Huron-St. Lawrence Iroquois Relations in the Terminal Prehistoric Period

James F. Pendergast

An introductory summary of Jefferson County topography and archaeological history, including reference to the question of archaeological connections with Ontario, provides the background against which to examine and compare certain Jefferson County St. Lawrence Iroquois archaeological traits with their Huron counterparts. Ossuary burials, pottery, ceramic and stone pipes and bone tools from the two regions are examined in detail in the context of their similarity. A wide-ranging discussion considers viewpoints expressed by early scholars regarding the destruction of the Iroquois in Jefferson County by the Huron as well as some current hypotheses regarding the disappearance of the St. Lawrence Iroquois.

Introduction

Environment

Jefferson County is located at the east end of Lake Ontario where it encompasses the land at the headwaters of the St. Lawrence River. Lying in the lee of Lake Ontario, precipitation is heavy. In winter the snow is deep with heavy drifting similar to the conditions encountered in some regions occupied by the Huron, Petun, Erie and some Neutral. The climate provides 143 to 163 frost-free days (Cline and Marshall 1977:4) with significant local variation as is evidenced by there having been snow when it froze in the hills near Watertown on July 4th, 1976. The region is less than optimum for aboriginal corn farmers and certainly not as favourable as the regions occupied by the St. Lawrence Iroquois nearby in Eastern Ontario or to the area to the south occupied by the Five Nation

Two physiographic provinces, the Erie-Ontario Lake Plain and the Tug Hill Plateau, comprise large regions of Jefferson County. The Lake Plain lying between Lake Ontario and the Tug Hill Plateau, which definitely is not a plain, paradoxically is known as the Eastern Ontario Hills. The glacial features in this hilly region, drumlins, moraines and outwash plains, have been severely eroded by wave action of the glacial lakes Iroquois and Frontenac. Limestone bedrock occurs irregularly. The Lake Plain slopes upward in an easterly direction from 250 feet above sea level at Lake Ontario to the Tug Hill Plateau.

The Tug Hill Plateau rises in the southeast corner of the County to a height of 1600 feet above sea

level. Although it has the appearance of being a shoulder of the Precambrian Adirondack Mountains, it is in fact an Ordovician limestone feature of the Appalachian Plateau. Generally the terrain on the Plateau is more rugged than the Eastern Ontario Hills particularly along the line of the escarpment where bedrock limestone cliffs occur. The Plateau is overlain with glacial debris: till, kamic moraines and isolated drumlins (Stewart 1958).

North Sandy Creek and South Sandy Creek rise on the Plateau and flow through the Eastern Ontario Hills to Lake Ontario on approximately parallel courses. Both Creeks have cut prominent watercourses. In some areas the valleys are broad and flanked with high hills while at other locations, particularly in the vicinity of the Plateau escarpment, they are narrow and deep with sheer walls.

In the region north of Black River, bounded by the Adirondack Mountains, the Tug Hill Plateau and the St. Lawrence River, the Eastern Ontario Hills merge with the St. Lawrence Lowlands. This region too consists of glacial features and debris eroded by the glacial Lake Iroquois and Lake Frontenac, but it is not as rugged as the region south of Black River. A series of small rivers and creeks which flow on roughly parallel courses, from northeast to southwest, into Lake Ontario give the region an undulating appearance. This region rises to the Tug Hill Plateau to the southeast and to the Adirondack Mountains to the east.

Thirty-four St. Lawrence Iroquois village sites in Jefferson County lie on the axis of South Sandy Creek and at the headwaters of the small rivers and creeks flowing into the east end of Lake Ontario north of Black River.

Archaeological History

The earliest record of archaeological sites in Jefferson County is contained in the *Journal* of the Rev. John Taylor as a result of his journey to the 'Black River Country' in 1802 (Taylor 1850). He visited five earthworks in the Sandy Creek area recording their size, shape and location in a series of sketches. Unfortunately he did not record details of the artifacts, principally pottery and pipes, he saw.

In 1848 Ephriam G. Squire made the first serious archaeological survey of the County under the

auspices of the New York Historical Society and the Smithsonian Institution. He published the results of this survey twice, first with the Smithsonian Institution then commercially in Buffalo (Squire 1851a:17-26; 1851b). **In** 1850 and again in 1851 Franklin B. Hough published short papers in which he noted the locations and nature of sites in Jefferson County and described some pottery and pipes from these sites (Hough 1850:100-105; 1851:103-109). In 1854 Hough re-published much of this information in his History of Jefferson County (1854:10-13). The Jefferson County Historical Society published a booklet in 1895 which includes a paper by Henry Woodworth that notes the presence of archaeological sites in general terms. In 1898 Edgar C. Emerson published his work on Jefferson County in which he noted the location of many archaeological sites using a series of sketch maps. In 1900 William M. Beauchamp published an inventory of the archaeological sites in the County.

But it was not until 1906, when a Peabody Museum field party under M.R. Harrington excavated on fourteen Iroquois sites, that a record of the Iroquois material culture from Jefferson County became available. Harrington reported on thirteen of these sites in his paper Prehistoric Iroquois Sites in Northern New York (1922) but a more detailed account of his work on the Putnam site remains unpublished (Harrington n.d.). In 1922 Arthur C. Parker published a catalogue of archaeological sites in New York State which includes those in Jefferson County. This work was largely derived from Beauchamp's earlier inventory. William A. Ritchie visited Iroquois sites in Jefferson County but he did not publish an account of his work there (Funk 1977).

In 1966 Robert Weber, a graduate student at the State University of New York at Buffalo (SUNYAB) surveyed the Sandy Creek drainage and the Watertown area. He succeeded in locating seventeen of the sites recorded in the early literature (Weber 1968; White n.d.a:1).

In 1967 a Highway Salvage Survey Team from SUNYAB surveyed areas in Jefferson County and the Durham site in particular. In part due to the success of this work, Marian White formulated a research proposal entitled "The Nature of Warfare and Confederacies among the Northern Iroquois" and in 1968 conducted the SUNYAB Summer School which located some twenty sites in the Sandy Creek drainage. Excavations were conducted on eight sites including the Durham site again. In 1969 the SUNYAB Summer Field School undertook a major excavation on the Durham site (Sidler 1971). Plans to continue work by SUNYAB in Jefferson County were terminated by Dr. White's untimely death.

Over the past decade excavations have been conducted on a number of St. Lawrence Iroquois sites in Jefferson County. Marjorie Burger and Peter Pratt have excavated on the Camp Drum 1 site; Peter Miller of SUNY at Potsdam on the Depauville site and the late Merill Waters of Water-town, New York on the Frank site near Dexter. Earl Sidler conducted a field school on the Carlos site and on the Morse site. He also excavated on the Potocki site. Accounts of this work have not been published.

The long and varied history of Iroquois archaeological sites in Jefferson County is characterized by their having been ravaged by collectors from far and wide. Large collections remarked upon in the 19th century for their sophisticated artifacts can no longer be located. Tales of collectors who saved only pipes and those who only saved reconstructed pottery rims are still recounted. Apart from the Jack Carter collection at Clayton, the Merill Waters collection in Watertown and a few others which provide reliable provenance, no private collections have survived for study.

The literature suggests there were some sixty-odd Iroquois sites in the County, nearly double that in nearby Ontario and Quebec. However this estimate should be noted with reservations. There has not been a comprehensive archaeological survey of the County and current site listings are flawed by the many names by which some sites have been known over the years. The earlier Algonquin-Iroquois dichotomy by which sites in the County were classified also continues to conceal some early Iroquois sites.

European Material

Although extensive and at times exhaustive digging has been carried on in Jefferson County since at least 1849, not one article of European origin has been excavated in an archaeological context which permits it to be attributed to the St. Lawrence Iroquois.

However, European material has been found on or near Iroquois sites. In 1802 Taylor observed: "The point of a steel sword — 2 edges — about a foot long, was found last spring in ploughing in the fort [embankment] located on the south branch of Sandy Creek" (1850:1139). Hough (1854:11), Beauchamp (1886:66) and Edgar Emerson (1898:576) repeat this account of the find at Ellisburg without adding details. Hough and Emerson also mention how musket balls, hatchets and knives have been found in the County attributing them to the presence of the French and English in the 17th century and later. Emerson also notes that a star-shaped silver ornament with the initials 'P.H.' was found in Adams Township near Sandy

Creek (1898:399) and an 8-ounce iron ball was found near the Iroquois site at Burville (1898:327). Harrington (1922:333) raises the possibility of there being European material in an Iroquois context on the Durfee site but upon reflection he rejects that association. Robert Weber (1968:37-38) indicates a kaolin pipe stem and an iron axe were seen in a collection of St. Lawrence Iroquois artifacts, all of which were alleged to be from the same location in the Sandy Creek area.

Nevertheless, Marian White with full access to the literature and to the extant collections, and with the benefit of recent scientific excavations by Burger and Pratt, Miller, Waters and Weber, in addition to her own experience on some twenty village sites on Sandy Creek, concluded: "None of these sites contain European trade material..." (n.d.b:10). As Beauchamp had noted earlier (1886:107), intensive French and English activity in this region and the proximity of their forts and battles, account for the presence of the European material found to date in Jefferson County.

Connecting Links

Prior to 1853 W.E. Guest, a resident of Ogdensburg, New York, visited Jefferson County to see at first hand the archaeological sites described by Squire. That same year he crossed the St. Lawrence River to visit the sites we know today as the St. Lawrence Iroquois village sites at Roebuck and 27/VII or possibly the Cleary site. Although he did not comment specifically on the similarity between the artifacts he excavated on these sites north of Prescott and those in Jefferson County, his text and illustrations make that connection clear (Guest 1856:271).

In 1853 Hough published his History of St. Lawrence and Franklin Counties, New York in which he noted the presence of earthworks in eastern Ontario in the townships of Augusta, Williamsburg and Osnabruck which resembled those in St. Lawrence and Franklin counties, and by extrapolation those in Jefferson County. He too described the Roebuck site and either 27/VII or the Cleary site nearby. His reference to the earthworks at Williamsburg, the Beckstead site, predate the earliest record of this site in Canadian literature by eight years and that in Osnabruck at Aultsville by over ninety years.

Sir John William Dawson published the first account of the Iroquois artifacts being unearthed in downtown Montreal in 1860. These were believed to be the remnants of Cartier's *Hochelaga* (Dawson 1860:430-449). In a second paper published in 1861 Dawson became the first to remark on the similarity of this material and that recovered by Guest at Roebuck (1861:362-373). By association

he was also the first to connect the Montreal material with that in Jefferson County. In 1891 Laidlaw (1891:76-77) and Boyle (1891:24) remarked upon the similarity of certain ceramic specimens recovered on some Huron sites in Victoria County, Ontario, and those Dawson had recovered in Montreal. Their speculations pioneered the thinking which associates these ceramic similarities with the disappearance of the Hochelagans and the movement of their survivors to the Trent River valley in Victoria County. In 1936 Wintemberg described the Roebuck site in detail remarking on how the pottery resembled that from Montreal, Victoria County and Jefferson County (Wintemberg 1936:121) thereby confirming, in part, the connections Guest had implied eighty years earlier. In 1946 Wintemberg excavated Roebuck-Hochelaga-like pottery on the protohistoric Sidey-Mackay Petun site near Collingwood without mentioning the Jefferson County resemblence (Wintemberg 1946:P1.20C4, C9-I4 and El). Possibly this was inferred through the Roebuck connection he observed.

Over the period 1947-1956 Norman Emerson excavated Roebuck-like pottery on a number of late prehistoric Huron sites located on the Humber River north of Toronto; the Parsons, Black Creek and McKenzie (Woodbridge) sites (Emerson 1954: 1968:42). He also recovered it on the protohistoric Benson site located on the Trent River axis in Victoria County (1954:218) where it was also excavated by Ramsden (1977). Commencing in 1949 Pendergast excavated this distinctive pottery on the Payne site (1963:11) and Waupoos site (1964:76) in Prince Edward County and on the Lite site (1972a:40, P1.2) on the Trent River axis in Hastings Wintemberg earlier (1936:14) County. associated the latter two sites with Roebuck. In 1973 Burger and Pratt (1973:14) reported the distinctive Roebuck-like pottery on the protohistoric Trent site in Victoria County, and Nasmith (1981) reports it from the Kirche site, another late prehistoric site on the Trent River axis. Latta recovered it on the protohistoric and historic Charlebois, Cedar Point and Robitaille Huron sites in Huronia (Latta 1976:360, 392, 427). Finlayson (1985) excavated over 2000 Roebuck-like rimsherds on the Draper site, a late prehistoric Huron site in Durham Regional Municipality (Pearce 1978; Pendergast n.d.). Here too as at the other Huron sites mentioned, this ware was a minority category not exceeding ten percent of the pottery sample.

Over the years, the Iroquois in Jefferson County and those on the St. Lawrence River have been identified as various Five Nation Iroquois tribes. Beauchamp (1894:61-69) considered them to be Onondaga. Wintemberg (1936:121) suggested the

Roebuck site had been occupied by the Mohawk-Onondaga before those tribes became distinct. MacNeish attributed the Roebuck and Dawson (Hochelaga?) sites and the sites in Jefferson County to the Onondaga (1952:56) and the Oneida (1952:57). More recently Tuck (1969:397) and Pendergast (1975) have demonstrated that the Iroquois in Jefferson County, eastern Ontario and southern Quebec are a group, now called the St. Lawrence Iroquois, which are distinct from the Five Nation Iroquois. However work is not yet complete which will make it possible to differentiate between the material culture from each of the widely dispersed regions in which St. Lawrence Iroquois sites have been identified; i.e., Jefferson County (Harrington n.d.; Skinner 1921; Sidler 1971; personal observation), the St. Lawrence River valley in Ontario, New York and Quebec (Pendergast 1966; Girouard 1975; Pratt: personal communication; personal observation) and the Richelieu River valley including the north end of Lake Champlain (Perkins 1909; Schuyler Miller: personal communication; Anonymous n.d.). As a result, attributing the Roebuck-like pottery excavated on Huron sites to the St. Lawrence Iroquois carries the corollary, for the time being, that this pottery may be from any of the regions in which St. Lawrence Iroquois sites occur.

Archaeology

There are two clusters of St. Lawrence Iroquois archaeological sites in Jefferson County. One group of seven sites is located north of Black River on or at the headwaters of the several small rivers and creeks which flow into Lake Ontario between Clayton and Chaumont Bay. This cluster includes the Mud Creek, St. Lawrence, Matteson and Swarthout sites. The second cluster, which includes twenty-seven sites, lies generally on the axis of South Sandy Creek between Lake Ontario and the Black River at Watertown. It includes the Durfee, Caen (Whitford), Morse, Putnam, Heath, Talcott Falls, Durham and Saunders sites.

Pottery

In 1952 MacNeish drew attention to the presence of Huron pottery on four sites in Jefferson County, suggesting it was "aberrant." These sites were Durfee, Caen (Whitford), Swarthout and Ivey (1952:65). Harrington (n.d.: Pls. 19,22,30) and Skinner (1921:Pl. 36) also illustrate Huron rimsherds from St. Lawrence Iroquois sites in Jefferson County. As a result of my having examined samples of pottery from seventeen Jefferson County St. Lawrence Iroquois sites, I have identified Huron pottery on six sites. Photographs of pottery in the Heye Foundation and the Peabody

Museum, Cambridge, collections indicate Huron rimsherds occur on an additional six sites in Jefferson County. Table 1 identifies by types the Huron pottery found on these twelve St. Lawrence Iroquois sites in Jefferson County.

It should be clear the presence of Huron pottery on Iroquois sites in Jefferson County is not unique in New York State. Huron pottery also occurs, for example, in the Mohawk River area (Lenig 1965:109-113), on Onondaga sites in the Syracuse area (Tuck 1971:163, 173-174, 176) and on Seneca sites (MacNeish 1952:46).

Examples of Huron pottery from St. Lawrence Iroquois sites in Jefferson County are illustrated in Fig. 1.

Pot Handles

Jefferson County and the Huron also share the trait of having some pottery vessels with handles. These are strips of clay, usually round in crosssection, luted to the vessel to join the bottom of an overhanging castellation to the neck or shoulder of the vessel immediately below the castellation. Beauchamp (1898:142) notes their presence in Jefferson County and Parker (1922:113) states they are more common in Jefferson County than elsewhere in New York State. Harrington (1922:337) notes they are present on the Durfee and Heath sites in Jefferson County. Orr (1912:27) illustrates their presence on a Huron site in York County and Emerson (1954:83) indicates they are present on the protohistoric Sidey-Mackay Petun site. Ridley (1952:202) illustrates their presence on the Fallis site, a prehistoric Huron site in Tiny Township, Simcoe County.

Ceramic Pipes

Ten of Emerson's twenty-four Huron ceramic pipe types (1954:45-64; 1966:238-240) occur in Jefferson County (Weber 1970:Appendix D). They are the Coronet, Decorated Collared, Decorated Vasiform, Decorated Bulbous, Wolf, Owl, Bear, Snake, Bird (duck) and Roebuck Human Effigy pipes. Of the six Huron pipes Donaldson (1958:7) includes in his paper on Huron ceramics, the Coronet, Decorated Collared and Roebuck Human Effigy are also present in Jefferson County. Twelve of Noble's Huron pipe types (1968:249-250; 1979); the Coronet, Decorated Collared, Bird (duck), Owl, Bear, Wolf, Snake, Roebuck Human Effigy, Sitting Human Effigy, Open-Lipped Human Effigy, Human Janus and Human-Animal Janus; also occur in Jefferson County.

Weber's exhaustive inventory of Iroquois pipes (1970:Appendix D) indicates that ten Huron ceramic pipes also occur in Jefferson County. They are the Owl, Wolf, Bear, Snake, Decorated Vasi-

TABLE I

Huron Pottery on Sites in Jefferson County

Site	Huron Pottery Types* and Frequency	Source			
Clayton site cluster (total rims = 223)					
St. Lawrence	HI= 11; BN=10; CI=6; SN=1	Heye Foundation (98 rims)			
Swarthout (a)	total = 28 BN=5; HI = 5 HI=2; BN= 1 BN=8; LO=3; SN=1	"Carter collection (78 rims)			
Chaumont	total = 25 HI=6; BN=6; CI=5	"Heye Foundation (94 rims)			
Mud Creek	HI= 1; CI=1	"SUNYAB (18 rims)			
Matteson	BN=2; HI= I	"SUNYAB (32 rims)			
No provenience	HI=81; BN=24; WH=17; CI= 14; SN=4; LI=4; SI=3 total =147	Carter collection, including the Conger collection (c)			
Sandy Creek site cluster (tot	al rims = 66)				
Durfee	BN=8; HI=3; SX=1 HI=1total =13				
Caen (Whitford)	total = 15 HI=6; SN=2; BN= 1; LO= I total= I0	MacNeish (1952:65)			
Morse	BN =3; HI=1 WX=2; HI=1				
Putnam	total = 7 HI=2; SX=1 total = 3	Heye Foundation (123 rims)			
Heath	HI=2; CI= Itotal=3	Peabody Museum (d) (90 rims)			
Talcott Falls	HI=3; BN= I HI=2; WH= I LI =1	Mihalyi collection			
Durham	total = 8 LI=5; PN=4; BN=4; LO=2; MX=1	SUNYAB (Sidler 1971:20) (e)			
Saunders (f)	total = 16 BN=2; HI=1	Carter collection (14 rims)			
No provenience	total=3 BN=1; HI=1; WH=1total=3	Harrington (n.d.:PIs.22, 30)			
Uncertain Provenience (total rims = 9)					
Lewis (Roche) (f)	HI= 1; BN=1; CI=1	Rochester Museum (b)			
Jefferson County	total = 3 HI=4; BN= 1; CI= I total = 6	Carter collection			
TOTAL Jefferson County = 298					

T

*Huron pottery types:

BN = Black Necked BN = Black Necked
CI = Copeland Incised
HI = Huron Incised LI =
Lawson Incised LO =
Lawson Opposed
MX = Middleport Criss-Cross
PN = Pound Necked SI
= Seed Incised SN =
Sidey Notched SX = Sidey
Crossed WH = Warminster
Horizontal WX = Warminster
Crossed Crossed

Notes:

- (a) A multicomponent site
- (b) Rochester Museum and Science Center, Rochester, New York
- (c) Includes undifferentiated material from the Chaumont. St. Lawrence. Swarthout
- Matteson sites in the Clayton site cluster (Carter, personal communication) (d) Peabody Museum of Archaeology and Ethnology, Harvard University,
- Cambridge. Massachusetts
- (el Pottery expressed in terms of vessels; remainder are in terms of rimsherds
- (f) Probably another name for one of the sites listed above

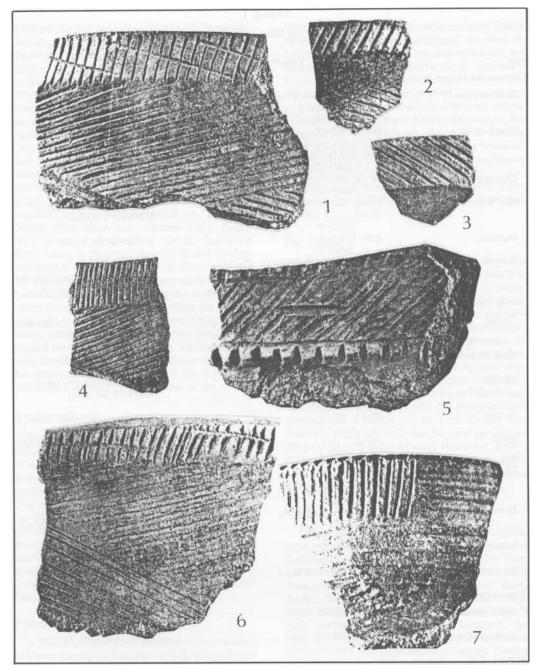


Fig. I

- Huron pottery from St. Lawrence Iroquois sites in Jefferson County.

 1: Black Necked with Warminster Crossed collar motif from the Morse site (Carter collection);
- Black Necked from the Morse site (Carter collection);
- Huron Incised from the Durfee site (Peabody Museum, Cambridge);
- Black Necked from the Matteson site (Carter collection);
- Miscegenated Durfee Underlined rimsherd with Huron Sidey Crossed motif superimposed from the Durfee site (Peabody Museum, Cambridge); Black Necked with Warminster Crossed collar motif from the Durfee site (Peabody Museum, Cambridge);
- 7: Copeland Incised from the Mud Creek site (Carter collection).

form, Decorated Collared, Decorated Bulbous, Roebuck Effigy, Open-Lipped Human and Sitting Human pipes. It is noteworthy that she indicates that of these only the Decorated Bulbous pipe may have temporal or spatial significance (Weber 1970:130-137). The work is flawed in this regard. The clustering of her Coronet, Mortice, Wolf Effigy and Bird Effigy pipes, as it is revealed by her research, does indeed indicate the clustering of these pipes in both time and space. It indicates the involvement of the Huron with the Seneca. Mohawk and St. Lawrence Iroquois on specific but different time levels in each of the three regions involved. The clustering of Huron ceramic pipes in the Seneca and Mohawk regions, as defined by Weber, reflect the Huron captive villages with those Five Nation tribes after 1649. The earlier involvement of the Huron and the St. Lawrence Iroquois is, in part, the subject of this paper.

Squire (1851a:77), Harrington (n.d.:P1.32), Sidler (1971:11 and personal communication) and Mathews (1980:296) indicate the presence of the Owl effigy pipe in Jefferson County. Harrington (n.d.:P1.33) and the Carter Collection (personal observation) indicate Decorated Vasiform pipes are present. Sidler (personal communication) and Mathews (1980:296) indicate the Wolf effigy pipe also is present. Rutsch (1973:195, 202, 209) illustrates Wolf and Bird pipes from Jefferson County and adds seven coronet pipes to the inventory (Rutsch 1973:165).

Emerson (1954) indicates Owl, Bear and Snake effigy pipes are 'Intermediate Pipe Forms' in Ontario while the Coronet, Decorated Vasiform, Decorated Bulbous, Decorated Collared, Wolf, Bird (duck) and Human Effigy pipes are attributable to his 'Historic and Late Prehistoric' period. Emerson does not suggest dates for these periods. Noble (1968:249-250) attributes the Coronet, Decorated Collared, Bird, Owl, Bear, Wolf, Snake, Roebuck Human, Sitting Human, Open-Lipped Human, Human Janus and the Human-Animal Janus pipes to the late prehistoricprotohistoric period. Weber (1970) attributes all the pipes she catalogues in Jefferson County to an undetermined `Prehistoric Period'. Noble (1979:74) indicates the Owl, Snake, Bear, Wolf, Open-Lipped Human and the Sitting Human effigy pipes were introduced in Ontario over the period 1450-1500 and the Duck effigy circa 1580. Mathews (1980:305, note 3) states "Emerson (1954:50, 57) was mistaken about the 'Wolf and bird being historic period markers and about owls and 'bears' becoming less popular in the historic period. My data also indicate that Noble's (1979:74) beginning dates for 'ducks' and 'ravens' are too late." She also suggests that the open-lips of Noble's (1979) Open-Lipped pipe are attributes

which appear throughout the Ontario sequence and do not warrant designation as a pipe type (Mathews 1980:306, note 4).

Mathews' work (1981a:4) on Janus pipes, generally pipes with human or animal effigies facing in opposite directions on a pipe bowl, indicates the largest concentration of these pipes, nine in number, is found in Huron territory, principally in Victoria and Simcoe counties. She also indicates multiple human effigy pipes (Mathews 1981a:8) and human effigies in juxtaposition (Mathews 1981a:9) are most common on Huron sites in Ontario. Mathews's work reveals the greatest concentration of these ceramic pipe forms in Iroquoia outside of Huronia is in Jefferson County. Parenthetically Janus ceramic pipes also occur on St. Lawrence Iroquois sites outside Jefferson County in the Prescott village cluster and on the Dawson site in Montreal. However these are not in the quantity or variety noted in Jefferson County and Huronia.

Weber (1970:Appendix D) indicates Janus pipes occur in her late prehistoric period, circa 1400 to contact, while her Janus Human-Animal and Double-Headed Ghost varieties occur in the post contact period to circa 1650. Noble (1979:74) indicates Janus effigy pipes appear in the Ontario Iroquois circa 1475. Mathews (1981a) does not suggest dates by which Janus pipes occur. Emerson does not include Janus pipes in his Huron pipe inventory.

These data on Janus ceramic pipes, which attributes sixteen Janus pipes to the Huron and ten to Jefferson County, are set out at Table 2.

The presence of ceramic pipes in Huronia and Jefferson County are set out at Table 3.

In summary these data on ceramic pipes indicate 15 of the 63 ceramic pipe types identified by Weber as having been found in Huron territory, or 24 percent; and 15 of the 39 ceramic pipe types identified in Jefferson County, or 39 percent of those pipes, are shared by the Huron and Jefferson County St. Lawrence Iroquois.

Stone Pipes

There are also similarities between Huron stone effigy pipes and those from Jefferson County. Skinner (1921:166) illustrates a stone Bird Effigy pipe from Jefferson County and Woodworth (1895:52) another. Both strongly resemble the Bird Effigy pipe from Durham County (Laidlaw 1914:46) and in a more general context others from Simcoe County (Laidlaw 1913:51; 1916:67) and York County (Laidlaw 1913:52).

Skinner (1921:29, 162) notes the similarity of the Lizard Effigy pipes from Jefferson County (Laidlaw 1914:52; 1916:79) and those from Halton

TABLE 2 Distribution of Janus Ceramic Pipes (a)*

Janu	ıs Human Effigies	•				
County	Context	Frequency				
New York						
Allegany	?					
Broome	Owasco	1				
Chenango	Owasco	2				
Jefferson	SLI (b)	4				
Montgomery	Owasco	2				
Chautauqua	Erie	1				
Madison	Oneida, Onondaga					
Genesee	Seneca	3				
Ontario	**	4				
Victoria	Huron					
Pr. Edward	Huron	1				
Middlesex	Neutral	2				
Simcoe	Huron					
York	Huron	1				
Ontario	Huron	1				
	Human/Animal Hea	ids				
New York						
Jefferson	SLI (b)	1				
Ontario	Owasco	1				
Madison?	Onondaga?					
Ontario	II	2				
Victoria	Huron					
Brant	Neutral	1				
	iple Human Heads	3				
New York Jefferson	SLI (b)	4				
Chenango	Owasco	1				
Madison	Oak Hill	1				
Montgomery	Oak Hill	2				
Fulton	Mohawk	2				
Madison	Oneida	1				
?	Onondaga	2				
Ontario		_				
Victoria	Huron	2				
Grenville	SLI (b)					
York	Huron	2				
Grey	Petun	1				
Quebec						
Laval	SLI (b)					
Juxtaposition Heads						
New York						
Jefferson	SLI (b)					
Onondaga	Onandaga	2				
Genesee	Seneca	3				
Ontario						
Victoria	Huron					
Simcoe	Petun	1				
Summary	Huronia Je	fferson County				
Janus - human	9	4				
Multiple - human	4	4				
Human - animal	2	1				
Juxtaposition	1					
TOTAL	16	10				

^{*}Notes: (a) Compiled from Mathews 1981

TABLE 3 **Huron and Jefferson County Ceramic Pipes**

Pipe Types	Huron Sources*		Jefferson Co Sources*
Coronet	(I)		(2)
Decorated Collared	(1)		(3)
Roebuck Human	(1)		(4) (28)
Decorated Vasiform	(1)		(5) (15) (16)
Wolf Effigy	(I) (26)		(6) (13) (14) (17)
•			(21) (29) (30)
Bird (duck) Effigy	(I) (26)		(18) (27)
Decorated Bulbous	(I)		(7)
Owl Effigy	(I) (26)		(8) (20) (30)
Bear Effigy	(I) (26)		(9)
Open Lip Human	(26)		(10)
Snake Effigy	(1) (26)		(II)
Sitting Human	(26)		(12)
Open Mouth Bird	(19)		(19)
Animal & Human	(22)(23)	(25)	(24) (25)
Janus Effigy	(25)		(25)

*Sources:

- (1) Emerson 1954:45-64
- (2) Rutsch 1973:165
- (3) Weber 1970:Appendix D, Type 19
- (4) Weber 1970: Appendix D, Type 24
- (5) Weber 1970:Appendix D, Type 15
- (6) Weber 1970: Appendix D, Type 16
- Weber 1970: Appendix D, Type 21 (7)
- (8) Weber 1970: Appendix D, Type 6 (9) Weber I970:Appendix D, Type 7
- (10) Weber I970: Appendix D, Type 73
- (11) Weber 1970: Appendix D, Type 9
- (12) Weber 1970: Appendix D, Type 75
- (13) Squire 1851:77
- (14) Harrington n.d.:P1.32
- (15) Harrington n.d.:P1.23
- (16) Carter collection
- (17) Rutsch 1973:195
- (18) Rutsch 1973:202-203
- (19) Rutsch 1973:209-210
- (20) Sidler 1971:1 I
- (21) Mathews 1980:296
- (22) Emerson 1954:204, human-bear
- (23) Boyle 1906:16, human-owl
- (24) Mathews 1981:17, human-snake
- (25) Mathews 1981, Table 3
- (26) Noble 1979:74
- (27) Beauchamp 1898, Fig. 217
- (28) Beauchamp 1898, Fig. 152
- (29) Beauchamp 1898, Fig. 171
- (30) Sidler, personal communication

and Simcoe counties (Laidlaw 1914:49, 50). Mathews (1981a:9) notes the presence of two stone pipes with effigies in juxtaposition in her sample from Simcoe County and two from Jefferson County.

Examples of Huron effigy ceramic and stone pipes from Jefferson County are illustrated in Fig. 2.

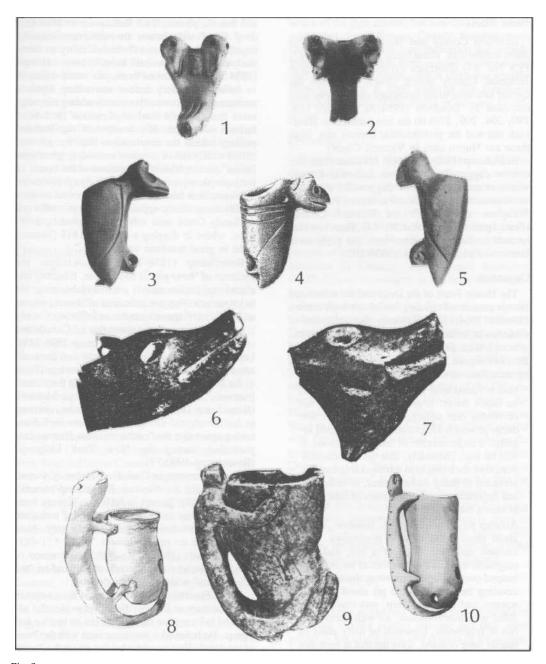


Fig. 2
Jefferson County and Huron pipes (not to scale).
1: Jefferson County clay Janus pipe (Mathews 1981:9);

- Jefferson County clay Janus pipe (Mathews 1981:9);
 Huron clay Janus pipe (Mathews 1981:9);
 Huron stone bird effigy pipe (Laidlaw 1914:46);
 Jefferson County stone bird effigy pipe (Skinner 1921:166);
 Jefferson County stone bird effigy pipe (Woodworth 1895:52);
 Jefferson County clay Wolf effigy pipe (Mathews 1980:296);
 Huron clay Wolf effigy pipe (Mathews 1980:296);
 Jefferson County stone Lizard effigy pipe (Laidlaw 1914:52);
 Huron stone Lizard effigy pipe (Laidlaw 1914:49);
 Jefferson County stone Lizard effigy pipe (Laidlaw 1916:79).

Bone Tools

Jefferson County and Huron bone tools also share similarities. Beauchamp (1902:P1.5 No. 47, P1.8 No. 84) illustrates carved bone pins from Jefferson County which closely resemble the carved and sometimes decorated carved bone pins recorded by Emerson (1954:90, 93, 186, 189, 190, 204, 209, 210) on the late prehistoric Hard-rock site and the protohistoric Benson site. Both these are Huron sites in Victoria County.

Beauchamp (1902:P1.11 No. 114) also illustrates a bone dagger-like tool from Jefferson County which resembles the bone dagger-like tools excavated on the late prehistoric Huron Payne and Waupoos sites in Prince Edward County (Pendergast 1963:6; 1964:70, 87). Emerson also records a similar specimen from the prehistoric Huron site at Downsview (1954:102).

Ossuaries

The Huron Feast of the Dead and the associated Huron custom of ossuary burial are well known (Tooker 1964:134). However the existence of ossuaries in Jefferson County is not as well known, although their presence has long been recorded. By 1849 Squire had located two bone pits which he described as follows:

One is found near the village of Brownville, on Black River. It is described as a pit, ten or twelve feet square, by perhaps four feet deep, in which are promiscuously heaped together a large number of human skeletons. It will be seen ultimately, that these accumulations owe their origin to a remarkable custom, common to many Indian tribes, of collecting and depositing together the bones of their dead, at stated intervals.

Another pit, very unlike this, however, exists about three miles east of Watertown. It is situated upon the slope of a hill, and was originally marked by a number of large stones heaped over it. Upon removing these and excavating beneath them, a pit about six feet square, and four feet deep, was discovered, filled with human bones, all well preserved, but in fragments. Upwards of forty pairs of patella were counted, showing that at least that number of skeletons had been deposited in the pit. . All the bones are those of adults... No relics of any kind were found with them (Squire 1851:25-26).

Hough (1850:102-103) located the ossuary described by Squire "three miles east of Watertown" as having been found in 1842 in Rutland on a commanding height on the farm of E. Hunting-ton. He adds the information that the pit was covered by flat circular stone under the stone pile

and that the pit was "four feet square and two feet deep filled with bones thrown promiscuously together". He estimates "between thirty to forty skeletons were buried here." Later Hough (1854:13-14) remarked 'bone pits' were common in Jefferson County before recounting Squire's account of the Brownville ossuary adding the comment that "a great deal of skeletons" had been thrown in the pit. His account of the Rutland ossuary added the information that the pit was "filled with bones of men and animals in great con-fusion" (italics added). He estimated the bones of forty people were present. Hough also provides in-formation on a third theretofore unreported ossuary "in Ellisburg nearly opposite an ancient earthwork on Sandy Creek near a house occupied by J.W. Ellis, where in digging a cellar in 1818 [human] bone in great numbers were found."

Beauchamp (1886:112)acknowledges presence of "bone pits in Brownville, Ellisburg and elsewhere" (italics added) without elaborating. He twice remarks they are indicative of Huron customs and "a thing of special interest in Jefferson County ... which suggests the ossuaries of Canada but on a much smaller scale" (Beauchamp 1886:125). Later he noted "in Jefferson County ... there are some small bone pits suggesting this custom [Feast of the Dead] but I know of none among the eastern Iroquois," the Onondaga, Oneida and Mohawk (Beauchamp 1889:135). Much of this he reiterates in his Aboriginal Occupation of New York State noting again that the "ossuaries show Huron ideas prevailed among the New York Iroquois" (Beauchamp 1900:79).

In his comments on Cusick's *Sketches of Ancient History of the Six Nations*, Beauchamp remarks (1892:80, 108) "Except in Jefferson County bone pits barely occur as far east as Onondaga" and again "There are ossuaries in Jefferson County, New York, but in no great numbers."

Woodworth (1895:53) noted the presence of what may be an ossuary south of Rutland on "the Allen place" without further details.

Edgar Emerson (1898:474) notes the existence of the ossuary at Brownville and provides the additional information that it was ten or twelve feet square. He believed it was associated with the Feast of the Dead. Emerson located the pit on the "north bank of Black River below Brownville a little below and on the opposite side of the road from the present village cemetery near where a small ravine crosses the highway." He also provides the information that the Rutland ossuary was located "on the farm of T.E. Beecher on the left side of the road leading north from his house just above the turn (about 15 rods from the road) on a gradually sloping hillside." He notes the pit was six feet square and four feet deep and "More than forty pair

of patella were counted. All were adult bones. No relics of any kind were included in the pit."

Skinner (1921:125) notes "a number of such ossuaries were found in the Rutland Hills in former years" without details. Parker (1922:576, 579) remarks on the ossuaries in Jefferson County in general terms and later repeats some of the information set out by Squire and Hough.

It is alleged that a local collector dug into another ossuary in 1930 but details are not available. This may be the graves excavated in 1930 by Jack Nicols on the isthmus leading to Point Peninsula which were not Iroquois (Jack Carter, personal communication). The multiple burials at Three Mile Bay (Harrington 1922:316), sometimes said to be Huron, are not Iroquoian.

Discussion

General

Connections between Jefferson County and the Huron are not limited to a comparison of artifacts alone. In 1889 Beauchamp wrote: "I have little doubt ... that the Onondaga were driven out of Jefferson County by the Huron ..." (1889:130). The idea that the Jefferson County Iroquois were Onondaga prevailed into the 1960s. But the hypothesis that the Huron impacted on the Jefferson County Iroquois does not appear to have survived the 19th century. Beauchamp goes on to remark on the presence of Huron customs in Jefferson County in the context of the now discredited concept of the Onondaga having moved to central New York from Jefferson County: "It is very likely that there was an earlier Huron Iroquois settlement of Central New York from Jefferson County where there are many fort sites. Among these are traces of Huron burial customs and the earthenware is generally finer than further south." (Beauchamp 1889:123-124).

As early as 1886 Beauchamp had noted that the ossuaries in Jefferson County reflected Huron customs (1886:112-113) and he reiterated this viewpoint on two occasions. In 1889 he remarked "In Jefferson County ... there are small bone pits suggesting this custom [Huron Feast of the Dead] but I know of none among the eastern Iroquois [the Oneida, Onondaga and Mohawk]" (1889:135). In 1900 he noted again "... ossuaries show Huron ideas prevalent among the New York Iroquois." (1900:79).

But Beauchamp's viewpoint was not held unanimously. Skinner's findings (1921:174) stand in sharp contrast. Although he had earlier noted the presence of ossuaries in Jefferson County (Skinner 1921:125), and the similarity between Jefferson County ceramic and stone pipes and their Huron equivalents, Skinner concluded, once again in

terms of the then current but now discredited concept, that the Jefferson County Iroquois were Onondaga: "... there is no indication that outside influences of any kind were at work on the ancient culture of the Onondaga, or that there was notable internal change in their material life [artifacts] during the period of the native occupancy of Jefferson County."

Ossuaries

It may transpire that the ossuaries in Jefferson County differ from their Ontario Iroquois counterparts other than by their being smaller, but there can be no doubt that the scholars mentioned were able to differentiate between an ossuary and other forms of multiple burials. Squire's familiarity with ossuaries in western New York, Beauchamp's comparison of the Jefferson County 'bone-pits' and the ossuaries in Ontario, and Parker's definition (1922:422) of an ossuary in his lexicon substantiate this conclusion.

Possibly the ossuaries in Jefferson County do not reflect only the impact of the Huron on Jefferson County Iroquois in the late prehistoric period. J.V. Wright (1966:52) has suggested that "The bundle burials (single and multiple) of the Miller and Bennett [Pickering] sites may represent the beginning of the ossuary burial practice of the Ontario Iroquois." Wright (1966:100-101) places the Pickering Branch of the Early Ontario Iroquois Stage in the period circa AD 1000 to 1250. Coupled with Pendergast's hypothesis, which attributes the genesis of the St. Lawrence Iroquois in Jefferson County to a "Pickering-mixed Canandaigua Owasco influence" (1975:47), it is possible that the nascent ossuary trait detected by Wright was introduced into Jefferson County by the Pickering on an early Iroquois time level. Clearly there is a need to seek archaeological data which will establish temporally the place these ossuaries hold in the Jefferson County Iroquois sequence.

Pipes

It has been suggested that the pre-eminence of Jefferson County potters indicate that they were probably the originators and donors of the sophisticated ceramic pipe forms which occur in many regions of northern Iroquoia. It should be noted, however, that the St. Lawrence Iroquois in Jefferson County were no more skilled than the St. Lawrence Iroquois in several other regions. As a result, this hypothesis may be extended to the St. Lawrence Iroquois generally with some validity.

Mathews (1980:298) has recognized the similarity between some St. Lawrence Iroquois pipe forms and those used by the Ontario Iroquois in southern Ontario, including Huron, much as has been

demonstrated in the body of this paper. She explains: "There are two possible explanations for the similarity of the animal pipes in the two regions. The southwestern Ontario pipe traditions may have its roots among the various St. Lawrence [Iroquois] people or, as all of the early dates overlap to some extent, the pipes may stem from a common tradition and appear in the two locations at about the same time." (1980:298). In support of the first alternative she notes the presence of the St. Lawrence Iroquois on late prehistoric and protohistoric Huron sites on the basis of their artifacts being present. Alternatively she notes the feasibility of postulating a diffusion of pipe styles. While it seems probable that these options are likely to em-brace the actuality, it will be difficult to demonstrate one or the other with credibility until St. Lawrence Iroquois archaeology, and Jefferson County archaeology in particular, reveals a dated ceramic pipe sequence.

Chronology

Returning to the data set out in the body of this paper. it is asserted that the concomitant sharing of certain material culture traits by the St. Lawrence Iroquois in Jefferson County and the Huron has been demonstrated. This situation is believed to have prevailed as a result of these Iroquoian groups having come into close contact during the late prehistoric period while the St. Lawrence Iroquois were still extant in Jefferson County. There is no evidence in Jefferson County to indicate this liaison continued into the protohistoric period. There are no protohistoric Iroquois sites in Jefferson County. The St. Lawrence Iroquois material culture traits discerned later on protohistoric and historic Huron sites reflect the presence of St. Lawrence Iroquois survivors on these sites at a time when the St. Lawrence Iroquois in eastern Ontario and Jefferson County had ceased to exist. A possible exception to this general situation could be the presence of the St. Lawrence Iroquois from the lower St. Lawrence River who were extant in the protohistoric and historic periods from the time Europeans arrived in these regions until circa 1580.

The presence of St. Lawrence Iroquois material on the Black Creek (Emerson 1954:142) and the Parsons sites (Emerson 1968:37) on the Humber River axis; the Benson (Emerson 1954:203: Ramsden 1977) and the Trent sites (Burger and Pratt 1973) on the Trent River axis and the Charlebois site (Latta 1976:356) in Huronia are examples of very late prehistoric and protohistoric Huron sites on which St. Lawrence Iroquois material culture items are found which may be attributed, in part at least, to St. Lawrence Iroquois survivors from Jefferson County. The historic

Warminster site (MacNeish 1952:37), Cedar Point (Latta 1976:387) and Robitaille (Latta 1976:410) are examples of historic Huron sites where the presence of St. Lawrence Iroquois artifacts indicate that survivors, or their descendants, were present long after the St. Lawrence Iroquois had ceased to exist as a separate entity.

Disappearance of the St. Lawrence Iroquois

The hypothesis which suggests the St. Lawrence Iroquois in eastern Ontario and southern Quebec were destroyed by the Huron circa 1580 is premised, in part, on our understanding of Iroquoian industry and social practices. Because pottery is believed to have been made by females (Wrong 1939:109) and pipe-smoking is believe to have been practiced by men alone (Biggar 1924:184; Wrong 1939:149), it is concluded that the presence of these artifacts indicate, as appropriate the presence of male or female Iroquoians.

Archaeology has revealed both Huron pipes and pottery on late prehistoric St. Lawrence Iroquois sites in eastern Ontario and southern Quebec; for example the Dawson site (Hochelaga?) (Pendergast and Trigger 1972:234-235. 253-254) and at the Glenbrook site (Pendergast 1981:171, 175) and in Jefferson County (Pendergast 1981). This suggests the presence of both Huron men and women in St. Lawrence Iroquois villages in eastern Ontario, Jefferson County and southern Quebec. Conversely St. Lawrence Iroquois pottery occurs on a number of late prehistoric Huron sites. for example the Payne, Waupoos (Pendergast 1963, 1964) and Draper sites (Pearce 1978). which indicates St. Lawrence Iroquoian women were present in these Huron villages in the late prehistoric period. However it has not been demonstrated that the pipe types used by St. Lawrence Iroquois men in eastern Ontario and southern Quebec, including Barred Trumpet and Vasiform pipes. occur on late prehistoric and protohistoric Huron sites. This has been interpreted to indicate there were no late prehistoric St. Lawrence Iroquois males from eastern Ontario or southern Quebec in these Huron villages. In concert these archaeological data and our understanding of Iroquois cultural practices have led to the conclusion that the St. Lawrence Iroquois were engaged in a war with the Huron which, in part, led to their destruction; a war in which the Huron took female captives but no males while the St. Lawrence Iroquois accepted both male and female captives.

The data presented in the body of this paper demonstrates a different situation existed as regards Jefferson County St. Lawrence Iroquois and the Huron in the late prehistoric period when ceramic and stone pipe forms and pottery occur reciprocally. Huron pottery occurs on late prehistoric St.

Lawrence Iroquois sites in Jefferson County and St. Lawrence Iroquois pottery which can he attributed to Jefferson County is present on late prehistoric Huron sites. On the basis of the concept described above, this suggests Huron men and women were present in late prehistoric St. Lawrence Iroquois villages in Jefferson County. And St. Lawrence Iroquois men and women lived in late prehistoric Huron villages.

This is quite unlike the situation which prevailed with regard to the St. Lawrence Iroquois in eastern Ontario and southern Quebec. Their men were not present in late prehistoric and protohistoric Huron villages.

However, the condition which permitted St. Lawrence Iroquois males from Jefferson County to be present in Huron villages and not those from eastern Ontario and southern Quebec should not be taken to indicate amicable relations prevailed between the Jefferson County Iroquois and the Huron. It seems more likely that the reciprocal distribution of artifactual traits demonstrated here represent a phase in the conflict when both male and female captives were acceptable on each side. Certainly the changes in the conduct of the war, which was fought initially under prehistoric conditions when the St. Lawrence Iroquois in Jefferson County and eastern Ontario were destroyed and later, circa 1580, under historic conditions when the St. Lawrence Iroquois in southern Quebec were destroyed, strongly suggests there were phases in this war when the rules differed.

Huron War

Interesting observations have been raised regarding the movement of the Huron from the region adjacent to Lake Ontario to the hinterland between Lake Simcoe and Nottawasaga Bay. The hypothesis which attributes the destruction of the St. Lawrence Iroquois to the Huron appears inconsistent with the Huron withdrawal from their traditional territory along the north shore of Lake Ontario, some of which was adjacent to the St. Lawrence Iroquois. Withdrawal from traditionally held territory is a mark of defeat and the Huron, the hypothesis alleges, were the victors, not the losers.

Archaeological evidence indicates the late prehistoric Huron sites on the Trent River axis in Prince Edward and Hastings counties, the Waupoos, Payne and Lite sites (Pendergast 1963, 1964, 1972), were in contact with the St. Lawrence Iroquois. But there is no evidence of a sequence of Huron sites in this region which continues through to the protohistoric period. Protohistoric Huron sites on the Trent River axis, Benson and Trent (Emerson 1954; Ramsden 1977: Burger and Pratt 1973 and personal communication), first occur well north in Victoria County immediately east of Huronia. This suggests the Huron on the Trent River axis adjacent to St. Lawrence Iroquois territory did withdraw as a result of St. Lawrence Iroquois pressure in the late prehistoric period. This is in sharp contrast to the Huron adjacent to Lake Ontario west of the Trent River axis. The Draper site (Finlayson 1985) and others in that cluster which were in contact with the St. Lawrence Iroquois remained adjacent to Lake Ontario in the late prehistoric period. Other Huron also in contact with the St. Lawrence Iroquois, Parsons and Black Creek (Emerson 1954; 1968), remained on in the Toronto area well into the late prehistoric period.

It is noteworthy that the Huron in the region west of the Trent River axis remained in the region after those on the Trent River axis adjacent to Lake Ontario, closer to the St. Lawrence Iroquois territory in eastern Ontario and Jefferson County, had moved northward into Victoria County immediately east of Huronia. Presumably St. Lawrence Iroquois pressure on these Hurons was greater than it was on the more remote Huron to the west of the Trent River. The eastern Huron were forced to move northward in late prehistoric times while the Huron west of the Trent remained adjacent to Lake Ontario. This interpretation of archaeological data would deny the premise that there was a monolithic one-time movement of the Huron from the region adjacent to Lake Ontario northward to Huronia.

Conclusion

The above interpretation does not deny the hypothesis that the Huron destroyed the St. Lawrence Iroquois. Rather it suggests that the Huron adjacent to St. Lawrence Iroquois were forced to react to St. Lawrence Iroquois pressures, as reflected by their move northward to Victoria County, before the St. Lawrence Iroquois were defeated. A corollary of this interpretation suggests that the Huron west of the Trent River axis were not forced to move northward by Five Nation Iroquois until after the late prehistoric Parsons and Black Creek sites were occupied. That is, after the St. Lawrence Iroquois had ceased to exist, apart from the remnants who remained until circa 1580 on the St. Lawrence River east of Hochelaga where they met Cartier and the Frenchmen who followed him in the 16th century. Then they too succumbed to many pressures including the Five Nation Iroquois, the Huron, and European disease.

At present the hypothesis which suggests that hostilities with the Huron were, in part, responsible for the elimination of the St. Lawrence Iroquois in eastern Ontario, and later on the St. Lawrence River in southern Quebec circa 1580, has been neither refuted nor improved upon. The

data set out here supports a conclusion that this hypothesis may be extended to explain, in part, the disappearance of the St. Lawrence Iroquois in Jefferson County, New York.

Acknowledgements

I am deeply indebted to the Reverend Earl Sidler for having shared unstintingly with me over the last twenty years his detailed knowledge of Jefferson County archaeology. My perceptions of Jefferson County have been greatly enhanced by his having made available to me the unrestricted use of his library, the results of his fieldwork and the long-lost collections he has painstakingly brought to light. I thank him too for the private tours he con-ducted over the countryside to show me the sites. I wish to express particular thanks to Jack Carter of Clayton, New York, who for more than twenty years has shared with me his knowledge of Jefferson County archaeology, his library, and his archaeological collection. I thank his wife Helen for the gracious manner in which she always made Margaret and I welcome. I express my appreciation to Arthur Einhorn of Lowville, New York, who, while Curator, Lyons Falls Museum, obtained a number of private collections for study and for my use of Museum facilities to assist me. I thank Merill Waters (deceased) of Watertown, New York, for his having made his collection available to me for study. I appreciate the assistance provided by the Jefferson County Historical Society by making their library and collections available to me from time to time over a very long period, since 1949, and more recently the courtesies ex-tended by Margaret Shaeffer, Director of the Society Museum, Laura L. Scharer, Registrar Researcher and Elaine Norton, Museum Secretary. I thank Carol Johnson for having typed and proof-read this and other works.

References Cited

Anonymous n.d.

Mandeville. Unpublished paper on a Iro quois site on the Richelieu River.

Beauchamp, William M.

1886 The Aborigines: Traces of a People Long Since Departed. Transactions of the Jefferson County Historical Society at Watertown, New' York, 1886-1887.

1889 The Origin and Early Life of the New York Iroquois. *Transactions of the Oneida Historical Society at Utica*, 1887-1889.

1892 The Iroquois Trail or Foot-Prints of the Six Nations in Customs, Traditions, and History. H.C. Beauchamp, Fayetteville, New York. 1894 The Origin of the Iroquois. American Antiquarian and Oriental Journal 16(2).

1898 Earthenware of the New York Aborigines.

New York State Museum Bulletin No. 22.

1900 Aboriginal Occupation of New York. New York State Museum Bulletin No. 32.

1902 Horn and Bone Implements of the New York Indians. New York State Museum Bulletin No. 50.

Biggar, Henry P. (editor)

1924 Voyages of Jacques Cartier. Public Archives of Canada Publication 11. Ottawa.

Boyle, David

Pottery. Fourth Annual Report of the Canadian Institute, (Session of 1890-91).
 An Appendix to the Report of the Minister of Education, Ontario. Toronto.

1906 Notes on Some Specimens. Annual Archaeological Report Ontario for 1905. Appendix to the Report of the Minister of Education. Toronto.

Burger, Marjorie K., and Peter P. Pratt

1973 SUNY-Oswego Excavations in Ontario Relating to the Disappearance of the St. Lawrence Iroquois. Eastern States Archaeological Federation, Bulletin No. 32.

Cline, M.G., and R.L. Marshall

1977 Soils of New York Landscapes. *Physical Sciences, Agronomy 6, Bulletin 119.* New York State College of Agriculture and Life Sciences, Cornell University.

Dawson, Sir John William

1860 Notes on Aboriginal Antiquities Recently Discovered in the Island of Montreal. Canadian Naturalist Geologist and Proceedings of the Natural History Society of Montreal (volume 5). Reprinted in Cartier's Hochelaga and the Dawson Site, by James F. Pendergast and Bruce G. Trigger, McGill-Queens University Press, 1972.

Additional Notes on the Aboriginal Antiquities found at Montreal. Canadian Naturalist and Geologist and Proceedings of the Natural History Society of Montreal (volume 6). Reprinted in Cartier's Hochelaga and the Dawson Site, by James F. Pendergast and Bruce G. Trigger, McGill-Queens University Press, 1972.

Donaldson, William S.

1958 Research Guide to Pottery Sequences in Ontario. Research Guide No. 2, Publication No. 5, Ontario Archaeological Society.

Emerson, Edgar C.

Our County and its People: A Descriptive Work on Jefferson County, New York. Boston History Company. Boston.

Emerson, J. Norman

1954 The Archaeology of the Ontario Iroquois. Unpublished PhD dissertation, Department of Anthropology, University of Chicago, Chicago, Illinois.

1966 The Payne Site: An Iroquoian Manifestation in Prince Edward County, Ontario. National Museum of Canada Bulletin No. 206, Contributions to Anthropology. 1963-64, Part 1

1968 Understanding Iroquois Pottery in Ontario: A Rethinking. Special publication of the Ontario Archaeological Society. Toronto.

Finlayson, William D.

1985 The 1975 and 1978 Rescue Excavations at the Draper Site: Introduction and Settlement Patterns. National Museum of Man, Mercury Series, Archaeological Survey of Canada Paper No. 130.

Funk, Robert E.

An Archaeologist for all Seasons: A Biographical Sketch of William A. Ritchie. Current Perspectives in Northeastern Archaeology (Robert E. Funk and Charles F. Hayes III, editors). Researches and Transactions of New York State Archaeological Association, 17(I).

Girouard, Laurent

1975 Station 2 Point-aux-buissons. Les cahiers du patrimoine 2, Ministère des Affaires culturelles. Quebec.

Guest, W.E.

1856 Ancient Indian Remains, Near Prescott, C.W. Smithsonian Institution, Annual Report, 1856.

Harrington, M. Raymond

1922 Prehistoric Iroquois Sites in Northern New York. New York State Museum Bulletin Nos. 235, 236. The Archaeological History of New York, Part 1 (Arthur C. Parker, editor).

n.d. Manuscript report to J.W. Putnam regarding excavations in Jefferson County by the Peabody Museum, Cambridge, Massachusetts, in 1906. On file at the Peabody Museum, Cambridge, Massachusetts.

Hough, Franklin B.

1850 Notice of Several Ancient Remains of Art in Jefferson and St. Lawrence Counties. Documents of the Senate of the State of New York, Seventy-third Session (volume 2, document No. 75). Albany.

1851 Notices of Ancient Remains of Art in Jefferson and St. Lawrence Counties. Documents of the Senate of the State of New York, Seventy fourth Session (volume 2, document No. 30). Albany.

1853 A History of St. Lawrence and Franklin Counties, New York from the Earliest Period to the Present Time. Little & Co. Albany. 1854 History of Jefferson County in the State of New York from the Earliest Period to the Present Time. Joel Munsell, Albany. Sterling and Ridell. Watertown.

Laidlaw, George E.

 Balsam Lake. Fourth Annual Report of the Canadian Institute, (Session of 1890-91).
 An Appendix to the Report of the Minister of Education, Ontario. Toronto.

1913 Ontario Effigy Pipes in Stone. Annual Archaeological Report 1913. Minister of Education, Ontario. Toronto.

1914 Ontario Effigy Pipes in Stone. Annual Archaeological Report 1914, Minister of Education, Ontario. Toronto.

1916 Ontario Effigy Pipes in Stone. *Annual Archaeological Report 1916*. Minister of Education, Ontario. Toronto.

Latta, Martha A.

1976 The Iroquoian Cultures of Huronia: A Study of Acculturation through Archaeology. Unpublished PhD dissertation, Department of Anthropology, University of Toronto, Toronto, Ontario.

Lenig, Donald

The Oak Hill Horizon and Its Relation to the Development of Five Nations Iroquois Culture. Researches and Transactions of The New York State Archaeological Association.

MacNeish, Richard S.

1952 Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory. National Museum of Canada Bulletin No. 124.

Mathews, Zena Pearlstone

1976 Huron Pipes and Iroquoian Shamanism. *Man in the Northeast* 12:15-31.

1980 Of Man and Beast: The Chronology of Effigy Pipes Among Ontario Iroquoians. Ethnohistory 27(4).

1981a Janus and Other Multiple-Image Iroquoian Pipes. *Ontario Archaeology* 35:3-22.

198lb The Identification of Animals on Ontario Iroquoian Pipes. *Canadian Journal of Archaeology* 5:3148.

Nasmith, Carol Louise

1981 The Kirche Site: A Late Prehistoric Huron Village in the Upper Trent Valley. Unpublished MA thesis, McMaster University, Hamilton, Ontario.

Noble, William C.

Archaeology 1968 Iroquois and the Development of Iroquois Social Organization (1000-1650 A.D.): A Study in Culture Change based on Archaeology, Ethnohistory and Ethnology. Unpublished dissertation, Department Archaeology, University of Calgary, Calgary, Alberta.

1979 Ontario Iroquois Effigy Pipes. Canadian Journal of Archaeology 3:69-90.

Orr, Rowland B.

1912 Pottery. Annual Archaeological Report 1912, Minister of Education, Ontario. Toronto.

Parker, Arthur C.

The Archaeological History of New York.
 New York State Museum Bulletin Nos. 237,
 238. In The Archaeological History of New York, Part 2 (Arthur C. Parker, editor).

Pearce, Robert J.

1978 A Preliminary Report on the Draper Site Rim Sherds. Museum of Indian Archaeology at The University of Western Ontario, London, Ontario, Research Report No. 1.

Pendergast, James F.

1963 The Payne Site. *National Museum of Canada, Bulletin No.* 193.

1964 The Waupoos Site — An Iroquois Component in Prince Edward County, Ontario.

Pennsylvania Archaeologist 34(2).

1966 Three Prehistoric Iroquois Components in Eastern Ontario: The Salem, Grays Creek and Beckstead Sites. National Museum of Canada Bulletin No. 208.

1972 The Lite Site: An Early Southern Division Huron Site Near Belleville, Ontario. Ontario Archaeology 17:24-61.

1975 An In-Situ Hypothesis to Explain the Origin of the St. Lawrence Iroquoians. *Ontario Archaeology* 25:47-55.

1981 The Glenbrook Village Site: A Late St. Lawrence Iroquoian Component in Glengarry County, Ontario. National Museum of Man, Mercury Series, Archaeological Survey of Canada Paper No. 100.

n.d. The Origin of the St. Lawrence Iroquois Rim Sherds at the Draper Site. Report on file at the Museum of Indian Archaeology at the University of Western Ontario. London.

Pendergast, James F., and Bruce G. Trigger

1972 Cartier's Hochelaga and the Dawson Site. McGill-Queens University Press. Montreal and London.

Perkins, G.H.

1909 Aboriginal Remains in Champlain Valley. American Anthropologist II(4).

Ramsden, Peter G.

1977 The Benson Site — 1977: A Preliminary Report to the Canada Council. Copy on file at McMaster University, Hamilton, Ontario.

Ridley, Frank

The Huron and Lalonde Occupations of Ontario. *American Antiquity* 17(3): 197-210.

Rutsch, Edward S.

1973 Smoking Technology of the Aborigines of the Iroquois Area of New York State. Farleigh Dickinson University Press. Rutherford, Madison, Teaneck.

Sidler, Earl R. III

1971 The Durham Site: A Prehistoric Component in Jefferson County, New York. Unpublished MA thesis, Department of Anthropology, State University of New York, Buffalo, New York.

Skinner, Alanson

1921 Notes on the Iroquois. Indian Notes and Monographs. Museum of the American Indian, Heye Foundation. New York.

Squire, Ephriam G.

1851a Aboriginal Monuments of the State of New York Comprising the Results of Original Surveys and Explorations with an Illustrative Appendix. Smithsonian Contributions to Knowledge (volume 2).

1851 b Antiquities of the State of New York Being the Result of Extensive Original Survey and Explorations with a Supplement on the Antiquities of the West. Geo. H. Derby & Co. Buffalo.

Stewart, David P.

1958 The Pleistocene Geology of the Watertown and Sackets Harbour Quadrangles, New York. New York State Museum and Science Service Bulletin No. 369.

Taylor, John

1850 Journal of the Reverend John Taylor's Missionary Tour through the Mohawk & Black River Countries in 1802. *Documents Relative to the Colonial History of the State of New York* (volume I) (Edmund B. O'Callaghan, editor). Weed, Parsons and Co. Albany.

Tooker, Elisabeth

1964 An Ethnography of the Huron Indians, 1615-1649. Bureau of American Ethnology Bulletin 190.

Tuck, James A.

1969 Iroquois Cultural Developments in Central New York. Unpublished PhD dissertation, Department of Anthropology, Syracuse University, Syracuse, New York.

1971 Onondaga Iroquois Prehistory: A Study in Settlement Archaeology. Syracuse University Press. Syracuse, New York.

Weber, Joann Cynthia

1970 Types and Attributes in the Study of Iroquois Pipes. Unpublished PhD dissertation,
Department of Anthropology, Harvard
University, Cambridge, Massachusetts.

Weber, Robert A.

1968 An Archaeological Survey in Jefferson County, New York. Report on file at the Department of Anthropology, State University of New York, Buffalo.

White, Marian E.

n.d.a Current Work on Iroquois Archaeology in Northern New York. Paper presented to the New York State Archaeological Association Annual Meeting 1969. n.d.b The Nature of Warfare and Confederacies Among Northern Iroquoians. Paper on file at the Department of Anthropology, State University of New York at Buffalo.

Wintemberg, W.J.

1936 Roebuck Prehistoric Village Site, Grenville County, Ontario. National Museum of Canada Bulletin No. 83.

1946 The Sidey-Mackay Village Site. *American Antiquity* 11(3): 154-182.

Woodworth, Henry

1895 Indian Villages in Jefferson County. In The Jefferson County Historical Society, Water-town, N.Y. (volume 3). F.M. Herrick & Co. Watertown.

Wright, J.V.

1966 The Ontario Iroquois Tradition, *National Museum Bulletin* No. 210.

Wrong, George M. (editor)

1939 The Long Journey to the Country of the Huron (by Gabriel Sagard). The Champlain Society. Toronto.

Box 314 Merrickville, Ontario KOG 1N0