Sessions

The Two Worlds and Seven Generations of Archaeology in *Sauking Anishnaabekiing* (Bruce County)

Chairs: William Fitzgerald (SAAR Environmental Ltd.) and Holly Martelle (TMHC)

Saturday, November 4, 2023, 8:40 am – 12:00 pm

Bruce County Museum & Cultural Centre, Bruce Power Theatre

From exposed Paleozoic bedrock to deep post-glacial sand dunes, the diverse landscapes of the southern Ontario outback of Bruce County provided opportunities and obstacles for Indigenous and Euro-Canadian settlers, and now challenges for archaeologists.

The roots of archaeology in Bruce County can be traced to an 1876 exchange between a Wiarton farmer and the Peabody Museum of Archaeology and Ethnology at Harvard University. Across the ensuing seven generations, Bruce County archaeology has morphed and miscegenated through phases of "Old School" investigative archaeology to 21st century "CRM" compliance archaeology.

For "CRM" consultant archaeologists unfamiliar with the area's true cultural potential and bound by provincially-generic 2011 Standards (not Guidelines), surviving – frequently well-hidden, heritage resources in Bruce County have ever been threatened by the onslaught of residential, infrastructure, commercial, and industrial developments. The rigorous implementation of enhanced, regionally-specific archaeological standards combined with Saugeen Ojibway Nation engagement should mitigate these impacts.

Archaeology and cultural heritage revelations in Bruce County have had a rich past and challenging present, and will have a hopeful future.

Archaeological and Indigenous Perspectives on Ancient Gathering Places

Chairs: Peter Timmins (Western University) and Jessica Russell (Parslow Heritage Consultants)

Saturday, November 4, 2023, 8:40 am – 3:00 pm

Southampton Town Hall

As archaeologists, we often have the opportunity to conduct research on multicomponent sites that reveal themselves as ancient gathering places that have been visited by multiple groups, sometimes over the course of several millennia. This session will consider archaeological sites and locales that provide evidence for long-term use and explore underlying reasons for their popularity over time. Papers are invited that explore themes including but not limited to related to memory, traditional ecological knowledge, Indigenous cultural landscapes, interaction, subsistence strategies, raw material procurement and seasonal rounds.

The Tools of Tomorrow, Helping Us Understand Yesterday: Empowering Archaeological Research with Affordable Remote Sensing Tools

Chair: Issac Bender (Western University)

Sunday, November 5, 2023, 9:00 am – 11:20 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Rapid consumer-driven advancements in technology have drastically reduced the cost of previously inaccessible tools for archaeological reconnaissance, documentation, and interpretation, making them available to a wider range of researchers. Graduate students with limited funding, avocational archaeologists, and communities driven by a desire to preserve and understand their cultural heritage can now harness affordable tools like drones with high-resolution cameras, smartphone LiDAR scanners, and user-friendly GIS software. This session looks to explore this newfound accessibility and how it presents a remarkable opportunity to empower researchers to explore diverse research topics within various budgets, overcoming the constraints imposed by limited equipment.

The Future of Ontario's Past: Gathering to Consider Archaeology and Critical Heritage

Chairs: Robert MacDonald (Archaeological Services Inc) and Katherine Patton (University of Toronto)

Sunday, November 5, 2023, 8:40 am – 12:00 pm

Southampton Town Hall

The OAS symposium has always provided a welcoming venue for students and early career professionals to share their work and ideas with peers and mentors. This tradition has been strongly endorsed by academic and professional mentors who have provided logistical, financial, and scholarly support to generations of young archaeologists. To celebrate this fifty-year tradition of gathering, this session—jointly hosted by the University of Toronto Archaeology Centre and the Trent University Archaeological Research Centre—will showcase the work of current students and young professionals and facilitate dialogue among them on the future of Ontario archaeology. We have selected this expansive theme to invite presentations ranging from explorations of archaeological method and theory to substantive contributions concerning past lifeways, culture history, and culture process. We also invite presentations that address the mobilization of archaeological knowledge as it relates to cultural heritage and especially the critical exploration of heritage as a social/political/cultural construct. We encourage participation by practitioners who identify with descendant communities, especially Indigenous students and professionals, or with other segments of society not well represented in traditional archaeological scholarship. It is our hope that this session will foster a stimulating dialogue amongst participants and contribute to a memorable and formative symposium experience where lifelong friendships and professional relationships are established.

Paper Abstracts

Abdulaziz, Ienas (University of Toronto, Mississauga), Hazim Bakri (University of Toronto, Mississauga), Anjali Bhurji (University of Toronto, Mississauga), Kayla Mander (University of Toronto, Mississauga), Lena Sherwood (University of Toronto, Mississauga)

Sunday, November 5, 2023, 11:40 am – 12:00 pm

Southampton Town Hall

Exploring Historical Indigenous Fisheries Using a Humanities Based Approach

The Jackman Scholars in Residence program at the University of Toronto offers undergraduate students the opportunity to work intensively on a humanities or qualitative social science question over the course of four weeks in the summer. In May 2023, five students from second through fourth year collaborated on a project to research Wendat fisheries using historical sources, archaeological reports, and government documents, under the supervision of Dr. Alicia Hawkins. This project differs from traditional student work in that it did not involve either field work or lab analysis. In this paper, we describe our experiences and findings of this in progress work. We examined secondary documents, then tracked back to original ethnohistorical documents from the seventeenth century. We examined how the presence and abundance of fish has changed in the waterways of present-day Simcoe County by looking at historical catch data. From archaeological reports, we drew out information about the technology of fishing, trying to link the nature of artifacts with the tools needed for fishing. The program's humanities-based approach allowed us, with diverse academic backgrounds to come together to contribute in different ways to the study.

Armstrong, Aidan (University of Toronto)

Sunday, November 5, 2023, 11:20 am – 11:40 am

Southampton Town Hall

Imaging Simulated Clandestine Graves With Ground-Penetrating Radar: Comparing Signals From Buried Pig and Human Cadavers

Interpreting ground-penetrating radar (GPR) signals in searches for clandestine graves is challenging as radar reflection depends on transient soil properties. Published studies accessing radar signals from simulated graves have mainly used pig carcasses as proxies which may not adequately compare to human cadavers. This study presents a comparative analysis of GPR signals over simulated clandestine graves with both pig and will-donated human remains. Six graves were established at the REST[ES] taphonomy facility near Trois-Rivières, Quebec in May 2022 with two pig graves, two human graves, and two control graves. The graves were 2 x 1 m and 75 cm deep. We conducted 250 MHz GPR surveys before and directly after burial, and at selected times over the following year. We were able to discern signatures from the graves by

contrasting them to the preburial survey. However, without this preburial survey, the reflections within the six graves would not be unique to their surroundings. These reflections were not distinct within grave types (pig, human, control). They also changed irregularly over time within and between grave types. Nevertheless, certain reflection patterns were frequently observed. We classified these reflections into a scheme of five patterns that describe our observations: two distinct hyperbolic reflections, a surficial v-shaped reflection, a general increase in amplitude contrast within the grave, and increasing homogeneity. We used this classification scheme to interpret the signatures as a composite of reflection patterns that are produced by not only a cadaver but also the contrasts from backfilled sediment, grave walls, and changes in preferential penetration of water. Our scheme describes the evolving signatures of the entire graves over time and could be used to identify burials in archaeological or forensic investigations. However, our results so far cannot differentiate the GPR signatures from pig and human remains and further work is therefore needed.

Bender, Isaac (Western University)

Sunday, November 5, 2023, 10:40 am – 11:00 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Using Affordable RGB Photogrammetry for High-Resolution Cemetery Mapping

Advances in aerial imaging technologies, digital imaging, and software have put photogrammetry in a position to generate results comparable to other, more expensive, high-resolution surface- mapping technologies, at significantly lower costs. This paper explores the question of how to properly mobilize affordable and accessible small remotely piloted aircraft system (sRPAS) photography technology to enable researchers bound by budgetary constraints to document cemeteries or other sites with cultural heritage value or interest. While other point-cloud- generating surface-mapping tools, such as LiDAR, have a proven track record in producing high- resolution topographic mapping and modeling, a major pitfall is that it generally requires expensive equipment. Through the application of simple photogrammetric methodologies, the author created a three-dimensional map with approximately 3 cm resolution in all three axes without additional processing of the point cloud or digital surface model. While this may not be sufficient for identifying, for example, more subtle cemetery features, such as unmarked burials, it shows promise for being a cost-effective and accessible solution for producing high-resolution topographic maps.

Cristos, Katrina (University of Toronto)

Sunday, November 5, 2023, 11:00 am – 11:20 am

Southampton Town Hall

Electrical Resistivity Imaging of Simulated Graves With Experimentally Buried Human And Pig Remains

Electrical resistivity imaging (ERI) is an underutilized technique in the search for buried human remains both in forensic and archaeological contexts. Published studies assessing ERI signals from graves have relied on pigs as a proxy for human remains which may not be representative. This study assesses the changes in resistivity signals in graves over time and compares signals from pig graves and human graves. To do this, we dug six graves in silty sandy soil in May 2022 at the REST[ES] research site in southern Quebec: two for will-donated human bodies, two for pigs, and two empty control graves. Directly before and after burial, as well as several times over the past year, we conducted ERI surveys over these graves. One month after burial, all graves were associated with a negative resistivity anomaly; resistivity decreased by at least 60% within the graves. The empty graves dropped from about 400 Ωm to 130-150 Ωm (human control grave) and 700 Ωm to 200-300 Ωm (pig control grave) and have remained at these levels until the time of writing. Since September 2022, all graves containing remains have shown consistently lower values of resistivity than the control graves, ranging from 20 to 125 Ωm. When comparing pig and human grave anomalies using timelapse inversions, we find that anomalies associated with pigs tend to spread farther outside of the graves than those associated with humans. We interpret that preferential infiltration of water lowers resistivity in all graves. In addition, release of decomposition fluids since September 2022 has further decreased the resistivity in the graves containing remains, and we postulate that the pig remains produce more leachate. Our findings suggest that ERI is suitable for imaging simulated human clandestine graves, that graves with remains produce a lower resistivity, and that there are observable differences between pig and human burials. Thus our study promotes the use of ERI in archaeological and forensic investigations.

Donker, Lauren (McMaster University)

Sunday, November 5, 2023, 10:40 am – 11:00 am

Southampton Town Hall

Monuments Produced by the St. Thomas White Bronze Company as a Fashion Trend

Like art and clothing, the disposal of the dead is a realm of human practice subject to fads and changing fashion. While scholars have examined the influence of fashion on mortuary practice, few have been able to in a specific manner because controlled datasets are largely unavailable. The grave markers produced between 1883-1901 by the St. Thomas White Bronze Company—made of zinc and given the misnomer “White Bronze”— provide an exceptional opportunity to rectify this. The monuments bear the commemorated individual’s death date, and would have been erected shortly thereafter, the manufacturer’s location is known, and census records provide consumer’s details. Using age, gender, religion and social class, this paper assesses competitive mortuary display, ostentation and novelty, and the agency of individuals and broader social categories in effecting changes. In comparing individuals who purchased White Bronze, a unique and novel type, to those who purchased contemporary traditional monuments, I argue that women were more conscious of novel fashion trends and selected White Bronze to acquire

prestige. The results broaden our understanding of the personally motivated choices of specific people which set fashion trends in motion.

Ertemin, Dygu (McMaster University) and Richard Zane-Smith

Sunday, November 5, 2023, 9:20 am – 9:40 am

Southampton Town Hall

Generationally-Linked Archaeology in Ontario: A Collaborative Experimental Approach to Neutral Shell Tempered Pottery Analysis

This paper bridges the gap between archaeological science and Indigenous ways of knowing through a collaborative study led by archaeological scientist Duygu Ertemin and Elder Richard Zane Smith, a Wyandot potter and knowledge keeper. Focusing on 17th-century shell tempered pottery from Neutral Iroquoian-speaking groups at Christianson, Hamilton, and Fonger sites, housed at McMaster University's Sustainable Archaeology laboratory, the research combines experimental replication and scientific analysis. In this paper, we present our methodological approaches, the challenges faced, and lessons learned, emphasizing the potential of collaborative approaches for the future of Ontario Archaeology, and Indigenous heritage material studies. Previous archaeological studies attributed the emergence of shell-tempered pottery in Neutralia, what is today Southern Ontario, to population movements, but lacked Indigenous perspectives. Our collaborative effort unravels the complexities of past Indigenous lifeways, exploring variations in temper and paste preparation practices. Through experimental reconstruction, we create a gathering space to practice and replicate Neutral Indigenous pottery techniques together. The knowledge produced in this collaborative effort will be used in future laboratory analyses planned for this research, such as Use-Wear and Scanning Electron Microscopy Coupled with Energy Dispersive X-ray (SEM-EDS), to interpret the technological choices of the Neutral potters. The experimental approach of our collaboration will also establish a reference collection for 'non-destructive' Indigenous ceramic technology analyses, addressing Six Nations communities' concerns about heritage material preservation

Fisher, Jacqueline (Fisher Archaeological Consulting)

Saturday, November 4, 2023, 9:40 am – 10:00 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Two Minds, Two Worlds – Straddling Bruce County Archaeology from a Research versus a CRM Perspective

Having been a part of the archaeological community for decades (how did that happen?), I have been privileged to work within Saugeen Ojibway Nation’s Territory in both a research and CRM capacity. Fieldwork for my survey research along the Penatangore River watershed, taking part in teaching grade school children at the Dunk’s Bay site, and being a part of research excavations

led by Jim Molnar and Bill Fitzgerald at Nochemowenaing are compared with the many CRM driven projects in the Territory with more notable ones being the River Mouth Speaks site and Lion's Head. Old School versus modern CRM make for an interesting comparison.

Fitzgerald, William (SAAR Environmental Ltd)

Saturday, November 4, 2023, 8:40 am – 9:00 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Zhaagnaash Cometh: The Evolution of Bruce County Archaeology

Bruce County's Indigenous archaeological history unfolds across three centuries. Of note, several research archaeologists grew their reputations between the 1950s and early-1970s on a handful of Bruce County sites spanning the Late Archaic through Late Woodland. All of these sites, though, had been discovered, initially investigated, and reported to research institutions by a furniture maker, bacteriologist, and dentist. Compounding Bruce County's stunted archaeological growth and cultural understanding have been largely unchallenged stereotypes adopted by, expanded upon, and perpetuated by research archaeologists and later by their CRM progeny. Neglected by research archaeologists of the third quarter of the 20th century – with one notable black-balled exception, it has been, however, somewhat ironically, CRM archaeologists of the late-20th and early-21st centuries who are infilling what has been for the most part an archaeological *terra incognita*.

Fitzgerald, William (SAAR Environmental Ltd), Helen Sluis, Shelby Haggerty (Archaeological Research Associates Ltd), Janqueline Fisher (Fisher Archaeological Consulting), and James Molnar (Fisher Archaeological Consulting)

Saturday, November 4, 2023, 9:20 am – 9:40 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Wash-meh aa-wan e-yoo dash waab-shki moo-wish: Indigenous Cherts of Bruce County (So Far)

As early as 1848 and throughout the 20th century, geologists have identified primary chert outcrops in Bruce County. While revisions to Paleozoic geological lithofacies classifications have evolved, what naming system is used for distinct geological formations and members is culturally irrelevant. Regardless of the name assigned by geologists to a distinctive unit, changing scientific designations would have had no impact on the cherts that were or could have been harvested in the past. Knowledge of the geographical location of cherts is what matters and should have been the principal concern of archaeologists past and present. Especially when chert sourcing is used to reconstruct past Indigenous cultural activities involving Bruce County, it is implicit that archaeologists must be aware and capable of properly identifying known local and non-local cherts and their Bruce County archaeological occurrences. Presented here is a selection of documented Bruce County chert outcrops.

Ginson, Grant (Trent University)

Sunday, November 5, 2023, 9:20 am – 9:40 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

A Ruler or a Computer? A Comparative Study of Digital and Analog Mapping Techniques

Recent technological developments have created a multitude of methods to record archaeological data. From photogrammetry to laser scanning, there are more ways than ever to record archaeological excavations. At the same time the traditional pen and paper methods are still often used in the field, usually because they are seen as quicker and do not require a familiarity with or purchase of any sort of specialized software. To evaluate these methods strengths and weaknesses; digitized drawings of a Victorian drain pipe were created with both traditional and modern recording methods. The drawings were then compared with each other examining the time to make, the residuals from being referenced and the general variance in shape of the individual stones of its construction.

Homerski, Nathan

Sunday, November 5, 2023, 9:40 am – 10:00 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Identification, Education, and Outreach: Building and Standardizing Digital Collections with Photogrammetry

Due to the technological advancements of the past decade, 3D modeling is increasingly becoming more accessible to both public use and low-funding research. However, even with the low costs and the ease with which to use these new technologies, archaeology in Ontario has still been slow to adopt new 3D modeling techniques. One method in particular, photogrammetry, has a wide range of applications within the field of archaeology. This presentation will discuss one avenue of small-scale photogrammetry application: the creation of a 3D model database of diagnostic points to aid in the organization and cataloguing process within our discipline. Many scattered, limited collections of 3D modeled artifacts can be found online (e.g., Sketchfab), though there exists little cohesive documentation or contextualization to accompany them. Through a collaborative effort to create a database of diagnostic points, potential lies therein to develop an extremely powerful tool to apply 21st-century technology to artifact identification. Furthermore, an accessible, digital collection of cultural heritage can allow for greater public outreach and education.

Jamieson, Jordan (Mississauga of the Credit First Nation Field Liaison Representative)

Saturday, November 4, 2023, 2:20 pm – 2:40 pm

Southampton Town Hall

The Good Credit Indians – Archaeology from an Indigenous Perspective

For many indigenous communities there is an unseen cost of entry when trying to become involved in their cultural materials, and it comes in the form of compromising on their values from a cultural perspective. I look to share from personal experience the difficulties and obstacles of becoming involved in the archaeological process, as well as the benefits and tremendous upsides it brings.

To begin we must first recognize the foundational difference between the indigenous perspective and the western perspective. How heavy influenced the outlook our cultural materials are viewed through that western lens, supported by legislation that is stemmed from colonialism. Next, the importance of building relationships to the descendant communities, in whose cultural materials we work in. Not only that but pushing to evolve the relationships into meaningful change and building the capacity in which communities can become in control of their cultural materials.

As we look to better understand the past through archaeological materials, it's imperative that we begin to recognize the disparity and open the conversation of how we view, curate and interpret those cultural materials and remains.

Martelle, Holly (TMHC)

Saturday, November 4, 2023, 11:20 am – 11:40 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

The After Times: Thinking About a New Generation of Archaeology Without the MCM

The current state of CRM archaeology in Bruce County offers a glimpse into what the next generation of our "industry" could become in a post-MCM world. There is no better case study to consider the value and appropriateness of provincially-dictated standards and guidelines, or MCM *ad hoc* versions thereof, for almost every aspect of archaeological projects. The rigorous, regionally-specific archaeological standards set by the Saugeen Ojibway Nation are now the requirements that archaeologists working in the County must follow, making MCM acceptance (with or without technical review) relatively meaningless in a development context. Similar situations have been unfolding across the province where municipalities, Indigenous and Descendant communities are having more say in how archaeology is done, where, and why. One wonders what role, if any, remains for the MCM, now a regulatory body that appears more disconnected than ever from the participants and practices in the archaeological endeavor. But can archaeology move forward without them? If so, what does that look like?

Martin, Scott (Sustainable Archaeology McMaster)

Saturday, November 4, 2023, 11:20 am – 11:40 am

Southampton Town Hall

Nursery (AhGx-8): The North Shore Landing

Nursery (AhGx-8) is a site that has revealed itself slowly over years investigation. It still remains challenging to define its 'site type'. It likely served many and diverse purposes over the millennia. Many of its artefacts, too, are minute and non-diagnostic, left by those who remain anonymous. The ancestors of at least two communities, of at least two different traditions, appear to have lived and worked at this site, albeit not simultaneously. This offering will provide an overview of archaeological work at the site and current interpretations of it as a rest stop, a trailhead, a gathering place connecting land and lake.

Meade, Matt (Bruce County), Jack Van Dorp (Bruce County), Josh Dent (TMHC), and Holly Martelle (TMHC)

Saturday, November 4, 2023, 10:40 am – 11:00 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Co-Managing Archaeological Potential in the Peninsula and Beyond: Bruce County's Archaeological Management Plan

Working with the Saugeen Ojibway Nation (SON) and the Historic Saugeen Metis (HSM), Bruce County and TMHC Inc. recently created an Archaeological Management Plan (AMP) for the county. Both SON and HSM actively participated in all facets of the process, providing input on the AMP, which benefitted greatly from the region-specific archaeological expertise of these Indigenous collaborators and their advisors. Important in the process was the recognition of the unique character of the Bruce and its archaeological record. Just less than 400 archaeological sites have been registered in the county. Almost as many are known but not registered. A major component in the development of the potential model was creating site leads for sites identified by avocational archaeologists like Donald Shutt. Another challenge was the gross inaccuracy of site location data in the Ministry of Citizenship and Multiculturalism (MCM) database and the need to make significant corrections before the model could be generated. For SON, HSM, TMHC Inc., and the County of Bruce, the AMP was an exercise in relationship building and addressing shortcomings in the current data and planning process. Conversations between the County, SON, and HSM regarding the co-management of archaeological potential are anticipated to continue, as issues arise, and new data becomes available.

Meekins, Juanita (Parks Canada) and Emily Martin (The Firelight Group)

Saturday, November 4, 2023, 11:00 am – 11:20 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Ceremony and Consent: The Cultural and Monetary Costs of Archaeology

Archaeology is the work of disturbing ancestors from their resting places and unearthing fragments of the lives that have come before us. For this reason, archaeology in this area,

Saugeen Ojibway Nation Territory, is both deeply personal and spiritual for members of the Saugeen Ojibway Nation. It is fundamental that this work be done in a culturally relevant way, with profound respect, and with the close involvement and consent of the descendants of those ancestors.

The baseline duty to consult and accommodate (Canada's constitution, 1982), fortified by the United Nations Declaration on the Rights of Indigenous Peoples' requirement for consent, speaks to the necessary role for Indigenous peoples on whose territories' disturbance associated with proposed development, including archaeology, occurs. Though legal requirements, expectations, and pace of development have all dramatically increased, resourcing for Indigenous Nations' labour in these processes has not kept pace. Though a lack of resources does not dissolve these requirements, it does add undue stress to a nascent system and limits its possibilities.

Menary, Chris (WSP)

Sunday, November 5, 2023, 9:00 am – 9:20 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Free and Open-Source Resources for Archaeological GIS Analysis

Over the past decade, federal and provincial governments have undertaken large-scale Lidar surveys and made the data publicly accessible. Combined with QGIS, a free GIS platform, it is now possible to conduct archaeological remote sensing without paying for software or data. This session will explore the numerous Open Data platforms, the available data, the software, and how anyone can now be a GIS analyst.

McGuire, Jenna (Historic Saugeen Métis Centre)

Saturday, November 4, 2023, 2:00 pm – 2:20 pm

Southampton Town Hall

Letting the Beads Speak: Investigations into woven Métis beadwork specimens from Southampton, ON

Beadwork and quillwork material cultural practices often go far beyond decorative function. They can be used for expressions of love, honouring other beings, part of ceremonial structure and as devices of remembrance and teaching. Sometime in the 1880's, two beadwork strips were completed by Joseph Longe III, a Métis cooper from Southampton Ontario. Josephs father was born in the Red River area of Manitoba and the entire family were fur traders throughout the Great Lakes, but particularly out of the Saugeen River, Lake Huron. Josephs beads represent a unique look into Métis culture and diaspora communities. Over a half dozen symbols are illuminated in the beads. This study investigates some of the possible interpretations of the symbols, colours and function of the beaded strips and how these interpretations can help inform understanding of local Métis culture and identity. We also examine how beadwork and similar

material cultural practices can be a vehicle for cultural reclamation and reviving traditional teachings.

Molnar, James (Fisher Archaeological Consulting) and William Fitzgerald (SAAR Environmental Ltd)

Saturday, November 4, 2023, 9:00 am – 9:20 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

More than a Good Place to Fish: Revealing Nochemowenaing

Small-scale archaeological excavations at Hunter's Point between 1990 and 1992, in 1994, and burial investigations between 1996 and 1998 revealed the point to be more than what the Ministry of Citizenship, Culture and Recreation and Ministry of Consumer and Commercial Relations considered to be a seasonal resource procurement site that could be sacrificed. The Hunter's Point (BfHg-3) site – subsequently named *Nochemowenaing* by the Chippewas of Nawash Unceded First Nation, was brought to light as a multicomponent concentration of habitation, ritual, and burial activity spanning the Middle Woodland period through late-19th century. The point has since become a protected area co-managed by the Chippewas of Nawash and Ontario Heritage Trust where traditional *Anishinaabe* ceremonial activities are once again practised.

Moody, John F. (TMHC)

Sunday, November 5, 2023, 11:00 am – 11:20 am

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Enhancing Efficiency and Resolution in Cultural Resource Management Archaeology: The Promise of Low-Cost Photogrammetry

One of the biggest challenges of cultural resource management (CRM) archaeology is capturing comprehensive data about the past while operating under time and budget constraints. This paper introduces an initiative undertaken by TMHC Inc. to confront this challenge by integrating low-cost photogrammetry within an Ontario CRM context. During the 2023 field season, TMHC conducted Stage 3 and 4 excavations within Moss Park in downtown Toronto, which revealed extensive remains of 19th century residential and commercial buildings. Our findings reveal that low-cost photogrammetry can surpass traditional recording practices by offering enhanced data quality and resolution, potentially within significantly reduced timeframes. However, the adoption of this approach was not without its own challenges. Our research underscores the transformative impact of this technology, promising a more efficient and data-rich future for cultural resource management archaeology.

Racher, Paul (Archaeological Research Associates Ltd)

Saturday, November 4, 2023, 11:40 am – 12:00 pm

Bruce County Museum & Cultural Centre, Bruce Power Theatre

Idle Some More: Or Why Everyone but the Province Seems to Understand that Archaeology Needs to Decolonize

Since the earliest days of CRM in Ontario, the province's objectives for the system by which it manages the archaeological past have been unclear. Ostensibly laudable goals such as site preservation or contributing to our understanding of history are so rarely achieved that they present more as an unintended bug than a feature of the system. For the cynics among us, which is to say almost all of us now, it seems clear that its actual purpose was to get archaeological heritage, particularly of the Indigenous sort, out of the way – while doing so under the cover of an orderly bureaucratic organization. Five decades on now, it is no longer possible to look past the foundational contradiction which was always present: that CRM archaeology in Ontario is a Colonizer government, employing Colonizer professionals, to scrub Indigenous heritage from the landscape within a system which was designed to disadvantage Indigenous interests. It's tempting to think that, when such a truth becomes clear, it would be a catalyst for change. But as much as the MCM's system frustrates, disappoints, wounds, and sickens the archaeological and Indigenous communities alike, the "machine" continues to run exactly as it was intended to: serving the economic growth interests of the Province of Ontario. We archaeologists have been the province's henchmen for too long now – doing the hands-on dirty-work of putting their policies into practice. Is it time for an uprising?

Russell, Jessica (Parslow Heritage Consultants)

Saturday, November 4, 2023, 9:00 am – 9:20 am

Southampton Town Hall

Ridge Pine 3: A Multi-component Archaic Site in a Resource-rich Landscape

The Ridge Pine 3 (AhHk-137) site is located on the eastern edge of Grand Bend in the Ausable Valley, about 1.3 km inland from Lake Huron. The primary occupation of the site occurred during the Late Archaic Narrow Point complex. There is also evidence of multiple occupations likely occurring at the site during the Early Archaic, the late Middle Archaic, and the Late Archaic Small Point complex. This place was continually returned to throughout the Archaic and can provide insight into why people choose to return to certain places through time. This presentation will go through the evidence for multiple occupations at Ridge Pine 3 as well as the reconstruction of the paleoenvironment to understand why groups continued to return to the Ausable Valley over a long period of time. Sites in the vicinity will be briefly discussed to emphasize the importance of this area for people choosing to inhabit it. Indigenous knowledge, historical research into treaties, and Indigenous-led archaeology provide examples of this area being used as a gathering place and having significance through time.

Severn, Matthew (TMHC)

Saturday, November 4, 2023, 9:20 am – 9:40 am

Southampton Town Hall

The Call of the Lake: Lake Wawanosh as a Place to Return To

Lake Wawanosh once existed east of what is now Sarnia until its draining in the 1880s. While this lake is no longer present upon the landscape, numerous Indigenous sites have been identified which reveal the lake's former shoreline. These sites further impart the lake's significance as a place people returned to throughout the deep past. Through my own thesis research, I focused on two such sites that once bordered the shore: The cultural material recovered from these sites suggest occupations that span the Woodland Period indicating the significance of the land traversed time.

Thistle-Hill, Cole (Six Nations Archaeological Community Monitor)

Saturday, November 4, 2023, 9:40 am – 10:00 am

Southampton Town Hall

Southern Ontario Chert and its Connection to Gathering Places

Indigenous gathering land uses are proven through evidence since times immemorial. Materials today are examined by archaeologists to provide the story of time and how Indigenous communities have been impacted over time with the loss of material uses. On archaeological sites across southern Ontario, the prominent artifacts being collected are lithic reduction which highlights the extensive use and importance of this workable material across time.

Southern Ontario is spoiled with workable material, cherts, chalcedony, quartz, quartzites and agates. Much of Ontario has seen an intense level of development, and this has reshaped many of the known chert sources. The explanation is described with investigation of resources, such as the Kettle Point outcrop which is found in Southwestern Ontario along the Lake Huron shore.

These workable materials are utilized for traditional uses throughout these eras and provide context by showing trajectory of time by the tool use and changes in practices over time periods. Learning Traditional practices and teachings is important to me and having the ability to utilize the same materials that were being used thousands of years ago, experiencing and feeling the connection through time with what the hardships of day-to-day life would be like.

Thomas, Jessica (Parslow Heritage Consultants)

Saturday, November 4, 2023, 1:40 pm – 2:00 pm

Southampton Town Hall

"Yeah, I've been to Europe before": A Discussion About North American Indigeneity on Saint Pierre Island, St. Pierre et Miquelon, France

Currently under the jurisdiction of France, though located 20 km away from the southern coast of Newfoundland, the Territorial Collectivity of Saint Pierre and Miquelon has passed between English and French governments for centuries. St. Pierre Island, the main island of the archipelago is home to the southernmost known paleo-Eskimo site and is still a gathering place for many cultures. Through the discussion of Indigenous land use on the main Island of St. Pierre, kinship with the multicultural settler population (both historic and contemporary), and the role contemporary archaeologists play in conducting and disseminating research (such as the L'Anse-à-Henry and Anse à Bertrand sites), the presence of Indigenous North Americans on the islands has remained consistent throughout the centuries. The study of St Pierre and Miquelon opens up further discussion on the role of North American Indigeneity within a European context.

Timmins, Peter (Western University)

Saturday, November 4, 2023, 8:40 am – 9:00 am

Southampton Town Hall

A Nice Place to Visit and a Great Place to Live: The Grand Bend Area as an Ancient Gathering Place

This paper will discuss the archaeology of the southeastern shoreline of Lake Huron in the vicinity of the modern community of Grand Bend, Ontario. The significance of the Grand Bend area as an important locale in precontact times has been highlighted by a combination of academic and CRM projects. The paper will review recent archaeological discoveries, discuss their environmental context, and explore the appeal of the Grand Bend area over the millennia.

van Beek, Nicholas (Trent University)

Sunday, November 5, 2023, 9:00 am – 9:20 am

Southampton Town Hall

Panorama: Finding Artifacts while Lost in History, Perspectives on Heritage from the Humanities

From artifacts assemblages to DNA tests Settler-Indigenous dichotomies make visible and structure understandings and practices of heritage as public discourse. This is central to archaeology in Ontario as private CHM firms, public sector actors, and researchers are interconnected with and monitored by First Nations and Indigenous peoples. Two-Row Wampum, Two-Eyed Seeing and other conceptions speak of respectful relationships as separate worlds alongside one another while public discourse of imposters and of cultural appropriation warn of transgressions. This paper explores threads of perspective within European and

international traditions of the humanities developed outside of or in the ruins of progressive visions of history, which shed light on the role of this history in giving retrospective authority to this dichotomy. This includes relationships with material remnants, time, memory, landscapes, and trauma. Exploration of perspective from these ruins is contemplative of whether a vision outside of progressive history, which continues to anchor a broadly Canadian experience, is desirable or even attainable by archaeologists and heritage practitioners as aims of the Truth and Reconciliation Commission are negotiated in our workplaces and wider contexts.

Warner, Logan (Trent University)

Sunday, November 5, 2023, 9:40 am – 10:00 am

Southampton Town Hall

Understanding Toronto's Transit Archaeology with Post-Structuralism

Public transit development presents itself as a tool to examine archaeological theory, due in part to the inherent dichotomy between development of the new and archaeology of the old. Cutting edge transit projects embody a contemporary technological and cultural pinnacle, more so than typical housing developments due to their technical nature and essential services provided. Born of a dedication to Toronto's metropolitan potential, the Toronto Transit Commission itself is the embodiment of early 20th century innovation and mid-century development-forward ideology. Crucially, though public transit projects reconstruct the urban environment, their development is destructive of the natural landscape, and importantly, the cultural resources embedded. When transit projects intersect with archaeology, those developing infrastructure of the future are forced to face the past, making the relationship between these forces even more concerning.

Warrick, Gary (York University)

Saturday, November 4, 2023, 10:40 am – 11:00 am

Southampton Town Hall

Archaeological Sites, Ancient Gathering Places, and Indigenous Cultural Landscapes in the Grand River Valley, Ontario.

The Grand River valley has been home for Indigenous peoples for over 13,000 years. Archaeological materials are near ubiquitous on either bank of the Grand River from Kitchener-Waterloo to Lake Erie. In certain locations, archaeological materials are densely concentrated in multicomponent sites, commonly interpreted as ancient gathering places and/or settlements. Ecological features of the immediate site environment can partially account for repeated use of a location over centuries or millennia, especially agricultural settlements, but fail to explain why locations with similar environmental settings contain little archaeological evidence. For the most part, archaeologists are good at finding high-density nodes (sites worthy of excavation) in the archaeological landscape, but are missing out on the majority of past human activity.

Multicomponent sites are simply high-density islands in a low-density sea of archaeological materials that we fail to find on a daily basis. Ancient gathering places need to be better placed in an Indigenous cultural landscape. This paper will provide an overview of the archaeological landscape and Indigenous cultural landscape of the Grand River valley, highlighting the importance of Indigenous involvement in the identification of Indigenous cultural heritage landscapes.

Wilson, Rosemary (Parslow Heritage Consultants)

Saturday, November 4, 2023, 11:40 am – 12:00 pm

Southampton Town Hall

Beeton P3: How the Ancient Landscape can Create a Place for Continuous Gathering

There are many important factors to consider when researching why an area of land became a popular gathering place for multiple Indigenous groups through time. This presentation will discuss one of those reasons: being the environment. The Beeton P3 (BaGw-82) site located in the town of New Tecumseth serves as an example of how an ancient landscape can make an area habitable for centuries to come. A CRM (cultural resource management) stage 3 excavation found that the site served as a gathering place for Indigenous groups throughout the Late Archaic and Middle Woodland periods. This was in part due to a glacial lake and subsequent river system which provided valuable resources to support such a consistent presence. Material culture evidence, such as lithics, will also be used to examine occupation at the Beeton P3 site over time. How a CRM stage 3 excavation of a site, which is done prior to a full site excavation (stage 4), can successfully determine whether a landscape had been continuously occupied will also be reflected upon.

Woodley, Philip (Western University)

Saturday, November 4, 2023, 11:00 am – 11:20 am

Southampton Town Hall

The Middle Woodland Occupation of the Christie Site (AhHa-61): Interpreting a Persistent Place

Christie (AhHa-61) is an unploughed site located outside of Ancaster, southcentral Ontario, with evidence of use over thousands of years. A principal, long period of use at the site encompasses most of the Middle Woodland period – making Christie a persistent place through the Middle Woodland era. This paper will review how this place was used and reused by the people who knew it as home and what these findings reflect about their lifeways, the regional cluster of Middle Woodland sites Christie was a part of, and what these findings suggest for other Middle Woodland sites across southern Ontario.

Poster Abstracts

Counter, Kelsey L. (Trent University)

Joint Pathology Examination: A Case Study in Arthritis

This joint pathology examination case study examines the remains of the A-5 skeleton from Trent University's teaching collection, a middle-aged adult male of European descent. This individual has extreme Osteoarthritis (OA) and Rheumatoid Arthritis (RA). A differential diagnosis of the remains studied determined if and where arthritis was seen and what type was represented. The examination of the joint pathologies of A-5 is important in understanding the severities of said pathologies.

Eady-Sitar, Lauryn E. and Jessica Z. Metcalfe (Lakehead University)

Sulfur Isotope Compositions Indicate Wetland Plant Consumption by Great Lakes Mammoths and Mastodons

Sulfur isotope values ($\delta^{34}S$) are used in archaeological research to make inferences about marine versus terrestrial diets, and more recently, wetland diets. Assessing post-mortem diagenetic alteration of ancient specimens is a crucial first step that requires further research. In this study, mammoth (*Mammuthus* spp.) and mastodon (*Mammut americanum*) bone, dentin, and cementum collagen samples from the Great Lakes region (n=20) are (1) evaluated for sulfur contamination and isotopic alteration, and (2) utilized to make inferences about proboscidean diets. To evaluate the preservation of the proboscidean samples, we utilized independent approaches involving quality controls (%S, C:S, and N:S) derived from modern collagen samples, and correlations between quality control variables and isotope values. After applying quality control criteria that lead us to exclude 4 proboscidean samples, all the remaining 16 proboscidean $\delta^{34}S$ values were negative. Mammoths and mastodons had similar maximum $\delta^{34}S$ values, but a number of mastodons had much lower $\delta^{34}S$ values. These results are consistent with the consumption of wetland plants by both taxa. A working hypothesis is that some mastodons had diets that included a very high proportion of wetland plants rooted in anoxic sediments.

Fransoo, Evelyn (University of Toronto)

Ontarian Tree Rings and Subsistence

The impacts of climate change are undeniable. The change of subsistence due to changing climate patterns is seen in the archaeological record, specifically in faunal remains. The primary paleoclimate data used include tree ring widths from various species synthesized from multiple dendrochronology studies. This poster reflects a course paper exploring possible relationships between changing environments in a small region in Ontario during the 13th to 19th centuries and subsistence patterns.

Khamis, Sarah

Traditional Knowledge and Artificial Intelligence (AI): A Comparison of Methodologies and its Wider Implications of Understanding Culture

The field of archaeology has been around for centuries. However, the introduction of AI has caused a monumental shift in the way archaeologists locate, assess, and interpret artifacts. Recently, researchers have concentrated on methods involving visual programming languages and AI to model diverse historical objects. Even LiDAR that was once simply sonar imaging can now access complex digital databases and highlight landscape features better than it once did before. The application of various tools, platforms and systems are other components for conducting archaeological research, analysis, and preservation. However, many archaeologists still rely on exclusively traditional models, ignoring the advances in the field. With the use of AI, archeologists can potentially produce the same results more efficiently. In addition to the benefits that AI brings to archaeology, there are still some issues when it comes to cultural privacy and bias in the community. This session will be a comparison of traditional methodology with newer advancements in AI.

Parent Eastwood, Savannah (Archaeological Services Inc.)

An Updated Approach to Archaeological Illustration

Archaeological illustration is an efficient and accessible way to highlight important features of an artifact while controlling the visibility of post-depositional changes which may obscure them. Illustrations are also becoming increasingly employed in publications which discuss sensitive artifacts for which photographs might be inappropriate. For many years, archaeologists have relied on analog methods using traditional tools and media such as simple rulers and pen and ink to complete publishable images of the artifacts they study. In this poster I will explain how, using skills developed in my 20-year career as a professional illustrator and artist, many of these processes can be done much more efficiently, accurately and aesthetically using a combination of digital media and photography.

The methods I have developed work well for many styles of illustration ranging from a simple graphic or stipple-shaded depiction to fully rendered digital painting in eye-catching colour. Access to high-resolution digital files can also allow researchers to share images more conveniently with co-authors and colleagues using platforms like Dropbox and Google Drive. As so much of our work as archaeologists moves toward the high-tech, the migration from pens and tracing paper toward expert digital illustration is a sensible and progressive choice.

Poernbacher, Breanne (McMaster University)

Pipe Facets: An Indicator of Low Socioeconomic Class or an Example of Researcher Bias?

Present-day pipe facet diagnosis is not currently standardized and involves macroscopically examining dentition for circular concave(s) on the occlusal surfaces of teeth. This subjective process presents potential confirmation bias; while there is a trend of pipe facets in 19th century

London being most prevalent in working-class populations, there are no rigorous methodologies for confirming this data is not contaminated by class stigmatization. The over-diagnosis of low-class populations amplifies the present-day assumption that impoverished people are careless with their health, allocating them away from necessary health aids. Some studies have begun considering secondary indicators (such as lingual tobacco staining), refine facet size and location, as well as consider microscopic abrasion analysis for diagnosing pipe facets. Where possible, such criteria is applied to the dental pathology descriptions and photographs (provided by the Wellcome Osteological Research Database) associated with five post-Medieval London cemeteries (St Bride's Lower, Cross Bones, St Mary and St Michael, St Benet Sherehog, and Chelsea Old Church). The first three cemeteries representing the low socioeconomic class all demonstrate high levels of confidence with pipe facet diagnosis, even with inconclusive evidence (such as the absence of mandibular and maxillary involvement). More careful diagnosis accounting for secondary factors predominates St Benet Sherehog's and Chelsea Old Church's data. While the absolute extent of misdiagnosis cannot be confirmed, there is evidence that pipe facets are magnified in low socioeconomic class populations and disregarded in the upper class.

Richer, Kyla (Trent University)

Compiling An Osteological Profile Despite Lack Of Excavation Documentation

This research project is focused on compiling an osteological profile of the Armoury Skeleton PA10 subadult. The project aims to identify the individual's age and possible pathologies, given the lack of documentation during the initial excavation and analysis of the site. The site is dated to between 1827 and 1854, and the remains were identified as Irish immigrants. Burial 10 has been given very little attention compared to the other burials. The skeletal remains were stored in a wooden box labelled PA 10A, and a catalogue of all the bones in the box was compiled. The age determination was done using three standard methods - the fusions of bones, the measurement of bone, and the eruption of teeth. The cranium was examined for pathologies finding the individual suffered from Hydrocephalus likely caused by an underlying condition. Finally, a differential diagnosis was done to identify the most likely conditions that could explain the pathologies present, Chiari Malformation type 2, Dandy-Walker Syndrome, or Aqueductal Stenosis.

Sayeed, Sarah (University of Toronto Mississauga)

An Archaeological Perspective on The Dental Hygiene Practices in Ontario From Late 19th and Early 20th Century

During the late 19th century, the Schreibers, a British-Canadian Family, built three houses- Iverholme, Lislehurst, and Mount Woodham, on property currently a part of the University of Toronto Mississauga (UTM) campus. The UTM'S archeological field school has been examining artifacts under the umbrella of the Schreiber Wood Project. Through this project, undergraduate students have been collecting and documenting artifacts from two sites- AjGw-534 and AjGw-

535 (Iverholme) associated with the Schreiber occupation. The project collection now includes approximately 20,000 artifacts, including dental hygiene products from the late 19th and early 20th century, such as bone toothbrushes and metal toothpaste tubes. This poster examines changes in dental hygiene from the late 19th to early 20th century and a shift towards the manufacture and use of Canadian-made products by settlers in Southern Ontario.