

# Prehistory and Archaeology



Times-Review

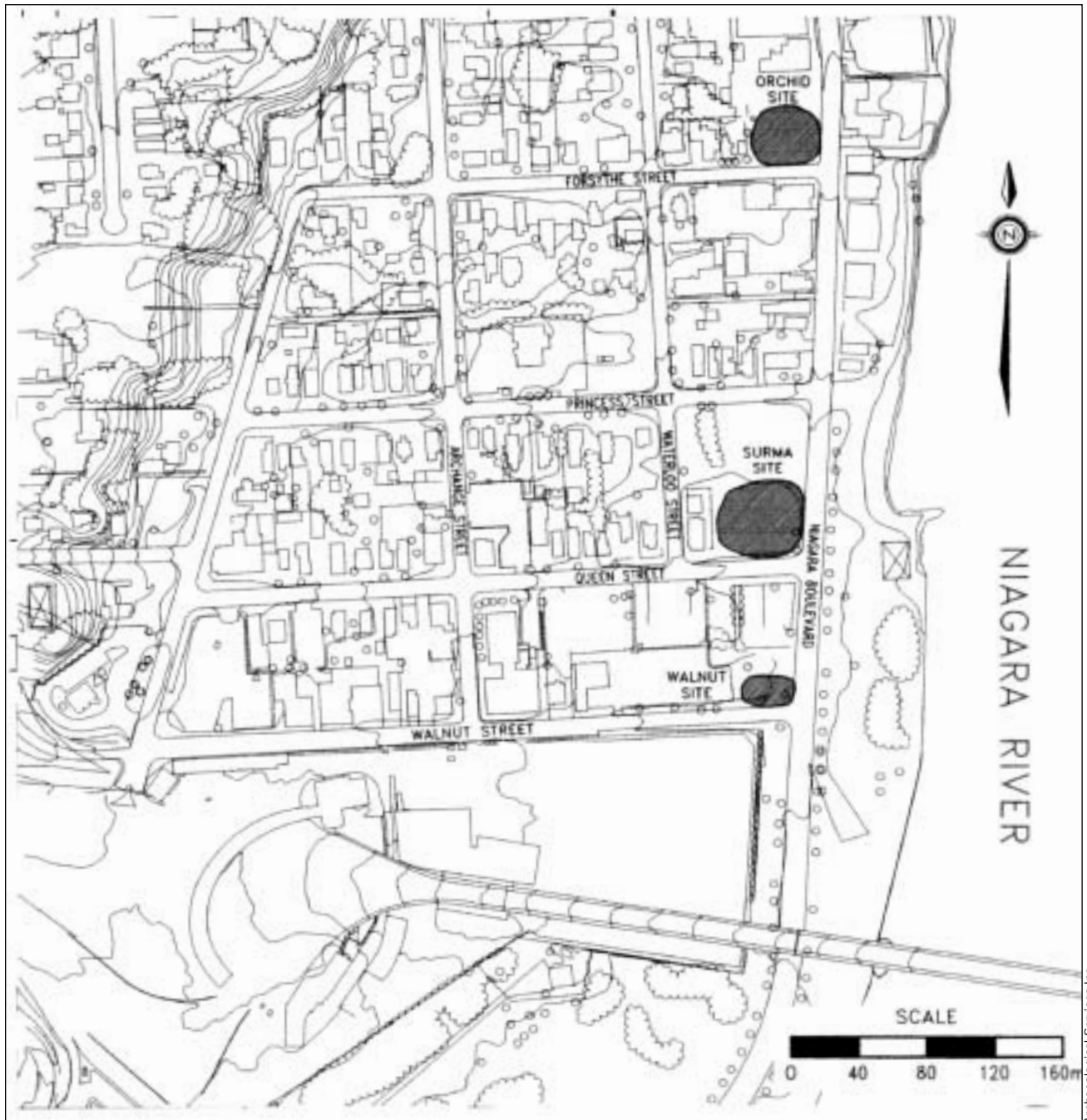
Orchid site. Dr. Marian White, shown wearing white hat and glasses, from the University of Buffalo, coordinated the excavation of this burial site on Forsythe Street in July 1964. She was assisted by William Noble of the Canadian National Museum.

By Ronald F. Williamson and Martin S. Cooper

While the first appearance of people in Ontario has not been accurately dated, it is thought that small bands of hunters arrived sometime after the draining of several large meltwater lakes which isolated southern Ontario until approximately 12,500 years before present.<sup>1</sup> Evidence concerning these people, who are known as Palaeo-Indians, is very limited since populations were not large and since little of the sparse material culture of these nomadic hunters has survived the millennia. Virtually all that remains are the tools and by-products of their chipped stone industry, the hallmark being large, fluted<sup>2</sup> spear points. Given the tundra-like environment which prevailed during this period, and the locations of their hunting camps, it is

thought that their economy focused on the hunting of large Pleistocene mammals such as mastodon, moose, elk and especially caribou. Of particular interest in this regard is the frequent location of Palaeo-Indian sites adjacent to the strandlines of large post-glacial lakes. This settlement pattern has been attributed to the strategic placement of camps in order to intercept migrating caribou herds.

While bands of this period no doubt travelled throughout the southeastern Niagara Peninsula, they do not appear to have repeatedly or intensively occupied the area. Indeed, no sites have been documented in the Niagara Peninsula, although two isolated fluted projectile points have been found. While locational



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data are unavailable regarding one of these points, the other was discovered northeast of Point Abino on the Crystal Beach moraine, a relic shoreline feature that was associated with glacial Lake Warren (Feenstra 1981). The point, dating to about 11,000 B.P., was fluted on one side only and was manufactured from Onondaga chert, a local chert<sup>3</sup> found on the shores of Lake Erie.

The transition from the Palaeo-Indian period to the subsequent Archaic period (ca. 10,000 B.P. to 3000 B.P.), occurred at about the same time that deciduous

forest was beginning to cover southernmost Ontario. Few Early Archaic sites have been investigated since their presence, as with the previous Palaeo-Indian period, is often documented on the basis of isolated projectile points. Little is therefore known about their economy. Limited archaeological data, however, suggest a broader more adaptable subsistence base for later Archaic foragers. Their annual subsistence cycle involved small interior fall and winter hunting camps, which were situated to harvest nuts and animals attracted to mast-pro-

Figure 1. Locations of the Orchid, Surma and Walnut sites.



Figure 2. Digging at the Orchid site on Forsythe Street, July 24, 1964. Dr. Marian White from the University of Buffalo is standing near the edge of the dig.

ducing forest, and larger spring and summer settlements, which were located near river mouths and lakeshores in order to garner rich aquatic resources. While the small fall and winter camps would have been used by single families, the larger spring and summer settlements would have been occupied by many families residing together, strategically exploiting seasonal concentrations of resources (e.g. spawning fish).

In the southeastern Niagara Peninsula region, the presence on the shoreline of high quality chert for toolmaking, and the rich Lake Erie fishery would have been attractive to Archaic peoples. Many sites have also been found adjacent to interior wetlands associated with headwater tributaries and along the Crystal Beach and Fort Erie moraines. While these sites likely represent fall-winter family sites centred on the harvesting of nut resources associated with oak and hickory forests and on the exploitation of deer and other wetland resources, the larger settlements, ranging in size from nine to thirteen hectares, are most frequently found on the Niagara River and on the Lake Erie coast. During the spring, groups would have returned from

the interior camps to fish, replenish chert supplies from the adjacent Onondaga chert deposit and bury band members who had died over the winter months. Many of these sites would also appear to have been multi-component in nature, indicating continual use of this area over an extended period of time.

The subsequent Woodland period (1000 B.C.- A.D. 1650) is divided into three subperiods: Early (1000 B.C.- 400 B.C.), Middle (400 B.C.- A.D. 800) and Late Woodland (A.D. 800- A.D. 1650).

The Early Woodland period differed little from the previous Late Archaic period with respect to subsistence pursuits and the location of settlements. On the other hand, this period is marked by the introduction of ceramics into Ontario and may be characterised as a time of increasing social or community identity. This latter attribute is especially evident in changes to and the elaboration of mortuary ceremonialism. Indeed, the analyses of Early Woodland cemeteries have provided compelling evidence for an expanding integrative ritual network that involved, for example, the application of large quantities of symbolically important red ochre to human remains. Also, these cemeteries often contained grave offerings of art indicative of prevailing social and spiritual perspectives. Much of this art was frequently made using exotic raw materials such as native copper from the western end of Lake Superior and displays a considerable investment of time and artistic skill. Moreover, the nature and variety of these exotic grave goods suggest that members of the community outside of the immediate family of the deceased were contributing mortuary offerings. Thus, social integration during the Early Woodland period appears to have increased and expanded relative to earlier times.

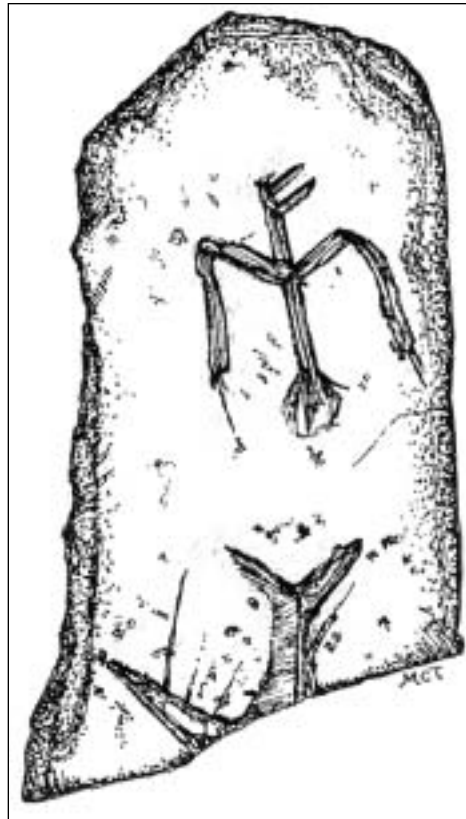
Both base settlements and campsites of the Early Woodland period have been documented in the southeastern peninsula region, including sites within Fort Erie, one of which yielded a number of Early Woodland projectile points and Vinette 1 pottery, the earliest form of ceramics recovered in northeastern North America. Other contemporary projectile points, manufactured from Flint Ridge chalcedony, an exotic chert quar-

ried in the Ohio valley, attest to long-range regional interaction between Ontario populations and more complex societies in the mid-continent.

The Middle Woodland period similarly represents a continuation of earlier settlement and subsistence activities, the exploitation of spring spawning fish being especially well documented. Groups of this period are viewed as autonomous and kin-based with seasonal movements restricted to a relatively small area such as a drainage basin. There are many known Middle Woodland sites in the southeast peninsula, perhaps reflecting an increase in population over the preceding period. Large, spring-summer sites are found along the north shore of Lake Erie and the Niagara River, where the primary mode of subsistence was undoubtedly fishing. Some of the most important Middle Woodland sites in the region are located in Port Colborne, on Point Abino, and in the area of the former Erie Beach Club in Fort Erie. The most significant development of this period, however, was the introduction of tropical cultigens such as maize and squash to southern Ontario populations, initiating a long and gradual transition to food production away from reliance on naturally occurring resources.

The Late Woodland period therefore encompassed a revolution in the subsistence and settlement regime of southern Ontario's aboriginal peoples unparalleled in the prehistory of the province. As the most populous group and the most involved in the development of this new life-style, Ontario Iroquoians often form a distinct focus of Late Woodland archaeology. As such, the Late Woodland period is often subdivided into Early (A.D. 800- A.D. 1300), Middle (A.D. 1300- A.D. 1400) and Late Iroquoian periods (A.D. 1400- A.D. 1650).

The Early Iroquoian economic strategy represents a continuation of Middle Woodland subsistence and settlement patterns with the aforementioned addition of corn horticulture to the subsistence regime. Villages tended to be small, palisaded compounds with long-houses<sup>4</sup> occupied by either nuclear or, with increasing frequency, extended families. These extended families formed the basis of community socio-politics



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Figure 3. *Illustration of ground slate gorget fragment found in the Peace Bridge truck yard. Note the two opposing thunderbird effigies.*

and, to a lesser extent, intercommunity integration. While villages were typically located on sandy soils to facilitate corn horticulture, camps and hamlets were strategically placed to continue with the traditional exploitation of naturally occurring food resources. Indeed, while corn appears to have been an important dietary component at this time, its role was more of a supplement than that of a staple. Early Iroquoian society is thus best viewed as an important transitional stage between earlier hunting and gathering populations and later, fully agricultural Iroquoian societies.

Only one Early Iroquoian component has been documented within the southeastern peninsula. It probably represents a seasonally occupied fishing camp. The lack of villages in the region is likely due to the paucity of large tracts of sandy soil and to the fact that Iroquoians may have moved out of the area to farm the sand plains to the west, returning in the spring to bury their dead, collect chert, and exploit the coastal fishery.

The Middle Iroquoian period marks a stage in Iroquoian cultural evolution characterised by fully developed corn-bean-squash agriculture and a more fully integrated village political system based

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By the 15th century, certain village households became larger and more variable in membership than others within the same community. This trend peaked around the turn of the 15th century with some longhouses reaching lengths of over 120 metres with three or more extensions evident. Some villages attained a size of over 4 hectares.

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on extended kinship. Widespread similarities in pottery and smoking pipe styles also point to increasing levels of intercommunity communication and integration.

In many cases, it appears that Early Iroquoian communities may have actually coalesced at the beginning of the fourteenth century precipitating these dramatic changes in the economic, social and political spheres of Iroquoian life. While there is not yet substantial evidence, it would also seem that villages and village networks were in conflict, with each other, and/or together against Algonkian-speaking peoples to the west. Whatever the causal factors, some villages became more heavily palisaded and some household groups (and longhouses) became larger. These developments may also have been due, in part, to a general increase in population over Middle Woodland levels.

While the extensive Fort Erie and Niagara clay plains may have prevented Middle Iroquoian peoples from establishing villages in this area, numerous seasonally occupied fishing and chert collection campsites are found along the Lake Erie coast. Yet, at least one site situated on the Lake Erie coast near Morgan's Point, may have been occupied year-round. It appears to have involved the exploitation of a wide range of wild plant and animal resources, as well as the cultivation of maize and sunflower (Pengelly and Pengelly 1986).

Settlement and subsistence patterns appear to have remained relatively stable during the Late Iroquoian period. The most noticeable changes occurred in the socio-political system. Indeed, by the fifteenth century, certain village households became larger and more variable in membership than others within the same community. This trend peaked around the turn of the fifteenth century with some longhouses reaching lengths of over 120 metres with three or more extensions evident. Some villages attained a size of over 4 hectares. This trend may reflect changes in the fortunes and solidarity of dominant lineages within villages and/or the movement of families between allied communities. During the sixteenth century, however, longhouses became more regular in size, perhaps

as clans<sup>5</sup> became more important than lineages. Since clan membership cut across related communities, this aspect of kinship was an important source of tribal integration. When European explorers and missionaries arrived in Ontario at the beginning of the seventeenth century, Iroquoian villages were under the direction of various chiefs elected from the principal clans. In turn, these villages were allied within powerful tribal confederacies. Unfortunately, intertribal warfare with the Five Nations Iroquois of New York State during the seventeenth century, exacerbated by the intrusion of Europeans, resulted in the dispersal of the three Ontario Iroquoian confederacies — the Huron, the Petun and the Neutral, the latter of which occupied villages in the southeastern Niagara Peninsula.

A number of Neutral sites, including two villages and six small, special-purpose sites, were found by Cooper while he was conducting his doctoral research in the Fort Erie area (1985;1986). He also relocated a number of historic cemeteries that had been recorded in the nineteenth century. Another village and a few smaller sites were documented by Jim Pengelly.

All of the villages are located on glaciolacustrine beach/off shore bar deposits, providing slightly elevated, well drained positions within otherwise level topography. The six small, special-purpose sites include: a possible horticultural cabin site utilized to tend horticultural fields; a chert quarry site; and three temporary hunting-fishing-gathering camps near headwater tributaries. Another site, consisting of an isolated ceramic pipe, is associated with a wetland, and may also have functioned as a hunting-gathering station.

One site, situated in Fort Erie, consists of a fifteenth century Iroquoian ossuary as well as seventeenth century Iroquoian deposits, including burials. While the ossuary interments may relate to the Thompson and Garrison Road villages, both of which were identified in the early twentieth century, neither has been extensively investigated. The seventeenth century burials likely relate to the sites documented by Cooper.

## The Archaeology of Fort Erie

The first archaeological investigations conducted in the Fort Erie area occurred in the late 1800s and early 1900s and are known primarily from museum accession records from institutions in Buffalo and Toronto.

While David Boyle, the father of Canadian archaeology (Killan 1983), visited the area in 1887, during his initial season as Provincial Archaeologist for Ontario, the first focused research in the region was undertaken by Frederick Houghton of the Buffalo Museum of Science, who compiled a list of sites in the Niagara Frontier for the Buffalo Society of Natural Sciences (Houghton 1909). He identified two small, prehistoric Neutral villages, a quarry site, and “a continuous occurrence of cultural debris extending along the bank of the Niagara River” (Houghton 1909:320). He also identified a specific site between the village of Fort Erie and the ruins of Old Fort Erie, along the banks of the Niagara River, where he again referred to the beach as “one continuous refuse heap.” Joseph Granger (1976) described this feature as the Niagara River sheet midden, extending from one end of Fort Erie to the other and representing the accumulated refuse of many cultural groups over thousands of years.

Houghton was also impressed with the quality and abundance of chert on the beach at Fort Erie, observing that “the shore at Fort Erie on this outcrop is strewn with chips, flakes, blocks and half-formed implements, the waste of aboriginal quarrying and manufacture” (Houghton 1909:337-9).

Indeed, in terms of prehistoric subsistence and economy, perhaps the most significant environmental factor influencing resource extraction schedules and thus prehistoric settlement locations in this general region is the bedrock geology and the relative accessibility of chert, which outcrops extensively on most of the north shore of Lake Erie from Fort Erie to Nanticoke. In these locations, Onondaga chert would have been available in abundance to aboriginal peoples.

Following a hiatus of almost 60 years, archaeologists returned to the southeastern Niagara Peninsula. In the late 1950s



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and early 1960s, Marian White of the University of Buffalo focused her work in the Niagara Frontier, not only re-examining known Neutral sites, but also looking for new sites on both the American and Canadian sides of the Niagara River. Her doctoral dissertation, *Iroquois Culture History in the Niagara Frontier Area of New York State*, demonstrated the continuity of Iroquoian development in western New York State (White 1961).

In July of 1964, workmen uncovered human bone and associated cultural material while grading a portion of the first terrace adjacent to the Niagara River near the intersection of Forsythe Street and Niagara Boulevard in downtown Fort Erie (Figure 1). Known as the Orchid site, (AfGr-1)<sup>6</sup>, the find generated immediate international interest and archaeologists came from Buffalo and from the National Museum of Canada in Ottawa to investigate. A co-operative excavation was undertaken, directed by Marian White of the University of Buffa-

Figure 4. Reconstructed ceramic vessel (A.D. 675) found in the Peace Bridge truck yard.

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The Orchid site consisted of a large ossuary, and an area of burials and cultural debris located in an extensive sheet midden. The cultural affiliation of the ossuary, which contained over 300 individuals, remains a matter for further investigation.

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lo (Figure 2). She was assisted by William Noble, who at the time was affiliated with the National Museum in Ottawa. In 1995, all of the skeletal material and associated grave goods that had been removed from the site were repatriated from the National Museum (now the Canadian Museum of Civilization) and reinterred in a hide-lined ossuary pit at a newly registered and protected cemetery on the grounds of Old Fort Erie.

The Orchid site consisted of a large ossuary, and an area of burials and cultural debris located in an extensive sheet midden. The cultural affiliation of the ossuary, which contained over 300 individuals, remains a matter for further investigation. White (1966) considered the ossuary to be terminal Middle Woodland based on artifacts recovered *in situ* from a layer above the ossuary. Noble (1978), however, believed the ossuary to be considerably later, probably prehistoric Iroquoian. A recently obtained radiocarbon date from a long bone yielded an adjusted date of A.D. 1380±90 years (Birx 1991:11).

The Orchid site produced Late Archaic, Early Woodland, Middle Woodland, Late Woodland and historic Iroquoian cultural material, in addition to Middle Woodland and seventeenth-century Iroquoian burials (Granger 1976). The seventeenth-century burials included a female of approximately 50 years of age. Artifacts associated with this individual consisted of two red tubular beads, a red twisted tubular bead, a dog or wolf canine, and the base of a smooth-surfaced globular vessel (Granger 1976:7). Another burial consisted of two young adult males whose legs overlapped in a flexed position. Thirteen net sinkers and seven river pebbles probably represent the inclusion of a fishing net. Granger suggested that this net may have entangled the two individuals after their canoe had upset in the Niagara River, causing them to drown. Many of the other grave goods were specifically associated with one of the two individuals and included a conch shell gorget with nine blue glass beads inset, sixteen copper seed beads, fine copper wire, and a turtle shell rattle. These later interments may relate to the nearby historic Iroquoian sites identified

by Cooper in the course of his detailed investigations of the Neutral occupation of the southeastern Niagara Peninsula.

The Orchid site was again visited by Jim Pengelly and the authors in 1988, when demolition of a house resulted in the exposure of two human adult crania, large quantities of associated human bone and associated artifacts. The artifacts consisted of a small brass kettle and glass trade beads and numerous pieces of chert debitage and faunal material. This undisturbed area would appear to represent an extensive and intact cultural deposit containing a large number of human burials.

In the spring of 1965, a second locality on the Niagara River terrace, the Surma site, was accidentally uncovered. The Surma site is located 250 metres to the south of the Orchid site, at the corner of Queen Street and Niagara Boulevard (Figure 1). Excavations, in front of the former Queen's Hotel, were directed by J. Norman Emerson of the University of Toronto, and again William Noble acted as site supervisor.

Cultural material and burials, representing the Archaic to early Late Woodland periods, were recovered (Emerson and Noble 1966). Many of the burials contained long-distance trade goods such as columella shell beads, platform pipes and slate gorgets. The site also contained a major Late Archaic (Broadpoint) component (ca. 1800 B.C.), including one of the largest concentrations of Genesee projectile points in the Lower Great Lakes Region (Emerson and Noble 1966). The presence of pentagonal preforms for this point type suggested to Ian Kenyon (1981) that these points were being manufactured at the site.

Further investigations of the Surma site were conducted by the London Museum of Archaeology and Archaeological Services Inc. (ASI) in 1992. While ASI's work only involved mapping the foundations of the former Queen's Hotel and monitoring their infilling in preparation of the site as a parking lot, the Museum of Archaeology's work involved the excavation of approximately twenty test units and the recovery of nearly 100,000 artifacts, mostly chert flakes.

A number of new sites adjacent to Orchid and Surma have been registered

by ASI as a result of archaeological resource assessments conducted in 1992 and 1993. The Walnut site (AfGr-7) was documented during the demolition of the garage and residence at 9 Walnut Street, on the northwest corner of Walnut Street and Niagara Boulevard; one block south of the Surma site (Figure 1). Numerous artifacts, however, had already been salvaged from the southwest corner of the same intersection in 1969, during earth moving activities. The artifacts recovered at that time included three clay pipe stems, a drill, an adze-like scraper, several projectile points (types unknown) and a green stone pendant. Also, a subsurface pit was exposed to a depth of 142 centimetres, yielding a knife, chert flakes and fish bone.

During ASI's recent excavation, however, a single one-metre-square test unit, placed on an undisturbed portion of the property, yielded over 4,000 artifacts. Profiles of the walls of the unit revealed complex stratigraphy involving a number of buried soil layers. Most importantly, a black organic soil was detected at a depth of 40 centimetres, extending to 50-55 centimetres below surface. It is likely that this layer corresponds with the 'continuous cultural debris' identified by Houghton and documented at Orchid and Surma. Prehistoric pit features had clearly been excavated through this layer to the light-brown sandy soil below. This same layer was also evident in a small trench that was excavated approximately 20 metres to the west.

Two primary burials were also documented on the Walnut site by ASI in the spring of 1993 when a number of storm water catch basins were placed by the Buffalo and Fort Erie Public Bridge Authority at the former intersection of Walnut Street and Niagara Boulevard. The burial pits had been excavated through the buried black organic soil into the underlying sands. Unfortunately, a gas pipeline trench had truncated the second burial so that only the lower limbs and pelvic bones remained. Burial 1 represented the remains of a fully intact and articulated female in her early thirties. The individual had been placed on her left side in a tightly flexed position. Not enough of the second burial was present to determine gender and

age. Nevertheless, it was possible to ascertain that this individual was also placed in a tightly flexed position, lying on the left side.

With respect to the disposition of these remains, once the limits of the burial pit had been completely exposed, a traditional tobacco burning ceremony was performed by a local elder. Permission was then granted by the local native community to fully expose and disinter the remains, although this decision was subsequently reversed, on the advice of a



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Six Nations faithkeeper. The remains were thus left in place and the catch basin was relocated.

The buried black organic layer that extends across the site and in which the burial pits had been excavated, contains thousands of chert flakes and tools. Based on the presence of a variety of diagnostic lithic tools and ceramics, the site is clearly multi-component (Archaeological Services Inc. 1993), as were the Orchid and Surma sites. The principal observation resulting from our excavations at Walnut then, was that the black organic layer, recorded on all of the above sites, contains cultural debris resulting from numerous occupations over a 3,000 year period. It was also concluded, at that time, that the layer extended from south of Walnut Street to north of Forsythe Street and even further as was evidenced by the presence of the buried soil horizon at the Middle Woodland Lavinia site (AfGr-8), situated on the east side of Niagara Boulevard, between Catherine and Lavinia Streets.

Figure 5. Cache of Mead-owood preforms found in the Peace Bridge truck yard.

Moreover, this deposit is known to extend discontinuously southward for a considerable distance, as suggested originally by Houghton. Indeed, excavations at the Snake Hill site (AfGr-6) (Pfeiffer and Williamson 1991; Litt, Williamson and Whitehorne 1993), an American military cemetery dating to 1814 and located approximately 2.6 kilometres further south along the shore of the river and lake, yielded, in addition to the remains of American soldiers, evidence of the buried artifact-laden soil horizon, and of extensive use of the site from Archaic times through to the Early Iroquoian period. The recovery of numerous netsinkers, points, scrapers, and flakes, as well as a substantial cache of large crude bifacial cores would appear to suggest that the site was occupied for the purposes of fishing and the manufacturing of chert tools.

The extent and nature of the sheet midden in the downtown core was further defined by ASI in 1993 during a routine archaeological assessment of a sanitary sewer and watermain construction project undertaken on behalf of the Public Works Department. During this work, test units were placed through road and sidewalk surfaces in the area between Queen and Forsythe Streets. This resulted in the documentation of the eastward extent of this deposit across the road to encompass all of the sidewalk area on the east side of the boulevard. Most important was the discovery that significant deposits remain intact immediately below the pavement and concrete/gravel bed of the road and sidewalks.

In an attempt to address the problems posed for development by this very large and rich, intact, buried archaeological deposit, ASI has since been retained by both the Town of Fort Erie and the Buffalo and Fort Erie Public Bridge Authority, to monitor their undertakings and to salvage excavate any deposits that could not otherwise be avoided.

In the case of the Town of Fort Erie, the presence of this deposit under the road and adjacent sidewalks of this area has serious implications for the installation and replacement of watermains and sewers. While every attempt has been made to replace services within previously disturbed construction trenches,



Figure 6. *Preforms, projectile points, drills and a scraper (Genesee - 1800 B.C.).*

all new service locations have been subjected to thorough excavation. While several localities were investigated along the various lines, one extensive trench across Niagara Boulevard at the intersection of Forsythe and Niagara, near the location of the Orchid site (AfGr-1), yielded evidence of a wall of a house structure and 27 pit features, all under the road. The features contained dozens of chert tools, hundreds of fragments of ceramic vessels and thousands of animal bones. The chert tools and ceramic vessels indicate two major occupations in this area, one during the Transitional Woodland period (ca. A.D. 700) and the other during the Early Woodland period (ca. 500 B.C.). There were also many tools dating to the late Archaic period

(Genesee - ca. 1800 B.C.). Almost 25,000 chert flakes, discarded in the manufacturing of the stone tools, were also recovered. A preliminary analysis of this material indicates that most were secondary knapping and secondary retouch flakes suggesting a focus on biface and tool refinement. An inventory level analysis of the recovered animal bone was also conducted by Stephen Cox Thomas, who determined that approximately 59 per cent of the material was fish and 33 per cent mammal. The identified species include white-tailed deer, grey squirrel, beaver, dog, muskrat, raccoon, elk, black bear, chipmunk, passenger pigeon, pickerel, drum, catfish, sturgeon, bullfrog and turtle. The floral sample, analysed by Stephen Monckton, yielded seeds of black nightshade, bramble, grape, goosefoot, cleavers, and a number of kinds of nuts including hickory, walnut and acorn.

Approximately 120 square metres of excavation was also undertaken for the Buffalo and Fort Erie Public Bridge Authority in advance of their construction of a large commercial customs processing centre on the southwest corner of Queen and Niagara. It was decided, early in the design process, to place the building on footings rather than to excavate a full foundation, since the former process would pose less of a threat to the archaeological deposit. Fifty pit features were excavated within test units placed at the locations of the footings. Approximately 141 kilograms of chert debitage were recovered from the palaeosol overlying the features. In addition, almost 10,000 secondary knapping flakes, secondary retouch flakes, and tools were recovered from the features. The recovered animal bone included many of the same species as identified in the above sample as well as rabbit, wild turkey, gull, duck, bullhead, bowfin and sucker.

Work has subsequently centred on deposits that would be impacted by the resurfacing of the commercial truck yard, installation of various services, and landscaping features. While several hundred pit features were recorded, it was necessary to excavate only about a third of these as the others could be protected from any future disturbance. The features contained dozens of chert tools, hundreds of fragments of ceramic ves-

sels and thousands of animal bones (mainly fish and medium to large sized mammal). While the chert tools and ceramic vessels indicate almost continuous occupation of the site, three major components are again represented: the principal occupation during the late Archaic period (Genesee - ca. 1800 B.C.), and other substantial occupations during the Early Woodland (Meadowood - ca. 500 B.C.), and Transitional Woodland (ca. A.D. 700) periods. Almost 30,000 chert flakes, discarded in the manufacturing of stone tools, were also recovered.

Of special interest was the recovery of a slate gorget fragment, probably dating to the Transitional Woodland period, engraved with the images of two opposing thunderbirds (Figure 3), the recovery and reconstruction of a collapsed ceramic vessel (Figure 4), radiocarbon dated to A.D. 675, using encrusted food debris, and the recovery of a cache of exquisitely made Early Woodland preforms, probably manufactured at the site (Figure 5).

The ceramic vessel was found to contain the remnants of a stew or soup consisting primarily of pickerel, bass, venison and purslane (a local pot herb). A recreation of this soup was prepared by the students of an aboriginal culinary course offered by Niagara College and served to the local media and public at an event co-sponsored by the Greater Fort Erie Chamber of Commerce and the Fort Erie Native Friendship Centre.

In total, at least one million artifacts have been recovered from the Fort Erie site including diagnostic specimens from all of the periods between Late Archaic and Transitional Woodland times, although the primary occupation of the site is by people manufacturing Late Archaic Genesee tools. People were clearly at the site to quarry the Onondaga chert that outcrops at that location, to fish and hunt, and to bury their dead as is attested to by the hundreds of burials that have been previously documented on the site. While the tool analysis is only just beginning, it would appear that hundreds of Genesee tools, including spearheads, knives, scrapers and drills (Figure 6), were being manufactured on the site and subsequently circulated inland

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It was decided, early in the design process, to place the building on footings rather than to excavate a full foundation, since the former process would pose less of a threat to the archaeological deposit.

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to other bands. As it is the largest site of its kind in the Northeast, it likely functioned as a central manufacturing and distribution centre for this period.

In summary, previous assessment of the extent of the buried deposit has confirmed its continuous presence below the surface of the roads, sidewalks, lawns and parking lots west from the Niagara River for some 400 metres and north from the vicinity of the Peace Bridge for approximately 600 metres, thereby encompassing an area of about 24 hectares (60 acres) (Figure 7). Its pres-

ence poses serious problems for development in this portion of the urban core of Fort Erie. This is a problem which is easily addressed, however, by undertaking archaeological investigations, in full consultation with the local Aboriginal community, before any subsurface disturbances are initiated. This is a sensible approach not only on this site but in any area with archaeological potential within the Town's jurisdiction. Only then will we ensure the conservation of these fragile and non-renewable heritage features.

Figure 7. Known extent of archaeological site.



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## NOTES

<sup>1</sup>The chronological ordering of the periods in Ontario's past has been made with respect to the following three temporal referents: B.C. - before Christ; A.D. - *Anno Domini* (in the year of our Lord); and B.P. - before present (1950).

<sup>2</sup>Fluted points are distinctive in that they have channels or grooves parallel to their long axis and usually on both faces of the tool. These grooves are created by the removal of long thin singular flakes from the base of the point.

<sup>3</sup>Chert is a hard, dense microcrystalline rock, which occurs in nodules, lenses, and layers in shale or limestone.

<sup>4</sup>Longhouses are large (30m long, 7m wide and 7m high) wooden house structures constructed by covering a cedar sapling frame with large sheets of elm and cedar bark. These structures usually housed a woman, her daughters and their families — the Iroquoian extended family.

<sup>5</sup>A clan is a group in which membership is defined by kinship through one parent. A clan often provides mutual security, governance, marriage regulation through exogamy and social institutions, religion and ceremonies, property regulation and social control. The members of the clan often trace descent to an original ancestor, often a mythical figure or animal.

<sup>6</sup>Canadian archaeological sites are registered by Borden Block, named for Dr. Charles Borden, who designed the system in the early 1950s. A Borden Block is a unit defined by latitude and longitude (10 minutes by 10 minutes) on the 1:50,000 NTS maps. Each block has been assigned a four-digit alphanumeric which gives it a unique geographic placement in Canada. The sequential number is the site identifier for the site records, which are maintained in Ontario with the Ministry of Citizenship, Culture, and Recreation.

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