SOME RECENT DEVELOPMENTS IN THE SEARCH FOR EARLY MAN IN ONTARIO

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ABSTRACT

The long-term Royal Ontario Museum survey and excavation program focusing on the Early Man occupation of Ontario is briefly described. The results of the 1976 survey along the strandline of glacial Lake Algonquin and preliminary excavations at the Fisher site, a major Early Paleo-Indian base camp, are discussed.

INTRODUCTION

Early Man sites in the Great Lakes region are often associated with the strandlines of late glacial or early postglacial lakes, a fact which prompted Quimby (1959) to suggest the term Aqua-Plano for the Late Paleo-Indian manifestations in the region. For example, in Wisconsin, the Eden-Scottsbluff cremation burial at the Renier site is located on the crest of a beach attributed to the Main stage of glacial Lake Algonquin (Mason and Irwin 1960). In northern Ontario, the Brohm (MacNeish 1952) and Cummins sites and several other closely related stations near Thunder Bay (Fox 1975; MacDonald 1971; Wright 1972) occur on a strandline of glacial Lake Minong. Farther to the east, the George Lake I site (Greeman 1966) occurs on an unidentified strandline of probable post-Algonquin age.

Early Paleo-Indian (fluted point complex) sites have also been associated with late glacial strandlines. In Michigan, the Barnes (Roosa 1963; Wright and Roosa 1966), Lux (Griffin 1977), and Holcombe sites (as well as closely related stations on the same ridge; Fitting, Devischer, and Wahla 1966) appear to be associated with the strandlines of glacial lakes Warren, Lundy, and Clinton (an arm of Lake Algonquin) respectively. In south-western Ontario, the recently discovered Parkhill site, an important Early Paleo-Indian base camp, is located near the strandline of Lake Algonquin (Roosa 1973, 1977). In the same region, Dellar (1974) has found both Early and Late Paleo-Indian sites on or slightly above the Algonquin beach as well as on the earlier strandlines of glacial lakes Warren and Whittlesey.

Unfortunately, no radiocarbon dates are available confirming that Early Man in this region was actually contemporaneous with these various lakes although this would not be inconsistent with the age of Early and Late Paleo-Indian complexes in other regions. The earliest reliable radiocarbon dates for fluted point complexes in North America range from approximately 9500 B.C. in the western Plains and southwestern United States (Haynes 1967) to 8600 B.C. in Nova Scotia (MacDonald 1968). In eastern North America, however, the maximum date may be extended back to 10,500 B.C. if the Dutchess Quarry Cave date in eastern New York state (Funk, Walters, and Ehlers 1969) is eventually confirmed by similar dates from other sites. Consequently, in the Great Lakes region, Early Paleo-Indian hunters were almost certainly contemporaneous with the later stages of lakes Algonquin and Iroquois, and the Champlain Sea, which, together, are currently dated between approximately 12,500 and 9500 years B.P. (Anderson 1971; Lewis, Anderson, and Berti 1966; Karrow et al 1972). The occurrence of isolated artifacts and a few sites within the limits of Lake Iroquois and the Champlain Sea in Ontario (Garrad 1971) and New York (Funk 1972; Ritchie 1965) should perhaps be interpreted not as a geological base date for the earliest occupation of the region but as an indication that the area was occupied.
for a lengthy period of time. Based on the presently known maximum age of fluted point complexes elsewhere, it is unlikely that Early Man occupied the beaches of glacial lakes Warren and Whittlesey at the time these lakes were in existence since they are currently dated between 12,500 and 13,000 + years B.P. and therefore pre-date the earliest appearance of the fluted point complexes. This raises the possibility that Early Paleo-Indian peoples simultaneously occupied both former strandlines and then existing beaches. Certainly one of the most interesting problems for the future is the determination of the reasons for this apparent settlement pattern.

**THE ROM EARLY MAN SURVEY:• 1974-75**

The author has conducted Early Man surveys in Ontario since 1970, first on glacial and postglacial strandlines in Killarney Provincial Park (Storck 1970, 1974), then along the Niagara escarpment and in the major river valleys cutting through this feature (Storck 1971, 1972, 1973), and, most recently, on the strandlines of glacial lakes Iroquois and Algonquin in southwestern Ontario (Storck 1974a, 1974b, 1975). In addition to the longer range goal of determining the nature and extent of Paleo-Indian occupation in Ontario, one of the more immediate objectives of this work is to determine the most effective method of focusing survey work for the purpose of discovering Paleo-Indian sites. A related objective, in the case of the Algonquin and Iroquois strandline survey, is to determine whether or not Early Paleo-Indian peoples actually lived on the shores of these glacial lakes and, if so, to determine how they were adapted to the lakeshore habitat. This paper reports on recent investigations on the Algonquin strandline.

Most of the author's survey work on the Algonquin strandline has been conducted on the western margin of the Simcoe lowlands. The strandline in this region is quite prominent, consisting, along most of its length, of an erosional bluff approximately 30 to 40 feet in height. This bluff, and the various depositional features also occurring along the strandline, were probably formed for the most part during the later history of the lake, during the long-lasting Main stage which recent work (Karrow et al 1975) indicates existed from approximately 11,200 B.P. until the opening of the North Bay outlet by glacial retreat and the final draining of the lake approximately 10,400 years ago.

In 1974, approximately 200 miles of the Algonquin strandline were surveyed in a 440 square mile area centered roughly on Alliston (Fig. 1). Cultivated fields within a zone several hundred yards wide beginning at the strandline and extending inland from the former lake shore were selectively walked. Particular attention was paid to the mouths of stream valleys where they cut through the former beach, knolls overlooking the strandline and offering an uninterrupted view of the surrounding terrain, possible caribou crossings, etc. Former islands and the margins of shallow embayments were also of special interest.

The 1974 survey resulted in the discovery of 47 localities which produced a few flakes or isolated artifacts, four Woodland sites, four Archaic sites, and the multi-component Early and Late Paleo-Indian Hussey site (BbGw-1). It is located on the crest and western or lakeward end of a former peninsula of Lake Algonquin. Although the crest of the peninsula was only approximately 35 feet above the water plane of the lake (Burwasser 1974), the locality would have provided, as it does today, an uninterrupted view for miles in all directions, vegetation permitting. Two fluted point fragments, a spurred end scraper, several bifaces and scrapers, and a number of unworked flakes were obtained in controlled surface collections on two occasions (Fig. 2). The surface survey indicated the presence of at least three areas of loose concentrations of artifacts and debitage, possibly representing different campsites or different activity areas of the same site. These were tested in 1975. Unfortunately, two of these concentrations produced no diagnostic material.
The third contained a small amount of Late Paleo-Indian material and may represent a small campsite occupied by people of post-Folsom—pre-Cody complex affiliations.

At the conclusion of the 1974 survey, a second season of excavation was conducted at the Early Paleo-Indian Banting site (BaGx-1) near Alliston. This site is located on the crest and eastern end of a drumlin and former island in Lake Algonquin and is only approximately four air miles southwest of the Hussey site in the same arm of the former lake. Work began at the Banting site in 1973 after it was learned that two fluted points had been found previously in the same general area, one on the south side of the drumlin near the crest and the other on the north side near the base (Fig. 3). A final season of excavation was conducted in 1975. As a result of this work, five widely separated areas were excavated resulting in the exposure of at least two Early Paleo-Indian activity areas or possibly unrelated campsites.
Fig. 2. Selected artifacts from the Hussey site.

- a — spurred end scraper
- b — groover
- c — base of lanceolate projectile point
- d — lanceolate projectile point
- e — lanceolate projectile point
- f — knife
- g — fluted point
- h — fluted point
Fig. 3. Selected artifacts from Area A (west) of the Banting site.

Top row
a — double spurred graver and scraper
b — single spurred graver
c — single spurred graver
d — piece esquillé

Second row
a — end scraper
b — side scraper
c — side scraper

Bottom row
a — fluted point (cast; original owned by Mr. E. Banting)
b — fluted point (cast; original owned by Mr. E. Banting)
c — fluted point
d — fluted point
In 1975, the Algonquin strandline was surveyed intensively from Glencairn, at the northern limits of the previous years’ work, to Thornbury on Georgian Bay, a distance of approximately 50 miles. Other strandlines belonging to several post-Algonquin lakes were also surveyed whenever possible.

The 1975 survey resulted in the discovery of 18 localities which produced isolated artifacts or flakes, one site of unknown cultural affiliation, a possible Late Paleo-Indian-Early Archaic site (the Coates Creek site, BcHa-44), and a very promising Early Paleo-Indian site (the Fisher site, BcHa-45). The Fisher site is located a short distance west of Stayner on a terrace and the crest of a knoll overlooking a barrier bar of Lake Algonquin. A pond may have existed in a low-lying area between the site and the barrier bar as a result of greater stream discharge and/or periodic flooding by Algonquin storms. This site will be discussed later in the paper.

THE 1976 SURVEY AND EXCAVATIONS

KINCARDINE AREA SURVEY

Work along the Algonquin strandline continued for a third season in 1976 with the survey of a former lagoon in the vicinity of the town of Kincardine. Recent work (Karrow et al 1975) indicates that a bar on the inner or eastern margin of the lagoon was probably formed during an early stage of Lake Algonquin prior to 11,500 years B.P. The outer barrier bar was probably constructed during the Main stage of the lake which existed from approximately 11,200 to 10,400 years B.P. Most of the survey work was concentrated on the eastern margin or landward side of the lagoon, particularly near the mouths of the Penetangore and North Penetangore rivers and smaller streams. Most of the barrier bar itself is occupied by the town of Kincardine.

Although no diagnostic Paleo-Indian artifacts or sites were discovered, an unworked flake (Fig. 4) from one of the ten collecting localities is of considerable interest because of its geological implications. The flake is from locality number 10 located a short distance southwest of Kincardine near the southern end of the barrier bar where it merges with the Algonquin bluff. The flake has clearly been water-worn. Both faces have been polished and the striking platform and edges have been smoothed and rounded. The flake was found at an elevation of approximately 644 feet above sea level on the first terrace below the barrier bar of Lake Algonquin which is at an elevation of approximately 657 feet a.s.l. This location today is approximately 63 feet above and roughly three-tenths of a mile inland from the shoreline of Lake Huron. The flake was probably water-rolled during the time of formation of this terrace since there are no streams in the area today that could account for its water-worn condition and deliberate or accidental long-distance transport by man or animal from another location, such as a modern beach, can be ruled out as extremely unlikely. Three other widely-scattered flakes were found on the barrier bar itself but these have sharp edges and are otherwise “fresh” in appearance.

Because of its elevation and position immediately below the Algonquin barrier bar, the terrace on which the water-worn flake was found is tentatively identified as a strandline of one of the so-called “Upper group” of post-Algonquin lakes, including Ardtrea, Upper Orillia, and Lower Orillia (Deane 1950). In 1910, Goldthwaite (1910:10) identified several strandlines below the Algonquin beach within the boundaries of the town of Kincardine at elevations ranging from 636 to 660 feet above sea level. Two of these occurring at elevations
of 657-660 feet and 636 feet were later tentatively correlated by Deane (1950:73) with the Ardrea and Upper Orillia beaches, respectively. Unfortunately, no recent geological studies of the beach ridges in this area have been undertaken.

The post-Algonquin interval extended from the end of Lake Algonquin to the inception of low-level lakes in the deepest parts of the Huron and Georgian Bay basins, named Lake Stanley and Lake Hough, respectively. According to Karrow et al (1975), the opening of the North Bay outlet and the draining of Lake Algonquin occurred between 10,600 and 10,400 years ago. Lakes Stanley and Hough are believed by some geologists to have formed about 10,000 years ago (see for example, Sly and Lewis 1972; Dreimanis 1977). Consequently, if this dating is correct the period between 10,400 and 10,000 years ago would be a minimum geological date for the water-worn flake if the terrace on which it was found can, in fact, be correlated with one of the post-Algonquin lake stages. It should be stressed that the time of formation of the terrace provides a minimum geological date for the artifact since it could have been dropped in the general area at an earlier time and subsequently redeposited when the terrace was formed.

This interpretation is, of course, tentative. The elevation of the terrace on which the flake was found should be more accurately determined and the post-Algonquin beaches in the Kincardine area should be identified and mapped before a final correlation of this terrace with a particular strandline can be made. In addition, more widespread agreement should be reached among geologists concerning the age of the post-Algonquin interval.

Fig. 4. Water-worn flake from Kincardine Locality 10. Left, dorsal face; right, ventral face. The flake is 23.0 mm. long. The striking platform is at the top.
since substantially different dates for the end of Lake Algonquin and the beginning of lakes Stanley and Hough have been published in the geological literature of the past several years (cf. Prest 1970). Although an unworked flake would normally receive no more than a passing notice, the waterworn condition and geological context of this artifact have important implications for the dating of Early Man in this province. If the terrace can be correlated with a former lake stage that occurred between 10,400 and 10,000 years ago, it will provide one of the earliest geological dates thus far available for the age of Early Man in Ontario.

**EXCAVATIONS AT THE FISHER SITE**

Preliminary excavations were also begun at the Fisher site in 1976. Two of the three areas of artifact concentrations initially discovered in 1975 were extensively tested. In addition, a continuation of the systematic surface survey resulted in the discovery of two other occupation areas.

Three of the occupation areas, all located on or near the highest part of the site, have produced a large number of fluted points in various stages of manufacture, as well as channel flakes, preforms, biface fragments, single and multiple spurred gravers, and a variety of other tools (Fig. 5). The two remaining occupation areas, both located on the lower terrace immediately adjacent to the former pond or marsh, have produced large numbers of cores and preform fragments as well as abundant debitage but no fluted points and only one or possibly two channel flakes. The very marked differences in the artifact assemblages suggest that the five areas may actually represent, not individual and unrelated campsites but rather, different activity areas of the same large base camp. It may be significant to note in this regard that from Area B, the most productive of the three highest occupation areas, there is an uninterrupted view of the surrounding region to the north, east, and south and as far as the Niagara escarpment in the west, some three and a half miles distant. This, in addition to the differences in the artifact assemblages, suggests that the higher areas on the site may have served as look-outs where spears were repaired while watching for game while the lower areas of the site adjacent to the pond or marsh may have served as the main living area where more preliminary or other kinds of stone knapping activities were conducted.

All of the points are either unfinished or broken but the most complete specimens indicate that the length may have ranged from approximately 30 to 50 mm., and occasionally somewhat longer. The maximum width ranges from 14 to 25 mm. On most specimens there is a noticeable constriction a short distance above the base. Below this, the sides flare outward slightly producing what are frequently termed “ears.” Unsuccessfully fluted specimens and the basal fragment of a channel flake indicate that a basal nipple was prepared as a platform for fluting. One or, less frequently, two channel flakes were removed from each face. On specimens which were only fluted once on each face, the flutes are from one-quarter to three-quarters as wide as the point and extend nearly to the tip. A number of the finished points were not ground on the sides and/or base.

The fluted points are very similar to those from the Parkhill site, which is currently being investigated by William Roosa of the University of Waterloo. In fact, the two samples would be difficult to distinguish visually if placed together suggesting that the two sites were occupied by very closely related people, if not actually by the same band. The sites are also similar in that a large proportion of the artifacts from each are made of the same type of chert, which is buff or white in colour with variable amounts of pink or yellow
Fig. 5. Selected artifacts from Area B of the Fisher site.

Top row
a — double spurred graver
b — single spurred graver on channel flake
c — basal fragment of channel flake with striking platform
d — mid-section of channel flake
e — groover

Middle row
a — unfinished fluted point
b — fluted point
c — fluted point
d — fluted point

Bottom row
a — hammerstone
b — end scraper
c — spokeshave
mottling. This chert also predominates at the Banting and Hussey sites. Unfortunately, the bedrock source of this material has not been identified and it could be either Devonian or Silurian in age. The Parkhill site occurs in the region of Devonian formations which underlie most of southwestern Ontario, the eastern margin occurring approximately 30 to 60 miles west of the Niagara escarpment (Liberty 1969) (Fig. 1). The Banting, Hussey, and Fisher sites occur just east of the eastern margin of Silurian formations which occur in a band 20 to 60 miles wide from the Niagara escarpment westward (Liberty 1969). Consequently, the presence of Silurian age chert at the Parkhill site near Lake Huron would indicate a north to south movement of people while the presence of Devonian age chert at the Banting, Hussey, and Fisher sites in the Simcoe lowlands would indicate a south to north movement. The difference is important since the presence of Silurian age chert at the Parkhill site would require at least a two-way movement (possibly also implying a periodic or seasonal movement over a period of time), first north to the region of Silurian chert, and the Fisher site, and then south again to the Parkhill site. The presence of Devonian chert at the Banting, Hussey, and Fisher sites, on the other hand, could only be used to infer a colonizing movement in a single direction. This is, of course, based on the assumption that Early Paleo-Indian peoples probably initially entered this part of the province from the south rather than from the north around the lakes. Further comparative analyses of the chert from these sites and from various bedrock formations are necessary before it will be possible to determine the origin of this material.

Unfortunately, no charcoal or animal bone was recovered so it is not yet possible to date the Fisher site and determine whether it was occupied during a stage of Lake Algonquin or at some later time.

One or possibly two additional seasons of excavation are necessary in order to obtain more conclusive data concerning the differential distribution of artifacts in the different areas of the site and the possible significance that this might have in terms of the community organization or settlement pattern. For this purpose, the work will be directed toward obtaining large and comparable samples from each of the areas recognized to date. A larger sample of artifacts will also facilitate the determination of external cultural relationships. In addition to providing larger samples for intra- and inter-site analysis, more widespread excavations are required to determine whether any features may have survived containing charcoal or animal bone for identification and dating purposes. The dating, of course, is critical since, in addition to indicating whether Early Paleo-Indian peoples were actually contemporaneous with Lake Algonquin, it would place the occupation of the Fisher site in a specific environmental context in the late glacial-early postglacial vegetational sequence. This information, as well as the recovery of faunal and/or floral remains, is basic to further studies of Paleo-Indian cultural-ecological adaptations. Information on Paleo-Indian subsistence in the Northeast is almost completely lacking except for some not entirely unequivocal evidence from the Holcombe site in Michigan (Cleland 1965) and the Dutchess Quarry Cave in eastern New York (Funk, Walters, and Ehlers 1969) that Early Man may have hunted barren ground caribou. This should be confirmed from other sites if possible and information on other aspects of hunting, gathering, and possibly even fishing, for which there is recent evidence (McNett et al 1977), is needed before it will be possible to obtain even a general picture of subsistence. These and other aspects of the Early Paleo-Indian adaptation (s), such as social organization and possibly changing adaptations to the postglacial environments, are areas where additional research is needed if sites with pertinent data can be discovered, an end to which this research is directed.
ACHNOWLEDGEMENTS

I would like to thank all of the landowners who gave me permission to work on their land and, in particular, Mr. and Mrs. Edward Banting, Mr. and Mrs. Reg. Fisher, and Mr. William Hussey. I would also like to thank Charles Garrad who first informed me of the Banting site. Part of the work reported here was done under provincial licences granted by the Ontario Ministry of Culture and Recreation (licence numbers 75-A-005 and 76-B-0082). I gratefully acknowledge the support of the Canada Council for the 1975 field season (grant number S74-1632) and the continued support of the Royal Ontario Museum and Drs. A.D. Tushingham and W.A. Kenyon of that institution. The map was drawn by David Findlay, Office of the Chief Archaeologist, ROM, and is based on an earlier version by Jirina Hosek. The photographs were taken by William Robertson, Photography Department, ROM.

Finally, I must also thank all of the people who worked on the field crews for their dedication to "the search" and — above all — for their patience which was, alternately, both grim and hopeful but always determined.

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