canada, as well as the diversity of and within the communities we study in the past. The double triangle represents the "tent" that is Canadian archaeology, which aspires to be a community where all are welcome and have a place.

About the CAA

The Canadian Archaeological Association (CAA) was founded in 1968. Membership includes professional, avocational and student archaeologists, as well as individuals of the general public of any country, who are interested in furthering the objectives of the Association.

The objectives of the CAA are as follows:

• To promote the increase and the dissemination of archaeological knowledge in Canada;
• To promote active discourse and cooperation among archaeological societies and agencies and encourage archaeological research and conservation efforts;
• To foster cooperative endeavours with aboriginal groups and agencies concerned with First Peoples' heritage of Canada;
• To serve as the national association capable of promoting activities advantageous to archaeology and discouraging activities detrimental to archaeology;
• To publish archaeological literature, and;
• To stimulate the interest of the general public in archaeology.

Les objectifs de l'ACA

L'Association canadienne d'archéologie (ACA) a été fondée en 1968. Ses adhérents comptent des archéologues dont c'est la profession ou un violon d'Ingres et des étudiants, ainsi que des membres venant du grand public et de n'importe quel pays, qui ont en vue de favoriser les objectifs de l'Association. Les objectifs de l'ACA sont les suivants:

• promouvoir l'accroissement et la propagation de connaissances archéologiques au Canada;
• promouvoir une coopération et des échanges actifs entre les sociétés et les organismes archéologiques, et favoriser le travail de recherche et de conservation;
• stimuler les efforts de coopération avec les groupes autochtones et les organismes concernés par le patrimoine canadien des Premières nations;
• servir d'association nationale pouvant promouvoir les activités avantageuses pour l'archéologie et décourager les activités nuisibles à l'archéologie;
• publier de la documentation archéologique;
• stimuler l'intérêt du grand public pour l'archéologie

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General Information

Registration

Please register for the conference in order to access the virtual conference space on Gather.town and the direct Zoom links for the conference sessions. Access the registration form here: https://canadianarchaeology.com/caa/annual-meeting/registration.

Registration is “pay what you can” and is open to all. To reduce the risk of Zoom bombing, please **do not** share the conference links or passwords. We ask that you encourage others to register rather than sharing access details with them directly.

Information Desk

The Info Desk is in the foyer in the Gather.town space. It will be staffed during the following hours:

Date	**Time (all times are EDT)**
Wednesday, May 5	3:00 pm – 8:00 pm
Thursday, May 6	10:30 am – 8:00 pm
Friday, May 7	10:30 am – 8:00 pm
Saturday, May 8	11:00 am – 2:30pm

Netiquette

Please engage with others in the virtual conference space in a respectful, professional manner. We want to promote a safe, engaging, respectful environment that values diversity of opinion. This means being polite, avoiding saying or writing anything that you would not say to someone’s face, and avoiding any comments or behaviours that you would feel uncomfortable having directed at you. Be sensitive to your own positionality and that of others in your online interactions.

You are welcome to disagree with someone, but please do so respectfully, and respect others’ differing opinions and perspectives. Avoid bullying and using offensive or confrontational language – online exchanges should be constructive. Please avoid dominating the conversation – make space for others.

Note that THE USE OF ALL CAPS IN AN ONLINE CHAT CAN MAKE IT LOOK LIKE YOU ARE SHOUTING and should be avoided. We encourage the judicious use of emoticons to help display tone or emotion, since it can be difficult to discern in written online communication.

Session and roundtable organizers will remind participants of these guidelines, and session and roundtable facilitators may mute or remove anyone who does not adhere to them.

Any conference attendee who feels that they are being harassed or made to feel unsafe can report their concerns via email to safety@canadianarchaeology.com. That e-mail address will be monitored during the following times:

Date	Time (all times are EDT)
Wednesday, May 5	10:00 am – 8:30 pm
Thursday, May 6	10:00 am – 8:30 pm
Friday, May 7	10:00 am – 8:30 pm
Saturday, May 8	10:00 am – 8:30 pm

Please see the draft CAA Anti-Harassment Policy (https://canadianarchaeology.com/caa/about/ethics/canadian-archaeological-association-anti-harassment-policy-procedures) and its Appendix A (https://canadianarchaeology.com/caa/sites/default/files/page/attachments/caa-anti-harassment-policy-appendix-a_nov-28-2020_0.pdf) for further details.

Pre-recorded Presentations

The pre-recorded presentations are available on YouTube and can be accessed using the links in the conference program and on the conference Gather.town site. All presentations are captioned. To turn on the captions, simply click the white caption icon at the bottom of each presentation. It looks like this:

Accessing and Navigating Gather.town

Conference Gather Link: https://gather.town/i/ANe1OEmF

Password: conference2021

To ensure the safety of everyone at the conference we are kindly asking conference participants not to share the Gather.town link and password with anyone who is not a registered conference participant.

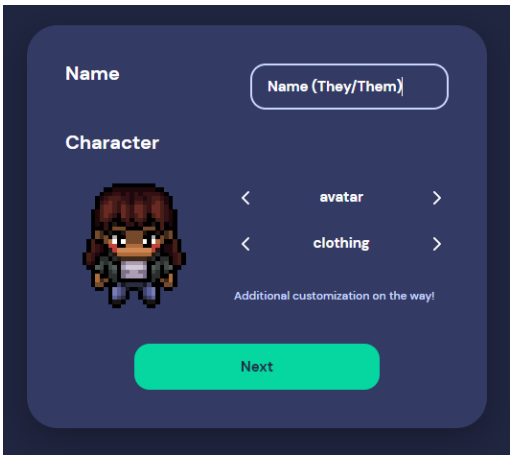
We are very excited to be able to host this year's virtual conference on Gather.town, a video platform that allows you to explore our tailor-made virtual conference venue to access session rooms, social spaces, and more! Using Gather.town is optional for all sessions except the Poster Session, Trivia Night, and Games Night, which we be hosted exclusively on Gather.town. All other sessions, roundtables, and events can be accessed directly using the Zoom links on the conference website and in the program.

There are two ways to access Gather.town. The first is through your browser – in which case you can simply copy and paste the CAA Conference Gather.town link (above) into your browser. From there, you will be prompted to enter the conference password. The second

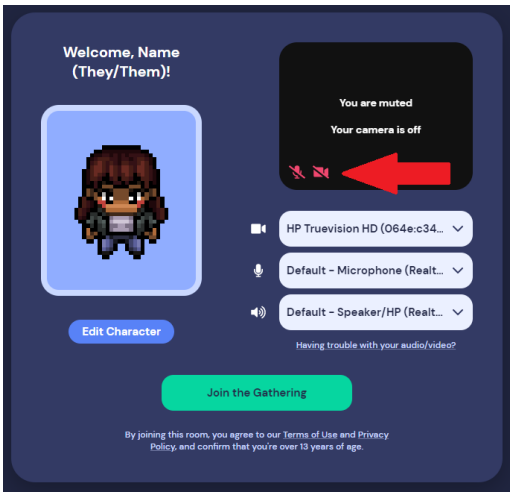
way to access Gather.town is by downloading the app, available for Mac and Windows, from the Gather.town website here: https://gather.town/download

Once you have entered either through the app or your browser, you will be brought to a screen where you will be able to select your avatar and enter your name.

We encourage you to use your full name (first and last) or preferred nickname and last name, followed by your pronouns (she/her, he/him, they/theirs etc.). This will allow others in the space to identify you and address you using your preferred pronouns.



Please note that if you choose to use a Gather.town display name that is rude, offensive, or hateful, the room moderators reserve the right to remove you without notice.



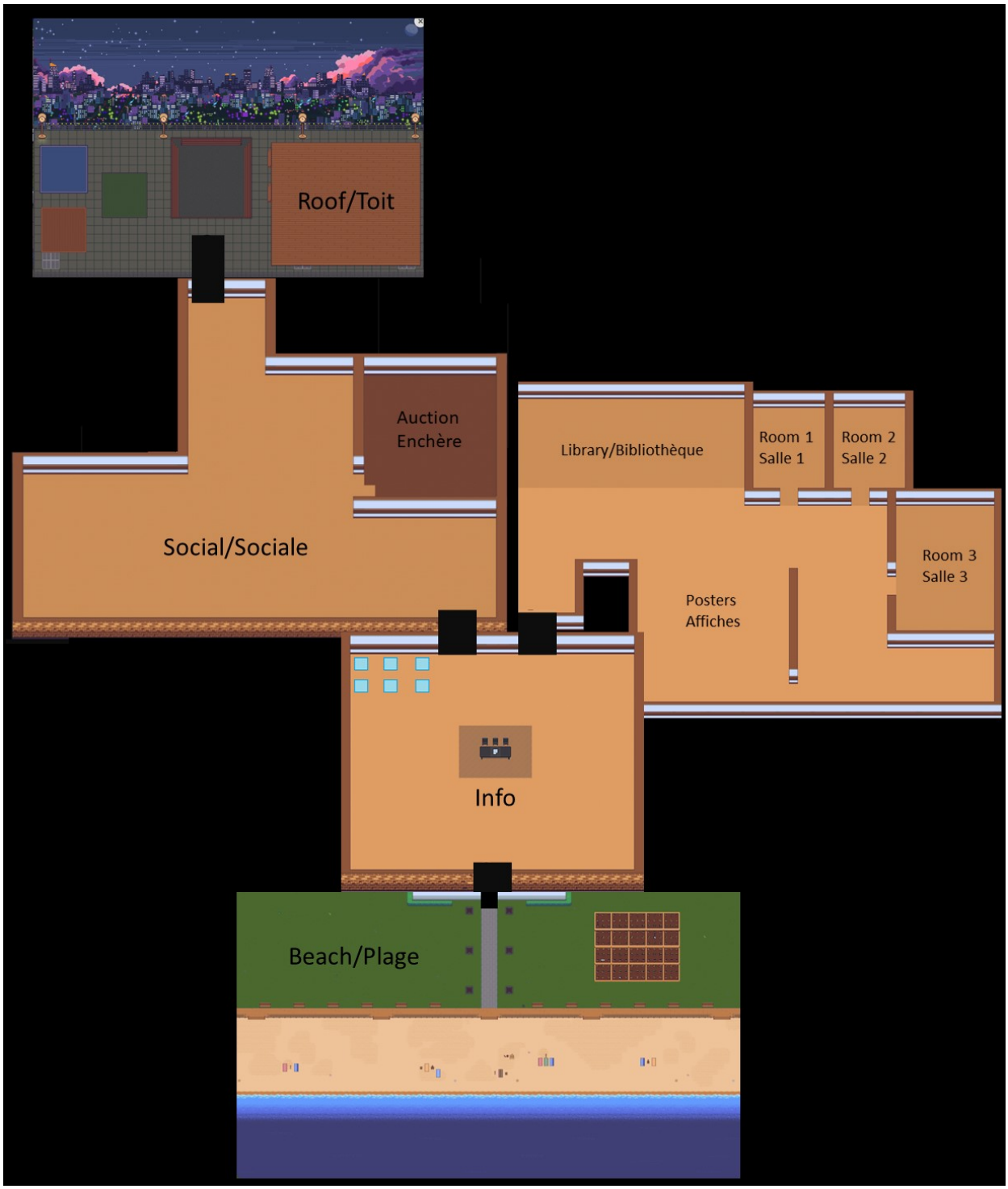
Once you click next, you will be brought to a page which configures your video and microphone settings. You can turn your camera and microphone on or off here before you enter the gathering space.

At this point, if you have never been to Gather.town, you will be brought to a tutorial, and your character will be on an island in an ocean. We STRONGLY encourage you not to skip the tutorial, as it will walk you through how to use this platform.

If you need help or have questions about accessing or navigating Gather.town, please refer to their FAQs here: https://support.gather.town/help/getting-started.

If, after checking the FAQs you are still unable to access Gather.town, e-mail conference@canadianarchaeology.com for assistance.

CAA 2021 Virtual Conference Venue



Zoom

All of our regular sessions and events, except for the Poster Session, Trivia Night, and Games Night, will be hosted on Zoom. If you have never used Zoom before, please read through the instructions at the end of this section for help on how to use the platform.

There are several ways to access Zoom sessions. The first is by following the links from the Registrants only area of the CAA website.

You can also find all the zoom links later in this program on the session schedule and with the session descriptions.

Alternatively, you can access the Zoom links through the conference rooms in Gather.town. Simply enter the Gather.town Conference Venue and make your way to the sessions area. Move your avatar to the right side of the area, where you will find three Session rooms labelled Room 1, Room 2 and Room 3 (see the Conference Venue map above). Refer to the conference schedule for the correct room for the session you want to attend. Once you have entered the session room, make your way to the phone symbol and press x – this will take you to the Zoom meeting!

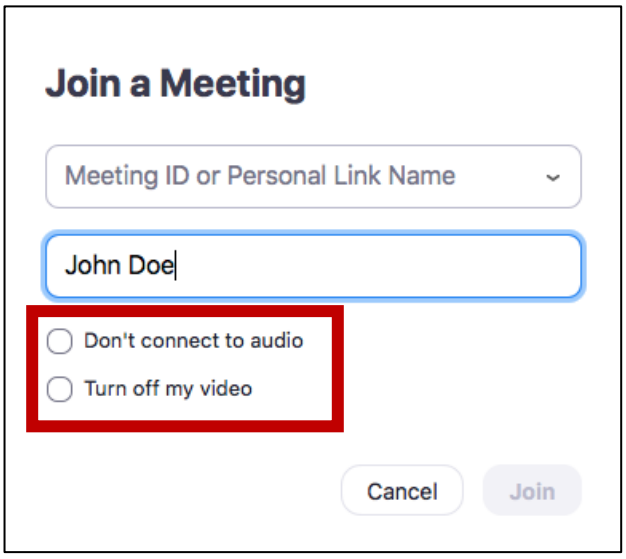
To ensure the safety of everyone at the conference and reduce the risk of Zoom bombing, we are kindly asking conference participants not to share the Zoom links or Gather.town login with anyone who is not a conference participant. Please encourage others to register for the conference to gain access to the links.

Please note that some of our sessions will be recorded. If you do not wish to be recorded but still want to participate, please keep your video off during the session. To see if your session will be recorded check the session descriptions in this program.

Zoom Access Instructions

For the best experience, ensure that you are running the latest version of the Zoom app. If you have never used Zoom before, you will need to download and install the program in order to participate in conference sessions. If you do not have Zoom installed on your device, you will be prompted to do so when you click the links to access sessions. If you want to download Zoom prior to your session, just follow the link below and select the appropriate version for your device: https://zoom.us/download

Once you have downloaded Zoom, all you need to do to access a session is click on the link. Zoom should open automatically.



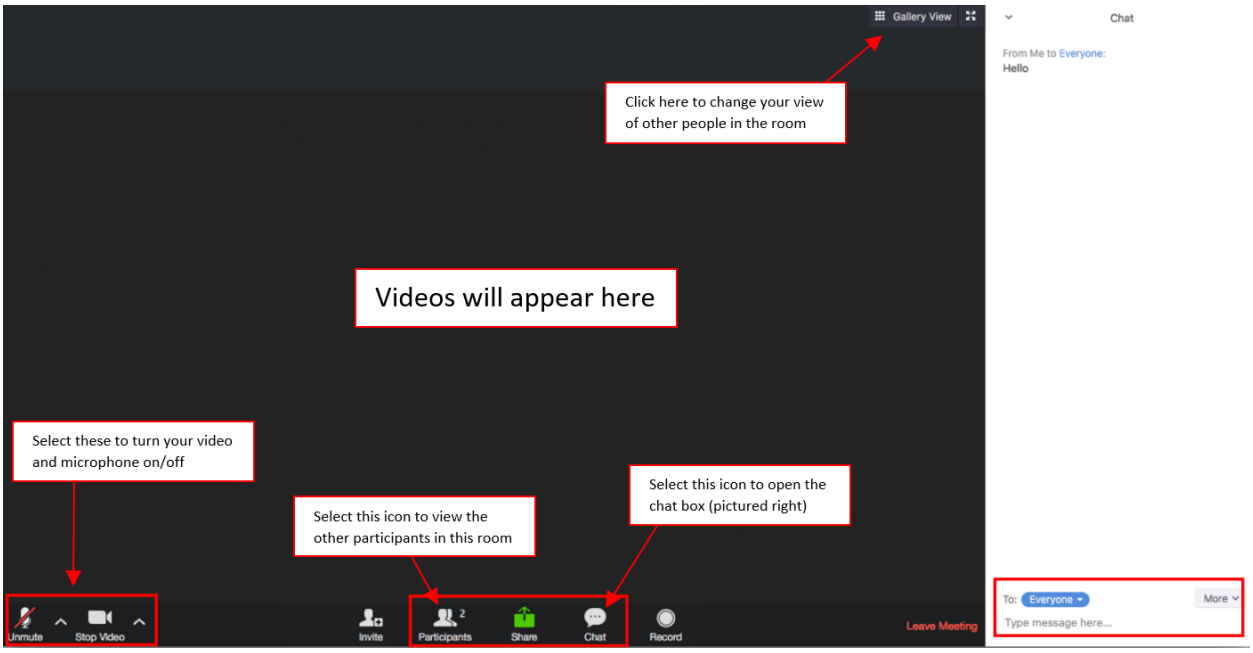
When you enter Zoom you will see a message prompt asking for your username. This is the name other participants will see in Zoom if your camera is off. We encourage you to use you full preferred name (first and last) so that other participants can recognize you easily. We also encourage you to list your pronouns after your name (She/Her, He/Him, They/Theirs etc.) to help other participants address you using your preferred pronouns.

Please note that if you choose to change your visible name in Zoom to something rude, offensive, or hateful the room moderators reserve the right to remove you without notice.

This dialog box also asks if you would like to connect to the session with video and audio. If you do NOT want to connect with video and audio, please make sure these options (highlighted here in red) are selected.

As a courtesy to presenters, we ask that you please keep your microphone OFF/MUTED when entering a session room. Unmute only when it is your turn to speak.

Once you have clicked 'Join' to enter the session room, you will come to a page which tells you to wait for the host to let you in. Please be patient, the session host will let you in shortly. If your microphone is on when you enter the room, please mute yourself by clicking the small microphone icon on the bottom of your video screen.



Instructions for Presenters and Session Chairs

Presenters and session chairs are asked to arrive in their assigned Zoom room 10-15 minutes ahead of their session start time. If session chairs would like to provide an introduction, please do so before the official session start time to avoid using time allotted to one of the presenters. It is important that presenters and session chairs respect the times listed in the program to ensure that delegates can move between sessions to hear specific presentations. If a presenter is absent, please pause the session or use that time for discussion, then begin the next presentation at the originally scheduled time.

Poster Session

The poster session will be hosted in the Sessions space of the CAA Gather.town conference venue. Posters will be available for viewing throughout the entire conference. You can access them by navigating your avatar close to a virtual poster board and clicking ‘x’. You can also access them using the direct links on the conference website and in the program.

The Poster Session is scheduled for Thursday, May 6th between 2:10 and 2:50 pm EDT. Poster presenters will be available at their posters during that time to discuss their research with fellow delegates. You can find each presenter by navigating your avatar to theirs and entering the private space in front of each poster. For information on how to use Gather.town, please see the *Accessing and Navigating Gather.town* section earlier in this program. If you have any issues accessing the poster session, please visit our Info Desk where volunteers will be ready to help during conference hours.

Silent Auction

Proceeds from this year's virtual silent auction will go towards our student travel grants, to help make future in-person conferences more accessible. We have had a number of generous donations to the auction this year, and we encourage you to have a look at the items available.

There are two ways to access the auction. The first is by signing into the conference registrants portion of the CAA website, and selecting the silent auction page. You can also find it on Gather.town. It has its own room in the Social Space. Bids can be submitted via the links provided on both the CAA website and the Gather.town silent auction area. Both platforms will also link to a page with the current highest bids for each item.

Highest bids will be updated twice daily throughout the conference at 11:00 and 18:00 EDT. If we receive two or more identical highest bids before the next update, the bid submitted first will become the new highest bid. The final live update will take place on Saturday, May 8th at 18:00 EDT, at which point we will announce the winners.

Prizes/Awards

Poster Prize

We are pleased to announce that there will be a $200 prize for the best student poster at this year's conference. Thank you to Turtle Island CRM for donating the prize money and to our judges for evaluating the posters based on their content, presentation, and overall research contribution to the field of study. The winner will be announced at the Awards Ceremony on Saturday evening.

Student Presentation Prize – Student Voices Session

The CAA Student Committee has organized a Student Voices Session featuring short live presentations from students and early career researchers. It will take place on Saturday. Turtle Island CRM is providing a $200 cash prizes to the winners in the undergraduate and graduate student categories. They will be judged based on content, organization and delivery. Thank-you to our volunteer judges!

Daniel Weetaluktuk Award

Daniel Weetaluktuk (1951-1982) of Inukjuak made increasingly important contributions to arctic anthropology between 1976 and 1982. His interests in archaeology, traditional Inuit lifeways, cultural resources, and natural history bridged native and scientific perspectives. To honour Daniel and his work, the Canadian Archaeological Association instituted the Daniel Weetaluktuk Memorial Scholarship in 1983 at the Annual General Meeting in Halifax.

This year, prizes are available for the best undergraduate and graduate research paper. The winners will each receive $250.00. Those papers deemed excellent and of publication quality will be forwarded by the awards committee to the editorial board of the *Canadian Journal of Archaeology* for the opportunity to have the paper published.

The deadline for submissions is June 15, 2021. For more information, follow this link: https://canadianarchaeology.com/caa/about/awards/daniel-weetaluktuk-award

Annual Meetings

Wednesday, May 5th

12:00 – 3:00 pm EDT, Session Room 1 – CAA Board Meeting

3:00 – 5:00 pm EDT, Session Room 1 – Provincial Archaeology Society Leaders

Saturday, May 8th

2:50 pm EDT, Session Room 1 – CAA Annual General Meeting

Zoom link: https://zoom.us/j/98231101213

All current CAA members are invited to attend the AGM. It will take place in Session Room 1 of the Gather.town conference venue. You can also access it via the direct zoom link on the conference schedule in this program and the Registrants Only conference website. Come along to hear what the CAA committees have been working on. We will be voting on the new Anti-Harassment policy and proposed amendments to the CAA constitution, which will split the Secretary/Treasurer position on the Board of Directors into two positions. We will also be discussing ways to put *Canadian Journal of Archaeology* on a more secure financial footing.

Panels

Thursday, May 6th

Publishing Panel

11:00 – 11:50 am EDT, Session Room 1

Zoom link: https://zoom.us/j/98231101213

Hosted by the CAA Student Committee; Organizers: Laurence Ferland, Beatrice Fletcher, and Kelsey Pennanen

Publications can influence your chances of securing an academic job and be a useful method of communicating your work to other researchers. Publishing a paper can be intimidating, especially if you're unfamiliar with the process. This workshop aims to demystify the publication process for early-career researchers and students and help them through it. Our expert panel is here to answer any questions you have on getting your paper to publication. The panelists will discuss topics such as selecting a journal, formatting and organization, the

review process, and communicating your work beyond academia. The panelists will include Editors from provincial, national, and international journals to share their valuable and varied experiences. All are welcome to attend. Access this panel in Session Room 1 of the Gather.town venue or via the direct Zoom link on the conference schedule.

Panelists

Todd Kristensen, Editor, Archaeological Survey of Alberta
The Archaeological Survey of Alberta publishes an annual journal called the Occasional Paper Series. Based on experience as an editor for the series, I'll offer advice to think about how theses, dissertations, and archaeological permit reports can be compartmentalized and crafted for submission to a variety of publication venues.

Patricia (Patty) Wells, Editor, ARCTIC
Patricia (Patty) Wells is an archaeologist (PhD Memorial University) and editor of the journal *Arctic* situated at the Arctic Institute of North America, University of Calgary. Her archaeological research focuses on social and technical practices of Arctic groups who inhabited Newfoundland, the Groswater and Dorset, through analyses of bone, antler and ivory remains.

John Creese, Editor, Canadian Journal of Archaeology
John Creese is Editor-in-Chief of the *Canadian Journal of Archaeology* and serves on the editorial board of the *Cambridge Archaeological Journal*. He will chat about strategies for publishing graduate research in academic journals, common pitfalls made by early career authors, and how best to respond to reviewer feedback (yes, even "Reviewer 2"!).

Friday, May 7th

Careers Panel

6:00 – 7:00 pm EDT, Session Room 1

Zoom link: https://zoom.us/j/98231101213

Hosted by the CAA Student Committee; Organizers: Kelsey Pennanen, Lusine Petrosyan and Sarah Smith

This panel offers students and participants an opportunity to learn from archaeologists with established professional careers from a range of fields outside of academia, including CRM, consultation, government, and museums. Gain a better understanding of what a career in archaeology can look like and be better prepared for any challenges you may face along the way. Take time to expand your career choices and join us to learn more about diverse

careers in archaeology! Access this panel in Session Room 1 of the Gather.town venue or via the direct Zoom link on the conference schedule.

Panelists

Jenny Cohen (Terrestrial Archaeologist) - Parks Canada, ***Federal Government***
Jenny Cohen, a Parks Canada Terrestrial Archaeologist for Coastal BC, is responsible for archaeology-related matters for National Parks Reserves and National Heritage sites in coastal BC. These include Pacific Rim, Gulf Islands National Park Reserves, Gwaii Haanas National Park Reserve, Haida Heritage Site and National Marine Conservation Area, and Fort Rodd Hill, Fisgard Lighthouse, Fort Langley, and Gulf of Georgia National Historic Sites. She first started at Parks Canada in 2009 as an archaeological collections assistant and has held various term positions for the agency, as well as working on Parks Canada and provincial projects as a contract and consulting archaeologist. In her current position since 2018, she plays diverse roles ranging from CRM and research-based archaeology to public engagement and regulatory/permitting work. Some of her duties include providing expertise and recommendations for strategic planning and project management, archaeological permit reviews, conducting in-field Archaeological Impact Assessments and other fieldwork, archaeological research design, program and contract development, training, public outreach, and archaeological database management. She works directly with multidisciplinary teams, Indigenous communities, consulting archaeologists, and other stakeholders on a range of project types. She finds the work to be very challenging and rewarding and is honored to work with so many dedicated and passionate people from a variety of fields and backgrounds.

Geordie Howe, BA, RPCA (Archaeologist / Policy Analyst Park Development) - Vancouver Board of Parks and Recreation, ***Local Government***
Geordie has forty-five years of archaeological experience; including forty years as a heritage resource management consultant with a career spanning the years from the emergence of consulting archaeology in the late 1970s to Indigenous and Community led archaeology programs of today. He currently serves as archaeologist for the Vancouver Board of Parks and Recreation in British Columbia. Geordie received his B.A. in Archaeology/Anthropology from University of British Columbia in 1979. He has been working in archaeology since 1976 and his major areas of interest include the prehistory of the Pacific Northwest Coast, lithic technology, ecological archaeology, and quantitative methods in archaeology. Geordie has worked for the Department of Anthropology (UBC), the Canadian Museum of Civilization, and the BC Government's Heritage Conservation Branch between 1978 and 1981; Provenance Research Inc. from 1981 to 1983; Arcas Consulting Archeologists from 1984 to 2009; and Amec Foster Wheeler from 2009 to 2016 as a Senior Associate Archaeologist and Project Manager. Geordie is a Past President for the BC Association of Professional Archaeologists. He is a member of the Society for American Archaeology and the Society for Historical Archaeology and past Editor of the Archaeological Society of BC publication, The Midden. Geordie has also served on the City of Coquitlam's Heritage Advisory Committee.

Kayleigh Speirs (Curator and Manager) - Kay-Nah-Chi-Wah-Nung Historical Centre (Manitou Mounds), ***Museums***

Kayleigh Speirs is the Curator and Manager of Kay-Nah-Chi-Wah-Nung Historical Centre (Manitou Mounds) owned and operated by Rainy River First Nations in Northwestern Ontario. She has experience in museum curation, management, and works to promote reconciliation and Indigenization in museums. Along with the community, she works to protect and preserve the tangible and intangible history and culture of Rainy River First Nations and to ensure all visitors have an educational and inspirational experience at the Place of the Long Rapids.

Kristin McKay (Senior Project Manager) - Circle CRM Group, ***CRM Industry***
Kristin McKay is a Senior Project Manager at Circle CRM Group, and has been working as a permit-holding archaeologist in Alberta since 2006. Kristin is also a permit holder in British Columbia, Saskatchewan, the Yukon, and Northwest Territories. She spends most working days in the office doing project management, as well as a lot of the behind the scenes work for clients including desktop assessments, GIS, etc. Join us to learn more about Kristin's work in cultural resource management archaeology!

Social Events

Wednesday, May 5th

6:00 pm EDT, Session Room 1 – Opening Ceremonies and Reception

Zoom link: https://zoom.us/j/98231101213

This event will launch the conference on Wednesday evening. It will begin with welcomes and protocols from Indigenous Elders and Knowledge Keepers so that we can open the conference in a good way. Find us in Session Room 1 on Gather.town or via the direct Zoom link on the conference schedule. Following a brief introduction from the conference committee, there will be a chance to explore our virtual conference space on Gather.town. Please come along and try out this easy-to-use platform. We are excited to share this space with you. It mimics the experience of being able to move around a space to chat with different people. We hope everyone will take advantage of this time to mix and mingle, to reconnect with old friends and make new ones.

Thursday, May 6th

6:00 pm EDT, Gather.town – Trivia Night**

Link: https://gather.town/i/ANe1OEmF **Password:** conference2021

Presented by the CAA Student Committee; Trivia Masters: Becky Goodwin and Liam Wadsworth

****Registration required:*** **Sign up here**

Join us on the Roof Terrace of the conference Gather.town venue for an evening of socializing, competition, and fun facts. Teams of 5 or fewer are invited sign up prior to the event. “Free agents”, lone players looking to join a team, are also welcome to sign up using the link above. The event will be approximately two hours and include four rounds with 60 questions. The categories range from pop-culture to French language, archaeology and beyond! There will be a cash prize, and all (not just students) are welcome. If you have questions about how to use/access the Gather.town conference venue, see the *Accessing and Navigating Gather.town* section earlier in this program.

Friday, May 7th

6:00 – 8:00 pm EDT, Gather.town Social Area – Games Night and Social Time

Link: https://gather.town/i/ANe1OEmF **Password:** conference2021

You’re invited to an informal Games Night, hosted in the Social Area of our Gather.town conference venue. Join us for some lighthearted fun! If games aren’t your thing, come and socialize. Fix yourself a snack and a drink and join us on the Rooftop Terrace, or one of the many other social spaces.

Gather.town has several embedded games, which we have placed throughout the Social Area for you to access. Each game is located in a different, carpeted private space so that you can join a conversation without things getting too crowded. If the table with the game you would like to play is occupied, don't worry! You can quickly go up to any game and copy the embedded link from the game table to share with your friends in the Gather.town chat. If you have any questions about how to access or play games, please ask at the Info Desk where volunteers will be happy to help you.

To help get comfortable with Gather.town, feel free to explore our virtual conference venue independently prior to Games Night to understand how the space works, or consult the *Accessing and Navigating Gather.town* section earlier in this program.

Saturday, May 8th

6:00 pm EDT, Session Room 1 – Awards Presentation and Closing Ceremonies

Zoom link: https://zoom.us/j/98231101213

Join us in Session Room 1 on Gather.town or via the direct Zoom link on the Conference schedule to celebrate the winners of the Smith-Wintemberg and Public Communications awards! We will also announce the winners of the Student Poster and Presentation competitions. We will round out the evening with closing prayers from an Indigenous guest.

Daily Schedule Overview

All times are in Eastern Time

Wednesday, May 5th

12:00-3:00 pm EDT	CAA Board Meeting. Session Room 1
3:00-5:00 pm EDT	Provincial Archaeological Societies Meeting (*e.g.*ASBC, NSAS, etc.). Session Room 1
6:00-8:00 pm EDT	Opening Reception. Session Room 1

Thursday, May 6th

11:00-11:50 am EDT	Publishing Panel
12:00-5:30 pm EDT	Sessions
12:00-2:00 pm EDT	Women in Archaeology Roundtable (Sponsored by Circle CRM)
2:10-2:50 pm EDT	Poster Session. Gather.town
6:00-7:00 pm EDT	Archaeology Trivia Night. Gather.town
7:00-8:00 pm EDT	Post Trivia Social Time. Gather.town

Friday, May 7th

12:00-2:00 pm EDT	Indigenous Engagement in CRM Archaeology in Canada Roundtable (Sponsored by TMHC)
12:00-5:00 pm EDT	Sessions
6:00-7:00 pm EDT	Careers in Archaeology Panel
7:00-8:00 pm EDT	Post Panel Social Time. Gathertown

Saturday, May 8th

12:00-2:00 pm EDT	Black and POC Diversity in Archaeology Roundtable (Sponsored by Boreas Heritage Consulting)
12:00-2:30 pm EDT	Sessions
2:50-4:50 pm EDT	CAA Annual General Meeting. Session Room 1
6:00-7:00 pm EDT	Awards Presentations. Session Room 1
7:00-8:00 pm EDT	Social Time. Gather.town

Sessions at a Glance

All times in Eastern Time

Thursday, May 6th

Poster Session in Gather.town from 2:10-2:50 EDT

Eastern Time	Session Room 1 https://zoom.us/j/98231101213	Session Room 2 https://zoom.us/j/92645602340	Session Room 3 https://zoom.us/j/91298992257
12:00 pm	Recent Archaeological Research in Canada's Northeast (12:00 - 1:10) *This session will be recorded*	Women in Archaeology Roundtable (12:00 - 2:00) Sponsored by: Circle CRM Group	Being with Animals in the North: Archaeological Perspectives (12:00 - 2:20) Sponsored by: AE Lalonde AMS Labs
12:15 pm			
12:30 pm			
12:45 pm			
1:00 pm			
1:15 pm	Collaborative Archaeologies in Northeastern North America (1:25 - 3:05)		
1:30 pm			
1:45 pm			
2:00 pm			
2:15 pm			
2:30 pm			
2:45 pm			A Decade of Research at the Institute of Prairie Archaeology (2:40 - 5:10) *This session will be recorded* Sponsored by: Institute for Prairie and Indigenous Archaeology; Ember Archaeology
3:00 pm		Recent Research in Latin American Archaeology (3:00 - 5:30) *This session will be recorded* Sponsored by: CLAAS and Mummies and Microcosms Project	
3:15 pm	Advancing Method and Theory in Canadian Spatial Archaeology 1: Terrestrial and Aerial Remote Sensing (3:20 - 5:30) Sponsored by: Ember Archaeology		
3:30 pm			
3:45 pm			
4:00 pm			
4:15 pm			
4:30 pm			
4:45 pm			
5:00 pm			
5:15 pm			
5:30 pm			

Friday, May 7th

Eastern Time	Session Room 1 https://zoom.us/j/98231101213	Session Room 2 https://zoom.us/j/92645602340	Session Room 3 https://zoom.us/j/91298992257
12:00 pm	Digital Archaeology: How Hard Can It Be? (12:00 - 2:20) *This session will be recorded* Sponsored by: Ember Archaeology	Indigenous Engagement in CRM Archaeology in Canada Roundtable (12:00 - 2:00) Sponsored by: TMHC	Ganj Dareh Then and Now: Integrating Past and Current Research (12:00 - 2:00) *This session will be recorded*
12:15 pm			
12:30 pm			
12:45 pm			
1:00 pm			
1:15 pm			
1:30 pm			
1:45 pm			
2:00 pm			
2:15 pm		Archaeological Advances and Anomalies in the Boreal Forest (2:20 - 4:50) *This session will be recorded* Sponsored by: Circle CRM	Commemorating Indian Residential Schools through Archaeology and Digital Heritage (2:20 - 5:00) *This session will be recorded* Sponsored by: Stantec
2:30 pm	Advancing Method and Theory in Canadian Spatial Archaeology 2: Remote Sensing, GIS, and Landscapes (2:40 - 4:50) Sponsored by: Stantec		
2:45 pm			
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Saturday, May 8th

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<tr><th>Eastern Time</th><th>Session Room 1
https://zoom.us/j/98231101213</th><th>Session Room 2
https://zoom.us/j/92645602340</th><th>Session Room 3
https://zoom.us/j/91298992257</th></tr>
<tr><td>12:00 pm</td><td rowspan="7">Archaeology and Heritage in the Contemporary World
(12:00 - 1:30)
This session will be recorded</td><td rowspan="7">Black and POC Diversity in Archaeology Roundtable
(12:00 - 2:00)
Sponsored by: Boreas Heritage Consulting</td><td rowspan="7">Student Voices: Growing Communities Through Support and Collaboration
(12:00 - 2:00)
This session will be recorded
Sponsored by: Turtle Island CRM</td></tr>
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<tr><td>1:30 pm</td></tr>
<tr><td>1:45 pm</td><td rowspan="4">People, Plants and Animals
(1:50 - 2:30)</td><td rowspan="12"></td></tr>
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<tr><td>2:30 pm</td></tr>
<tr><td>2:45 pm</td><td rowspan="11">CAA Annual General Meeting
(2:50 - 4:50)</td></tr>
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Session Details

All times are in Eastern Time

Thursday, May 6th

Poster Session in Gather.town: https://gather.town/i/ANe1OEmF

Password: conference2021

Schedule:

2:10 – 3:10 pm EDT	*Mountains and Moche Bodies: An Iconographic Analysis of Ceramic Vessels from the Museo Larco in Lima, Peru* Maryssa Barras (University of Toronto) *From home to the Brandon Indian Residential School: Addressing the colonial legacy of displaced Indigenous children through GIS and archives (1936-1952)* Kim Figura (British Columbia Institute of Technology + Simon Fraser University), Katherine Nichols (Simon Fraser University), Laure Spake (University of Otago), Dayle Blackbird (Brandon University + Simon Fraser University), Darian Kennedy (Community Liaison for the Sioux Valley Dakota Nation + Simon Fraser University), Emily Holland (Brandon University), Deanna Reder (Simon Fraser University), John Albanese (University of Windsor), Dongya Yang (Simon Fraser University), Hugo Cardoso (Simon Fraser University), and Eldon Yellowhorn (Simon Fraser University) *Histological insights into Growth Stages of Adult Bison Bones* Madison Mancusa (Lakehead University) and Jessica Metcalfe (Lakehead University) *Food for Thought: Insights into Late Ceramic period (ca. 950 – 450 BP) Canine Diets in Machias Bay, Maine* Abby Mann (University of Maine) and Eric Guiry (School of Archaeology and Ancient History, University of Leicester and Department of Anthropology, Trent University) *The Identification of Multiple Occupations at FgPl-12 Using Portable Optically Stimulated Luminescence* Stewart, Peter (Western Heritage) and Krista Gilliland (Western Heritage) *Ndakina 2020, Archaeology* Geneviève Treyvaud (Bureau du Ndakina, Grand Conseil de la Nation Waban-Aki, INRS-ETE) and Louis-Vincent Laperrière-Désorcy (Bureau du Ndakina, Grand Conseil de la Nation Waban-Aki, University of Toronto)

REMEMBER.

Pieces of the past are all around us, sometimes buried deep, and other times, hidden in plain sight. We seek them out. We uncover their stories. These "embers" connect us to our past, our present ambitions and our visions for the future.

This philosophy is now better represented with our new name: **Tree Time Services Archaeology** has become **Ember Archaeology.** We are still a Tree Time Company.

CHANGE IS GOOD

A lot has changed in our profession since our first day of seeking, uncovering and documenting the past. Over the years, we've evolved too. Our team leads the way in predictive modeling, digital data collection, community engagement and minimizing industry impacts.

Our new look and name reflect the clients we serve, the partnerships we build and the connections we make. Like a campfire reigniting from the smallest glowing ember, understanding our past helps light our way forward. If you feel the same, let us know.

Ember Archaeology is always looking for new team members and associates from across Canada.

Kurtis@EmberArchaeology.ca
Call us: 780-975-0217

EMBER ARCHAEOLOGY

Session Room 1 Schedule

Recent Archaeological Research in Canada's Northeast

This session will be recorded

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JFZR1R_Wfvo1nv7Lfdr_0O6

Zoom link: https://zoom.us/j/98231101213

Schedule:

12:00 pm EDT	*The Oil Drums of War: Fort Clarence and the Dartmouth Refinery* David Jones
12:10 pm EDT	*Gaspe Bay Survey Project* Carolyn Kennedy (Texas A&M University) and Christopher Dostal (Texas A&M University)
12:20 pm EDT	*Redefining the "Rattlesnake" bead: new evidence from 18th century Prince Edward Island* Helen Kristmanson (Government of Prince Edward Island) and Erin Montgomery (Government of Prince Edward Island)
12:30 pm EDT	*An Indigenous or African representation on a French-made tobacco pipe found at a 17th-century English colonial site in Newfoundland: preliminary insights and interpretations* Barry Gaulton (Memorial University) and Misha Ewen (University of Manchester)
12:40 pm EDT	*Captain John MacDonald and the Highland Emigration to Prince Edward Island* Helen Kristmanson (Government of Prince Edward Island) and Erin Montgomery (Government of Prince Edward Island)
12:50 pm EDT	Discussion

Collaborative Archaeologies in Northeastern North America

Organizers: Steven Dorland, Veronica King-Jamieson, Jonathan Ferrier, David Smith

Session Abstract:

As archaeologists are confronting the colonial legacy in which their discipline is grounded, there are growing developments in archaeology and material culture studies to democratize knowledge through greater inclusion in collaborative approaches. These approaches recognize and promote Indigenous voices, perspectives, and methodologies braided together with archaeological and material culture practices. Rather than focusing on research interests only and seeing Indigenous communities as subjects to be studied, anthropologists are partnering or engaging with communities to find mutually beneficial goals that further prioritize

needs and interests of the community. In this session, speakers will present different applications, experiences, and reflections associated with their research in northeast North America, a region that brings its unique challenges and opportunities. This session focuses on collaborative archaeologies and material culture studies in professional, academic, and museum contexts. Past works of scholars and research institutions in this region have contributed significantly to establishing strong community relations. In this session, we continue these efforts through a dialogue on ways of doing, ways of being, and ways of knowing to work towards the decolonization of archaeological and material culture studies.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JHCsE7R0RxThwZd2uJUaybs

Zoom link: https://zoom.us/j/98231101213

Schedule:

1:25 pm EDT	*Towards an Inuit-led Public Archaeology Program in Hebron, Nunatsiavut* Michelle Davies (Memorial University of Newfoundland) and Lena Onalik (Nunatsiavut Government)
1:35 pm EDT	*In Conversation with the Ancestors: Indigenizing Shell Heap Research at Acadia National Park, Maine* Bonnie Newsom (University of Maine), Natalie Dana-Lolar (University of Maine), Isaac St. John (Houlton Band of Maliseet Indians; University of New Brunswick), Rebecca Cole-Will (Acadia National Park), and Catherine Schmitt (Schoodic Institute at Acadia National Park)
1:45 pm EDT	*Two-Row Wampum-Covenant Chain Tradition applied to the study of Hodinosho:ni ash splint baskets* Talena Atfield (Canadian Museum of History)
1:55 pm EDT	*Indigenous and Collaborative Archaeology at the La Cloche Site* Allen Toulouse (Sagamok Anishnawbek First Nation), Naomi Recollet (Ojibwe Cultural Foundation), Kaitlyn Malleau (University of Toronto), and Sarah Hazell (Laurentian University)
2:05 pm EDT	Break
2:15 pm EDT	Toulouse et al. – Part 2
2:25 pm EDT	*Learning about Learning: Community-based Archaeology in Partnership with Mississaugas of the Credit First Nation* Steven Dorland (University of Toronto Mississauga), Veronica King-Jamieson (Mississaugas of the Credit First Nation), Jonathan Ferrier (Dalhousie University), Jordan Jamieson (Mississaugas of the Credit First Nation), and David G. Smith (University of Toronto Mississauga)
2:35 pm EDT	Gary Warrick: Discussant
2:50 pm EDT	Discussion

Advancing Method and Theory in Canadian Spatial Archaeology 1: Terrestrial and Aerial Remote Sensing

Organizers: William T. D. Wadsworth, Scott Hamilton

Sponsored by Ember Archaeology

Session Abstract:

Diverse geospatial and remote sensing methods have become increasingly common tools for archaeological site prospection, characterization, and monitoring, but remain comparatively underdeveloped in Canadian archaeology. While a recent uptick in the adoption of these techniques in Canada is apparent, efforts remain largely at the margins of many archaeological programs. In light of Canada's unique and diverse regions, archaeologists interested in remote sensing are positioned to undertake networked conversations to explore the methodological and theoretical frontiers of remote sensing application.

This session seeks participants currently engaged in remote sensing research, or those who have an interest in its application. It provides a venue for practitioners to debate methodologies, exchange ideas about data visualization and interpretation, and lament the challenges of such applications. We encourage participation from those interested in ground-based, aerial, satellite or underwater remote sensing, near-surface geophysical prospection, data processing and visualization, and how such data might impact methodological and theoretical aspects of applied and academic archaeology.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JE0RMQZ8DgeayOWYAOcmR-D

Zoom link: https://zoom.us/j/98231101213

Schedule:

3:20 pm EDT	*Wally's Beach II: Remote Sensing and Monitoring* William T. D. Wadsworth (University of Alberta) and Gabriel Yanicki (Canadian Museum of History)
3:30 pm EDT	*Magnetics: Not Just for Finding Your Way in the Subarctic* Jamie Steinberg (Lakehead University) and Scott Hamilton (Lakehead University)
3:40 pm EDT	*20 Years of Magnetic Susceptibility Surveys: Lessons Learned* Jonathan Fowler (Saint Mary's University)
3:50 pm EDT	*Geophysical Survey at Nutana Cemetery: A Comparison of Ground Penetrating Radar (GPR) and Electromagnetic Data* Terence Clark (University of Saskatchewan), Butch Amundson (Stantec), James Hulsebosch (Stantec), Joshua Murphy (University of Saskatchewan), and Angela Burant
4:00 pm EDT	Discussion
4:10 pm EDT	Break

4:20 pm EDT	*'Stuff Only Drone Nerds Care About': Evaluating UAV Photogrammetric Precision and Accuracy* Scott Hamilton (Lakehead University)
4:30 pm EDT	*Comparing Aerial Photogrammetry and Ground-based LiDAR for Erosion Monitoring* Kelsey Pennanen (University of Calgary)
4:40 pm EDT	*The Puzzle of Multi-sourced Data: From Aerial Photogrammetry to Soviet Maps* Laurence Ferland (Université Laval)
4:50 pm EDT	*Detecting Change at Threatened Heritage Sites Using UAV Photogrammetry: A Case Study from Qikiqtaruk, Yukon* Katelyn O'Keefe (University of Calgary)
5:00 pm EDT	*From a Bird's Eye View. Application of Unmanned Aerial Vehicles in Historical Resources Impact Assessments* Petr Kurzybov (Western Heritage Services Inc.), Michael Ma (Western Heritage Services Inc.), and Daniel Lu (Western Heritage Services Inc.)
5:10 pm EDT	Discussion

Session Room 2 Schedule

Women in Archaeology Roundtable

Organizer: Margarita de Guzman

Sponsored by Circle CRM Group

Time: noon – 2:00 pm EDT

Zoom link: https://zoom.us/j/92645602340

Session Abstract:

As Women have been playing an increasing role in archaeology but still face obstacles and challenges due to gender; some of these are systemic and intergenerational while some are societal or internal. While many women have overcome difficulties and have achieved levels of greatness in their career, many women still face barriers and hurdles, and many women leave archaeology due to difficult circumstances. It doesn't have to be this way. This roundtable invites women (inclusively defined) in all levels of their career to chat with women who have endured; they will share their stories and lessons learned. Come and be inspired.

Panelists:

Amelia Fay, Manitoba Museum

Jennifer Botica, Kleanza Consulting

Holly Martelle, Timmins Martelle Heritage Consultants

Lisa Rankin, Memorial University

Kisha Supernant, University of Alberta

Recent Research in Latin American Archaeology

Organizers: Diana K. Moreiras Reynaga, Matthew Longstaffe, Amedeo Sghinolfi

Contact Email: claas.canada@gmail.com

Sponsored by CLAAS and Mummies and Microcosms Project

This session will be recorded

Session Abstract:

As part of an ongoing agenda to promote and disseminate Latin American archaeology in Canada, the Canadian Latin American Archaeology Society's (CLAAS) Board of Directors are hosting a session during this year's CAA meeting. We hope to integrate a wide array of topics involving new and exciting archaeological findings in Mexico, Central America, the Caribbean, and South America. We encourage contributions on diverse topics, including those within the scope of the conference theme and techniques and approaches to studying pre-Columbian societies such as ceramic and lithic analyses, paleoethnobotany, geospatial analytical tools, and zooarchaeological and bioarchaeological studies. The main goal of this session is to provide a varied and representative depiction of the current state of Latin American archaeology from a Canadian context.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JEwUpH_cGuDOZM7u6GZuFMq

Zoom link: https://zoom.us/j/92645602340

Schedule:

3:00 pm EDT	"*The Whole is Greater than the Sum of its Parts": Deconstructing the Ancient Maya Marketplace as a Socioeconomic Institution* Matthew Longstaffe (University of Calgary) *Urbanization and transformation during the Late Classic in the Calakmul region, Campeche, Mexico*

	Kathryn Reese-Taylor (University of Calgary), Armando Anaya Hernández (Universidad Autónoma de Campeche), Nicholas Dunning (University of Cincinnati), and Felix Kupprat (Universidad Nacional Autónoma de México) *Current research on Maya urbanism at Tenam Puente, Chiapas, Mexico* Elizabeth Paris (University of Calgary), Roberto López Bravo (Universidad de Ciencias y Artes de Chiapas), and Gabriel Lalo Jacinto (INAH-Chiapas) *Evidence of socio-economic complexity at the Precolumbian Maya site of Coco Chan, Belize* Alec McLellan (Trent University Archaeological Research Centre (TUARC))
3:15 pm EDT	Discussion
3:40 pm EDT	Break
3:50 pm EDT	*Exploring Social Memory and Belonging in Body and Earth: A Moche Burial Offering and Earth Packets from Huaca Colorada, Jequetepeque Valley, Peru (650-950 CE)* Aleksa Alaica (University of Toronto) and Luis Manuel González La Rosa (Archaeology Centre, University of Toronto) *Gray Wolves and Golden Eagles in the Mexica World: New Insights on the Use of Animals from the Sacred Precinct of Tenochtitlan's Offerings through Zooarchaeological and Phosphate Oxygen Isotope Analyses* Diana K. Moreiras Reynaga (Department of Anthropology, University of British Columbia), Israel Elizalde Mendez (Proyecto Templo Mayor, INAH), Ximena Chávez Balderas (Fiscalía General del Estado de Quintana Roo), Leonardo López Luján (Proyecto Templo Mayor, INAH), and Fred J. Longstaffe (Department of Earth Sciences, The University of Western Ontario) *Women, body, and embodiment in Postclassic Huasteca* Fabiola Sanchez (University of Victoria) *Ritual Time, Space, and Memory in Early Colonial Hearths at Coyotepetl, Tepeticpac, Tlaxcala* Lisa Overholtzer (McGill University) *The Secular Clergy and the Indigenous People of Oztuma, Guerrero: An Example of Evangelization in the 16th Century* Lorena Medina Martínez (UAA – INAH)
4:05 pm EDT	Discussion
4:30 pm EDT	Break

4:40 pm EDT	*Mummies as Microcosms – The Interdisciplinary, Collaborative Analysis of Mummy Bundles from the Central Coast of Peru* Andrew Nelson (Western University), Lucía Watson (Pontificia Universidad Católica del Perú), Jocelyn Williams (Trent University), Suellen Gauld (Santa Monica College), José Arias (Centro Instituto Nacional de Antropología e Historia), Joanna Motley (Western University), Lauren Poeta (Western University), Cameron Beason (Western University), Teegan Muggridge (Western University), Pauline Kirgis (Université de Bordeaux), Jean-Bernard Huchet (Université de Bordeaux), Christophe Bou (Université de Bordeaux), Andres Shiguekawa (Independent Specialist), Jhon Baldeos (Universidad de Trujillo), Sarita Fuentes (Museo Pachacamac), Susana Abad (Museo Pachacamac), and Denise Pozzi-Escot (Museo Pachacamac) *Artificial Head-shaping and Craniovascular Traits: A Case Study in Pre-Columbian Crania from Cuba, the Largest Caribbean Archipelago* Gizeh Rangel-de Lazaro (Natural History Museum) *Mapping Las Colmenas: Using an Integrated Remote Sensing Approach to Map Buried Architecture* Kayla Golay Lausanne (McMaster University) *The Prehispanic Occupation of the Carabamba Valley, Northern Peru* Amedeo Sghinolfi (Western University) *Away from 'The Field': Pivoting Archaeological Investigations during Pandemic Times* Marieka Brouwer Burg (University of Vermont), Meaghan Peuramaki-Brown (Athabasca University), and Shawn Morton (Grande Prairie Regional College)
4:55 pm EDT	Discussion

Session Room 3 Schedule

Being with Animals in the North: Archaeological Perspectives

Organizers: Robert Losey, Tatiana Nomokonova

Sponsored by AE Lalonde AMS Labs

Session Abstract:

This session explores relationships between people and animals in the circumpolar North. We welcome papers focusing on any type of archaeological materials, ranging from faunal

remains to artwork. We define the North for the session to include any boreal or arctic region. Theoretical, methodological, and overview papers will be included, and we particularly encourage contributions from Indigenous-based perspectives and collaborative research endeavors.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JH_zu0iullLvJF7MGAdJJ7r

Zoom link: https://zoom.us/j/91298992257

Schedule:

12:00 pm EDT	*Domesticating Dogs in the North* Robert Losey (University of Alberta)
12:10 pm EDT	*The Variable Histories of Reindeer Scapulae in Arctic Siberia* Tatiana Nomokonova (University of Saskatchewan), Andrei Plekhanov (Scientific Center of Arctic Studies), and Andrei Gusev (Scientific Center of Arctic Studies)
12:20 pm EDT	*The Eneolithic and Bronze Age Animal Imagery from the Iamal Region of Arctic Siberia* Daniel Tupakhin (Arctic Research Center of Yamal-Nenets Autonomus District) and Olga Tupakhina (Arctic Research Center of Yamal-Nenets Autonomus District)
12:30 pm EDT	*Animals in Early Iron Imagery from the Iamal Region of Arctic Siberia* Andrey Gusev (Arctic Research Center of Yamal-Nenets Autonomus district) and Natalia Fedorova (Arctic Research Center of Yamal-Nenets Autonomus district)
12:40 pm EDT	Break
12:50 pm EDT	*Animal Imagery from Medieval Sites of the Iamal Region of Arctic Siberia* Andrey Plekhanov (Arctic Research Center of Yamal-Nenets Autonomus district) and Alexander Gusev (Arctic Research Center of Yamal-Nenets Autonomus district)
1:00 pm EDT	*Dashing Through The Snow: Activity Reconstruction of Reindeer Hooves in Fennoscandian Archaeology* Emily Hull (University of Oulu) and Anna-Kaisa Salmi (University of Oulu)
1:10 pm EDT	*Human – Animal Relationships from the Perspective of Historic Caribou and Sheep Fences in the Mackenzie Mountains, Northwest Territories* Glen MacKay (Prince of Wales Northern Heritage Centre)
1:20 pm EDT	*Furs and Food Stuffs: Thule Inuit use of Arctic Fox at Arviq, N.W.T., Canada* Adrianna Wiley (University of Guelph) and Lisa Hodgetts (Western University)
1:30 pm EDT	Break
1:40 pm EDT	*What Muskrat Told Me: Zooarchaeological Evidence for Early Muskrat-Human Relationships in the Inuvialuit Settlement Region*

	Danii Desmarais (University of Toronto)
1:50 pm EDT	*Being with Bison in Beaver Territory* Jessica Metcalfe (Lakehead University), Elizabeth Carpenter (Lakehead University), and Victoria Wanihadie (Tsattine Resurgence Society)
2:00 pm EDT	*Living with Trees in the Early Holocene Forests of Northern Europe* Barry Taylor (University of Chester)
2:10 pm EDT	Discussion

A Decade of Research at the Institute of Prairie Archaeology

Organizer: John W. (Jack) Ives

Sponsored by Institute for Prairie and Indigenous Archaeology and Ember Archaeology

This session will be recorded

Session Abstract:

The Institute of Prairie Archaeology was created to conduct and promote archaeological, anthropological and interdisciplinary research relevant to the northern Plains region of western Canada and the northern United States. Its work was intended to enhance public, First Nations, and Métis community and rural engagement with the University of Alberta in these research areas, and, particularly, to provide leadership in the training of archaeologists through field schools and other professional work. From its inception in 2008, the Institute supported research connected with the University of Alberta archaeological field school (at both the 10,000 year old Ahai Mneh site on Transalta's Lake Wabamun area lease and the Avonlea-Old Women's Phase bison kill complex on the University of Alberta's Rangeland Research Institute's Mattheis Ranch in the Brooks area), transdisciplinary Apachean origins research with a specific focus on the rich perishable record of the Promontory caves in Utah, Early Prehistoric Period research spanning the time frame from the Western Canadian Fluted Point Database to the Cody Complex, remote-sensing and GIS based analysis of landscapes throughout western North America, paleoenvironmental studies, new research on Métis wintering sites, application of bison bone bed analytical techniques to a unique Neolithic aurochs bone bed in Jilin, China, and Besant-Sonota era investigations in Alberta, Saskatchewan, and North and South Dakota. As the Institute embarks on a new phase of activity as the Institute of Prairie and Indigenous Archaeology, the assembled papers will take stock of a highly productive decade of graduate, undergraduate and research associate research.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JFpFRqfH8NSsm0tROiS4kkL

Zoom link: https://zoom.us/j/91298992257

Schedule:

2:40 pm EDT	*A Roadmap for Institute of Prairie Archaeology Research, 2009-2019* John W. (Jack) Ives (University of Alberta)
2:50 pm EDT	*Wally's Beach I: Stratigraphic Interpretations* Gabriel Yanicki (Canadian Museum of History) and William T. D. Wadsworth (Institute of Prairie and Indigenous Archaeology, University of Alberta)
3:00 pm EDT	*Stemmed Points and the Ice Free Corridor* John W. (Jack) Ives (University of Alberta)
3:10 pm EDT	*Looking Back: New Analyses and Interpretations of the Stelzer Site (39DW242), South Dakota* Andrew Lints (University of Alberta), Reid Graham (Government of Manitoba), and John Ives (University of Alberta)
3:20 pm EDT	Break
3:30 pm EDT	*The Matzhiwin Creek Bison Kill: An Avonlea-Old Woman's Bison Kill and Processing Area in Southern Alberta* Dale Fisher (University of Alberta)
3:40 pm EDT	*Where is the Beef? Aurochs Representation and Use in Neolithic Northeast China* Zhe Zhang
3:50 pm EDT	*The Pan-Dene Comparative Lexicon* Conor Snoek (University of Lethbridge) and Sally Rice (University of Alberta)
4:00 pm EDT	*The Late Holocene White River Ash East Eruption and Pre-contact Culture Change in Northwest North America* Todd Kristensen (Archaeological Survey of Alberta)
4:10 pm EDT	Break
4:20 pm EDT	*Isotopic Evidence for Long-Distance Mobility of Promontory Caves Occupants* Jessica Metcalfe (Lakehead University)
4:30 pm EDT	*Palaeoenvironmental Reconstructions in the Boreal Forest and their Connection to the Archaeological Record* Christina Poletto
4:40 pm EDT	*From IPA to IPIA: A Vision for 2020-2025* Kisha Supernant (Institute of Prairie and Indigenous Archaeology, University of Alberta)
4:50 pm EDT	Discussion

Friday, May 7th

Session Room 1 Schedule

Digital Archaeology: How Hard Can It Be?

Organizer: Clarence Surette, Lakehead University

Sponsored by Ember Archaeology

This session will be recorded

Session Abstract:

Over the past year defined by the COVID 19 pandemic, digital archaeology or the application of digital media to archaeology has seen a boom. This is exacerbated by teaching operations shifting to online delivery. This session offers a venue to discuss the process of creating digital media, the costs in time and equipment, and its broader use and application in supporting research and teaching. Also important is consideration whether and how such activities will continue in a post-Covid 19 situation.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JFe3L-5QmnTVNENBXddHN84

Zoom link: https://zoom.us/j/98231101213

Schedule:

12:00 pm EDT	*3D Scanning, Modelling, and Printing: What Have I Gotten Myself Into?* Clarence Surette (Lakehead University)
12:10 pm EDT	*Digital Models and Their Application to Research and Education in Archaeology* Clarence Surette (Lakehead University), Zebedee Kawei (Lakehead University), Scott Hamilton (Lakehead University), and Chris McEvoy (Lakehead University)
12:20 pm EDT	*Efficacy of 3D Models in Teaching: Forensic Anthropology and Osteology* Jade Ross (Lakehead University) and Clarence Surette (Lakehead University)
12:30 pm EDT	*Teaching Digitally Accessible Cultural Heritage* Cara Tremain (Langara College)
12:40 pm EDT	Break
12:50 pm EDT	*Digitalization of Pre-Columbian Crania Collections using 3D Scanning Techniques* Gizeh Rangel-de Lazaro (Natural History Museum), Adrián Martínez-Fernádez (Centro Nacional de Investigación sobre la Evolución

	Humana), Armando Rangel-Rivero (Museo Antropológico Montané, Universidad de La Habana), and Alfonso Benito-Calvo (Centro Nacional de Investigación sobre la Evolución Humana)
1:00 pm EDT	*Seeing the Past in Multitudes: A Proposal for Presenting Interpretations of Fragmentary Archaeological Data* Hillary Kiazyk
1:10 pm EDT	*Virtual Archaeological Site Tours in the Service of Cultural Heritage Education* Scott Hamilton (Lakehead University) and Chris McEvoy (Lakehead University)
1:20 pm EDT	*AVROD Virtual Archaeology — Digitizing and Disseminating Archaeology and World Heritage through VR Technologies* Jeremy Brooks
1:30 pm EDT	Break
1:40 pm EDT	*3D Technology, Scanning and Morphometrics* David Norris (University of Western Ontario)
1:50 pm EDT	*Unraveling Fabric-Impressed Pottery Through the Six Seasons of the Asiniskaw Īthiniwak Project: Interlinking Digital Models and Weaving Techniques as Ethnoarchaeology* Jill Taylor-Hollings (Dept. of Anthropology, Lakehead University/Ontario Archaeological Society), Clarence Surette (Dept. of Anthropology, Lakehead University), Kevin Brownlee (Manitoba Museum), and Scott Hamilton (Department of Anthropology, Lakehead University)
2:00 pm EDT	*The Ethics of Digital Dialogue* Sierra McKinney (University of Montreal), Katherine Cook (University of Montreal), and L. Meghan Dennis (The Alexandria Archive)
2:10 pm EDT	Discussion

Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes

Organizers: William T. D. Wadsworth, Scott Hamilton

Sponsored by Stantec

Session Abstract:

Diverse geospatial and remote sensing methods have become increasingly common tools for archaeological site prospection, characterization, and monitoring, but remain comparatively underdeveloped in Canadian archaeology. While a recent uptick in the adoption of these techniques in Canada is apparent, efforts remain largely at the margins of many


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archaeological programs. In light of Canada's unique and diverse regions, archaeologists interested in remote sensing are positioned to undertake networked conversations to explore the methodological and theoretical frontiers of remote sensing application.

This session seeks participants currently engaged in remote sensing research, or those who have an interest in its application. It provides a venue for practitioners to debate methodologies, exchange ideas about data visualization and interpretation, and lament the challenges of such applications. We encourage participation from those interested in ground-based, aerial, satellite or underwater remote sensing, near-surface geophysical prospection, data processing and visualization, and how such data might impact methodological and theoretical aspects of applied and academic archaeology.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JHepP0xprn6VXIkLNIFcxeK

Zoom link: https://zoom.us/j/98231101213

Schedule:

2:40 pm EDT	*Adding LiDAR Data to the Toolkit for Archaeological Prospection at the Highland Valley Copper Mine in BC* Sarah Smith (Simon Fraser University)
2:50 pm EDT	*Identifying and Relocating Cultural Depression Sites Using LiDAR Technology* Jennifer Gainer (Circle CRM Group Inc.)
3:00 pm EDT	*Volumetric Estimates for Coastal Shell Middens on the West Coast of Vancouver Island* Robert Gustas (University of Victoria), Iain McKechnie (University of Victoria, Hakai Institute), and Quentin Mackie (University of Victoria)
3:10 pm EDT	*Digital Terrain Analysis as an Archaeological Site Prospection Tool in the Central Ice-free Corridor, Western Alberta* Robin Woywitka and Benjaman Michalchuk (MacEwan University)
3:20 pm EDT	Discussion
3:40 pm EDT	Break
3:50 pm EDT	*Microfossils, Remote Sensing, and GIS for Proxy-dating Coastal Archaeological Sites and Landscapes: A case from Minas Basin, Bay of Fundy, Canada* Wesley Weatherbee (Saint Mary's University)
4:00 pm EDT	*"The View From Afar": Applications of Remote Sensing in the Management of Northwest Territories Cultural Landscapes* Mike O'Rourke (GNWT - Cultural Places Program), Glen MacKay (GNWT - Cultural Places Program), Steve Schwarz (GNWT - Centre for Geomatics), Jurjen van der Sluijs (GNWT - Centre for Geomatics), and Julie Buysse (GNWT - Cultural Places Program)
4:10 pm EDT	*Virtual Cultural Landscapes: Geospatial Visualizations of Past Environments in SE Alaska*

	Kelly Monteleone (University of Calgary/Mount Royal University), Amy Thompson (University of Texas at Austin), and Keith Prufer (University of New Mexico)
4:20 pm EDT	*Mining Government Archaeology Data for the Big Picture* Eileen Paddy Colligan (Hunter College Anthropology Research Affiliate, City University of NY)
4:30 pm EDT	Discussion

Session Room 2 Schedule

Indigenous Engagement in CRM Archaeology in Canada Roundtable

Organizer: Matthew Beaudoin

Sponsored by Timmins Martelle Heritage Consultants

Time: noon – 2:00 pm EDT

Zoom link: https://zoom.us/j/92645602340

Session Abstract:

The implementation of UNDRIP, the TRC, and recent social and political events across Canada have brought Indigenous participation in archaeology to the forefront of the discussions once more. While these discussions are still common within academic circles, CRM archaeology is often omitted or quiet in these conversations. CRM practice in Canada is a unique intersection of government requirements, capitalism, and competitive archaeological practice that often requires the complex navigation of on the ground relationships and engagements with Indigenous communities. These on the ground engagements and negotiations are a unique point of Indigenous community participation in archaeological practice with highly variable methods and outcomes. The purpose of this round table is to bring CRM practitioners and Indigenous community representatives together from across the country to briefly present their perspectives on these engagements, relationships, and practices and to discuss their thoughts on where we are, what is working, and how things can be improved.

Archaeological Advances and Anomalies in the Boreal Forest

Organizer: Margarita de Guzman

Sponsored by Circle CRM Group

This session will be recorded

Session Abstract:

Archaeological assessments in the Boreal forest occur on a large scale annually and have occurred for well over a decade in advance of development across diverse landscapes. Over time, the methodology behind these assessments has changed; more tests are conducted, LiDAR has been introduced, and technology has advanced, along with our understanding of where archaeological sites may be.

This session invites participants to share findings from archaeological assessments in the Boreal forest that were exciting, surprising, unique, and/or utilized new methods or techniques. Together, these presentations can contribute to an even greater understanding of archaeology in these regions.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JGFf0YIUhUvg5UpqQ3ly3mA

Zoom link: https://zoom.us/j/92645602340

Schedule:

2:20 pm EDT	*Drone-based Photogrammetry of Indigenous Archaeology in Newfoundland's Boreal Forest* James Williamson (Memorial University Newfoundland)
2:30 pm EDT	*A Unicorn – A Prehistoric campsite near Grande Prairie, Alberta* Gareth Spicer (Turtle Island CRM)
2:40 pm EDT	*HaQw-3: Analysis of a Stratified Campsite in the Upper Peace Region of Alberta* Alexandra Burchill (Circle CRM Group)
2:50 pm EDT	*Realities and Realizations: Radiocarbon Dating in the Boreal Forest* Timothy Allan (Tree Time Services Inc.)
3:00 pm EDT	*The Identification of Multiple Occupations at FgPl-12 Using Portable Optically Stimulated Luminescence* Peter Stewart (Western Heritage) and Krista Gilliland (Western Heritage)
3:10 pm EDT	*Forestry and Archaeology in Alberta: A History and Synthesis* Darryl Bereziuk (Archaeological Survey of Alberta), Colleen Haukaas (Archaeological Survey of Alberta), and Todd Kristensen (Archaeological Survey of Alberta)
3:20 pm EDT	Discussion
3:30 pm EDT	Break
3:40 pm EDT	*Lumps and Bumps in the Muskeg: Lidar in Alberta's Boreal Forests* Madeline Coleman (Tree Time Services)
3:50 pm EDT	*Where are all the Archaeology Sites in Northwest Alberta?* Margarita de Guzman (Circle CRM Group Inc.), Trevor Peck (Circle CRM Group Inc.), Amanda Wong (Circle CRM Group Inc.), Alexandra Burchill (Circle CRM Group Inc.), Shannon Wright (Circle CRM Group Inc.),

	Brooke Gerard (Circle CRM Group Inc.), and Tyler Statz (Circle CRM Group Inc.)
4:00 pm EDT	*Are We Actually Looking for Sites Where We Think We are Looking for Sites?* Kristin McKay (Circle CRM Group Inc.)
4:10 pm EDT	*It's the Little Things: Small Sites Big Contributions* Laura Nuttall
4:20 pm EDT	*It's a Swamp Thing: The Enigma of Finding and Interpreting Sites within the Boreal Forest of Northern Alberta and Northeastern British Columbia* Kyle Belanger (Circle CRM Group Inc.), Eugene Gryba, Jean Paul Foster (Stantec), and Brooke Gerard (Circle CRM Group Inc.)
4:30 pm EDT	*En"lightenment": Evaluating the Role of Optical Techniques in Building Understandings of Boreal Forest Landscapes* Krista Gilliland (Western Heritage) and Robin Woywitka (MacEwan University)
4:40 pm EDT	Discussion

Session Room 3 Schedule

Ganj Dareh Then and Now: Integrating Past and Current Research

Organizers: Julien Riel-Salvatore, Sanaz Shirvani

This session will be recorded

Session Abstract:

The Aceramic Neolithic site of Ganj Dareh, excavated 1967-1974 by Canadian archaeologist Philip E.L. Smith (Université de Montréal), occupies a central place in discussions about the nature and tempo of cultural evolution across the transition to an agro-pastoralist lifeway. A number of preliminary reports were complemented in the early 2000s by new studies on the animal and human remains at the sites, establishing it as a locus for early goat domestication just over 10,000 years ago and showing its occupants were descended from local hunter-gatherers and unrelated to the early farming populations from the western Fertile Crescent. This has prompted both renewed fieldwork at the site and efforts to organize and analyze the large collections accumulated during Smith's original excavations, currently housed at UdeM. This session aims to bring together members of different research groups that have tended to work in isolation on various aspects of Ganj Dareh, in order to present ongoing research on the site and chart new, integrated courses of action for future work.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JHTaJ-c4k_u5LbkXRg8SuY7

Zoom link: https://zoom.us/j/91298992257

Schedule:

12:00 pm EDT	*Excavating Archives: New Insights into the Stratigraphy at Ganj Dareh* Andrew Lythe (Université de Montréal) and Julien Riel-Salvatore (Université de Montréal)
12:10 pm EDT	*Resurrecting Old Data: Spatial Reconstruction of the 1967-74 Excavations at Ganj Dareh* Alejandra Uribe Albornoz (Université de Montréal) and Julien Riel-Salvatore (Université de Montréal)
12:20 pm EDT	*The 1967-1974 Ganj Dareh Collections: New light on Lithic Technological Organization* Julien Riel-Salvatore (Université de Montréal) and Lyne Grondin (Université de Montréal)
12:30 pm EDT	*First Observations on the 1967-74 Clay Object from Ganj Dareh* Sanaz Shirvani (Université de Montréal)
12:40 pm EDT	*Remembering the Ancestors: Burial Practices at Ganj Dareh* Deborah C. Merrett (Simon Frasier University) and Christopher Meiklejohn (University of Winnipeg)
12:50 pm EDT	Break
1:00 pm EDT	*Goat Genomes from Ganj Dareh and the Zagros Highland* Kevin Daly (Trinity College Dublin), Daniel Bradley (Trinity College Dublin), Melinda Zeder (Smithsonian Institution), Lisa Yeomans (University of Copenhagen), Pernille Bangsgaard (University of Copenhagen), and Marjan Mashkour (Centre National de la Recherche Scientifique)
1:10 pm EDT	*Re-Excavating Ganj Dareh: the 2017 and 2018 Seasons* Tobias Richter (University of Copenhagen), Hojjat Darabi (University of Copenhagen), Cecilie Lelek Tvetmarken (University of Copenhagen), Christoph Purschwitz (University of Copenhagen), and Peder Mortenses (University of Copenhagen)
1:20 pm EDT	*A Revised Radiocarbon Chronology of Ganj Dareh* Joe Roe (University of Copenhagen)
1:30 pm EDT	*Re-visiting the Neolithic Plant-based Subsistence in the Eastern Fertile Crescent; New Insights from Ganj Dareh* Amaia Arranz-Otaegui (University of Copenhagen), Golnaz Ahadi (University of Copenhagen), and Anne Frijda Schmidt (University of Cambridge)
1:40 pm EDT	*Neolithic Female Figurine from Tepe Sarab* Hamed Vahdati Nasab (Tarbiat Modares University) and Mandan Kazzazi (Wirtschaftsuniversität Wien)
1:50 pm EDT	Discussion

Commemorating Indian Residential Schools through Archaeology and Digital Heritage

Organizers: Peter Dawson, Madisen Hvidberg

Sponsored by Stantec

This session will be recorded

Session Abstract:

Indian Residential Schools (IRS) were part of an education system, in name only, that caused great pain and suffering to generations of Indigenous people across Canada for over a hundred years. The few schools that remain standing, the grounds where they once stood, as well as the cemeteries and unmarked graves of missing children, exist as “sites of conscience” and “witnesses to history”. Consequently, establishing a national strategy for understanding the historical and ongoing traumas of the IRS system and commemorating these spaces is among the Calls to Action issued by the Truth and Reconciliation Commission of Canada (TRC). This session explores how community-guided projects across the country are using archaeology, remote sensing, digital heritage, and other approaches to ensure that the histories, legacies, and effects of Indian Residential Schools in Canada are not ignored or forgotten.

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JHALQWc8-d8mXj1Dm4bt7uB

Zoom link: https://zoom.us/j/91298992257

Schedule:

2:20 pm EDT	*Digitally Preserving Former Indian Residential Schools: Two Case Studies from Alberta* Peter Dawson (University of Calgary), Madisen Hvidberg (University of Calgary), Katayoon Etemad (University of Calgary), Faramarz Samavati (University of Calgary), Derek Lichti (University of Calgary), Kate Pexman (University of Calgary), Vivian Ayoungman (Old Sun College), and Sherri Chisan (University nuhelot’įne thaiyots’į nistameyimâkanak Blue Quills)
2:30 pm EDT	*"Documenting" Digital Documentation at Old Sun Community College* Madisen Hvidberg (University of Calgary), Joey Big Snake, Meagan Breaker, Brendon Many Bears, and Peter Dawson (University of Calgary)
2:40 pm EDT	*Addressing the Missing Children: Implementing the Truth and Reconciliation Commission Calls to Action 72 to 76 on School Deaths and Unmarked Burial Information* Alex Maass (Crown-Indigenous Relations and Northern Affairs)
2:50 pm EDT	*The Nepowewin Mission Cemetery: A Community-led, Academic and Corporate Partnership to Locate Unmarked Graves* Terence Clark (University of Saskatchewan), Dave Rondeau (Métis Nation of Saskatchewan), Butch Amundson (Stantec), Glenn Stuart (University of Saskatchewan), Olenka Kawchuk (University of

	Saskatchewan), James Hulsebosch (Stantec), Joshua Murphy, Kali Sielsky, and Angela Burant
3:00 pm EDT	Break
3:10 pm EDT	*Finding the Relatives: Wise Practices for Research Design in Locating Unmarked Graves in Western Canada* Kisha Supernant (Institute of Prairie and Indigenous Archaeology, University of Alberta), William Wadsworth (Institute of Prairie and Indigenous Archaeology, University of Alberta), and Terence Clark (Department of Anthropology and Archaeology, University of Saskatchewan)
3:20 pm EDT	*Bearing witness: What good work can archaeology do in an Indian Residential School context?* Eric Simons (UBC), Andrew Martindale (UBC), and Alison Wylie (UBC)
3:30 pm EDT	*Heeding Calls to Action 71–76* Eldon Yellowhorn (Department of Indigenous Studies, Simon Fraser University)
3:40 pm EDT	*Quantifying Uncertainty in Ground Penetrating Radar* Andrew Martindale (UBC), William Wadsworth (University of Alberta), and Colin Grier (WSU)
3:50 pm EDT	Break
4:00 pm EDT	*Negotiating Multiple Authorities in a National Gravesite Register* Raymond Frogner (National Center for Truth and Reconciliation) and Ingrid Reiche (University of Calgary)
4:10 pm EDT	*Circles of Healing Honoring Elders, Spirits and Land* Paulette Steeves (Algoma University) and Krista McCraken (Algoma University)
4:20 pm EDT	*Shaping the Legacy Program at the Mi'kmawey Debert Cultural Center* Tim Bernard (Mi'kmawey Debert Cultural Centre) and Dorene Bernard (Mi'kmawey Debert Cultural Centre)
4:30 pm EDT	*Working for Sioux Valley Dakota Nation: Finding missing Indigenous children to foster restorative justice, repatriation, and reconciliation through forensic anthropology and archaeology at the Brandon Residential School* Katherine Nichols (Simon Fraser University), Darian Kennedy (Community Liaison for the Sioux Valley Dakota Nation + Simon Fraser University), Emily Holland (Brandon University), Deanna Reder (Simon Fraser University), John Albanese (University of Windsor), Dongya Yang (Simon Fraser University), Kim Figura (Simon Fraser University), Dayle Blackbird (Brandon University + Simon Fraser University), Hugo Cardoso (Simon Fraser University), and Eldon Yellowhorn (Simon Fraser University)
4:40 pm EDT	Discussion

Saturday, May 8th

Session Room 1 Schedule

Archaeology and Heritage in the Contemporary World

Organizer: Stephanie Halmhofer

This session will be recorded

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JEThNcYm_AR2NN9SIU24Zzr

Zoom link: https://zoom.us/j/98231101213

Schedule:

12:00 pm EDT	*Belongings Held in Trust: Indigenous Cultural Heritage and B.C.'s Community Museums* Lindsay Foreman
12:05 pm EDT	*Excavating the Crystal Palace: Victorian Popular Culture in Twenty-First-Century Archaeological Media* Kevin McGeough (University of Lethbridge)
12:10 pm EDT	*Finding the Best Policy – Disclosure Reduces Conflict and Builds Trust, it Really is that Simple* Gareth Spicer (Turtle Island CRM)
12:15 pm EDT	*Hidden Costs: An Analysis of the Effects of the COVID-19 Pandemic on Canadian Archaeology Students* Catherine Jalbert (Texas Historical Commission) and Lisa Overholtzer (McGill University)
12:20 pm EDT	Discussion
12:40 pm EDT	Break
12:50 pm EDT	*Inclusive Narratives in the Pre-Modern North Atlantic* Shannon Lewis-Simpson (Memorial University)
12:55 pm EDT	*Myth-Taking and Myth-Making: Exploring the Use of Pseudoarchaeology in Lost City Explorers and Arkworld* Stephanie Halmhofer (University of Alberta)
1:00 pm EDT	*Power, Politics and Policies: The Archaeology Field School at Town Pointe, NS* Mikael Haller (StFX University)
1:05 pm EDT	*Learning from Community-University Research Alliances to Improve Institutional Readiness for Repatriation* Rebecca Bourgeois (University of Alberta)
1:10 pm EDT	Discussion

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BOREAS Heritage Consulting Inc.

CORPORATE PROFILE

Based in Halifax, Nova Scotia, Boreas Heritage is an independently owned company of archaeology consultants, heritage researchers, and geographic information system (GIS) and geophysics specialists.

Co-founders, Sara J. Beanlands and Stephen G. Garcin, combine more than 40 years of experience to offer the highest standards of professional services and expert advice. Today, this partnership has grown and mobilized to become the most dynamic cultural resource management firm operating in Atlantic Canada and a leader in the application of GIS and advanced technology.

At Boreas Heritage, we recognize and acknowledge the Indigenous Peoples of Atlantic Canada as treaty partners. We are honoured to work and live on the unceded ancestral lands of the L'nuk in Mi'kma'ki and offer our support as allies to First Nation representatives, businesses, and communities as they build capacity and progress toward self-determination. Boreas Heritage is committed to honouring Indigenous knowledge, wisdom and traditions, and our business model includes a commitment to incorporating the Truth and Reconciliation Commission of Canada "Calls to Action".

WORKING WITH US

Our greatest resource is our team of skilled professionals. Boreas Heritage is committed to promoting transparent and respectful engagement and ensuring our clients comply with relevant heritage management standards. We follow the Code of Conduct and Standards of the Register of Professional Archaeologists and actively embrace innovative, cost-saving solutions for our clients. We incorporate emerging technologies into our methods and analysis to deliver practical solutions for project management and stakeholder challenges. We are proud of our reputation for integrity and ethical practice in serving Indigenous communities, government agencies, commercial developers, and the private sector. Boreas has an excellent health and safety record and is COR certified by the Canadian Federation of Construction Safety Associations.

Company Values

- ***Safe Workplace***
- ***Personalized Service***
- ***Clear Communication***
- ***Honest Advice***
- ***Creative Problem Solving***

Specializations

- ***Archival Research & Interviews***
- ***Field Survey & Excavations***
- ***Comprehensive & Concise Reports***
- ***Geophysical Survey* (EM38B & GPR)**
- ***UAV Operation***
- ***GIS Mapping & Interpretation***
- ***Heritage Promotion & Public Interpretation***
- ***Project Management***

People, Plants, and Animals

Playlist: https://www.youtube.com/playlist?list=PLe75n6eUk0JEQad6rbRfQzsZAvKVKk3t6

Zoom link: https://zoom.us/j/98231101213

Schedule:

1:50 pm EDT	*Using Phytoliths to Examine Environment and Human Occupation in the Jezreel Valley, Israel* Kali Wade (Atlatl Archaeology Ltd.)
1:55 pm EDT	*The Olson site (DgMg-167): Initial Investigations of a Pre-contact Indigenous Farming Site near Melita, Manitoba* Mary Malainey (Brandon University)
2:00 pm EDT	*Spatial Analysis from the Ostrich Eggshell Assemblage Recovered from Grassridge Rockshelter, South Africa* Danica Engen (University of Manitoba), Alex Monin (University of Manitoba), and Thomas Doran (University of Manitoba)
2:05 pm EDT	*The effects of Colonization on Indigenous Agriculture: An Overview from Manitoba* Garth Sutton (Manitoba Archaeological Society)
2:10 pm EDT	Discussion

Session Room 2 Schedule

Black and POC Diversity in Archaeology Roundtable

Organizer: Tommy Ng

Sponsored by Boreas Heritage Consulting

Time: noon – 2:00 pm EDT

Zoom link: https://zoom.us/j/92645602340

Session Abstract:

Canadians of European heritage represent 78% of Canada's total population of about 35 million vs. 22% or seven million who identify as a visible minority (this does not include Indigenous people). And yet, that demographic is not similarly reflected in archaeology, a profession whose sole purpose is to study the human past. Archaeologists of European ancestry, who dominate the discipline in Canada, generally have no cultural affinity to their research topics. This raises the question why Black and POC archaeologists are under-represented in this discipline. Even finding POC panelists for this roundtable discussion was

challenging! Is this due to systemic racism or perhaps economic considerations? Is it because the profession itself is not generally looked favourably upon by various visible minority groups? This roundtable discussion will touch upon these questions and many others. This event will be unique because the panelists want the conversations to be meaningful and impactful. To accomplish this, we want this discussion to touch on topics that are uncomfortable. Bring all your questions, stereotypes and misperceptions. Let's talk about them. We encourage participants to ask questions that are socially uncomfortable and even unacceptable. There will be no consequences and no witch hunt. Since this discussion will be conducted online, you can remain anonymous if you wish. We need to have uncomfortable conversations if we want this profession to move forward and be inclusive for all Canadians.

Note that this roundtable does not include Indigenous panelists as there is another roundtable with an Indigenous focus. We welcome any and all participants.

Panelists:

Margarita de Guzman

Neha Gupta

Mackenzie Johnson

Tommy Ng

Lisa Small

Achinie Wijesinghe

Session Room 3 Schedule

Student Voices: Growing Communities Through Support and Collaboration (Short Papers)

Organizers: The CAA Student Committee (Kelsey Pennanen, Molly Ingenmey, Tekla Cunningham)

Contact Email: caa.students@gmail.com

Sponsored by Turtle Island CRM

This session will be recorded

Session Abstract:

This session is aimed primarily at students, early-career researchers, and those interested in gaining presentation experience, to provide a platform for the budding archaeology

community to plant roots through sharing their voice. Presenting at a conference for the first time can be leaf-shaking, so this session will comprise shortened talks of ideas in blossom. Presentations for this session can involve a research project that has preliminary findings, the results of an honour's thesis or independent project, a research proposal, a story from the field, a short history of your favourite object, a book review, a tasty field recipe, or ideas for archaeology quarantine activities- the only catch is your presentation must be given in only 5 minutes!

The presentations will be given synchronously using the webinar format to provide the most authentic experience to an in-person talk. Presentations will be grouped based on similarity in topic matter, so please provide a general description of the topic you will be discussing, in no more than 250 words, and submit it to the Abstract Submission Form on the CAA website. Visual components for presentations from accepted presenters will be limited to only 1-3 slides and will be requested prior to the presentation date to allow for compilation and smooth transition between presentations. A synchronous question-and-answer period will be offered at the end of the session for time to connect with presenters. If you have any questions, please feel free to reach out to caa.students@gmail.com. We look forward to your submission and hearing your valuable perspectives and insights!

Zoom link: https://zoom.us/j/91298992257

Schedule:

12:00 pm EDT	Session Introduction
12:10 pm EDT	*Archaeology, Storytelling, and Resilience: A Case Study from the Greater Antilles* Tekla Cunningham (University of Winnipeg)
12:15 pm EDT	*Whales and Whaling: A Guide to Traditional Whaling* Susannah Clinker (McGill University) and Robyn Nakano (McGill University)
12:20 pm EDT	*Environmental Impacts of 18th Century British Colonial Worldviews: A Small-Scale Example from a British Military Fort in Southern Ontario* Keira McCartney (McMaster University)
12:25 pm EDT	*A New Approach for Assessing Harvesting Pressure of Shellfish From Archaeological Sites in Nova Scotia* Ian Predham (Memorial University)
12:30 pm EDT	*Size Matters: The Applicability of Scuffage at Wintering Sites in the Northern Plains* Zoe Cascadden (University of Calgary)
12:35 pm EDT	*A Story of Paleolithic Occupations: Understanding Neanderthal and Homo sapiens Spatial Organization at Riparo Bombrini* Amélie Vallerand (Université de Montréal)

12:40 pm EDT	*Leukoma staminea: A New Proxy for Seasonality and Palaeotemperature for Coastal British Columbia* Sarah Kuehn (Memorial University of Newfoundland)
12:45 pm EDT	*Ladies, Gentlemen, and [redacted]: A Nonbinary View of Feminist Archaeological Theory* Kaitlyn Vanderkolk (University of Calgary)
12:50 pm EDT	Break
1:00 pm EDT	*Radiocarbon Dating Marine Bivalve Mollusks: Best Practices for Calculating a Marine Reservoir Correction* Marisa Dusseault (Memorial University of Newfoundland), Meghan Burchell (Memorial University of Newfoundland), and Kristin Poduska (Memorial University of Newfoundland)
1:05 pm EDT	*Where did it all go?: Ontario Heritage Legislation and Professional Looting* Tatjana Vieira
1:10 pm EDT	*An Archaeology Girl in a Material World: How Experimental Archaeology Can Enhance an Undergraduate Degree* Gillian Taylor (University of Calgary)
1:15 pm EDT	*The Ornaments of the Arma Veirana Burial: Using Experimental Archaeology to Shed Light on Prehistoric Social Behaviors* Catherine Brun (Université de Montréal)
1:20 pm EDT	*The Intricacies of Mortuary Practices in Early Hominin Populations* Sydnye Berard (University of Winnipeg)
1:25 pm EDT	*Increasing Accessibility using Universal Design: A Case Study from Archaeology/Anthropology Department Websites* Alexandra Ward (Department of Archaeology, Memorial University)
1:30 pm EDT	Discussion

Abstracts

Alaica, Aleksa (University of Toronto) and Luis Manuel González La Rosa (Archaeology Centre, University of Toronto)
Exploring Social Memory and Belonging in Body and Earth: A Moche Burial Offering and Earth Packets from Huaca Colorada, Jequetepeque Valley, Peru (650-950 CE)
Session: Recent Research in Latin American Archaeology
Time: 03:50 PM, Thursday May 6, 2021 – Session Room 2
Life histories of human offerings provide important contexts for interpreting social memory and belonging in the past. At Huaca Colorada, the discovery of over two dozen human offerings in architectural renovation events highlight the way that community members from distinct labour and subsistence lifeways were integral to ceremonial practices during the Late Moche period (650-950 CE). This paper focuses on a burial context of an adult male, who was interred in a dense midden context, with signs of healed trauma and a violent death. The context of this offering is associated with a dog burial and over one hundred earth packets that were deposited alongside a principal retaining wall. These earth packets were categorized into four types based on their shape and colour. The variable form of these earth packets in relation to a male burial with intense labour markers links the life history of this burial to the artifacts used for constructing the monumental walls at Huaca Colorada. This paper argues that the coastal affiliation and occupational role of this male offering were memorialized in the social memory of ceremonial practice at Huaca Colorada and fostered a continued sense of belonging among coastal participants during mortuary rituals.

Albornoz, Alejandra Uribe (Université de Montréal) and Julien Riel-Salvatore (Université de Montréal)
Resurrecting old data: spatial reconstruction of the 1967-74 excavations at Ganj Dareh
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 12:10 PM, Friday May 7, 2021 – Session Room 3
The absence of published stratigraphic sequence and spatial extent of the different levels from the site of Ganj Dareh (Iran) have hampered a holistic understanding of the site's shifting human occupation over time. In this study, we digitized the master list of excavation units from Smith's 1967-1974 excavations and imported the resulting data into a GIS in order to resolve some of these issues. This allowed three things: First, it permitted a detailed reconstruction of the plan view of the site. Second, it allowed the production of a dynamic 3D model of the excavated area into which individual features could be inserted to capture their stratigraphic and planimetric relationships to different phases of occupation. Third, we were able to generate elevation maps for each of Smith's five levels, which show that there were diachronic shifts in the site's occupied area over time and serve to demonstrate Smith's impression that Level C was restricted to the western part of the mound. We conclude by exploring the potential of these data to be integrated in future work at the site to correlate past data to ongoing research at the site.

Allan, Timothy (Tree Time Services Inc.)
Realities and Realizations: Radiocarbon dating in the Boreal Forest.
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 02:50 PM, Friday May 7, 2021 – Session Room 2
Radiocarbon dating using charcoal or bone collagen is difficult in boreal forest ecosystems because of the acidic soil chemistry of conifer-dominant forests and persistent forest fire regimes. Collagen is quickly broken down and rendered useless, and charcoal concentrations can often be natural, rather than an anthropogenic feature. Radiocarbon dating is typically employed by consulting mitigation projects (or HRIM), or research projects, and not typically conducted on samples collected during consulting survey projects (HRIA) identified via shovel testing. However, a case can be made for opportunistic dating of viable samples identified through shovel testing, using various mediums if the context is acceptable. Calcined bone can be an acceptable medium for opportunistic dating when found in association with other artifacts. Advances in radiometric dating of calcined bone (via carbonates) has allowed for extremely low sample sizes, lower cost relative to other mediums (~$400 CDN). This poster will present the results of four years of radiocarbon dating for various consulting projects across northern Alberta and present a case for making opportunistic radiocarbon dating standard practice for HRIA projects.

Arranz-Otaegui, Amaia (University of Copenhagen), Golnaz Ahadi (University of Copenhagen), and Anne Frijda Schmidt (University of Cambridge)
Re-visiting the Neolithic plant-based subsistence in the Eastern Fertile Crescent; new insights from Ganj Dareh
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 01:30 PM, Friday May 7, 2021 – Session Room 3
Van Zeist et al.'s detailed analyses of Ganj Dareh provided a wealth of information about the types of plant species exploited by its inhabitants over time, reconstructed the vegetation and evaluated its evolution during the early Holocene. They wondered however why key cultivars like emmer were not exploited at the site, and what the relationship with other farming communities in the area could have been. To answer these questions, archaeobotanical studies were re-initiated in 2017, benefitting from recent advances including the study of: 1) a wide range of plant macroremains (i.e. seeds and wood charcoal, but also underground storage organs, animal dung and carbonised food remains); 2) the integration of plant microremains such as phytoliths and starch; and 3) the inter-disciplinary analyses of adobe-brick samples; 4) the application of stable isotope analyses. Recovered plant remains were also directly dated to resolve previous chronological uncertainties, their contextual integrity assessed through detailed micromorphological analyses, and additional stable isotope analyses are planned to better understand plant exploitation and cultivation practices at the site. Overall, in this paper we describe the archaeobotanical research plan designed, discuss some preliminary results, and present the main questions that we seek to answer in the upcoming years.

Atfield, Talena (Canadian Museum of History)
Two-Row Wampum-Covenant Chain Tradition applied to the study of Hodinosho:ni ash splint baskets
Session: Collaborative Archaeologies in Northeastern North America
Time: 01:45 PM, Thursday May 6, 2021 – Session Room 1
The Two-Row Wampum Covenant Chain methodology outlines protocols that can facilitate respectful research partnerships between Indigenous communities and researchers. Formed between the Hodinosho:ni confederacy and Dutch merchants arriving near Albany, NY between 1609-1613, this treaty set the precedent for Nation-to-Nation treaties between European colonial powers and Indigenous peoples. The relationship is depicted through two parallel purple rows, one representing the Hodinosho:ni canoe and the other representing Dutch ship, both sailing down a shared river. Both the ship and canoe travel parallel paths, neither interfering with the integrity of the other. In applying this methodology, researchers are encouraged to move away from extractive models and focus on developing new models for sharing the river with Indigenous communities in ways that are relationally respectful and accountable. In this presentation, information gathered through both academic and community sources is given equal weight and authority. Both forms of information gathering, interpretation, and explanation are used in collaboration to convey the continued importance of ash splint basket weaving to Hodinosho:ni communities while creating a mutually beneficial body of information.

Barras, Maryssa (University of Toronto)
Mountains and Moche Bodies: An Iconographic Analysis of Ceramic Vessels from the Museo Larco in Lima, Peru
Session: Poster session
Time: 02:10 PM to 02:50 PM, Thursday May 6, 2021 – Poster Room (Gather.Town)
This poster summarizes part of my research undertaken for my Master's degree over the course of two years.
The Moche (AD 300-800) were a coastal people from the north coast of Peru, famed for their impressive huaca plaza constructions and enormous body of fine ceramics, among other things. Moche ceramics have, in particular, been the subject of intense scrutiny by archaeologists and art historians over the past fifty years – shedding light into their cosmological and religious beliefs in addition to their worldviews. Using the digital scholar's portal from the Museo Larco in Lima, Peru, this poster contributes to the already large body of work on Moche iconography examining a sample of 17 ceramic vessels divided into thematic categories related to representations of human bodies, body parts, and mountains. While this sample is small, the 17 vessels assessed were chosen as representative pieces for larger thematic categories, which future research using additional collections will expand upon. Ultimately, using a comparative analysis this poster argues that human figures and mountains were, circumstantially, interchangeable, or equivalent, blurring divisions between human and other than human wak'a bodies.

Belanger, Kyle (Circle CRM Group Inc.), Eugene Gryba, Jean Paul Foster (Stantec), and Brooke Gerard (Circle CRM Group Inc.)
It's a Swamp Thing: The Enigma of Finding and Interpreting Sites within the Boreal Forest of Northern Alberta and Northeastern British Columbia
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 04:20 PM, Friday May 7, 2021 – Session Room 2
This presentation will discuss the importance of identifying, excavating and interpreting small single use occupation sites within the northern Boreal Forest Ecoregion through the use of ethnographic records, landform analyses and intra-site patterning. It will be shown that single-use sites may hold more cultural value than that of larger sites because they are purer in form, and are not obscured by numerous reoccupations over many thousands of years, particularly in Boreal Forest settings where very little post-glacial deposition has occurred. Our hope is to show these one/two/three family unit sites are a common type of pattern hunter/gatherers adopted throughout prehistory in response to the variable nature of available resources in this region. With further exploration and identification of these sparsely represented sites may be valuable for establishing local cultural chronology, and may reveal a more complete picture of hunter/gatherers' seasonal rounds and day to day affairs with regards to resource gathering. It could be a valuable model for other archaeologists to follow when conducting their surveys of Boreal Forest environments.

Berard, Sydnye (University of Winnipeg)
The Intricacies of Mortuary Practices in Early Hominin Populations
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 01:20 PM, Saturday May 8, 2021 – Session Room 3
A society's burial practices can be quite telling of the population, in modern times and the past. My aim in this research is to explore the evidence and critiques of sites that are thought to contain intentional burials of early hominin populations. In examining the evidence found at Shanidar Cave in Kurdistan, Sima de los Huesos in Atapuerca, Spain, and Rising Star Cave in South Africa I explored evidence of intentional burial practices at each site and the critiques surrounding them. I also analyzed some of the alternative explanations for the burials and the downfalls of looking at the past through a modern lens. Even if these practices didn't have the same meaning as modern-day funeral rites do to present human populations, the study of early burial practices brings a more relatable point of view to the study of ancient populations.

Bereziuk, Darryl (Archaeological Survey of Alberta), Colleen Haukaas (Archaeological Survey of Alberta), and Todd Kristensen (Archaeological Survey of Alberta)
Forestry and Archaeology in Alberta: A History and Synthesis
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 03:10 PM, Friday May 7, 2021 – Session Room 2
This paper summarizes the origins of the forestry compliance archaeology program in Alberta and synthesizes some statistics since implementation in the early 2000s. In the past decade, 200-400 new archaeological sites are recorded per year during historical resources impact assessments of harvest blocks, forestry roads, and other forestry developments. Almost 5000 sites have been recorded in the province during forestry compliance programs. We

summarize annual records of the number of sites discovered, the number of shovel tests excavated, and the number of developments subjected to archaeological fieldwork. Our goals are to document trends, contextualize anomalies, and explain the value of forestry compliance for heritage protection in Alberta.

Bernard, Tim (Mi'kmawey Debert Cultural Centre) and Dorene Bernard (Mi'kmawey Debert Cultural Centre)
Shaping the Legacy Program at the Mi'kmawey Debert Cultural Center
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 04:20 PM, Friday May 7, 2021 – Session Room 3
Multiple engagement sessions in 2013/14 and in 2018-2021 has clearly charted a path to honour Survivors and their descendant families at the Future Cultural Centre scheduled to open in 2025. They have also provided guidance and direction on pursuing National Historic Site Designation, Research on the site for burials and a historic graveyard, Commemoration for Survivors and Decedents. In partnership with the Tripartite Forum's Culture and Heritage working committee, Parks Canada and the NS Department of Communities, Culture and Heritage, Boreas Heritage was engaged to conduct a GPR investigation, provide high resolution imagery and conduct a unmanned Aerial Vehicle Survey. Our research continues this spring and summer. The IRS Legacy Project is committed to be part of the vision for the Mi'kmawey Debert Cultural Centre, where we continue to Share our Stories, Protect of Past and explore our History.

Bourgeois, Rebecca (University of Alberta)
Learning from Community-University Research Alliances to Improve Institutional Readiness for Repatriation
Session: Archaeology and Heritage in the Contemporary World
Time: 01:05 PM, Saturday May 8, 2021 – Session Room 1
Readiness assessments in community-based participatory research (CBPR) are used to optimize the success of community-engaged scholarship. These assessments, however, are directed exclusively at evaluating communities and are not reflexive of institutional capacity, perpetuating the asymmetrical power dynamic that community-based research seeks to eliminate. This paper presents a critical analysis of institutional readiness through the systematic review of limitations cited in publications from archaeology and anthropology projects conducted with support from the Social Sciences and Humanities Research Council's (SSHRC) Community-University Research Alliances (CURA) funding program. This analysis compares the proportion of constraints that were influenced by institutional stakeholders in relation to those resulting from other areas. To comment on the realities of institutional readiness for collaboration, this paper addresses two research questions: 1, how can a critical analysis of institutional readiness contribute to decolonizing repatriation practices?; and 2, what are the steps that institutions need to take to become more ready for repatriation partnerships with First Nations in Canada? The goal of this research is to use the limitations identified in CURA projects to inform how institutional readiness contributes to outcomes of repatriation projects and suggest avenues for improving the landscape of repatriation in Canada.

Brooks, Jeremy
AVROD Virtual Archaeology — Digitizing and Disseminating Archaeology and World Heritage through VR Technologies
Session: Digital Archaeology: How Hard Can It Be?
Time: 01:20 PM, Friday May 7, 2021 – Session Room 1
I will be discussing my MA thesis work from Trent University in the field of Digital Archaeology and how I started AVROD Virtual Archaeology as a solution for remotely studying and experiencing archaeological and cultural heritage sites. I will discuss my techniques for digitizing archaeological and cultural heritage sites using photogrammetry and how these models can be studied and disseminated through the AVROD Virtual Reality platform.

Brouwer Burg, Marieka (University of Vermont), Meaghan Peuramaki-Brown (Athabasca University), and Shawn Morton (Grande Prairie Regional College)
Away from 'The Field': Pivoting Archaeological Investigations during Pandemic Times
Session: Recent Research in Latin American Archaeology
Time: 04:40 PM, Thursday May 6, 2021 – Session Room 2
The past year has brought about a new reality for archaeologists, especially those working outside their home countries or as part of diverse multinational collaborations. As many of us grapple with the possibility of missing or radically modifying yet another field season this summer, we ask whether there is a silver lining to our new normal? Across our discipline, researchers/academics, government officials, rights holders, stakeholders, and interested publics are marshalling to keep the conversation going and developing new ways of interacting. At a time when "physical distancing" is a near-universal public health strategy, we have–with the aid of new and developing digital platforms–never been more connected. We are hopeful that this spirit of connection will continue, with long-term positive consequences for truly collaborative projects. In this presentation, we outline remote research strategies inspired by the new normal and pursued by our two field programs in Belize, which stand to push science forward and generate more meaningful community collaboration beyond COVID-19. We discuss key considerations that should structure future decisions regarding field-based research in Belize and beyond. Finally, we wish to solicit feedback from our colleagues, both travelers and hosts, in order to improve our practice.

Brun, Catherine (Université de Montréal)
The ornaments of the Arma Veirana burial: using experimental archaeology to shed light on prehistoric social behaviors
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 01:15 PM, Saturday May 8, 2021 – Session Room 3
The 2017 discovery of an Early Mesolithic (10 000 – 9000 cal BP) newborn buried in Arma Veirana (Erli, Italy) is remarkable for its rarity and for the richness and diversity of its grave goods. Those are composed of 93 perforated Columbella rustica and 4 perforated Glycymeris sp. Studying these ornaments and how they were made is important because they reflect social norms about ornamentation among hunter-gatherers in Liguria at the dawn of the Holocene. The main purpose of the research presented in this paper is to study experimentally how these beads were manufactured, worn and integrated into ornaments.

Experimental archaeology is an ideal approach for this work since it informs us about the whole array of possible physical constraints and techniques involved in the creation of shell ornaments, as well as allowing us to explore how physical movement affected the use-wear these beads accrued, opening interesting avenues of reflection about how links between the living and the dead were embodied in the Early Mesolithic. The results of this study thus can have implications for our understanding of the emergence of innovative behaviors, in particular early expressions of social hierarchy manifested by the development and transmission of hereditary social status.

Burchill, Alexandra (Circle CRM Group)
HaQw-3: Analysis of a Stratified Campsite in the Upper Peace Region of Alberta
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 02:40 PM, Friday May 7, 2021 – Session Room 2
In 1975, HaQw-3 was first identified by archaeologists as a major campsite with an extensive concentration of buried artifacts on the upper terrace of the Peace River. Over the next 30 years, the site was revisited and reassessed through both survey and excavation. Fast forward to 2019, the site was once again re-visited and a shovel testing program resulted in the identification of over 200 artifacts. Over time and through changing field methodologies and research, HaQw-3 became more than an extensive surface scatter. HaQw-3 presents a rare opportunity to study a stratified site within the Peace River Region, an area within the boreal forest most often represented by small-scale lithic scatters. Through this presentation, the history of HaQw-3 will be explored along with an analysis of the site.

Cascadden, Zoe (University of Calgary)
Size Matters: The Applicability of Scuffage at Wintering Sites in the Northern Plains
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:30 PM, Saturday May 8, 2021 – Session Room 3
Scuffage predicts that artifacts discarded on the floors of domestic or high-traffic spaces will be kicked, broken, or pushed into the ground depending on the artifact's location and size prior to site abandonment. This theory and the impacts on artifact distribution has been explored in experimental studies, but there is limited research on its applicability to the soils and domestic sites of the Northern plains. By examining the location of artifacts found in datable levels at the tipi ring sites EgPn-377 and EgPn-375, there are indications that the artifact distribution patterns found in those experimental scuffage studies can be seen in wintering household contexts in the Foothills of the Rocky Mountains.

Clark, Terence (University of Saskatchewan), Butch Amundson (Stantec), James Hulsebosch (Stantec), Joshua Murphy (University of Saskatchewan), and Angela Burant
Geophysical Survey at Nutana Cemetery: A Comparison of Ground Penetrating Radar (GPR) and Electromagnetic Data
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 03:50 PM, Thursday May 6, 2021 – Session Room 1

Saskatoon's first cemetery has 162 known internments starting in 1884 is located along the South Saskatchewan River. Many graves have stone tombstones and correspond to cemetery plot maps. Others have missing markers and due to slope erosion, some graves have been relocated and their locations are no longer certain. This project uses multiple non-invasive techniques to measure their correlation in both marked and unmarked contexts. Focus will also been placed on the differences in adult, child, and infant graves which the grave size and depth may vary greatly.

Clark, Terence (University of Saskatchewan), Dave Rondeau (Métis Nation of Saskatchewan), Butch Amundson (Stantec), Glenn Stuart (University of Saskatchewan), Olenka Kawchuk (University of Saskatchewan), James Hulsebosch (Stantec), Joshua Murphy, Kali Sielsky, and Angela Burant
The Nepowewin Mission Cemetery: A Community-led, Academic and Corporate Partnership to Locate Unmarked Graves
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 02:50 PM, Friday May 7, 2021 – Session Room 3
A Métis-led project to determine the location of unmarked graves at the historic mission site of Nepowewin brought together archaeologists from the University of Saskatchewan, Stantec, and the Métis Nation of Saskatchewan. Nepowewin (or the Budd Mission) was established by Henry Budd in 1852 and operated until at least 1875. Mission records indicate at least 26 individuals were in interned in the cemetery. The location of the cemetery and graves has since been lost. The Nepowewin Project leveraged the skills, knowledge, and technologies of academics, consultants, and community members in a novel approach that aimed to locate graves in a thorough, efficient, and culturally sensitive manner. This model may prove beneficial for the Indian Residential School Unmarked Graves project.

Clinker, Susannah (McGill University) and Robyn Nakano (McGill University)
Whales and Whaling: A Guide to Traditional Whaling (website)
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:15 PM, Saturday May 8, 2021 – Session Room 3
In the last century, whaling has quickly become one of the most controversial subsistence practices across the globe. At the frontlines of this dispute are various Indigenous whaling communities that continue to practice traditional whaling and anti-whaling advocates. While both sides make passionate cases for their cause, the unfortunate truth is that the sheer influence and power large anti-whaling campaigns wield often drown out the voices of Indigenous whaling societies who continue to rely on whales for sustenance and cultural identity. Not only are the motivations behind traditional whaling often neglected by anti-whaling campaigns, facts about their environmental and socio-economic impact are also skewed to serve their conservation interests. To confront this imbalance and the general colonial undertones of anti-whaling campaigns, we present this website that provides straight-forward facts about whales, whaling and the significance of traditional whaling for two case studies (Japan and Faroe Islands). With all the information at their disposal, the general

public is encouraged to consider traditional whaling and whale conservation not as opposing efforts but, rather, as efforts that would benefit from alliance.

Coleman, Madeline (Tree Time Services)
Lumps and bumps in the muskeg: Lidar in Alberta's boreal forests
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 03:40 PM, Friday May 7, 2021 – Session Room 2
Muskeg. It can really fill a boot and put a dampener on our day while we try to access remote parts of the province in our quest to complete HRIAs. Yet so much of Alberta is made up of this resource-rich terrain, and forms a significant part of traditional land use for Indigenous groups today. It stands to reason that archaeological sites can't be far away. But what if the typically "perfect" landforms don't exist (high, dry, flat, and distinct)? Where do you start to look? With the advent of light detection and ranging (Lidar), many archaeological sites have been found on low relief features surrounded by muskeg. Places we would have walked past before because they weren't perfect, or places we would never have seen on a topography map are increasingly our go-to target areas in muskeg terrain. This presentation will outline how low relief muskeg sites can remain undetected without Lidar; why precontact indigenous people might be drawn to muskeg areas; and how seemingly small lithic scatters can reflect pre-contact indigenous lifeways in the muskeg.

Colligan, Eileen Paddy (Hunter College Anthropology Research Affiliate, City University of NY)
Mining Government Archaeology Data for the Big Picture
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 04:20 PM, Friday May 7, 2021 – Session Room 1
People of the Thule culture spread across the North American Arctic about 1000CE to 1400. Although - or because - their sites are found from Alaska to Greenland, they are rarely studied on an Arctic-wide scale. The existence of growing repositories of data gathered from their widely dispersed sites is making this an increasingly practical approach. By using the data bases from eight government jurisdictions including six Canadian provinces and territories, Alaska and Greenland, this presentation discusses the difficulties as well as the promise these large data sets hold for creating informative maps and for researching settlement patterns and other expressions of culture across the full expanse of Thule world.

Cunningham, Tekla (University of Winnipeg)
Archaeology, Storytelling, and Resilience: A Case Study from the Greater Antilles
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:10 PM, Saturday May 8, 2021 – Session Room 3
Through archaeological analysis, the lives of people living hundreds of years ago can be better understood. By studying the material remains that they left behind and through different analyses, we can uncover more about what their lives looked like and how they interacted with the world. Archaeology is used to tell stories about the lives of people from long ago. This storytelling can help us understand more about their resilience and capabilities. Often,

misperceptions about the abilities of people, especially Indigenous peoples, are still promoted due to colonial legacies, obscuring their true knowledge and capabilities. This is true in the Caribbean, where the writings by colonizers still shape current perceptions about the Indigenous peoples of the islands. However, through archaeological analyses, more is being uncovered about their lives. Telling their stories helps combat those misperceptions and shares with the world the reality of their knowledge and resilience. The Caribbean has been inhabited for thousands of years and the inhabitants in the past must have been capable and resilient, yet this has been obscured due to colonial misperceptions. Through archaeology, the truth about their lives can be uncovered and told, and their resilience and strength can be better understood.

Daly, Kevin (Trinity College Dublin), Daniel Bradley (Trinity College Dublin), Melinda Zeder (Smithsonian Institution), Lisa Yeomans (University of Copenhagen), Pernille Bangsgaard (University of Copenhagen), and Marjan Mashkour (Centre National de la Recherche Scientifique)
Goat genomes from Ganj Dareh and the Zagros highland
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 01:00 PM, Friday May 7, 2021 – Session Room 3
Ganj Dareh provides some of the earliest evidence of goat management by humans. We assess goat remains from Ganj Dareh, using a combination of genomic and archaeozoological methods. Genetic data indicate two clusters of animals: a larger group with domestic affinity, and a smaller cohort with wild affinity. Goat from throughout the site's occupation (Smith Level A-E) show genetic and demographic indications of management; mitochondrial and Y chromosome markers echo demographic traces of reduced male survival and a larger female breeding population. The genetic legacy of management is also revealed by large regions of homozygosity, implying recent kin breeding among Ganj Dareh goats. Similar analyses of goat from Tepe Abdul Hosein indicate that these signals were not exclusive to Ganj Dareh, and may represent animal management practises shared throughout the Central Zagros highlands. The eastern region of Fertile Crescent, as evidenced by our cross-disciplinary study of the goat of Ganj Dareh, is key to deepening our understanding of the emergence of herd management in southwest Asia.

Davies, Michelle (Memorial University of Newfoundland) and Lena Onalik (Nunatsiavut Government)
Towards an Inuit-led Public Archaeology Program in Hebron, Nunatsiavut.
Session: Collaborative Archaeologies in Northeastern North America
Time: 01:25 PM, Thursday May 6, 2021 – Session Room 1
In 1959, Hebronimiut (People of Hebron) were dispossessed from their homeland in northern Labrador. Though Inuit had lived in the region for centuries, the decision to close and resettle the community was a colonial exercise, done without their consultation or consent. However, the story of Hebron is a source of pride and identity among many descendants, and cultural threads continue to connect Labrador Inuit to the region today. The primary goal of the Hebron Family Archaeology Project is to provide opportunities for the residents of Hebron to return to their homeland and to record the stories and memories of elders before they are lost. The research goals, originally centered around household excavation, have shifted to non-

invasive archaeological recording methods, family-based interviews, and increasing accessibility. Today, the project is an Inuit-led venture that aims to remove western colonial influence in archaeological practice, from collaboratively designing research questions, through developing appropriate field practices and methods of data collection, to sharing the dissemination of research results appropriately. This shift in control works to decolonize the process and structure of research, and champion the right for indigenous peoples to define and describe their own past.

Dawson, Peter (University of Calgary), Madisen Hvidberg (University of Calgary), Katayoon Etemad (University of Calgary), Faramarz Samavati (University of Calgary), Derek Lichti (University of Calgary), Kate Pexman (University of Calgary), Vivian Ayoungman (Old Sun College), and Sherri Chisan (University nuhelot'įne thaiyots'į nistameyimâkanak Blue Quills)
Digitally Preserving Former Indian Residential Schools: Two Case Studies from Alberta
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 02:20 PM, Friday May 7, 2021 – Session Room 3
Surviving Indian residential school (IRS) buildings are among the most poignant reminders of the history and legacy of the residential school era in Canada. While over a hundred schools operated during this period, only a small number remain standing. Among the Calls to Action defined by the Truth and Reconciliation Commission (TRC) are several that deal specifically with the issue of preserving and commemorating former residential school sites. In this paper we discuss two community-guided projects which use 3D laser scanning to digitally preserve two surviving Indian residential school buildings in Alberta. We outline how these projects can build capacity in participating communities via the training of Indigenous youth in digital technologies. We also discuss how the virtual and physical models of surviving school buildings generated by our project are being used to create "as built" architectural plans, online exhibits, and educational materials which will help increase awareness of the history and legacy of these schools, as well as honor residential school survivors, families, and communities.

de Guzman, Margarita (Circle CRM Group Inc.), Trevor Peck (Circle CRM Group Inc.), Amanda Wong (Circle CRM Group Inc.), Alexandra Burchill (Circle CRM Group Inc.), Shannon Wright (Circle CRM Group Inc.), Brooke Gerard (Circle CRM Group Inc.), and Tyler Statz (Circle CRM Group Inc.)
Where are all the archaeology sites in northwest Alberta?
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 03:50 PM, Friday May 7, 2021 – Session Room 2
Archaeology in advance of forestry development in Alberta has been based strongly on strategies adapted from previous investigations, whereby areas of highest archaeological potential will be found on well-defined and elevated landforms overlooking or adjacent to major drainages or waterbodies. This practice dates back to the earliest investigations in the 1970s and continues to be reflected in DEM dedicated targeting strategies. Conversely, areas typically considered to exhibit low archaeological potential are poorly drained and/or in flat and featureless terrain. However, the real world is not so black and white, and high

archaeological potential needs to be assessed relative to the surrounding landscape; in many areas in the boreal forest, these ideal landforms are few and far between, and many archaeology sites are found on atypical landforms, in atypical locations. This presentation takes a statistical approach to survey strategy and site identification, relating known sites to the factors of landform and water bodies. By illustrating where we find sites relative to where we look for sites, we challenge theories of where typical sites can be found in the boreal forest.

Desmarais, Danii (University of Toronto)
What Muskrat Told Me: Zooarchaeological Evidence for Early Muskrat-Human Relationships in the Inuvialuit Settlement Region
Session: Being with Animals in the North: Archaeological Perspectives
Time: 01:40 PM, Thursday May 6, 2021 – Session Room 3
Muskrats have been an important aspect of human lifeways in the Inuvialuit Settlement Region (ISR) since time immemorial, and they continue to play an important role in Inuvialuit culture today. A focus on the importance of larger prey species in ancestral Inuvialuit subsistence practices has tended to overshadow the significance of the modest muskrat, despite the luxurious and technologically advantageous nature of their hides. This paper outlines my preliminary efforts at understanding early Inuvialuit-muskrat relationships, and how that relationship might have evolved through time. Particular attention is paid to the nature of muskrat remains recovered from the archaeological record, and how this small rodent played a supporting role in ancestral Inuvialuit lifeways. Following a relationality approach to communicating Indigenous archaeology, I discuss my interpretations through the lens of my relationships with muskrat, community, the land, and research.

Dorland, Steven (University of Toronto Mississauga), Veronica King-Jamieson (Mississaugas of the Credit First Nation), Jonathan Ferrier (Dalhousie University), Jordan Jamieson (Mississaugas of the Credit First Nation), and David G. Smith (University of Toronto Mississauga)
Learning about Learning: Community-based Archaeology in Partnership with Mississaugas of the Credit First Nation
Session: Collaborative Archaeologies in Northeastern North America
Time: 02:25 PM, Thursday May 6, 2021 – Session Room 1
Community-based archaeologies in traditional territories of Anishinaabe, Mississauga, Mi'kmaq, Wendat, Anishinaabe, Cree, and Haudenosaunee, among other Nations has played an instrumental role in unsettling archaeology, democratizing knowledge, and strengthening and repairing relations between communities and academic institutions. In this paper, we introduce the development of a community-based project grounded in partnerships between the Mississaugas of the Credit First Nation, University of Toronto, and Dalhousie University. There are two goals of this project, 1. Learning about learning past traditions with MCFN community youth, and 2. Develop capacity building for community youth to lead future cultural heritage initiatives and contribute to greater understanding of ancestral practices. As part of this discussion, we also provide our unique perspectives and reflections, to highlight the multi-vocality associated with this project. The spirit of a community-based project should be centered on the specific needs and interests of the Indigenous community or communities

that archaeologists partner with, and not a one size fits all model. Through this approach, archaeologists can create research partnerships with Indigenous communities across traditional lands that are grounded in strong relationships, trust, respect, and which ultimately succeed to reach project goals and address the needs and interests of Indigenous communities.

Dusseault, Marisa (Memorial University of Newfoundland), Meghan Burchell (Memorial University of Newfoundland), and Kristin Poduska (Memorial University of Newfoundland)
Radiocarbon Dating Marine Bivalve Mollusks: Best Practices for Calculating a Marine Reservoir Correction
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 01:00 PM, Saturday May 8, 2021 – Session Room 3
Bivalve mollusk shells, such as clams and mussels, incorporate naturally occurring carbon-14 from their marine environment into their calcium carbonate (CaCO3) structure as they grow and are commonly found at coastal archaeological sites. The quality of radiocarbon measurements depends on whether the CaCO3 has been altered chemically or structurally after death, how a sample is extracted from the shell, and how accurately the marine radiocarbon environment at the time of death can be reconstructed. This last factor requires applying a marine reservoir correction to the date which is a challenge to determine because it requires considering the species' growth patterns and the variability of the marine environment. Most archaeological studies use a single radiocarbon measurement on a short-lived marine shell sample to calculate the correction while others complete high-resolution studies using long-lived samples that link multiple radiocarbon measurements from a single shell with other isotopic data that provides information about climate and human-environment interactions. Using radiocarbon measurements on archaeological shells of Saxidomus gigantea from Comox and Deep Bay, British Columbia as a case study, we highlight that developing robust, highly location-specific corrections through multiple sample measurements is necessary for interpreting radiocarbon dates accurately.

Engen, Danica (University of Manitoba), Alex Monin (University of Manitoba), and Thomas Doran (University of Manitoba)
Spatial analysis from the ostrich eggshell assemblage recovered from Grassridge Rockshelter, South Africa
Session: People, Plants, and Animals
Time: 02:00 PM, Saturday May 8, 2021 – Session Room 1
Beads are ubiquitous past and present for culturing the body and providing symbolic context to social interactions. In this regard, beads and ornaments are frequently the focus of archaeological inquiry, with the acquisition, manufacture, and manipulation of the raw material from which beads are created being overlooked. This is especially true of ostrich eggshell beads in southern Africa. Here we present preliminary results from a detailed approach to studying unworked ostrich eggshell from Grassridge Rockshelter, South Africa, a site that contains large ostrich eggshell bead assemblages that date to the terminal Pleistocene and mid-Holocene. Specifically, this study focuses on the distribution of ostrich shell with regard to

burning features and recovered ostrich eggshell beads. Our results inform the relationship between ostrich shells, ostrich eggshell beads, and site taphonomy. These data provide novel spatial insights into the use and discard of ostrich eggshell at the site, such as the frequency (or lack thereof) of worked or unworked fragments in certain areas.

Ferland, Laurence (Université Laval)
The Puzzle of Multi-sourced Data: From Aerial Photogrammetry to Soviet Maps
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 04:40 PM, Thursday May 6, 2021 – Session Room 1
Technologies are both a bane and a blessing for archaeologists: they can make life more agreeable when allowing greater precision and saving a climb for that aerial picture. They also require training, or are not available when needed (even though the knowledge of their existence burns like red iron). Archaeologists are resourceful beings, however, and are known to make the best out of what they have. This applies to mapping using UAV and airborne photogrammetry. As amazing as they are, theses tools have their limits and may require additional methods or data sources to produce fully reliable maps. Happily, there is a wide array of open access and institutional databases which may provide lacking information. Though useful to fill in gaps and refine the precision of data acquired in the field, they also raise issues such as compatibility, scale, coverage, or 'black box' treatment where the manipulations that lead to the available product are unknown. In order to discuss these issues, two case studies based on aerial photogrammetry combined with ground data as well as external data such as Soviet maps and LiDAR tiles will be presented, namely Petko Karavelovo tell site in Bulgaria and DeEr-01 in Saguenay, Québec.

Figura, Kim (British Columbia Institute of Technology + Simon Fraser University), Katherine Nichols (Simon Fraser University), Laure Spake (University of Otago), Dayle Blackbird (Brandon University + Simon Fraser University), Darian Kennedy (Community Liaison for the Sioux Valley Dakota Nation + Simon Fraser University), Emily Holland (Brandon University), Deanna Reder (Simon Fraser University), John Albanese (University of Windsor), Dongya Yang (Simon Fraser University), Hugo Cardoso (Simon Fraser University), and Eldon Yellowhorn (Simon Fraser University)
From home to the Brandon Indian Residential School: Addressing the colonial legacy of displaced Indigenous children through GIS and archives (1936-1952)
Session: Poster session
Time: 02:10 PM to 02:50 PM, Thursday May 6, 2021 – Poster Room (Gather.Town)
The Brandon Indian Residential School (Brandon IRS) was active in southwestern Manitoba between 1895-1972. This study draws on a snapshot of publicly available archives (1936-1952) showing student recruitment from 54 communities across Alberta (1), Saskatchewan (21), Manitoba (25), Ontario (5), Quebec (1), and Nunavut (1). The goals of this study are to bring a tangible human dimension to our common understanding of IRS experiences while also recovering deeper knowledge of the school's legacy of missing children. GIS models were produced to highlight the spatial magnitude of the possible routes travelled by children from each community. We hope to enrich the sharing and honouring of these lived experiences by highlighting the individual journeys of three children. These lines of

exploration are part of the Brandon IRS Cemeteries Project, an investigation into school graves and burial grounds spearheaded by the Sioux Valley Dakota Nation. As GIS and other digital mapping tools are rooted in western epistemologies, researchers must remain critical about the ways these are used to communicate Indigenous narratives and events. We are actively learning, adapting, and growing to shape the project and our individual involvement in a respectful and meaningful way.

Fisher, Dale (University of Alberta)
The Matzhiwin Creek Bison Kill: An Avonlea-Old Woman's Bison Kill and Processing Area in Southern Alberta
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 03:30 PM, Thursday May 6, 2021 – Session Room 3
Sometime between 850 and 1000 B.P., a group of Plains bison hunters occupied the landscape around Matzhiwin Creek and its confluence with the Red Deer river, northwest of Duchess, Alberta. Here, on the homeland of Treaty 7 peoples, the hunters took advantage of the natural topography and drove a number of bison into a trap, dispatching them and processing them for their meat and hides. Excavations conducted by the Institute of Prairie Archaeology of the University of Alberta during the 2019 field school revealed an extensive Late Precontact bonebed (EfOx-70) and processing area (EfOx-71). Radiocarbon dates and projectile point forms place the sites within the Avonlea-Old Women's transitional period. With the excavation of multiple faunal remains, stone tools, pottery and features, the site represents an interesting addition to communal bison hunting research during this time period. Initial analysis of both sites suggests that one or more prime-dominated herds were trapped and dispatched with arrows made of Knife River Flint, Swan River chert, Montana cherts, and a variety of local, thermally altered materials.

Foreman, Lindsay
Belongings Held in Trust: Indigenous Cultural Heritage and B.C.'s Community Museums
Session: Archaeology and Heritage in the Contemporary World
Time: 12:00 PM, Saturday May 8, 2021 – Session Room 1
For over two decades, I have been involved in the excavation, collection, analysis, organization, conservation, and interpretation of 'Canadian' Indigenous Cultural Heritage. Commonly described as artifacts and ecofacts by archaeologists, ancestral belongings and material culture items recovered from the ground's surface or below it, are deeply connected to contemporary Indigenous ways of being and knowing. Community heritage institutions do not always reflect this cultural continuity and dynamism in their exhibitions, programs, and discussions of the Indigenous communities within whose traditional unceded territories they are situated. We must all work together to move forward in a good way to eliminate this disconnection, to be more mindful of how we collect, handle, interpret, and store Indigenous Cultural Heritage (both tangible and intangible), and to be more transparent about the 'collections' that we hold in trust for all of our community members.

My archaeological career has included stints with academic institutions, in the private sector, in community museums, and most recently, with Indigenous organizations. The care, analysis, and interpretation of 'collections' of Indigenous Cultural Heritage is the common

thread between all of these opportunities. Here I share some insights gained through my recent work with several community museums in British Columbia.

Fowler, Jonathan (Saint Mary's University)
20 Years of Magnetic Susceptibility Surveys: Lessons Learned
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 03:40 PM, Thursday May 6, 2021 – Session Room 1
Terrestrial geophysical methods have been a core part of our research program now for 20 years. Over that time, we have witnessed significant changes in instrumentation, survey methods, and especially in data processing and visualization. This presentation examines best practices in multi-instrument surveys for archaeological prospection, site delineation, and mapping, with an emphasis on magnetic susceptibility as an underappreciated method for detecting a wide range of sites and features.

Frogner, Raymond (National Center for Truth and Reconciliation) and Ingrid Reiche (University of Calgary)
Negotiating Multiple Authorities in a National Gravesite Register
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 04:00 PM, Friday May 7, 2021 – Session Room 3
Many factors must be considered when developing a keeping place for survivors' memories of unmarked gravesites produced by residential school operations. These include unresolved questions related to concepts of legal and cultural authority over lands containing unmarked residential school grave sites. For example, land claims are an ongoing issue in the Indigenous/settler relationship. The misuse of public lands for Indigenous childrens' graves creates understandably more distrust in an ongoing colonial narrative of settler dispossession of Indigenous lands than almost any other issue. Other issues focus on jurisdictional control over unmarked grave sites, the need to identify and consult with cultural authorities, and data sovereignty over the conditions of access, use, and ceremony for information relating to these sensitive heritage sites. This presentation will consider these issues in the context of a national repository for residential school gravesite information.

Gainer, Jennifer (Circle CRM Group Inc.)
Identifying and Relocating Cultural Depression Sites Using LiDAR Technology
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 02:50 PM, Friday May 7, 2021 – Session Room 1
LiDAR is a remote sensing method that uses predictive models to assess the landscape for potential landforms and features which exhibit archaeological potential. Although, it is commonly used to identify geographical features, it has also proved useful in identifying and relocating large cultural depression sites. A study of a small area in the Cariboo-Chilcotin, within the central interior of British Columbia, shows the benefits and short falls of the LiDAR technology by "ground truthing" areas which were pinpointed as part of the study as having high potential for cultural depression sites. The results of the survey were then compared to

previous site records to help relocate, and potentially gain additional information, from some previously recorded sites in the area.

Gaulton, Barry (Memorial University) and Misha Ewen (University of Manchester)
An Indigenous or African representation on a French-made tobacco pipe found at a 17th-century English colonial site in Newfoundland: preliminary insights and interpretations
Session: Recent Archaeological Research in Canada's Northeast
Time: 12:30 PM, Thursday May 6, 2021 – Session Room 1
Representations of Black and Indigenous people are frequently seen on 17th- and 18th-century European tobacco advertisements as well as on other printed or visual matter. The iconography presented in these representations often portrays hybrid elements of Indigenous and African ethnicity. Evocations of exoticism and passivity are also commonplace.

Borrowing ideas from Catherine Molineux's (2007) article "Black Virginians", this paper traces the context and provenance of a late 17th-century clay tobacco pipe embellished with a relief-moulded representation of an African or Indigenous individual smoking a pipe and holding a bundle of tobacco. Unearthed during the excavation of a colonial fishing village in Ferryland, Newfoundland, this object highlights the trade in Newfoundland codfish for tobacco produced by enslaved peoples, the connection between decorated pipes and the socio-economic status of the smoker, and the intersection of imperialistic plans, early modern tobacco cultivation and political economy.

Gilliland, Krista (Western Heritage) and Robin Woywitka (MacEwan University)
En"lightenment": Evaluating the role of optical techniques in building understandings of boreal forest landscapes
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 04:30 PM, Friday May 7, 2021 – Session Room 2
Archaeological sites in the boreal forest are inherently difficult to interpret, in part due to bioturbation and a lack of datable materials or diagnostic artifacts. However, previous research in other regions demonstrates that optical techniques can be used to obtain not only chronometric ages, but can also illuminate sediment depositional histories and site formation processes. To explore this possibility, samples for portable optical profiling were collected while conducting archaeological assessments in northwestern Alberta over the past seven years.

We present the preliminary results of optical profiling along with an evaluation of optical ages obtained within the boreal forest, situating these data within a broader geomorphological context. We suggest that, despite the methodological and logistical challenges ingrained in applying optical methods in northern settings, these techniques can appreciably increase understandings of the dynamics of archaeological site formation in these areas. We provide recommendations for the next steps to be taken in order to establish a regional, relative chronology for archaeological sites in northwestern Alberta. This work has the potential to contribute to reconciliatory efforts by documenting the deep history of human occupation of the boreal forest. It also has wider resonance within the broader fields of geomorphology, pedology, and chronometric dating.

Golay Lausanne, Kayla (McMaster University)
Mapping Las Colmenas: Using an Integrated Remote Sensing Approach to Map Buried Architecture
Session: Recent Research in Latin American Archaeology
Time: 04:40 PM, Thursday May 6, 2021 – Session Room 2
This presentation discusses the results of a survey project conducted in 2018 and 2019 on the North coast of Peru at Las Colmenas (V-157), a site within the Gallinazo Group. The project addresses two main research questions: (1) What remote sensing technique(s) worked best to identify buried features at Las Colmenas? (2) What combinations of techniques proved to be optimal for identifying buried features, and what are the benefits and limitations of the use of an integrated approach? This project incorporated two scales of analysis: macroscale optical and thermal Unmanned Aerial Vehicle (UAV) surveys and microscale Ground-Penetrating Radar (GPR), magnetic susceptibility, and magnetometry surveys. A side-by-side comparison proved the thermal UAV, GPR, and magnetic susceptibility surveys were most successful at Las Colmenas. However, by integrating these methods, we noted that a multi-faceted approach documents more features than any one method. But integrating a smaller subset of these methods can still be beneficial depending on the resources available and the goals of the project.

Gusev, Andrey (Arctic Research Center of Yamal-Nenets Autonomus district) and Natalia Fedorova (Arctic Research Center of Yamal-Nenets Autonomus district)
Animals in Early Iron Imagery from the Iamal Region of Arctic Siberia
Session: Being with Animals in the North: Archaeological Perspectives
Time: 12:30 PM, Thursday May 6, 2021 – Session Room 3
This presentation introduces a wide range of animal images found at the Ust'-Polui site in the Iamal region of Arctic Siberia. Excavations at this site have produced a broad assortment of organic materials that have been particularly well preserved in the permafrost areas of the site's cultural deposits. Ust'-Polui is a well-known archaeological location in north-western Siberia that had been used for community gatherings and sacral activities by Indigenous populations living in the Lower Ob River area from the third century BCE to the second century CE. The Ust'-Polui animal imagery includes approximately 140 objects of metal, antler, birch bark, wood, and stone. The animal images were carved on handles of spoons, knives, and awls and were depicted on combs, a variety of metal pendants, and other objects. The majority depict birds, especially waterfowl, but also raptors and owls. Waterfowl are often depicted as floating in water; raptors are depicted in profile and often as eating the heads of artiodactyls. Most of the mammals depicted are reindeer with a few having open mouths and protruding tongues. Other items contain images of possible mustelids, beavers, and bears.

Gustas, Robert (University of Victoria), Iain McKechnie (University of Victoria, Hakai Institute), and Quentin Mackie (University of Victoria)
Volumetric Estimates for Coastal Shell Middens on the West Coast of Vancouver Island
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 03:00 PM, Friday May 7, 2021 – Session Room 1

Coastal shell middens are a quintessential component of the archaeological record on the Northwest Coast. Despite their importance in informing the cultural and environmental histories of Indigenous peoples, the majority of research on shell middens has not sought to estimate the 3D characteristics of these cultural deposits including geometric shape and volume. Here we present a new general model for estimating midden volume based on a regular geometric solid which relies on the metrics of the extent and depth of shell bearing deposits. This technique is scalable and designed to work with legacy survey data. We evaluate the accuracy of our technique using survey and LiDAR data from sites in Tseshaht Territory in the Broken Group Islands on Vancouver Island. As part of the evaluation process we developed a new method of 3D visualization of middens using systematic survey and subsurface percussion core data. The comparison of general and targeted midden model estimates demonstrates a high level of accuracy for our general model when applied at regional scale. This work presents the first ever landscape scale measure of midden volume within our study area, which has relevance to ongoing research questions.

Haller, Mikael (StFX University)
Power, Politics and Policies: The Archaeology Field School at Town Pointe, NS
Session: Archaeology and Heritage in the Contemporary World
Time: 01:00 PM, Saturday May 8, 2021 – Session Room 1
Despite popular portrayals of archaeologists as inconsequential to modern issues and problems, archaeological research is an important source for the promotion of social identity and political agendas. During the 2010 archaeological field school at Town Pointe, Nova Scotia, this became abundantly clear as proposals from different stakeholders shaped the methodology and aims of the research. During this project, we surveyed the site of Town Point, the original European settlement in Antigonish County, in hopes of identifying pre-contact and European settlements and to assess Euro-Mi'kmaw relations in the early 1800s. The survey zone was on Crown lands (NS Province) being managed under a timber lease that also had a land claim initiated by the local Indigenous Mi'kmaq. Additional stakeholders' input needed to be negotiated to address the concerns of the pubic and individuals in developing the goals of the project. While the findings of the field school were not remarkable, students quickly learned that archaeological research addresses the present as much as the past.

Halmhofer, Stephanie (University of Alberta)
Myth-Taking and Myth-Making: Exploring the Use of Pseudoarchaeology in Lost City Explorers and Arkworld
Session: Archaeology and Heritage in the Contemporary World
Time: 12:55 PM, Saturday May 8, 2021 – Session Room 1
Pop culture can be a powerful medium for sharing archaeology and inspiring interest in our field. But what happens when that archaeological information being shared is incorrect? What happens when it's not archaeology being shared, but rather pseudoarchaeology? This presentation aims to explore those questions, using two comic series – Lost City Explorers and Arkworld – as examples. Both comics feature the mythical city of Atlantis, a city popular among non-archaeologists and pseudoarchaeologists alike. In addition, Atlantis has more recently been adopted by conspiracy theory and alt-right movements. This presentation will

look at how Atlantis is featured in Lost City Explorers and Arkworld. It will look at how these series may reinforce existing beliefs or encourage new beliefs about Atlantis and pseudoarchaeology. And considering the ways in which archaeology is misappropriated by alt-right and conspiracy theory movements, it will highlight why archaeology and pseudoarchaeology in pop culture is something to which archaeologists should pay attention.

Hamilton, Scott (Lakehead University)
'Stuff only drone nerds care about': Evaluating UAV Photogrammetric Precision and Accuracy
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 04:20 PM, Thursday May 6, 2021 – Session Room 1
Consumer-grade (or 'prosumer') Unmanned Aerial Vehicles (UAVs) are increasingly used for mapping when 'survey grade' output is not required. While an attractive tool for archaeological mapping, uncertainty exists regarding the precision, accuracy and replicability of georeferenced photomosaics and elevation models. This is important when UAV-derived cartography is integrated with more precisely georeferenced digital data. This case study compares output from repeated flights over the same locality, using GIS to analyze the consistency of horizontal georeferencing and elevation models. While revealing horizontal georeferencing consistency within ± 2 metres, dramatic variation in the elevation models is noted. While this variability reflects the technical limitations of prosumer UAVs, at issue is how to improve output precision and accuracy from such comparatively inexpensive equipment. One approach involves a RTK GPS receiver to independently determine the coordinates and elevations of Ground Control Points, and then their use to refine/correct the original photogrammetric output.

Hamilton, Scott (Lakehead University) and Chris McEvoy (Lakehead University)
Virtual Archaeological Site Tours in the Service of Cultural Heritage Education
Session: Digital Archaeology: How Hard Can It Be?
Time: 01:10 PM, Friday May 7, 2021 – Session Room 1
As part of a collaboration with the Lakehead University NiiJii Indigenous Mentorship program, the Department of Anthropology is using consumer-grade 360° cameras to create a virtual tour of archaeological sites on the Thunder Bay campus. These sites were investigated during a 2015 archaeological field school, revealing localized lithic debitage scatters and one copper projectile point along the McIntyre River immediately upstream from the Nipissing Transgression strand line. They may date to when the locality was the stream outlet into the mid-Holocene extent of Lake Superior.

Our early efforts involve capturing 360° images from strategic locations linked to archaeological site plans, drone mosaics and satellite images, with additional 'hotpoints' featuring the excavations in progress and artifact illustrations. The intent is to develop a virtual tour package accessible via the internet. This will be used by Niijii as part of its broader education outreach to Indigenous students in the broader NW Ontario region.

Hull, Emily (University of Oulu) and Anna-Kaisa Salmi (University of Oulu)
Dashing Through The Snow: Activity Reconstruction of Reindeer Hooves in Fennoscandian Archaeology
Session: Being with Animals in the North: Archaeological Perspectives
Time: 01:00 PM, Thursday May 6, 2021 – Session Room 3
The use and husbandry of reindeer in Fennoscadia has been an area of increasing interest in zooarchaeology, especially in both Arctic and Human-Animal Studies. The historical record and recent research has shown that mixed subsistence existence was practiced by the Sámi peoples from at least the 14th century. The reindeer in these communities included a combination of herded, hunted, and working reindeer. Research of phalangeal entheseal changes (ECs) has shown definable differences between wild forest reindeer (R.t. fennicus) and domestic barren ground reindeer (R.t. tarandus). Analysis of pathological changes and long bone ECs has revealed skeletal changes typical to working reindeer. In this paper, we analyze phalangeal ECs of reindeer from three Sámi sites, Juikenttä, Nukkumajoki, and Autiokenttä, located in Finland. Research into pathology and ECs of reindeer long bones from these sites is consistent with a pattern of a mixture of herded, working, and wild animals. The movements of the reindeer hooves give further evidence to both animal lives and human husbandry, and we have therefore undertaken a comparative analysis of modern phalangeal ECs with all three sites. This work helps to provide archaeological evidence for Sámi subsistence patterns as well as human-animal relationships of the past.

Hvidberg, Madisen (University of Calgary), Joey Big Snake, Meagan Breaker, Brendon Many Bears, and Peter Dawson (University of Calgary)
"Documenting" Digital Documentation at Old Sun Community College
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 02:30 PM, Friday May 7, 2021 – Session Room 3
Strength-based approaches emphasize recognizing strengths of individuals derived by their unique experiences and backgrounds. Approaching community projects with the flexibility to apply strength-based approaches can allow for collaboration beyond the scope of original research design. During the 3D digital documentation and preservation of Old Sun Community College in the summer of 2020, three Siksika students were hired to participate and be trained in terrestrial laser scanning (TLS) and survey techniques. However, in working together the students' art-based backgrounds and interests in more traditional audio-visual recording methods led to the development of a documentary-based project to capture the process of 3D preservation at the school. Driven by the students' own interests, passions, and skillsets, this presentation discusses the experiences and benefits of the application of a strength-based model for this on-site collaboration.

Ives, John W. (Jack) (University of Alberta)
A Roadmap for Institute of Prairie Archaeology Research, 2009-2019
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 02:40 PM, Thursday May 6, 2021 – Session Room 3
Now embarking on a new phase of activity as the Institute of Indigenous and Prairie Archaeology, the Institute of Prairie Archaeology (IPA) was formed in 2008. In the ensuing

decade of research, the graduate students and researchers connected with the IPA took on teaching and research connected with the University of Alberta field school at the 10,000 year old Ahai Mneh site on Transalta's Lake Wabamun area lease and the Avonlea-Old Women's Phase bison kill complex on the University of Alberta's Rangeland Research Institute's Mattheis Ranch in the Brooks area. Other research initiatives involved trans-disciplinary Apachean Origins research concerning the departure of Navajo and Apache ancestors from the Canadian Subarctic (centring on the rich record in the Promontory caves of Utah), Besant-Sonota era investigations in Alberta, Saskatchewan, and North and South Dakota, paleoenvironmental studies, continued elaboration of Western Canadian Fluted Point Database, and investigation of the aurochs bone bed at the Houtaomuga Neolithic site in Jilin, China. This introductory discussion will provide a quick sketch of these research activities, introducing the papers to follow in the session.

Ives, John W. (Jack) (University of Alberta)
Stemmed Points and the Ice Free Corridor
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 03:00 PM, Thursday May 6, 2021 – Session Room 3
Given the paraglacial impacts affecting the ice-free corridor, it has made a great deal of sense to focus upon extracting toolstone, morphological and distributional information from the Western Canadian Fluted Point Database in contemplating the earliest Indigenous settlement of Canada east of the Pacific Coast. Even though Tse'K'wa (Charlie Lake Cave) remains the only site at which a Corridor fluted point has been dated (to a Younger Dryas time frame), fluting and basal thinning strategies are readily recognizable, reflecting a comparatively narrow range of time (~13,000 to 12,000 years ago). Stemmed points involve a more generalized hafting strategy, spanning a decidedly greater time range (>13,000-~ 9,000 years ago for the Western Stemmed Point tradition). One corollary of the recognition that stemmed points occupy time ranges from pre-Clovis through to the later early pre-contact period would be that early bearers of stemmed point traditions had similar opportunities to enter southern portions of a Corridor already being inhabited 13,500 years ago, as at Wally's Beach. It is prudent therefore to consider the variability in stemmed points from the Corridor, and to assess them against northern (Sluiceway, Mesa and Dry Creek Component 2 materials) and southern comparators (Parman, Haskett, and Cougar Mountain).

Jalbert, Catherine (Texas Historical Commission) and Lisa Overholtzer (McGill University)
Hidden Costs: An Analysis of the Effects of the COVID-19 Pandemic on Canadian Archaeology Students
Session: Archaeology and Heritage in the Contemporary World
Time: 12:15 PM, Saturday May 8, 2021 – Session Room 1
Emergence of the COVID-19 pandemic has unquestionably altered many aspects of daily life and has laid bare the structural inequalities that exist within our society. As researchers begin to examine how immediate pandemic-related impacts are unfolding across various disciplines, early studies draw the same conclusion: if mitigation strategies are not developed, students and early career researchers, particularly those who hold marginalized identities, could encounter lasting consequences. In this paper, we add to this growing body of data by

illuminating the experiences of Canadian archaeology students using preliminary results from our 2021 survey (n=90/280 total). We argue that students, especially BIPOC and first-generation, are among the most vulnerable to the current effects of the COVID-19 pandemic and the ongoing uncertainty created by this crisis. Areas of concern include field school cancellations, delays in fieldwork/labwork for program completion, isolation from their peers and mentors, lack of networking, and how these combined factors may affect future prospects on an increasingly unstable job market. Two primary questions will guide our conclusions: how do we lessen effects on students in the present, and how do we combat long-term impacts which may hinder entry and participation in archaeology by students in the future?

Jones, David
The Oil Drums of War: Fort Clarence and the Dartmouth Refinery
Session: Recent Archaeological Research in Canada's Northeast
Time: 12:00 PM, Thursday May 6, 2021 – Session Room 1
Once known as the Eastern Battery (1754), Fort Clarence (named by Prince Edward, Duke of Kent, in 1798 and re-built in 1866) currently lies, largely intact, underneath the former Imperial Oil Dartmouth Refinery in Woodside, Nova Scotia. Join David Jones for an examination of the archaeological and commemorative potential of Fort Clarence.

Kennedy, Carolyn (Texas A&M University) and Christopher Dostal (Texas A&M University)
Gaspe Bay Survey Project
Session: Recent Archaeological Research in Canada's Northeast
Time: 12:10 PM, Thursday May 6, 2021 – Session Room 1
In 1534, French explorer Jacques Cartier arrived in Gaspé, Québec and claimed Canada for France. Gaspé, located in Eastern Québec on the North Atlantic, has been a hub of maritime culture in North America for centuries, and continues to be an important fishing and commerce port today. At different points in history, Gaspé has been home to indigenous fishermen, Basque whalers, and robust French and British cod fishing communities, each with their own unique shipbuilding heritage. In the summer of 2019, Institute of Nautical Archaeology researchers from Texas A&M University initiated a long-term study of shipbuilding in the area, starting with a survey of the Gaspé Bay for shipwrecks and other submerged cultural heritage. This paper discusses the results of that survey, and the long-term goal of the study, including the public outreach efforts taken by the principal investigators and the resulting success in locating cultural heritage materials based on local knowledge.

Kiazyk, Hillary
Seeing the Past in Multitudes: A Proposal for Presenting Interpretations of Fragmentary Archaeological Data
Session: Digital Archaeology: How Hard Can It Be?
Time: 01:00 PM, Friday May 7, 2021 – Session Room 1
When working with a fragmentary archaeological record we often find ourselves challenged with how to display artifacts that are broken and incomplete. Digital archaeology has made reconstruction and representation of the past possible in novel ways that are more accessible and cost effective. However, it can be difficult to communicate what choices we have made in

the creation of digital archaeology. This is often not an issue when filling in small gaps in the archaeological record that do not require a significant interpretive leap to understand. However, this proves to be more challenging when working with a highly fragmentary archaeological record. There are a number of interpretive leaps that we must make when working with a limited dataset. As a result, presenting interpretations of this data in multiple ways could provide viewers a clearer and more accurate picture of what interpretive leaps have been made. Outlined in this paper are some possible methods for displaying extrapolated archaeological data that could assist with communicating the interpretive process along with the interpretations that digital archaeology allows us to make.

Kristensen, Todd (Archaeological Survey of Alberta)
The Late Holocene White River Ash East Eruption and Pre-contact Culture Change in Northwest North America
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 04:00 PM, Thursday May 6, 2021 – Session Room 3
A volcanic eruption at A.D. 846-848 blanketed portions of Subarctic Yukon and Northwest Territories in ash. This paper examines impacts of the eruption on pre-contact hunter-gatherer social relationships using palaeoenvironmental records, historic records of Indigenous practices, and provenance studies of obsidian and Tertiary Hills Clinker. Changes in lithic raw material distributions after the volcanic eruption suggest that some residents in the Yukon Basin temporarily abandoned their territories and returned up to a century later with strengthened networks from southeast Alaska. Residents of the eastern extent of the tephra footprint in Northwest Territories also experienced a disruption to social relationships that may relate to a temporary reliance on kin from the barren grounds east of Mackenzie River. The utilization of kinship networks to weather an ecological disturbance promoted new modes of economic exchange and the transfer of technologies, including the spread of the bow and arrow and the intensification of copper use.

Kristmanson, Helen (Government of Prince Edward Island) and Erin Montgomery (Government of Prince Edward Island)
Redefining the "Rattlesnake" bead: new evidence from 18th century Prince Edward Island
Session: Recent Archaeological Research in Canada's Northeast
Time: 12:20 PM, Thursday May 6, 2021 – Session Room 1
The identification of imported glass beads from archaeological sites has contributed to chronology building and the reconstruction of social and economic networks across the globe. In eastern North America, considerable attention has been given to the exchange of beads through Indigenous trade networks from the Atlantic Ocean to the Great Lakes between the 16th and 18th century AD. This paper reports on a variety of glass beads recovered from the Pointe aux Vieux archaeological site, an 18th century Acadian house located in western Prince Edward Island, Canada. Occupied between AD 1728 and 1758, the Pointe aux Vieux site offers the opportunity to study a bead assemblage from a definable time period. Included in the bead assemblage from Pointe aux Vieux are ten Roman or rattlesnake beads which have typically been identified as European glass trade beads from 17th and 18th century contexts and are the focus of this study. Building on research by Karklins et al. (2016) we present the results of microscopic observation and SEM-EDS analysis which confirmed that

these beads are not glass but were manufactured in the Fichtelberg region of northeastern Bavaria using a locally sourced igneous rock called proterobas.

Kristmanson, Helen (Government of Prince Edward Island) and Erin Montgomery (Government of Prince Edward Island)
Captain John MacDonald and the Highland Emigration to Prince Edward Island
Session: Recent Archaeological Research in Canada's Northeast
Time: 12:40 PM, Thursday May 6, 2021 – Session Room 1
In 1772 Captain John MacDonald of Glenfinnan, Scotland, arranged passage for a large group of Scottish Catholic Highlanders to Glenaladale, his 20,000 acre estate in Tracadie, Prince Edward Island. 8th laird of Glenaladale and second in command of the Clanranald chieftans, “Captain John,” as he is remembered today, had become disenchanted with the economic policies of the post-Culloden chieftains and the climate of intolerance toward Catholic Scots. Responding to the Roman Catholic bishops of Scotland, who identified emigration as the most promising option, Captain John organized a humanitarian effort by which friends, family, and fellow Highlanders from South Uist and the mainland could make a new home in a friendlier land. In realizing this plan, Captain John was supported by the Roman Catholic Church, but in carrying out the plan, he was aided by his brother Donald, who lead the trans-Atlantic journey on his behalf, and his sister Helen (Nelly), who established and managed the Glenaladale estate single handedly for nearly 19 years. This paper presents the initial findings of archaeological investigations at the PEI Glenaladale estate, including excavations at the site of Captain John’s mansion.

Kuehn, Sarah (Memorial University of Newfoundland)
Leukoma staminea: A New Proxy for Seasonality and Palaeotemperature for Coastal British Columbia
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:40 PM, Saturday May 8, 2021 – Session Room 3
This study tests the feasibility of *Leukoma staminea* as a new proxy for past sea surface temperature (SST) and seasonality from shell middens in coastal British Columbia (BC). Three live L. staminea clams were collected from the Sechelt Inlet in Sechelt, BC, to calibrate stable oxygen isotope values with current climatic conditions. Samples for stable oxygen isotope analysis were collected sequentially to obtain a record of shell growth, beginning at the ventral margin and following the axis of growth. Five shells of both L. staminea and S. gigantea were analyzed from Powell River, BC, in the traditional territory of the Tla’amin First Nation. Results showed that L. staminea can be used as a proxy for SST and seasonality, and there is a seasonal emphasis on shellfish harvesting in the summer and autumn months. Reconstructed SST estimates showed a range of 5.1-18.9℃ for live-collected shells and 5.3-32.0℃ for the archaeologically collected shells. Palaeotemperature results of the archaeological shells show an overestimation of past SST, attributed to the dual effects of water temperature and salinity on shell oxygen isotope values.

Kurzybov, Petr (Western Heritage Services Inc.), Michael Ma (Western Heritage Services Inc.), and Daniel Lu (Western Heritage Services Inc.)
From a Bird's Eye View: Application of Unmanned Aerial Vehicles in Historical Resources Impact Assessments.
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 05:00 PM, Thursday May 6, 2021 – Session Room 1
One of the goals of CRM is to mitigate impacts to historic resources created by various industrial developments. Recognizing, describing, and classifying these impacts are complex tasks usually addressed within traditional historic resource impact assessment (HRIA). Rapidly developing Unmanned Aerial Vehicles (UAVs) technologies have potential to change that. UAVs have become widespread in industrial settings, archaeological research and CRM, and allow users to acquire rapid and inexpensive fine-resolution imagery using a variety of sensors. Their affordability, versatility, and flexibility give them an advantage over other means of acquiring remote-sensing data (e.g., ortho or satellite imagery). Advancements in software for processing imagery (i.e., artificial intelligence) have also opened up many new opportunities.

Western Heritage tested one application of UAVs in a small pilot project in the boreal zone of Northwestern Alberta. The project's goal was to acquire and analyze landscape imagery to identify and classify land disturbances created during forest harvest. This pilot study's preliminary results demonstrated the potential benefits of this method and clarified its advantages and challenges. Results of this study will help to inform and potentially define historical resource impact assessment (HRIA) strategies.

Lewis-Simpson, Shannon (Memorial University)
Inclusive Narratives in the Pre-Modern North Atlantic
Session: Archaeology and Heritage in the Contemporary World
Time: 12:50 PM, Saturday May 8, 2021 – Session Room 1
Our interpretations of archaeological L'Anse aux Meadows and to an extent the eastern Arctic have been heavily influenced by Old Norse saga accounts, which have in turn been interpreted, translated, & promoted through the 19th century lens of systemic colonialism. The concept that the "Vikings" "discovered" North America is a colonial, Eurocentric view of origins, highly problematic and erases Indigenous voices and agency, yet this narrative continues to be promulgated in trade books and popular interpretations. The dual concepts of terra nullius and doctrine of discovery are so ingrained in our archaeological and historical studies that it is impossible for this academic discourse not to be politicized as it is framed as one of discovery in the saga text and popular imagination. What needs to be acknowledged is that these Old Norse accounts do not constitute a singular narrative of exploration and discovery, but a narrative of the land, of murder, of exchange, rejection of technology, kidnapping, and forced conversion. This exclusion, this mythmaking, leading to a Nordic ideal, misreads the past. It is time to decentre the narrative. This paper will consider ways to do that, by working together.

Lints, Andrew (University of Alberta), Reid Graham (Government of Manitoba), and John Ives (University of Alberta)

Looking Back: New Analyses and Interpretations of the Stelzer Site (39DW242), South Dakota

Session: A Decade of Research at the Institute of Prairie Archaeology

Time: 03:10 PM, Thursday May 6, 2021 – Session Room 3

During the 1960s, Dr. Robert Neuman excavated a series of burial mounds associated with a large residential campsite along the Oahe Reservoir in South Dakota called the Stelzer site. Although these excavations figured prominently in later discussions concerning Besant and Sonota, limited research had been completed on the materials collected from the Stelzer site since its discovery. Our employment of 11 ultrafiltered bone collagen dates collected from the Stelzer site yielded an age range of 1810 to 1556 cal BP. Remarkably, it is likely that the large residential camp at the Stelzer site was occupied within a narrow window of time. Therefore, renewed examination of the lithics and pottery from the Stelzer site permits us to provide further insight towards the lifeways of the peoples responsible for the Selzer site. We report that spatial analysis of lithic materials combined with paleodietary and visual analyses of pottery, reveals that the site was inhabited by peoples with connections to both the Great Plains and Woodland regions. These results not only add further complexity to this period, but also demonstrates how existing collections from past excavations enable us to build important contributions to Great Plains archaeology.

Longstaffe, Matthew (University of Calgary)

“The Whole is Greater than the Sum of its Parts”: Deconstructing the Ancient Maya Marketplace as a Socioeconomic Institution

Session: Recent Research in Latin American Archaeology

Time: 03:00 PM, Thursday May 6, 2021 – Session Room 2

Recent research on the ancient Maya has documented market economies, although debate remains as to the importance of associated socioeconomic institutions, such as physical marketplaces, for structuring economic life in Maya societies across space and time. Broadly defined, a socioeconomic institution is an organized group of people that uses regularized practices, labour, and resources to fulfill shared social and economic objectives. One approach to better understand the role of socioeconomic institutions in the organization of ancient Maya market economies, how they changed over time, and how their structure varied from region-to-region, is to employ analytical models that deconstruct these institutions into their constituent parts to allow evaluation and comparison of their properties and mechanics.

Drawing on a growing database of published archaeological and ethnohistoric data on Maya markets and marketplaces, this paper applies a behavioral analytical approach to identifying and categorizing the variable traits or elements that, together, characterize these socioeconomic institutions. I examine ancient Maya market institutions not as immaterial abstractions, but rather as tangible organizations that are defined by the actions and practices of people, are diverse in their organization, and which have material outcomes that are observable in the archaeological record.

Losey, Robert (University of Alberta)
Domesticating Dogs in the North
Session: Being with Animals in the North: Archaeological Perspectives
Time: 12:00 PM, Thursday May 6, 2021 – Session Room 3
Anthropology and the biological sciences now both commonly argue that domestication is an on-going process, not an event confined to the far distant past. Very recent research suggests that dogs may have originated in Siberia well into the Pleistocene, and dogs have clearly been living in portions of the Arctic for at least 11,000 years, if not far longer. Domestication did not end with these early appearances of dogs in the North. Several forms of archaeological and genetic evidence make this abundantly clear. First, dogs in the North underwent a series of dietary adaptations due to domestication, most of them long after they first emerged in relationships with people. Second, the body masses of dogs in portions of the North shifted through time and varied by place. This likely indicates long-term adaptation to human-dominated food environments, and human selection for dogs of certain body sizes. Finally, human selection processes that clearly shaped the evolutionary history of dogs are well evidenced in the archaeological record of the North. Most notable are examples of breeding outcomes, namely the culling of dogs before they reach reproductive age.

Lythe, Andrew (Université de Montréal) and Julien Riel-Salvatore (Université de Montréal)
Excavating archives: new insights into the stratigraphy at Ganj Dareh
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 12:00 PM, Friday May 7, 2021 – Session Room 3
Ganj Dareh is an Aceramic Neolithic site in the Central Zagros and has the potential to enhance our understanding of the onset of the Neolithic. At present, all publications concerning Ganj Dareh have identified five major occupation horizons, referred to as levels A to E, from top to bottom. Although the absence of structural features clearly distinguishes level E from levels D to A, levels D to A remain largely archaeologically indistinguishable. Furthermore, the stratigraphic horizons that exist within each of these levels have not been clearly defined. In this report, we present the results of a meticulous reanalysis of the original excavation documentation from the 1971 field season in four adjacent trenches and identify fourteen distinct stratigraphic horizons were identified. This presentation presents the first clear definition of the vertical and horizontal coordinates of each occupation horizon at Ganj Dareh, as well as describes the archaeological features such as hearths or walls they include. This first step provides a better understanding of Ganj Dareh's stratigraphy and provides us with the necessary context from which a more robust chronological framework can be constructed, while developing a more nuanced picture of the full complexity of Ganj Dareh's archaeological record.

Maass, Alex (Crown-Indigenous Relations and Northern Affairs)
Addressing the Missing Children: Implementing the Truth and Reconciliation Commission Calls to Action 72 to 76 on School Deaths and Unmarked Burial Information
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 02:40 PM, Friday May 7, 2021 – Session Room 3

Known as the Missing Children Calls to Action, 72 through 76, are five of the 94 Calls to Action issued by the Truth and Reconciliation Commission of Canada in its 2015 Final Report. An estimated 6000 children died at the 140 schools in the system country wide over the course of the latter part of the 1800s and the first half of the 1900s. The TRC Commissioners called on the federal government to work with Indigenous communities, families, and partners to develop a national approach for the ongoing identification, maintenance, commemoration, and protection of these burial sites. This presentation will provide an overview of recent work at Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) to advance this suite of Calls to Action in collaboration with Indigenous communities, to address the deaths of children at Canada's Residential Schools and to discuss ongoing work to locate and document their largely unmarked places of burial.

MacKay, Glen (Prince of Wales Northern Heritage Centre)
Human – Animal Relationships from the Perspective of Historic Caribou and Sheep Fences in the Mackenzie Mountains, Northwest Territories
Session: Being with Animals in the North: Archaeological Perspectives
Time: 01:10 PM, Thursday May 6, 2021 – Session Room 3
The archaeological record of the central Mackenzie Mountains – the homeland of Shúhtagotʼine (Mountain Dene) hunter-gatherers – contains several examples of historic communal hunting structures used to funnel animals towards kill sites. The remnants of these features, including their strategic placement in the landscape, encompass a large body of Shúhtagotʼine traditional ecological knowledge related to the movements and behavior of mountain caribou and sheep. The relationship of the Shúhtagotʼine with the animals they hunt also structure the material records of these sites, and may explain the relative absence of faunal remains near the fence features. Indigenous place names and other contextual information illuminate the role of communal hunting structures in Shúhtagotʼine land use in the central Mackenzie Mountains in the recent and more distant past.

Malainey, Mary (Brandon University)
The Olson site (DgMg-167): Initial Investigations of a Pre-contact Indigenous Farming Site near Melita, Manitoba
Session: People, Plants, and Animals
Time: 01:55 PM, Saturday May 8, 2021 – Session Room 1
In September 2018, Eric Olson found bison scapula hoes and lithic artifacts on the banks of a creek in the southwest corner of Manitoba. Investigations of the Olson site (DgMg-167) in 2019 and 2020 were a joint project of Brandon University and the Manitoba Archaeological Society. Indigenous engagement and public archaeology are important components of the project.

Excavations in 2020 near where an in situ modified deer scapula was found in 2019 provided further evidence of a bone toolmaking workshop. We anticipate that the analysis of soil cores collected from a grassy expanse in the valley will provide evidence of the crops grown and pre-contact Indigenous field system employed. A ground-penetrating radar survey of the prairie level west of the valley resulted in the identification of 29 subsurface anomalies, which we hope to begin evaluating this summer. AMS radiocarbon dates on bone and charcoal indicate the horticultural occupation began in the late AD 1400s/early AD 1500s and

ended close to the time of European contact. Possible cultural connections between Olson site farmers and those at the Lockport site (EaLf-1), Middle Missouri villages and elsewhere are considered.

Mancusa, Madison (Lakehead University) and Jessica Metcalfe (Lakehead University)
Histological insights into growth stages of adult bison bones
Session: Poster session
Time: 02:10 PM to 02:50 PM, Thursday May 6, 2021 – Poster Room (Gather.Town)
In this study we explore the use of histology to identify relative sequences of bone tissue growth and to categorize adult bison bones into relative age groups. Archaeological bison bones from Idaho (10OA275) and Utah (42BO1, 42BO107, 42BO109) were transversely thin sectioned and viewed under transmitted and cross-polarized light between 2.5 and 1000x magnification. According to previous studies of large mammal bone development, fibrolamellar (FL, aka plexiform) bone is laid when the animal is immature and growth is rapid. Parallel-fibered (PF) and circumferential lamellar (CL) bone develop when the animal nears its maximum size and growth is slower. After formation, each bone type may be remodelled by secondary osteons (SO, aka Haversian systems), which increase in density as the animal ages. Based on tissue types and SO densities, we grouped our bison bones into early, intermediate, or late-developing adult categories. This approach to age categorization can be used on fragmentary bones and has the potential to provide finer detail on the age structure of archaeological bison bone assemblages than is possible based on epiphyseal fusion. Furthermore, identifying earlier and later developing tissues facilitates microsampling individual bones for geochemical analyses of temporal changes in bison diet and mobility.

Mann, Abby (University of Maine) and Eric Guiry (School of Archaeology and Ancient History, University of Leicester and Department of Anthropology, Trent University)
Food for Thought: Insights into Late Ceramic period (ca. 950 – 450 BP) Canine Diets in Machias Bay, Maine
Session: Poster session
Time: 02:10 PM to 02:50 PM, Thursday May 6, 2021 – Poster Room (Gather.Town)
The Canine Surrogacy Approach (CSA) has been used by researchers to infer dietary trends of past peoples through an analysis of δ13C and δ15N stable isotope values derived from archaeological dog remains. Stable isotope analyses (SIA) of dogs in the Maine-Maritime Peninsula region has thus far focused on remains dating to the Late Archaic period (ca. 5000-3050 BP) and have largely indicated a marine-oriented diet for dogs and human communities; however, few studies have analyzed dog remains from the Ceramic period and none from the Late Ceramic period (ca. 950-450 BP) for subsistence trends. This historical period is marked by extreme social change for northeastern North America, when Europeans and Indigenous people began to interact and trade. Here, CSA is applied to a case study of Late Ceramic period C. familiaris remains at an archaeological site in Machias Bay, Maine to better understand canine diet in this understudied time period. Results of SIA, combined with 14C dates, indicate a shift away from consumption of marine resources among dogs ca. 650-450 BP and towards more terrestrial foods. This case study offers a new approach for understanding subsistence changes in the region during the Late Ceramic period.

Martindale, Andrew (UBC), William Wadsworth (University of Alberta), and Colin Grier (WSU)
Quantifying Uncertainty in Ground Penetrating Radar
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 03:40 PM, Friday May 7, 2021 – Session Room 3
Ground Penetrating Radar (GPR) is becoming a trusted method for non-destructive mapping of near-surface buried features. Mapping of historic cemeteries and subsurface stone architecture is now routine. However, GPR tends to be used where it works and abandoned otherwise, and in all contexts the quantification of uncertainty in signal identification is unclear. This approach favours contexts where anomalies appear as high-contrast signals against a homogeneous background, usually with spatial characteristics that unambiguously match expectations. However, when background heterogeneity is high, the GPR signal patterning is noisy, and the spatial patterning of targets and arrangements is unclear, some evaluation of uncertainty is necessary. We identify two avenues to improve the quantification of confidence: an explicit assessment of the visual elements within GPR projections and the application of statistics to the 3D data cube represented by gridded traces. The first of these is a more systematic application of judgmental evaluations that can be compiled and combined with non-GPR data into an index of confidence. The second is an as-yet untested effort to define the difference in content, boundaries, and reflective effects of the propagated EM signal in numerical terms, thereby allowing for a computation of uncertainty between field data and hypothesized patterns.

McCartney, Keira (McMaster University)
Environmental Impacts of 18th Century British Colonial Worldviews: A Small-Scale Example from a British Military Fort in Southern Ontario
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:20 PM, Saturday May 8, 2021 – Session Room 3
Excavations at Old Fort Erie, a British Colonial fort built in the 1760’s and landscape used as a battleground during the War of 1812, have been conducted as part of Wilfrid Laurier University's archaeology field school. Identification of the faunal remains associated with the Old Fort show evidence for varied diet and land use during the time between the Fort’s building to the construction of the New Fort (1764-1805). As the first British Fort in what is now Ontario, Old Fort Erie’s archaeological assemblage provides a small-scale look at the development of British colonial worldviews in the area and the consequences of their transplantation. Changes in environmental pressures on aquatic and terrestrial resources caused by colonial presence in the area contributed the extirpations and extinctions seen across the continent. Passenger Pigeons (Ectopistes migratorius) and Lake Ontario Salmon (Salmo salar) are two examples of this phenomenon evidenced to have been exploited at Old Fort Erie. Archaeological evidence at Old Fort Erie suggests that the people inhabiting the Fort between 1764 and 1805 took advantage of what they would have seen as a “pristine land”, exploiting a wide variety of species without regard for the future consequences.

McGeough, Kevin (University of Lethbridge)
Excavating the Crystal Palace: Victorian Popular Culture in Twenty-First-Century Archaeological Media
Session: Archaeology and Heritage in the Contemporary World
Time: 12:05 PM, Saturday May 8, 2021 – Session Room 1
The emergence of archaeology as a professional discipline in the 19th century coincided with an explosion of new forms of popular media. Archaeology was represented in many of these media forms - in periodicals, novels, panoramas, theatres, expositions, and even the rituals of secret societies. Archaeology inspired authors like H. Rider Haggard and designers like Owen Jones and their representations of archaeology in popular culture have inspired significant thinking about the discipline. Their representations of archaeology were part of the process of articulating the study of ancient material culture as an academic discipline.

The representations of archaeology in 21st-century popular culture bear striking similarities to their Victorian predecessors. Many of the same themes and issues that are explored in popular archaeological representations now were established in Victorian times. Some similarities reflect structural issues implicit in the media. Others reflect continued concerns such as understanding the self and the other. And some unwittingly reify outmoded archaeological thinking, entangled with colonialist, gendered, and racist ideologies. This paper seeks to explore the 19th century roots of contemporary archaeological popular representation.

McKay, Kristin (Circle CRM Group Inc.)
Are we actually looking for sites where we think we are looking for sites?
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 04:00 PM, Friday May 7, 2021 – Session Room 2
HRIAs for forestry developments in northern Alberta are typically targeted at the high potential landforms. Since 2011, archaeologists conducting HRIAs for forestry developments in Alberta have had access to digital elevation data. This strongly influences the way fieldwork is conducted, from the first desktop review of the proposed harvest blocks to the in-field assessment and selection of areas to shovel test. Such digital data is often reviewed in the form of a hillshade or elevation model; however, landform classification using GIS can delineate discrete landforms often overlooked or misinterpreted during the pre-field review. Using the available digital elevation data, I compare landform classification derived from GIS analysis against areas that were selected for shovel testing in two areas of northern Alberta, to see if we are actually looking for sites in the high potential areas we think we are looking for them.

McKinney, Sierra (University of Montreal), Katherine Cook (University of Montreal), and L. Meghan Dennis (The Alexandria Archive)
The Ethics of Digital Dialogue
Session: Digital Archaeology: How Hard Can It Be?
Time: 02:00 PM, Friday May 7, 2021 – Session Room 1
Over the past year the impacts of COVID-19 have accelerated the already rapid adoption of digital tools by museums, archaeological and heritage sites for public engagement. As an increasing amount of engagement efforts are occurring through digital platforms, it is critical

that practitioners reflect on how such digital participatory initiatives can be implemented in an ethical manner. This paper will focus on the ethical considerations around facilitated and participatory dialogue.

Within many dialogic guides, the first step to enacting dialogue is developing a series of expectations and rules for interaction. This is often followed by tips for the facilitator on how they can employ these community created rules to ensure discussion occurs in a safe environment. However, in seeking to meet our duty of care and ensure the wellbeing of all participants, it is critical we do not avoid the often-upsetting truth of the past. This is a delicate balance, which requires skill and care. These challenges are augmented within a digital environment. What degree of anonymity from participants should we allow? How can we facilitate dialogue using non-synchronous methods? How do we resolve the lasting collection of digital data? This paper reflects on these challenges.

McLellan, Alec (Trent University Archaeological Research Centre (TUARC))
Evidence of socio-economic complexity at the Precolumbian Maya site of Coco Chan, Belize
Session: Recent Research in Latin American Archaeology
Time: 03:00 PM, Thursday May 6, 2021 – Session Room 2
Archaeologists argue that the resiliency of Precolumbian Maya communities during the Terminal Classic collapse (800-1000 AD) in the Maya lowlands was based on their leaders' ability to navigate the institutional and interrelational changes of the period, especially as they relate to divine kingship. This can be extended to include the leaders' ability to adapt to changing trade networks and the commodification of new materials. Lamanai, a Precolumbian Maya site in Northern Belize, is known for circumnavigating the changes that caused the collapse of many centres in the Maya lowlands. One of the well-established explanations for the resiliency of Lamanai is its ongoing access to coastal trade networks. To understand the economic structure of individual communities, archaeologists look for evidence of social stratification, which is evident in variability in the built environment. By analyzing differences in structure size, which has been used as an indicator of long-term labour investment, and the density of ceramics per structure, I argue that one of Lamanai's supporting communities – referred to as Coco Chan – was heavily stratified in the Terminal Classic period, indicating a community with varied access to the market-based economy.

Medina Martínez, Lorena (UAA – INAH)
The secular clergy and the Indigenous people of Oztuma, Guerrero: an example of evangelization in the 16th century
Session: Recent Research in Latin American Archaeology
Time: 03:50 PM, Thursday May 6, 2021 – Session Room 2
During the sixteenth century, the Mesoamerican territory experienced a series of changes in its social, political, economic and religious structure. In accordance with population size and the specific characteristics of each area, it developed its own dynamics of contact, interaction and evangelization. This resulted in a new conformation of the territory and its inhabitants that was necessary for the establishment of the viceregal government. This presentation will address the particular case of the archaeological site located to the north of Guerrero state, Mexico, named Oztuma, ranging from the period of contact to the end of the sixteenth century. My analysis will focus on the secular clergy and their evangelizing activities, the

strategies they used in the area and the relationship developed with both Indigenous groups and Spanish authorities to accomplish the relocation of Oztuma's inhabitants.

Merrett, Deborah C. (Simon Frasier University) and Christopher Meiklejohn (University of Winnipeg)
Remembering the Ancestors: Burial Practices at Ganj Dareh
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 12:40 PM, Friday May 7, 2021 – Session Room 3
Burials beneath house floors have long been recognized as a predominant practice in the Early Neolithic of the Near East. Although exhibiting variability from region to region the widespread similarities include clustering of burials within and under burned building. Burial practices in the Central Zagros have not been as closely examined as in the Levant and Anatolia. 'Who has been buried beneath house floors' is a fundamental question in Early Neolithic bioarchaeology. Here we explore burial as a vital component of social memory construction in the Early Neolithic of Central Zagros of Iran at Ganj Dareh ca. 10,000 cal B.P.

Clusters of burials were observed in both levels D and C. Successful extraction of aDNA from individuals in one cluster in Level D demonstrates that related individuals were buried within a single archaeological structure. Age-at-death analysis suggests that not all deaths occurred at the same time. Memory within the house of burial locations facilitates burial of additional family members at later dates. We suggest that houses are part of the mnemonic of burial, social memory, and meaning that creates embodied spaces, often accompanied with large scale burning of the structures as an integral part of social memory preservation processes.

Metcalfe, Jessica (Lakehead University)
Isotopic Evidence for Long-Distance Mobility of Promontory Caves Occupants
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 04:20 PM, Thursday May 6, 2021 – Session Room 3
The Promontory Caves of Utah contain exceptionally well-preserved cultural materials left behind by a human group in transition between a Subarctic/Northern Plains and Southwestern/Southern Plains way of life – possibly Apachean ancestors. In this presentation I describe a unique combination of archaeological, isotopic, genetic, and ecological evidence which suggests that the AD 13th century occupants of the Promontory Caves had travelled to (or had contact with other groups who had travelled to) areas hundreds of kilometres to the south or east: most likely northern Arizona or central Colorado. Arriving at either of these locations would have placed the travellers in closer proximity to Johnson Canyon (near Mesa Verde), where a Promontory-style moccasin was recently recognized. It is thus possible that as early as the late AD 13th century, Promontory people had ventured into the heart of Dinétah. Regardless of their identity, Promontory Cave inhabitants had expansive landscape knowledge that would have allowed them to make well-informed decisions about directions and routes of movement for territorial shifts in response to rapidly changing environmental and social conditions during the late 13th century.

Metcalfe, Jessica (Lakehead University), Elizabeth Carpenter (Lakehead University), and Victoria Wanihadie (Tsattine Resurgence Society)
Being with Bison in Beaver Territory
Session: Being with Animals in the North: Archaeological Perspectives
Time: 01:50 PM, Thursday May 6, 2021 – Session Room 3
Since time immemorial, Beaver people have lived in the Peace region of northwestern Alberta and northeastern British Columbia. The Peace region is located in an ecological transition zone where northern and southern populations of wood and plains bison intermingled until the near-extinction of bison in the late 19th century. Archaeologists are well aware that communal bison hunting was widespread on the Great Plains, particularly in the northern Plains (southern Alberta, Saskatchewan, and Montana), for thousands of years. In contrast, a recent review of buffalo jumps, pounds, and arroyo traps included a total of zero sites in the Peace region, and there is a perception among some scholars that such sites do not extend that far north. However, Beaver oral histories clearly indicate that communal bison hunting was a societal norm, which implies that communal hunting strategies were utilized in Beaver territory. We describe a project in its initial stages that seeks to investigate communal bison hunting in Beaver territory using archival, ethnohistorical, oral historical, ecological, and field-based approaches.

Monteleone, Kelly (University of Calgary/Mount Royal University), Amy Thompson (University of Texas at Austin), and Keith Prufer (University of New Mexico)
Virtual Cultural Landscapes: Geospatial Visualizations of Past Environments in SE Alaska
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 04:10 PM, Friday May 7, 2021 – Session Room 1
Recent advances in spatial and remote sensing technology have led to new methods in archaeological site identification and reconstruction, allowing archaeologists to investigate landscapes and sites on multiple scales. These remotely conducted surveys provide the foundation for virtual cultural landscapes and seascapes that archaeologists and the public interact with and experience, often better than traditional maps. Our study examines landscape reconstruction and archaeological site classifications from a phenomenological and human behavioural ecology (HBE) perspective. Through temporal reconstructions, archaeologists experience and interpret the past and subtle changes of virtual cultural landscapes and seascapes. We evaluate the use of remotely sensed data (lidar, satellite imagery, sonar, radar, etc.) for understanding virtual cultural landscapes, while incorporating Indigenous perspectives with a focus on a seascape in coastal Alaska, USA. By incorporating ethnographic, oral histories, Indigenous traditional knowledge, and community engagement archaeologists can begin to understand decisions made in the past, especially pertaining to settlement selection and resource procurement. These virtual reconstructions become cognitive images of a possible place that the observer experiences. Virtual cultural landscapes allow archaeologists to reproduce landscapes in different formats enhancing public engagement with the past and elucidate how landscapes changed over time based on human behaviours.

Moreiras Reynaga, Diana K. (Department of Anthropology, University of British Columbia), Israel Elizalde Mendez (Proyecto Templo Mayor, INAH), Ximena Chávez Balderas (Fiscalía General del Estado de Quintana Roo), Leonardo López Luján (Proyecto Templo Mayor, INAH), and Fred J. Longstaffe (Department of Earth Sciences, The University of Western Ontario)

Gray Wolves and Golden Eagles in the Mexica World: New Insights on the Use of Animals from the Sacred Precinct of Tenochtitlan's Offerings through Zooarchaeological and Phosphate Oxygen Isotope Analyses

Session: Recent Research in Latin American Archaeology

Time: 03:50 PM, Thursday May 6, 2021 – Session Room 2

Based on written and pictographic sources, we know that the Mexica assigned particular attributes and symbolic associations to a wide range of animal species. In particular, wild carnivorous species like golden eagles and gray wolves played an important role in Mexica myths and religious cosmovision. For instance, the golden eagle was associated with the sun, while the wolf was linked to the day/night transition. While there is knowledge that the Mexica kept exotic animal species in a vivarium at Tenochtitlan, questions remain about the length of captivity and overall treatment of these animals prior to their use in Mexica sacrificial/oblatory rituals. In this paper, we present the osteological, paleopathological, and phosphate oxygen isotope results of an adult golden eagle and three Mexican wolves recovered from three offerings within Tenochtitlan's sacred precinct. Our findings indicate that the Mexica kept these animals in captivity at Tenochtitlan for a prolonged period, took care of them, and in the case of the gray wolves, bred them in captivity. As such, this study provides new insights to better our understanding of the interactions between the Mexica and these exotic animal species at their most sacred precinct.

Nelson, Andrew (Western University), Lucía Watson (Pontificia Universidad Católica del Perú), Jocelyn Williams (Trent University), Suellen Gauld (Santa Monica College), José Arias (Centro Instituto Nacional de Antropología e Historia), Joanna Motley (Western University), Lauren Poeta (Western University), Cameron Beason (Western University), Teegan Muggridge (Western University), Pauline Kirgis (Université de Bordeaux), Jean-Bernard Huchet (Université de Bordeaux), Christophe Bou (Université de Bordeaux), Andres Shiguekawa (Independent Specialist), Jhon Baldeos (Universidad de Trujillo), Sarita Fuentes (Museo Pachacamac), Susana Abad (Museo Pachacamac), and Denise Pozzi-Escot (Museo Pachacamac)

Mummies as Microcosms – the interdisciplinary, collaborative analysis of mummy bundles from the Central Coast of Peru

Session: Recent Research in Latin American Archaeology

Time: 04:40 PM, Thursday May 6, 2021 – Session Room 2

The phrase, "mummies as microcosms" emphasizes that mummy bundles, known as "fardos", are microcosms of the individual(s) contained within, and the society that buried them. They are literally bundles of biological and cultural information. Our objective is to use non-destructive paleoimaging techniques in concert with minimally invasive sampling techniques to analyze collections of fardos from sites on the Central Coast of Peru dating to the Middle Horizon, Late Intermediate Period and Late Horizon. In keeping with the theme of this session, this paper seeks to present a "representative depiction" of this project to our CLAAS

colleagues by describing the project's myriad components and by presenting some preliminary findings. Topics to be discussed include CT and x-ray analysis of the fardos, consideration of taphonomic processes, including archaeoentomology, the mortuary treatment of children, the use of deep learning algorithms to segment skulls from CT scans for the assessment of non-metric traits, effective practices of knowledge mobilization of information derived from bioarchaeological research, biomechanical analysis for the reconstruction of activity patterns, conservation of fardos and the analysis of textiles, isotopic and C-14 analysis and more. In this paper we will focus on our work at the site of Pachacamac.

Newsom, Bonnie (University of Maine), Natalie Dana-Lolar (University of Maine), Isaac St. John (Houlton Band of Maliseet Indians; University of New Brunswick), Rebecca Cole-Will (Acadia National Park), and Catherine Schmitt (Schoodic Institute at Acadia National Park)
In Conversation with the Ancestors: Indigenizing Shell Heap Research at Acadia National Park, Maine
Session: Collaborative Archaeologies in Northeastern North America
Time: 01:35 PM, Thursday May 6, 2021 – Session Room 1
Acadia National Park (ANP) in Maine is home to at least 24 coastal shell-bearing archaeological sites reflecting the last 4,000 years of Native American life. Most of these sites are threatened by climate change-induced impacts such as sea-level rise and increased storm intensity—the result being an irrecoverable loss of Wabanaki heritage. In a new analysis of legacy collections from previous studies, Wabanaki archaeologists are studying the material heritage of their ancestors and integrating Wabanaki language and values to inspire deeper connections between past and present peoples. This work is designed to support consultations between ANP staff and Wabanaki communities about Indigenous heritage places in the Park, which will encourage culturally informed decisions on coastal site stewardship and management of sites at risk for loss. This effort is an initial step in Indigenizing shell heap research and coastal site management within the context of cultural heritage and climate change loss and damage.

Nichols, Katherine (Simon Fraser University), Darian Kennedy (Community Liaison for the Sioux Valley Dakota Nation + Simon Fraser University), Emily Holland (Brandon University), Deanna Reder (Simon Fraser University), John Albanese (University of Windsor), Dongya Yang (Simon Fraser University), Kim Figura (Simon Fraser University), Dayle Blackbird (Brandon University + Simon Fraser University), Hugo Cardoso (Simon Fraser University), and Eldon Yellowhorn (Simon Fraser University)
Working for Sioux Valley Dakota Nation: Finding missing Indigenous children to foster restorative justice, repatriation, and reconciliation through forensic anthropology and archaeology at the Brandon Residential School
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 04:30 PM, Friday May 7, 2021 – Session Room 3
Calls to Action 74 & 75 in the final report of the Truth and Reconciliation Commission reaffirms the importance of locating and identifying graves and cemeteries of Indian

Residential Schools. However, it is silent on the ambit of legal responsibility and formal accountability held by federal and provincial agencies. Nor do academic researchers and community partners have clear guidelines for developing community engagement and partnerships of this kind. This project is being spearheaded by Sioux Valley Dakota Nation and supported by partners at universities in British Columbia, Ontario and Manitoba. Currently, we are working to identify affected communities with children that may be buried in the Brandon Indian Residential School cemeteries. By working collaboratively to establish a path forward, we aim to restore dignity and honour to these children and their gravesites, in the ways and desires of their communities. This presentation discusses the projects' initial steps to ensure Sioux Valley Dakota Nation and affected Indigenous Nations are involved in all aspects of the research. We demonstrate that university-based researchers, graduate and undergraduate students collaborating with Indigenous Nations can lead to progress on addressing social justice issues and human rights violations.

Nomokonova, Tatiana (University of Saskatchewan), Andrei Plekhanov (Scientific Center of Arctic Studies), and Andrei Gusev (Scientific Center of Arctic Studies)
The Variable Histories of Reindeer Scapulae in Arctic Siberia
Session: Being with Animals in the North: Archaeological Perspectives
Time: 12:10 PM, Thursday May 6, 2021 – Session Room 3
Animal scapulae are widely incorporated into Indigenous lifeways across the Circumpolar North, especially as hide working tools, fish knives, and divination devices. This is particularly the case for the Iamal Peninsula of Arctic Siberia, where reindeer scapula tools are among the most abundant groups of implements found during archaeological excavations of two Iron Age sites, namely Iarte VI and Ust'-Polui. This presentation addresses the histories of the reindeer scapulae based on the materials from these two sites. The Iarte VI settlement contained almost 290 scapula tools that appear to have been used for softening and straightening reindeer skin straps for ropes and lassos. Excavation at Ust'-Polui produced over 250 fish knives made from this skeletal element. We will explore how this one particular skeletal element was separated from the other parts of the animal body, which scapulae were chosen for tool production, how they were transformed into objects of interest and use, and how they ultimately became important links in the chains of people-reindeer relationships in this region. We further discuss how reindeer scapulae are embedded into perceptions of wild and domestic reindeer and involved in a variety of social and material practices in this region.

Norris, David (University of Western Ontario)
3D technology, scanning and morphometrics
Session: Digital Archaeology: How Hard Can It Be?
Time: 01:40 PM, Friday May 7, 2021 – Session Room 1
This presentation discusses the analysis of 3D geometric morphometric approaches to characterizing western Great Lakes Late Paleoindian projectile points. The process of scanning a physical object, digitizing the data and examination in a 3D environment allows for additional cultural data to be analyzed. Although the learning curve to scan the data can be steep, the amount of data obtained for analysis is considerable, especially when compared to a traditional 2D analysis. The resulting scanned data can also be duplicated, shared, compared and used for other types of research as well as teaching. In this pandemic and

post-pandemic atmosphere, digital data can be stored, shared and transmitted without the need of the physical specimen for actual analysis thereby allowing a broader use for online learning.

Nuttall, Laura
It's the little things: Small sites Big Contributions
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 04:10 PM, Friday May 7, 2021 – Session Room 2
The introduction of LiDAR, as a tool for predicting areas of low, moderate and high archaeological potential resulted in marked changes in survey strategies in the boreal forest of Alberta. Small landforms too low in elevation to be present on topographic maps, or seen across vast expanses of muskeg were now visible without the expense of aerial survey. Sampling a wide variety of these landforms resulted in the notable increase in the identification of small, lower density sites in the area between the Quarry of the Ancestors and the Birch Mountains. The artifacts recovered from these sites are both temporally and culturally significant, providing insight into the routes used by pre-contact peoples to travel across the landscape and the day-to-day activities conducted during their journeys. This presentation focuses on the artifacts recovered from sites HhOu-113, HhOu-114 and HhOu-115 to illustrate how these smaller landforms can yield sites of high interpretative potential.

O'Keefe, Katelyn (University of Calgary)
Detecting Change at Threatened Heritage Sites Using UAV Photogrammetry: A Case Study from Qikiqtaruk, Yukon
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 04:50 PM, Thursday May 6, 2021 – Session Room 1
The heritage features on Qikiqtaruk (formerly known as Herschel Island), Yukon, represent a long period of occupation, from 800 years ago to the present. Pauline Cove, the island's most culturally significant area, has the most heritage features. These features include Inuvialuit sod houses and historic buildings associated with the whaling period, fur trade, missionaries, and the RCMP. Unfortunately, coastal erosion and inland flooding events associated with a changing climate are putting these features at risk. Aerial imagery of Pauline Cove was taken in July 2017 and July 2019 using an unmanned aerial vehicle (UAV, i.e., Drone). By comparing orthomosaics and point clouds generated from each respective year, changes to the heritage features and the landscape have been detected and documented. First, heritage-rich segments of the orthomosaics of Pauline Cove were compared using visual inspection. Second, change-detection analysis was performed on the point-clouds to quantify the differences between the two years. Together, these methods elucidate the impact of flooding, erosion, and researcher activities on Pauline Cove's heritage. Furthermore, the low-cost, streamlined procedures can be applied to develop a monitoring strategy for heritage at Pauline Cove and other circumpolar environments.

O'Rourke, Mike (GNWT - Cultural Places Program), Glen MacKay (GNWT - Cultural Places Program), Steve Schwarz (GNWT - Centre for Geomatics), Jurjen van der Sluijs (GNWT - Centre for Geomatics), and Julie Buysse (GNWT - Cultural Places Program)
"The View From Afar": Applications of Remote Sensing in the Management of Northwest Territories Cultural Landscapes.
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 04:00 PM, Friday May 7, 2021 – Session Room 1
Archaeologists have long sought to understand the extent of archaeological sites and features by "getting a better view". From riding in hot air balloons to relying on state of the art orbital sensor packages, there is a substantial history of remote sensing applications in archaeology. Such lofty perspectives can yield a better understanding of past human land-use practices through a more holistic view of the landscape, but they can also play a critical role in the management of culturally significant locations. Given the impacts of climate change on the stability of cultural landscapes throughout the Northwest Territories (NWT), archaeologists with the Prince of Wales Northern Heritage Centre have partnered with the NWT Centre for Geomatics to develop a series of remote sensing assets capable of informing archaeological management and research initiatives. The results of this collaboration have already proven an asset to iterative-recursive management approaches by generating immediately actionable results in the face of increasing climate uncertainty, while operating under constrained budgets. This paper outlines some of the challenges NWT archaeologists are facing in the management of culturally significant locations, as well as some of the imagery-based solutions which have been developed to meet those challenges.

Overholtzer, Lisa (McGill University)
Ritual Time, Space, and Memory in Early Colonial Hearths at Coyotepetl, Tepeticpac, Tlaxcala
Session: Recent Research in Latin American Archaeology
Time: 03:50 PM, Thursday May 6, 2021 – Session Room 2
This paper presents data from extensive excavations of a household terrace on Coyotepetl (Coyote Hill), Tepeticpac, one of the four señoríos or altepetl that made up the state of Tlaxcallan. The Tlaxcaltecas allied with the Spanish to defeat their Aztec enemies, becoming self-identified Indigenous conquerors, colonizers to the north and south, and direct subjects of the Spanish crown with lighter tribute obligations. Our 2017 excavations of one terrace recovered the remains of domestic occupation spanning the Late Postclassic to early Colonial periods. One room, in particular, featured a series of four stratified floors all dating to the 16th century and each featuring a fired brick hearth. These hearths were located in the four cardinal directions, their construction over time forming a counterclockwise circuit that would have not been visible except in the social memory of the home's inhabitants. These hearths allow us to understand colonial Indigenous cosmology—the four corners of the universe, solar cycles, ritual movement, and the calendar—as it was rooted and recreated in the home. Alongside material culture recovered in a midden just outside, this house provides a window into the forging of a dynamic and vibrant ritual life and Indigenous social identity under Spanish colonialism.

Paris, Elizabeth (University of Calgary), Roberto López Bravo (Universidad de Ciencias y Artes de Chiapas), and Gabriel Lalo Jacinto (INAH-Chiapas)
Current research on Maya urbanism at Tenam Puente, Chiapas, Mexico
Session: Recent Research in Latin American Archaeology
Time: 03:00 PM, Thursday May 6, 2021 – Session Room 2
This presentation highlights our recent research in the Central Highlands of Chiapas, focusing particularly on the results of our project at the site of Tenam Puente, near the modern city of Comitán de Domínguez. Tenam Puente was one of the most important political capitals on the western Maya frontier, with an occupation that spans the Late Classic (AD 600-900) and Early Postclassic (AD 900-1250) periods, an era of transition and instability for much of the Maya culture area. Our research has identified an ancient marketplace at the site, presenting an important opportunity to investigate the development of commerce at the city, as it represents a significant labor investment in the architecture of the urban core, relatively late in the site's occupation. The marketplace also includes features that facilitated the monitoring and policing of the space by political authorities, providing new insights into the investigation of economic surveillance in past societies, which are relevant to similar concerns in modern cities.

Pennanen, Kelsey (University of Calgary)
Comparing Aerial Photogrammetry and Ground-based LiDAR for Erosion Monitoring
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 04:30 PM, Thursday May 6, 2021 – Session Room 1
From revealing to destroying, natural erosional processes have complex and lasting interactions with heritage sites. Accurate and detailed mapping is required to determine erosional impacts to a site over time, but this can be difficult to conduct using traditional methods with shifting reference points. Modern remote sensing methods can provide a means of monitoring change and allow for the creation of detailed models over large areas that can be compared at a yearly scale. This case study reports on the comparisons of using ground-based laser scanning (terrestrial LiDAR) over one year and aerial-based (UAV) photogrammetry over four years for quantifying erosional change at a threatened heritage site. Through work conducted at a buffalo jump on Blackfoot territory in Alberta, this paper outlines the determination of computational distance measurements to determine change derived from the two techniques using open-source software. Comparisons of the two methods including commentary on costs, time, accuracies, required training/permitting, and other considerations including data collection during adverse weather conditions will be addressed. Conclusions on the application of the two methods for heritage documentation and monitoring will be provided with suggestions to establish remotely sensed long-term monitoring programs.

Plekhanov, Andrey (Arctic Research Center of Yamal-Nenets Autonomus district) and Alexander Gusev (Arctic Research Center of Yamal-Nenets Autonomus district)
Animal Imagery from Medieval Sites of the Iamal Region of Arctic Siberia
Session: Being with Animals in the North: Archaeological Perspectives
Time: 12:50 PM, Thursday May 6, 2021 – Session Room 3

Animal imagery was often used to embellish items utilized by the many populations inhabiting Western Siberia during the Holocene. This is especially the case for bronze items made by medieval populations inhabiting the Iamal and Gydan peninsulas and forest-steppe zone of northwestern Siberia from 9 to 14th centuries CE. This presentation discusses artefacts with animal imagery found during the excavations of three medieval cemeteries, Zelenyi Iar, Iur-Iakha 3, Parisento, and the settlement Iarte 6. Excavations at these sites produced 21 objects with images of waterfowl, bear, fur-bearing animals, horse, hare, reindeer, and fish. Many of the animal images appear on bracelets, pendants, knife handles, and sheaths. One of the most common motifs of this time was the image of a bear's head laying between its front paws, most often found on metal bracelets. It is noticeable that decorated knife and sheath sets played an important role in indicating an individual's social status. This stands in contrast with findings of ancient imagery from previous periods, when animals often reflected subsistence patterns rather than being markers for social status within local communities.

Poletto, Christina
Palaeoenvironmental Reconstructions in the boreal forest and their connection to the archaeological record
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 04:30 PM, Thursday May 6, 2021 – Session Room 3
Northeastern Alberta has a rich archaeological history spanning from time immemorial, but due to compressed stratigraphy and acidic soils, the only archaeological evidence that remains is often lithics. However, high resolution records like that from Sharkbite Lake, Alberta, helps supplement the archaeological record by providing ecological context to the landscape in which Indigenous peoples lived. One key factor to the environmental success of the boreal forest is fires (both natural and anthropogenic) which also plays an important role in the region's history.

Predham, Ian (Memorial University)
A New Approach for Assessing Harvesting Pressure of Shellfish From Archaeological Sites in Nova Scotia.
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:25 PM, Saturday May 8, 2021 – Session Room 3
Marine bivalves from archaeological sites can reveal critical information about past environments and human impacts on shellfish populations, specifically harvesting strategies. Identifying the age and season of shellfish collection demonstrates how often shellfish were harvested and when a site was being occupied. Previous research on Mya arenaria from archaeological shell midden deposits demonstrated the potential of this species for seasonality studies. However, variation in individual and population growth rates, coupled with issues of preservation makes this species difficult to analyze. Thin-section analysis of seasonal growth bands is unreliable, however, reliable age estimates can be made. The variation in growth rates and variability between populations makes interpreting seasonality from shell growth unreliable. This research presents an alternative way to assess the age-at-death from M. arenaria and proposes that counting annual growth rings is a reliable way to interpret the long-term history of shellfish harvesting in Nova Scotia.

Rangel-de Lazaro, Gizeh (Natural History Museum)
Artificial head-shaping and craniovascular traits: a case study in pre-Columbian crania from Cuba, the largest Caribbean archipelago
Session: Recent Research in Latin American Archaeology
Time: 04:40 PM, Thursday May 6, 2021 – Session Room 2
Artificial cranial modification (ACM) was a widespread practice in the Americas at European contact. Previous research indicates that the pressure and tension exerted during ACM induced functional and structural changes between soft and hard tissues. The impressions left by the vascular system on the surface of the skull are a unique source of evidence when working with bioarchaeological collections. Craniovascular features have been investigated in multiple populations; however, no information is available on artificially modified pre-Hispanic Caribbean skulls. To shed light on this matter, this case study provides a reference for the craniovascular traits using a bioarchaeological collection of fronto-occipital tabular oblique artificially shaped pre-Columbian crania from Cuba. Results suggest that changes produced by intentional head-shaping may have affected the pattern and direction of endocranial vascular structures, while emissary foramina placed in less-affected areas appear to be less influenced by changes in cranial morphology. Future work will investigate the consequences of ACM on the vascular systems and compare them with unmodified pre-Columbian specimens. Also, the effects of head-shaping in endocranial thermoregulation should be explored in the future. Providing new knowledge about the prevalence and variation of the craniovascular traits may be useful in research based on bioarcheological collections and medicine.

Rangel-de Lazaro, Gizeh (Natural History Museum), Adrián Martínez-Fernádez (Centro Nacional de Investigación sobre la Evolución Humana), Armando Rangel-Rivero (Museo Antropológico Montané, Universidad de La Habana), and Alfonso Benito-Calvo (Centro Nacional de Investigación sobre la Evolución Humana)
Digitalization of pre-Columbian crania collections using 3D scanning techniques
Session: Digital Archaeology: How Hard Can It Be?
Time: 12:50 PM, Friday May 7, 2021 – Session Room 1
The current possibilities of virtualization of cultural heritage using digital technologies have a favorable impact on preserving, access and managing archaeological collections. The use of three-dimensional (3D) models of archaeological samples fosters engagement with visitors, stimulates new forms of learning, and revalorizes the exhibits. In the current study, we use a hand-held structured light scanner to create 3D reality-based models of pre-Columbian crania from the Caribbean and South American collections. The resulting 3D models were used for producing 3D printing replicas and animated videos. The 3D resources derived will encourage new knowledge through research and provide broader access to these pre-Columbian archaeological collections through learning and outreach activities. The significance of digitizing these specimens goes beyond the creation of 3D models. It means protecting these fragile and valuable collections for future generations. The methodology and results reported here can be used in other museums with similar collections to digitally document, study, protect, and disseminate the archaeological heritage. In the future, we seek to continue

exploring the application of novel methods and digital techniques to the study of the pre-Columbian crania collections.

Reese-Taylor, Kathryn (University of Calgary), Armando Anaya Hernández (Universidad Autónoma de Campeche), Nicholas Dunning (University of Cincinnati), and Felix Kupprat (Universidad Nacional Autónoma de México)
Urbanization and transformation during the Late Classic in the Calakmul region, Campeche, Mexico
Session: Recent Research in Latin American Archaeology
Time: 03:00 PM, Thursday May 6, 2021 – Session Room 2
The Late Classic (550-850 CE) is a pivotal period in Maya culture, immediately preceding the deterioration of the large cities in the southern lowland area. As the seat of the powerful Kaanul ("Snake") dynasty, Calakmul, located in the Central Karstic Uplands, played a central role in the geopolitics of the period, emerging as arguably the most dominant center in the Maya lowlands between the mid-7th and late 8th centuries. During the past ten years, the Proyecto Arqueológico Yaxnohcah-Bajo Laberinto has conducted lidar prospection, ground verification, and archaeological excavations in 100 km2 area along the southern rim of the Bajo Laberinto wetlands south of Calakmul. These investigations have revealed a pattern of high density settlement, along with extensive agricultural terraforming and landscape modifications, suggesting that populations exploded at the beginning of the Late Classic. In this presentation, we explore the urban growth and the ensuing social, economic, and subsistence transformations in the greater Calakmul region at this critical juncture in history, when the Calakmul kings established hegemony over much of the Maya lowlands.

Richter, Tobias (University of Copenhagen), Hojjat Darabi (University of Copenhagen), Cecilie Lelek Tvetmarken (University of Copenhagen), Christoph Purschwitz (University of Copenhagen), and Peder Mortenses (University of Copenhagen)
Re-Excavating Ganj Dareh: the 2017 and 2018 seasons
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 01:10 PM, Friday May 7, 2021 – Session Room 3
We present an overview of the 2017 and 2018 excavations at Ganj Dareh, the site's stratigraphy, architecture, dating, and material culture. Between 1974 and when our new research began, the site had severely suffered since Smith's excavation areas had been left open and not sufficiently backfilled and had severely eroded with many profiles slumping and collapsing. Construction of a tarmac road had damaged the southern part of the mound, while ploughing in the surrounding fields was damaging its edges. Finally, several looting pits and tunnels further undermined its stability and integrity. In 2017 we were given the opportunity by the Iranian Centre for Archaeological Research to re-investigate Ganj Dareh as part of the Tracking Cultural and Environmental Change: the late Epipalaeolithic and early Neolithic in the Seimarreh Valley (TCEC) project. Two eight-week excavation seasons took place in the summer of 2017 and 2018 focusing on two areas of the mound (Area A and D) and the area surrounding it. Work on the mound aimed to re-document the stratigraphy of the site and especially to obtain samples for radiometric dating, archaeobotanical analysis, and micromorphology. The work around the mound aimed to establish the presence and extent of sub-surface archaeology around it.

Riel-Salvatore, Julien (Université de Montréal) and Lyne Grondin (Université de Montréal)
The 1967-1974 Ganj Dareh collections: New light on lithic technological organization
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 12:20 PM, Friday May 7, 2021 – Session Room 3
The Aceramic Neolithic site of Ganj Dareh (Kermanshah, Iran) is arguably one of the most significant sites for enhancing our understanding of goat domestication and the onset of sedentism. Despite its central importance, it has proven difficult to obtain contextually reliable data from it and integrate the site in regional syntheses because it was never published in full after excavations ceased in 1974. This paper presents the Ganj Dareh archive at Université de Montréal and shows how the documentation and artifacts it comprises still offer a great deal of useful information about the site. In particular, building on the refined stratigraphic understanding proposed by our team, we explore two possible pre-agricultural levels (H-01 and P-01) and explore the spatial distribution of lithics. This allows us to highlight some differences in lithic technological organization in levels H-01 and P-01 suggestive of higher degrees of residential mobility than subsequent phases of occupation at the site. These data help refine our understanding of Ganj Dareh's occupational history and recenter it as a key site to improve our understanding the Neolithization process in the Middle East.

Roe, Joe (University of Copenhagen)
A revised radiocarbon chronology of Ganj Dareh
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 01:20 PM, Friday May 7, 2021 – Session Room 3
The absolute chronology of Ganj Dareh is known from some 41 previously published radiocarbon dates, including those on Smith's original samples of bulk carbon and charcoal (Hole 1987), goat bone collagen (Zeder and Hesse 2000) and human skeletal remains (Meiklejohn et al. 2017). Here I present a further 59 dates from the renewed Copenhagen–Razi excavations, sampled from securely-identified charcoal and charred seeds and processed at the Aarhus AMS Centre. This expanded sample, together with the clarified stratigraphy revealed by the reexcavation, allows for the construction of the first robust Bayesian chronological model of the site. The results confirm that Ganj Dareh was occupied for a relatively short period between 10,200 and 9450 cal BP, though with slightly longer duration (580–750 years) than previously estimated. The Bayesian model also tightly constrains the site's internal chronology, opening the way for fresh insights into the evolution of animal and human lifeways over this critical period in the emergence of agriculture.

Ross, Jade (Lakehead University) and Clarence Surette (Lakehead University)
Efficacy of 3D Models in Teaching: Forensic Anthropology and Osteology
Session: Digital Archaeology: How Hard Can It Be?
Time: 12:20 PM, Friday May 7, 2021 – Session Room 1
Though some may have previously held the opinion that in order to study and learn osteology, a hands-on experience is required, teaching endeavors over the past year have indicated incorporation of digital modelling can be as effective. Through the use of various programs, including MeshLab, MeshMixer, BioDigitial, and Sketchfab, teaching using 3D models of real

and cast human and non-human bone proved adequate as well as practical given the circumstances. A future of continuing to integrate 3D models whenever possible seems plausible as this reduces the deterioration of specimens while continuing to relay the necessary techniques to learners. These models also provide at-home study aids for students. Feedback collected from a third-year Forensic Anthropology course at Lakehead University as well as perspectives from educators will be presented. The challenges associated with 3D modelling for teaching will also be examined with possible solutions discussed. In these ever-changing times, adaptability has been of utmost importance and 3D digital modelling is one way to modify teaching while ensuring high-quality instruction is delivered and rewarding learning occurs.

Sanchez, Fabiola (University of Victoria)
Women, body, and embodiment in Postclassic Huasteca
Session: Recent Research in Latin American Archaeology
Time: 03:50 PM, Thursday May 6, 2021 – Session Room 2
The analysis of a group of feminine imagery, including ceramics and sculpture, from the Huasteca culture and region provide evidence for practices of embodiment in the Late Classic and Postclassic periods. Multiple lines of evidence for the interpretation of the ritual use of the dhayemlaab/quexquemitl, as textile or body ornamentation was used by elite women to negotiate their status. Through an integrated application of theories of embodiment and body with archaeological material culture, ethnohistorical sources, and ethnography offer a visible role for Huasteca women as active participants in ceremonial and ritual practices.

Sghinolfi, Amedeo (Western University)
The Prehispanic Occupation of the Carabamba Valley, Northern Peru
Session: Recent Research in Latin American Archaeology
Time: 04:40 PM, Thursday May 6, 2021 – Session Room 2
Archaeological investigations in the Central Andean region have usually focused on the coast and the highlands, neglecting the intermediate zones that connect these two ecological macro areas. One such zone is the Carabamba Valley in Northern Peru (ca. 150 to 3,500 m.a.s.l.). This river valley includes the resource-rich chaupiyunga area (ca. 500-2,300 m.a.s.l.), where valuable goods like coca and fruits can be grown and is also a natural corridor that connects the coastal Virú Valley to the Carabamba Plateau. In the past, this stretch of land played an important role in supplying water to the arid coast and put into contact peoples featuring different sociopolitical organizations, beliefs, identities, and material cultures. A pedestrian survey of the Carabamba Valley was conducted in 2019 and allowed to identify several unreported archaeological sites. The analysis of artifacts collected from the surface reveals a long occupation spanning from the Early Horizon (1,000 – 200 BC) to the Late Horizon (1,470 – 1,532 AD). The Carabamba Valley likely acted as a borderland between coastal political formations (Virú, Moche, Chimú), and highland polities, and the admixture of coastal and highland traits shows interaction among different groups.

Shirvani, Sanaz (Université de Montréal)
First Observations on the 1967-74 Clay Object from Ganj Dareh
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 12:30 PM, Friday May 7, 2021 – Session Room 3
Ganj Dareh is a small settlement located in a valley located southeast of Kermanshah in the Central Zagros, Iran. It is considered as one of the earliest Neolithic sites, having been radiocarbon dated to ca. 10,200 – 9,900 years BP. While many observations from the site have demonstrated fundamental shifts in the social life of its occupants, Ganj Dareh site is also noteworthy for having yielded hundreds of clay figurines and tokens. Philip Smith and other scholars have argued this corpus of artifacts as one of the most significant innovations of Early Neolithic material culture, but their function and variability remain unclear to this day. In this paper, based on Smith's documentation we tabulate the kinds of tokens and figurines across the five original level to test the idea of Riel-Salvatore et al. (2021) that Level H-01 is devoid of clay objects, which first appear in overlying Level E-01. Another aim of this paper is to see whether the clay tokens from Ganj Dareh support or invalidate Bennison-Chapman's ideas about their multifunctional nature in the Early Neolithic as a whole.

Simons, Eric (UBC), Andrew Martindale (UBC), and Alison Wylie (UBC)
Bearing witness: What good work can archaeology do in an Indian Residential School context?
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 03:20 PM, Friday May 7, 2021 – Session Room 3
The Kuper Island Industrial School operated for 85 years (1890-1975) on Penelakut traditional territory. It is known as a place of significant abuse of Indigenous children—physical, emotional, cultural, and spiritual. The Truth and Reconciliation's National Student Memorial Register records the names of 121 children who died while in the school's care, but there are few records of where they were buried. Many in the community are concerned that 'lost' children lie in unmarked and clandestine graves on the former school grounds, which are at the heart of the present-day Penelakut village. Not knowing where these unmarked burials are located continues to be a matter of serious concern for those who are committed to fostering a healthy, safe, and independent community. We explore our role as researchers in the context of an emerging partnership with the Penelakut Tribe, one aim of which is to locate the burials of the missing children. This relationship is in the process of taking shape, so we focus on understanding conditions for developing trust, and the interactional expertise necessary to work well together, with a good heart. We suggest that, in some respects, this may usefully be understood as a practice of witnessing on several dimensions.

Smith, Sarah (Simon Fraser University)
Adding LiDAR Data to the Toolkit for Archaeological Prospection at the Highland Valley Copper Mine in BC
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 02:40 PM, Friday May 7, 2021 – Session Room 1

As heritage resource management and Indigenous stewardship move into the forefront of operational planning and project design in British Columbia, it falls to researchers to find innovative ways to increase assessment efficiency. In this study I explore methods for employing LiDAR-derived digital elevation models as a tool for archaeological prospection within the Highland Valley Copper Mine. The efficacy of LiDAR-based topographic analysis using manual feature extraction is compared with ground-truthing data provided by my research partners at the Nlaka'pamux Nation Tribal Council. Specific methods were developed for the identification of high potential microtopographic relief. The methods identified a high percentage (75-92%) of recorded archaeological sites which meets Provincial requirements for a moderately effective predictive model. Recommendations are provided for improving LiDAR-analysis performance using best practices and interpolation workflow identified in contemporary studies. A cost-benefit analysis determined a significant financial implications for incorporating LiDAR-survey into the heritage management program. Survey program cost savings would allow for redistribution of resources and potentially a greater focus on mitigative systematic data recovery. The use of remote sensing technologies can have a positive impact on heritage resource management industry by decreasing program costs while maintaining research quality.

Snoek, Conor (University of Lethbridge) and Sally Rice (University of Alberta)
The Pan-Dene Comparative Lexicon
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 03:50 PM, Thursday May 6, 2021 – Session Room 3
The Pan-Dene Comparative Lexicon (panDCL), currently nearing final stages of preparation, is an on-line, searchable database compiled primarily from published or open-access lexical resources for the majority of Dene languages and many dialects thereof. Lexicographic documentation of Dene languages has been considerable. However, much of the collected information takes the form of field notes or manuscripts with very limited information or general availability. Researchers both in and outside of the academy have struggled to gain access to such an aggregate array of data. In compiling the comparative database with a view to making it publicly accessible, this project aims for open and replicable scientific research on Dene languages for the people who speak or want to study them. At present, there are over 25,000 entries and this greater availability of digital data is crucial at a time when new computational approaches to language and dialect classification are emerging. These methods coupled with better data allow for fresh perspectives on historical linguistic relationships and new opportunities for collaboration between Dene communities, archaeologists, and linguists.

Spicer, Gareth (Turtle Island CRM)
A Unicorn – A Prehistoric campsite near Grande Prairie, Alberta
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 02:30 PM, Friday May 7, 2021 – Session Room 2
In most cases, particularly in the Boreal forest, Historic Resource Act clearance in Alberta consists of submitting the required on-line form, often facilitated through a consultant, and waiting for the Historic Resource response granting clearance under Section 31 of the Act. Even in instances when complex regulatory requirements are outlined in responses from

Alberta Culture, including field assessment, cultural resource sites are rare; particularly those with research potential and scientific significance. Infrequently, however, sites such as these do occur and it is upon the management of these non-renewable resources that the Act, and the regulatory framework it governs, is predicated. One of these sites was identified as a result of a recent SemCAMS Midstream pipeline development near Grande Prairie, Alberta. This Prehistoric period deposit included a rich assemblage of lithic debitage, tools and calcined bone. The majority of these artefacts are small pieces of lithic debitage. Two pieces of obsidian were also recovered as a result of these excavations sourced to the Mt. Edziza locale. As a result of this SemCAMS Midstream sponsored work this site was confirmed as a significant cultural resource, atypical for the boreal forest of Alberta.

Spicer, Gareth (Turtle Island CRM)
Finding the Best Policy – Disclosure reduces conflict and builds trust, it really is that simple.
Session: Archaeology and Heritage in the Contemporary World
Time: 12:10 PM, Saturday May 8, 2021 – Session Room 1
At the Canadian Archaeological Conference in 2017, I presented on the management history of the Fort Edmonton Cemetery as it related to the Walterdale Bridge Replacement Project. The success of the indigenous engagement and consultation work related to that project was a catalyst for stakeholders in the Edmonton area to assess many long standing indigenous consultation and engagement assumptions. As a follow up to this presentation, I will outline the results of an ongoing utility infrastructure project in the North Saskatchewan River Valley. As a result of this project, the position of provincial regulators as the gate keepers of cultural resource information has been brought into question. I will outline how the selective disclosure of cultural resource information prevents community stakeholders from assessing the information required in support of informed cultural resource decisions. As result, the decision to withhold cultural resource information was exploited to create conflict and mistrust in the aid of a special interest. I will assert that regulatory decisions that by default withhold cultural resource information, without consideration of the consequences, result in poor public management decisions.

Steeves, Paulette (Algoma University) and Krista McCraken (Algoma University)
Circles of Healing Honoring Elders, Spirits and Land
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 04:10 PM, Friday May 7, 2021 – Session Room 3
Every day as I walk across the land I remember the generations of Anishnaabe children who were forced to attend residential school here. My footsteps follow the spirits of Anishnaabe youth who walked these hallways before me. Some of them never left, they are buried in the graveyard, in the quiet forest behind Shingwauk Hall, just past the crying rock. How do we honor their memory and Anishnaabe Elders and communities? How do we teach the next generation about this violent history of colonization? Education about the past and honoring in the present take many forms. Travelling in sacred circles of healing from the past to the present led by Anishnaabe elders and Survivors of Shingwauk Residential School.The history of the Shingwauk site is displayed through photographs and memories hung silently along pale blue walls. Truth telling lines the shelves of the Shingwauk Residential Schools Centre

archives. Memories, stories and history are shared with the world through digital archives, digitized archival materials, and virtual tours as a starting place for healing and honoring.

Steinberg, Jamie (Lakehead University) and Scott Hamilton (Lakehead University)
Magnetics: not just for finding your way in the Subarctic
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 03:30 PM, Thursday May 6, 2021 – Session Room 1
Subarctic Archaeology can be a daunting task at the best of times; consider the large geographic size, difficult landscapes and constantly changing soil conditions. Acidic soil conditions destroy much of the visible organic evidence available to archaeologists. As the technology has developed, many archaeologists have considered the earth's geomagnetic properties to document anomalies that could derive from anthropogenic origins. One such property is magnetic susceptibility which has proven effective in detecting hearth features in Europe and other regions of North America. The efficacy of the handheld Terraplus KT-10 magnetic susceptibility meter is being evaluated for archaeogeophysical surveys in the Subarctic by means of experimental hearth fires under controlled conditions.

Stewart, Peter (Western Heritage) and Krista Gilliland (Western Heritage)
The Identification of Multiple Occupations at FgPl-12 Using Portable Optically Stimulated Luminescence
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 03:00 PM, Friday May 7, 2021 – Session Room 2
Note: This poster will also appear in the Poster Session (02:10 PM to 02:50 PM, Thursday May 6, 2021 – Gather.Town)
Identifying distinct occupations at archaeological sites within the boreal forest can be a challenge. Radiocarbon dates can be difficult to acquire, as the acidic soils in coniferous forests means there is rarely suitable faunal material to submit for dating. Limited sediment deposition, natural disturbances such as bioturbation, and a lack of visible stratigraphy can also make it difficult to associate artifacts from an assemblage with a particular feature or with temporally diagnostic artifacts such as projectile points.

To address this challenge, Western Heritage has been using their Portable Optically Stimulated Luminescence (POSL) reader to help characterize the depositional histories of sediments at archaeological sites in the boreal forest, assess their level of disturbance, and infer their relative ages.

During the 2020 field season the POSL reader was used to characterize the sediments at Archaeological Site FgPl-12, a precontact campsite where a projectile point and a subsurface feature were recorded in sediments in which natural disturbances largely precluded the preservation of any developed soil horizons. The POSL analysis of the sediments from this archaeological site demonstrated that the subsurface feature was a more recent addition to the site that intruded into older sediments from which the projectile point was recovered.

Supernant, Kisha (Institute of Prairie and Indigenous Archaeology, University of Alberta)
From IPA to IPIA: A Vision for 2020-2025.
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 04:40 PM, Thursday May 6, 2021 – Session Room 3
The first decade of the Institute of Prairie Archaeology resulted in diverse and impactful research projects, partnerships, and practices. As the mandate of the Institute expands to engage with Indigenous archaeology more explicitly, becoming the Institute of Prairie and Indigenous Archaeology, there is a renewed commitment continue the legacy of IPA while broadening the scope of the activities of the Institute. In this talk, I articulate a vision for the next phase of IPIA, focusing on three core areas: archaeological practice, pedagogy, and policy. I explore the implications of this transition to IPIA and articulate how the Institute will continue to contribute to scholarship, as well as how our scholars and partners will continue to work toward more just, inclusive, and relational archaeologies.

Supernant, Kisha (Institute of Prairie and Indigenous Archaeology, University of Alberta), William Wadsworth (Institute of Prairie and Indigenous Archaeology, University of Alberta), and Terence Clark (Department of Anthropology and Archaeology, University of Saskatchewan)
Finding the Relatives: Wise Practices for Research Design in Locating Unmarked Graves in Western Canada
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 03:10 PM, Friday May 7, 2021 – Session Room 3
Many Indigenous communities across the lands we call Canada have buried their ancestors since time immemorial, but the impacts of colonization on burial practices, places, and histories has led to Indigenous communities not always knowing where their ancestors and relatives are buried. Over the past several years, we have been approached by multiple Indigenous communities in Alberta and Saskatchewan to assist in locating the missing burial places of the ancestors using archaeological remote sensing techniques. Some of the requests have been to help locate missing children around residential schools, but the majority of the requests have been to assist communities in surveying local historic cemeteries and other burial contexts. From these projects, we have been able to refine archaeological remote sensing techniques in a variety of environments with different burial types and different community histories. In this paper, we share what we have learned about wise practices of research design, both in the technical aspects of the application of archaeological remote sensing, as well as building good relationships between archaeologists and community members.

Surette, Clarence (Lakehead University)
3D Scanning, Modelling, and Printing: What Have I Gotten Myself Into?
Session: Digital Archaeology: How Hard Can It Be?
Time: 12:00 PM, Friday May 7, 2021 – Session Room 1
Digital archaeology is quickly becoming a new subdiscipline within archaeology, enabling documentation, analysis, and reconstruction of artifacts and archaeological sites. With diverse

technologies available, it is not always clear which equipment is better when considering accuracy, coverage, cost and ease of use. This is addressed using our experiences with a variety of products that range from those with low cost and gentle learning curve, through to high-cost sophisticated scanners that require extensive training. The quality of output from these options is also considered.

Surette, Clarence (Lakehead University), Zebedee Kawei (Lakehead University), Scott Hamilton (Lakehead University), and Chris McEvoy (Lakehead University)
Digital Models and Their Application to Research and Education in Archaeology
Session: Digital Archaeology: How Hard Can It Be?
Time: 12:10 PM, Friday May 7, 2021 – Session Room 1
With digital technologies becoming widely available, an increasing number of researchers and educators are learning how to scan, model and print replicas of artifacts. It is a complicated and learning intensive process but even archaeological sites may even be scanned so as to immerse the 'visitor' in that digitized location. Models can now be made with varying levels of accuracy from several tools including computed tomography (CT) scanning, photogrammetry, and laser or structured light scanning. Depending on what you are replicating, there are advantages and disadvantages to each method but one or more variation may be required. In this presentation, I will discuss what type of analysis can be done with 3D models resulting from various technologies including which software can be used to repair, reconstruct, and analyze them. Due to the increase in online learning because of COVID-19 virus impacts, I will also discuss how models can be used to create interactive content in support of teaching at Lakehead University, based on our experiences in the last year.

Sutton, Garth (Manitoba Archaeological Society)
The effects of Colonization on Indigenous Agriculture: An Overview from Manitoba.
Session: People, Plants, and Animals
Time: 02:05 PM, Saturday May 8, 2021 – Session Room 1
Indigenous peoples were successful pre-contact agriculturalists with microbotanical evidence suggesting that maize, beans, squash and other produce were consumed in Manitoba ca. 1500 years ago. The recovery and documentation of scapula hoes, bell shaped storage pits and other agricultural implements point to local production of plant foods that were possibly introduced from the eastern woodlands as well as the Plains Villagers to the south. Europeans, beginning with early fur traders, began to migrate into the area and establish semi-permanent to permanent settlements that would have a direct effect upon Indigenous agricultural practices. With Confederation and the Deed of Surrender, an influx of settlers descended upon Manitoba, which required the First Peoples to enter into treaty with the Canadian government displacing them onto small parcels of unproductive land. This along with the implementation of the Indian Act in 1876, fundamentally changed Indigenous agricultural practices that created barriers resulting in food insecurity. This paper aims to highlight the highly successful agricultural practices that were in use prior to European settlement and the detrimental effects that early policy makers and government legislation had on these practices that created great difficulty producing agricultural goods for commercial and subsistance needs.

Taylor, Barry (University of Chester)
Living with trees in the early Holocene forests of Northern Europe
Session: Being with Animals in the North: Archaeological Perspectives
Time: 02:00 PM, Thursday May 6, 2021 – Session Room 3
The past two decades have seen a growing body of research into the ways in which animals were perceived by the human communities inhabiting the early Holocene forests of northern Europe. This work has come to see the relationship between humans and animals in cultural terms, exploring the ontological significance of particular species, and how this is reflected in the way animal bodies were treated and disposed of.

This paper argues that human-plant relationships were situated within the same ontological perspectives. In a series of case studies from the North European Mesolithic, it will show how trees, and materials from trees, were subject to particular forms of treatment and deposition, comparable to that of the remains of animals. In doing so, it will argue that both plants and animals were active constituents in the worldviews of human communities, were bound up in people's cosmologies, and imbued with a significance that went beyond their role as a source of food or raw material.

Taylor, Gillian (University of Calgary)
An Archaeology Girl in a Material World: How experimental archaeology can enhance an undergraduate degree
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 01:10 PM, Saturday May 8, 2021 – Session Room 3
Experimental archaeology can be a great way for students to learn and truly understand what they are learning in their classes. Dr. Matthew Walls put me in contact with Don Gardner, and I helped him facilitate a weekly experimental archaeology workshop from January to March, 2020, for undergraduate students to recreate Arctic material culture. We worked through numerous books on the subject, primarily The Frozen Saqqaq Sites of Disko Bay, West Greenland (2017) by Bjarne Grønnow, and working through the various tools and "nailing" down the methods behind their construction. We experimented with adzes, splitting wood, braiding sinew and crafting harpoons, among others. I will be using this experience, along with the flintknapping group that I am involved with, to illustrate how hands-on participation and learning can greatly complement and enhance an undergraduate archaeology degree.

Taylor-Hollings, Jill (Dept. of Anthropology, Lakehead University/Ontario Archaeological Society), Clarence Surette (Dept. of Anthropology, Lakehead University), Kevin Brownlee (Manitoba Museum), and Scott Hamilton (Department of Anthropology, Lakehead University)
Unraveling Fabric-Impressed Pottery Through the Six Seasons of the Asiniskaw Īthiniwak Project: Interlinking Digital Models and Weaving Techniques as Ethnoarchaeology
Session: Digital Archaeology: How Hard Can It Be?
Time: 01:50 PM, Friday May 7, 2021 – Session Room 1
The Six Seasons of the Asiniskaw Īthiniwak (Rocky Cree) SSHRC Partnership project is developing historical picture books set in Northern Manitoba in the early 1600s. This project is

driven by Asiniskaw Īthiniwak communities in partnership with the University of Winnipeg and other organizations.

Archaeology is an important part of this project, enabling analysis of curated assemblages recovered from Īthiniwak traditional territories in Northern Manitoba lake systems affected by hydro-electric development. Findings by the archaeology team from Lakehead University and the Manitoba Museum are being 'woven' into narratives by developing interpretative sidebars within books and apps, contributing to curriculum guides, and producing classroom resources such as 3D printed artifact replicas.

As surface finishes and manufacturing techniques of Indigenous pottery in central Canada are not well understood by archaeologists, we are currently building on limited knowledge of precontact woven bag technologies used by Selkirk composite Late Woodland groups in Manitoba. This innovative study is being accomplished by 'interlinking' digital 3D scans to recreate fabric impressions on vessels with ethnoarchaeological replication of weaving techniques and pottery making. Ultimately, that will provide better understanding of pottery and bag technologies, which can also be used for Six Seasons project's educational materials.

Toulouse, Allen (Sagamok Anishnawbek First Nation), Naomi Recollet (Ojibwe Cultural Foundation), Kaitlyn Malleau (University of Toronto), and Sarah Hazell (Laurentian University)
Indigenous and Collaborative Archaeology at the La Cloche Site
Session: Collaborative Archaeologies in Northeastern North America
Time: 01:55 PM, Thursday May 6, 2021 – Session Room 1
The history of research at the La Cloche Site on the north shore of Lake Huron spans 50 years. Past archaeological investigations at Fort La Cloche have generally resulted in a vague understanding of site occupation and boundaries, but it is suspected the site spans an area at least one kilometre square and includes deposits from the Middle Woodland until recently. In this paper, we will examine the background and history of research at the La Cloche Site, as well as the collaborative projects currently being developed between Indigenous and academic partners.

Tremain, Cara (Langara College)
Teaching Digitally Accessible Cultural Heritage
Session: Digital Archaeology: How Hard Can It Be?
Time: 12:30 PM, Friday May 7, 2021 – Session Room 1
Equipping the next generation of archaeologists with the knowledge and experience of digital tools and technologies for the heritage sector is essential in today's increasingly computerized world. For the past few years, archaeology students at Langara College have been experimenting with a range of digital applications including virtual tours of museums and converting scans of archaeological artefacts into tangible objects via 3D printing. The shift to online classes presented an opportunity to offer a 'Digital Archaeology' class, in which students have been exploring the process of creating their own 3D models using photogrammetry, blogging about cultural heritage, and even curating archaeological content for immersive virtual reality rooms. This presentation will showcase examples of teaching digital archaeology inside and outside of the physical classroom, and discuss ways in which

we can digitize our pedagogical toolkits to increase student accessibility and engagement with exciting technologies that can be applied to the field of cultural heritage.

Treyvaud, Geneviève (Bureau du Ndakina, Grand Conseil de la Nation Waban-Aki, INRS-ETE) and Louis-Vincent Laperrière-Désorcy (Bureau du Ndakina, Grand Conseil de la Nation Waban-Aki, University of Toronto)
Ndakina 2020, Archaeology
Session: Poster session (Note that this poster is also related to the Indigenous Engagement Roundtable)
Time: 02:10 PM to 02:50 PM, Thursday May 6, 2021 – Poster Room (Gather.Town)
The Ndakina Office helps represent the Abenaki Councils of Odanak and W8linak regarding affirmation and consultation, land claims, as well as environmental questions and adaptation to climate change. Archaeological research plays an important role to the acquirement of knowledge for the sustainable and responsible management of the W8banakiak ancestral territory. Erosion project consists of a risk assessment study focused on erosion problems identified on the banks of Alsig8tegw (St. Francis River) and W8linaktegw (Becancour River). It was possible to assess the expansion of erosion phenomena on known archaeological sites, as well as evaluate the impact of erosion on potential areas identified along the rivers. Lachapelle Site is an ancestral burial site located near the community of Odanak. The repatriation of its archaeological collection by the Ndakina Office allowed us to analyze the artifacts to understand past occupations at the site. A zooarchaeological study revealed new interpretations regarding cultural links between ancestral burial practices and carnivore fauna. Introspect: 3D acquisition and characterization techniques have been used to study wampums and pottery sherds. This work is carried out as a multidisciplinary project aimed at assessing the interior of archaeological objects without destroying them, help determine their materials, manufacturing processes, uses and origins.

Tupakhin, Daniel (Arctic Research Center of Yamal-Nenets Autonomus District) and Olga Tupakhina (Arctic Research Center of Yamal-Nenets Autonomus District)
The Eneolithic and Bronze Age Animal Imagery from the Iamal Region of Arctic Siberia
Session: Being with Animals in the North: Archaeological Perspectives
Time: 12:20 PM, Thursday May 6, 2021 – Session Room 3
This presentation introduces animal imagery that was found at a few archaeological sites of the Arctic and subarctic sections of the Iamal region of northwest Siberia during the Eneolithic and Bronze Age. Some of the imagery styles are quite unique for this region, particularly in terms of their chronological span and geographical distribution. Most of the animal imagery was made on clay objects, especially ceramic vessels. These images include a variety of avian and mammalian species, particularly waterfowl, raptors (owls), terrestrial carnivores (e.g., possibly mustelids, bears, canids), ungulates (e.g., moose), and sea mammals (seals). We further compare the range of animal species depicted in imagery from this period to the results of identifications of faunal remains recovered during excavations of the archaeological site Gornyi Samotnel - 1. This settlement is considered one of the earliest and most intriguing Eneolithic sites in this region because of its good stratigraphic preservation, remains of a dwelling, over 30,000 artefacts, ~500 animal remains, and many animal images depicted on rims and walls of its ceramic vessels.

Vahdati Nasab, Hamed (Tarbiat Modares University) and Mandan Kazzazi (Wirtschaftsuniversität Wien)
Neolithic Female Figurine from Tepe Sarab
Session: Ganj Dareh Then and Now: Integrating Past and Current Research
Time: 01:40 PM, Friday May 7, 2021 – Session Room 3
Prehistoric human figurines in general and female figurines in particular have been of long-standing interest to archaeologists, but there has been considerable debate about their function. Although early human figurines are often viewed as a corpus, there is considerable variety in body proportions, forms and artistic styles across the vast geographical areas and temporal periods for which they are attested. Here, a metric analysis using the Root Mean Square Deviation (RMSD) technique is used to compare a figurine from Tepe Sarab with contemporaneous and earlier figurines from a broad geographical area. The results of this analysis indicate that there is a clear division in style and body proportions between the female figurines that are made during the Paleolithic and Neolithic periods. Moreover, our results indicate that there are clear differences in style and body proportions between figurines found in Central Europe and the Near East.

Vallerand, Amélie (Université de Montréal)
A Story of Paleolithic Occupations: Understanding Neanderthal and Homo sapiens Spatial Organization at Riparo Bombrini
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:35 PM, Saturday May 8, 2021 – Session Room 3
The site of Riparo Bombrini (Liguria, Italy) offers a unique setting to compare the spatial organization of Neanderthal and Homo sapiens occupations in a single archaeological site. The disappearance of the Neanderthals is one of the greatest debates in prehistory since the period of their decline corresponds to the arrival of Homo sapiens in Europe. It is thus often assumed that fundamental differences distinguish the two populations, and the ability to structure space within the sites they occupied into distinct activity areas is often invoked as a key distinctive trait of our species. However, this behavior has never been assessed for both groups at a single site, making direct comparisons impossible so far. This project thus aims to objectively evaluate the degree of spatial organization in the earliest Protoaurignacian levels (A1-A2, associated with Homo sapiens) as well as the latest Mousterian levels (MS1-MS2, associated with Neanderthals) at Riparo Bombrini. Combining GIS and quantitative methods allow the study of the spatial distribution of artefacts and features in these levels, showing that Neanderthals indeed organized their living spaces like Homo sapiens. This contributes new data to the ongoing debates over ‘behavioral modernity,’ suggesting it is not limited to our species alone.

Vanderkolk, Kaitlyn (University of Calgary)
Ladies, Gentlemen, and [redacted]: A Nonbinary View of Feminist Archaeological Theory
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 12:45 PM, Saturday May 8, 2021 – Session Room 3

Feminist theory has been incredibly productive in its goal of bringing female voices to the forefront of archaeology, both of our subjects and of researchers themselves. Feminist archaeology has pursued the equalization of our field, pushing for non-gendered consideration for grants and equal opportunity to pursue research projects, as well as investigation into the roles and lives of women in the past. However, feminist theories have continued to perpetuate a western gender binary in practice and among its researchers. Nonbinary voices are still existing at the margins, if existing at all. In this paper, I aim to critique feminist and queer theories from a non-binary lens. Does feminist archaeology provide a platform for the understanding of nonbinary genders, third genders, even two-spirit genders? If not, how and where does it fail, and how can we improve our theories to encompass nonbinary experiences and perspectives?

Vieira, Tatjana
Where did it all go?: Ontario Heritage Legislation and Professional Looting
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 01:05 PM, Saturday May 8, 2021 – Session Room 3
Most of the archaeological work that takes place in the province of Ontario is in the form of CRM. This “professional” archaeology follows the standards and guidelines provided by Ontario heritage legislation, which has long been criticized and critiqued by Indigenous communities due to its meager engagement and consultation requirements and lack of enforcement of minimum standards of practice. This legislation also has major effects on access to and ownership of heritage material as anything found during a project is entrusted to the archaeologist on behalf of the people of Ontario. This results in Indigenous heritage materials stored in boxes and bags in garages, basements, and storage lockers of Euro-Canadian archaeologists, completely unbeknownst to descendant relations. In this paper I will examine how the Ontario heritage legislation has created a system where archaeological material is continually excavated in the name of urban expansion, but final excavation reports and artifacts are virtually inaccessible leading to the extraction and hoarding of Indigenous heritage material that may be more appropriately referred to as “Professional Looting”.

Wade, Kali (Atlatl Archaeology Ltd.)
Using Phytoliths to Examine Environment and Human Occupation in the Jezreel Valley, Israel
Session: People, Plants, and Animals
Time: 01:50 PM, Saturday May 8, 2021 – Session Room 1
Phytolith analysis is routinely utilized in archaeological contexts to answer a number of research questions ranging from agricultural strategies, to a community’s activity areas, to household plant use. While results can be informative and valuable, our understanding of plant use within occupation areas is heightened when they are paired with internal and external control samples from the surrounding areas. This study examines phytoliths from twenty one sediment samples extracted from four stratigraphic columns from the Jezreel Valley of modern-day Israel. Following standard techniques, we reconstruct the paleoenvironment of this large valley area to assess preservation conditions and summarize the past’s dominant plant communities. These results set a baseline understanding of phytolith densities and types to then examine with and in comparison, to three archaeological

sites that have undergone previous phytolith analysis. Sites include Tel Shimron, Tel Megiddo, and Legio and will be completed at a later date. Together, this work provides a large scale understanding of the ancient Jezreel Valley and highlights the importance of collecting and analyzing external and internal control samples for meaningful microbotanical interpretations. This work is being completed by Atlatl Archaeology Ltd for the Jezreel Valley Regional Project, Tel Megiddo Expeditions, and Tel Shimron Excavations.

Wadsworth, William T. D. (University of Alberta) and Gabriel Yanicki (Canadian Museum of History)
Wally's Beach II: Remote Sensing and Monitoring
Session: Advancing Method and Theory in Canadian Spatial Archaeology I: Terrestrial and Aerial Remote Sensing
Time: 03:20 PM, Thursday May 6, 2021 – Session Room 1
Southern Alberta's Wally's Beach (DhPg-8) is an archaeological and palaeontological locality of enduring research interest. Dating to at least 13,300 cal. BP, the site figures prominently in narratives of Clovis and pre-Clovis occupation of the Ice-Free Corridor during the earliest stages of the peopling of the Americas. Here, we summarize efforts to determine the extent of intact cultural deposits using three remote sensing techniques: aerial photogrammetry, synthetic aperture radar (SAR), and ground-penetrating radar (GPR). Each technique uniquely contributes to the overall prospection and monitoring of the site, complementing (and sometimes illuminating) results from surface/subsurface testing. Drone-generated orthomosaics and digital elevation models capture the site in stunning detail, highlighting areas of active aeolian and lacustrine erosion. SAR offers the potential to monitor these changing surfaces in real time. In addition to erosion, both provide views of parallel processes of deposition, the extent of which is most fully revealed by GPR. What appears to be a large infilled paleochannel—a suspected meander of the early St. Mary River—runs through the middle of the site and continues to trap sediment today. The banks and basin of this channel help delineate future targets for the recovery of buried Holocene and terminal Pleistocene materials.

Ward, Alexandra (Department of Archaeology, Memorial University)
Increasing Accessibility using Universal Design: A Case Study from Archaeology/Anthropology Department Websites
Session: Student Voices: Growing Communities Through Support and Collaboration (Short-Session)
Time: 01:25 PM, Saturday May 8, 2021 – Session Room 3
Accessibility and universal design (UD) are often used as buzzwords without understanding how to apply the design principles. This study evaluates the accessibility and UD on archaeology department websites, through a survey of 12 archaeology and anthropology websites in Canada. The aim of the study is to evaluate what currently exists, and develop recommendations for integrating UD in university websites. Elements of inclusivity that recognise the colonial structure of universities and the disciplines of archaeology and anthropology were also evaluated. The results indicate that UD and accessibility on university websites is incredibly mixed, with the same website passing one criterion while failing another. In order to improve accessibility on archaeology department websites in Canada,

those designing the website should be aware of the principles of UD and how to best apply them. This can include using forms of communication other than text, such as video, selecting appropriate colours and fonts, and using keyboard navigation with selection indicators. Effectively integrating UD into departmental websites will improve accessibility and sharing of information. With proper implementation, accessibility and UD can be far more than just buzzwords and become a meaningful part of university web design principles.

Weatherbee, Wesley (Saint Mary's University)
Microfossils, Remote Sensing, and GIS for Proxy-dating Coastal Archaeological Sites and Landscapes: A case from Minas Basin, Bay of Fundy, Canada
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 03:50 PM, Friday May 7, 2021 – Session Room 1
An analysis employing previously published Foraminifera data spanning the Mid-Late Holocene from salt marsh deposits backing the coastal beach site of Oak Point (BgDc-07) on the southwestern shores of Minas Basin, Nova Scotia provides insights into regional scale intertidal morphodynamics. Site formation and post-depositional processes are examined using Foram data from three radiocarbon dated samples published as higher high water (HHW) sea level indicator points (SLIP). These data provide an elevation equivalent to the limit of high marsh, and highest astronomical tides (HAT) for the age interval of each sample. Two SLIPs represent past higher high marsh, and one represents lower high marsh. Stumps of an in-situ drowned forest are exposed below the site, clustering in two loci. The first hold well rooted stumps showing through mudflats at the lower limit and along an erosional face at the upper limit. It contains rooted stumps of various sizes, indicating the forest was well established prior to relative sea level rising to its modern limit. Calibrated SLIP ages, together with a hydrographic vertical separation surface, lidar derived digital elevation model, and ground penetrating radar surveys allow for the production geochronological boundaries for the site deposition and age of the drowned forest.

Wiley, Adrianna (University of Guelph) and Lisa Hodgetts (Western University)
Furs and Food Stuffs: Thule Inuit use of Arctic Fox at Arviq, N.W.T., Canada
Session: Being with Animals in the North: Archaeological Perspectives
Time: 01:20 PM, Thursday May 6, 2021 – Session Room 3
While Thule Inuit exploitation of Ringed seal and caribou is well documented, their use of Arctic fox (Alopex lagopus) remains understudied. This paper combines evidence from ethnohistory, ethnography, and zooarchaeology to better understand Arctic fox use in a dwelling at the ca. 1550 AD site of Arviq (OkRn-1), Banks Island, Northwest Territories. While cutmark analysis from Arviq supports exploitation of fox for pelts, it also suggests at least some foxes were used for food. This interpretation is supported by epiphyseal fusion evidence indicating some fox harvesting occurred in the late summer and/or fall, when Arctic foxes would still have had summer coats, which were not used in clothing. Additionally, human-fox relationships at the site had a symbolic or spiritual element, suggested by a cluster of fox skulls in a shallow pit within the dwelling. Comparison with the earlier site of Nelson River (OhRh-1) indicates Arctic fox have played an important role in Inuit subsistence on Banks Island throughout its occupational history, a practice that continued into the recent

past. Fox may have been a key resource for mitigating periodic food shortages in the Amundsen Gulf region, which does not have the same resource richness as surrounding Arctic regions.

Williamson, James (Memorial University Newfoundland)
Drone-based photogrammetry of Indigenous archaeology in Newfoundland's boreal forest
Session: Archaeological Advances and Anomalies in the Boreal Forest
Time: 02:20 PM, Friday May 7, 2021 – Session Room 2
This presentation will focus on using drones as part of a photogrammetric method in Newfoundland's boreal forest. These surveys will create spatial data for a mapping project on Beothuk house-pits in the Exploits River Valley. Many of the difficulties encountered during this project are the effect of dense tree cover and low-level vegetation. Among these difficulties, lousy lighting and root disturbance can make interpretations of house-pits' microtopography much more difficult.

Despite these issues, the internal architecture of Beothuk house-pits is visible from the image-based models. The internal architectures are then delineated using raster products from image-based modeling. This presentation will discuss how the method was adapted for use in the boreal forest and how this impacts the data and interpretations produced.

Woywitka, Robin and Benjaman Michalchuk (MacEwan University)
Digital terrain analysis as an archaeological site prospection tool in the central ice-free corridor, western Alberta
Session: Advancing Method and Theory in Canadian Spatial Archaeology II: Remote Sensing, GIS, and Landscapes
Time: 03:10 PM, Friday May 7, 2021 – Session Room 1
Recent studies indicate that a viable biome for human habitation was established in the ice-free corridor (IFC) of western Canada by ca. 13,000 years ago. Although opinions vary on whether the IFC should again be considered a candidate for the initial dispersal of humans into North America, this work has stimulated a resurgence of interest in the IFC. Did people initially move into the area from south or north of the ice sheets? How do people adapt to newly deglaciated terrain? Despite the significance of these questions, our ability to address them is limited by a dearth of intact sites that can be dated to the deglacial period. Surprisingly, there have been very few systematic surveys of the IFC that attempt to fill this gap in the archaeological record. We address this by developing a digital terrain analysis approach to archaeological survey in the central IFC in western Alberta. We incorporate high resolution digital elevation models, surficial geology mapping, and archaeological data to identify landscape settings and sedimentary contexts where sites of deglacial age are likely to be preserved. The result is a geomorphological map that can help guide future survey for deglacial aged sites in the central ice-free corridor.

Yanicki, Gabriel (Canadian Museum of History) and William T. D. Wadsworth (Institute of Prairie and Indigenous Archaeology, University of Alberta)
Wally's Beach I: Stratigraphic Interpretations
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 02:50 PM, Thursday May 6, 2021 – Session Room 3

An ongoing archaeological program at Wally's Beach (DhPg-8) in southern Alberta is intended to assess the remaining potential for intact stratigraphy and cultural deposits at this actively eroding and highly significant Ice-Free Corridor site. Test excavations in 2018 revealed buried paleosols at various depths and locales, indicating that the landscape was once far more variable than the relatively flat surface topography would suggest. To help explain this stratigraphic variability, we present a landscape interpretation grounded in the identification of two features: a large infilled paleochannel identified by ground-penetrating radar in October 2019 and the plowed field that was inundated by the St. Mary Reservoir in 1953, intermittently intact on the surface and in some places now buried. The significance of surface and test excavation finds are discussed in relation to each. While Pleistocene and Holocene exposures are found to be less disparate than they might seem, the redeposit of ancient cultural materials over top of a historic surface illustrates the interpretive challenges related to past mechanical disturbance and ongoing displacement by wind and wave action at this site. Several key targets for future investigation are identified using these geochronological markers as a guide.

Yellowhorn, Eldon (Department of Indigenous Studies, Simon Fraser University, Burnaby, BC)
Heeding Calls to Action 71–76
Session: Commemorating Indian Residential Schools through Archaeology and Digital Heritage
Time: 03:30 PM, Friday May 7, 2021 – Session Room 3
Among the Calls to Action issued by the Truth and Reconciliation Commission in its Final Report in 2015, numbers 71–76 specifically address archaeology. Together they identify the way that the profession can mobilize its knowledge, expertise and resources to advance this effort. Setting right this injustice means that archaeologists have a unique perspective to offer to the national dialogue about reconciliation. Using archaeological methods and field work we will define our contribution to this conversation. However, embedded in the broad goals are some very personal stories of unresolved loss. We can also help bring resolution to these cases.

Zhang, Zhe
Where is the Beef? Aurochs Representation and Use in Neolithic Northeast China
Session: A Decade of Research at the Institute of Prairie Archaeology
Time: 03:40 PM, Thursday May 6, 2021 – Session Room 3
Aurochs, the wild ancestor of modern domesticated cattle, had been regarded as extinct by the end of the Pleistocene period in China. Recent findings at the Houtaomuga site in Jilin provide abundant evidence of their late persistence and their significance to human society in Neolithic China.

The site of Houtaomuga in Da'an County, Jilin province (northeastern China), was excavated during 2011-2015. The unique feature G2 is a circular trench that surrounded an entire village; aurochs bones were deposited inside the trench at a very high density. This research, based on a comprehensive study of aurochs remains, will explore the economic and ritual life in ancient China.

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