

**THE MCCLELLAHAN OSSUARY: A STUDY IN DATA RETRIEVAL
FROM A LOOTED, EARLY HISTORIC SITE**

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ABSTRACT

The McClellahan ossuary is evaluated as to demography, cultural affiliations, and skeletal pathology in a test case of information retrieval in the context of extensive disturbance. The results indicate that even in such extreme instances meaningful, though limited, data *can* be recovered.

INTRODUCTION

The McClellahan ossuary (AjGx-8) is located in Esquesing Township several miles north of the town of Milton, Ontario, at map reference 855247, Map 30/M12W, Edition 4 ASE, Series A 751, on a small knoll (Figures 1, 4-5), and has been known as the "Milton ossuary no. 2" in the past. The area was under cultivation until recently. A larger historic ossuary was excavated in the same field by Mr. P. Hartney, formerly of the University of Toronto (Figure 1), and a prehistoric village site which lies west of and in between the two ossuaries was investigated by an Erindale College field school under the direction of Dr. A. Mohr, University of Toronto (Figure 1). Excavation of AjGx-8 was undertaken in September 1971 as a rescue operation, as the site was being looted to such an extent that complete destruction seemed imminent.

EXCAVATION

The ossuary area was gridded into five-foot units and excavation proceeded from the outside units towards the centre in order to isolate the ossuary edge. Once the edge had been defined the feature was sectioned from east to west. No artifacts or skeletal remains were encountered outside the ossuary edge. No work from on top of the feature was permitted, so as to avoid bone breakage through ground pressure, and all backdirt was screened through one-quarter inch mesh screening; looter's shovels, however, had left the majority of the bone in fragments. The extent of the looting became apparent when a candy wrapper was uncovered only one inch above the ossuary floor in the northwest quadrant.

FEATURES

The ossuary is circular, measuring 7 feet 6 inches in diameter and 11 inches in depth, although an original depth of 19 inches before both looting and ploughing is estimated (Figures 2-3). A sub-floor pit, measuring 17½ inches in diameter and 20½ inches in depth, was uncovered in the southwest quadrant of the ossuary (Figures 2-3), and this feature may be the only undisturbed area of the site. The pit contained a bundle burial composed of 3 adult females, 2 adult males, and a juvenile whose sex cannot be determined; such a deliberate (and separate) interment represents a discrete action with possible social implications such as a family grouping. The sub-floor pit was outlined by a black organic stain inch wide, possibly the decayed remnant of a hide or skin wrapping for the bundle.

CULTURAL REMAINS

Shell beads are the dominant artifact class at McClellahan, followed distantly by copper (Table 1). The presence of a blue glass bead, trade copper, and iron fragments place the ossuary

in the proto-historic or the historic period, and the assemblage is fairly typical of an Ontario Iroquois ossuary of the early historic period. Since no carbon samples were recovered and the glass bead is not presently dateable (see below), a more precise chronological ordering is not possible.

TABLE 1
ARTIFACT CLASSES AT McCLELLAHAN

Class	Number	%
Shell beads	908	98.5
Copper	9	0.9
Iron	2	0.2
Glass bead	1	0.1
Shell pendant	1	0.1
Projectile point	1	0.1
Totals	922	99.9

Shell Beads (Figure 8, c-t)

Of the 908 shell beads recovered, 878 (96.7%) are discoidal, 14 (1.5%) are barrel-shaped, 12 (1.3%) are cylindrical, and 4 (0.4%) are trianguloid. Diameters of the discoidal beads range from 6.0 mm. to 18.4 mm. with a mean of 8.7 mm.

Copper

Nine small pieces of trade copper comprise the sample, however only one fragment can be identified as to probable function. This specimen, approximately one-third of which remains, appears to be a bracelet and measures 32.8 mm. in width and 1.0 mm. in thickness.

Iron

Two small, badly rusted, fragments of iron were found on the ossuary floor near its centre. Their original shape, size, and function cannot be determined.

Glass Bead (Figure 8, b)

A single blue glass bead occurred on the ossuary floor adjacent to, but not necessarily associated with, the sub-floor bundle burial. It is wire-wound and falls into the W1b12 category (Kidd and Kidd, 1970: 62). Unfortunately this type is common to several centuries and a multitude of areas, and cannot be used to provide even an approximate date for the McClellahan ossuary.

Shell Pendant (Figure 8, a)

This broken specimen, which may have served as either a pendant or a gorget, is fragmentary and identified on the basis of a portion of a drilled suspension (?) hole measuring an estimated 4.7 mm. in diameter.

Projectile Point

The single lithic artifact is of bifacially chipped Delaware chert and is broken at a distance of 34.3 mm. from the base. It is basally thinned, has straight blade edges, is side notched, and the base is convex. Width at base is 35.2 mm.; notch width is 5.1 mm.; and notch depth is 3.0 mm. Thickness at point of breakage is 5.9 mm.

DISCUSSION

Little can be stated about the McClellahan ossuary in interpretive or comparative terms. It is reasonable to regard the site as being early historic in time because of the presence of European copper, iron, and the glass bead. Despite looting, one can observe a high ratio of native artifacts to European imports; this ration changes at later Ontario Iroquois ossuaries such as Shaver Hill where over 400 trade items were uncovered (Stothers, 1973: 23) - this site dating *circa* 1600 to 1625 A.D. (ibid). A copper trade knife and an iron bar celt were recovered from the early historic Sopher ossuary (Noble, 1968: 200), parallelling the small amounts of the same metals at McClellahan.

Bundles containing two or more individuals are also found on other Ontario Iroquois ossuary sites, such as the three bundle burials adjacent to the main Shaver Hill ossuary (Strothers, 1973: 37).

The "false floors" characteristic of most Neutral ossuaries (Noble, 1968: 223; Ridley, 1961: 56) provide some clue as to McClellahan affiliations: This characteristic is not present, thus the site is probably Southern Division Huron. This interpretation is further supported by McClellahan's geographical situation, and indeed the adjacent prehistoric AjGx-1 village site is Southern Division Huron (Mr. W. D. Finlayson: personal communication).

PHYSICAL ANTHROPOLOGY

Within the ossuary proper no bones whatever were found in articulation, probably as the result of the severe looting; only the undisturbed bundle burial exhibited relationships between skeletal elements suggestive of articulation, and even this feature has had some shovel damage to the long bones protruding above the level of the ossuary floor (see Figure 7). The skeletal material is here presented by anatomical components, and cultural inferences and a discussion of the bundle burial follow the morphological and pathological analyses. It should be noted that the data from the bundle are included in the main body of the analysis.

Cranial Remains

It appears that skulls and mandibles formed a primary target for the looters, as there were notably few large portions left intact; *no* fragments were large enough to yield standard morphological observations such as those employed by Anderson (1968) for the Serpent Mounds material. The majority of the fragments comprise parietal and occipital vault pieces, one immature occipital bone derives from an individual less than two years old, and at least one adult is represented by the other occipital fragments.

Teeth provide the majority of information available for the facial area, and Tables 2 and 3 show caries and *pre mortem* tooth loss. Small sample size precluded the inclusion of other dental observations. Caries is high in deciduous teeth and moderately high in permanent teeth. This incidence of dental caries is higher than Middle and Late Woodland populations for most southern Ontario sites (see Cybulski, 1968: 24). *Pre mortem* tooth loss is correspondingly high for the McClellahan population. At the early historic Sopher and Ossossane ossuaries *pre*

mortem tooth losses are also high, at 51.8% and 65% respectively (Noble, 1968: 206; Gruber, 1958: 9), while at the *circa* 1250 A. D. Bennett village the loss is appreciably lower at 22.2% (Wright and Anderson, 1969: 130).

TABLE 2
CARIES INCIDENCE

Age	Maxilla	Mandible	Total	%
Permanent	4/28	5/39	9/67	13.4
Deciduous	4/7	3/6	7/13	53.8
All teeth	8/35	8/45	16/80	20.0

TABLE 3
PRE MORTEM TOOTH LOSS

Teeth	Maxilla	Mandible	Total	%
Incisors	8/8	2/14	10/22	45.4
Canines	1/5	1/11	2/16	12.5
Premolars	2/8	3/13	5/21	23.8
Molars	2/5	12/18	14/23	60.8
All teeth	13/26	18/56	31/82	35.4

Vertebral Column

Only 122 complete vertebrae or large vertebral fragments survive for analysis. A minimum of 6 individuals can be identified: 3 adults from 3 complete atlas vertebrae, and 3 juveniles from 3 intact axis vertebrae. All of the juveniles appear to have died between the ages of 12 to 16 years, and one sacral had fused just prior to death.

Morphology:—Anomalies occurring in the foramen transversarium are common for the third through seventh cervical vertebrae (Table 4); these 15 anomalies involve various degrees of bony spur development in the foramen. This trait is expressed as a pair of spurs extending from the sides of the foramen transversarium or as a doubling of the foramen by a complete bony bridge—9 of the anomalies are complete bridges. For comparative purposes this total breaks down into 4 bilateral observations, 2 unilateral observations (left +, right 0), and 3 unmatched observations (left 2, right 1). There are 2 instances of bilateral spurring, or incomplete bridges.

An anomalous flat facet occurs on a single thoracic vertebra, on the superior surface of the spinous process, midway between the end of the process and the neural arch. The facet is oval and measures 10 mm. in length.

Spondylolysis occurs unilaterally (left side) on one of the 10 lumbar vertebrae.

TABLE 4
DOUBLE TRANSVERSE FORAMINA INCIDENCE

Vertebra	Right	Left	Total	%
C1	0/1	0/1	0/2	-
C2	0/2	0/2	0/4	-
C3-7	9/25	6/24	15/49	30.6
All cervical	9/28	6/27	15/55	27.2

Pathology:—All areas of the spinal column are affected with osteoarthritis and osteophytosis, however it is not possible to generate etiologic hypotheses for the occurrence of osteoarthritis for the McClellahan population as a whole due to the small sample size (Table 5). Mixed remains from several age grades and both sexes distort significant disease profiles in most ossuary populations, of course.

Osteoarthritis occurs bilaterally on the facets of two sacra, two others being unaffected. No instances of *spina bifida* occur. Collapsed vertebral bodies exist on 4 thoracic and 3 lumbar vertebrae.

TABLE 5
VERTEBRAL OSTEOARTHRITIS AND OSTEOPHYTOSIS INCIDENCE

Vertebra	Superior L	facet R	Inferior L	facet R	Superior body	Inferior body
C1	1/3	2/2	1/4	1/3		-
C2	0/3	0/3	0/3	0/3	1/2	0/2
C3-7	4/31	4/27	5/31	5/28	6/17	5/18
All cervical	5/37	5/32	6/38	6/34	7/19	5/20
%	13.5	15.3	15.6	17.6	46.8	25.0
Thoracic	5/54	5/57	8/55	11/55	9/22	13/26
%	9.4	8.9	14.1	20.0	42.8	50.0
Lumbar	4/11	2/8	3/15	5/17	3/6	3/6
%	40.2	25.0	20.0	29.3	50.0	50.0

Humerus

Four pairs of adult humeral caputs, 4 pairs of adult distal articular surfaces, 4 right and 6 left adult mid-shaft fragments, and 1 left and 2 right juvenile mid-shaft fragments comprise the sample. Since no 2 shafts are from the same adult at least 6 adults are represented, and at least one juvenile.

Morphology:—Of the 4 pairs of distal humeri, 2 fragments (both left) possess septal apertures—none occur on the juvenile specimens. There are no instances of supratrochlear processes.

Pathology:—Osteoarthritis, periostitis, and *ante mortem* breakage are all absent. Since long

bone breakage *ante mortem* can occur in specific patterns which may reflect ossuary patterns, it is useful to treat each area as a separate observation, as in Table 6 below.

TABLE 6
HUMERAL SHAFT PATHOLOGY

Age	Proximal third	Midshaft	Distal third
Adult	0 (3L, 2R)	0 (2L, 4R)	0 (5L, 5R)
Juvenile	0 (1L, 2R)	0 (1L, 1R)	0 (1L, 1R)

Radius

Six adult left distal ends, 5 adult right distal ends, 1 juvenile left proximal end, and 2 juvenile right proximal ends make up the sample; interestingly this distribution yields the same demographic information as did the humerii. One pair of distal articular surfaces have fused just prior to death, indicating an age of 21-22 years. Two right distal epiphyses are unfused, and another 2 radial shafts belong to a juvenile under 6 years of age.

Morphology:—Among the adults and late adolescents distal radial facets are triangular (2 left, 3 right), or constricted (3 left, 3 right).

Pathology:—Only one instance of osteoarthritis is present: there is a slight amount of bony lipping on an adult left distal facet.

Ulna

There are 4 adult proximal and 3 adult distal left ends, 5 adult distal and 2 adult proximal right ends, 1 juvenile proximal left end, and 2 juvenile proximal right ends in the sample. Of the specimens noted as juvenile, one right epicondyle of an olecranon process shows recent fusion, indicating an age of 17-19 years.

Pathology:—Incipient osteoarthritis is evident on 3 right and 2 left proximal surfaces and on 2 left distal facets.

Scapula

Four left and 5 right adult, and 3 right juvenile fragments comprise the sample—all badly broken. Each analyzed fragment consists of at least a complete articular facet and suprascapular area.

Morphology:—Suprascapular notches and infraspinous fossae are both absent. Pathology:—Slight osteoarthritis occurs on one left scapula, and 3 right scapulae display slight to medium bony lipping.

Sternum

The sample consists of 3 complete manubria.

Pathology:—One specimen exhibits extreme osteoarthritis on the clavicular facets with plaque formation on its anterior surface.

Ribs

The ribs have suffered very badly from the efforts of the looters, to the extent that the only data which can be retrieved are that at least 11 separate first ribs are present.

Pelvis

Of the innominates 5 left and 7 right are adult, and 3 left and 3 right are juvenile. Analyzed innominates consist of an acetabulum, ilial area, and at least part of the ischium. All pubic areas are either destroyed or highly fragmented. Three adult male (1 left, 2 right) and 4 adult female (2 left, 2 right) innominates were identified.

Morphology:—Anomalous, non-pathological pits occur in 2 of the 7 right adult and in 3 of the 5 left adult specimens.

Pathology:—Two left acetabula show slight arthritis, and one right acetabulum exhibits marked arthritis. One right ischial tuberosity contains a deep pit of pathological nature: its edges are eroded and an array of small pits occurs around the depression.

Femur

Two complete adult left, 3 left and 1 right adult proximal ends, 4 left and 2 right adult distal ends, 3 left adult mid-shafts, 2 left and 2 right juvenile proximal ends, 2 left and 1 right juvenile distal ends, and 1 juvenile caput comprise the sample.

Morphology:—A true third trochanter occurs on one left femur, and a well-developed ridge is present on another left femur in the same area.

Pathology:—Six adult femoral shafts bear pathological pitting, possibly related to osteomyelitic infections; because of their damaged condition it is not possible to give a true sample size for this observation. The distal end of a left femur (adult) exhibits severe osteoarthritis.

Patella

Four left adult and 9 right adult patellae are present.

Pathology:—Spurring occurs on 1 left and 2 right specimens, and there is evidence of slight arthritis on a lateral facet of a left patella.

Tibia

The tibia sample consists of 5 left and 3 right adult distal ends, 1 left and 3 right adult proximal ends, 4 left adult mid-shafts, and 1 left juvenile proximal end.

Pathology:—One left and 2 right mid-shafts display the results of an infection: they bear extra bone deposits and are of increased density.

Calcaneus

Three left and 5 right comprise the sample.

Morphology:—Three right calcanei possess double anterior facets, and 2 have constricted facets.

The Bundle Burial

A minimum of 3 adult females are present in the bundle, as the single left female innominate does not pair up with either of the 2 right specimens. At least 2 adult males are also part of the bundle, and a radial shaft belongs to a juvenile between the ages of 10 and 19 years (no adult ages could be determined). The tooth found in the sub-floor pit may also belong to this juvenile. Most areas of the human body are represented in the feature (see below), but cranial portions, teeth, ribs, and the small bones of the hands and feet are either low in incidence or absent. From the compactness of the bundle, the lack of butchering marks, and the lack of articulations it seems evident that the soft tissues had deteriorated sufficiently to permit mani-

pulation of these varied skeletal elements into one bundled group. This bundle, with its several individuals of both sexes and varied age groups, may represent a common social bond, such as family or clan, and is paralleled at a number of other Ontario Iroquois sites.

The skeletal elements comprising the bundle are as follows:

- Cranial—11 fragments, including 1 occipital and 1 male frontal with V-shaped medium/heavy brow ridges, and an unerupted mandibular molar.
- Vertebrae—2 lumbar, 2 thoracic.
- Humerus—1 complete right, 1 complete left, 1 left fragment.
- Radius—1 juvenile proximal fragment, epiphysis unfused.
- Sternum—1 sternbrae.
- Clavicle—1 proximal fragment.
- Scapula—1 right.
- Sacrum—1 superior half.
- Innominate—2 right adult male with acetabular pitting, 2 right adult female one with arthritis, 1 left adult female with acetabular pitting, 1 right indeterminate, 1 left fragment indeterminate.
- Femur—2 complete left, 1 distal fragment, 3 right shafts.
- Tibia—4 left shafts, 3 right proximal ends.
- Metacarpals—3.
- Phalanges—3.

GENERAL DEMOGRAPHY

The extreme disturbance and damage caused by many looters pose serious problems for the interpretation and demography of the McClellahan ossuary. Within the ossuary exclusive of the bundle burial only 5 individuals could be identified, based on adult innominates and juvenile humeri, and includes 2 adult females, 1 adult male, and 2 juveniles whose sex could not be determined. By using these skeletal elements allowance has been made for the presence of portions of the bundle being included with the main ossuary. A second calculation can be made utilizing left mandibular first molars, which were recovered only in the main ossuary: 9 adults and 3 juveniles are identifiable by this means. It is more than probable that both population estimates are far below the original population figure which existed prior to the systematic looting.

CONCLUSIONS

From the presence of trade goods and the frequency of dental decay the McClellahan ossuary may be placed within the early historic period. A minimum population of 11 individuals, and a possible occupation by 18 individuals, comprise the contents of the ossuary. At least 3 adult males, 5 adult females, and 3 juveniles whose sex could not be determined are identifiable, and these people belonged to the Southern Division Huron ethnographic grouping. The extreme looting of this ossuary, and the effects of such undisciplined action, are only too evident in the material here presented. Although some meaningful data were retrieved they are of minor significance when compared to the *possible* information potential. No statement concerning the effects of looting on a burial site can be too strong.

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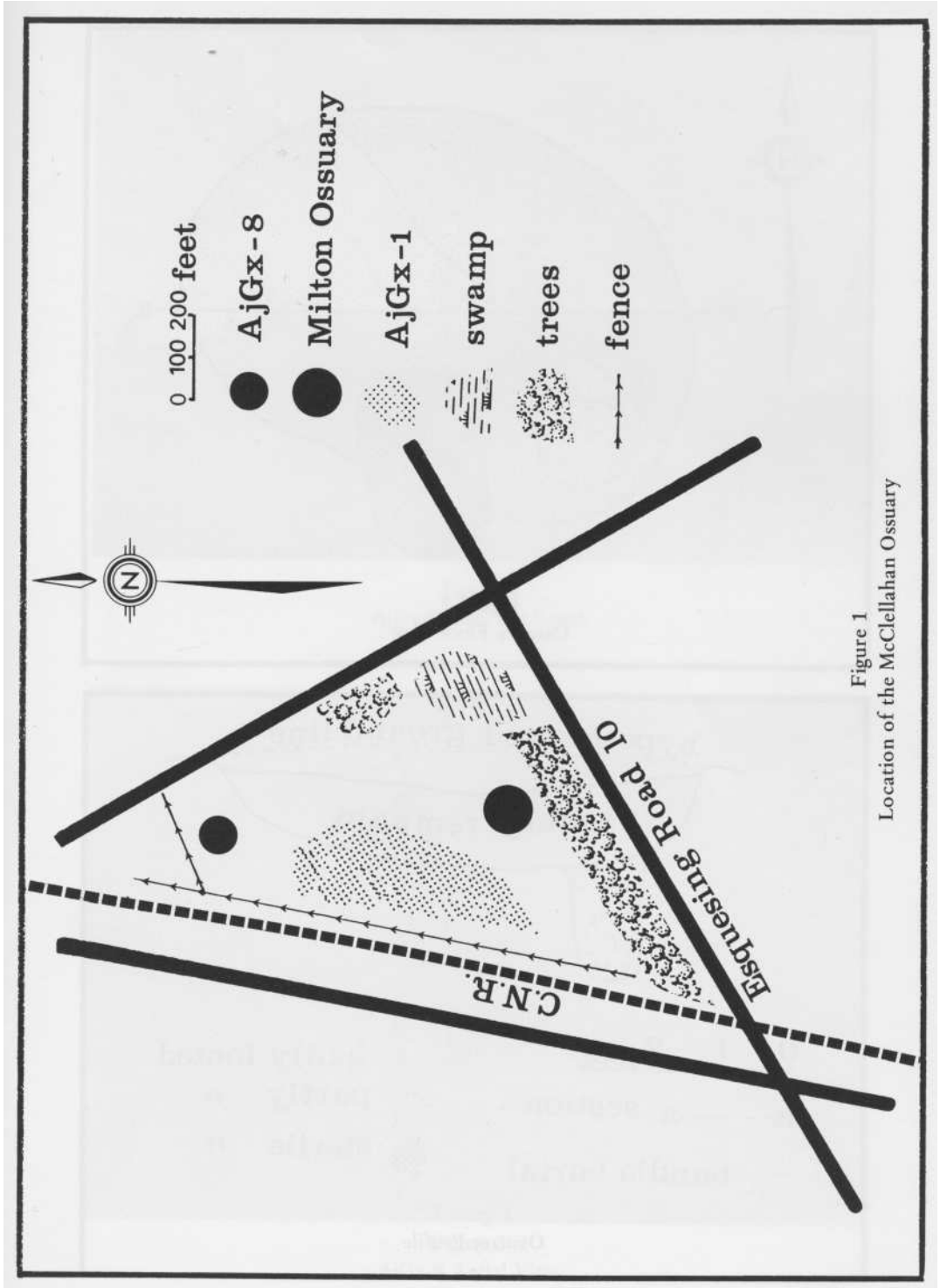


Figure 1
Location of the McClellahan Ossuary

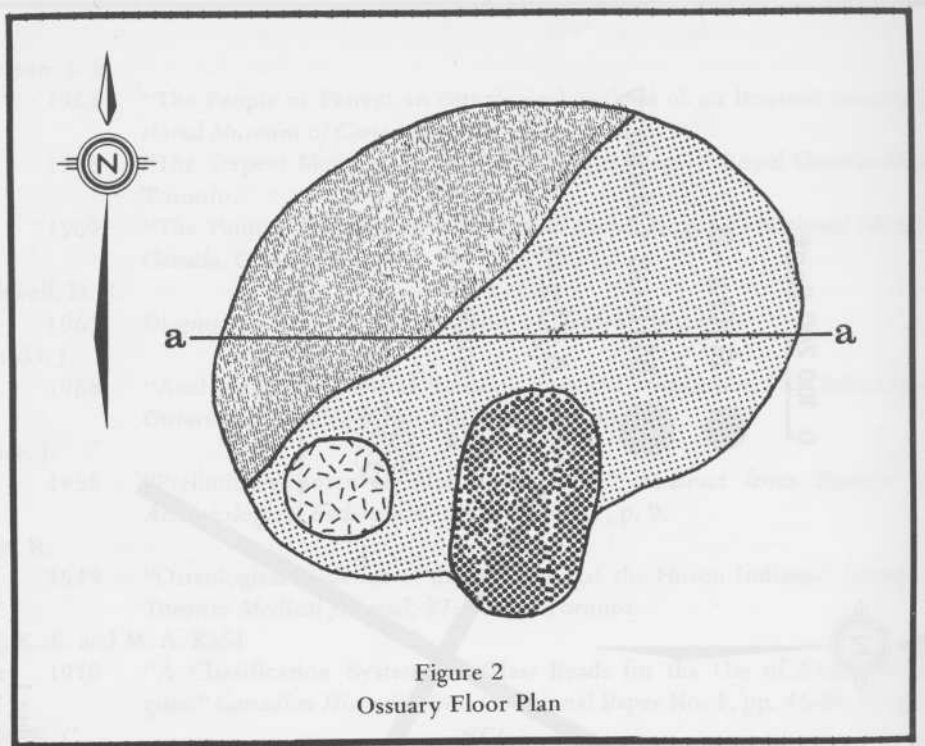


Figure 2
Ossuary Floor Plan

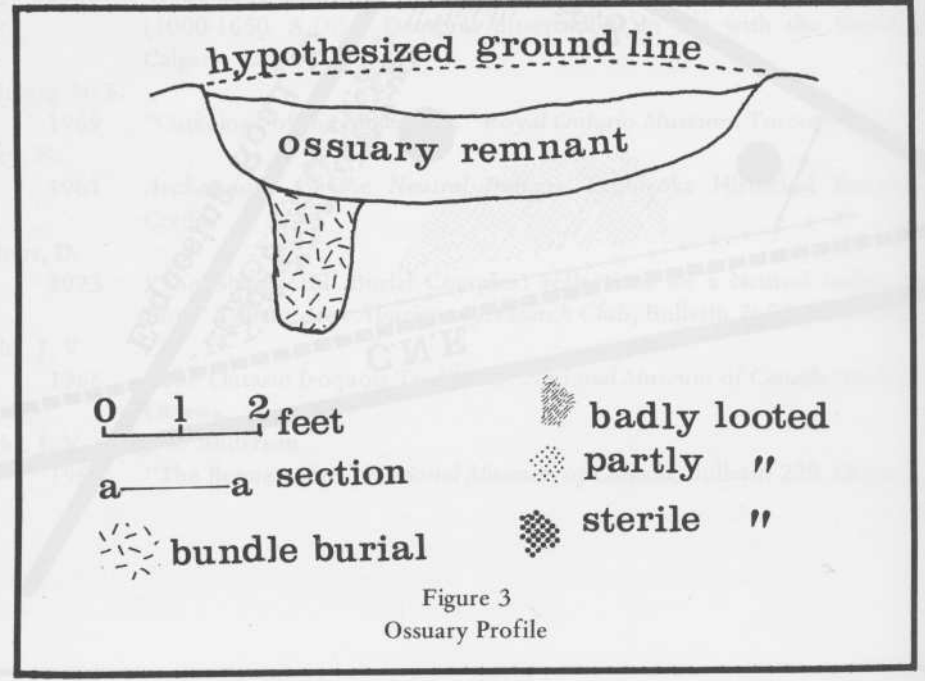


Figure 3
Ossuary Profile



Figure 4
AjGx-8 from the South



Figure 5
AjGx-8 Aerial View



Figure 6
The Bundle Burial



Figure 7
The Bundle Burial

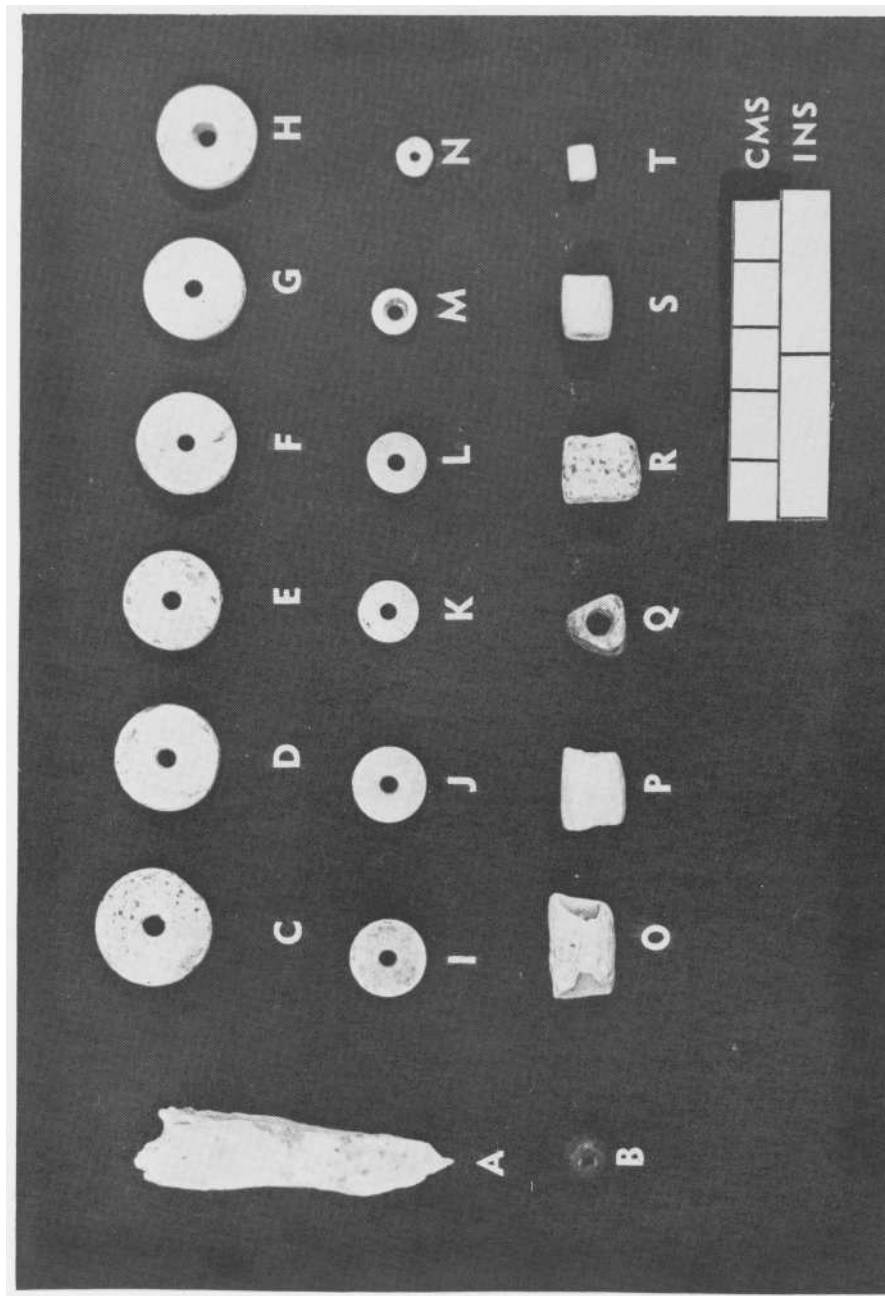


Figure 8

Cultural remains: a) shell pendant;
b) glass bead; c-t) shell beads