ARCHAEOLOGY OF THE FORT SEVERN AREA, NORTHWESTERN ONTARIO

Jean Luc Pilon of the Department of Anthropology, University of Toronto, has kindly agreed to speak to the Chapter on his historic period research in northernmost Ontario. Jean's subject area involves some of Ontario's most exciting history, so that his talk promises to be both interesting and entertaining.

See you at the Museum of Indian Archaeology at 8:00 P.M. on Thursday, March 10!
EXECUTIVE REPORT

At the March 2 meeting in London, our executive received some disappointing news. We are about to lose one of our Chapter's most active members - Mr. Ted Rowcliffe. Ted has decided to return to university full time and will be moving to the Kitchener-Waterloo vicinity. While that may be good news for the Waterloo-Grand River Chapter, it leaves us without a secretary! It would be impossible to list Ted's many contributions to our Chapter - the organization of our Ohio bus tour and recent printing of our dues envelopes to name but two - and all that can be said is that his enthusiasm, energy and humour will be sorely missed. We wish Ted all the best in his new endeavours.

From the foregoing, you will have guessed that the election of a new secretary will be on the meeting agenda next Thursday. Those interested in participating on our executive are encouraged to step forward.

A brighter note during the meeting involved arrangements for the Chapter picnic. It sounds good - more details below! Paul mentioned that he had reviewed the re-revised O.A.S. constitution and Ted noted that 71 percent of the bus trip questionnaire respondents had expressed an interest in travelling to the Smithsonian and Washington vicinity. George reported that our Chapter has nearly 70 paid members and a bank balance of close to $1,000.00!

The Chapter has also experienced good cooperation from the Lake Erie Symposium volume authors. Four of the seven revised manuscripts are in hand. Finally, our speaker agenda until the summer break has been confirmed:

April 14

Fossil Insects and Reconstruction of the Archaeological Environment

Alan and Ann Morgan

May 12

Early Woodland Occupations of Southern Ontario

Michael Spence

SOCIAL REPORT

Chapter Picnic '83

Arrangements have been made to hold our summer festivities at the Longwoods Conservation Area on Saturday, June 18. The pavilion has been reserved, the longhouses will be open to us and corn soup is to be provided! Our thanks to Ron Williamson and the Lower Thames Valley Conservation Authority.

Jim reports that a license application has been submitted and the "long awaited
Dorchester survey project" will be launched this spring. Those interested in learning archaeological survey and excavation techniques are encouraged to contact Jim at our next meeting or telephone him at 285-2379, so that a volunteer list can be drawn up for our project. The survey results should be very illuminating concerning Native hunting activities around the Dorchester Swamp over many thousands of years. Further, this month's research articles underline the importance of returning to the Harrietsville Earthwork for more information regarding this important village.

Chapter Lab Nights

Thanks to the efforts of our O.A.S. volunteers, tremendous progress has been made in processing the Elliott village recoveries. All artifacts are now washed and all light fraction floats have been bagged. Most impressive is the fact that over half of the heavy fraction floats have been sorted! Already, Rudy reports corn, tobacco, possibly beans, butternut and hickory nut from this c. 900 A.D. village (four radiocarbon samples have been sent off). Our Wednesday night regulars have included: Bob Calvert, George Connoy, Linda and Mike Gibbs, Wayne Hagerty, Dave Riddell, Ray Crinklaw, Danny Van Maaele, Geldhof Norbert and Ken Carter. Even Bill Donaldson from Sarnia has attended several sessions!

This coming Wednesday at 7:00 P.M. members are encouraged to bring their 19th century discoveries to our historic artifact workshop which will be presented by Ian Kenyon.

Upcoming Archaeological Meetings

April 15-17 New York State Archaeological Association annual meeting to be held in Glens Falls, N.Y. Program chairman: Mr. Gordon Deangelo Box 121, Oran, N.Y. 13025 (315-682-6312)

April 21-24 Canadian Archaeological Association annual meeting. Halifax, Nova Scotia.

Both articles in this month's issue describe information derived from our 1981 Chapter test excavations on the Harrietsville Earthwork site. They indicate what a substantial contribution can be made to our understanding of Ontario prehistory by O.A.S. Chapter projects.
THE HARRIETSVILLE SITE (AfHf-10): 1981 EXCAVATIONS

JAMES KERON

Recent research in the townships of North Dorchester, Westminster and the City of London has disclosed the existence of a sequence of Late Woodland sites spanning Glen Meyer to late Prehistoric Neutral times. One problem encountered is the extreme paucity of diagnostic artifacts resulting from 150 years of cultivation and depredation by pot hunters. The Brian site (Keron, 1981, Poulton, 1982) provides and example, where three separate samplings of the three acre village have yielded five diagnostic artifacts. The Harrietsville earthwork was no exception to this rule. The first sample from the site consisted of two body sherds and one notched projectile point. This was primarily due to crop cover, but even ideal conditions would have produced a half dozen rimsherd at most.

With this problem in mind the London Chapter of the Ontario Archaeological Society decided to establish a research program to attempt to enlarge these samples and better document the sites. The strategy employed was to sample midden areas with a limited number of two meter squares and, using controlled surface pickup and some trenching, attempt to delineate the village boundary. The site chosen to begin this project was the Harrietsville site (AfHf-10), since previous work by Boyle (1896) had documented the existence of an earthwork at this village. Furthermore, the fact that most of the site was covered by Christmas trees precluded the recovery of a representative sample by surface collection.

The Harrietsville project was also established to evaluate the feasibility of conducting small scale sampling using volunteer labour excavating on weekends and working evenings to wash and catalogue the artifacts. It was open ended so that no matter the level of support, the project could not fail on its face. Our worries concerning lack of support proved groundless as during the fall of 1981 and winter of 1982 16 volunteers contributed a total of 63 days of labour in the excavation and 38 evenings processing artifacts in the lab sessions, thereby demonstrating the feasibility of such a project. We had planned to complete the work in the fall of 1982, but rescue excavations at the Elliott village absorbed all of the volunteer labour. This report is a preliminary report on the results of our 1981 excavation.

Location and Topography

The site is located in the Kettle Creek drainage, high on the south slope of the Westminster Moraine (see Figure 1). The physiographic features of this region, which Chapman and Putnam (1973) call the Mount Elgin Ridges, are a series of parallel recessional moraines of the Lake Erie ice lobe. Lowlands separating the moraines are general poorly drained and swampy. The topography in the immediate vicinity of the site is typical of the moraines with high rolling hills and not infrequent kettles creating small ponds or swamps. About two kilometers southeast of the village is a large kettle lake known as Whittaker Lake. Immediately southeast of the

Figure 1: Site Locations
The site itself is a deep ravine which contains a small tributary of Kettle Creek, while to the southwest is a small kettle or sink hole which is situated on the periphery of the village. To the north and west there is a gentle slope away from the village, so that there is good drainage over the entire site. The vicinity is predominately clay soils (Huron clay loam), but in the area of the village this clay is overlaid by two to four feet of coarse sand. Located within the village are two small kettles or sinkholes which Boyle recorded (1896) as being 84 ft. across and 7 ft. deep and 70 ft. across and 5 ft. deep, respectively. The water table is less than one meter below the present day surface in these depressions.

The early survey records document a maple/beech climax forest cover, however about 1 km to the west some pine was noted among the maple and beech (Finlay, 1977). When the site itself was cleared it was covered with maple and beech. Boyle (1896) reports "A few stumps of considerable size remain on the bank. One of maple near the south is two feet six inches in diameter and another beech is two feet ten inches". Local recollections also confirm this. Ross (1967) reports a statement by Mr. A. Jackson a former owner "About 65 years ago he assisted in cutting the trees of a portion of the fort belonging to Mr. Sharp. Hard maples grew on the walls with many of the trees measuring two feet through at the stump". Finally, Festecau's wood identifications in the following article document a similar forest cover during the period of village occupation.

History

In 1895 the site was visited by David Boyle who documented the existence of earthworks. While they were mostly destroyed in the field east of the north/south fenceline, to the west, the earthwork was still undisturbed and was measured at "twelve to eighteen feet across and two to four feet high". A map of the site delineating the earthworks, fenceline and the sinkholes was later drawn by the landowners and sent to Boyle who included it in his report (see Figure 2). After Boyle's visit the site does not seem to have attracted any professional attention, although local tradition places the Jury's on the site twenty or thirty years ago and reports another dig on the site by people from Toronto. The site, however, has not gone unnoticed by local people, among whom it is widely known as "Old Fort Mossley" or "Old Fort Dorchester". Numerous uncontrolled excavations have occurred over the years resulting in considerable damage to the site. In the history of North Dorchester Township (Ross, 1967) it is recorded "Mr. A. Jackson...can remember digging for gold which was supposedly buried within the walls. At the time, some seventy five years ago, the Indian relics, for which people later dug, were given very little attention." Occasional potting of the site has continued up until the 1980 visit by the author.

The Excavations

In early August of 1981 the site was visited by Wm. Fox of the M.C.C. and the author in order to pinpoint the most productive areas for testing. The two midden areas were identified by regular shovel testing of the site. In mid August we laid out a grid on Midden I and eventually excavated two two meter and three one meter squares.
Figure 2: Harrietsville Earthwork Map (from Boyle, 1896)

Rough Plan of Earthwork, Lots 10 and 11, Con. 5, in N. Dorchester Tp, Middlesex Co., Ont. (1/6 in = 3 ft.)

- MIDDLETON
- MIDDLESEX
- TRENCH I
- TRENCH II
- Lot 10
- Lot 11
- Indistinct outline of former embankment.

- Sink-hole, 84 ft. dia, 7 ft. deep.
- Sink-hole, 70 ft. dia, 5 ft. deep.
- Ravine.
The first two meter square was in an area of heavy looting disturbance and contained little information of value. Indeed, after carefully mapping the planview of the disturbed soil, we subsequently discovered a modern beer bottle about 40 cm below the surface. After this disappointing start we adopted a strategy of using one meter squares to sample an area before taking out a full two meter square. Four such squares were then dug. The next square south of our first square contained an undisturbed layer which had been ignored by the pothunters, and produced the bulk of the artifacts from Midden I. A large sample of the undisturbed layer was recovered for flotation. After the crop was taken off the west field, we subsequently put in two more two meter squares in Midden II. This deposit was mostly within the ploughzone, nevertheless, a number of diagnostic artifacts and some faunal material was recovered.

An attempt to locate the village boundary and community patterns in October involved the excavation of a 2 meter wide trench in the north field (see Figure 2). This trench (Trench I) was extended north from the fence for 22 m and uncovered only a few postholes. In early November we completed the trench and put in another one meter trench (Trench II) between two rows of Christmas trees. This trench was more productive, uncovering what may be a house end and a portion of the palisade. Ironically, during this final day the north field was ploughed and on the way out we shovel-shined the dead furrow (a trench about 20 cm deep and 30 cm wide caused by the action of the plough in turning over the soil) and discovered a feature in the subsoil which probably represents the ditch outside the earthwork. This feature was about 4 m beyond the end of Trench I.

Community Patterns

While little can be said about the internal organization of the village owing to the limited nature of the excavations, it is possible to make some comments on the criteria used for site selection and on the accuracy of Boyle's map of the earthworks. The village is bounded on one side by a steep ravine, however the other three sides have almost level approaches unlike the Lawson site (Wintemberg, 1939) where three sides are bounded by ravines.

A unique feature of the village interior are two large sinkholes noted by Boyle, and the inclusion of them within the village was certainly a conscious design, despite the fact that they reduce significantly the village area suitable for house construction. The only conceivable benefit of including these features within the village perimeter was as a water source. It could also be speculated that this was not the primary source of water for the group but was only used during emergency situations when other more remote sources were unavailable. Another indicator of this supposition is the fact that Midden I was placed on the very edge of the eastern sinkhole, which unless foresight was totally lacking would seem to indicate that the sinkhole was not viewed as a primary water source. When this information is coupled with the fact that there was a small stream in the ravine immediately southeast of the village, the argument that these sinkholes were not the primary source of water seems reasonable. An interior water source is not unique to the Harrietsville site, but is also found on the Southwold Earthworks another late prehistoric Neutral village (Smith, 1977). Here however the village actually spans a small stream.
Another factor which made the site attractive was the layer of sand which covers the site in an area which is otherwise clay till. This would have facilitated construction of palisades, houses and earthworks. It was also a factor in what we refer to as the second component or occupation of the site, namely groundhogs. Rodent burrows were evident in both middens and had caused some disturbance of the intact layer in Midden I, with the result that some of the material was subsequently redeposited much lower.

While we failed to locate the boundary of the village, except possibly during the ploughing operations, some comments are possible regarding Boyle's map (1896). First, the scale as published in inaccurate if we take the measurements given in the text and apply them to the village map. Taking the four primary measurements given on the earthwork and applying them to the map we arrive at scales varying from 1" = 67' to 1' = 88'. The proper scale on the map should likely read "1/16 in. = 5 ft.". This error could result from a typographical error on the original or the reduction of the original for publication purposes without modification of the scale. A second observation is that while the fencelines, the western intact earthwork, and the two sinkholes are in the proper relation to each other, the two eastern promontories of the village around the small ravine do not exist as drawn. It would be possible for the northern earthwork to have extended the distance illustrated for the southern alignment, and indeed, if the feature we located during the ploughing is the earthwork ditch, then this may have been the case. The map could be improved by reversing the southern and northern earthworks and the associated ravine configuration. Thirdly, while the scale error is consistent with regard to fencelines and earthworks, it is radically different for the diameters of the two sinkholes. Here the observed scale from the map is 1" = 132', as compared to 1' = 80' for the rest of the map. This error obscures the fact that the sinkholes do take up a significant portion of the site. Boyle himself did not measure the earthworks (Boyle, 1896:39) and future contour mapping will clarify the situation.

Artifacts

Below is a preliminary description of the artifacts recovered from the 1981 excavations. Unfortunately, the numbers collected are not large enough to permit statistically significant comparisons to other sites, however this may be corrected by future work.

Projectile Points

Of a total of 19 projectile points and point fragments recovered from the site, three are of pre-Iroquoian origin (Archaic and Early Woodland), and six more are too fragmentary to permit analysis (see Figure 3). Data from the remaining ten triangular and side notched forms are presented in Table 1.
Table 1: Projectile Point Attributes

<table>
<thead>
<tr>
<th>Catalogue Number</th>
<th>Length</th>
<th>Width</th>
<th>W/L Ratio</th>
<th>Form</th>
<th>Chert Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>217</td>
<td>24</td>
<td>20</td>
<td>.83</td>
<td>Triangular</td>
<td>Onondaga (L)</td>
</tr>
<tr>
<td>410</td>
<td>26</td>
<td>21</td>
<td>.81</td>
<td>Triangular</td>
<td>Onondaga (L)</td>
</tr>
<tr>
<td>21</td>
<td>20</td>
<td>15</td>
<td>.75</td>
<td>Triangular</td>
<td>Onondaga (L)</td>
</tr>
<tr>
<td>216</td>
<td>22*</td>
<td>15</td>
<td>.68</td>
<td>Triangular</td>
<td>Unidentified</td>
</tr>
<tr>
<td>260</td>
<td>18</td>
<td>14</td>
<td>.78</td>
<td>Triangular</td>
<td>Kettle Point</td>
</tr>
<tr>
<td>7</td>
<td>32</td>
<td>18</td>
<td>.56</td>
<td>Triangular</td>
<td>Onondaga</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>13</td>
<td>.32</td>
<td>Notched</td>
<td>Onondaga</td>
</tr>
<tr>
<td>236</td>
<td>38*</td>
<td>13</td>
<td>.34</td>
<td>Notched</td>
<td>Unidentified</td>
</tr>
<tr>
<td>385</td>
<td>45*</td>
<td>18</td>
<td>.40</td>
<td>Triangular</td>
<td>Onondaga</td>
</tr>
<tr>
<td>212</td>
<td>35*</td>
<td>13</td>
<td>.37</td>
<td>Triangular</td>
<td>Onondaga</td>
</tr>
</tbody>
</table>

* - estimated measure
(L) - probably local till pebble source

While the data above represent only ten specimens, there seem to be some interesting trends. Ignoring notching, there seem to be two different types emerging. The first represented by the first five artifacts, is shorter and has a much higher width to length ratio than the second type composed of the last five. This same distribution emerges in a study by Fox (1980), but in this case he was dealing with several villages of the Ontario Iroquois and Younge Traditions, where the short points were characterized as belonging to the Wolfe peoples and the longer points to the Neutral.

Another interesting observation is that if 6 other Iroquoian point fragments are added to the above, we have one Kettle Point chert specimen out of sixteen or 6 percent of the total. At the Lawson site, Fox (ibid.) reports 59% Kettle Point chert.

Figure 3: Projectile Points
While the rest of the chipped stone has not been subjected to any formal analysis the following comments are possible.

A significant portion of this industry was based on knapping chert cobbles found in the local glacial till. Examples of exhausted cores and the flakes removed from them, rough and finished preforms and refined tools made of this material are well represented. There is some problem differentiating till from quarried Onondaga chert when no pebble cortex is present; however, the flaking quality is generally poorer (lower silica content) among the local till cherts as opposed to the imported variety. Finally, several scrapers of both end and side varieties were recovered from the Harrietsville village.

Ground Stone

This artifact class was conspicuous in its absence. One rough celt was recovered on the surface when the site was first relocated, while another small (50 cm long) chisel was found in Midden I. This lack of ground stone undoubtably results from the long history of collecting on the site, as adze manufacturing debitage is common in both middens.

Ceramic Vessels

Twenty-four vessels are represented by 60 rimsherds and rim fragments (see Figures 4 and 5). Rims were deemed to be analysable if the interior surface and the lip were present and there was enough of the neck to indicate the presence or absence of decoration. The standard pottery types developed by McNeish (1952) are presented in Table 2 as vessel counts, with bracketed numbers representing vessels which display interior punctate decoration. Percentage by type for the Harrietsville and Lawson villages (Pearce, 1980) is also given.

Table 2: Pottery Type Comparison between the Harrietsville and Lawson Villages

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Vessel Count</th>
<th>Percent</th>
<th>Percent at Lawson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawson Incised</td>
<td>12 (4)</td>
<td>50</td>
<td>36.3</td>
</tr>
<tr>
<td>Pound Necked</td>
<td>4 (1)</td>
<td>17</td>
<td>18.8</td>
</tr>
<tr>
<td>Parker Festooned</td>
<td>4 (0)</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>Dentate Stamp</td>
<td>2 (0)</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Niagara Collared</td>
<td>1 (0)</td>
<td>4</td>
<td>18.5</td>
</tr>
<tr>
<td>Untyped</td>
<td>1 (0)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Lawson Opposed</td>
<td>0</td>
<td>0</td>
<td>10.7</td>
</tr>
</tbody>
</table>

While the sample from Harrietsville is not large enough to permit statistically significant comparisons with Lawson, the general differences might have some validity. These are primarily the larger proportion of western material at Harrietsville, including both Parker Festooned and the Dentate
Stamped vessels (see Figure 6). This amounts to 25% of the material at Harrietsville as opposed to 4.2% at Lawson. The Parker Festooned vessels are different from those from the Parker Earthworks. At Harrietsville, the paste and temper of this pottery is identical to the Neutral ware on the site, differing only in the Parker Festooned motif. While Parker Festooned material from Lawson is highly standardized, being created with a tool with five teeth (Pearce: personal communication), the Harrietsville vessels are highly variable, with both the number of teeth and the size of the teeth changing. The other major difference between the two sites is the absence of Niagara Collared and Lawson Opposed at Harrietsville.

Figure 4: Lawson Incised Rims

Figure 5: Pound Necked Rims
Ceramic Pipes

Pipes recovered from the site include six analysable bowl fragments and a number of stem, elbow and mouth piece fragments (see Figure 7). The bowl fragments consist of 4 ringed and two plain specimens. Stem, mouthpiece and elbow fragments are plain, and all pipes exhibit a high degree of polishing or burnishing.

Dating of the Village

A radiocarbon date of 1350 + 75 A.D. (Fox, 1982) was obtained from an undisturbed ash layer in Midden I. This layer was protected as it was immediately adjacent to a fence which had been in place for well over 100 years.

Conclusions

If one accepts the traditional dates for the Middleport phase as 1300-1400 A.D. (Wright, 1966), then the single mean date of 1350 A.D. is a little too early. However, at one sigma it could be 1425 A.D. which is more in keeping with the Neutral ceramic types represented on the village. The low incidence of plain and opposed designs argues for a placement sometime earlier than the 1500 A.D. estimate for the Lawson site. Another factor which may argue for a time different than Lawson is the almost complete absence of Kettle Point chert.

This village is one of a number of sites in the Lake Whittaker area which Pearce (1981) calls the Late Whittaker cluster. Other sites such as
Wester, Messenger, Smith, Dyjack, Pinetree and Gravel Pit all appear to predate Harrietsville as they are said to be Middleport (Pearce: personal communication). Harrietsville at this time appears to be the most recent in a series of village moves relating to a single group. Comparison of the material with that of Messenger, for which a good sample exists, should prove interesting in delineating these movements. Unfortunately the other sites all suffer from the same problem mentioned at the outset, poor samples. Comparison with material from other villages of the Western Neutral Group to the south and west should also be undertaken.

Given a date of c. 1425 A.D. for the site, what is different in the western Neutral world between then and the 1500 A.D. Lawson village? Consider the following:

1. Between these two dates something has happened which makes Kettle Point chert more attractive, as from 6% at Harrietsville it has grown to 58% at Lawson.

2. Western style pottery (Parker Festooned and dentate stamped vessels) seems to be rarer at Lawson than it was 75 years earlier.

3. The short, broad arrow points identified as belonging to western groups reach Harrietsville in plentiful numbers but are rare at Lawson.

4. Both Harrietsville and Lawson people are concerned with defensible villages. At Lawson the topography creates a virtual fortress before village construction. Earthworks and palisades cover the only open approach. At Harrietsville an earthwork is constructed in such a manner as to provide a water source within the village for some purpose other than ease of hauling water, since it was not the primary source.

Whether these facts represent simple changes in cultural values or the result of interaction between local and western groups is difficult to say. A not unreasonable explanation is that it represents another 50 years in the conflict between the Neutrals and the "Fire Nation" to the west. If this is the case, then the observation can be made that things were fairly even in the early fifteenth century, but by the end of the century, the western Neutral beat back the enemy to the west. In Harrietsville times western projectile points are common on Neutral sites, while during Lawson times the converse is true. Earlier, Kettle point chert is rare, but later the source seems to open up.

As was mentioned previously, the above conclusions are tenuous owing to the small sample of artifacts. It remains for future research to augment the sample and test our hypotheses. More particularly, we plan to construct an accurate contour map of the site and establish the village perimeter. Barring any unforeseen major rescue excavations, this should be accomplished in 1983.

Acknowledgments

I would like to thank all of the volunteers who participated in the
excavation and artifact washing and cataloguing, particularly George Connoy who was present close to 100% of the time! Also, the landowners Mr. Clifford Sykes, Mr. John Struger and Mr. Kent Flannery are sincerely thanked for their permission to excavate, and thanks to Bill Fox for the time and advice spent when strategic decisions were required. Finally, thanks to my wife Pat for her patience throughout the frequent Saturday absences during the excavation portion of the project.

AN INITIAL REPORT ON CARBONIZED PLANT REMAINS FROM THE HARRIETSVILLE EARTHWORKS SITE (AFHF-10) MIDDEN I IN NORTH DORCHESTER TWP., MIDDLESEX CO.

RODOLPHE DAVID FECTEAU

Introduction

As indicated in the previous article, the London Chapter undertook excavations in several areas of the Harrietsville village during 1981. Midden I proved to be a deep and badly disturbed ash deposit; nevertheless, some intact segments were located and a 190 litre ash layer sample was removed for flotation. This soil was processed by Pat Cornelius and Wayne Hagerty using a SMAP machine.

This floral analysis includes the identification of carbonized seed remains (cultivated and wild) and carbonized wood from the flotation light fraction. Two size grades of carbonized wood (> 5.0 mm and > 9.5 mm) were examined to determine whether the variety of tree species increased as size decreased. The total weight of the midden light fraction was 435 g. and results of identifications are presented in Tables 1 and 2.

Plant remains

Cultigens

Cultivated plants identified include corn, bean, sunflower and tobacco (see Table 1).

Corn (Zea mays)

Corn is represented by 13 corn kernels (10 of which were measurable), kernel fragments, cob fragments (mostly cupules) and one embryo. The kernels average 9.0 mm wide by 5.7 mm in thickness. They range from 6.6 mm to 10.4 mm wide and 4.9 mm to 6.8 mm thick.

The kernels are generally wider than long and the general shape and size indicate a Northern Flint variety (Brown and Anderson, 1947; Yarnell, 1964).
Corn is common to Neutral sites having been recorded on 15 sites (McAndrews, Fecteau, Hick, 1981). This record begins with the Pipeline site dating from the second half of the 14th century and continues through to mid-seventeenth century historic sites, such as Hood and Hamilton.

Bean (*Phaseolus vulgaris*)

Three bean lobes were recovered. The lobes average 11.2 mm long by 6.3 mm wide by 2.5 mm thick and range from 11.0 mm long and 5.9 mm to 7.0 mm wide and 2.2 mm to 2.4 mm thick.

Bean is recorded on 11 Neutral sites and usually is present in small numbers (McAndrews, Fecteau and Hick, 1981).

Sunflower (*Helianthus sp.*)

Six sunflower seeds were recognized. Two seeds with achene pericarp or seed coat are present as well as four naked seeds. The two seeds with pericarp are 9.0 mm and 8.3 mm long by 4.0 mm and 5.0 mm wide, respectively. Three incomplete specimens range from 5.0 mm long to 7.0 mm long and 2.3 mm to 2.9 mm wide.

To date, sunflower has been recovered from only seven Neutral sites and 11ke bean, occurs in small quantities (McAndrews, Fecteau and Hick, 1981).

**Tobacco** (*Nicotiana rustica*)

Four seeds, three of which were measurable, were recovered from the light fraction sample. Three seeds range from .6 mm long to .9 mm long and .4 mm wide to .6 mm wide.

To date, tobacco has been found on only two other Neutral sites, the 16th century Wolf Creek site (Fecteau, 1981) in Kent County and on the late 14th century Pipeline site (Busby, 1979) in Halton County.

Table 1: Carbonized seeds from Hidden I on the Narresville Earthwork site

<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
<th>Width</th>
<th>Length</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunflower</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1

<table>
<thead>
<tr>
<th>Cultivated Plants</th>
<th>Seeds</th>
<th>Small Fragments</th>
<th>Large Fragments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>13</td>
<td>1267</td>
<td>1</td>
<td>360</td>
</tr>
<tr>
<td>Sunflower</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Tobacco</td>
<td>.4</td>
<td>.07</td>
<td>-</td>
<td>.4</td>
</tr>
</tbody>
</table>

*Includes cupules, cupule fragments, stalk fragments.** - 2 lobes are the equivalent of 1 seed; this was done to simplify calculations.
This record of tobacco on the Harrietsville village is the first archaeological report from the 15th century in southwestern Ontario.

Wild Plants

A total of 2909 carbonized seeds representing 11 taxa have been identified (see Table 1).

Greens/Grass

Carbonized seeds of three leafy plants are present in small amounts. These include goosefoot, knotweed and purslane. One incomplete grass seed was also recovered, but the importance of these plants in the diet of the occupants is unknown.

Fleshy fruits

Seeds of fleshy fruits accounted for 92.1% of all seeds identified. Raspberry seeds are the most prevalent, followed by elderberry and strawberry. A single hawthorn seed was recovered. The large quantity of berries, especially raspberry, suggests they were used by the occupants.

Other seeds

Small amounts of carbonized sumac and spikenard, and seeds tentatively identified as ground cherry were also recovered. The economic status of these seeds is unknown. Spikenard can be used as flavouring and a food source (Yarnell, 1964: 58).

Carbonized Wood

A total of 45.5 g of carbonized wood were examined. The results are expressed as percentages of total weights of combined size grades (> 5.0 mm and > 9.5 mm) in Table 2.
Sugar maple comprises the greatest amount of wood in the assemblage, accounting for 57.4%. Following in descending order of abundance are: beech which comprises 25.5%, white elm which constitutes 11.2%, ash at 1.9% and ironwood and birch which make up .2%. Unidentified wood accounted for 3.5%.

Examination of carbonized wood from two size grades indicates that the number of species identified increases when size grade decreases. The smaller size grade (9.5-5.0 mm) appears to be the optimum size grade for identification of carbonized wood. Wood specimens smaller than 5.0 mm usually lack the characteristics needed for positive identification. This increase in varieties of wood provides essential added information.

Seasonality

The native food plant remains identified from the seed and wood assemblages indicates that the Harrietsville Earthwork site was occupied from at least spring to late fall (May-November). Information on seasonal availability of plant remains was abstracted from Peterson (1978) and Yarnell (1964) and is summarized in Table 3. The wide variety of plant food remains, in general, argues well for a spring to late fall occupation, however a year round occupation cannot be dismissed. Raspberry, elderberry, strawberry and beechnut are all resources that can be stored for winter consumption.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>beech*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>raspberry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>elderberry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strawberry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hawthorn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sumac</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ground cherry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>spikenard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>purslane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>knotweed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goosefoot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*beech nuts are not present in the sample, but are implied by the wood identification

Summary

The identification of carbonized plant remains from the Harrietsville Earthworks site indicates a food plant subsistence dominated by corn of the Northern Flint variety. Bean and sunflower were also used by the occupants and
tobacco was available as a smoking material. A wide range of wild plants were also available to the inhabitants as supplementary food.

The large quantities of raspberry and elderberry seeds suggest they may have been stored for winter consumption. The weedy nature of the wild plant assemblage implies disturbance on the site, perhaps as a response to agricultural activities. The range of food plant remains indicates at least an early summer to late fall occupation.

The tree specie assemblage is consistent with a climax beech/maple forest containing elm and ash as secondary species. All trees identified are present in the region today.

Acknowledgments

The author would like to thank Bill Fox, Regional Archaeologist, Ministry of Citizenship and Culture, London, who supplied the plant material for analysis and Dr. Jock McAndrews, Botany Department, Royal Ontario Museum, Toronto who provided facilities for the analysis.

References

Brown, Wm.L and E. Anderson

Busby, A.M.

Fecteau, R.D.
1981 Archaeobotany of the Wolf Creek site (AcHm-3), Chatham Twp., Kent Co., Ontario. manuscript.

McAndrews, J.H., R.D. Fecteau, and S. Hick

Watson, P.J.

Yarnell, R.A.
1964 Aboriginal relationships between culture and plant life in the Upper Great Lakes Region. Anthropological Paper No. 23, University of Michigan, Ann Arbor.
1 Headstones in Haldimand County occasionally show a Masonic design, either by itself, within a floral wreath or associated with other symbols, like the Maltese cross (Illus. 11) or a winged hourglass (Illus. 10). The compass denotes rationality; the square, uprightness. The winged hourglass is a classical symbol of mortality. 2 The descending hand of God holds an open scroll bearing various messages of Christian hope. 3 A hand holds a broken chain. 4 The urn, symbol of sorrow, was an element of the Classic Revival style in English architecture. In this headstone the draped urn is flanked by two inverted torches of life. 5 This is a rare example of a low relief carving of a figured cherub holding a garland of flowers. Cherub stones tend to stress the joy of resurrection and immortality. 6 The impish winged cherub design on this 1854 stone presides over the grave of an infant. Originally this was a popular pattern on 18c New England gravestones and was known as a "soul effigy". 7 This unique symbol depicts a burning altar and altar cloth. The flame represents the soul arising triumphant over the ashes of death; the shroud indicates the presence of Jesus. 8 This 1856 carving of Jesus was probably based on Byzantine iconography. Icons often depict Christ with His right hand raised in the traditional gesture of blessing and the left hand holding an open book with a biblical text. The carving here deviates from the normative imagery, as the stonemason substituted a scroll for the book and pointed the index finger of the right hand upwards. 9 The star, a Masonic symbol, is usually found in conjunction with other motifs, e.g. a hand holding a book. 12 Headstones displaying wheat sheaves and sickles are occasionally found in the smaller Haldimand church cemeteries and they seem appropriate to a county that is largely agricultural. 13, 14 The anchor, a Christian symbol of hope, is a familiar motif on stones in the southern townships near Lake Erie. 15 The square rigged schooner, also found on gravemarkers in the southern townships, is perhaps a motif that reflects the local fishing industry more than it does Christian symbolism. 16 A shallow rectangular upright frame, encircled by ivy or used singularly, is an odd type of marker. It is uncertain what the frame contained in its original state. 17 This charming carving of a young girl in a hoop skirt appears on an 1863 headstone for a year-old baby girl. 18, 19 In Roman Catholic cemeteries the cross is the dominant theme used either as a single motif or in combination with other sculptural forms. In Illustration 18, the cross of Calvary is centred in a trefoil shape and on either side, facing the cross, are praying angels. A hand holding a Latin cross within a background of leaves (Illus. 19) is only one of the many variations of this popular theme.