

## RESEARCH UPDATE

# An Early Hunter-Gatherer Cemetery in the Canadian Lower Great Lakes

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## Introduction

The timing and context of the first emergence of cemeteries is of broad interest to archaeologists who wish to understand and explain changes in social complexity in late hunter-gatherer societies. Eastern North America has a particularly informative archaeological record for generating insight into how and why relatively small scale communities transform into much larger and regionally integrated societies, especially as these major transformations occur prior to the emergence of maize-based polities about 800 years ago (Sassaman 2010). An important element of this record of cultural change is innovation, transmission and adoption of new ideas concerning mortuary practices, and variation in these rituals over time provides considerable insight into the organizational complexity of hunter-gatherer societies.

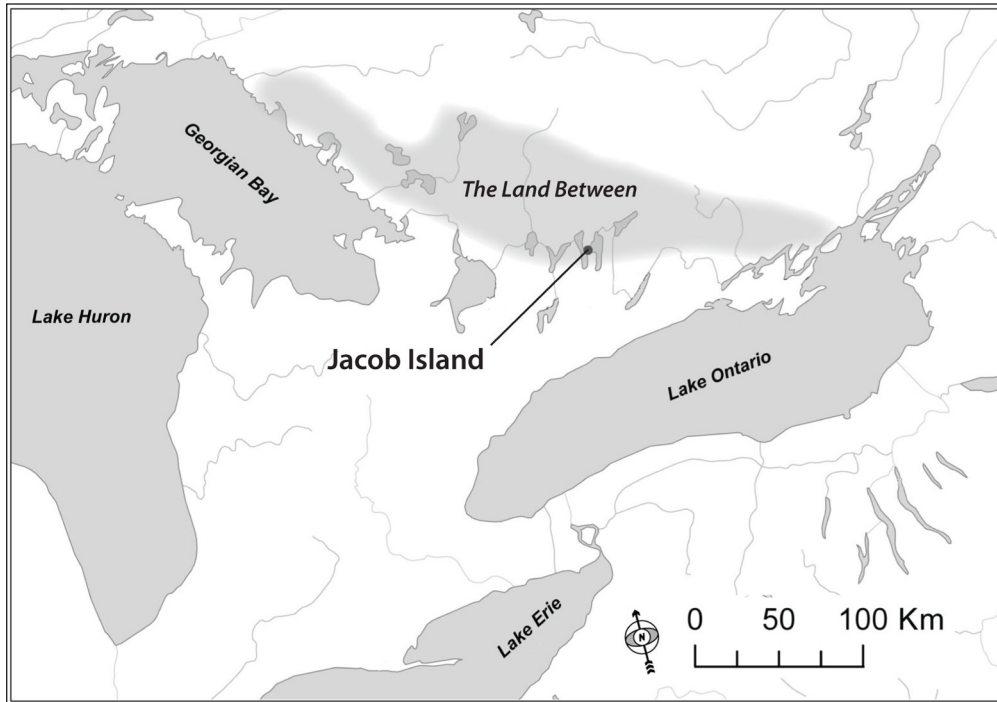
Although cemeteries are widely used during the Middle and Later Woodland periods (ca. 300 BC to AD 1600) in the lower Great Lakes region of North America, it is the changes that occur through the Late Archaic and Early Woodland periods—roughly 3000–300 BC—that are of particular concern. This is because this time frame is associated with what appears to be significant fluctuations in population density, the initial adoption of indigenous cultivars (squash, sunflower and goosefoot), increasing evidence for the

anthropogenic manipulation of local environments (e.g., construction of fish weirs, propagation of wild rice, and axes as well become common), the development of wide-reaching trade networks for acquisition of prestige materials such as copper, and accompanying hints of social status differentiation (Crawford 2014; Taché 2011; Sassaman 2010; Ellis et al. 2009; Spence and Fryer 2006; Kingsley 1999). Documenting changes in mortuary practices during this period, specifically the contexts associated with the emergence of corporate group burial locations, is a fundamental part of building understanding of the wider changes within the social, economic and community interaction dynamics of Great Lakes Aboriginal societies (Milner et al. 2009).

## Jacob Island 1 and the Land Between

One of the earliest known collective burial locations in eastern Canada is Jacob Island 1 (JI-1), located about 70 km north of Lake Ontario in the Kawartha Lakes region along the southern edge of the Canadian shield (**Fig. 1**). Jacob Island is 43 ha in area and densely forested except for the western third of the island, which is currently used as a children's summer camp. Our field research between 2009 and the present has identified a long history of use including a large third millennium BC cemetery, second millennium food processing and storage activity areas, contemporary smaller short-term task-specific processing camps, several first millennium ritual activity areas as well

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**Figure 1:** Location of Jacob Island in the Lower Great Lakes (Photo J.Conolly).

as a small lakeside settlement dating to the twelfth to thirteenth century AD. The cemetery is the focus of this paper, referred to as JI-1 (**Fig. 2**), which was discovered during construction activity in 2009. Between 2010 and 2014, the author directed the documentation and recovery of a complex set of primary and secondary cremation and inhumation features in which over 70 individuals were identified (Conolly et al. 2014). Within a tightly circumscribed area of approximately 50 m by 40 m we documented eight discrete burial groups, with date ranges between 3000 cal BC and A.D. 1200. The main cluster of mortuary events (64 individuals) occurs during the Late Archaic, between approximately 3000 and 2500 BC, in at least four interment episodes.

The wider regional setting within which the island is located is popularly known as 'The Land Between', as it sits on the ecotone (an area between two ecosystems that displays features of both) between the southern drumlin and till plains north of Lake Ontario

and the rugged granitic landscape of the Canadian Shield. It encompasses a region about 30 km wide (N–S) and 240 km long (E–W) and is an interface, both culturally and economically, between southern farming (and now industrialized urban) communities and northern hunting and fishing (and now timber and mining) economies. During the fourteenth to sixteenth centuries—before the ravages of European diseases and political instability from the fur trade destabilised local populations—farming villages were dotted along this boundary and benefited from trade with hunter-gatherers inhabiting the rugged uplands. In the deeper pre-agricultural past, hunter-gatherers are likely to have moved seasonally across the ecotone, alternating between large macroband (extended kin-group) warm-weather camps in areas adjacent to productive wetlands and spring fishing runs, and smaller upland, family-sized hunting camps. This type of seasonal movement pattern was documented ethnographically in the early twentieth century, and



**Figure 2:** Jacob Island and JI-1. Image copyright DigitalGlobe 2015.

archaeological research on settlement size variability, occupational intensity and site seasonality supports the conjecture that this land use pattern has a much deeper antiquity than documented in the written record.

### **Hunter-Gatherer Cemeteries and Land Tenure**

The seasonal patterns of movement between family and macroband settlements offer some insight into the factors that underlie the shift from single inhumation to corporate burial patterns. It is likely that the locations of larger Late Archaic settlements in this area are strategically placed to facilitate foraging within highly productive parts of the landscape (Conolly 2015). There are ecological differences in the settings of locations that exhibit high occupational intensity and sites with low occupational intensity and we have demonstrated a relationship between the former with seasonally flooded wetland

areas and lake-river confluences. Such locations are particularly productive and offer access to high return resources that are only episodically available. The site of JI-1 is located in a setting of this kind, and a reasonable inference therefore is that founding of cemeteries is linked to the development of seasonal gatherings of extended kin groups at these highly productive locations (**Fig. 3**). Thus, corresponding with the spring through autumn months when extended family groups congregate at productive fish runs and wetland foraging locations they also, within the context of other ritual activities, buried family members. The large number of secondary burials we identified also shows that these rituals included the interment of individuals who had died some time earlier, presumably during periods away from the macroband settlements.

Why collective burials became important rituals at these locations and why they included



**Figure 3:** Sue Colledge documenting a multiphase Late Archaic storage pit (Photo J.Conolly).

secondary (that is, bundle) burials of people who otherwise would have been interred closer, geographically and spatially, to where they had died, are issues that require investigation. One potential answer comes from the set of ideas first developed in the 1970s—well-known as the Saxe-Goldstein hypothesis (named after the proponents)—that offers some insight. This proposes that cemeteries emerged in response to forager inter-group competition in densely packed landscapes. Cemeteries thus function to express and to maintain group tenure over critical resources (Saxe 1970: 119; Goldstein 1981; see also Rakita and Buikstra 2008; Milner et al. 2009). In dense and competitive social landscapes, communities who adopt these types of group-strengthening rituals are likely to have advantages over communities who are less committed in terms of maintaining collective access to high value resource areas. The basic hypothesis fits this specific instance as the Late Archaic (and the later Middle Woodland) periods have been shown to have high population densities in this part of northeastern North America, and the settings of their mortuary locations correspond to high-value and spatially circumscribed foraging locations. However, it is also important to recognise that these places represent places of community integration and cooperation and that mortuary rituals can be used to affirm and reinforce collective identity and affiliation and tie otherwise fluid group memberships more tightly through ritual practices.

To explore these ideas further thus requires larger samples of mortuary locations than are currently available and so one component of our ongoing work involves survey of the wider regional landscape to identify additional Late Archaic sites. This is tied into a wide programme of community engagement, as the settings in which we work are experiencing significant developmental impacts on archaeological sites, including early burials (such as generated the data from JI-1). Thus we work closely with the local First Nation communities to identify, protect and where necessary, document and mitigate these impacts. Community engagement is a central component of the research programme and a feature of all work involving Aboriginal archaeology in Canada.

### Community Engagement

The Royal Proclamation of 1763 established Aboriginal title to traditional lands in what is now Canada, and the proclamation remains enshrined in law via the Canadian Constitution. The law ensures that when development impacts on traditional lands and archaeological sites, regardless of whether it is on Crown or privately owned property, Aboriginal communities must be consulted. However, because Ontario also has a complex history with regards to occupational histories, treaties, and territorial boundaries, different Nations may identify as the descent community for different periods of the archaeological past in the same geographic region. This can, sometimes, lead to competing and contested claims by First Nations over which specific Nation should be identified as the appropriate representatives for engagement (Williamson and MacDonald 2015). As archaeological sites can be used as evidence for asserting claims for longer-term traditional use beyond historically-known territorial areas, this places archaeologists centrally within ongoing debates over Aboriginal land rights, which at times can be difficult to negotiate. There is no side-stepping this issue as the legal and regulatory framework within which archaeology is

practised in the Province of Ontario requires all project directors to be licensed, and a condition of this is maintaining a high level of engagement with descendant Aboriginal First Nation communities, especially whenever human remains are encountered. Community involvement has thus been a central component of our work at Jacob Island, and has consisted of presentations to Chief and Council, graveside visits by Elders, and the participation in a reburial and dedication ceremony at the conclusion of our work in 2011. Further engagement is ongoing; it has addressed issues related to oral and traditional knowledge concerning the treatment and placement of the dead, and this has informed our interpretations of variability observed in post-mortem treatment of the buried remains.

### Conclusions

The work that began with the mitigation of construction impacts has expanded into a longer term research programme that aims to build better understanding of the context, and impetus for change among hunter-gatherer societies in the lower Great Lakes. There is a wealth of data with which to do this, as archaeologists have been engaged in excavations in this part of the province from the late nineteenth century onwards. There are hundreds of known and documented sites in our study area, ranging from Paleoindian hunting stations, Archaic fishing camps and mortuary locations, Middle Woodland burial mounds and interaction centres, and Late Woodland horticultural villages. There are significant gaps in knowledge, however, and it is necessary to devote more time and energy to comprehensive sampling programmes to document the temporal and regional variability in technology, subsistence and ritual practices across these complex middle and late Holocene hunter-gatherer societies. Alongside our ongoing work with First Nation communities that ensures archaeological sites are protected and properly documented, this project is a multi-year undertaking, but the outcome

will enable more sophisticated interrogation of the significant changes in hunter-gatherer societies that began well before the transition to the village-based farming economies of the first millennium AD.

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