



**NEWSLETTER OF THE LONDON CHAPTER,  
ONTARIO ARCHAEOLOGICAL SOCIETY**

*c/o Museum of Ontario Archaeology  
1600 Attawandaron Road, London, ON N6G 3M6*



April 2016

16-04

The next London Chapter meeting will be held on **Thursday, January 11, 2018** at the Museum of Ontario Archaeology starting at 7:30 PM. The meeting will feature a presentation co-authored by **Holly Martelle, Matthew Beaudoin** and **Kaitlyn Malleau** of **Timmins Martelle Heritage Consultants**, London (with a special guest appearance by **Chris Ellis** who will provide the "multi-generational" perspective) entitled: ***Old Points and New Data: Multi-generational Perspectives on the Brodie Site near Delaware, Ontario.*** This large, important site has been a focus of several investigations on and off over many years culminating in the recent CRM work at the site. There are rumours we will also have to try and elect a new executive for 2018 at this meeting so if anyone is interested...

The **February 8<sup>th</sup> meeting** will be our annual "**Members Night**" with multiple short presentations on current research. Promised topics include not only Ontario but Mayan archaeology! We still need a couple of more presenters so if you are interested please contact Chris Ellis (cjellis@uwo.ca) as soon as possible!

Speaker's Night is held the 2<sup>nd</sup> Thursday of each month (January to April and September to December) at the Museum of Ontario Archaeology, 1600 Attawandaron Road, near the corner of Wonderland & Fanshawe Park Road, in the northwest part of the city. The meeting starts at 7:30 pm. Doors open at 7:00 PM and as usual there will be free juice and cookies!

## Chapter Executive

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### ANNUAL RATES

Student	\$15.00
Individual	\$18.00
Institutional	\$21.00

## The Bonisteel Site Burial

By Michael W. Spence

### Introduction

The Bonisteel site (AfGu-2) is a late Glen Meyer or Middle Ontario Iroquoian (Uren) component on the north shore of Lake Erie, near Port Colborne (Dodd et al. 1990; Fox 1986; Pengelly and Pengelly 1987). The accepted calibrated dates for the site are 1235 AD  $\pm$  185 and 1380 AD  $\pm$  110 (Dodd et al. 1990: Table 10.1). In 1986 a burial was found exposed on the beach. It had recently been cut into by the waters of Lake Erie. Twenty-five complete and partial human skeletal elements had been displaced but were recovered beside the feature. Some of the partial elements conjoined with others still *in situ*. An adult, a child and an infant were represented among the displaced bones.

Jim and Sue Pengelly had examined the area shortly before and seen nothing amiss, so the exposure of the burial had probably occurred no more than a few days before its discovery. It is difficult to say how many elements might have been totally lost to the waves. The remaining part of the feature was excavated by Bill Fox, Jim and Sue Pengelly, Janie Fox, Detective David Briggs of the Niagara Regional Police, and me. A total of fifty-one elements, including the displaced bones, were recovered from the feature.

The burial feature was a flat-bottom pit. The bones occupied the southern two-thirds of the pit, where they had been deposited in a compact mass. Cultural material (chert flakes, a hammerstone, and a deer tooth) was mixed in the fill but does not seem to have been associated with the burial activities; the pit had been previously used as a storage feature (Fox 1986:18, 20). The one exception is the radius of a juvenile mammal (the epiphysis was unfused), probably a deer. It was with some human long bones, and appeared to have been deliberately included with them. It may have been mistaken for a human element and so erroneously added to the burial. The presence of animal and artifact debris indicates that the burial was in an occupation area, but the limited area of the rescue excavation does not allow us to say whether or not it was within a house.

### The Burial

Three individuals were included in the burial: an adult male, a child of about 6–9 years, and an infant of 6–12 months. None of them was complete (Table 1). The only elements in articulation were three thoracic vertebrae (T1–T3) of the adult, which rested at the north edge of the deposit. No other bones were articulated. For example, the fourth thoracic of the adult was present but at the far end of the deposit from T1–T3; the adult C7 was near but not articulated with T1; and the diaphyses of the infant's left ulna and radius were near each other but not in articulation.

The compact nature of the deposit and the parallel alignment of some of the long bones suggest that the bones had all been placed there together, perhaps in a bundle. The skeletal elements of the three individuals were intermingled in the deposit. This evidence

suggests that either the bodies of the three had rested together in a primary burial, or they had become mixed during preparation for the secondary burial.

**Table 1.** Inventory of Skeletal Elements from the Bonisteel burial.

<b>Element</b>	<b>Adult</b>	<b>Child</b>	<b>Infant</b>
cranium	present	temporal fragment	pars basilaris
clavicle	L		
scapula	R		
humerus	L, R		
ulna	R		L diaphysis
radius			L diaphysis
hamate	R		
metacarpal	R4-5, 1 unidentified		
hand phalanx	1 proximal, 3 unidentified	1 proximal, 3 middle	
rib	1L, 1R, 1 unidentified		3 unidentified
cervical vertebra	C1, 6-7	C7 arch	1 arch half
thoracic vertebra	T1-4		
lumbar vertebra		1 (L1 or L2)	
femur		1 proximal and 1 distal epiphyses	
tibia			1 proximal epiphysis
fibula			1 diaphysis
patella	L		
calcaneus	L		
metatarsal	L1, R2, R5		
foot phalanx	1 proximal		
metacarpal/metatarsal		1 unidentified	1 unidentified
loose tooth		maxillary left canine	

L = left, R = right

There was no clear pattern of organization in the deposit. The north edge was marked by the three articulated thoracic vertebrae. The largely complete adult cranium was at the southwest edge, resting on its right side and facing west. An adult sacrum was at the rear (east) side of the cranium. A number of bones were aligned roughly northwest-southeast in a loose cluster between the articulated thoracics and the cranium: the humeri and ulna, a rib, a metacarpal and a metatarsal of the adult; the infant's radius; and the mammalian radius. Directly beneath the cranium were the infant's ulna and the adult's fourth thoracic vertebra. The adult scapula rested vertically by the front (west side) of the cranium, and the clavicle was on top of the cluster. Other elements, from all three individuals, were scattered throughout the deposit.

## The Individuals

*The Adult.* The adult is a male. The supraorbital ridges are large and the superior margins of the orbits are rounded. The mastoid processes are broad. All of the observable epiphyses are fully fused. The virtually edentulous condition of the maxilla suggests an individual of considerable age. The only applicable aging method is cranial suture closure, which suggests an age in the fifth decade of life (Meindl and Lovejoy 1985).

The maxilla shows antemortem loss of all the teeth with the exception of the left third molar, which has a caries at the enamel-cementum junction on the mesial side. Wear on the tooth is slight. The only other evidence of pathology is on the right second metatarsal, which has extensive layers of newly laid bone on the shaft.

An adult sacrum and coccyx were also recovered from the feature, but will be described separately.

*The Child.* The few skeletal elements from the child in the burial offer limited opportunities for age identification. The loose maxillary canine had developed to the root one-half (R<sup>1/2</sup>) stage, suggesting an age of about 6–10 years (AlQahtani et al. 2010:Table 6, Figure 6; Ubelaker 1978:Figure 62). The arch of the lumbar vertebra (L1 or L2) had only recently fused to the centrum while the arch of the seventh cervical vertebra was still separate. The literature suggests a variety of ages for arch–centrum fusion, mostly in the 3–6 year span (Baker et al. 2005:Table 10.3; Krogman and İşcan 1986:87; Scheuer and Black 2000:204, 206). An age of about 6–9 years seems likely, then, especially since dental development is generally considered to be a more reliable age indicator than skeletal development.

There were remarkably few elements of the child in the feature, all of them small and relatively minor ones (Table 1). The cranium was represented by a loose tooth and a fragment of temporal bone, while the long bones were represented only by two epiphyses. However, an unknown number of elements may have been swept away by the waves of Lake Erie.

*The Infant.* The infant is also poorly represented, with only 10 elements recovered (Table 1). Again, age identification depends on only a few elements. The pars basilaris is 21 mm in length by 22 mm wide, indicating an age of 6–12 months at death (Redfield 1970). The long bone diaphyses were all damaged but their original lengths can be estimated with some confidence: ulna – ca. 86 mm; radius – ca. 75 mm; fibula – ca. 86 mm. Scheuer and Black (2000:Tables 9.12, 9.17, 11.17) assign an age of 6–9 months to these lengths, while Ontario Iroquoian elements of these dimensions are from infants of about 8–12 months (Saunders and Spence 1986). The infant was thus at some point in the 6–12 month span at death.

The cranium is represented only by the pars basilaris and the long bones only by three diaphyses and one epiphysis (Table 1). As with the child, this underrepresentation may be due in part to the disturbance of the feature by lake water and in part to the difficulty of

recognizing such small bones during the process of exhuming the primary burial and preparing the secondary burial.

*The Sacrum and Coccyx.* An adult sacrum, found near the adult cranium, had been modified by punching (not drilling) four holes into the first sacral body (Figure 1). There are two into the ventral face, just below the superior rim. They are 7 and 8 mm in diameter. Two more holes, 5 and 6 mm in diameter, have been punched into the superior surface, near the ventral edge. The one to the viewer's left, centred between the two in the ventral face, communicates with both of the ventral holes. The other superior hole is a dead end, communicating with neither ventral hole.

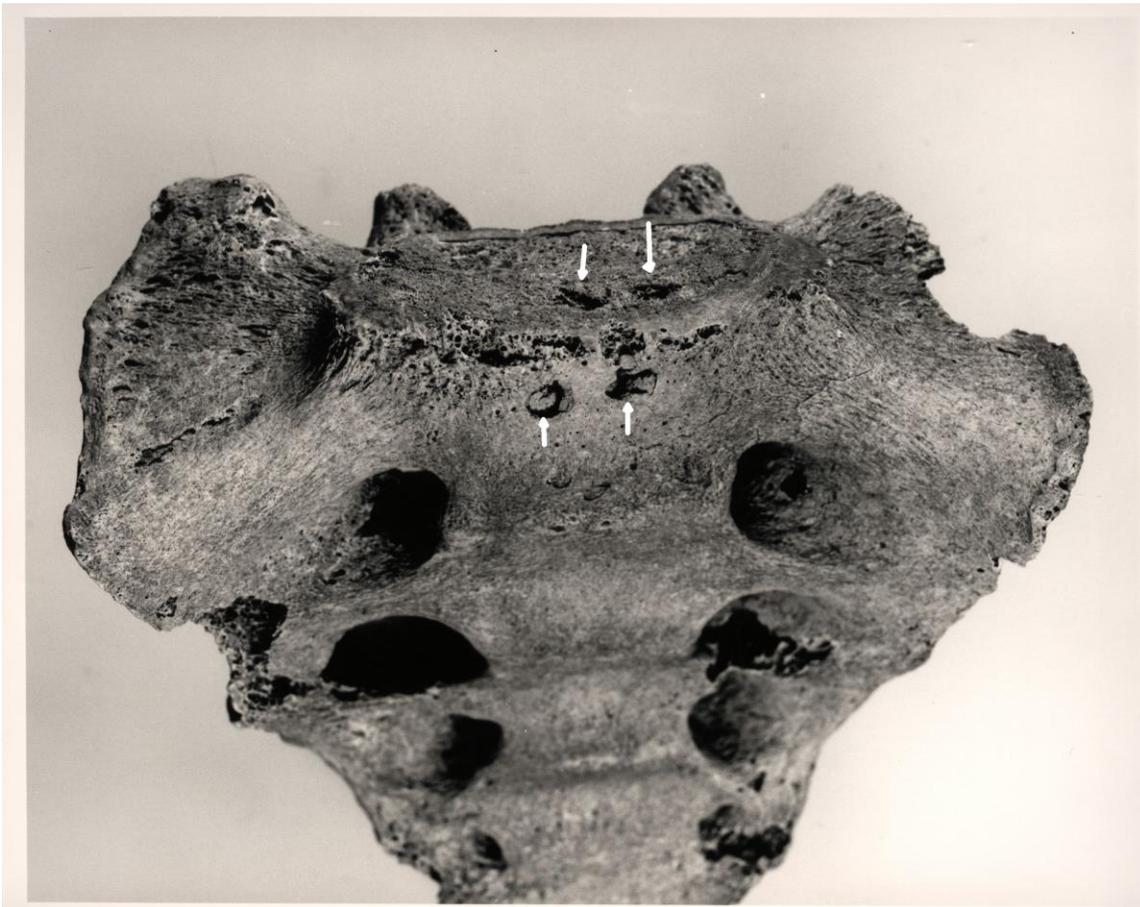
The holes were probably meant to allow suspension of the sacrum, but to what end? Was the sacrum a relic of a revered ancestor, or was it a trophy taken from an enemy? No highly similar finds occur in other Ontario Iroquoian sites but modified bones do appear widely, although sparsely, on them (Jenkins 2016; Williamson 2007). In Western Basin tradition sites, particularly in the Riviere au Vase, Younge and Springwells phases, the skeletons of the deceased are commonly rearticulated, frequently with holes to facilitate lacing the bones together (Greenman 1937; Redmond 1982; Speal 2006). However, none have been noted for the sacrum, although Speal (2006:11, Table 1, Figure 7) mentions and illustrates holes in the innominates, apparently for tying the femora to them.

The Roffelsen burial, in a Younge phase site near Chatham (Spence et al. 2014), has evidence of skeletal manipulation that may be comparable to the Bonisteel example. In two individuals, a male adult and a male teenager, there are holes in their second and third lumbar vertebrae (but not in the other lumbar or the sacra). All of the bones have been defleshed, apparently to allow the display of articulated skeletons. However, the recovered bones of the Bonisteel adult show no evidence of defleshing. Although many, particularly the leg bones, are missing, enough is visible of the arm bones to be sure that they had not been defleshed. Also, the location of the holes on the sacrum suggests that they were intended to facilitate its suspension, not to fasten it to the fifth lumbar or innominates.

Another example of worked human bone that may be relevant to the Bonisteel case is the modified adult mandible from a multiple secondary burial in the Glen Meyer phase Praying Mantis site in London (Pearce 2010:105–106, Figure 7). The mandible had been deliberately broken in places and has several holes drilled in it. The nature of the modification suggests that it was intended to be worn, perhaps as part of a mask, or fastened to something. It is not from any of the adults buried in the feature. The question of whether it was a relic or a trophy remains open.

It is not clear whether the Bonisteel sacrum is actually one of the adult individual's bones. It is fully adult, with the bodies fused, and probably male. The superior surface of the first sacral body is larger than either of the alae. A coccyx was also recovered from the burial feature, but it was not in articulation with the sacrum. The coccyx and sacrum fit perfectly together, so both are of the same individual. Unfortunately, the burial did not

include the elements (innominates, fifth lumbar) that could show whether or not the sacrum and coccyx are of the same person as the other adult bones.



**Figure 1.** The Bonisteel sacrum. Arrows indicate the four punched holes.

The presence of both the sacrum and coccyx in the burial, although separated from each other, suggests that they had been gathered up together from the primary burial. The absence of defleshing and dismemberment marks further indicates that their soft tissues had been lost through natural decomposition, as had the soft tissues of all the other bones in the burial (although the three thoracics might still have had some connecting tissues). However, it is impossible to say whether the decomposition of the sacrum and coccyx tissues took place in the primary burial, along with that of the other bones, or whether it had occurred in some other context. In sum, there are three possible scenarios for the presence in the burial of the sacrum and coccyx:

1. They are an ancestral relic, preserved and ultimately placed with the adult in the primary and then secondary burials;
2. They are the trophy from a slain enemy, preserved and ultimately placed with the adult in the primary and then secondary burials;

3. They are of the adult in the burial, prepared for suspension when the adult was exhumed from the primary burial, to then be worn or displayed in some fashion before the secondary burial.

### **Another Bonisteel Burial**

A decade before the discovery described here, another burial was found about 70 metres further along the Lake Erie shore. Unfortunately it was found in construction work so there are no available data on its context. There were Late Woodland sherds in the pit fill.

The bones that were collected were analyzed by Jerome Cybulski (1976). They are of a child about 9–11 years of age. The inventory of recovered skeletal items includes, partial or whole: the cranium and mandible, both clavicles and scapulae, both ilia, 1 ischium, 1 pubis, 9 vertebrae, ribs, both humeri, 1 radius, 1 ulna, both femora and tibiae, 6 unfused epiphyses, 1 talus, and 7 metatarsals and phalanges (Cybulski 1976). It is impossible to say with certainty whether the burial was primary or secondary, although the wide representation of body parts suggests the former.

### **Conclusions**

The Bonisteel burial was the secondary burial of three individuals: an adult man, a child and an infant. The two subadults were seriously underrepresented but this might be due to loss during the erosion of the feature and to less rigorous collection of subadult remains from the primary burial(s). The adult man was also missing some elements that are usually expected in secondary burials (Spence 1994). Most notable of these are the mandible and the long bones of the legs. However, a patella and some bones of the feet were recovered, so erosion might have been responsible for the absence of the long bones. The small number of individuals suggests that this might have been the secondary burial of those who had died over the course of the previous year. Unfortunately, without more data on the context of the burial we cannot say whether the three individuals represent the annual dead of the whole community or of some subgroup within it.

Since the sacrum and coccyx both ended up in the secondary burial, although a little apart from each other, it is likely that they were still held together by some residual soft tissue when they were placed in the primary burial of the adult. If so, the person that they originally came from had probably died only a few months or years earlier. The question is whether that man was a recent and valued member of the community or a conquered enemy. Was the sacrum worn or displayed to celebrate his life, or his death?

Williamson (2007) and Jenkins (2016) have explored the question of modified human bone in Ontario Iroquoian sites. They both concluded that most or all of it was taken from captives or enemies killed in warfare. Jenkins sees a shift in practice that seems to have occurred around 1300 AD. Before then there were few such items, and those that did occur were found in ritually charged contexts like burials and sweat lodges. Later, modified bones became increasingly common and were usually found in refuse contexts like middens. She suggests that this represents a change in their meaning. She also

suggests that a modified skeletal element, when separated from the body of the victim, lost its connection to that individual and came to represent the defeat of the enemy and the success of the victors. The referent of the bone object shifted, with its separation from the body, from the individual enemy to his or her community, and the power it held was acquired by the victor's community (Jenkins 2016:172–176).

The Bonisteel sacrum, found in a burial, belongs to the earlier category of modified bone, which Jenkins (2016:172) believed to have a different meaning. I would suggest that those earlier items still retained, as a crucial element of their significance, the identity of the individual from whom they were taken. They are analogous to Gregory's (1982) "gift," an object which, although presented to another, still retains the identity of the individual donor as the principal component of its meaning and worth. It is "inalienable."

In the case of the Bonisteel sacrum, its significance in the Bonisteel community was tied to the identity of the person who had been killed to obtain it. Furthermore, it may also have been inalienable in the sense that it, and whatever power it had, was the property of the victor, the specific individual who captured or killed the victim; hence its final disposition in the burial. It could not be inherited or passed to another. The same would be true of the Praying Mantis mandible.

Later, as populations and warfare increased and warring communities perhaps became more geographically and socially distant from one another, the individual identities formerly attached to modified bones may have shifted to more communal identities. Similarly, they became the property of the victorious community, not just of the individual responsible for their acquisition. Deprived of their individual attachments, the midden became the appropriate context for their final disposal, perhaps after they had been in circulation for a number of years or even generations.

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