THE ARCHAEOLOGY OF SOME NOVA SCOTIAN INDIAN CAMPSITES

J. S. Erskine Wolfville, Nova Scotia

(Received for publication Jan. 9, 1971)

Abstract. Campsites at Tusket Falls, Yarmouth Co., Gaspereau Lake, Kings Co., Bear River, Digby Co., and Little Narrows, Cape Breton, have been explored. These comprise two phases of the Archaic period and several sequences of change in transition from Archaic to Woodland cultures. An attempt has been made to clarify the Period of Confusion, 1000 B.C.-A.D. 1000

Previous explorations of campsites of Indians in Nova Scotia have been made which have indicated that the southwestern area of the Province is the richest in artifacts of their cultures. However little is known of the archaeology of Indians in Nova Scotia apart from the discovery of some artifacts by Smith and Wintemberg in 1913-14 (1), the explorations of the author in 1957-59 (2, 3) and the important excavations at Debert (4-6). The results of explorations during 1961-66 are herewith reported.

Tusket Falls, Yarmouth County

The Tusket River used to have valuable runs of salmon and gaspereaux, and the rapids at the foot of a small lake coincided with the top of the tide to complete the perfect fishing-place. The shores and banks on either side were rocky and steep and unsuitable for camping, but the top of the western bank had a flat area of about two acres with a small brook at the north end. The western half was occupied by some houses and a road; the eastern half was a triangular field where a variety of Indian artifacts had previously been found.

To determine the organization of the camp, I laid out a line at right angle to the road and dug one square yard in three. The gravelly soil had been ploughed occasionally for two centuries to a depth of 9 inches. I found random chips but no remaining structure except occasionally the base of a hearth beneath the ploughline. In one such hearth, 23 yards from the road, I found a short side-notched point with the tip broken. It resembled the "Brewerton" pattern but was much too short, and the side-notches had been ground, not chipped (Fig. 4). It belonged to the Laurentian period.

Along the edge of the stone wall where the plough had not been able to reach my only find was a small quartzite arrowpoint with a broken stem similar to those from the Mersey River and Indian Island,

Merigomish. As they were common here, I named the type "Tusket". Beneath them were a few quartz points, roughly triangular but not sharply tipped. They were unfamiliar to me, but they closely resembled "Shield Archaic" points as illustrated by Ritchie (7).

Gaspereau Lake, Kings County

The summer of 1965 had been very dry, and Gaspereau Lake had almost ceased to exist. For the first time, I saw a narrow marshy beach clear of the water which had covered it for 40 years. A test-hole indicated that it had been occupied by Micmacs. We already have a fair picture of their period, but, as almost every site has some new item to contribute, this one was explored.

Once in Queens County I had dug a site in which 3 successive cultures had moved progressively up the slope to avoid the rising sea. This site reversed the process as the oldest camps were highest on the slope. Evidently that had been the beach of the period, limited above by the forest and below by the level of the lake. As the overflow from the lake slowly wore down the granite dyke at the outlet, another stretch of beach emerged, while the forest above moved down to occupy the part no longer subject to floods. Excavation was thus complicated by the position on the slope and the depth from the surface.

No charcoal, pottery or bone had survived 40 years of immersion which hampered dating. Therefore I tried a geological measurement. A few yards above the top of the site was a rock escarpment which probably was the level of the lake at the end of the ice-age. I divided the difference in altitude into 15 sections of 1000 years each. If the erosion of the outlet had been consistent, this might have been reasonably accurate. There had however been other outlets from the lake.

The first signs of occupation appeared at the level of 3000 B.C., but deepest in this section were two random pieces. One was a smoothed curved piece of stone which told nothing except that it had not been brought in by flood-water. The other was the failure of a large clumsy point. An effort at producing a stem suggested the Laurentian period, but the crudity and the green chert from which it was made, suggested the more ancient fishing culture of the Mersey high terrace.

Above these was a camp of 3 hearths, dug down about 10 inches as in all subsequent wigwams. Two of them were separated by 6 yards, and if these had been occupied at the same time, the wigwams would have been rather smaller than that of the average Micmac. Two of these hearths had been used as caches for winter tools, and spring floods had deposited silt such that they had not been recovered. This was

especially valuable as it showed that each cluster of artifacts belonged to the same date. They included large, heavy spearpoints with triangular stems (Fig. 1). These could have been used only for thrusting. The stems were designed to slip from the shaft and to remain in the wound. This fits only the technique of winter hunting of the moose in deep snow and would have been useless in other seasons. There were also two net-weights, which were crude rectangles of stone notched at each side. No remains of nets have been found in Nova Scotia, but in New York State one has survived and was associated with similar net-weights (7). As they had been cached with other winter tools, this suggests fishing through the ice. A neat, slender, side-notched point of chalcedony was probably the tine of an eel-spear.

The tip of a slate knife was found along with the crude spearpoints. The Laurentian culture seems always to have delighted in art. Their elaborate "atlatl-weights" for balancing spear-throwers and their stone effigies of animals, common to the south and west of us, are rare here, but Nova Scotia is the home of slate knives. These may be simple fish-knives, or they may be broader and with stems threaded for lashing to a haft of knife or spear, or they may be elaborate and long beyond any practical use. This knife-tip came from such a masterpiece and was of green and white slate, bevelled to a flat hexagon with the tip an obtuse angle not intended for work. My crude calculation of dates placed this Early Laurentian culture between 3000 and 2000 B.C.

The next culture down the slope was also Laurentian but showed a complete change in pattern. There were no more wigwam hearths. The wigwams seem to have formed a line, north and south, with a row of hearths on either side to be used for cooking as well as for smoking fish. The equal importance of the opposite lines of hearths suggested that gaspereaux, which run during the period of easterly winds, were as important as the salmon which belong to the west winds, because only the leeward hearth would not endanger the wigwam.

The spearpoints of this "Middle Laurentian" culture were smaller than those of the earlier, and their stems were either parallel-sided or narrowest at the edge of the blade so that they would not slip from the shaft (Fig. 2). We have here a different form of hunting with the spear thrown by hand or atlatl. We know only the winter spearpoints of the Early culture and only the summer spearpoints of the Middle culture. The lack of hearths in their wigwams shows that they did not occupy this site in winter.

The site was rich with adzes which were usually thin, concave and ground only at the cutting edge. There were also a few flat celts. Great flakes of quartzite may have served as wedges, and there were oval, grooved and flat hammers for driving them. A single broken gouge was

found. Two broken slate knives of common type were in this area, but their depth showed them to have been abandoned on the beach of the earlier culture. Here the slate knife seemed to have been replaced by a Brewerton-type point (Fig. 3) which was not sharp at the tip and somewhat diagonal at base. The favoured stone for these was honey-like quartzite from glacial drift.

A few miles up the lake, another Middle Laurentian site had been eroded by the ice, and an atlatl-weight, two gouges and a "plummet", the refined form of the net-weight, had been found previously. It seems likely that the two sites belonged to the same band with one site in summer and the other in winter when the forest would have protected them from the north wind. The plummet supports the theory of winter net-fishing. The period of Middle Laurentian fell in the 2000-1000 B.C. section.

The next section of the site was very disappointing. The period 1000-1 B.C. is haunted by a dozen subcultures, yet only two of these have provided us with adequate sites. It would have been of great value to have found here a representative tool-kit of even one more culture. In fact, we found only one point, medium-small and side-notched, which we call "Brighton" (Fig. 11). Only two points, both in fishing sites and without shellfish remains, have been found. Each might belong to the Shield Archaic group of this period but the evidence is quite inadequate.

The most abundant artifacts in this section were of the Tusket culture, but the numbers cannot be considered comparable as these were arrowpoints, not spearpoints, required in much greater numbers and much easier to flaw in the making. Almost all were of Blomidon stone — jasper, chalcedony, quartz, agate and even amethyst (Figs. 13, 14) Other tools which might have given us some inkling of Tusket culture were missing.

The Tusket phase seems to have disappeared before the Micmacs whose occupation of this site covered a greater area than their known 1000 years warranted. They also confused other periods by renovating and enlarging salmon hearths of earlier cultures and scattering their cached contents. On the other hand, they let three gaspereau hearths fill with peat. They must have been numerous, at least in the salmon run, but the greater part of their wigwam sites had been wholly or partially eroded by water and ice and had been buried in rotten sawdust. Not so much as a bead was found to tell of occupation during the French period, but a part of a 19th century crock showed that they had returned in the hungry centuries to follow.

Bear River, Digby County

In 1957-59 we excavated a site near the mouth of Bear River (2). The original excavation had covered 4 subsites. Three of them were shelves on the hillside levelled for winter occupation, and the fourth was a mere fringe of a summer site eroded by the sea. The oldest culture found had been that of "Lower Bear River", a Late Laurentian culture much influenced by Owasco pottery and Maine shellfish culture. Their occupation was estimated as 500-150 B.C.

They were replaced by the "Upper Bear River" culture which also took over the coast of Queens County. By radiocarbon dating, their arrival at this site was about 150 B.C. Their departure was estimated as not later than A.D. 200. A single Indian Gardens (Micmac) point had been found in the first test-hole, but no occupation by this people could be traced until after the French period. Then we found relics of French convent training in the form of embroidery scissors and thimbles, brass rings, and the great buttons of ceremonial cloaks, as well as porpoise vertebrae carved into counters for gambling games. These were followed by shipbuilders' spikes and cracked chinaware. Then these ceased.

The new discovery in 1965 was of masses of shell in an abandoned pasture on the hillside above. Here we found relics of an industrial development. Four large hearths had served to dry or smoke clams against the winter. Three of them were deep trenches with mounds of shells on either side; a fourth had a cross-trench as well to profit by every wind. Adzes were common, and two of them had been driven into the ground to await another season, probably August and September, as clams were not eaten in the early summer. Only an occasional unfinished tool or cluster of chips gave a hint as to the culture involved. Our uncertain conclusion was that two of the hearths had been Upper Bear River and two Indian Gardens. In a shallow wigwam site at one side there was a single Tusket point, and in a clam hearth there was a point which may have been Lower Bear River but which probably had nothing to do with the industry.

We had been aware that these people shifted their wigwams to the beach in summer, though they often cooked in small stone-framed hearths on their winter sites. There had been a large site beside the beach, but the greater part of it had been carted away for fertilizer. However, we found a patch of 9 square yards which was intact.

At the extreme north edge, in a sandy area without clamshells, there were two broken points of unknown types (Figs. 5, 6) though definitely of the Late Archaic period of confusion. In a shell-rich layer above these was an unfinished tool like those found in the Upper Bear

River clam-hearths. Then for a depth of 7 inches there were Tusket arrowpoints with slender stems, and finally the uppermost 3 inches held the corner-notched points of the Micmacs. This resolved the problem of why the Micmacs had not occupied this site as they had all the others. They had, indeed, been here, but only in summer when they had camped on the beach.

Little Narrows, Cape Breton

On my first enquiry about Indian sites in Cape Breton, I was referred to Little Narrows, known to all Indians though usually considered by them to be a workshop rather than a campsite.

The site was on a sandspit beside a tidal lake. Indians have camped there in this century to spear and smoke eels.

Here there was pottery of the northern Point Peninsula type unlike that common in southern sites. A few arrowpoints and a broken long spearpoint were found, but it was impossible to be sure of their relationship. At last I found two-thirds of a wigwam site. It was shallow but fairly rich in artifacts, and I found 6 points. Later I realized that I had dug through 3000 years in those 6 inches. One point was a Brewerton of Middle Laurentian, one Shield Archaic (Fig. 7), one Brighton, one like a Long Lamoka (Fig. 12), two of Indian Gardens (Fig. 15, 16) and a brass ring.

Seven years later, someone spaded the site superficially. As margins and the deep smoking hearths had not been reached, these were then re-excavated. It was difficult work and largely unrewarding except in the depths where there remained the hollows of smoking hearths and broken artifacts of some unfamiliar culture. A hearth was cleared which lacked the usual potsherds and we found an unfamiliar diamond-shaped tool (Fig. 8). Such a tool had been attributed to the Beothuks of Newfoundland, and this fitted. The Micmacs of the North Shore and Cape Breton assert that they drove the Red Indians, the Beothuks, from Nova Scotia to Newfoundland, I had always imagined that the Laurentians had been driven out by the Micmacs, but here was this Shield Archaic culture with its broken Steubenville points (Fig. 9) coming in between. The recent excavation at Port au Choix had shown that the Laurentians were in Newfoundland by 2300 B.C. Had the Shield Archaics ousted the remaining Laurentians from Cape Breton and then been ousted in their turn by the Micmacs?

The Period of Confusion, 1000 B.C.-A.D. 1000

There can be little doubt that this period resulted from the introduction of Mexican culture into the Ohio Valley, probably by a small body of missionaries rather than settlers. Their religion,

agriculture, organization and practice of war spread by acculturation and resulted in the expulsion of the many bands that did not adopt agriculture. A first wave of migration seems to have reached Nova Scotia from Maine and a later wave from the St. Lawrence Valley. This suggests the expansion of the Iroquois, but unfortunately the prehistory of these areas is less well-known than that of Nova Scotia. Byers (8) recorded a sequence in shore-camps with (a) no shellfish, (b) oysters and quahogs, (c) clams as well. We also have observed this sequence, but it is complicated by the northern wave which seems to have lacked all shellfish culture, and it is further complicated on the South Shore by the rarity of oysters and quahogs. Lacking adequate information, we may simplify the confusion by grouping the subcultures which seem closely related as follows.

Southern Invaders 600 B.C.-A.D. 200

Late Laurentian. No pottery. Oysters and quahogs eaten but no clams. Oyster culture is known only from Indian Island at Merigomish, and Whynacht Cove at Mahone Bay, but the scanty artifacts in each do not correspond, whereas points similar to those of Whynacht Cove have been found at Port Joli, Queens Co. (which has no oysters), Bear River and Newville Lake, Cumberland Co. Port Joli and Shinimicas River have yielded flat gouges which may belong here.

Clam Cultures. Clams eaten and dried; Owasco pottery; confined to shores. This includes Lower and Upper Bear River and perhaps Maccan which, though somewhat inland, had points very like those of Upper Bear River. The layer above the Oyster culture at Indian Islat. Merigomish, had a single Tusket point among clamshells. Although the Tuskets seem to have been northern invaders, they may have carried clam culture to Merigomish. The pottery of the period is northern.

Northern Invaders ?-A.D. 1000

Shield Archaic. This culture is best known from Little Narrows and a site at North Aspy (MacDonald — unpublished). Neither has been dated. There is also a caribou campsite on the escarpment overlooking Tracadie Harbour. The inhabitants seem to have had no pottery and to have eaten no shellfish. They are associated with Steubenville points of two types (Figs. 9, 10) and with Brighton (Fig. 11) and Long Lamoka (Fig. 12) though less certainly. If these can be grouped together, we find this culture on North Shore and South Shore and on fishing sites somewhat inland. In a shallow layer at Port Mouton, two teeth of a buried woman were found. The molar was flat, which indicates that she had not been eating clams; the incisor was worn down to the gum, perhaps by chewing skins which is a northern custom.

Tusket. Not dated. This culture first brought in bows and arrows, but in Prince Edward Island the collected artifacts seem to show a complete transition from Middle Laurentian to Tusket, from spear to bow. It seems likely that the culture that we know as Tusket evolved not far from the Chignecto Peninsula. It seems to have infiltrated other cultures without attacking them.

Indian Gardens — Micmac. The legends of this people include contacts with the Mohawks on the St. Lawrence River and an ephemeral start at corn culture. We have no carbon-dates before A.D. 1050, but the small square-based points seem to belong to two or three centuries earlier (Fig. 15) than the fan-based type (Fig. 16). They overran all other cultures, but, probably by taking over the women of the conquered, they adopted the food patterns and the pottery of their predecessors. This meant eating shellfish in the area west of Merigomish and Musquodoboit and avoiding it east of that line.

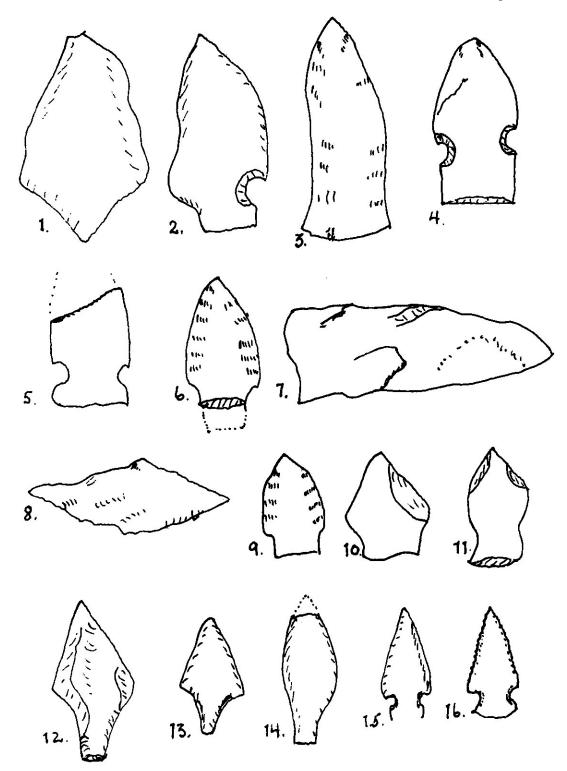
Acknowledgments. The author acknowledges with thanks financial support for this investigation from The National Museum of Canada.

References

- 1. Smith, H. I. and W. J. Wintemberg, Some shell-heaps in Nova Scotia. National Museums of Canada, Bull. No. 47 (1929).
- 2. Erskine, J. S., Proc. N.S. Inst. Sci. 24, 339 (1957-58).
- Erskine, J. S., Micmac Notes, N.S. Museum, Archaeol. Ser. No. 1 (1960);
 No. 2 (1961).
- 4. MacDonald, G., Excavations at Debert, Nova Scotia: a study of lithic technology and settlement pattern at a fluted point site. Doctorate dissertation presented to Yale Univ., Ann Arbor, Mich. (1966).
- 5. MacDonald, G., Quaternaria 8, 59 (1966).
- 6. Byers, D. S., Quaternaria 8, 33 (1966).
- 7. Ritchie, W. A., The archaeology of New York State. Natural History Press, Garden City, N.Y. (1965).
- 8. Byers, D. S., Am. Antiq. 19, 343 (1954); 20, 274 (1955); 24, 427 (1959); Curr. Anthrop. 3, 247 (1962).

Figs. 1-16. Types of Artifacts (all X 1/2)

- 1. Early Laurentian. Gaspereau Lake, Kings County.
- 2. Middle Laurentian. Gaspereau Lake, Kings County.
- 3. Brewerton type, Middle Laurentian. Gaspereau Lake, Kings County.
- 4. Brewerton type, Middle Laurentian. Tusket Falls, Yarmouth County.
- 5. Late Laurentian fragment, Bear River, Digby County.
- 6. Late Laurentian, stem broken. Bear River, Digby County.
- 7. Shield Archaic, Little Narrows, Cape Breton.
- 8. Shield Archaic. Little Narrows, Cape Breton.
- 9. Steubenville point, Little Narrows, Cape Breton.
- 10. Steubenville point. Port Mouton, Queens County.
- 11. Brighton point, Brighton, Digby County.
- 12. Long Lamoka point, Little Narrows, Cape Breton.
- 13. Tusket point. Bear River, Digby County.
- 14. Tusket point, Bear River, Digby County.
- 15. Early Indian Gardens. Little Narrows, Cape Breton.
- 16. Indian Gardens, Little Narrows, Cape Breton.



Figs. 1-16 (see p. 8)