

An In-house Infant Burial at the Benson Site

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An infant burial in a longhouse at the protohistoric Benson Site in the upper Trent river valley suggests the existence in the late 16th century of some childbirth-related practices described by Sagard in Huronia one or two generations later. It also gives rise to the suggestion that not all in-house burials were expressions of a conscious burial pattern.

Benson Burial 1

The Benson site is a late sixteenth century Huron site of approximately 4.5 acres located in Victoria County, Ontario, in the Kawartha Lakes area of the upper Trent River system (Fig.1). The site was partly excavated in 1976 and 1977 as part of the Late Iroquoian Occupations of South Central Ontario Project conducted by McMaster University (Ramsden 1979).

In the course of excavating the site, three infant interments were encountered beneath the floors of longhouses (Fig.2). All three burials will be described in a forthcoming site report. Only Burial 1, the subject of this paper, contained any grave inclusions. This was an infant buried in a pit measuring approximately 53 by 32 cm, extending to a depth of 60 cm, which was intrusive into an earlier ash pit near the east end of House 10. In the upper part of the pit, lying directly over the infant, was a slab of limestone about 30 cm in diameter. The body was level and the arms bent, the left one in front and the right one behind the body (Fig.3). The skull was completely crushed, but otherwise the bones were in a generally good state of preservation.

Included within the burial pit were a small body sherd immediately beneath the skull; a bone awl, situated above the skull and pointing upwards; a freshwater clam valve, lying on the floor of the grave to the left of the skull; and four articulated Mustelid paws, probably marten, located just to the left of the skull and in the area of the shoulder girdle.

Osteology

Both the developing deciduous tooth buds and long bone diaphyses were available for osteological analysis. It is well known that dental development shows less variability than skeletal development throughout the growth

period and is more closely correlated with chronological age (Lewis and Garn 1960). The calcification of the crowns of the deciduous teeth of Burial 1 (Table 1) was compared to the standards published by Moorrees et al.(1963). These authors recommend averaging the age at death estimate from the three teeth reported in their study, the deciduous canine and first and second molar, as well as the standards for both males and females. This yields an estimated age for Burial 1 of birth to 3.25 months with an average of 1.4 months. It should be pointed out that Moorees et al. recommend that the age ratings should be presented as a range of maximal and minimal values because there is variability in the development of individual teeth. In fact the three distal mandibular teeth they utilized in their study are the most variable of all deciduous teeth in terms of development (Saunders and Spence 1986). Consequently, all of the teeth should be examined to achieve the closest estimate of chronological age. In addition, the Moorees et al. reference sample begins at three years of age, which introduces a bias towards overaging fetal and newborn infants.

When long bone diaphyseal lengths (Table 1) are compared to the values reported by Merchant and Ubelaker (1977) from a sample of eighteenth century Arikara the age estimate is birth to six months. Merchant and Ubelaker's age categories do not permit a finer discrimination. Cognizant of the demographic fact that there are high rates of mortality in the first year of life, Stewart (1979) re-examined the Arikara data of Merchant and Ubelaker by looking at the frequency distribution of long bone diaphyseal lengths of infants aged dentally to be fetal to one year of age. He found distinct clustering of a large percentage of the sample within a relatively narrow range of lengths. He published the ranges of these 'birth-size concentrations' for the six long limb bones of the skeleton. When Benson Burial 1 is compared to these ranges all of the long bones fall within the newborn size concentrations. Consequently, a conclusion that the infant died at birth seems justified. Nevertheless, it was deemed useful to have comparative dental and skeletal data on other infant burials from

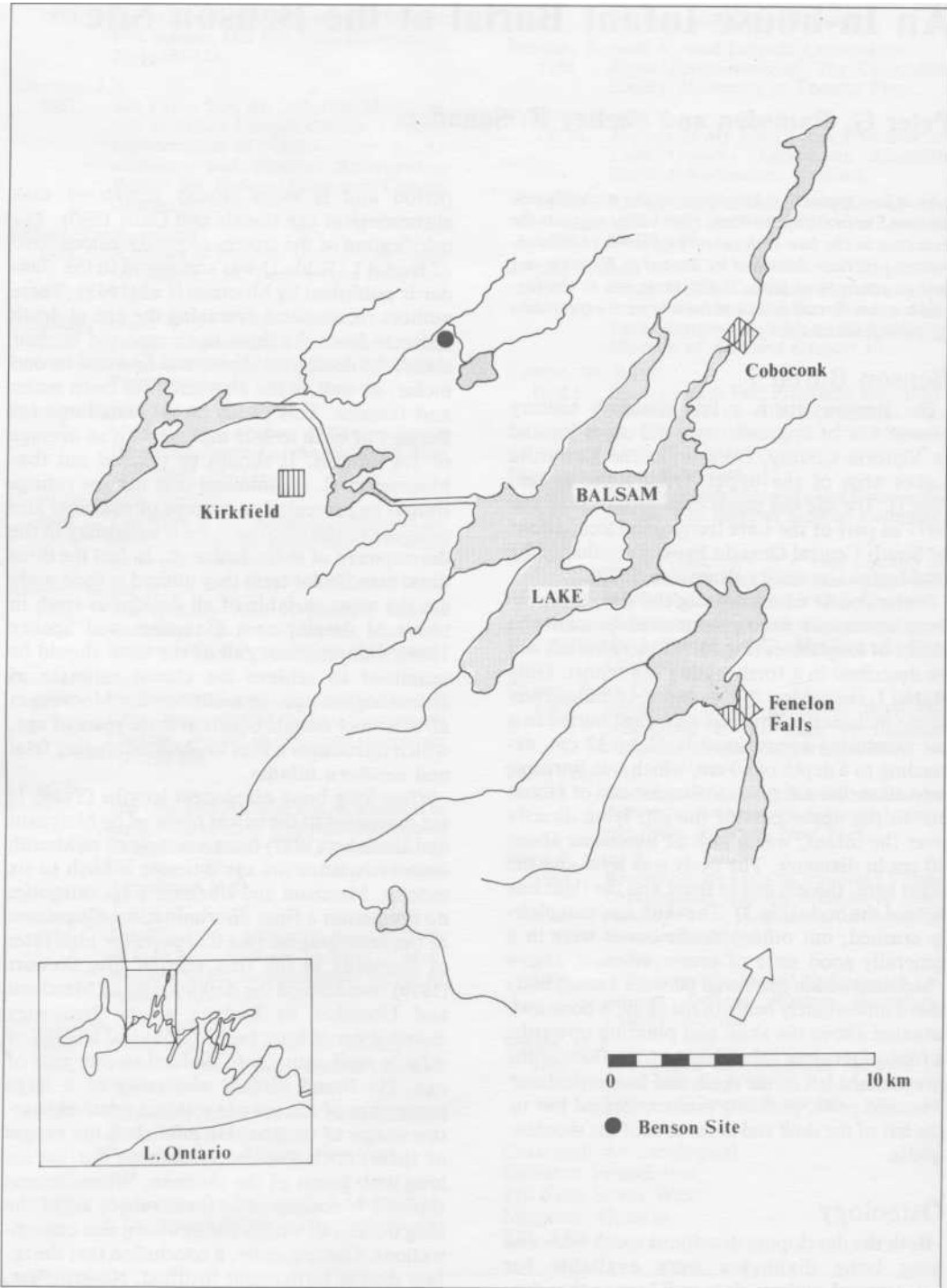


Fig. 1
Location of the Benson Site.

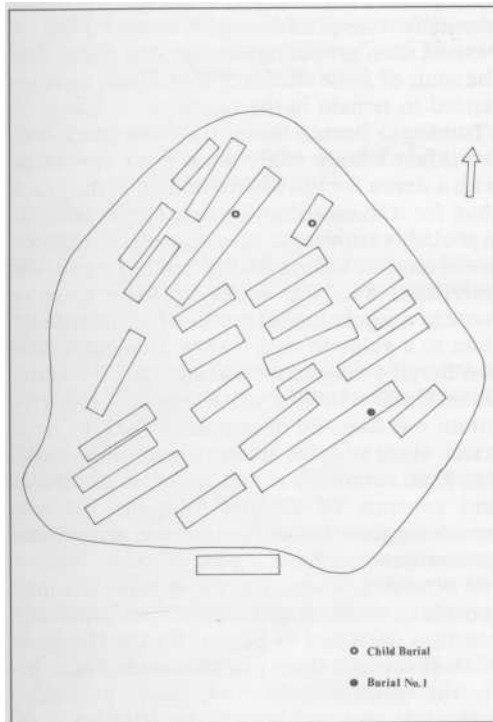


Fig. 2
Benson Site map showing palisade, houses and burials.

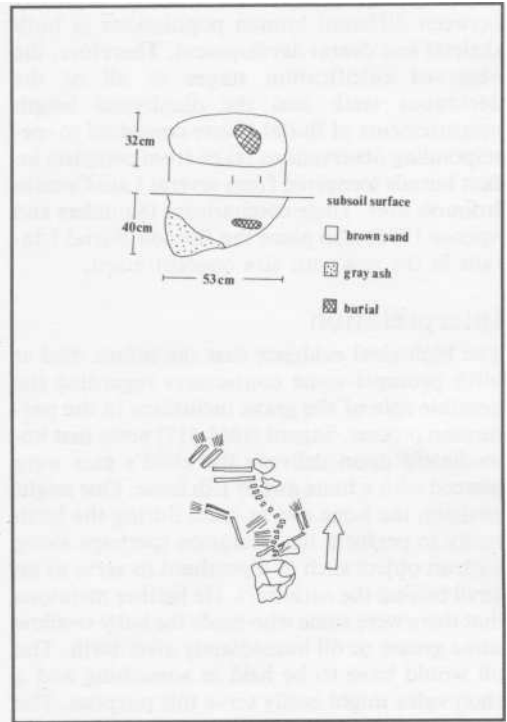


Fig. 3
Sketch of burial pit and skeleton of Burial 1.

TABLE 1

Dental and skeletal development of Benson Burial 1

Tooth Calcification Stages		Diaphyseal Length Measures	
		L	R
Maxilla			
i1	Cr-c*		45 +
i2	Cr-c	33	34
c	Cr-1/2	30	30
dm1	Cr-1/2	67	66
dm2	Cr-1/2		
Mandible			
i1	Cr-c	77	76
i2	Cr-3/4	65	67
c	Cr-1/2		63
dm1	Cro-oc	22	22
dm2	Cr-oc		16

*Moorrees, Fanning and Hunt 1963

+ measurements taken with sliding calipers to the nearest mm

Ontario Iroquois sites since there is variability between different human populations in both skeletal and dental development. Therefore, the observed calcification stages of all of the deciduous teeth and the diaphyseal length measurements of Burial 1 were compared to corresponding observations taken from complete infant burials recovered from several Late Ontario Iroquois sites. These comparisons (Saunders and Spence 1986) also place the Benson Burial 1 infant in the newborn size concentration.

Interpretation

The biological evidence that the infant died at birth prompts some conjectures regarding the possible role of the grave inclusions in the parturition process. Sagard (1865:117) notes that immediately upon delivery the child's ears were pierced with a bone awl or fish bone. One might envision the bone awl at hand during the birth ready to perform the operation (perhaps along with an object such as a potsherd to serve as an anvil behind the earlobe?). He further mentions that there were some who made the baby swallow some grease or oil immediately after birth. The oil would have to be held in something and a clam valve might easily serve this purpose. The four articulated marten paws are undoubtedly the remnants of a marten skin which either covered or supported the head of the dead infant. Perhaps this skin served as a mat to receive the newborn or was meant to serve as a wrap. Although *ex post facto* explanations are seductively easy and therefore hazardous, each of the objects in the grave can be given a speculative role in the events immediately following the birth of a Huron infant as described by Sagard in 1624. We might presume that if the infant were delivered dead none of these actions would need to be carried out, and the instruments gathered to perform them might be placed with the infant in its grave, particularly if this were dug close to the site of parturition, inside the house.

Discussion

Kapches (1976) has suggested that infant interments within longhouses represent a burial pattern analogous to that described by Brebeuf, in which children who died before two months of age were buried where their souls could re-enter women's bodies, such as on pathways. Knight and Melbye (1983) on the other hand have questioned Kapches' generalization, suggesting instead some alternative reasons for burials beneath house floors involving the mythologic importance of twins and other, possibly 'special'

individuals. Fitzgerald (1979) has also suggested alternative interpretations of in-house burials on Neutral sites, proposing among other things that the souls of some classes of individuals were intended to remain in the house.

Turning to Benson Burial 1, a slab of rock over the infant's body might seem more consistent with a desire for the soul to remain in the grave than for it to escape at the first opportunity. It is probably fruitless to speculate on the psychosocial motives behind the form of any *particular* interment, since the results are likely to serve more as a psychological profile of the interpreter than as a guide to past reality. However, Benson Burial 1 may be seen as a pragmatic, situational burial event in which a deceased, full-term infant was disposed of immediately at the birth scene, along with the accoutrements of its birth. The great variability in age, position, placement and contents of Ontario Iroquois in-house burials suggests that an equally wide range of circumstances may have produced them.

In summary, Burial 1 at the Benson Site may provide an archaeological reflection of childbirth practices described by Sagard for the Huron in 1624. If so, then those practices extend back into the protohistoric and, very probably, prehistoric past and beyond the boundaries of Huronia. It further raises the suggestion that some in-house burials are still-born infants for whom burial at the scene of birth was simply the most convenient option rather than an expression of a spiritual or social theme.

Acknowledgements

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