A Revised Temporal Framework for Middle Woodland Ceramics in South-central Ontario

Jenneth E. Curtis

Analysis of ceramic collections from key Middle Woodland sites in the Rice Lake-Trent River region, in combination with recent excavations, has documented a regional sequence along which changes in ceramic manufacture and decoration may be observed. I propose a division of this sequence into three temporal phases of the local Point Peninsula tradition, thus providing a framework for the investigation and interpretation of Middle Woodland sites within the region. This paper introduces each phase, describing characteristic ceramic attributes along with relevant data concerning settlement patterns, subsistence practices, and chronology. The relationships of this Middle Woodland sequence to earlier and later periods are also considered.

Introduction

In 1944, William Ritchie defined Point Peninsula as a focus of the Vine Valley aspect, Woodland Pattern. He named it after the first recorded site, a burial component in Jefferson County, New York (Richie 1944). A few years later, Ritchie along with R.S. MacNeish (1949) published a ceramic typology for Point Peninsula in New York State. Point Peninsula types such as Vinette Dentate, St. Lawrence Pseudo-scallop-shell, Point Peninsula Corded, and Point Peninsula Rocker-Stamped were subsequently identified at sites in Ontario (Dailey and Wright 1955; Emerson 1955; Johnston 1968a, 1968b; Spence and Harper 1968). By 1969, Ritchie had revised his taxonomy and defined the Point Peninsula tradition of the Middle Woodland period to include the Rice Lake-Trent River region of south-central Ontario.

As part of my doctoral thesis research at the University of Toronto, I have analyzed ceramic assemblages from several Point Peninsula sites at Rice Lake and along the Trent River. Based on the results of these analyses I propose a division of the local Point Peninsula tradition into a sequence of three temporal phases as shown in Figure 1. The Trent phase is the earliest, dating before A.D. 1. It is followed, chronologically, by the Rice Lake phase dating from A.D. 1 to 800, and subsequently by the Sandbanks phase dating from A.D. 700 to 1000. In this paper I outline

the ceramic attributes and changes that characterize each phase along with available data concerning settlement patterns, subsistence practices, and radiocarbon dates.

In formulating this taxonomy I considered and incorporated the terms and definitions used at various times by other researchers in the region. My aim here is to clarify our knowledge of local Point Peninsula, not to complicate it by introducing a whole new set of terms (Stothers 1999; Williamson 1999:3; Wright 1999:289). The chronological divisions made here are largely artificial, as my research indicates a high degree of continuity along with gradual change in ceramics across the entire Middle Woodland period. The selection of specific start and end dates for each phase is thus necessarily arbitrary. The phases blend into one another (Figure 1) as indicated by the overlapping dates between the Rice Lake and Sandbanks phases.

The Ceramic Assemblages

The analysis considered ceramic assemblages from several Point Peninsula sites in the Rice Lake-Trent River region (Figure 2). The East Sugar Island site (BbGm-11), located on Rice Lake, consists of two oval burial mounds and a lake side midden (Boyle 1897; Ritchie 1949; Stothers 1974). As part of his investigation of the Point Peninsula tradition, Ritchie (1949) conducted extensive excavations into the midden

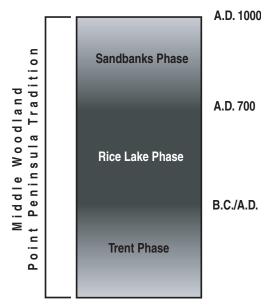


Figure 1. The Point Peninsula sequence in the Rice Lake-Trent River region.

deposit at this site. He encountered a "clear-cut stratigraphy" that included four artifact-bearing layers. From the surface downward, these were: (1) sod and loam; (2) ash; (3) soil mixed with crushed shell; and (4) a black soil. Ritchie (1949:21) suggested that the shell stratum "apparently reflects intensive utilization of the island camping site by Point Peninsula folk engaged in the seasonal gathering of fresh water clams." He had more difficulty interpreting the ash layer, stating that "the significance of the ash bed in the site's history is uncertain. The production of such an extensive layer of nearly pure white and gray ash, 4-7 inches [10-18 cm] in thickness, required the complete combustion of a large volume of wood" (Ritchie 1949:21). He suggested that this layer represents a shift to fall and spring wild fowl hunting as the waters of the lake became too weedy for clams. Each of the ceramic artifacts in Ritchie's collection from the

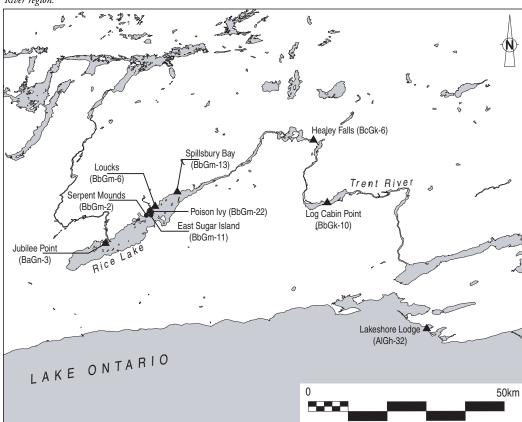


Figure 2. Location of sites mentioned in the text. Map produced using ArcView GIS 3.2a with Canadian National Topographic Series maps.

East Sugar Island site midden is identified according to the layer in which it was found. This has enabled me to treat the ceramics from each layer as separate assemblages and to identify chronological trends occurring at the site. These four assemblages thus form an excellent foundation for the regional sequence.

Ceramics from the nearby Serpent Mounds site (BbGm-2) excavated by Richard Johnston (1968a) were also included in the analysis. This site comprises nine earthen burial mounds, an extensive lake side shell midden and a "habitation" area (Boyle 1897; Johnston 1968a). Johnston (1968a:41) states that "the shell deposit was rather impressive" consisting of a "continuous strip along the sloping bank". In this case, two spatially distinct assemblages were available: one from the midden deposit and a second from the habitation area. I also considered several assemblages recovered by the Trent Valley Archaeological Survey conducted by Trent University in the 1960s (Hakas 1967; Richardson 1968), including those from the Loucks (BbGm-6), Jubilee Point (BaGn-3), and Poison Ivy (BbGm-22) sites (Kenyon 1973). These are all multi-component assemblages spanning the entire Middle Woodland Period and beyond. The Healey Falls site (BcGk-6), located mid-way along the Trent River, was used over thousands of years as a portage and as a stone tool manufacturing locality (Farvacque and Ross 1999). The ceramic assemblage from this site was also considered. Beyond the mouth of the Trent River, the Lakeshore Lodge site (AlGh-32), located in Sandbanks Provincial Park also produced a significant ceramic assemblage. Sheryl Smith (1981; 1987) interprets this site as a seasonal activity station focused on fishing.

During the summer of 2001 I conducted excavations at two sites in the region: the Spillsbury Bay site (BbGm-13) on Rice Lake, and the Log Cabin Point site (BbGk-10) on the Trent River. These two sites also produced significant Point Peninsula assemblages. Spillsbury Bay is a short-term resource procurement camp that includes a shell midden deposit. Excavations at Log Cabin Point revealed a rich, multi-component deposit spanning the length of the Middle Woodland

Period in a similar manner to the occupations of the Loucks, Jubilee Point, and Poison Ivy sites on Rice Lake.

An attribute analysis of these assemblages was subsequently conducted using the Northeast Woodland Pottery Analytic Code developed by David Smith (1999). Attributes from a series of variables relating to vessel manufacture, shape, and decoration were recorded. Rim sherds from each assemblage were sorted and mended such that the unit of analysis employed was that of the vessel as represented by mended rim sections. In total, I examined almost 700 vessels from 13 different assemblages (Table 1). Analysis proceeded through the tabulation of the frequency of each attribute as it occurred in each assemblage. A visual examination of these frequency distributions then led to the identification of diagnostic attributes as those that were restricted in their occurrence to a portion of the regional sequence. These characteristics were used to divide the sequence into the three temporal phases (Figure 1).

Table 1. Ceramic assemblages and number of vessels.

East Sugar Island (BbGm-11)	
Black Layer	22
Shell Layer	27
Ash Layer	41
Sod and Loam Layer	45
Serpent Mounds (BbGm-2)	
Midden	132
Habitation Area	5
Loucks (BbGm-6)	100
Jubilee Point (BaGn-3)	74
Poison Ivy (BbGm-22)	91
Healey Falls (BcGk-6)	19
Lakeshore Lodge (AlGh-32)	30
Spillsbury Bay (BbGm-13)	20
Log Cabin Point (BbGk-10)	78
Total	684

Taxonomy

A variety of taxonomic labels have been employed to describe archaeological manifestations in the region. Ritchie labels Point Peninsula as a tradition. He defines tradition as "a custom, concept or trait, or combination of such traits with persistence in time" (Ritchie 1980:xxiv). Ritchie (1980:208; Ritchie and Funk 1973:117) goes on to explicitly characterize Point Peninsula as a ceramic tradition. Spence et al. (1990), on the other hand, refer to Point Peninsula as a complex. This term implies a more comprehensive understanding and congruence of traits in many aspects of material culture (McKern 1939; Smith 1997:54). As my investigation of Point Peninsula and my definition of its local phases are based primarily on ceramics, I have chosen to use the name Point Peninsula tradition. The ceramics from the Rice Lake-Trent River region considered in this study exhibit the general characteristics common to Point Peninsula vessels. In terms of shape, vessels are collarless with outflaring rims. Decoration was applied through stamping or impressing pseudo-scallop-shell, dentate, and cord-wrapped-stick implements into the clay.

While these ceramics clearly fit within the Point Peninsula tradition, the tradition itself encompasses a vast geographical and temporal range. Geographically, Ritchie (1980:208) includes the area stretching from the St. Lawrence Valley to southern Manitoba within the tradition. Spence et al. (1990:157) circumscribe Point Peninsula to a somewhat smaller, yet still extensive area, covering south-central and eastern Ontario, southern Quebec, western and northern New York State, and northwestern Vermont. Chronologically, Point Peninsula spans the Middle Woodland period from 400 B.C. to A.D. 800 (Smith 1997:53). These vast geographical and temporal scales necessarily incorporate a large amount of variation (Spence et al. 1990:158). It is thus useful to identify smaller regional units and briefer temporal periods within these ranges in order to better understand local developments. The concept of a phase is appropriate in this respect. Willey and Phillips (1958:22) define a phase as a limited temporal and geographical entity possessing characteristic traits. In the Rice Lake-Trent River region, Johnston (1968b:27) categorized sites with burial mounds and shell middens into a Rice Lake phase of the Point Peninsula tradition. Thus the identification of local phases is not new. The Rice Lake phase, however, has been an isolated category. Without preceding or succeeding counterparts, it floats rather ambiguously within the larger taxon of the Point Peninsula tradition. Here I have linked it with an earlier Trent phase and later Sandbanks phase in order to produce a complete Point Peninsula sequence in the region.

The Trent Phase

The sequence begins with the Trent phase. The rim shape diagnostic of this phase is thin and everted, with a pointed or rounded lip. An everted rim has a distinctive shape in which the upper rim is bent sharply outwards from the exterior wall of the vessel. Trent phase vessels, as represented by the assemblage from the black soil layer at the East Sugar Island site, have a mean lip thickness of only 3.7 mm. Rim thickness, measured two centimetres below the lip is somewhat thicker with a mean of 6.7 mm. Pseudo-scallopshell impressed decoration is also diagnostic of this phase. This technique creates thin serpentine lines that are arranged into bands of oblique, vertical and horizontal impressions (Figure 3). Dentate and cord-wrapped-stick stamped vessels are also common during this phase. In terms of manufacturing techniques, coil breaks occur more frequently on vessels of the Trent phase compared to those of later phases. This is demonstrated by the East Sugar Island site assemblages where the frequency of coil breaks decreases over time from its occurrence on 32 percent of body sherds in the black soil layer to only four percent in the sod and loam layer. Overall, Trent phase vessels tend to be very well made and finely decorated.

Radiocarbon dates are not available for this phase, thus its inception date is unknown. Dates from elsewhere in southern Ontario place the beginning of Point Peninsula and the Middle Woodland period around 400 B.C. (Smith 1997:45). A comparable time frame is possible in the Rice Lake-Trent River region but needs to be confirmed through further research. Ceramic assemblages of the Trent phase are small. Sites occur on islands, along the lakeshore and on river banks. The sparse artifact scatters are suggestive of small camp sites with subsistence focused on seasonal



Figure 3. Trent Phase ceramics from the East Sugar Island site. Rochester Museum and Science Center, Rochester, NY.

hunting, fishing and gathering. The lowest layer at the East Sugar Island site, for example, produced an assemblage of 22 Trent phase vessels. At the Serpent Mounds site, Trent phase ceramics were associated with 19 post molds clustered around a large pit feature in what Johnston (1968a:35) refers to as the "habitation area." He interprets this area as a summer hunting camp used during the earliest phase of occupation at the site (Johnston 1968a:75). The Log Cabin Point, Poison Ivy, Healey Falls, Loucks, and Jubilee Point assemblages all include Trent phase ceramics, indicating their use as camping places during this early phase.

The Rice Lake Phase

The Rice Lake phase follows the Trent phase chronologically. As previously noted, this phase was originally defined by Johnston (1968b:27). The ceramics of this phase are distinguished by the complexity of their surface modifications and

decorative techniques. Interior surfaces may exhibit combing. This technique involves the use of a dentate tool that is drawn across the wet clay to produce horizontal, vertical or oblique lines. In other cases, the dentate tool was used to texture interior or exterior surfaces with a stippled effect. Dentate, cord-wrapped-stick, and pseudoscallop-shell tools were all used to produce decoration by means of simple stamping and more complex techniques such as rocker-stamping, rolling, and drag-stamping. These complex techniques were used on the necks of ceramic vessels to produce ribbon-like bands of decoration. Rice Lake phase vessels are collarless with convex interior and concave exterior rim profiles. Lips may be either rounded or flat.

A radiocarbon date of cal.190 B.C. (1 A.D.) A.D. 140, from the base of the Serpent Mounds midden (M-1104) marks the beginning of this phase (Johnston 1968a:71; Smith 1997:69). This date coincides with the beginning of shell accumulation at the site. Radiocarbon dates from several burial mounds within the region also relate to this phase dating between approximately A.D. 0 and A.D. 600 (Table 2). In fact, it is the construction of these mounds that Johnston (1968b:27-29) identified as the defining feature of the Rice Lake phase. Sites with burial mounds are also linked by the common occurrence of extensive shell middens such as those at Serpent Mounds and East Sugar Island. Johnston (1968b:28) determined that the shell middens are contemporary with the mounds based on the ceramics they contained. Recent excavations at the Spillsbury Bay site revealed a small shell midden layer. A rim sherd characteristic of the Rice Lake phase with rocker-stamped decoration on the neck and horizontal combing on the interior surface was recovered from this layer. These finds

Table 2. Radiocarbon dates from mounds in the Rice Lake-Trent River region (from Smith 1997).

	•
Site	Date
East Sugar Island	0 B.C. (A.D. 130) A.D. 320
Cameron's Point	A.D. 70 (150, 190) 330
LeVesconte	A.D. 80 (220) 340
Serpent Mounds	360 B.C. (A.D. 220) A.D. 640
LeVesconte	A.D. 220 (340) 430
Serpent Mounds	A.D. 230 (410) 590

are associated with a radiocarbon date on bone of 1220±60 B.P. (TO-10246). This calibrates to a date of A.D. 775 with a one sigma range of A.D. 760-890 and a two sigma range of A.D. 660-905, indicating that the Rice Lake phase persisted until approximately A.D. 800. The occurrence of shell middens suggests that shellfish gathering was added to a subsistence strategy based on seasonal hunting, fishing and gathering during this phase.

Two types of sites are known for the Rice Lake phase. Camp sites, as seen during the Trent phase, continued in use. Larger base camps with extensive shell middens and clusters of burial mounds were established as at East Sugar Island and Serpent Mounds. The camp sites tend to occur in clusters centered around the base camps that are themselves spaced out along the north shore of Rice Lake and the Trent River. This pattern may indicate the presence of several local bands within the region each inhabiting a major base camp site (Spence et al 1984:123).

The Sandbanks Phase

The final phase in the Point Peninsula sequence is the Sandbanks phase. The label Sandbanks was introduced by Phil Wright and Hugh Daechsel (1993) who defined the Sandbanks tradition for eastern Ontario with Lakeshore Lodge as the type site. They date the Sandbanks tradition between A.D. 700 and A.D. 900. My research has confirmed many aspects of Wright and Daechsel's characterization of Sandbanks ceramics, including key attributes such as textured surfaces and cordwrapped-stick impressed decoration, along with the use of punctates and bosses. Comparison of the Lakeshore Lodge assemblage with the upper layers of the East Sugar Island site and the Spillsbury Bay site, however, suggest to me that Sandbanks may be more appropriately considered as part of the Point Peninsula tradition. I have thus redefined Sandbanks as a local phase of the Point Peninsula tradition and place its temporal range between A.D. 700 and A.D. 1000.

Sandbanks ceramics retain key Point Peninsula features including the collarless outflaring rim shape with concave exterior and convex interior

profiles. Diagnostic ceramic attributes of the Sandbanks phase include textured surface modifications in which cordage or cord-wrappedimplements are used to roughen the exterior surface of the vessel. The first exterior decorative band, beginning at the lip of the vessel, is often plain, while cord-wrapped stick impressed horizontals are common in the second exterior band (Figure 4). Though cord-wrapped-stick impressions are a prominent feature of the ceramics during this phase, dentate stamped vessels are also present. The Sandbanks phase also corresponds with a marked increase in the incidence of delimitation in the form of exterior bosses or punctates applied to vessel rims (Table 3). These delimiters mark off different portions of the vessel often corresponding to points of change in shape or decoration (David Smith, personal communication 2000).

A radiocarbon date of cal. A.D. 790 (970) 1190 (S-2194) was obtained from the Lakeshore Lodge Site (Smith 1987:5; Smith 1997:71). This is consistent with the stratigraphic position of Sandbanks phase ceramics at Spillsbury Bay, where they overlie the radiocarbon dated shell midden layer of the Rice Lake phase mentioned



Figure 4. Sandbanks Phase ceramics from the East Sugar Island site. Rochester Museum and Science Center, Rochester, NY.

Table	3.	Incidence	0	f delimitation.
--------------	----	-----------	---	-----------------

]	Present		Absent	
	n	%	n	%	
East Sugar Island Black	0	0	22	100	
East Sugar Island Shell	1	3.7	26	96.3	
Serpent Mounds	18	13.6	14	86.4	
East Sugar Island Ash	6	14.6	35	85.4	
East Sugar Island Sod and Loam	10	25.6	29	74.4	
Lakeshore Lodge	19	63.3	11	36.7	

above. This limited chronological data suggests an A.D. 700-A.D. 1000 temporal range for the Sandbanks phase.

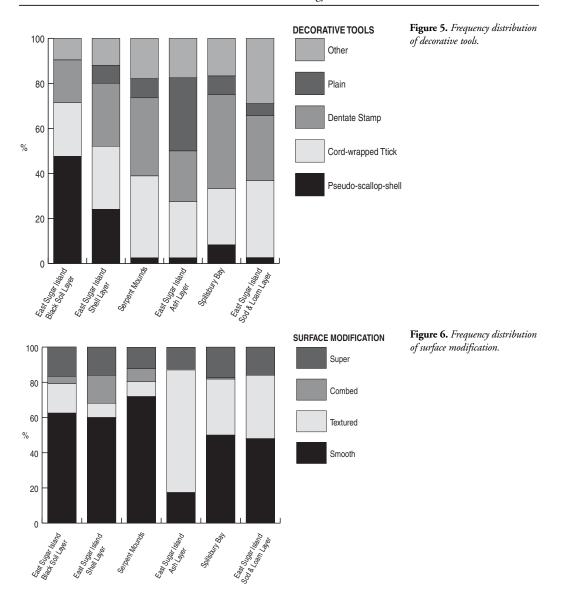
Further research is needed to determine the settlement patterns characteristic of this phase. Some base camp sites continued in use, as the upper layers of the East Sugar Island site yielded significant assemblages of Sandbanks phase ceramics. Sandbanks ceramics are represented at all of the sites considered in this analysis, indicating a continued occupation of the study region throughout this phase. The Spillsbury Bay site represents a small camp used for resource procurement. Most of the artifacts from this site were recovered from a layer of dark brown soil overlying the shell midden layer and thus dating to the Sandbanks phase. Analysis of the faunal assemblage from this site suggests that hunters were procuring large animals, such as deer and moose, perhaps for transport back to larger base camps (Harrington 2002). While occupying the site at Spillsbury Bay, they subsisted on smaller mammals such as muskrat. Fishing was also an important component of the subsistence strategy during this phase. Abundant fish remains were recovered from the Spillsbury Bay site. At the Lakeshore Lodge site, fish remains were recovered along with numerous netsinkers (Smith 1981).

Overview of the Sequence

This sequence of three phases in the Point Peninsula tradition is characterized by both continuity and gradual change. I have highlighted the diagnostic characteristics of each phase. It is also useful to consider the sequence as a whole from the perspective of a particular ceramic variable and its

patterns of change over time. Figure 5 illustrates the use of various decorative tools in a selection of the assemblages. The four assemblages from the East Sugar Island (ESI) site are included here—the lowest layer, ESI Black is to the left side of the graph and represents the Trent phase. The ESI Shell assemblage along with the midden assemblage from Serpent Mounds represent the Rice Lake phase. The Sandbanks phase is represented by three assemblages: ESI Ash, Spillsbury Bay and ESI Sod and Loam. Pseudo-scallop-shell, cordwrapped-stick and dentate tools were used throughout the Point Peninsula tradition. The pseudo-scallop-shell tool was popular during the Trent phase and subsequently declined in use. In contrast, the cord-wrapped-stick tool and the dentate tool increased in use over time. Each assemblage includes a roughly equal mix of cordwrapped-stick and dentate tool use. Plain bands gradually became more common through time, becoming particularly popular during early Sandbanks as seen in the ESI Ash assemblage.

Other chronological trends are evident in the use of surface modification. Figure 6 summarizes data on the exterior surface modification of body sherds in several assemblages. Smoothed sherds are common in all assemblages, illustrating the continuity across the Point Peninsula tradition. Combed sherds, on the other hand, are largely restricted to Trent phase and Rice Lake phase assemblages. During the Sandbanks phase textured sherds are very common. This differential use of surface modification on body sherds is particularly important as such sherds are much more common than rim sherds on archaeological sites in the region. The recovery of combed or textured sherds during surface collection may provide a



preliminary indication of the date of a site. At the Spillsbury Bay site, for example, textured sherds were found on the surface. Excavations in the same area subsequently recovered Sandbanks phase ceramics.

Discussion

The establishment of a local Middle Woodland sequence allows for the consideration of its relationships to earlier and later periods. Early Woodland sites, though rare in Ontario, may be recognized on the basis of Vinette I pottery and Meadowood style lithic artifacts (Spence et al. 1990:128). Vinette I pottery is characterized by straight-sided, conoidal based vessels with complete interior and exterior cord-marking (Ritchie and MacNeish 1949:100). These vessels are plain with a coarse, porous paste, large temper particles and distinct coil breaks (Ritchie and MacNeish 1949:100). I did not observe any sherds matching this description among the assemblages included in this study (Dunlop and Spence [1999:131-132] do identify several Vinette 1

sherds in the Healey Falls assemblage). Jackson (1980; 1986) has identified characteristic Vinette I ceramics from the Dawson Creek site at the west end of Rice Lake. These sherds were recovered from several hearth features associated with radiocarbon dates of 1000 B.C.-500 B.C. (Jackson 1986:398). The more recent of these features included "aberrant" Vinette sherds that are smoother and thinner than typical Vinette I ceramics, and are decorated with shallow punctates (Jackson 1980:22; 1986:396). As Jackson suggests, these vessels may represent a period of ceramic experimentation and transition to the Middle Woodland period. A number of contrasts are evident, however, in comparison with early Middle Woodland vessels of the Trent phase. The latter tend to have a fine paste, thin outflaring or everted rims and well executed pseudo-scallopshell, dentate, or cord-wrapped-stick stamped decoration. Further research is needed to establish a link between these Early and Middle Woodland ceramic styles.

At the end of the Middle Woodland period, the Sandbanks phase leads directly into the Early Ontario Iroquois Stage of the Late Woodland period with some temporal overlap between circa A.D. 900 and A.D. 1000. Village sites appear in the archaeological record at this time. The Auda site, located southwest of Rice Lake, is the earliest known village (Kapches 1987). It consists of several small longhouses and is radiocarbon dated to cal. A.D. 680 (980) 1190 (Kapches 1987; Smith 1997:71). I examined the ceramic assemblage of 29 vessels from this site as part of my thesis research. These vessels share many similarities with Point Peninsula vessels and could just as easily be classified with Middle Woodland as with Late Woodland ceramics. This situation indicates the transitional nature of the Auda community in an in situ cultural development from the Middle to Late Woodland (cf. Kapches 1987). Like many of the Rice Lake and Sandbanks phase vessels, the Auda vessels have collarless, outflaring rims and straight lips. The use of plain bands that characterize Sandbanks phase ceramics continues at Auda, as does the use of the dentate tool common throughout the Point Peninsula sequence. The application of bosses begun in the Sandbanks phase increases in frequency at Auda. The Auda site ceramics contrast with those of the Sandbanks phase in the increased use of the linear tool, absence of the cord-wrapped-stick tool and limited application of neck decoration.

MacDonald and Williamson (1995) describe and illustrate ceramics from the thirteenth century Hibou site, an Early Iroquoian village located a few hundred metres from the Auda site. Based on their ceramic analysis MacDonald and Williamson (1995:38) suggest that Hibou may be an Owasco community that moved into the region. Vessels from Hibou, however, also exhibit similarities with local Point Peninsula assemblages and especially those of the Sandbanks phase. Many of the rims are collarless and more than half have exterior bosses (MacDonald and Williamson 1995:20). Plain exteriors are also common and often exhibit cord-roughened surfaces. The decorated rims exhibit cord-wrappedstick and linear stamping along with some incising (MacDonald and Williamson 1995:20). The Hibou ceramics contrast with those of the Sandbanks phase and the Auda site in their very low incidence of dentate stamping and greater incidence of incipient collars.

Another Early Iroquoian village is located to the east of Rice Lake at the Richardson site (Pearce 1977; 1978). I examined vessels from this location and found them to be predominately collared with convex exterior and concave interior profiles and straight lips. The use of push-pull horizontals is a frequent decoration on the rims and necks of these vessels. Continuity with Point Peninsula assemblages and with the Auda assemblage is seen in the frequent use of dentate stamping and occasional use of linear stamping. The cord-wrapped-stick tool is present on only two percent of vessels. The use of bosses persists in the Richardson assemblage though with the addition of segregating punctates. Early Iroquoian ceramics similar to those from Auda, Hibou, and Richardson are present in all of the assemblages considered for this study, indicating continued use of lake and river side camp sites well into the Late Woodland period for purposes of fishing, hunting, and traveling.

This evidence for in situ cultural development from at least the early Middle Woodland in the Rice Lake-Trent River region has broader implications for our understanding of the Middle to Late Woodland transition across the Northeast. In the lower Great Lakes area the question of the nature of this transition is framed from the perspective of the origin of Iroquoian culture. Iroquoian groups share a common set of features including a village-based settlement pattern and horticultural subsistence practices. Archaeological expressions of these features are linked to historically documented, Iroquoian-speaking groups that possess a matrilineal, matrilocal society. The question of Iroquoian origins thus becomes an issue of the origin and coincidence of these traits.

The earliest speculations regarding Iroquoian origins focused on the migration hypothesis (Smith 1990:280; Wright 1966:3). Versions of this hypothesis had Iroquoians moving into the lower Great Lakes from the north, west or south depending on the proponent of the particular hypothesis (Wright 1966:3-5). Based on his ethnographic research, Lewis Henry Morgan (1851:5-6) concluded that the Iroquois had previously resided in the vicinity of Montreal. He thus traced their migration ascending the St. Lawrence River to Lake Ontario and then moving along the eastern shore of the lake into New York State. Arthur Parker (1916) combined information from oral traditions and archaeological finds to suggest a southern origin for the Iroquois. He believed that they once lived in an area centred on the mouth of the Ohio River then subsequently moved up the Ohio, splitting into two groups. One group moved across the north shores of Lake Erie and Lake Ontario establishing the Neutral and Huron Nations. A second group traveled the south shores founding the Seneca and Susquehannock nations. Migration hypotheses enjoyed a long period of popularity until James Griffin (1943) suggested the alternative of indigenous development, thus originating the in situ hypothesis (Smith 1990:282; Wright 1966:5-6). Griffin (1943) noted characteristics of language, horticulture, and ceramics indicating a longer occupation in the Great Lakes Area than was previously thought. He suggested that Iroquoian culture evolved from Hopewell. MacNeish (1952) put Griffin's methodology, and thus the in situ hypothesis, into practice (Smith 1990:282; Wright 1966:5-6). He applied the Direct Historic Approach, tracing documented Iroquoian tribes back through the archaeological materials left by their ancestors. While MacNeish (1952) implied local development from Middle Woodland antecedents, he did not incorporate any Point Peninsula ceramic data into his study. Ritchie (1969) conducted extensive research summarizing the archaeology of New York during both the Middle and Late Woodland Periods. He proposed an in situ development from Point Peninsula through Owasco to the New York Iroquois and ultimately the historically documented tribes. Ritchie (1949) had previously reached the same conclusion of in situ development with respect to the multi-component East Sugar Island Site located in the present study region. Claude Chapdelaine (1993) also supported the in situ hypothesis concerning the gradual development of a sedentary lifestyle among Iroquoians.

Dean Snow (1994; 1995) revived the migration hypothesis by arguing that Owasco culture was intrusive to New York, having arrived about 1,000 years ago and absorbing late Point Peninsula groups. He cited discontinuities in the archaeological record as evidence for this event, arguing that multifamily residences, compact villages, and horticultural subsistence practices appear suddenly in Iroquoia (Snow 1995:71). Snow pointed to the Clemson's Island culture of Pennsylvania as the source for these immigrants. Though formulated with respect to New York, the same argument can by extended to all of southern Ontario. If Iroquoian culture was intrusive to New York from the southwest it must also have been intrusive to Ontario as an extension of the same migration. Crawford and Smith (1996) called Snow's migration hypothesis into question by documenting the in situ development of Early Iroquoians from the Princess Point Complex in southwestern Ontario. Princess Point sites date from A.D. 500 and exhibit the beginnings of maize horticulture, thus, contradicting Snow's date of A.D. 1000 for an Iroquoian migration (Crawford and Smith 1996).

Snow (1996) responded to this contradiction by pushing back the migration to prior to the time of Princess Point. He maintained that discontinuities are still evident in the archaeological record. Snow (1996:795) did not identify a new source for the migration stating instead that we "cannot necessarily expect to find a clear common archaeological ancestor." John Hart (2001) also questioned Snow's argument for an abrupt appearance of maize and matrilocality. By considering an evolutionary model of interaction between human and maize populations Hart (2001) demonstrates the gradual co-evolution of agriculture and matrilocality while noting that this process could be the result of either in situ development or migration. The present findings of cultural continuity in terms of shared ceramic attributes from Point Peninsula through the Auda site assemblage to the Early Iroquoian stage indicate that Iroquoian culture developed locally across the lower Great Lakes with the gradual addition of maize horticulture to subsistence practices and with the establishment of small villages while lake and river side camp sites remained in use.

Conclusion

The characteristics of the ceramic assemblages from the Rice Lake-Trent River region as described here are consistent with those of the Point Peninsula tradition. At the same time, changes in attribute frequency, especially in areas of decorative tools, surface modifications, and delimitation, allow for the division of the sequence into three local phases: Trent, Rice Lake, and Sandbanks. These phases span a period from before A.D. 1 up to A.D. 1000. At present, the definition of these phases is largely based on ceramics with limited information regarding settlement patterns and subsistence practices. The Rice Lake phase had been previously identified. By adding the Trent phase and redefining Sandbanks, my aim is to provide a framework within which new information from the region may be evaluated. At the same time, I expect that such new information will lead to further refinement of the proposed sequence and its taxonomy.

This revision of the Point Peninsula sequence

allows for a preliminary assessment of its relationships to Early and Late Woodland developments in the region with broader implications for our understanding of the archaeology of the Northeast. While continuity between the Middle Woodland assemblages and the Early Woodland Dawson Creek site material remains uncertain, clear continuity is evident among Middle Woodland and Early Iroquoian assemblages in the region indicating an in situ development of Iroquoian culture.

Acknowledgments. Many people have provided assistance with various aspects of this research. I especially thank Marti Latta and David Smith of the University of Toronto for their support and advice. Ceramic assemblages were generously made available by Susan Jamieson, Trent University; Mima Kapches, Royal Ontario Museum; Betty Prisch, Rochester Museum and Science Center; Denise Graham and Council Members, Alderville First Nation; Sheryl Smith, Brian Ross, and Kyla Spence, Parks Canada; and Chris Andersen and Cathy McAinsh, Ontario Ministry of Culture. Thanks to John Williams and the Otonabee Region Conservation Authority and Frances Wilcox, Norman Vivian, Raymond Vivian and their families for their interest and for permission to work on their properties. Also to Mary Brawley, John Creese, Katelyn Loukes, Michelle Yovanoff, Bradley Brown, Chris Menary, Nick Gromoff, Norma Knowlton, Stacey Hodder, Harry Johnson, Marianne Murphy, Wai Kok and Julie Cowling for all their hard work as part of my excavation and lab crews. I also l thank Mima Kapches, Susan Jamieson, and Cath Oberholtzer for their suggestions and David Robertson for his assistance with the figures. Following the presentation of the original version of this paper at the OAS Symposium in November 2002 I received the radiocarbon date result from the Spillsbury Bay site which lead me to revise the absolute chronology of the Point Peninsula sequence to that presented here.

Financial support for this research was provided by the Social Sciences and Humanities Research Council of Canada in the form of a doctoral fellowship (752-98-1845) and by the University of Toronto.

References Cited

Boyle, D.

1897 Ontario Mounds. Annual Archaeological Report for Ontario 1896-1897:14-37.

Chapdelaine, C.

1993 The Sedentarization of the Prehistoric Iroquoians: A Slow or Rapid Transformation? Journal of Anthropological Archaeology 12:173-209.

Crawford, G.W., and D.G. Smith

1996 Migration in Prehistory: Princess Point and the Northern Iroquoian Case. American Antiquity 61:782-790.

Dailey, R.C., and J.V. Wright

1955 The Malcolm Site: A Late Stage of the Middle Point Peninsula Culture in Eastern Ontario. Transactions of the Royal Canadian Institute. 31(1):3-23.

Dunlop, H., and K. Spence

1999 Analysis of the Native Ceramic Assemblage from Healey Falls, Trent-Severn Waterway. In The Healey Falls Site, Trent-Severn Waterway National Historic Site, edited by R.N.R. Farvacque and B.D. Ross, pp. 128-146. Ms. on file, Archaeological Services, Cultural Resource Management, Ontario Service Centre, Parks Canada, Cornwall, Ontario.

Emerson, J.N.

1955 The Kant Site: A Point Peninsula Manifestation in Renfrew County, Ontario. *Transactions of the Royal Canadian Institute* 31(1):24-66.

Farvacque, R.N.R., and B.D. Ross

1999 From Portage to Dam: The Healey Falls Site, Trent-Severn Waterway National Historic Site (45H). Ms. on file, Archaeological Services, Cultural Resource Management, Ontario Service Centre, Parks Canada, Cornwall, Ontario.

Griffin, J.B.

1943 The Iroquois in American Prehistory. *Papers of the Michigan Academy of Science, Arts, and Letters* 29:357-374.

Hakas, D.

1967 Trent Valley Archaeological Survey Report. Ms. on file, Department of Anthropology, Trent University, Peterborough, Ontario.

Harrington, L.

2002 A Faunal Analysis of Spillsbury Bay (BbGm-13).
Ms. on file, Department of Anthropology, University of Toronto.

Hart, J.P.

2001 Maize, Matrilocality, Migration, and Northern Iroquoian Evolution. *Journal of Archaeological Method and Theory* 8:151-182.

Jackson, L.

1980 Dawson Creek: An Early Woodland Site in South-central Ontario. Ontario Archaeology 33:13-32.

1986 New Evidence for Early Woodland Seasonal Adaptation from Southern Ontario, Canada. *American Antiquity* 51:389-401.

Johnston, R.B.

1968a The Archaeology of the Serpent Mounds Site. Art and Archaeology, Occasional Paper 10. Royal Ontario Museum, Toronto.

1968b Archaeology of Rice Lake, Ontario. Anthropology Paper 19. National Museum of Canada, Ottawa.

Kapches, M.

1987 Auda Site: An Early Pickering Iroquois Component in Southeastern Ontario. *Archaeology of Eastern North America* 15:155-175.

Kenyon, W.A.

1973 Relatives They Did Not Know. *Royal Ontario Museum Archaeological Newsletter* 94.

MacDonald, R.I., and R.F. Williamson

1995 The Hibou Site (AlGo-50): Investigating Ontario Iroquoian Origins in the Central North Shore Area of Lake Ontario. In Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society, edited by A. Bekerman and G. Warrick, pp. 9-42. Ontario Archaeological Society, North York.

MacNeish, R.S.

1952 Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory. Anthropological Series
 31. National Museum of Canada, Ottawa.

McKern, W.C.

1939 The Midwestern Taxonomic Method as an Aid to Archaeological Study. *American Antiquity* 4:301-313.

Morgan, L.H.

1851 League of the Iroquois. M. H. Newan, New York

Parker, A.C.

1916 The Origin of the Iroquois as Suggested by their Archaeology. American Anthropologist 18:479-507.

Pearce, R.J.

1977 An Eastern Regional Expression of the Pickering Branch. Unpublished MA thesis, Department of Anthropology, Trent University, Peterborough, Ontario.

1978 Archaeological Investigations of the Pickering Phase in the Rice Lake Area. Ontario Archaeology 29:17-24.

Richardson, F.

1968 Trent Valley Archaeological Survey Report. Ms. on file, Department of Anthropology, Trent University, Peterborough, Ontario.

Ritchie, W.A.

1944 The Pre-Iroquoian Occupations of New York State. Memoir 1. Rochester Museum of Arts and Sciences, Rochester.

1949 An Archaeological Survey of the Trent Waterway in Ontario, Canada and its Significance for New York State Prehistory. Research Records 9. Rochester Museum of Arts and Sciences, Rochester.

1969 The Archaeology of New York State. Revised ed. The Natural History Press, Garden City, New York.

1980 The Archaeology of New York State. Revised ed. Harbor Hill Books, Harrison, New York.

Ritchie, W.A., and R.E. Funk

1973 Aboriginal Settlement Patterns in the Northeast. Memoir 20. New York State Museum and Science Service, Albany.

Ritchie, W.A., and R.S. MacNeish

1949 The Pre-Iroquoian Pottery of New York State. *American Antiquity* 15:97-124.

Smith, D.G.

1990 Iroquoian Societies in Southern Ontario: Introduction and Historic Overview. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by C.J. Ellis and N. Ferris, pp. 279-290. Occasional Publication 5. London Chapter, Ontario Archaeological Society, London.

1997 Radiocarbon Dating the Middle to Late Woodland Transition and Earliest Maize in Southern Ontario. *Northeast Anthropology* 54:37-73.

1999 Northeast Woodland Pottery Analytic Code. Ms. on file, Department of Anthropology, University of Toronto.

Smith, S.A.

1981 The Lakeshore Lodge Site (AlGh-32): A Multi-Component Woodland Fishing Station in Sanbanks Provincial Park. Ms. on file, Ontario Ministry of Culture, Toronto.

1987 Princess Point in Eastern Ontario?! or What To Do When Your Concepts Break Paper presented at the 14th Annual Symposium of the Ontario Archaeological Society, Ottawa, Ontario. Ms. on file, Department of Anthropology, University of Toronto.

Snow, D.R.

1994 The Iroquois. Blackwell Publishers, Cambridge.

1995 Migration in Prehistory: The Northern Iroquoian Case. *American Antiquity* 60:59-79.

1996 More on Migration in Prehistory: Accommodating New Evidence in the Northern Iroquoian Case. American Antiquity 61:791-796.

Spence, M., and J.R. Harper

1968 The Cameron's Point Site. Art and Archaeology, Occasional Paper 12. Royal Ontario Museum, Toronto

Spence, M.W., R.H. Pihl, and J.E. Molto

1984 Hunter-Gatherer Social Group Identification: A Case Study from Middle Woodland Southern Ontario. In Exploring the Limits: Frontiers and Boundaries in Prehistory, edited by S. DeAtley and R. Findlow, pp. 117-142. International Series 223. British Archaeological Reports, Oxford.

Spence, M.W., R.H. Pihl, and C. Murphy

1990 Cultural Complexes of the Early and Middle Woodland Periods. In *The Archaeology of Southern Ontario to A. D. 1650*, edited by C. J. Ellis and N. Ferris, pp. 125-170. Occasional Publication 5. London Chapter, Ontario Archaeological Society, London.

Stothers, D.M.

1974 The East Sugar Island Burial Mound. *Pennsylvania Archaeologist* 44:20-25.

1999 Comments: Taxonomic Classification and Related Prerequisites of Scientific Research. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by R. F. Williamson and C. M. Watts, pp. 283-288. Eastendbooks, Toronto.

Willey, G.R., and P. Phillips

1958 Method and Theory in American Archaeology. University of Chicago Press, Chicago.

Williamson, R.F.

1999 Toward a Grounded Archaeology. In *Taming* the *Taxonomy: Towards a New Understanding* of *Great Lakes Archaeology*, edited by R. F. Williamson and C. M. Watts, pp. 3-8. Eastendbooks, Toronto.

Wright, J.V.

1966 The Ontario Iroquois Tradition. Bulletin 210.National Museums of Canada, Ottawa.

1999 Comments: Archaeological Cultural Constructs and Systematics: A Proposed Classification System for Canada. In *Taming the Taxonomy*: Toward a New Understanding of Great Lakes
Archaeology, edited by R. F. Williamson and C.
M. Watts, pp. 289-300. Eastendbooks, Toronto.
Wright, P., and H.J. Daechsel
1993 Continuity in Change: The Sandbanks

Tradition of Eastern Ontario. Paper presented at the 20th Annual Symposium of the Ontario Archaeological Society, Niagara Falls. Ms. on file, Department of Anthropology, University of Toronto.