

THE BRUCE BOYD SITE: AN EARLY WOODLAND COMPONENT IN SOUTHWESTERN ONTARIO

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ABSTRACT

The Bruce Boyd site is an Early Woodland burial area on a sand knoll near Long Point, Lake Erie. Excavation uncovered several burials and offerings with cache blades, Meadowood points, trapezoidal gorgets, galena, copper beads, copper bracelets, iron pyrites and red ochre. The ceramics were cordmarked on both interior and exterior, some of them also showing punctates on the lip and exterior rim.

INTRODUCTION

The Bruce Boyd site (AdHc-4) is located on a low, sandy knoll on the property of Bruce Boyd (Lots 8-9, Concession B, South Walsingham Township, Norfolk County), roughly one mile inland from the north shore of Lake Erie and five miles west of Long Point. First discovered by William Fox (1972), who designated it the Bellamy site, the burial area was partially excavated in 1975 (Dawkins et al 1976) and 1976 by a team from the University of Western Ontario under Spence's direction. The excavation was prompted by several considerations, but three in particular seemed important. For one, we hoped to obtain a representative sample of Early Woodland material from a site in this part of Ontario. Second, we wanted to investigate the possibility of an early appearance of cultivation in the region. Roughly contemporaneous sites in Michigan and northern Ohio show a limited degree of maize-squash cultivation, perhaps supplemented by "eastern complex" plants like chenopodium and iva (Struever and Vickery 1973:1199, 1201). Finally, we wished to determine the degree of social complexity that characterized the local society, its stability and cohesion as well as the nature of its internal ranking.

An area of 225 square meters was cleared on the upper east part of the knoll. The plough zone was shovelled and partially screened while the rest was trowelled. A large number of soil and flotation samples were taken for analysis. Some of the burial material was removed in blocks to allow more careful excavation in the laboratory. Analysis of the recovered artifacts and bone has not yet been completed, so the account presented below is a tentative one. Also, the very extensive groundhog activity at the site and, even more, the disastrous effect of soil acidity on the burials make interpretation of some features very difficult.

ARTIFACTS

The offering material from the site includes galena cubes, copper beads of three types (Fig. 1h), a copper axe, three-quarter clasp bracelets of sheet copper (Fig. 1g), square-sectioned copper awls, a clam shell, a beaver incisor, a flat abrading stone, axes, adzes (one made from a broken pendant or gorget), two small round stones, iron pyrites fire-making sets, a ground slate pendant (Fig. 1f), two trapezoidal gorgets (Fig. 1e), one rectangular gorget with excurvate sides, flint waste, cache blades, points, drills and end scrapers (Figs. 2-3). Some of this material, including the copper axe and the galena cubes, was found out of context, but most was *in situ* when excavated.

The drills are of the expanded base type (Fig. 3d). The end scrapers are small and triangular, often bifacially worked. Although superficial examination suggests that they are reworked points, a closer study reveals that most were originally created as end scrapers.

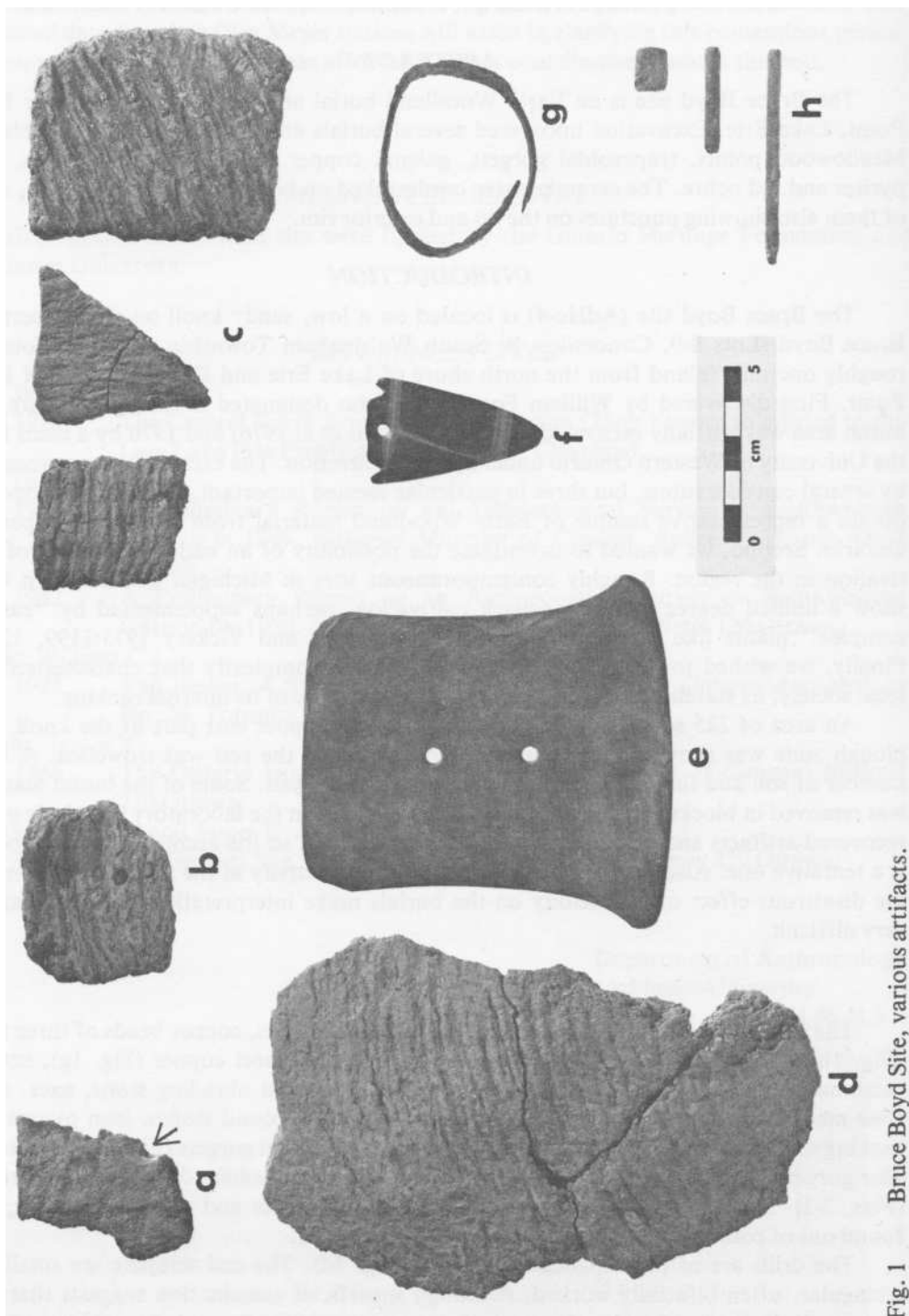


Fig. 1 Bruce Boyd Site, various artifacts.

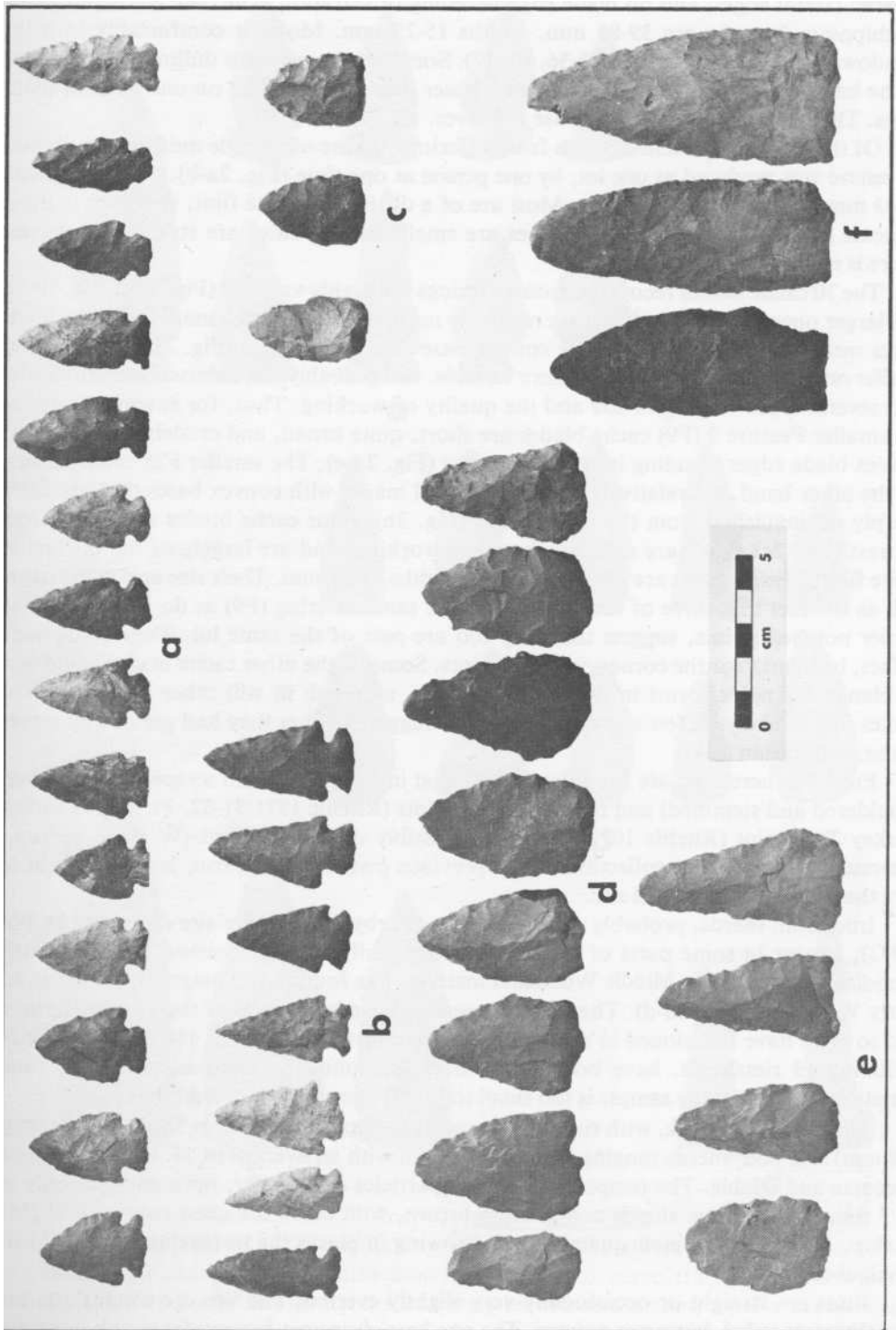


Fig. 2 Bruce Boyd Site, selected artifacts, F9 offering.

The 25 side notched points from offerings (Fig. 3a) generally have small notches, straight to convex bases (occasionally fan-shaped or slightly concave) with rounded or squared lateral edges, and no blade edge bevelling or serration. The base is often thinned by chipping. Lengths are 39-85 mm, widths 15-29 mm. Most fit comfortably into the Meadowood type (Ritchie 1971:35-36, Pl. 17). Some specimens show dulling and rounding of the basal edge, usually accompanied by lesser degrees of dulling on one or both blade edges. This probably is due to their use as knives.

Of the 28 corner notched points from offerings, 26 are of a single uniform type which we believe was produced as one lot, by one person at one time (Fig. 2a-b). They are small, 28-43 mm long by 16-24 mm wide. Most are of a distinctive white flint, very rare in other contexts at the site. The corner notches are small and the bases are straight to convex. There is no basal dulling.

The 70 cache blades recovered from offerings are highly variable (Fig. 2c-f; Fig. 3b-c). The larger ones (73-102 mm long) are relatively narrow, thin and well made, with the blade edges meeting a straight to slightly convex base at a sharp angle (Fig. 2f; Fig. 3c). The smaller ones (Fig. 2c-e; Fig. 3b) are more variable, and probably will eventually be subdivided into several types varying in size and the quality of working. Thus, for example, most of the smaller Feature 9 (F9) cache blades are short, quite broad, and crudely worked, with convex blade edges blending into convex bases (Fig. 2d-e). The smaller F25 cache blades, on the other hand, are relatively narrow and well made, with convex bases that are often sharply distinguished from the blade edges (Fig. 3b). Four cache blades stand out from the rest (Fig. 2c). They are smaller, show less working, and are largely of the distinctive white flint. Their lengths are 29-35 mm, their widths 17-21 mm. Their size and material, as well as the fact that three of them appear in the same offering (F9) as do 22 of the small corner notched points, suggest that they too are part of the same lot. They could well, in fact, be blanks for the corner notched points. Some of the other cache blades could also be blanks for point forms in the same offerings, although in still other cases their size makes this unlikely. A few show basal dulling, suggesting that they had previously served in some utilitarian task.

From F3 there is a Late Woodland cache that includes three end scrapers (two of them shouldered and stemmed) and nine Levanna points (Ritchie 1971:31-32, Pl. 15). A Fulton Turkey Tail point (Ritchie 1971:23, Pl. 9), possibly of Indiana flint (W. Fox, personal communication), is in a collection of the previous owner of the farm, but we cannot be sure that it is from the burial site.

Iroquoian sherds, probably derived from a nearby Glen Meyer site examined by Fox (1972), appear in some parts of the site, but can easily be distinguished from the Early Woodland ceramics. No Middle Woodland material was found. The majority of sherds are Early Woodland (Fig. 1a-d). They do not seem to have been parts of the grave offerings, and so must have functioned in some utilitarian context. A sample of 118 of these sherds, including 19 rimsherds, have been included in the following analysis. Although some variation was noted, the sample is too small to justify the creation of subtypes.

The sherds are thick, with rims (measured at the lip) ranging from 5 to 9 mm (average 7.8 mm) and bodysherds ranging from 6 to 19 mm with an average of 11.7 mm. The paste is coarse and friable. The temper is grit, with particles of feldspar, mica and quartzite up to 5 mm in size. Most sherds are medium brown, with cores the same colour or slightly darker. A number are inadequately fired, showing in places the texture and colour of the original clay.

Rims are straight or occasionally very slightly everted. The lips are usually flat and sometimes rounded, but never pointed. The one basal fragment is conoidal or sub-conoidal.

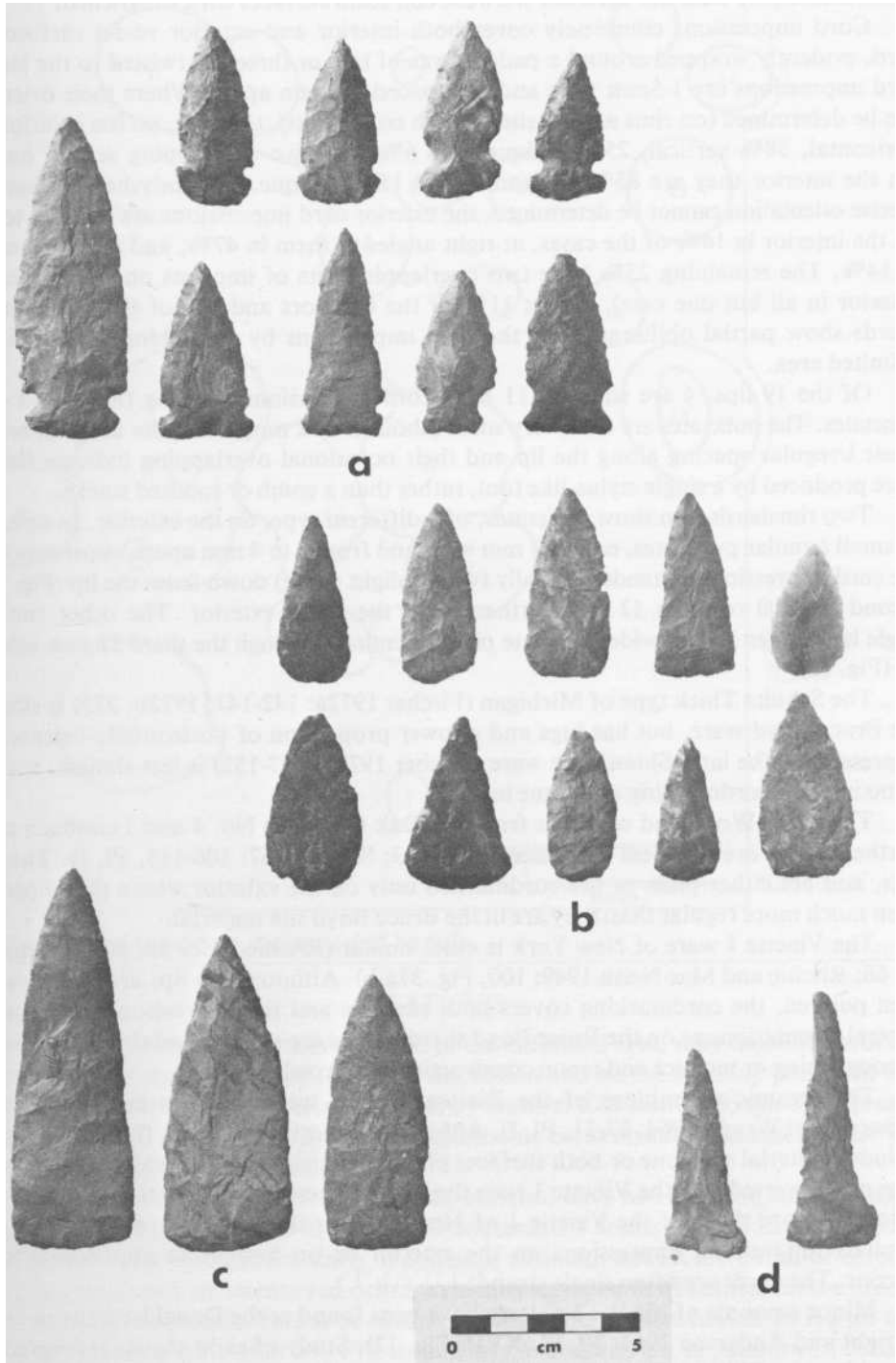


Fig. 3 Bruce Boyd Site, selected artifacts, F25 offering.

No lugs or other appendages were found. Manufacture was by coiling, but mortice and tenon techniques were not used nor were the coil seam surfaces cord roughened.

Cord impressions completely cover both interior and exterior vessel surfaces. The cord, evidently wrapped around a paddle, was of two or three ply twisted to the left. The cord impressions are 1-5mm wide and are spaced 1-7 mm apart. Where their orientation can be determined (on rims and on sherds with coil breaks), they are, on the exterior, 31% horizontal, 38% vertical, 25% oblique, and 6% with two overlapping sets of imprints. On the interior they are 85% horizontal and 15% oblique. On bodysherds where their precise orientation cannot be determined, the exterior cord impressions are parallel to those on the interior in 14% of the cases, at right angles to them in 47%, and diagonal to them in 14%. The remaining 25% have two overlapping sets of imprints on one surface (the exterior in all but one case). About 11% of the exteriors and 9% of the interiors of all sherds show partial obliteration of the cord impressions by smoothing, usually in only a limited area.

Of the 19 lips, 4 are smooth, 11 have cord impressions crossing them, and 4 have punctates. The punctates are oval, very small (about 1 by 2 mm) but quite deep impressions. Their irregular spacing along the lip and their occasional overlapping indicate that they were produced by a single stylus-like tool, rather than a comb or toothed stamp.

Two rimsherds also show punctates, of a different type, on the exterior. In one, a row of small annular punctates, each 4.5 mm wide and from 2 to 4 mm apart, superimposed on the cord impressions, extends vertically (with a slight curve) down from the lip (Fig. 1b). A second parallel row lies 12 mm further along the sherd exterior. The other rim has a single large (over 13 mm wide) punctate piercing entirely through the sherd 32 mm below the lip (Fig. 1a).

The Schultz Thick type of Michigan (Fischer 1972a: 142-147; 1972b: 273) is similar to the Bruce Boyd ware, but has lugs and a lower proportion of horizontally oriented cord impressions. The later Shiawassee ware (Fischer 1972a: 147-152) is less similar, with little or no internal cordmarking and some incising.

The Early Woodland ceramics from the Oak Openings No. 4 and Leimbach sites of northern Ohio are different (Strothers 1974: 2-3; Shane 1967: 106-113, Pl. I). They have lugs, and are either plain or are cordmarked only on the exterior where the impressions seem much more regular than they are in the Bruce Boyd site material.

The Vinette 1 ware of New York is quite similar (Ritchie 1955: 39, 50-54; 1969: 194, Pl. 68; Ritchie and Mac Neish 1949: 100, Fig. 37a-b). Although the lips are more rounded, even pointed, the cordmarking covers both surfaces and the impressions have the same general orientations as on the Bruce Boyd sherds. Lugs are absent, and there is no mention of roughening or mortice and tenon construction at the coil seams.

The ceramic assemblage of the Batiscan site is somewhat less similar (Levesque, Osborne and Wright 1964: 27-31, Pl. I). Although primarily Vinette 1, the assemblage also includes material with one or both surfaces plain. The sherds are generally thinner and the rims more everted. On the Vinette 1 rims the cord impressions are more variable in orientation than are those of the Vinette 1 of New York or the Bruce Boyd sherds, with less emphasis on vertical impressions on the exterior or on horizontal impressions on the interior. The cords are often single strand.

Minor amounts of Vinette 1 pottery have been found at the Donaldson site in Ontario (Wright and Anderson 1963: 30, Pl. XVII, Fig. 12). Study of eight sherds recovered from Donaldson by William Finlayson show that the Donaldson ware has interior and exterior cord impressions, usually at right angles to each other, but is somewhat finer and has more regularly disposed cord impressions than the Bruce Boyd material.

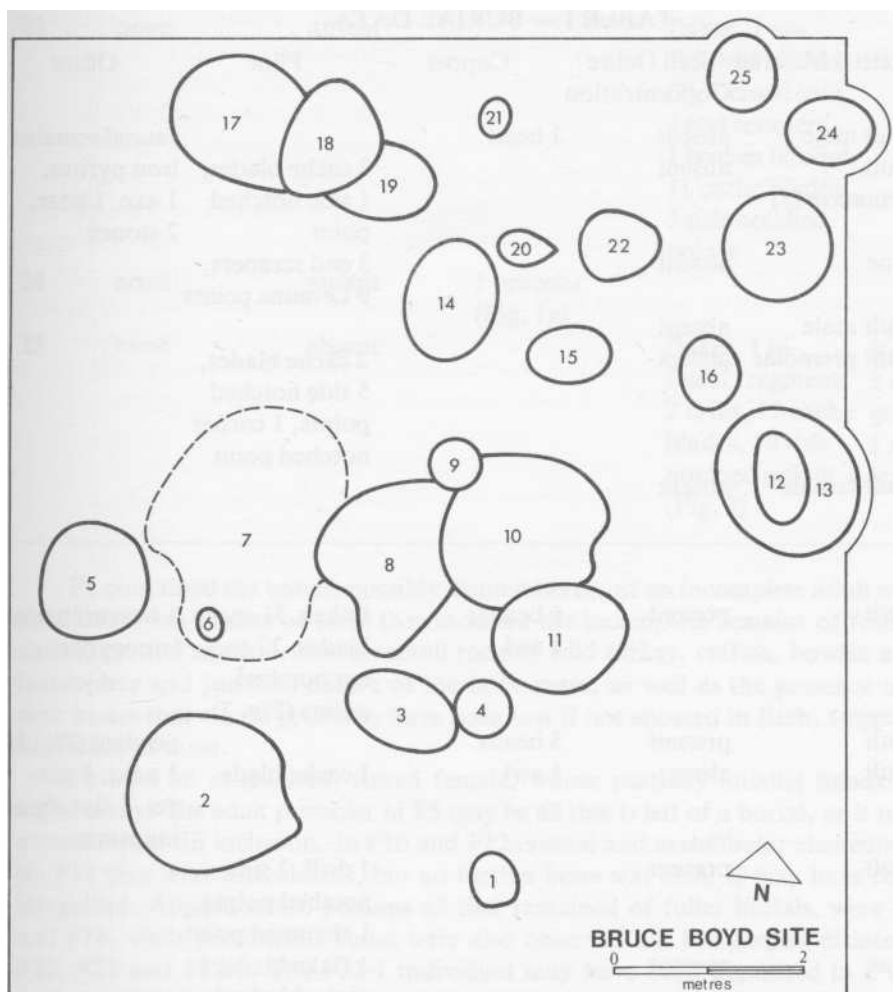


Fig. 4 Bruce Boyd Site, features and burials.

FEATURES

Although a number of features occurred in the excavated area, only those of particular interest have been included in the following discussion and on the site map presented here (Fig. 4). Table 1 presents the offering material by feature. Red ochre, though often present in the soil, is noted as present only if a distinguishable concentration indicates its use as a discrete element in the burial ritual.

The burials of features 4, 15 and 22-2, all bundles, have no red ochre concentrations or grave goods, and may prove to be Late Woodland. F3 seems to be a Late Woodland cache. All the other features are Early Woodland, although not all are burial or offering pits. F7 is a large area of intense red ochre, evidently dumped in quantities on the ground surface there. No associated burials or *in situ* offering material were found. F6 is a pit with a very intense ochre fill within F7. F19 is an Early Woodland pit of unknown function, while F16 contains charcoal and fire-cracked rock. The absence of offering material, red ochre and human bone indicates that F16 might have had a utilitarian function rather than a ritual one.

TABLE 1 - BURIAL DATA

Feature	Skeletal Material	Red Ochre Concentration	Copper	Flint	Other
1	adult male	absent	1 bead		faunal remains
2	adult cremation (?)	absent		2 cache blades, 1 side notched point	iron pyrites, 1 axe, 1 adze, 2 stones
3	none	absent		3 end scrapers, 9 Levanna points	
4	adult male	absent			
5	adult premolar	absent		2 cache blades, 5 side notched points, 1 corner notched point	
8	adult female	absent			
9	adult	present	6 beads, 1 awl	flakes, 31 cache blades, 22 corner notched points (Fig. 2)	1 beaver incisor, iron pyrites
10	adult	present	5 beads		pendant (Fig. 1f)
11	adult	absent	1 awl	1 cache blade	1 adze, 1 gorget, 1 flat abrading stone
12	adult	present		1 drill, 2 side notched points, 1 stemmed point	
13	none	present		1 flake blade, 1 cache blade, 1 side notched point, 2 bifacial fragments	
14	adult	present	16 beads	5 cache blades	
15	2 adults, 1 male and 1 female	absent			
17	adult cremation	present			
18	youth cremation	absent			
20	child	present	21 + beads	1 bifacial tip, 4 corner notched points	iron pyrites, 1 clam shell
21	adult	present		1 flake, 1 corner notched point	
22-1	adult	absent	1 bead	1 cache blade	
22-2	adult female	absent			

23	none	absent		flakes, 1 unfinished bifacial (?), 1 crude core, 4 end scrapers, 1 broken bifacial, 11 cache blades, 5 side notched points	
24	none	absent	1 bracelet (Fig. 1g)		
25	none	absent		flakes, 1 bifacial fragment, 2 drills, 17 cache blades, 10 side notched points (Fig. 3)	iron pyrites, 2 trapezoidal gorgets (Fig. 1e), 1 ground stone fragment

F1 contained the bones, possibly dismembered, of an incomplete adult male. Over the skull there was a mass of bone that included the incomplete remains of four deer, woodchuck, ground squirrel, beaver, small rodent, wild turkey, catfish, bowfin and chub. The incomplete and jumbled nature of the bone mass, as well as the presence of some small deer bones that would probably have been lost if not encased in flesh, suggest an offering of chunks of meat.

F8 held an articulated, flexed female, whose partially missing hands may indicate initial decay. The adult premolar of F5 may be all that is left of a burial, or it may be merely an accidental fill inclusion. In F10 and F12 cranial and mandibular elements were present (in F12 they were articulated), but no further bone was seen. It may have completely disintegrated. Aligned teeth, perhaps all that remained of fuller burials, were found in F11 and F14, while postcranial bones were also observed but had largely disintegrated in F9, F20, F21 and F22-1. The F22-1 individual may have been deposited in a complete and articulated state.

A partially intact cranium was found, *ex situ*, between F10 and F15, and might be from a disturbed Late Woodland burial. Also, Mr. Ralph Bellamy earlier removed a burial of unknown cultural context from the knoll. Finally, a groundhog had evidently disturbed the ochre-accompanied burial of a cremated youth or young adult. The disturbed grave must be just beyond the south edge of the excavated area, to judge by the location of the groundhog hole with the bone.

CULTURAL AFFILIATIONS AND DATE

The Bruce Boyd site is clearly part of a general Early Woodland horizon that also includes the Meadowood phase of New York and Quebec (Ritchie 1955, 1969: 180-201; Levesque, Osborne and Wright 1964), some of the Red Ochre burial sites of the Midwest (Ritzenthaler and Quimby 1962), Schultz and related habitation sites in Michigan (Fitting 1972), and the Leimbach material of Ohio (Shane 1967). Some of the the aceramic Red Ochre burial sites of Michigan also seem related (Binford 1963a, 1963b). The present evidence suggests that the closest links of the Bruce Boyd site are with the Meadowood phase of New York. The ceramics seem more similar to the New York Vinette 1 than to those of Michigan or Ohio. The emphasis on side notched (Meadowood) points reinforces

this, although similar points also appear at the Red Ochre Hodges site of Michigan (Binford 1963a: 129-132, Fig. 2 a-g). The trapezoidal gorgets of the Bruce Boyd site (Fig. 1e) are similar to a Hodges site gorget (Binford 1963: Fig. 3) and to one from the Red Lake site (Ritchie 1955: Pl. 23, No. 15). The expanded base drills, triangular end scrapers, cache blades, iron pyrites, galena, copper axes, copper awls, copper beads and rectangular gorgets appear widely in both Michigan and New York on this time level.

For the present, we prefer not to assign the Bruce Boyd site to any specific cultural category. Perhaps with the excavation of further sites in Ontario and western New York its cultural affiliations will be more precisely defined. It should be noted, though, that bar amulets, birdstones and tubular pottery pipes, all part of the Meadowood assemblage, have not been found at the Bruce Boyd site (although a birdstone was found at another possible Early Woodland site in the region — Fox 1972). Also, the site produced some items (three copper clasp bracelets, small corner notched points and punctated pottery) that have not appeared on contemporaneous sites in New York and Michigan.

The Bruce Boyd site probably dates to sometime in the 700-900 B.C. span. Radio-carbon dates for the Inverhuron Archaic (Stothers 1975: 39) and a date of 925 B.C. for the Glacial Kame Hind site near Wardsville (Savage 1976: 16) indicate that preceramic cultures survived in southwestern Ontario until as late as 900 B.C. The dates for the Donaldson and Burley sites suggest the appearance of Saugeen Focus ceramics by perhaps 700 B.C. (Stothers 1975: 39). A date in the 700-900 B.C. range would also agree well with the Meadowood phase dates from New York (Ritchie 1969: XXIII - XXIV, 181, Fig. 1). However, the punctate decoration of some of the Bruce Boyd pottery raises the possibility that the site is later than believed, perhaps contemporaneous with some of the early dentated ceramic assemblages in other parts of New York and Ontario (Wright 1972: 43).

SETTLEMENT PATTERNS

No Early Woodland habitation site has yet been located in the vicinity of the Boyd site. The knoll itself shows no evidence of habitation, other than perhaps limited occupation at the time of the burial rituals (F16 is probably associated with this). There are no post holes, fire-cracked rock is rare (other than in F16), sherds are not too common, and nothing like a midden was uncovered. Although flint flaking debris is present, it probably is due to the manufacture of grave offerings at the site. Flotation analysis is not complete, but as yet no carbonized seeds or plant remains have been recovered from the 40 samples that have been processed. Also, animal bone (beyond the F1 offering) is rare, although this might be partially due to the high soil acidity.

It seems that much of the knoll had been used for burial. Although the excavations were confined to a relatively small area in the eastern part, Early Woodland ceramics appear widely scattered on the knoll surface. A fragment of human cranium and a large ground slate pendant (Dawkins et al 1976: Pl. 2g) were found on the surface of the west part of the knoll. Probably burial in the knoll was a repeated, seasonal (spring or summer) event. The overlapping of Early Woodland pits, with the apparent intrusion of some burials into others (cf. F12 and F13), indicates repeated use of the area over some time. The ground squirrel and woodchuck of the F1 offering were probably taken sometime in the spring through fall period, while the F1 fish are spring spawners. This suggests (but by no means proves) that the F1 burial was placed there in spring or summer. It may well be that the local settlement pattern was one of small (microband) inland winter camps which coalesced in the spring into larger macroband spring-summer communities near the lakeshore. Such a pattern has been suggested for the Early Woodland occupants of northern Ohio and for

the Saugeen Focus (Stothers 1974:7-8; Wright and Anderson 1963:49; Finlayson 1971: 20-21). Individuals who died over the winter might have been cremated or given a temporary primary burial, to then be given final burial in the spring or summer at a cemetery near the macroband settlement. If this is the case (and the presence of disarticulated and partially decayed bodies supports the suggestion), the Bruce Boyd site would be the macroband cemetery. Overlapping features would represent use of the site in different years. This makes it very difficult to say which features are precisely contemporaneous, that is, represent the burial activity of one season. However, there is one clue to this at the Bruce Boyd site. As described earlier, F9, F20 and F22 produced small corner notched points and cache blades of a distinctive white flint (Fig. 2 a-c). all believed to have been the product of one craftsman at one time. This means that F9, F20 and F22 must represent contemporaneous events, the individuals involved dying in the same year and being buried in the same seasonal ritual (although more than just these 3 features might have been formed at that time).

RITUAL AND INTERNAL STRUCTURE

There is no evidence of the ritual destruction or burning of any grave offerings. Red ochre, when present in concentrated form in a grave, was directly associated with the skeletal remains. The same is generally true of the copper artifacts, which usually are associated with red ochre (although a number of red ochre concentrations do not include copper). Flint grave goods were placed somewhat apart from the copper and red ochre. Some of the flint artifacts show use, perhaps because they were the personal equipment of the deceased, while others seem to have been manufactured specifically for the offering. In the richer offerings (F9, F23, F25), the typological diversity of the flint items suggests that they represent contributions from several individuals (cf. Figs. 2-3).

One of the major objectives of the excavation was to obtain data on the nature of the status system of Early Woodland societies. We hoped to determine the roles that age and sex played in the assignment of relative status within the community, and to isolate any special or restricted status categories or signs of ranking. However, the severe disintegration of the skeletal remains make this nearly impossible, since we are generally unable to identify the sex or relative age of the burials. There are some clues that cremation might have been associated with lower status, as it was in Middle Woodland societies of the Rice Lake region (Spence and Harper 1968: 29-30). Of the three *in situ* cremations, two were without grave goods. The third is in a complex feature (F2), somewhat disturbed by groundhogs. It is possible that F2 actually contained two individuals, only one of whom was cremated. The grave goods listed in Table 1 might have been associated with either of these, or in some cases might even be accidental fill inclusions. Also, at least one of the cremations (F18) is not a full adult. In contrast, the richest of the Muskalonge Lake burials, accompanied by some 1500 cache blades, seems to have been cremated (Ritchie 1955:12-13).

There is some variation in the amount of grave goods associated with particular individuals. The rich offering of F9, for example, contrasts sharply with the absence of grave goods in F17 and F18 and the paucity of the F21 and F22-1 offerings. Unfortunately, we cannot say whether this variation reflects the sexual identity of the deceased, the number or wealth of the surviving kin, or the deceased's status within the community. A related question concerns the contributor of the white flint items to the F9, F20 and F22 burials. Twenty-six items were placed with the adult of F9, only four with the child of F20, and a single cache blade with the F22-1 adult. Does this variation reflect variation in the status of the deceased, variation in the contributor's emotional reaction to their deaths, or variation in the strength of his kinship ties to them?

In late Archaic and Early Woodland societies intensified collecting and, in some regions, incipient agriculture may have led to greater residential stability (cf. Ritchie 1969: 188-189). The macroband may have become a more persistent and stable social unit. Also at this time there was increasing participation in widespread trade spheres and ritual cults that were oriented toward the expression of social variables such as status. The growing importance of the macroband as a unit of reference for the individual might also have received some expression in burial ritual. The presence of cemeteries, rather than individual or family burial areas, suggests such a shift. The large red ochre area (F7) at the Bruce Boyd site is not associated with any particular burial or offering, and so may have been oriented toward the community as a whole. The large caches of F23 and F25 (Fig. 1e, 3) might also have been intended as general offerings, since no trace of human skeletal material was found in either feature. Both offerings are typologically varied, indicating contributions by several individuals, which again suggests that some responsibility toward the community's dead was widely accepted and jointly expressed. It is possible that there was once human bone in F23 and F25, but the soil acidity of F25 is less than that of some features where at least teeth have survived. More intensive tests, including phosphate analysis, will be necessary before any conclusions are possible. It is not our intention, though, to make any final statements here. Rather, we intend merely to present a preliminary report of our findings, and to suggest some of the general questions that we believe Early Woodland investigators in Ontario should consider in their research.

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