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# A LATE ARCHAIC BROADPOINT PHASE

# IN THE RIDEAU LAKES AREA OF EASTERN ONTARIO

by Gordon D. Watson

A late Archaic (ca. 2000-1000 B.C.) cultural phase, for which the broadpoint is the most diagnostic artifact, has been identified in the coastal plains of eastern North America from Florida to Maine and in the river valleys which drain the Piedmont area of the eastern United States. Turnbaugh (1975:51) has identified a number of broadpoint subtypes which he considers to be local manifestations of this Archaic culture with its distinctive lifestyles and artifact assemblages. He describes the broadpoint as having "a blade of triangular form, with overall large, shallow, flake scars and with its basal corners removed to form a broad stem". Turnbaugh (1975:51) lists the following recognized subtypes which he considers to be regionally differentiated varieties which all have a "strong genetic affiliation with the Savannah River point of the Southeast (Claflin 1931)": Koens-Crispin (Hawkes and Linton 1916) and Large Stemmed Point (Mournier 1972) in New Jersey; Snook Kill (Ritchie 1961) in New York; Lehigh (Witthoft 1953) and Long (Witthoft 1959) in Pennsylvania; and Atlantic (Dincauze 1972) and Corner-Removed (Fowler 1963) in New England.

The Broadpoint Transitional phase, as originally defined by Witthoft (1953) for the Susquehanna Valley of eastern Pennsylvania, is represented by sites with assemblages left by occupants who had a preference for quartzite, rhyolite, jasper and mudstone as lithic material, over the more easily workable flints and cherts,which were commonly used for stone tool manufacture. In addition, the broadpoints often occur on the same sites as steatite pots and, in the later stages of transition to the Woodland Period, with steatite tempered pottery of the Marcey Creek type (Evans 1955:54-57) and with Vinette 1 cord-malleated pottery (Ritchie and MacNeish 1949:100). This distinctive association of traits is evidently fairly standardized over the whole northeastern area where broadpoint sites have been found. The material inventory includes the broad corner-removed points or knives, cruciform drills, winged atlatl weights, steatite or steatite-tempered vessels, cleavers, stemmed blunts and, in the vicinity of soapstone quarries, a distinctive narrow-bladed quarry pick used for the soapstone industry (Witthoft 1953: 4-31, Ritchie 1969:134-148, Dincauze 1972:40-61, Turnbaugh 1975: 54).

In Pennsylvania, the principal manifestations of the broadpoint culture were found by Witthoft (1971:178) to represent "a very distinctive and marked change in every detail of material culture and way of life from earlier times in the Susquehanna Valley". He concluded that the broad spearpoints are not related to the Laurentian Archaic projectile points of the Brewerton culture which dominated the Upper Susquehanna Valley in the

in the preceding late Archaic times (Witthoft 1953). This rapid change of archaeological evidence has led Turnbaugh (1975) to propose that the broadpoint assemblages represent local adaptations of a people who migrated northward along the east coast, during a warming climatic trend about 2000 B.C., and up the rivers in pursuit of anadromous fish, which present a particularly rich harvest as they migrate upstream for spring spawning. Broadpoint sites are also found in the Hudson and Mohawk valleys (Funk 1976:259-263) of New York State, for example, at Snook Kill (Ritchie 1969:134) and Frontenac Island (ibid.:108), and in Massachusetts, where Dincauze (1972:40-61) has described an Atlantic Phase of the Susquehanna Tradition.

Ontario evidence for broadpoints is limited, but Kenyon (1980: 17-43) reports on four sites in the Ausable Valley which he relates to both the Satchell Complex in Michigan and the broadpoints of eastern United States.

The published works on broadpoints contain some controversy about whether the term Broadpoint can be defined as a culture, phase, horizon, tradition or knife (Cook 1976:337-357). Although all may apply in different contexts, the purpose of this paper is to document archaeological evidence of broadpoints and associated artifacts in the Rideau Lakes area and it is sufficient to refer to this manifestation as a phase by the definition of Willey and Phillips (1958:22), which is:

> an archaeological unit possessing traits sufficiently characteristic to distinguish it from all other units similarly conceived, whether of the same or other cultures or civilizations .....

The information presented at this early stage of investigation relates to the artifact inventory and to site locations. However, the strong contrast between the unique Inderwick site assemblage and those of the preceding Laurentian Archaic supports the conclusion of Witthoft (1953) that the people who left the broadpoint evidence probably arise from a different cultural base with markedly different concepts concerning lithic technology.

## THE RIDEAU LAKES BROADPOINT PHASE

Examination of surface collections held by the Perth Museum and private collectors and the results of the Rideau Lakes surveys (Watson 1976,1977,1979) indicate the existence of a Rideau Lakes Phase of the broadpoint-producing cultures of eastern North America. The unique traits of a broadpoint assemblage are particularly evident at the Inderwick site (BeGb-1) on the Rideau Lake but they are found, also, in the surface collections from several other Rideau Lake sites.

### The Inderwick Site (BeGb-1)

The Inderwick site is one of those identified by a surface collection made by Mr. C.C. Inderwick which is now held by the

Perth Museum. The site is about 11 kilometres south of Perth, Ontario in the North Burgess township of Lanark county at 44°47'56" North Latitude and 76°12'58" West Longitude.

During the 1975 examination of the site and the surface collection it was determined that the lithic material is almost exclusively of fine-grained quartzite, varying in colour from Munsell 10R6/3-pale red to 2.5R4/2-weak red, with 10R5/6-red being dominant. Only a very few flakes and one scraper of bluish-grey chert were found. It is also evident that the 7.5 foot raising of the water level by the Poonamalie dam of the Rideau Canal system had flooded much of the site but that a terrace above the sandy beach could have been occupied (Watson 1976). Preliminary conclusions, which have now been confirmed, were that the site belongs to the Late Archaic or Archaic to Woodland Transitional Stage (Witthoft 1953:4-33, Ritchie 1969: 150, Funk 1976:259-267, Starna 1979:3-18). Assuming that the site is likely to be approximately contemporaneous with similar sites in New York and Pennsylvania, the site can be expected to date between about 1750 and 1000 B.C.

The potential importance of the site and its apparently damaged condition, justified a careful staged approach to investigation, with evaluation between stages. The 1975 work included soil tests, determination of the underwater beach profile by through-the-ice measurements of water depth, excavation of a test trench from the high water mark to the low water line,test pitting of the terrace behind the beach, examination of the Inderwick surface collection and inspection of the underwater area of the site. This led to the conclusion that the site is mainly under water and (because the chipping detritus on the beach appeared to be smaller than the underwater sample) that the detritus in the above water area has been moved up the beach from the occupation area by wave action subsequent to the raising of the lake levels. This conclusion is supported by the observation that the humus layer at the surface of the terrace continues down the beach slope for about 4 metres but is now covered by up to 20 cm of beach sand containing a considerable quantity of relatively small red quartzite flakes of the same material which occurs in larger pieces, or as artifacts, in the underwater area.

The 1978 program included a quantitative assessment of the wave-sorting of the lithic material and the test excavation of two test areas; two square metres at the low water line and one square metre in the underwater area (Fig. 1). The sorting was tested by excavating a trench from the highest level of the beach to a limit of about two metres beyond the low water line. The contents of the trench were removed in 5 cm levels and screened througha ¼" screen. The contents of each excavation unit were then sorted, counted and weighed. The resulting data are presented in Table 1. In the underwater area it was found that not only was the lithic material much larger but it was concentrated in a layer of only about 7 cm depth and was lying directly on top of the silt hardpan which had been found, by the soil tests, to

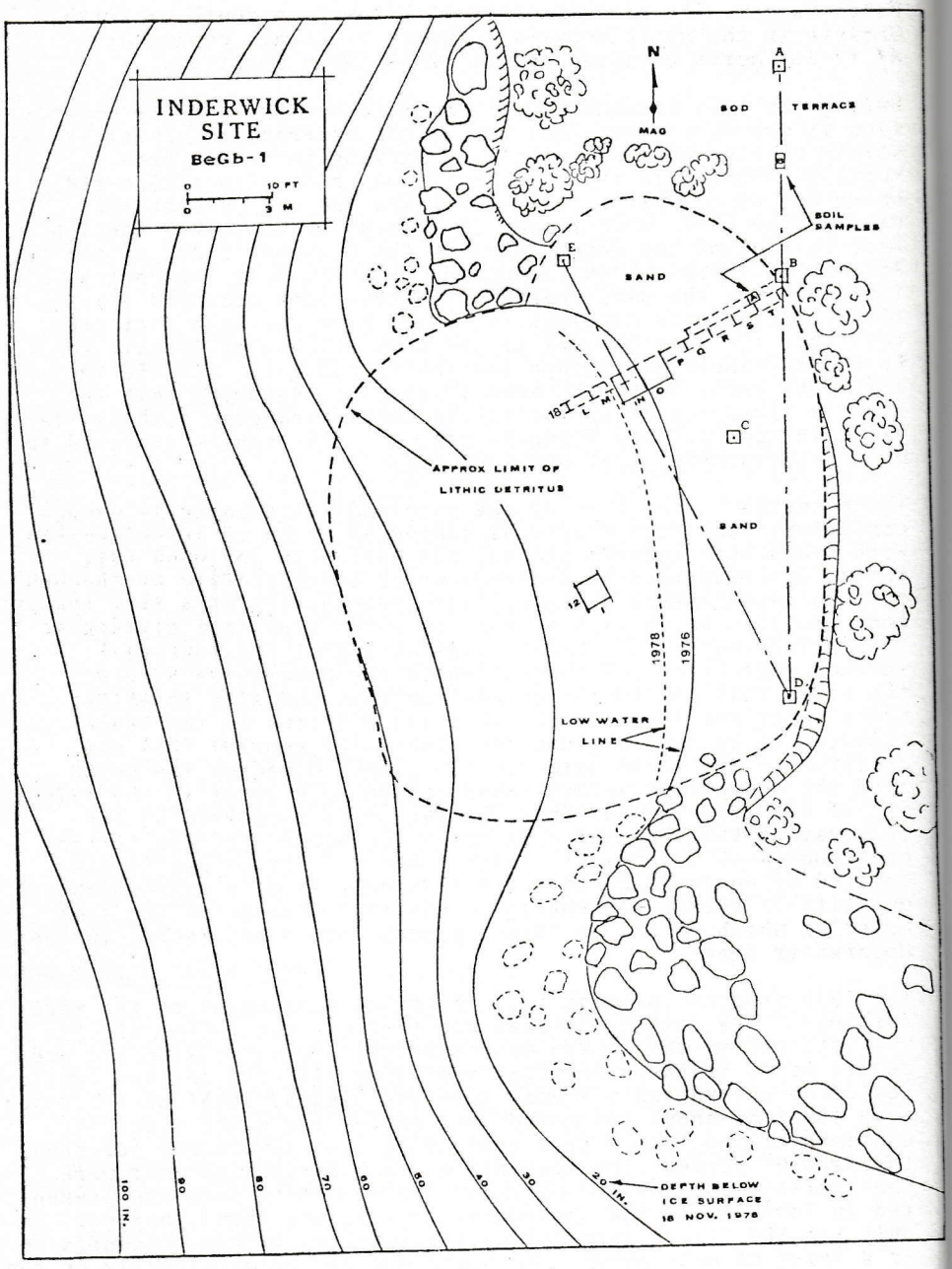


FIGURE 1: Inderwick (BeGb-1) Site Plan

underly the site.

It is clear from Table 1 and Figure 2 that the average weight of the quartzite flakes in the beach area above the low water line is less than half of the average weight below the line. In addition, no artifacts or large cores are present above the low water line. This supports the conclusion that the site materials have been significantly sorted and rearranged by wave action, since the raising of Rideau Lake water levels. Another effect of the wave action has been to remove sand and small lithic flakes from the principal locus of the site, while leaving the heavier objects in a thin layer which rests on the hardpan subsoil surface. Perhaps the most important evidence relating to this redistribution is that there is a limited portion of the site near to the low water line where the site appears to have only limited disturbance. A band one or two metres wide just above the low water line is believed, therefore, to be the most productive area for future excavation. A total screening of the upper levels of the beach would yield about 10 grams per square metre of relatively uniformly sorted quartzite flakes with an average weight of about one gram. This would make possible a detailed analysis of the quartzite lithic detritus. More excavation at the low water line was planned for 1979 (Licence 79-E-0345) but the high water levels of that year made the work impossible (Watson 1980:20-21). It is planned that some additional work will be undertaken in 1981, if the late season water levels are sufficiently low.

## The Inderwick Site Assemblage

The assemblage of the Inderwick site has a number of unique attributes. In addition to the almost exclusive use of red quartzite as lithic material, fragments of steatite (soapstone) were recovered in limited quantity in the test trench (Table 1). This is consistent with the Broadpoint phase in which steatite vessels and broadpoints are associated. Due to their relative softness, the steatite fragments are quite rounded by the wave action. Only one fragment (Fig.3:19), recovered from the 0-5 cm level of P18, has two flat surfaces at right angles that permit but do not prove, the conclusion that they are worked surfaces. Although steatite fragments apparently occur naturally in local glacial-drift (Kennedy, 1981), none were recovered in the screening of the test pits on the terrace behind the site. Therefore, if the steatite found in the site is a natural occurence, it is apparently limited to the beach area where the site occurs.

A few small fragments of calcined bone and two small samples of charcoal were recovered in association with the quartzite flakes and a single undecorated grit-tempered pottery sherd. This sherd and the few flakes of grey chert are indicative of a later occupation; a fact which is supported by a radiocarbon date of A.D. 670±95 (S1854) obtained for one of the two charcoal samples.

Several other attributes of the assemblage are particularly noteworthy. The presence of broad corner-removed red quartzite

TABLE 1

INDERWICK SITE: DISTRIBUTION OF MATERIAL DURING

| | | QUARTZITE | | | | | | CHERTLIKE | | | | | | FLINT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEST TRENCH | Depth cm | No. | % | Wt. Grs | % | Mean Grs | | No. | % | Wt. Grs | % | Mean Grs | | No. | % | Wt. Grs | % | Mean Grs | |
| I12 S 1/3 | 0-5 | 186 | 99.5 | 510 | 96.6 | 2.74 | | 1 | 0.5 | 18 | 3.4 | 18 | | | | | | | |
| | 5-10 | 33 | 100 | 45 | 100 | 1.36 | | | | | | | | | | | | | |
| I12 N 2/3 | 0-5 | 308 | 98.7 | 566 | 99.2 | 1.84 | | 1 | 0.3 | 1 | 0.2 | 1 | | 3 | 1.0 | 3 | 0.5 | 1 | |
| | 5-7 | 132 | 98.5 | 190 | 99.0 | 1.43 | | 2 | 1.5 | 2 | 1.0 | | | | | | | | |
| Totals I12 | | 659 | 98.9 | 1311 | 98.2 | 1.99 | | 4 | 0.6 | 21 | 1.6 | 5.25 | | 3 | 0.5 | 3 | 0.2 | 1 | |
| L18 N 1/3 | 0-5 | 10 | 100 | 47 | 100 | 4.70 | | | | | | | | | | | | | |
| | 5-7 | 14 | 100 | 34 | 100 | 2.42 | | | | | | | | | | | | | |
| Totals L18 | | 24 | 100 | 81 | 100 | 3.30 | | | | | | | | | | | | | |
| M18 N 1/3 | 0-5 | 17 | 85 | 41 | 97.6 | 2.40 | | 3 | 15 | 1 | 2.4 | 0.3 | | | | | | | |
| Totals M18 | | 17 | 85 | 41 | 97.6 | 2.40 | | 3 | 15 | 1 | 2.4 | 0.3 | | | | | | | |
| N18 S 2/3 | 0-5 | 69 | 100 | 86 | 100 | 1.20 | | | | | | | | | | | | | |
| | 5-10 | 35 | 100 | 22 | 100 | .60 | | | | | | | | | | | | | |
| | 10-15 | 109 | 94.8 | 102 | 96.9 | .94 | | 6 | 4.3 | 15 | 0.1 | 3.0 | | 1 | 0.9 | 0.3 | 0.8 | 0.3 | |
| | 15-20 | 19 | 100 | 19 | 100 | 1.00 | | | | | | | | | | | | | |
| N18 N 1/3 | 0-5 | 38 | 95 | 70 | 95.2 | 1.20 | | 1 | 2.5 | 3 | 4.1 | 3.0 | | 1 | 2.5 | 0.5 | 0.7 | 0.5 | |
| | 5-10 | 11 | 100 | 5 | 100 | .45 | | | | | | | | | | | | | |
| Totals N18 | | 281 | 97.2 | 304 | 94.2 | 1.08 | | 6 | 2.1 | 18 | 5.6 | 3.0 | | 2 | 0.7 | 0.8 | 0.2 | 0.4 | |
| O18 N 1/3 | 0-5 | 60 | 100 | 92 | 100 | 1.53 | | | | | | | | | | | | | |
| | 5-10 | 108 | 99.1 | 103 | 99.9 | .95 | | | | | | | | 1 | 0.9 | 0.1 | 0.1 | 0.1 | |
| | 10-15 | 46 | 97.9 | 52 | 99.6 | 1.13 | | | | | | | | 1 | 2.1 | 0.2 | 0.4 | 0.2 | |
| | 15-20 | 56 | 96.6 | 36 | 98.1 | .64 | | 1 | 1.7 | .5 | 1.4 | .5 | | 1 | 1.7 | 0.2 | 0.5 | 0.2 | |
| O18 S 2/3 | 0-5 | 157 | 96.9 | 255 | 97.3 | 1.62 | | 4 | 2.5 | 5 | 1.9 | 1.25 | | 1 | 0.6 | 2.0 | 0.8 | 2.0 | |
| | 5-10 | 144 | 96.0 | 198 | 94.7 | 1.38 | | 6 | 4.0 | 11 | 5.3 | 1.83 | | | | | | | |
| | 10-15 | 126 | 98.4 | 74 | 96.1 | .59 | | 2 | 1.6 | 3 | 3.8 | 1.50 | | | | | | | |
| | 15-20 | 98 | 100 | 91 | 100 | .93 | | | | | | | | | | | | | |
| Totals O18 | | 795 | 97.9 | 901 | 97.6 | 1.13 | | 13 | 1.6 | 18.5 | 2.1 | 1.50 | | 4 | 0.5 | 2.5 | 0.3 | 0.7 | |
| P18 N 1/3 | 0-5 | 82 | 97.6 | 172 | 95.0 | 2.09 | | 2 | 2.4 | 9 | 5.0 | 4.50 | | | | | | | |
| | 5-10 | 44 | 97.8 | 46 | 96.8 | 1.05 | | 1 | 2.2 | 1.5 | 3.2 | 1.50 | | | | | | | |
| | 10-15 | 46 | 100 | 29 | 100 | .63 | | | | | | | | | | | | | |
| | 15-20 | 105 | 98.1 | 90 | 98.9 | .86 | | 2 | 1.9 | 1.0 | 1.1 | .50 | | | | | | | |
| Totals P18 | | 277 | 98.2 | 337 | 96.7 | 1.21 | | 5 | 1.8 | 11.5 | 3.3 | 6.50 | | | | | | | |
| Q18 N 1/3 | 0-5 | 59 | 93.6 | 120 | 92.3 | 2.03 | | 1 | 1.6 | 4 | 3.1 | 4.00 | | 3 | 4.8 | 6 | 4.6 | 2.0 | |
| | 5-10 | 59 | 93.6 | 86 | 88.6 | 1.45 | | 2 | 3.2 | 9 | 9.3 | 4.50 | | 2 | 3.2 | 2 | 2.1 | 1.0 | |
| | 10-15 | 54 | 100 | 63 | 100 | 1.17 | | | | | | | | | | | | | |
| Totals Q18 | | 172 | 95.5 | 269 | 92.8 | 1.56 | | 3 | 1.7 | 13 | 4.5 | 4.33 | | 5 | 2.5 | 8 | 2.8 | 1.6 | |
| R18 N 1/3 | 0-5 | 48 | 92.3 | 75 | 80.6 | 1.50 | | 4 | 7.7 | 18 | 19.4 | 4.50 | | | | | | | |
| | 5-10 | 82 | 95.3 | 61 | 80.3 | .74 | | 4 | 4.7 | 15 | 19.7 | 3.75 | | | | | | | |
| | 10-15 | 71 | 98.6 | 61 | 96.8 | .85 | | 1 | 1.4 | 2 | 3.2 | 2.00 | | | | | | | |
| | 15-20 | 10 | 100 | 16 | 100 | 1.60 | | | | | | | | | | | | | |
| Totals R18 | | 211 | 95.9 | 213 | 85.9 | 1.01 | | 9 | 4.1 | 35 | 14.1 | 3.89 | | | | | | | |
| S18 N 1/3 | 0-5 | 64 | 79.0 | 81 | 69.2 | 1.27 | | 15 | 18.5 | 35 | 29.9 | 2.33 | | 2 | 2.5 | 1 | 0.9 | 0.5 | |
| | 5-10 | 71 | 89.9 | 114 | 88.7 | 1.60 | | 7 | 8.9 | 14 | 10.9 | 2.00 | | 1 | 1.3 | 0.5 | 0.4 | 0.5 | |
| | 10-15 | 155 | 95.7 | 107 | 95.1 | .69 | | 5 | 3.1 | 5 | 4.4 | 1.00 | | 2 | 1.2 | 0.5 | 0.4 | 0.3 | |
| Totals S18 | | 290 | 90.1 | 302 | 84.4 | 1.04 | | 27 | 8.4 | 54 | 15.1 | 2.00 | | 5 | 1.6 | 2.0 | 0.6 | 0.4 | |
| T18 N 1/3 | 0-20 | 350 | 95.1 | 312 | 93.7 | .89 | | 15 | 4.1 | 20 | 6.0 | 1.30 | | 3 | 0.8 | 1.0 | 0.3 | 0.3 | |
| Totals T18 | | 350 | 95.1 | 312 | 93.7 | .89 | | 15 | 4.1 | 20 | 6.0 | 1.30 | | 3 | 0.8 | 1.0 | 0.3 | 0.3 | |
| GRAND TOTALS | | 3076 | | 4071 | | 1.32 | | 85 | | 193 | | 2.27 | | 22 | | 17.3 | | 0.8 | |
| SITE PERCENTAGES | | | 96.6 | | 95.1 | | | | 2.7 | | 4.5 | | | | 0.7 | | 0.4 | | |

points (Fig. 3:1-3), large biface blanks (Fig. 3:4-12, Fig. 5: 1-4) and large flakes (Fig. 3:16-17). These large flakes with steeply sloping striking platforms are characteristic of core-on-anvil or large hard-hammer knapping technology (Oakley 1972:50) and were also observed in the quartzite assemblages of Pennsylvania (Witthoft 1959:79-85). The projectile points and other artifacts of the assemblage are similar to those of the DeTurk Complex of Pennsylvania (Witthoft 1959) and of Snook Kill (Ritchie 1969:134-142), Bare Island (Kinsey 1959:109-133) and of the "Batten Kill" Complex (Funk 1976:261-263) of New York State. The dominance of quartzite is probably significant. Ritchie (1961:15) comments on Bare Island points at the Kent-Hally site as follows:

> "At the Kent Hally site nearly 50% of these points were made of quartz. Other locally available stones in order of preference are; siltstone, quartzite, rhyolite, argillite and a very few of flint, gneiss and schist. No attempt was made to utilize the available flint and jasper sources. The reasons for this cultural preference are unknown."

A similar preference for quartzite as a lithic material is strikingly revealed at the Inderwick site. This suggests a fairly direct cultural affiliation with the broadpoint cultural manifestations of Pennsylvania and New York.

Inderwick Site Radiocarbon Dates

Two small charcoal samples were recovered from the bottom layer of 018 (Fig. 1) in association with red quartzite detritus, fire cracked rock and a single undecorated grit-tempered ceramic sherd (Fig. 3:18). Although the base of the test trench was below the water table, the association between the fire cracked rock, quartzite and charcoal is established by the fact that the charcoal floated to the surface as the fire cracked rock area was removed for screening, an indication that it had been held underground since being buried in the firepit.

A sample which was a single grain of charcoal yielded the date of A.D. 670±95 (S1854). This date is consistent with the plain pottery sherd and the minor amounts (less than 1%, Table 1) of grey flint flakes and the single flint scraper and supports the conclusion that there was a Woodland occupation of the site which left very limited evidence in the test area.

The other sample had charcoal of two quite different appearances. It was separated into two 1 gm parts and the laboratory was asked to date them separately, if possible. However, the two parts were combined in order to give a date of reasonable accuracy. The resulting date was A.D. 145±195 (S1853). Since it was likely that the newer appearing charcoal of this sample was from the A.D.670 age, the laboratory was asked to assume that one half of the sample was of that age and to determine the age of the other half of the sample which would result in the A.D. 145 date. The result

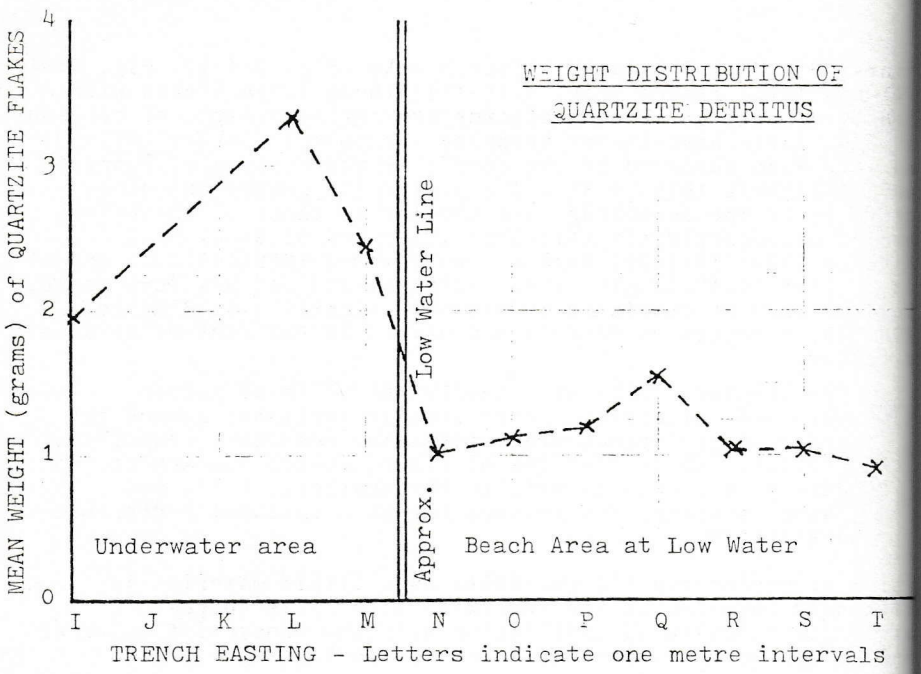


*Figure 2: Inderwick Site - Lithic Weight Distribution Graph.*

*Figure 3: Inderwick Site Artifacts - Red Quartzite, Except 18-20*

*1,3- Stemmed broadpoints with unthinned bases; 2- Stemmed point; 4-12- Biface Blanks; 13- Unifacial scraper ?; 14-16- Scribers ?; 16-17- Large flakes; 18- Undecorated grit-tempered pottery sherd; 19- Steatite fragment with flattened surfaces; 20- Chert scraper*

*Figure 5: Inderwick and Other Rideau Lakes Sites, Artifacts of Red Quartzite.*

*1-4- Large bifaces, Inderwick site; 5,7- Large bifaces, Inderwick collection (probably Inderwick site); 6- Triangular biface chopper, Stuarts Point (formerly Bobs Point)(BfGa-12); 8- Biface stemmed scraper, Inderwick collection; 9- Large biface stemmed blunt, Inderwick collection; 10- Uniface flake scraper ?, Inderwick site; 11- Biface, Squaw Point (East of Briggs Island, BfGa-6); 12- Biface, Plum Point (BfGa-2); 13- Bifacial stemmed blunt, Goose Island, Rideau Lake (identity of Goose Island unknown).*

*Figure 6: Broadpoint Phase Artifacts from Rideau Lakes Sites*

*1-5- Broadpoints, Plum Point (BfGa-2); 6,7,9-16- McLaren and Blomeley/Nichol Collections of Rideau Lakes Sites; 8- Squaw Point (East of Briggs Island, BfGa-6); 17-25- McLaren, Blomeley/Nichol and Inderwick Collections of Rideau Lakes Sites; 26,27- Stewart Wood Collection, North Sand Island (BfGa-5); 28-34- McLaren and Blomeley/Nichol Collections, Narrower Points of Red Quartzite. Materials: 1,23-27- Grey to Black Flint or Chert; 2,10- Light grey mottled-tan chert; 3,6,11-16,18-20,22,28-34- Red Quartzite; 4,5- Siltstone; 7- Red Jasper; 17,21- Mudstone.*


Figure 3: Inderwick Site Artifacts - Red Quartzite, except 18-20

was a date of 1345 B.C. (S1853 modified). Although this procedure is less rigorous than is desirable, the fact that it yields a date that falls within the range of dates anticipated for the broadpoint evidence, justifies taking it into consideration in assessing the site.

Lithic Materials, Inderwick and other Broadpoint sites of the Rideau Lakes.

The red quartzite used as lithic raw material probably was quarried in the local rocky areas of the Frontenac axis of the Canadian shield. However, the artifact material is more finely grained than any outcrop so far inspected and the source of the material for these red quartzite artifacts has not yet been established.

There is a steatite (soapstone) outcrop on a small island in Adams Lake, which is only about 2 kilometres straight line distance or about 4 kilometres by water from the Inderwick site. Although most of the site specimens of steatite are darker than the freshly quarried material, they may have become stained by the site deposits or by use.

The flint (or chert), which occurs in minor quantities (Table 1) is of the light grey mottled-light-tan Onondaga variety. It appears to be different from the local banded chert, which occurs as nodules in the plowzone on underlying limestone in the area just northeast of Smith's Falls, Ontario at BfGa-20, where a few surface artifacts have been recovered (Watson 1980:24).

Other Broadpoint Phase Artifacts from Rideau Lakes Sites

Although the Inderwick site is the most securely documented Broadpoint Phase data of the Rideau Lakes, several surface collections with differing certainty of source locations contain broadpoints or related artifacts which indicate other sites on the Lower and Big Rideau Lakes were occupied by peoples who produced points very similar to those of the Inderwick site. The McLaren Collection of the Perth Museum was catalogued by the collector and several of the broadpoints have specific provenience (Fig. 6).

These surface collections have been useful in the survey of the Rideau Lakes during which several of the sites are assessed as having potential for more specific investigation of this broadpoint manifestation.

Interpretation

The Inderwick site evidence, along with similar evidence from surface collections of other Rideau Lakes sites, justifies the conclusion that there is a Rideau Lakes Phase of the broadpoint producing cultures of eastern North America. Its closest affiliations are apparently to the Susquehanna Tradition of Pennsylvania and New York.


Figure 5: Inderwick and Other Rideau Lakes Sites Artifacts of Red Quartzite

The Rideau Lakes sites so far discovered are all in a riverine environment where the fishing was probably an important primary means of subsistence. The fish resource was likely to have been combined with the produce from hunting and gathering in the forested regions which surround the area with a rocky highland area to the West and a lowland area to the East.

Turnbaugh's (1975) hypothesis that broadpoint-producing cultures of the eastern seaboard were adapted to exploitation of migrating fish is not inconsistent with the finding of a broadpoint phase in the Rideau Lakes area of eastern Ontario. In fact, shad, alewife and eels all penetrate to the area. Since the broadpoint-producing peoples are known to have penetrated to about the height of land in New York and Pennsylvania, they would be near the sources of the northward-flowing rivers of the Great Lakes and St. Lawrence drainage basins. They would have found that the harvest of migrating fish in these rivers was later than that of the southward-flowing rivers and would provide a continuing source of fish for those willing to move northward as the season progressed.

Although the presence of broadpoints and related scrapers, choppers, blunts, drills and steatite fragments are documented in the Rideau Lakes sites, there is insufficient evidence, at this time, to outline the complete artifact inventory, the subsistence patterns, or other cultural traits of the peoples who occupied the area, apparently about 1500-1200 B.C. However, further investigations can be expected to reveal additional information about this broadpoint manifestation.

* * *

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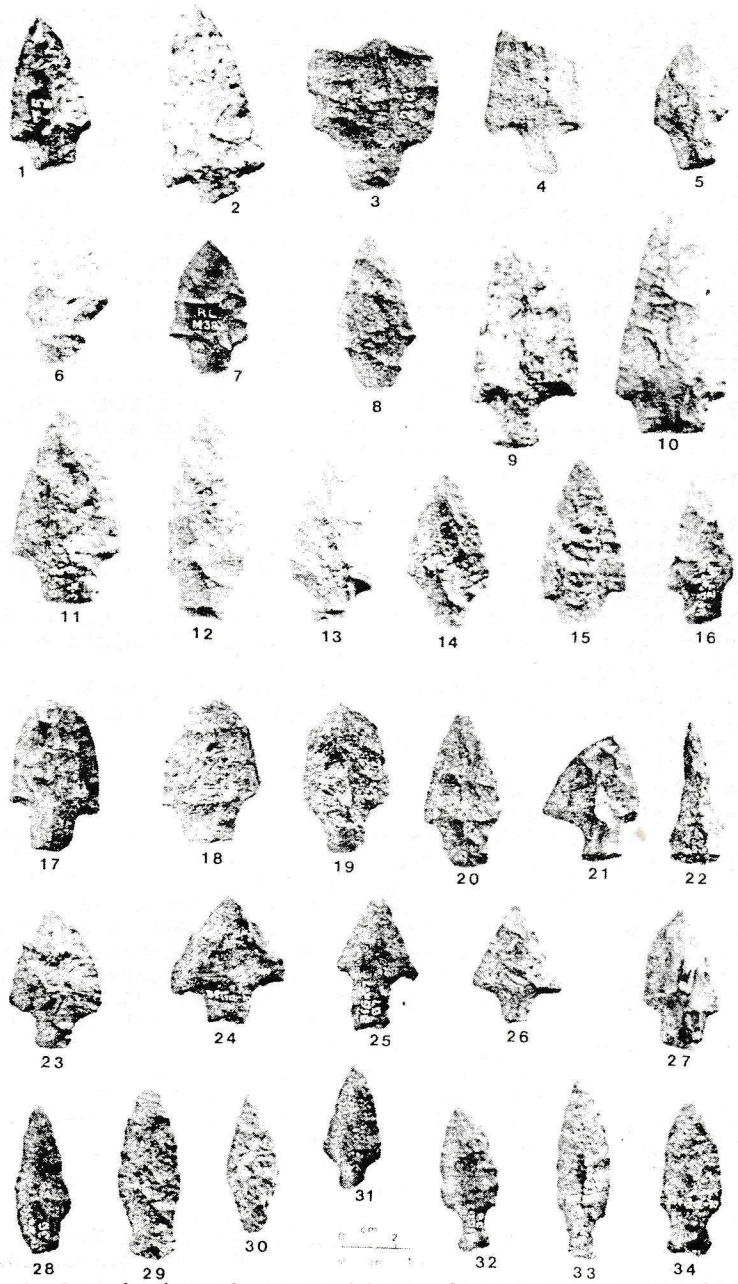


Figure 6: Broadpoint phase artifacts from Rideau Lakes Sites

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## THE HISTORIC LOG FARM SITE, BhFw-2, CARLETON COUNTY

## FIELD WORK, 1980

by Martha A. Latta

James and Anne Phillips Bradley emigrated from Ireland to Canada in 1826 with their family of three boys (Abraham was the first to be born in the New World) and established in Bytown, Upper Canada. Within the first five years Bradley was able to make his first purchase of land, Lot 1 Concession 4, Nepean Township, and on this site his family grew and prospered.

Despite cholera epidemics in the 1830's and the Orange/Catholic riots of the 1840's, Bradley and his older sons became successfully involved in the growing lumber trade of the region which provided a major source of income for the Irish immigrant population of the Bytown/Ottawa/Hull region. In 1854 his fourth son, Abraham, aged 23 or 24, acquired the two hundred acres of Lot 27 Concession 4 in the vicinity of Stony Swamp at a bargain price of $1 per acre. Two other brothers, Thomas and William, also bought property in the neighbourhood, and by the mid-1850's the Bradley family was well established in the area.

In 1857 Abraham Bradley (1830/31-1880) married Matilda McVeigh (1834-1915) and they had a family of three daughters and seven sons. At first Abraham and Matilda may have lived in the existing log house on the West ½ of Lot 27 Concession 4, or (cf.Reid 1979:24) in a small shanty on the East ½; archaeological evidence suggests the latter. In any case, at some point in the late 1850's Abraham Bradley evidently sold the West ½ and by 1861 his growing family was comfortably settled in a solid one and one-half storey house of log construction on the East ½, the site of the present Log Farm. He engaged in produce farming, stock raising and lumbering on this land, which was valued at $800 in the 1861 census:

| | 1861 Census | 1871 Census | 1881 Census |
|---|---|---|---|
| Spring wheat | 60 bushels | | Information lacking |
| Peas | 15 " | 10 bushels | |
| Oats | 200 " | 10 " | |
| Potatoes | 100 " | 100 " | |
| Hay | 4 tons | 6 tons | |
| Cattle | 5 | 9 | 9 |
| Horses | 4 | 3 | 2 |
| Sheep | 6 | 10 | 12 |
| Pigs | 3 | 7 | 3 |

Abraham Bradley died on July 1 or 2, 1880. His will deeded the Log Farm to his wife Matilda together with all of his personal property, including livestock, farm implements and household furniture. The older sons received other lands; Robert and Stewart were to receive the Log Farm upon their mother's death; and Carson, who was eleven, was instructed "...to be kept in school until he is fit to go into whatever trade he may choose."

Abraham's sons continued to work the Log Farm, on their mother's behalf, but as they established their own households on other property they moved away from the family farmstead. The exception was Thomas, the third son, who never married. He continued to live on the Log Farm with his mother, Matilda, raising stock and lumbering as his father had done. There is evidence that crop productions dropped steadily due to overcropping the poor land and that he relied increasingly on livestock. Matilda Bradley, Abraham's widow, lived at the Log Farm until her death in 1915. In 1916, Thomas sold the farm to John Bompas and moved into Ottawa, where he also died within the year.

At this point, the record of the Log Farm becomes less clear. Reid notes that John Bompas became a well-known dairy farmer in the Nepean area and that he leased (to someone else?) the Log Farm for pasturage. It is not known whether he ever lived on the property himself. There was verbal suggestion from members of the Interpretation Service of the National Capital Commission that at some point following World War 11, the Log Farm was sold or leased to the Kinsmen Society, or some similar benevolent organization, and that it was used as a summer camp for children in the Ottawa area. We would be delighted to hear from anyone who might have more accurate information about this period.

In 1966, the Log Farm Site was acquired by the National Capital Commission in the Southwest Greenbelt area of Ottawa/Hull, to be developed in conjunction with the Stony Swamp Conservation Region. The original log house, still standing, was repaired and restored to its nineteenth century condition. Outbuildings, including a barn and several log sheds, were brought to the site and established in positions as nearly approximating their predecessors as possible. On-going work by the Interpretation Service is designed to recreate the settings and furnishings of such a farmstead for residents and visitors in the Ottawa/Hull area. For this reason, archaeological research was contracted in 1980 in order to clarify questions of structures and moveable property at the Log Farm one century ago.

A group of students from the University of Toronto, under my general supervision, carried out archaeological testing on the grounds of the Log Farm between May 15 and July 7, 1980. Field Director was Ms. Robin Dods, and she was ably assisted by Dr. Marian Binkley, Mark Campbell, Susan Maltby, and Lorna Woods, as well as by Paul Merriam and a number of local volunteers who gave a welcome hand. We are also grateful to Ms. Aileen Merriam, Chief, Interpretation and Conservation Service, National Capital Commission, and Ms. Judy Larkin and Mr. Doug Wolthausen of her staff for making the study possible and giving us the necessary facilities to carry out the best work possible under the circumstances.

Five specific research projects were carried out:

A. The vanished summer kitchen. The primary research goal in this

category was the actual location of such a structure, while secondary concerns included its antiquity, construction and destruction. Was it originally used by the Bradley family, or was it of a later date?

B. The asphalt-topped wall. This structure was discovered while investigating the summer kitchen question, and so the primary research question was whether the wall was a portion of the foundation for an attached kitchen or shed, or whether it was part of the Log House foundation.

C. The bedrock excavation. This feature was probably constructed by quarrying limestone for construction use elsewhere on the site, but it appears to have served other functions too -- well, sink or cellar. When was it excavated, and when was it finally refilled with rubbish?

D. The stone foundation. A depression north of the existing stone shed contained an uncemented limestone foundation, representing rectangular structure(s) measuring about 4 by 7 meters. Was this an early house, a shed or a stable?

E. The stone-lined pit. This pit, like the bedrock hole, was excavated down into the bedrock beneath the site, but unlike the hole it was neatly finished with trimmed tabular limestone blocks. It, too, was filled with modern rubbish. Was it a well or a root cellar? What was the significance of the careful finishing of this feature?

The excavations opened thirteen areas, related to these five features, which totalled 178.25 square meters. Operations, which were defined in the field, reflect the features as follows:

Feature A - The summer kitchen: Operations 01,03,07,08,09, 10, and 12
Feature B - The asphalt-topped wall: Operations 05 and 06
Feature C - The bedrock excavation: Operation 07-10
Feature D - The stone foundation: Operation 11
Feature E - The stone-lined pit: Operation 13

From these areas, we recovered:

1,659 Ceramics, including Sponge, Mocha, Flow Blue, Granite and many monochrome transfer wares.

10,024 Glass fragments, including some push-up base bottles and a number of medicine bottles of the late 19th century.

10,985 Metal remains, of which 6,558 were nails. Other metal remains include modern cans and an early CNE badge.

1,260 Plastic items, many of them Dairy Queen spoons. This category, needless to say, was a big disappointment.

24 Rubber fragments -- hoses, boots, and four automobile

tires stuffed into the sink/cellar of Area C.

77 Leather bits such as shoes, belts and an (empty) wallet.

47 Fabrics -- wool and rayon twill, knitware and felt.

1,027 Bones -- buttons and food remains.

21 Shell buttons and clamshells.

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25,124 Artifacts. All washed, catalogued, analyzed and reported by January 1, 1981.

The analysis of the excavation and identification of Log Farm materials treats each one of these questions. Some appear to be answered; some remain mysterious. If it is possible to do so, this analysis should be given to local informants for their comments and criticisms, for such a two-pronged analysis gives the best opportunity for detailed and accurate site interpretation. This analysis generated the following observations:

1. One structure, Feature A, was built at about the time of the initial erection of the Log House. It was substantial with a flagstone floor and solid, dressed beam construction. There is no indication of its size or exact location, but it appears to have been located close to or attached to the west wall of the Log House. It appears to have finally burned down.

2. A second structure, Feature D, began as a rough chinked-log shack measuring about 4 x 5 meters built on a rough, unmortared limestone foundation. It appears to have been gradually improved, adding a shingled roof and painted wall boards. At some point a second room, perhaps a lean-to, was added to extend the complex to 7 meters or more in length. The addition probably had linoleum on the floor and papered walls. A wood-burning stove provided heat.

This may have been the original shanty occupied by Abraham and Matilda Bradley upon their arrival at the site. It was probably retained and modified for use by a hired man or grown child.

3. A trapezoidal excavation into the limestone bedrock, Feature C, resulted from quarrying, probably at an early date. It was kept open and used as a drain or cold cellar until the mid-20th century, when it was filled with rubbish as a safety precaution.

4. A rectangular excavation into the bedrock, Feature E, was walled with dressed tabular limestone. It too was filled with mid-20th century rubbish. The investigation of this feature was incomplete, but it appears to be too large for a conventional wall. Alternative interpretations include a storage chamber for blasting powder and a cess pit.

5. We found no traces of a detached summer kitchen in the precise area indicated by an elderly informant. She may have mistaken its location, and have intended to refer to the building discussed under Point 1 above.

6. An extensive rubbish heap, containing primarily 19th century

goods, ran southwest from the Log House on a line toward the drain/cellar in Area C. A second heap lay somewhat northwest of the Log House. These two areas may reflect disposal patterns from front and back doors of the House.

7. At some point within the past three decades, several alterations of the site took place:

a. A great deal of modern debris, including vast quantities of plastic Dairy Queen spoons and dishes, was deposited on the site. This was probably a load of fill spread over the site to level the ground for sodding. Large quantities of fill were spread around the Log House, while no fill layer covered the pit in Area E at all.

b. After the fill was in place, the site was ploughed or disked. This compacted the fill and spread it over low places. It also mixed the plastic and other modern material down to the bottom of the earlier deposit, so that there was no unmixed deposit in any of the areas examined on the site. The stratigraphic placement of objects was meaningless. Generations of woodchucks have continued this mixing.

c. Several very large rocks were removed, according to the personnel at the Stoney Swamp Conservation Area, because they interfered with lawnmowers and other equipment. These may have been the supports for a detached summer kitchen, but they left no traces in the archaeological record.

d. The fill, mixed with older deposits, was carefully spread over the top of the bedrock, Area C, burying it under an unbroken layer of humus and debris. This was not done in the area of the other pit, Area E.

e. Finally, a layer of sod was laid over the smoothed humus.

The Log Farm was an interesting problem from a methodological point of view, for it raised a number of obstacles to conventional archaeological procedures. We have attempted to resolve some of these by resorting to multi-layered analysis, combining data from ground context, structural remains, artifactual content and historical research. As is so often true, the conclusions are not necessarily those which were expected; they also include a new spectrum of challenges for further future research.

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