

THE WABINOSH RIVER SITE
AND THE LAUREL TRADITION IN NORTHWESTERN ONTARIO

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ABSTRACT

A review of the radiocarbon dates from Northern Ontario and adjacent regions in Manitoba and Minnesota suggests a late northern intrusion of the Laurel Tradition, (ca. 200 B.C.), in contrast to earlier interpretations of independent development commencing about 700 B.C. Based on recoveries from the multi-phase Wabinoash River Laurel Tradition site on Lake Nipigon, a small group composed of residual Archaic peoples and new peoples from the south can be identified as the first carriers of the Laurel Tradition. This early phase, ca. 200 B.C. to A.D. 500, is characterized by pseudo-scallop shell ceramics and sparse Archaic-like lithics. It was followed by a late phase which can be divided into two: (1) an era of expanded population marked by diverse Laurel ceramics, ca. A.D. 500 to A.D. 900, and (2) an era of reduced population and coalescence with a later Terminal Woodland period Blackduck Tradition, ca. A.D. 900 to A.D. 1200.

The Blackduck Tradition carriers are seen as a new, but related, southern population who rapidly spread across Northwestern Ontario coincident with climatic amelioration ca. A.D. 700 to A.D. 900. They are seen as a distinct group of Algonkian-speakers known in historic times as Northern Ojibwa.

INTRODUCTION

The Wabinoash River site (EaJf-1) is situated on the west shore of the most northerly of the Upper Great Lakes, Lake Nipigon. The site was discovered in 1967, excavated in 1968, and revisited in 1969 and 1978 (Dawson 1976a; Filteau 1978). Fig. 1 shows the location of the Wabinoash River site and other components referred to in the report.

The site is located about one mile up the Wabinoash River on the abruptly sloping north bank at the base of a series of major rapids. A deep pool of turbulent water, which abounds with fish, lies immediately in front of the site (Fig. 2). A stand of Balm-of-Gilead (*Populus candicans*) covered the Lower Terrace. Like sites throughout the Boreal Forest, the location has a high food potential (Dawson 1976a, 1976b, 1977).

Details of the excavations and a description of the artifacts recovered are provided. Ceramic and lithic classifications are after Dawson (1973, 1974, 1976b, 1977) and Wright (1967). Recoveries are compared to other sites in northwestern Ontario and radiocarbon dates are reviewed.

EXCAVATION

The site was laid out in a five-foot grid pattern along a north-south base line and a contour map was made. A dozen five-foot squares and a hundred test pits were opened (Fig. 3) and profiles and floor plans were recorded. The comparatively steep sloping bank up to 40 feet above the river was designated the Lower Terrace. Here, two major excavations were opened, one along the 15-foot contour designated Area A, and one along the 25-foot contour

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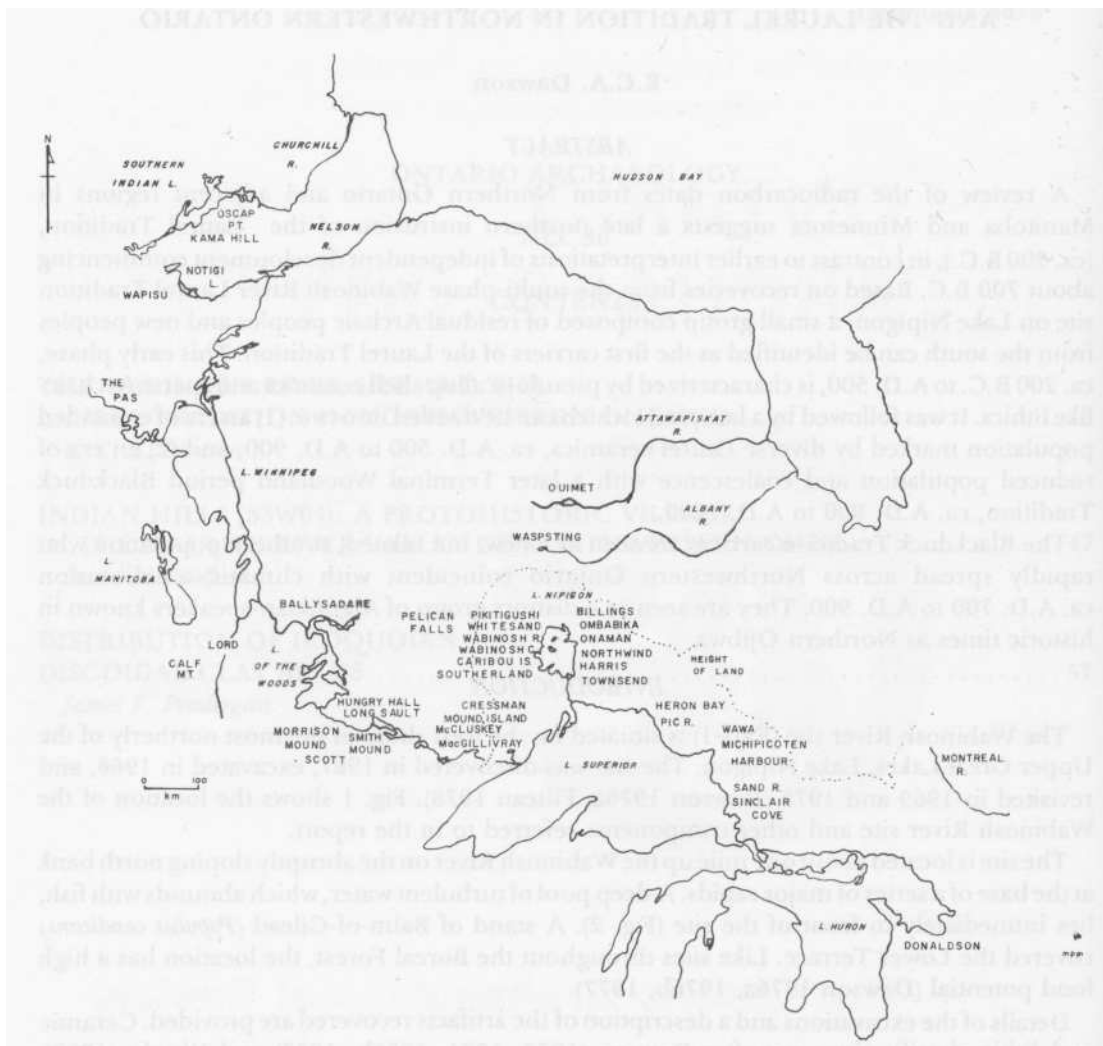


Fig. 1 Area map showing sites referred to in text

designated Area B. In the absence of clear evidence of strata, the terrace was excavated in arbitrary two-inch levels. Above the 40-foot contour, the land slope is more gentle; it was designated the Upper Terrace and excavated as a single unit, the depth of the deposit extending only two or three inches down from the forest duff.

On the surface there were remnants of a logging camp circa 1920. From the excavation, 33 historic items were recovered. A tiny blue seed bead and two fragments of heavy green glass which had been retouched indicates some use of the site by indigenous peoples in the late historic period 1821-1890. Such activities may have been associated with late Terminal Woodland period sites at the mouth of the river (Dawson 1976a: 105-110).



Fig. 2 Wabinoash River site viewed to the northwest from Wabinoash River

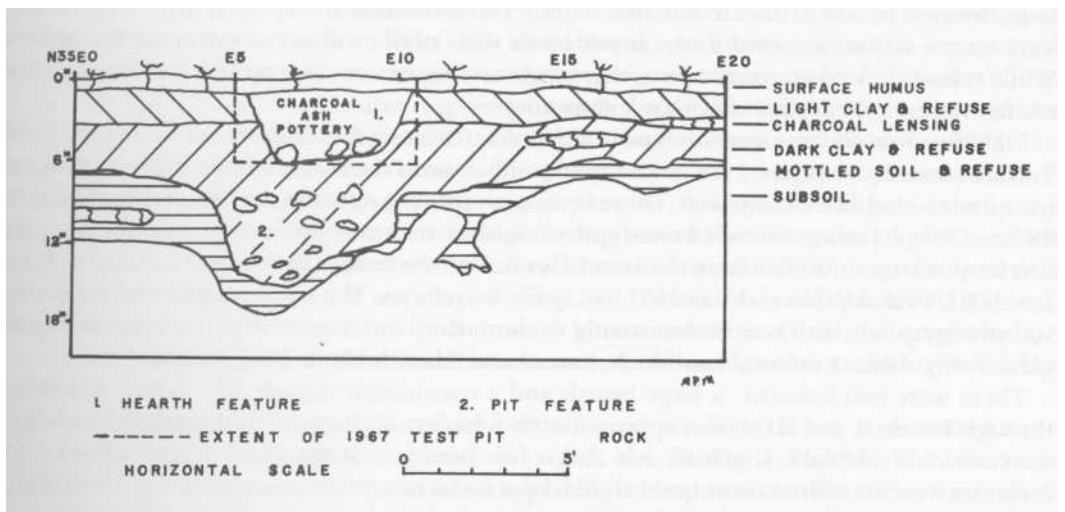


Fig. 4 Profile of hearth and roasting pit feature, lower terrace, area B

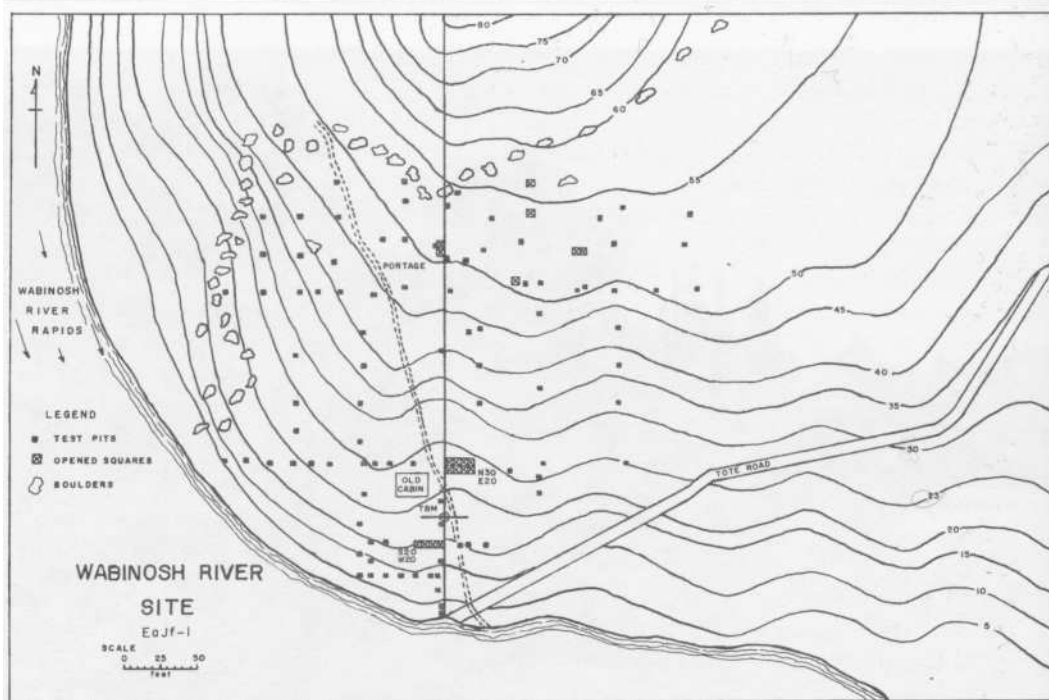


Fig. 3 Contour map of site

Four five-foot squares were opened along the 15-foot contour of the Lower Terrace (Area A). Here the bank slants at about 30°. The area was cleared of light bush and the squares were taken down to a depth of twenty inches. There were no prehistoric recoveries from the first level and only sparse recoveries from the second. The recoveries were primarily from the third, fourth and fifth levels, but even here the concentration was scattered and thin. Below Level V, large decayed root intrusions occurred together with sizeable clumps of humus and subsoil. Very sparse refuse occurred in the lower levels with sterile soil occurring at twenty inches. While refuse showed concentrations, there were no features or clear evidence of lensing. The configuration appears to reflect bank slumping.

Eight five-foot squares were opened in a cleared area along the 25-foot contour of the Lower Terrace (Area B). From here the land sloped gently toward the river and looking southeast the river mouth could be clearly seen. These squares were taken down to sterile subsoil at fourteen inches. One pit feature extended to a depth of eighteen inches. A few recoveries came from the first level, a larger number from the second level, with the bulk of the recoveries coming from Levels III, IV and V. Levels VI and VII had sparse recoveries. The levels roughly correspond to soil stratigraphy which was inconsistently evident. Recoveries tended to be concentrated in identifiably distinct cultural traditions, Laurel and Blackduck, in Levels III and IV.

There were two features: a large hearth and a roasting pit (Fig. 4). The hearth extended through Levels II and III. It was approximately four feet in diameter and marked by a heavy concentration of black charcoal, ash and a few boulders at the bottom level. Blackduck ceramics were recovered from Level II. Blackduck and Laurel ceramics occurred in Level III. The second feature, marked by fire-fractured rocks and ash flecks, occurred immediately below. In Level IV, large fire-fractured rock (4" to 6" wide) occurred in association with Laurel ceramics. Level V was the same except the rocks were smaller (3" to 4" in size). Three copper artifacts, one an Archaic type projectile point (Fig. 7, No. 22) and a notched projectile

point (Fig. 7, No. 11) were recovered from this level. In Level VI the fire-fractured rocks were smaller (2" to 3" in size). A copper knife and a barb (Fig. 7, No. 24; Fig. 9, No. 40) were recovered from this level. Small fire-fractured rocks continued in Level VII with flecks of burnt bone. Level VIII consisted of a mixture of large and small fire-fractured rock. Level IX was mottled subsoil. From Level IV to the base at Level VIII, the presence of varying-sized fire-fractured rocks, charcoal, bone flecks and the gradual slope of the outline indicates a roasting pit. Recoveries suggest it was from the Laurel occupation.

Seven five-foot squares were opened in the gradual sloping Upper Terrace. Shallow depressions associated with ancient tree falls and cultural deposits were scattered across the terrace. Hearths occurred below an inch or so of forest duff. They were marked by a few small boulders with no discernable orientation. Culture refuse, fire-fractured stone, chipping debitage and ceramics surrounded the hearths, while the interiors had virtually no cultural refuse and only sparse ash and charcoal traces. The features were small, one to two feet in diameter, extending down only two to three inches. All recoveries pertained to the Initial Woodland Period.

ANALYSIS

Table 1 shows the classes of recoveries. For those specialists wishing more detailed information, the original site report filed with the National Museum of Man, Archaeological Survey of Canada in 1978 contains expanded data on the recoveries.

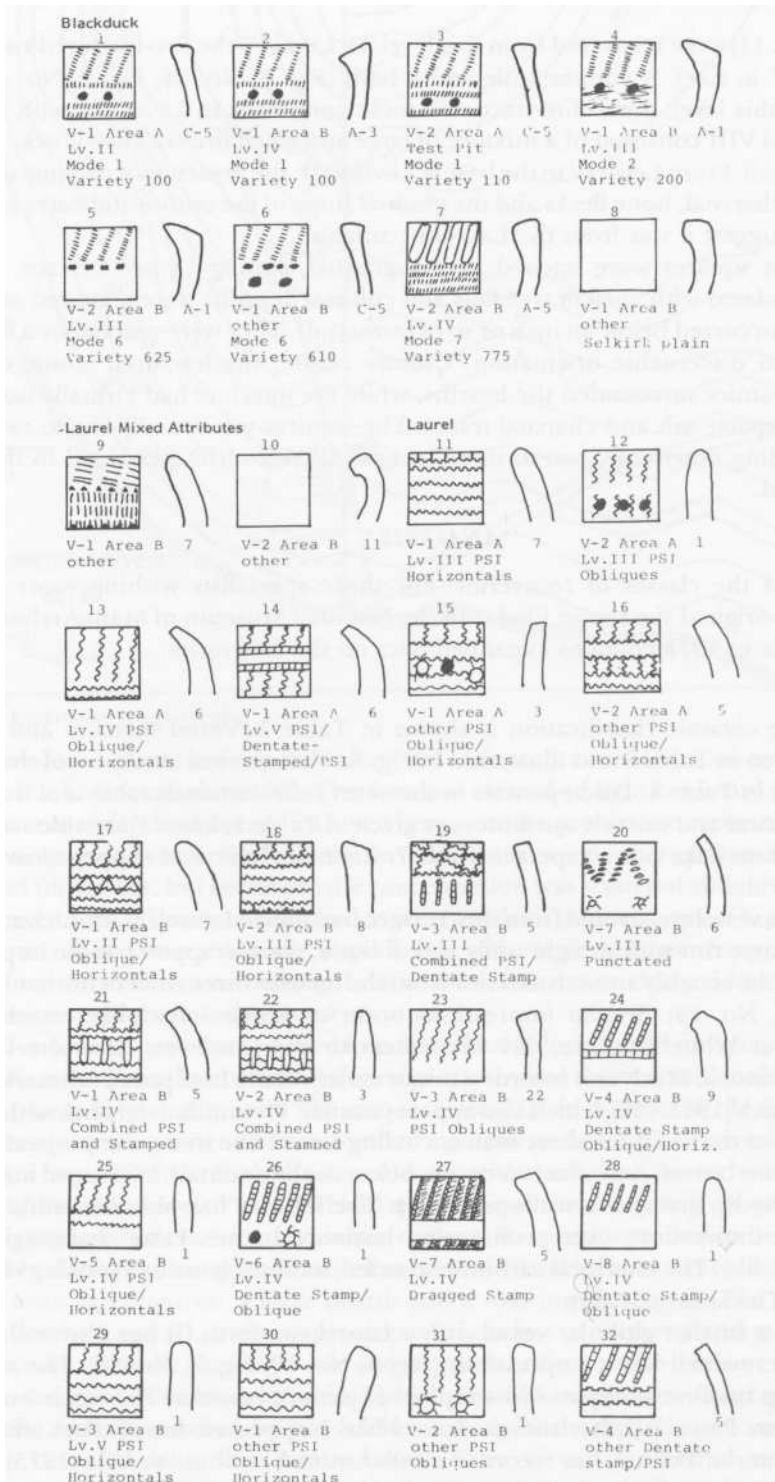
Lower Terrace

Lower Terrace ceramic classification is shown in Table 2. Vessel metrical and discrete attributes are given in Table 3 and illustrated in Fig. 5. The metrical attributes of the general tool kit are given in Table 4. Discrepancies in the court reflect unanalyzable tool fragments. End scraper metrical and discrete attributes are given in Table 5, linear flake side scrapers in Table 6 and random flake side scrapers in Table 7. Ceramic, lithic and copper recoveries are shown in Figs. 6 and 7.

Two significant vessels recovered from this Terrace had mixed Laurel/Blackduck attributes. One is heavy, coarse rim with straight walls and oblique, cord-wrapped paddle impressions extending down the roughly smooth exterior from the lip over three rows of horizontals (Fig. 5, No. 9; Fig. 7, No. 29). Similar impressions occur on some Selkirk-like vessels on the McCluskey site at Whitefish Lake, 210 kilometers to the southwest (Dawson 1974). In southeastern Manitoba, MacNeish records a minor variety of the Lockport Cordmarked ware, Cord-wrapped Stick (1958:155), which also appears similar. Five millimeters below the lip and superimposed over the obliques, there is an encircling row of fine triangular punctates which do not form interior bosses. A similar row occurs below the horizontals. Wide cord impression also occurs on the lip giving it a scalloped effect. The interior has oblique bands of cord-wrapped paddle impressions over pronounced horizontal striae. Paste characteristics are coarse Blackduck-like. The interior is carbon-encrusted, indicating use as a cooking vessel. Lip form is Laurel. Thickness is 7 mm.

The second is a smaller globular vessel with a Laurel rim form. It has a smoothed zone below the lip over twined-fabric impressions (Fig. 5, No. 10; Fig. 7, No. 30). The interior is plain while the lip has fine, oblique cord-wrapped object impressions. The rim is 7 mm thick and the body 6mm. Paste characteristics are Laurel-like. It appears to have Selkirk affinities. In Northeastern Ontario, Polluck has recorded similar mixed attribute vessels (1975).

One Laurel Plain vessel (Fig. 5, No. 20; Fig. 6, No. 31), actually had a zigzag pattern of incisions or punctates somewhat like the minor variety of the southeastern Manitoba Nutimik



Rim exteriors to the left. PSI - Pseudo-scallop shell impressed. Numbers below rim outline refer to rim form after Wright 1967 and Dawson 1974.

Fig. 5 Lower terrace vessel rim decorations and profiles

TABLE 1
WABINOSH RIVER SITE CLASSES OF RECOVERIES BY PROVENIENCE

	LOWER TERRACE										UPPER TERRACE		TOTALS		
	AREA B - Level							AREA A	TOTAL		f	%	f	%	
	I	II	III	IV	V	VI	VII		Other	f					%
CERAMICS															
<i>Rim Sherds</i>															
Laurel - Traditional	-	2	8	8	4	-	-	5	9	36	0.8	49	2.4	85	1.2
- Mixed	-	-	-	-	-	-	-	2	-	2	x	8	0.4	10	0.1
Blackduck	-	-	8	9	-	-	-	1	2	20	0.1	-	-	20	0.3
Selkirk	-	-	-	-	-	-	-	1	-	1	x	-	-	1	x
Juvenile	-	-	-	1	1	-	-	-	-	2	x	6	0.3	8	x
<i>Subtotal Rim Sherds</i>	0	2	16	18	5	0	0	9	11	61	1.3	63	3.1	124	1.8
<i>Body Sherds</i>															
Decorated - Laurel	-	5	16	49	41	6	-	22	51	190	4.1	144	7.0	334	5.0
- Blackduck	1	-	4	9	-	-	-	9	1	24	0.5	-	-	24	0.4
Undecorated	3	63	55	118	61	8	-	73	134	515	11.0	258	12.5	773	11.4
<i>Subtotal Body Sherds</i>	4	68	75	176	102	14	0	104	186	729	15.6	402	19.5	1131	16.8
<i>Sherdlets</i>	4	26	105	174	129	12	-	15	63	528	11.3	463	22.5	991	14.7
<i>Ceramic Waste</i>	-	-	-	2	3	1	-	-	3	9	x	8	0.4	17	0.2
SUBTOTAL CERAMICS	8	96	196	370	239	27	0	128	263	1327	28.2	936	45.5	2263	33.5
LITHICS															
<i>Chipped Stone</i>															
Scrapers - Side: random	-	3	5	4	7	-	-	3	3	25	0.5	21	1.0	46	0.7
linear	-	1	4	-	8	-	-	1	3	17	0.3	8	0.4	25	0.4
End	-	1	-	6	4	1	-	4	1	17	0.3	16	0.8	33	0.4
Large Plano	-	2	-	-	1	-	-	-	1	4	x	-	-	4	x
<i>Subtotal Scrapers</i>	0	7	9	10	20	1	0	8	8	63	1.3	45	2.2	108	1.6
Projectile Points	-	1	4	-	1	-	-	1	3	10	0.2	4	0.2	14	0.2
Bifaces	-	1	1	-	-	-	-	-	-	2	x	2	x	4	x
Wedges	-	2	-	-	1	-	-	-	-	3	x	2	x	5	x
Perforators	-	-	1	-	1	-	-	-	1	3	x	-	-	3	x
Knives	-	-	-	-	-	-	-	-	-	-	-	2	x	2	x
Unifaces	-	-	-	1	-	-	-	-	-	1	x	-	-	1	x
<i>Subtotal</i>	0	11	15	11	23	1	0	9	12	82	1.7	55	2.7	137	2.0
<i>Chipping Debitage</i>															
Cores	-	2	4	4	6	1	-	-	1	18	0.3	3	0.1	21	0.3
Flakes	1	15	36	54	25	3	4	26	75	239	5.1	95	4.6	334	5.0
Micro Flakes	-	64	143	196	93	7	8	18	59	588	12.6	547	26.6	1135	16.8
<i>Subtotal Debitage</i>	1	81	183	254	124	11	12	44	135	845	18.0	645	31.3	1490	22.1
<i>Subtotal Chipped Stone</i>	1	92	198	265	147	12	12	53	147	927	19.8	700	34.0	1627	24.1
<i>Rough Stone</i>															
Hammerstones	-	-	-	7	8	-	-	5	2	22	0.5	3	0.1	25	0.4
Anvil Stones	-	-	1	-	-	-	-	-	-	1	x	1	x	2	x
Paintstones	-	-	-	2	4	3	-	-	-	9	0.2	5	0.2	14	0.2
Abraders	-	-	-	-	-	1	-	1	1	3	x	-	-	3	x
Polished Stone	-	-	-	1	-	-	-	-	-	1	x	2	x	3	x
<i>Subtotal Rough Stone</i>	0	0	1	10	12	4	0	6	3	36	0.8	11	0.5	47	0.6
SUBTOTAL LITHICS	1	92	199	275	159	16	12	59	150	963	20.6	711	34.5	1674	24.8
COPPER															
Awls	-	-	1	-	-	-	-	-	1	2	x	1	x	3	x
Projectile Point	-	-	-	-	1	-	-	-	-	1	x	-	-	1	x
Beads	-	-	-	-	1	-	-	-	-	1	x	-	-	1	x
Knife	-	-	-	-	-	1	-	-	-	1	x	-	-	1	x
Barb	-	-	-	-	-	1	-	-	-	1	x	-	-	1	x
Coil	-	-	-	-	1	-	-	-	-	1	x	-	-	1	x
Fragments	-	-	-	2	2	-	-	-	1	5	0.1	1	x	6	x
SUBTOTAL COPPER	0	0	1	2	5	2	0	0	2	12	0.2	2	x	14	0.2
BONE TOOLS															
	-	-	-	1	-	-	-	-	-	1	x	-	-	1	x
FAUNAL REFUSE															
	21	172	528	1172	108	19	-	100	244	2374	50.7	410	19.9	2784	41.3
TOTAL RECOVERIES	31	360	934	1820	511	64	12	287	659	4677	99.7	2059	99.8	6736	99.8

TABLE 2
LOWER TERRACE CERAMIC CLASSIFICATION

	AREA B - Level						Test Pits & Balks	AREA A	TOTAL f	TOTAL %
	I	II	III	IV	V	VI				
RIM SHERDS										
<i>LAUREL TRADITIONAL</i>										
<i>Pseudo-Scallop Shell Impressed</i>										
Obliques over Horizontals	-	2	2	1	1	-	1	3	10	
Obliques	-	-	2	1	1	-	2	1	7	
Horizontals	-	-	-	-	-	-	-	1	1	
Undetermined, damaged	-	-	-	-	1	-	-	3	4	
<i>Subtotal Pseudo-Scallop Shell</i>	<i>0</i>	<i>2</i>	<i>4</i>	<i>2</i>	<i>3</i>	<i>0</i>	<i>3</i>	<i>8</i>	<i>22</i>	<i>1.6</i>
<i>Dentate</i>										
Obliques over Horizontals	-	-	-	1	-	-	-	-	1	
Obliques	-	-	-	1	-	-	-	-	1	
Damaged	-	-	-	1	-	-	-	-	1	
<i>Subtotal Dentate</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>3</i>	<i>0.2</i>
Dragged Stamp	-	-	1	1	-	-	-	-	2	
Plain	-	-	2	-	1	-	1	-	4	
Combined	-	-	1	2	-	-	1	1	5	
SUBTOTAL LAUREL TRADITIONAL	0	2	8	8	4	0	5	9	36	2.7
<i>LAUREL MIXED</i>										
Plain	-	-	-	-	-	-	1	-	1	
Cord-Impressed	-	-	-	-	-	-	1	-	1	
SUBTOTAL LAUREL MIXED	0	0	0	0	0	0	2	0	2	
TOTAL LAUREL	0	2	8	8	4	0	7	9	38	2.9
<i>BLACKDUCK</i>										
Mode 1	-	-	-	4	-	-	-	2	6	
Mode 2	-	-	3	-	-	-	-	-	3	
Mode 6	-	-	5	-	-	-	1	-	6	
Mode 7	-	-	-	5	-	-	-	-	5	
SUBTOTAL BLACKDUCK	0	0	8	9	0	0	1	2	20	1.5
<i>SELKIRK</i>	-	-	-	-	-	-	1	-	1	
<i>JUVENILE</i>	-	-	-	1	1	-	-	-	2	
TOTAL RIM SHERDS	0	2	16	18	5	0	9	11	61	4.6
BODY SHERDS										
<i>DECORATED</i>										
<i>Laurel</i>										
Pseudo-Scallop Shell Impressed	-	2	7	24	22	2	11	16	84	
Dentate Stamp	-	2	4	15	10	2	6	6	45	
Dragged Stamp	-	1	2	8	8	-	4	17	40	
Linear Punctate	-	-	3	2	1	1	1	10	18	
Incised	-	-	-	-	-	1	-	2	3	
<i>Subtotal Laurel</i>	<i>0</i>	<i>5</i>	<i>16</i>	<i>49</i>	<i>41</i>	<i>6</i>	<i>22</i>	<i>51</i>	<i>190</i>	<i>14.3</i>
<i>Blackduck</i>										
Cord-Wrapped Impressed	1	-	4	9	-	-	9	1	24	
SUBTOTAL DECORATED	1	5	20	58	41	6	31	52	274	16.7
<i>UNDECORATED</i>										
Smoothed	1	13	20	67	45	5	47	112	310	
Smooth or Roughened Cord	-	38	26	39	14	3	6	-	126	
Cord-Malleated	-	3	2	1	1	-	13	16	36	
Fabric-Impressed	2	9	7	11	-	-	7	6	42	
Basal	-	-	-	-	1	-	-	-	1	
SUBTOTAL UNDECORATED	3	63	55	118	61	8	73	134	515	38.9
TOTAL BODY SHERDS	4	68	75	176	102	14	104	186	729	54.9
SHERDLETS	4	26	105	174	129	12	15	63	528	39.8
CERAMIC WASTE	-	-	-	2	3	1	-	3	9	0.7
TOTAL CERAMICS	8	96	196	370	239	27	128	263	1327	100.0

Note: Blackduck rims from Levels III and IV are from two different vessels in each level.

TABLE 3
LOWER TERRACE VESSEL METRICAL AND DISCRETE ATTRIBUTES

VARIETY/PROVENIENCE	LIP THICKNESS	THICKNESS 25mm BELOW LIP	UPPER BAND WIDTH	DECORATED LIP	DECORATED INTERIOR	BOSSES	EXTERIOR PUNCTATES			INTERIOR PUNCTATES			FIGURE				
							distance below lip	distance apart	vertical length	distance below lip	distance apart	vertical length					
LAUREL																	
<i>PSI/Obliques over Horizontals (10)</i>																	
B-II	V-1	5.0	6.8	11.3													
	V-2	4.2	5.2	11.0										6, #18			
B-III	V-1	4.4	6.8	11.1										6, #28			
	V-2	7.7	5.7	3.3										6, #29			
B-IV	V-5	3.6	D	11.2													
B-V	V-3	5.6	7.1	9.0										7, #10			
B-Other	V-1	6.0	5.0	5.1										7, #25			
A-IV	V-1	3.2	7.1	15.4										6, #4			
A-0	V-1	4.6	6.0	8.0		e	9.5	D	4.3	x	---	13.0	14.0	4.2	x	---	6, #6
	V-2	4.0	7.0	7.0													6, #7
<i>PSI/Obliques (6)</i>																	
B-III	V-4	4.6	D	10.1	x	e						11.8	D	3.8	x	---	
B-IV	V-3	5.4	4.0	15.6	x							15.0	15.6	1.9	x	---	
B-V	V-1	3.1	6.4*		x												
B-Other	V-2	6.0	D	11.0													
	V-3	5.5	7.9	15.0	x	e						18.0	9.7	D	x	---	7, #26
A-III	V-2	5.0	D	5.5		i	9.1	5.4	3.0	x	---						6, #3
<i>PSI/Horizontals (1)</i>																	
A-III	V-1	4.0	7.2	-													6, #2
DENTATE																	
<i>Obliques over Horizontals (1)</i>																	
B-IV	V-4	4.4	7.0	12.0													7, #4
<i>Obliques (2)</i>																	
B-IV	V-6	3.6	D	9.6		e	13.5	D	3.1	x	---	13.5		D	x	---	
	V-8	4.0	D	12.0													
COMBINED (5)																	
<i>PSI/DS</i>																	
B-III	V-3	4.9	7.8	11.7													6, #30
<i>PSI/Stamp</i>																	
B-IV	V-1	4.7	8.4	8.0													7, #3
	V-2	D	5.5	6.0													
<i>DS/PSI</i>																	
B-Other	V-4	4.3	5.3	16.0													7, #27
<i>PSI/DS/PSI</i>																	
A-V	V-1	4.3	7.2	11.8	x												6, #5
<i>Drooped Stamp (2)</i>																	
B-III	V-5	3.6	5.4	5.5													
B-IV	V-7	5.5	8.2	-	x	x											
<i>Plain (4)</i>																	
B-III	V-6	5.0	D	-		e						10.3	D	D			
	V-7	3.5	6.1	-		e						30.3	24.2	3.0	x	---	6, #31
B-V	V-2	5.0	D	-													
B-Other	V-5	4.8	6.0	-		i	17.4	3.9	6.5	x	---						7, #28
BLACKDUCK																	
B-III	V-1(200)	9.4	6.4	13.2	x	i	18.0	14.0	3.0	x	---						6, #32
	V-2(625)	10.0	7.0	13.1	x												6, #33
B-IV	V-1(100)	11.0	7.5	17.0	x	i	17.0	10.0	4.3	x	---						7, #1
	V-2(775)	7.0	6.5	13.1	x												7, #2
B-Other	V-1(610)	7.8	6.9	13.0	x	x	16.5	11.0	4.0								7, #31
A	V-1(100)	6.6	8.9	9.0	x	x	15.0	15.5	3.0								6, #1
	V-2(110)	9.0	-	12.7	x		18.0			x	---						
SELKIRK																	
B-Other	V-1	7.0	5.5														7, #32

KEY: A - aberrant DS - dentate stamp O - oval S - square
 C - circular e - exterior PSI - Pseudo-scallop shell impressed
 D - damaged i - interior R - rectangular V - vessel
 (775) - vessel variety

* measurement taken at less than 25 mm

TABLE 4
LOWER TERRACE GENERAL TOOL KIT METRICAL ATTRIBUTES

	LENGTH	WIDTH	THICKNESS	BASE FORM	SCRAPERS					HAMMERSTONES			FIGURE	
					Margin Retouch	Major Length	Margin Thickness	Retouch Angle±5°	Number of Scraping Edges	Weight (grams)	FACES			Secondary Use (Mano)
										1	2			
PROJECTILE POINTS														
<i>Notched</i>														
Area A	-	23.2	4.5	S	-	-	-	-	-	-	-	-	-	-
Area B, Level III	36.1	26.8	6.0	S	-	-	-	-	-	-	-	-	-	6, #35
Level V	37.8	21.8	7.9	S	-	-	-	-	-	-	-	-	-	7, #11
Other	-	25.0	7.0	S	-	-	-	-	-	-	-	-	-	10, # 4
<i>Un-Notched</i>														
Area A	28.5	21.1	3.8	S	-	-	-	-	-	-	-	-	-	6, #11
	20.2	13.1	2.3	S	-	-	-	-	-	-	-	-	-	6, #12
<i>Stemmed</i>														
Area B, Level III	20.6	13.0	4.0	S	-	-	-	-	-	-	-	-	-	6, #34
LARGE PLANO SCRAPERS														
Area A	35.0	41.0	5.5	-	R	35.0	2.0	33	1	-	-	-	-	6, #8
Area B, Level II	46.1	30.0	19.7	-	R	20.0	1.9	65	1	-	-	-	-	6, #22
Level IV	59.1	54.2	10.1	-	L&R	59.1	2.0	45	2	-	-	-	-	6, #23
Level V	54.6	32.6	8.6	-	L	48.2	3.5	52	1	-	-	-	-	7, #16
WEDGES														
Area B, Level II	19.0	19.2	4.8	-	-	-	-	-	3	-	-	-	-	6, #24
	17.0	18.2	5.5	-	-	-	-	-	3	-	-	-	-	6, #25
Level V	26.6	14.1	8.0	-	-	-	-	-	3	-	-	-	-	7, #17
PERFORATORS														
Area A	25.2	12.0	4.4	-	R	6.0	-	-	1	-	-	-	-	6, # 9
Area B, Level III	17.0	24.0	4.4	-	R	-	-	-	1	-	-	-	-	6, #38
Level V	22.0	19.0	3.5	-	L&R	7.0	-	-	2	-	-	-	-	7, #21
BIFACE TRIANGULAR														
Area B, Level II	67.7	31.0	8.9	S	L&R	-	-	-	2	-	-	-	-	6, #26
HAMMERSTONES														
<i>Linear</i>														
Area A	88.0	34.0	-	-	-	-	-	-	-	328	X	X	-	6, #17
Area B, Level IV	125.0	79.0	-	-	-	-	-	-	-	1115	X	-	X	
	122.0	64.0	-	-	-	-	-	-	-	978	-	X	X	
	104.0	45.0	-	-	-	-	-	-	-	205	X	-	-	
	56.0	41.0	-	-	-	-	-	-	-	266	X	-	-	
Level V	92.0	63.0	-	-	-	-	-	-	-	262	-	X	X	
	62.0	53.0	-	-	-	-	-	-	-	97	-	X	X	
	-	-	-	-	-	-	-	-	-	1121	-	-	X	X
Other	71.0	43.0	-	-	-	-	-	-	-	206	X	-	-	10, #14
	64.0	40.0	-	-	-	-	-	-	-	110	X	-	-	
<i>Circular</i>														
Area B, Level IV	60.0	-	-	-	-	-	-	-	-	-	-	X	X	-
Level V	29.0	70.0	-	-	-	-	-	-	-	215	-	-	X	-
	52.0	52.0	-	-	-	-	-	-	-	579	-	-	X	-
Other	46.0	-	-	-	-	-	-	-	-	82	X	-	-	10, #13
<i>Irregular</i>														
Area B, Level IV	102.0	74.0	-	-	-	-	-	-	-	775	-	X	-	-
Other	76.0	64.0	-	-	-	-	-	-	-	422	X	-	-	-

L - Left R - Right 5 - Straight

TABLE 5
LOWER TERRACE END SCRAPERS DISCRETE AND METRICAL ATTRIBUTES

FORM/PROVENIENCE	FLAKE			DISTAL DORSAL MARGIN				ANGLE range	LATERAL MARGINS RETOUCHED/UTILIZED		LATERAL JUNCTION WITH DORSAL MARGIN	
	LENGTH range	WIDTH range	THICKNESS range	LENGTH range	THICKNESS range	FORM LO RO S C			R	L		ra
TRAPEZOIDAL												
OBLONG												
Small												
Other	20.7	14.5	3.5	12.1	3.0		1	74	-	-		
f	1	1	1	1	1		1	1				
Medium Dorsal Ridged												
Level IV	26.8	27.2	7.0	25.0	4.0			82	1	1	1	
f	1	1	1	1	1			1				
Level V	25.9	32.0	6.2	32.0	5.2		1	63	1	1		
f	1	1	1	1	1			1				
Level VI	21.4	17.8	4.6	16.8	3.3		1	78	1	-		
f	1	1	1	1	1			1				
Other Areas	33.0	31.0	6.6	-	-							
f	1	1	1									
PROLATE												
Bi-parallel												
Level II	21.5	25.0	5.3	24.7	4.0		1	76	1	1	2	
f	1	1	1	1	1			1				
Level V	17.2	18.0	6.5	17.4	5.2		1	63	1	1		
f	1	1	1	1	1			1				
Other	20.0	21.0	5.1	18.0	5.0		1		1	1		
f	1	1	1	1	1							
Area A	21.2	22.7	9.5	18.2	3.5		1	48	-	1	1	
f	1	1	1	1	1							
TRIANGULAR												
Isosceles												
Level IV	21.7-28.3	14.5-20.7	4.0-5.2	16.7-20.8	4.0		1	2	74-75	1	1	2
\bar{x}	24.3	18.5	4.6	18.3					74			
f	3	3	3	3	1				3			
OBLONG												
Level IV	37.9	18.7	7.0	17.3	5.0		1	75	1	1	1	
f	1	1	1	1	1			1				
Level V	29.8-34.5	19.0-23.1	6.0-7.4	17.8	3.7		1	81	-	1		
\bar{x}	32.1	21.1	6.7									
f	2	2	2	1	1			1				
Other	33.1	31.1	6.6	-	-				1	1		
f	1	1	1									
NOTCHED												
Other	25.0	19.0	5.0		5.0		1	69	1	1		
f	1	1	1		1			1				

C - convex
L - left
LO - left oblique
r - rounded
R - right
ra - right angle
RO - right oblique
S - straight

Trapezoidal: prolate, Fig. 6, No's. 10 & 21; Fig. 7, No's. 6 & 19; Fig. 10, No. 11; oblong, Fig. 7, No. 20; Fig. 10, No. 9; Triangular: oblong, Fig. 7, No's. 5 & 18; Fig. 10, No. 10; isosceles, Fig. 7, No. 7; Notched: Fig. 10, No. 12.

TABLE 6
LOWER TERRACE LINEAR FLAKE SIDE SCRAPERS
METRICAL AND FORM ATTRIBUTES

FLAKE	STRAIGHT MARGIN			PARALLEL MARGIN			CONVERGING MARGIN
	level III	level V	Other	level III	level V	Area A	level II
Length							
range	18.9	20.2-29.0	32.0	40.6	32.0	20.0-40.0	25.0
\bar{x}	-	26.0	-	-	-	31.2	-
f	1	7	1	1	1	3	1
Width							
range	11.9	11.4-17.1	16.5	17.1	22.3	14.5-27.0	11.4
\bar{x}	-	14.6	-	-	-	18.8	-
f	1	7	1	1	1	3	1
Thickness							
range	2.7	2.0- 5.5	7.0	4.5	2.4	3.0- 8.0	3.4
\bar{x}	-	3.4	-	-	-	4.7	-
f	1	7	1	1	1	3	1
RIGHT LATERAL MARGIN							
Length							
range	-	12.5-17.0	17.4	33.3	24.0	18.0-40.0	19.4
\bar{x}	-	15.1	-	-	-	20.6	-
f	-	3	1	1	1	3	1
Thickness							
range	-	0.9- 1.5	2.9	2.0	1.3	1.0- 1.8	1.1
\bar{x}	-	1.0	-	-	-	1.4	-
f	-	3	1	1	1	2	1
Angle \pm 5°							
range	-	23-26	36	54	23	32-35	30
\bar{x}	-	24	-	-	-	33	-
f	-	3	1	1	1	2	1
LEFT DORSAL MARGIN							
Length							
range	13.0	6.8-24.6	-	-	22.4	19.0-36.0	20.9
\bar{x}	-	19.5	-	-	-	27.0	-
f	1	3	-	-	1	3	1
Thickness							
range	0.8	1.0- 1.7	-	-	1.0	1.3- 1.9	1.1
\bar{x}	-	1.2	-	-	-	1.4	-
f	1	3	-	-	1	2	1
Angle \pm 5°							
range	24	25-30	-	-	26	25-36	30
\bar{x}	-	26	-	-	-	30	-
f	1	3	-	-	1	2	1
SCRAPING EDGES							
one	1	6	1	-	-	-	-
two	-	2	-	1	1	-	2
three	-	-	-	-	-	3	-
on opposite margin	-	1	-	1	-	1	-

Parallel margins with concave bight: Fig. 6, No. 14; with crushed and retouched margins: Fig. 6, No. 15; with graver spur, Fig. 7, No. 15; with aberrant margins, Fig. 6, No. 37; with converging margins: Fig. 6, No. 20.

TABLE 7
LOWER TERRACE RANDOM FLAKE SIDE SCRAPERS DISCRETE AND METRICAL ATTRIBUTES

FLAKE	STRAIGHT MARGIN Levels					CONCAVE MARGIN Levels		IRREGULAR MARGIN Levels		CONVERGING MARGIN Level
	II	III	IV	V	Other	II	V	IV	V	III
Length										
range	15.5-34.2	22.0-35.6	24.9	26.8-30.8	20.0-31.3	26.5	28.3	27.7	23.4-25.4	27.8
\bar{x}	24.8	26.4		29.0	25.0				24.4	
f	2	4	1	3	6	1	1	1	2	1
Width										
range	15.2-19.9	14.6-26.0	18.0	21.9-40.3	16.0-28.8	22.0	15.0	20.1	16.8-21.0	20.8
\bar{x}	17.5	19.4		28.8	23.5				18.9	
f	2	4	1	3	6	1	1	1	2	1
Thickness										
range	3.3- 3.7	3.3- 4.4	5.4	2.0- 4.0	1.4- 6.0	3.0	3.7	3.2	2.0- 3.8	3.2
\bar{x}	3.5	3.7		2.8	2.8				2.9	
f	2	4	1	3	6	1	1	1	2	1
MAJOR RETOUCHE MARGIN										
Length										
range	14.5-28.0	10.0-21.5	17.0	17.0-35.0	13.0-28.8	17.1	21.4	15.9	14.5-16.2	14.0
\bar{x}	21.2	14.2		25.2	17.7				15.3	
f	2	4	1	3	6	1	1	1	2	1
Thickness										
range	1.1- 1.2	0.8- 1.9	1.5	1.1- 2.0	1.0- 2.5	1.6	1.0	1.8	0.9- 2.0	1.5
\bar{x}	1.1	1.2		1.6	1.5				1.4	
f	2	4	1	3	6	1	1	1	2	1
Angle±5°*										
range	26-40	25-34	40	25-38	28-46	27	25	25	23-54	23
\bar{x}	33	27		32	35				38	
f	2	4	1	3	3	1	1	1	2	1
SCRAPING MARGINS										
one	2	3	-	3	5	-	1	1	2	-
two	-	1	1	-	1	1	-	-	-	-
three	-	-	-	-	-	-	-	-	-	1
on opposite face	-	1	-	-	-	1	-	-	-	1

* Goniometer angle measurement

Straight: Fig. 6, No. 13; Fig. 7, No's. 12, 13 & 14; Fig. to, No's. 7 & 8; Concave: Fig. 6, No. 19; Converging: Fig. 6, No. 36; Irregular: Fig. 7, No. 8.

Oblique type (MacNeish 1958:150) and recoveries from the northern Manitoba Tailrace Bay site (Mayer-Oakes 1970: 194, Fig. 85, B). A number of the decorated sherds had large, square, uniform dentate stamping like Hopewellian dentate (Fig. 7, No. 9) as distinct from the smaller rectilinear Laurel dentate.

A few flake scrapers had graver spurs and a few had crushed margins as well as retouched margins. Gouged-end tools (MacPherron 1967: 141) or wedges (Wright 1968: 18), in addition to bipolar crushing, also had retouched parallel margins like scrapers (Fig. 6, No's. 24 & 25). An end scraper was recovered with an antler handle (Fig. 7, No. 5). One side-notched projectile point (Fig. 6, No. 35), was a Wisconsin North Bay Tradition type (Mason 1966, Pl. IX) and a stemmed point (Fig. 6, No. 34) was a Selkirk-like point (Hlady 1971, pl. 1, No. 1) while a third (Fig. 10, No. 4) was a Shield Archaic point (Wright 1972a Pl. VI and IX). A polished schistose pebble recovered, impregnated with grease, is like those from the McCluskey Site on Whitefish Lake, considered to be from a medicine bundle (Dawson 1974:72). A nodule core and a utilized flake with a graver spur are shown in Figures 6, No. 27 and 10. **Copper recoveries**, (Fig. 6, Nos. 16 & 39; Fig. 7 Nos. 23 & 24; Fig. 9, Nos. 38 & 40), are similar to recoveries from the Heron Bay Site on Lake Superior (Wright 1967).

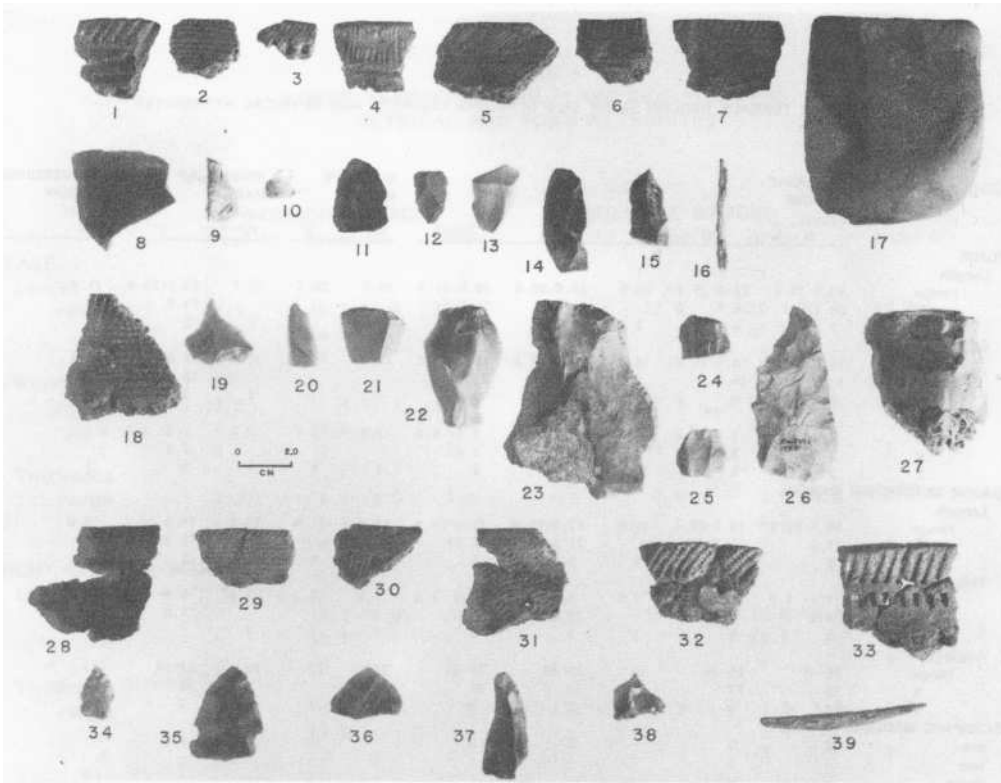


Fig. 6 Lower terrace recoveries, area A

Lower Terrace Area A

- No. 1 Blackduck rim - cord-wrapped object multi-impressed and encircling punctate Mode 1 Variety 100
- No. 2 Laurel rim - vertical to oblique pseudo-scallop shell impressed over horizontal pseudo-scallop shell impressed
- No. 3 Laurel rim - two rows of oblique pseudo-scallop shell impression with superimposed closely spaced circular encircling punctates
- No. 4 Laurel rim - vertical to oblique pseudo-scallop shell impressed over horizontal pseudo-scallop shell impressions
- No. 5 Laurel rim - mixed techniques, oblique pseudo-scallop shell impression over two horizontal lines of dentate stamping over oblique pseudo-scallop shell impressions
- No. 6 Laurel rim - oblique to verticals over horizontal pseudo-scallop shell impressions with superimposed punctates and bosses
- No. 7 Laurel rim - obliques over horizontals over oblique pseudo-scallop shell impressions
- No. 8 Large piano convex flake scraper with a single straight to convex dorsal retouched margin
- No. 9 Perforator
- No. 10 End scraper trapezoidal prolate
- No. 11 Triangular un-notched projectile point
- No. 12 Triangular un-notched projectile point
- No. 13 Random flake side scraper straight margin variety

- No. 14 Linear flake side scraper parallel margin variety with small concavity on one margin - spoke-shave
- No. 15 Linear flake side scraper parallel margin variety crushed and retouched margins
- No. 16 Copper awl
- No. 17 Linear schistose hammerstone

Lower Terrace Area B

- No. 18 Laurel rim - obliques over horizontal pseudo-scallop shell impressions (Lv II)
- No. 19 Random flake side scraper concave margin variety (Lv II)
- No. 20 Linear flake side scraper converging margin variety (Lv II)
- No. 21 End scraper, trapezoidal, prolate bi-parallel variety (Lv II)
- No. 22 Large Plano side scraper straight margin (Lv II)
- No. 23 Large Plano side scraper convex margin (Lv II)
- No. 24 Wedge scraper (Lv II)
- No. 25 Wedge scraper (Lv II)
- No. 26 Biface asymmetrical triangular (Lv II)
- No. 27 Nodule core (Lv II)
- No. 28 Laurel rim - oblique over horizontal pseudo-scallop shell impressed (Lv III) No.
- 29 Laurel rim - oblique over horizontal pseudo-scallop shell impressed (Lv III)
- No. 30 Laurel rim mixed, criss-cross over horizontal pseudo-scallop shell impressions over vertical dentate stamp (Lv III)
- No. 31 Laurel rim-plain with linear zig-zag (Lv III)
- No. 32 Blackduck rim - cord-wrapped object impressed and punctate Mode 2 Variety 200 (Lv III)
- No. 33 Blackduck rim - cord-wrapped object impressed and linear punctate Mode 6 Variety 625 (Lv III)
- No. 34 Triangular stemmed projectile point (Lv III)
- No. 35 Triangular notched projectile point (Lv III)
- No. 36 Random flake side scraper converging margin variety (Lv III)
- No. 37 Linear flake side scraper parallel aberrant margin variety (Lv III)
- No. 38 Perforator (Lv III)
- No. 39 Copper awl (Lv III)

Upper Terrace

Upper Terrace ceramic classifications are shown in Table 8, metrical and discrete vessel attributes are shown in Table 9 and illustrated in Fig. 8. Metrical attributes of the general tool kit are given in Table 10. End scraper discrete and metrical attributes are given in Table 11 and side scrapers in Table 12. Ceramic, lithic and copper recoveries are shown in Fig. 9 and 10.

One vessel from this Terrace has mixed attributes (Fig. 9 No. 8). It is a splayed, Blackduck-shaped vessel with three bands of oblique dentate stamping on the exterior below the lip with a line of encircling circular punctates in a plain zone below the first band. The punctates are 6 mm below the lip, 3 mm in diameter and 24 mm apart. oblique dentate stamping also occurs on the 10.5 mm thick lip. The body thickness 25 mm below the lip is 5.7 mm. The interior has a band of dentate stamping extending down from the lip over a plain surface with bosses. The paste is Laurel-like, and the exterior is fabric-impressed. Some of the Laurel ceramic include poorly defined dentate decorated sherds (Fig. 9, No. 11); a punctate variety (Fig. 10, No. 1); a dragged stamp variety (Fig. 10, No. 2); a conical basal sherd (Fig. 9, No. 12); and a coil of ceramic waste (Fig. 10, No. 3).

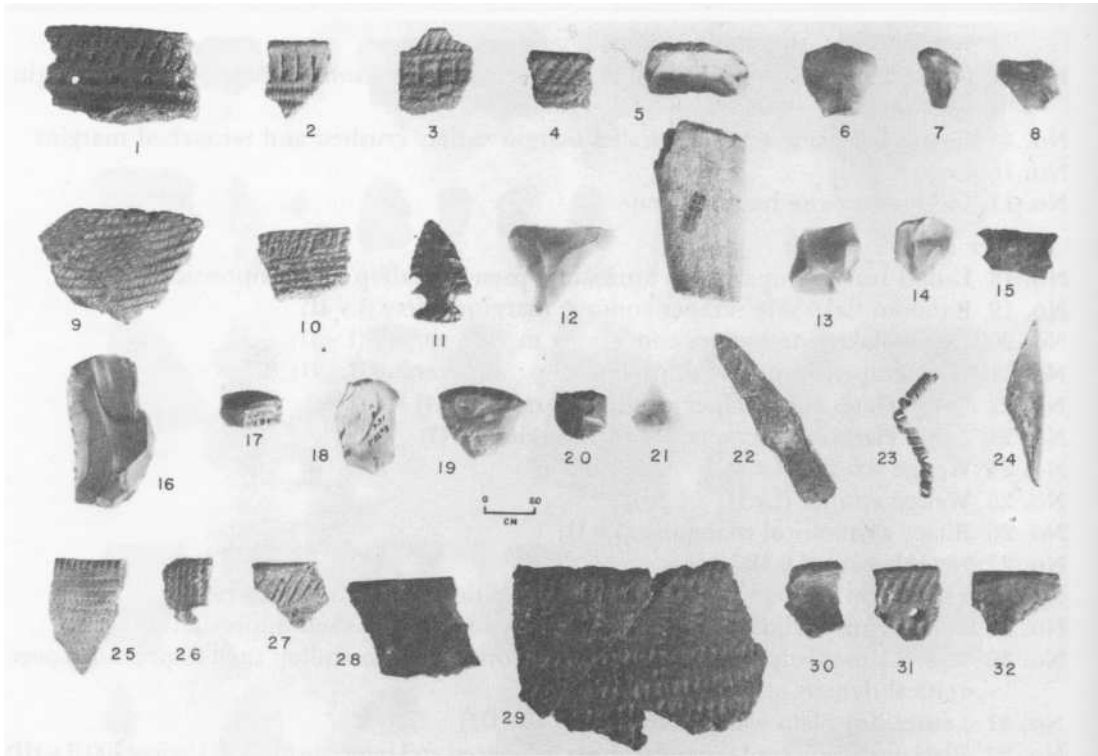


Fig. 7 Lower terrace recoveries, area B

Lower Terrace Area A

- No. 1 Blackduck rim - cord-wrapped object multi-impressed and encircling punctate
Mode 1 Variety 100 (Lv IV)
- No. 2 Blackduck rim - cord-wrapped object impressed and stamped Mode 7 Variety 775 (Lv IV)
- No. 3 Laurel rim - vertical over horizontal pseudo-scallop shell impressed with super-imposed linear stamping (Lv IV)
- No. 4 Laurel rim - obliques over horizontal dentate stamped (Lv IV)
- No. 5 End scraper triangular oblong with antler handle (Lv IV)
- No. 6 End scraper trapezoidal prolate (Lv IV)
- No. 7 End scraper triangular isosceles (Lv IV)
- No. 8 Random flake side scraper straight and irregular margin (Lv IV)
- No. 9 Pseudo-scallop shell decorated sherd Hopewellian dentate (Lv IV)
- No. 10 Laurel rim obliques over horizontal Pseudo-scallop shell impressed (Lv V)
- No. 11 Side notched projectile point (Lv V)
- No. 12 Random flake side scraper straight margin (Lv V)
- No. 13 Random flake side scraper straight margin (Lv V)
- No. 14 Random flake side scraper irregular margin (Lv V)
- No. 15 Linear flake side scraper parallel margin with graver spur (Lv V)
- No. 16 Large Plano convex side scraper (Lv IV)
- No. 17 Wedge scraper (Lv V)
- No. 18 End scraper triangular oblong medium dorsal ridged (Lv V)
- No. 19 End scraper trapezoidal medium dorsal ridged (Lv V)
- No. 20 End scraper trapezoidal oblong small (Lv V)
- No. 21 Perforator (Lv V)

- No. 22 Copper projectile point Type A (Lv V)
 No. 23 Copper coil bangle (Lv V)
 No. 24 Copper knife Type A-1 (Lv VI)
 No. 25 Laurel rim vertical over horizontal pseudo-scallop shell impressed (TP)
 No. 26 Laurel rim vertical pseudo-scallop shell impressed and punctated (TP)
 No. 27 Laurel rim oblique dentate stamping over horizontal pseudo-scallop shell impressed (TP)
 No. 28 Laurel rim plain (TP)
 No. 29 Laurel mixed attributes rim wide cord-wrapped paddle impressed (TP)
 No. 30 Laurel mixed attributes rim plain (TP)
 No. 31 Blackduck rim - cord-wrapped object impressed and encircling circular and linear punctates (TP)
 No. 32 Selkirk rim plain smoothed-over

TABLE 8
 UPPER TERRACE CERAMIC CLASSIFICATION

CLASS & TYPE	SHERDS		VESSELS	
	<i>f</i>	%	<i>f</i>	%
RIM SHERDS				
<i>Laurel</i>	19		8	34.8
Combined	11		4	17.4
Pseudo-Scallop Shell	6		4	17.4
Dentate Stamp	2		2	8.7
Dragged Stamp	7		1	4.3
Dragged Punctate	4		1	4.3
<i>Subtotal</i>	49		20	86.7
Mixed	8		1	4.3
<i>Juvenile</i>	6		2	8.7
SUBTOTAL	63	6.7	23	99.7
BODY SHERDS				
<i>Decorated</i>				
Dragged Stamp	72			
Dentate Stamp	41			
Pseudo-Scallop Shell	24			
Dragged Punctate	7			
<i>Subtotal</i>	144			
<i>Undecorated</i>				
Laurel	229			
Fabric-Imprinted	27			
Cord-Malleated	1			
Plain	1			
<i>Subtotal</i>	258			
SUBTOTAL	402	43.0		
SHERDLETS	463	49.5		
CERAMIC WASTE	8	0.8		
TOTAL	936	100.0		

TABLE 9
UPPER TERRACE LAUREL VESSELS METRICAL AND DISCRETE ATTRIBUTES

DECORATIVE VARIETY	LIP THICKNESS	THICKNESS 25mm BELOW LIP	UPPER BAND WIDTH	DECORATED LIP	DECORATED INTERIOR	BOSSES	EXTERIOR PUNCTATES			INTERIOR PUNCTATES			FIGURE 9	
							distance below lip	distance apart	vertical length	distance below lip	distance apart	vertical length		
									$\frac{\text{form}}{\text{C O R S}}$					
COMBINED TECHNIQUES														
<i>Linear Stamp over Dragged Stamp</i>														
V-1	4.0	7.5	4.2											#1
V-2	3.0	5.5*	D											
<i>Linear Stamp over Dragged Punctate</i>														
V-3	3.5	6.3	6.5											
<i>Dentate Stamp over Dragged Stamp</i>														
V-4	3.5	8.0	21.0											#2
V-5	3.6	6.4	3.5											#6
V-6	4.0	6.0*	4.0											#10
<i>Pseudo-Scallop Shell over Dragged Punctate</i>														
V-7	3.7	7.0	5.0											
<i>Pseudo-Scallop Shell over Dentate Stamp</i>														
V-8	4.6	5.2	10.9											
										9.0	10.0	2.5	x	#5
PSEUDO-SCALLOP SHELL														
<i>Vertical over Horizontal</i>														
V-9	2.8	6.0	12.9											
V-10	5.0	6.0	8.1	x	x	e	13.0	14.0	3.7	x	12.5	11.5	3.5	x
V-11	6.0	8.0	6.0											
<i>Horizontals</i>														
V-12	4.0	6.1	-											#4
DENTATE STAMP														
<i>Obliques over Horizontals</i>														
V-13	4.1	6.8	6.1											#7
V-14	3.8	4.5	8.0											
DRAGGED STAMP														
V-15	4.1	6.4	-											
DRAGGED PUNCTATE														
V-16	4.0	7.6	3.0											
PLAIN														
V-17	5.5	6.0	-											#3
V-18	5.0	D	-	x										
V-19	4.7	6.2	-			e6i	15.0	11.5	2.0	x	14.0	9.9	4.0	x
V-20	4.5	8.5	-			e6i	13.0	18.2	3.4	x	14.3	12.5	3.9	x
KEY: C - circular e - exterior O - oval S - square D - damaged i - interior R - rectangular V - vessel														
* measurement taken at less than 25 mm														

In Wright's classification, the linear flake side scrapers are classed as: irregular retouched (four); side-notched concave (one); concave (one); and atypical irregular (one). One end scraper differed in having a notched base (Fig. 9, no. 31). There was one side-notched lance or knife with a symmetrical convex blade edge (Fig. 9, No. 15); one bi-pointed knife (Fig. 9, No. 37) similar to one from the McCluskey Site (Dawson 1974: P1. IV, No. 20); and polished slate fragments, one with a perforation (Fig. 10, No. 5). One rectangular single-point copper awl (Fig. 9, No. 39) and a hammered piece of copper (Fig. 9, No. 41) were also recovered.

TABLE 10
UPPER TERRACE GENERAL TOOL KIT METRICAL DATA

CLASS	MAXIMUM		THICKNESS	SHOULDER	BASE	NOTCH	NOTCH	FIGURE
	LENGTH	WIDTH						
PROJECTILE POINTS								
Notched	42.0	20.0	7.4	18.0	15.0	2.5	4.5	#13
	44.0	19.0	6.3	18.5	16.4	3.6	?	#14
Fragments	-	-						
BIFACES								
Trapezoidal	34.2	12.7	2.5					#16
Fragment	-							
KNIVES								
Lance	-	23.3	5.9	23.3	17.9	3.4	3.2	#15
Bipointed	50.0	12.0	6.5					#37
WEDGES								
	21.5	20.5	5.7					#35
	20.4	15.2	6.0					#36
HAMMERSTONES								
Linear	94.0	69.0	<i>(wt.: 449 gms)</i>					
	113.0	36.0	<i>(wt.: 408 gms)</i>					
Irregular	75.0	58.0	<i>(wt.: 302 gms)</i>					

All measurements in millimeters.

FAUNAL ANALYSIS

R. Robin Dods of the University of Toronto analyzed the faunal recoveries. Her detailed report is filed as an integral part of the site report with the Archaeological Survey of Canada. What follows has been extracted from Dods's report. The location and identification of each of the 2,784 specimens is summarized in Table 13.

The site, located one mile upstream from the lake, is similar to several other Woodland Period sites in the Lake Nipigon area (Dawson 1976a). It is important to consider the excellent position of these sites in relationship to the numerous types of ecozones available for use in such a Boreal Forest setting - the large lake, the main river, tributary streams and creeks, shoreline areas of all the available water environments, forest and forest edge areas. Such a setting would offer year-round advantages (not found in what could be termed environment specialization).

TABLE 11

**UPPER TERRACE END SCRAPERS
DISCRETE AND METRICAL ATTRIBUTES**

FLAKE		TRAPEZOIDAL		TRIANGULAR	
		<i>Oblong</i>	<i>Prolate</i>	<i>Isosceles</i>	
Length	range	13.6-21.3	25.0	18.5-28.0	
	x	16.7	-	24.5	
	f	8	1	5	
	Width	range	11.0-17.7	26.0	16.2-24.0
		x	15.6	-	20.7
		f	8	1	5
	Thickness	range	2.0-5.2	4.0	3.5-4.5
		x	2.7	-	4.1
		f	8	1	5
DISTAL DORSAL MARGIN					
Length	range	7.2-17.7	25.0	17.0-24.0	
	x	13.2	-	20.2	
	f	6	1	5	
Thickness	range	0.9-2.8	3.5	3.0-4.0	
	x	2.2	-	3.4	
	f	6	1	5	
Angle $\pm 5^\circ$	range	40-78	90	77-89	
	x	65	-	80	
	f	7	1	5	
Angle	Left Oblique	-	-	1	
	Right Oblique	1	-	1	
	Straight	2	-	-	
	Convex	4	1	3	
LATERAL MARGINS					
RETOUCHED/UTILIZED					
Right	1	-	1	1	
Left	3	-	-	1	

Oblong; Fig. 9, No's. 25, 28 to 32 & 34; *Prolate*: Fig. 9, No. 18;
Isosceles: Fig. 9, No's. 19 to 22 & 33.

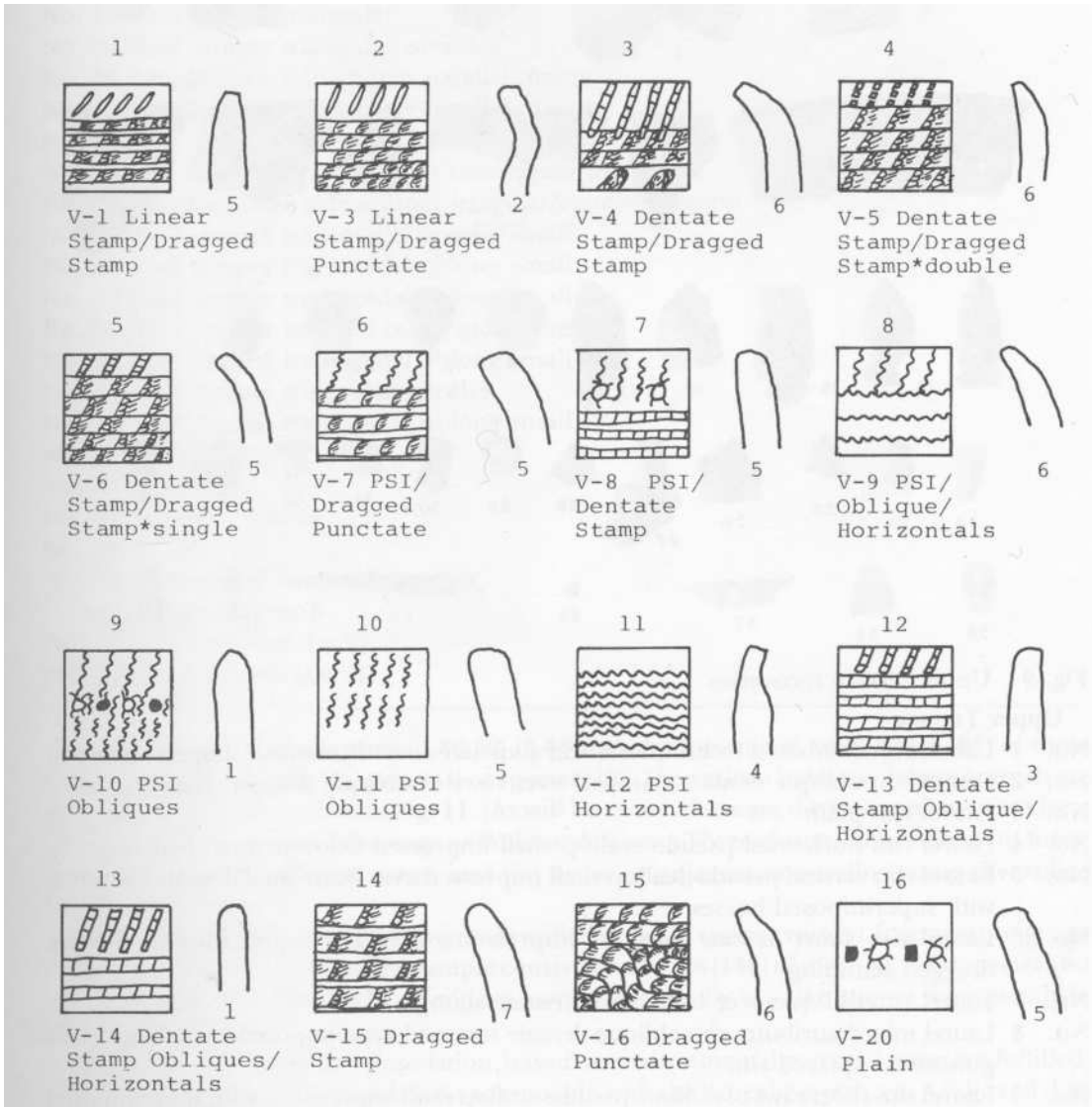
TABLE 12
UPPER TERRACE SIDE SCRAPERS METRICAL AND FORM ATTRIBUTES

FLAKE	LINEAR FLAKE			RANDOM FLAKE				
	<i>parallel margin</i>	<i>straight margin</i>	<i>concave margin</i>	<i>straight margin</i>	<i>irregular margin</i>	<i>converging margin</i>	<i>rounded margin</i>	<i>concave margin</i>
Length								
range	21.5-38.0	24.5-25.6	27.8	19.2-26.0	23.0-23.8	27.0	38.0	33.2
\bar{x}	28.1	25.0	-	22.5	23.4	-	-	-
f	4	2	1	7	2	1	1	1
Width								
range	13.8-17.0	15.8-17.0	17.0	14.7-23.4	13.5-18.8	25.0	22.5	18.5
\bar{x}	15.7	16.4	-	18.1	16.1	-	-	-
f	4	2	1	7	2	1	1	1
Thickness								
range	2.5- 5.0	3.5- 4.0	7.0	1.6- 4.3	2.1- 2.7	4.5	5.5	4.0
\bar{x}	3.6	3.7	-	3.1	2.4	-	-	-
f	4	2	1	7	2	1	1	1
RIGHT DORSAL MARGIN								
Length								
range	15.0-31.3	13.0	12.0	13.1-23.5	11.9-18.0	24.0	28.7	28.0
\bar{x}	21.3	-	-	18.9	14.9	-	-	-
f	4	1	1	6	2	1	1	1
Thickness								
range	0.6- 2.0	1.0	0.8	0.9- 1.8	0.8-1.0	1.2	2.1	0.5
\bar{x}	1.4	-	-	1.2	0.9	-	-	-
f	4	1	1	7	2	1	1	1
Angle \pm 5°								
range	38-42	42	51	22-40	40-43	38	30	36
\bar{x}	40	-	-	35	41	-	-	-
f	4	1	1	7	2	1	1	1
LEFT DORSAL MARGIN								
Length								
range	17.5-34.4	19.0	16.0	13.0-13.6	-	13.5	-	-
\bar{x}	22.2	-	-	13.3	-	-	-	-
f	4	1	1	2	-	1	-	-
Thickness								
range	0.5- 1.5	1.3	2.0	1.0- 1.5	-	1.0	-	-
\bar{x}	1.1	-	-	1.2	-	-	-	-
f	3	1	1	2	-	1	-	-
Angle \pm 5°								
range	37-42	38	49	25-35	-	32	-	-
\bar{x}	38	-	-	30	-	-	-	-
f	3	1	1	2	-	1	-	-
SCRAPING EDGES								
one	-	2	-	5	2	-	1	1
two	4	-	-	2	-	1	-	-
three	-	-	1	-	-	-	-	-
on opposite margin	-	-	-	-	-	-	1	-

Linear parallel: Fig. 9, No's. 17, 23, 24; Random converging: Fig. 9, No. 26; Random irregular: Fig. 9, No. 27.

TABLE 13
WABINOSH RIVER SITE FAUNAL RECOVERIES BY PROVENIENCE

	LOWER TERRACE								AREA		UPPER TERRACE		TOTAL	
	AREA B - Level			IV	V	VI	Other	A	TOTAL		f	%	f	%
	I	II	III						f	%				
<i>Rangifer t.</i>	3	3	3	2	-	-	-	1	11		1		12	
<i>Alces a.</i>	1	-	-	5	-	1	-	1	8		-		8	
<i>Cervidae sp.</i>	1	-	2	7	-	1	3	-	14		2		16	
<i>Ursus a.</i>	-	-	-	-	-	-	-	1	1		2		3	
<i>Canis l.</i>	-	-	-	-	-	-	1	-	2		-		2	
<i>Canis sp.</i>	-	5	-	-	1	-	-	-	6		3		9	
<i>Vulpes f.</i>	-	-	-	-	-	-	-	1	-		1		1	
<i>Castor c.</i>	-	2	7	7	-	-	-	7	23		1		24	
<i>Ondatra z.</i>	3	-	-	-	-	-	-	1	4		-		4	
<i>Erethizon d.</i>	-	-	1	-	-	-	-	-	1		-		1	
<i>Lepus a.</i>	1	3	-	-	-	-	1	1	6		-		6	
<i>Mustela v.</i>	-	-	-	-	-	-	-	-	-		1		1	
<i>Microtus p.d.</i>	-	-	-	-	-	-	-	1	1		-		1	
<i>Peromyscus m.m.</i>	-	-	-	-	-	-	-	1	1		-		1	
Mammal species	4	91	454	1126	101	17	82	155	2030	88.8	380	95.4	2410	89.76
<i>Subtotal</i>	13	104	467	1147	102	19	87	170	2108	88.8	391	95.4	2499	89.76
<i>Branata b.</i>	-	-	-	-	-	-	-	2	2		-		2	
<i>Branata sp.</i>	-	1	-	-	-	-	-	2	3		-		3	
<i>Gavia l.</i>	-	-	-	-	-	-	-	-	-		1		1	
<i>Mergus m.</i>	-	1	2	-	-	-	-	-	3		-		3	
<i>Melanitta d.</i>	1	1	-	-	-	-	-	-	2		-		2	
Avian species	-	7	14	5	1	-	-	4	31	1.7	5	1.5	47	1.68
<i>Subtotal</i>	1	10	16	5	1	0	0	8	41	1.7	6	1.5	47	1.68
<i>Stizostedion v.</i>	4	2	1	2	1	-	2	16	28		-		28	
<i>Micropterus d.</i>	-	-	-	1	-	-	1	-	2		-		2	
<i>Salvelinus n.</i>	-	-	-	-	-	-	-	1	1		-		1	
<i>Lota l.</i>	-	12	-	-	-	-	-	-	12		-		12	
<i>Catostomus sp.</i>	-	-	-	-	-	-	-	2	2		-		2	
<i>Osteichthyes</i>	3	41	31	15	3	-	8	40	141	7.8	-		141	6.68
<i>Subtotal</i>	7	55	32	18	4	0	11	59	186	7.8	-		186	6.68
<i>Rana sp.</i>	-	-	-	1	-	-	-	1	2		-		2	
<i>Testudinata sp.</i>	-	-	1	-	-	-	-	-	1		-		1	
<i>Subtotal</i>	0	0	1	1	0	0	0	1	3	0.1	-		3	0.11
Shell Unknown	-	-	-	-	-	-	2	1	3		-		-	
<i>Subtotal</i>	0	0	0	0	0	0	2	1	3	0.1	-		3	0.11
Unknown	-	3	22	2	1	-	-	5	33		13		46	
<i>Subtotal</i>	0	3	22	2	1	0	0	5	33	1.4	13	3.1	46	1.65
TOTAL	21	172	538	1173	108	19	100	244	2374	99.9	410	100.0	2784	99.9



Rim exteriors to the left.

PSI = Pseudo-scallop shell im^pressed.

Numbers below rim outline refer to rim form after Wright 1967.

Fig. 8 Upper terrace vessel rim decorations and profiles

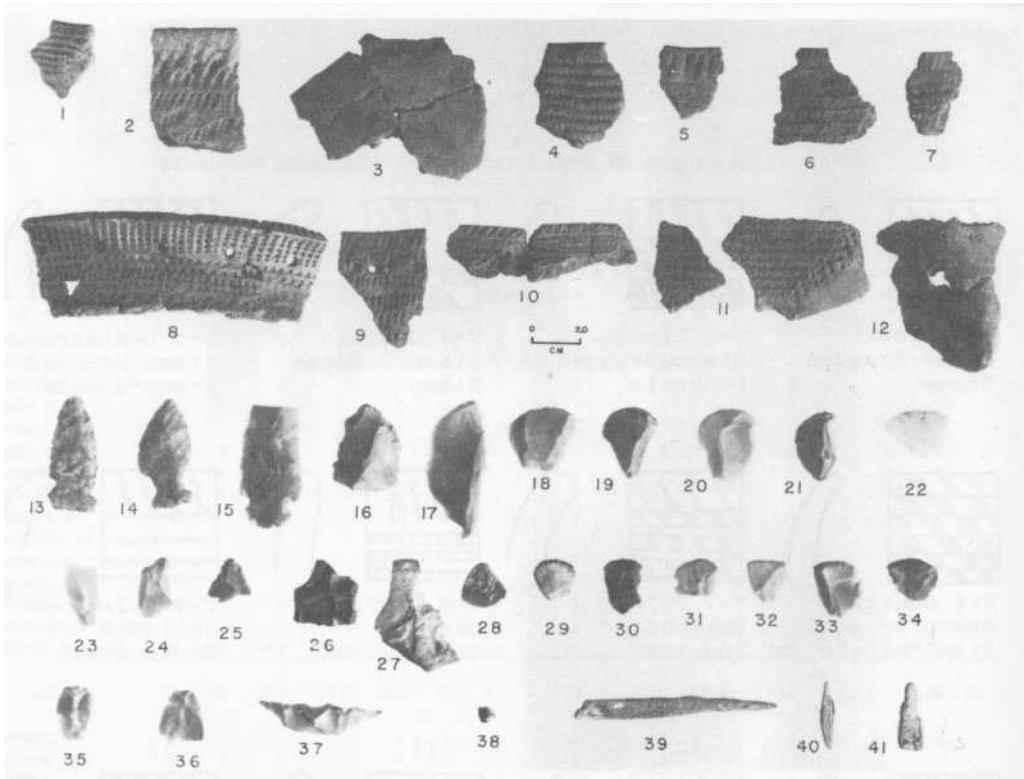


Fig. 9 Upper terrace recoveries

Upper Terrace

- No. 1 Laurel rim combined techniques linear punctates over horizontal dragged stamped
- No. 2 Laurel rim oblique dentate stamped over rows of oblique dragged stamp
- No. 3 Laurel rim plain
- No. 4 Laurel rim horizontal pseudo-scallop shell impressed below a smoothed zone
- No. 5 Laurel rim vertical pseudo-scallop shell impressed over horizontal dentate stamping with superimposed bosses
- No. 6 Laurel rim short dentate stamped impressions over horizontal rows of oblique dragged stamping
- No. 7 Laurel rim oblique over horizontal dentate stamp
- No. 8 Laurel mixed attributes rim oblique dentate stamped superimposed encircling circular punctates - splayed rim
- No. 9 Laurel rim short rows of oblique pseudo-scallop shell impressions with superimposed encircling circular punctates and bosses
- No. 10 Laurel rim dentate stamp over rows of dragged stamped impressions
- No. 11 Laurel decorative sherd, a typical dentate stamping part of vessel classed as pseudo-scallop shell impressed over horizontals
- No. 12 Laurel conical base fragment
- No. 13 Notched projectile point
- No. 14 Notched projectile point
- No. 15 Lance or knife
- No. 16 Trapezoidal biface knife with edge retouching
- No. 17 Atypical large linear flake side scraper

- No. 18 End scraper trapezoidal prolate
- No. 19 End scraper triangular
- No. 20 End scraper triangular
- No. 21 End scraper triangular
- No. 22 End scraper triangular isosceles
- No. 23 Linear flake side scraper parallel margin
- No. 24 Linear flake side scraper parallel margin
- No. 25 End scraper trapezoidal small
- No. 26 Random flake side scraper converging margin
- No. 27 Random flake side scraper irregular/concave margin
- No. 28 End scraper trapezoidal oblong small
- No. 29 End scraper trapezoidal oblong small
- No. 30 End scraper trapezoidal oblong small
- No. 31 End scraper notched trapezoidal small
- No. 32 End scraper trapezoidal oblong small
- No. 33 End scraper triangular isosceles
- No. 34 End scraper trapezoidal oblong small
- No. 35 Wedge
- No. 36 Wedge
- No. 37 Bi-pointed knife
- No. 39 Copper awl
- No. 41 Hammered copper fragment
- Lower Terrace Area B
- No. 38 Copper bead (Lv V)
- No. 40 Copper barb (Lv VI)

Although mammals comprised 89.8% (2,499) of the specimens, only 3.56% (89) of these were identified to family (1), genus (1) or species (12). The various habitats of these animals are presented in general outline in Fig. 11. (As will be noted, these are the expected environs for a site in such a locational advantage as Wabinoash River.) Three clusters are evident: (i) forest areas; (ii) open areas/brush areas; and (iii) water or adjacent areas, illustrating diversified food acquisition tactics.

Forty-seven (1.68%) specimens were identified as avian species with 11 fragments to genus or species. The fish section of the sample consisted of 6.68% (186) of the total. Four species and one genus were identified. All prefer deep, cool water usually in a lake but not infrequently in large rivers.

Expectations of a high fish population, based on environmental potential, were not fulfilled. The problem of low fish count seems to coincide with the Boreal Forest area. Acidic soil (low pH) would seem to be the obvious explanation. However, both calcined and non-calcined mammal bones were retrieved and mammalian bone depletion in the sample was not commensurate with exposure to acidic soil. There are four possible explanations: a) there is a taphonomic filter in operation that we have yet to identify; b) fish were not as abundant in the past for some unknown environmental reasons; c) economic patterns have changed significantly from prehistoric to historic times; and d) the problem is an artifact of excavation procedures.

The mammal species identified at this site are available throughout the year. However, several specimens were immature at the time of death (juvenile cortex, 37 or 1.3%) and therefore indicate a summer season for hunting in these cases. Several other specimens

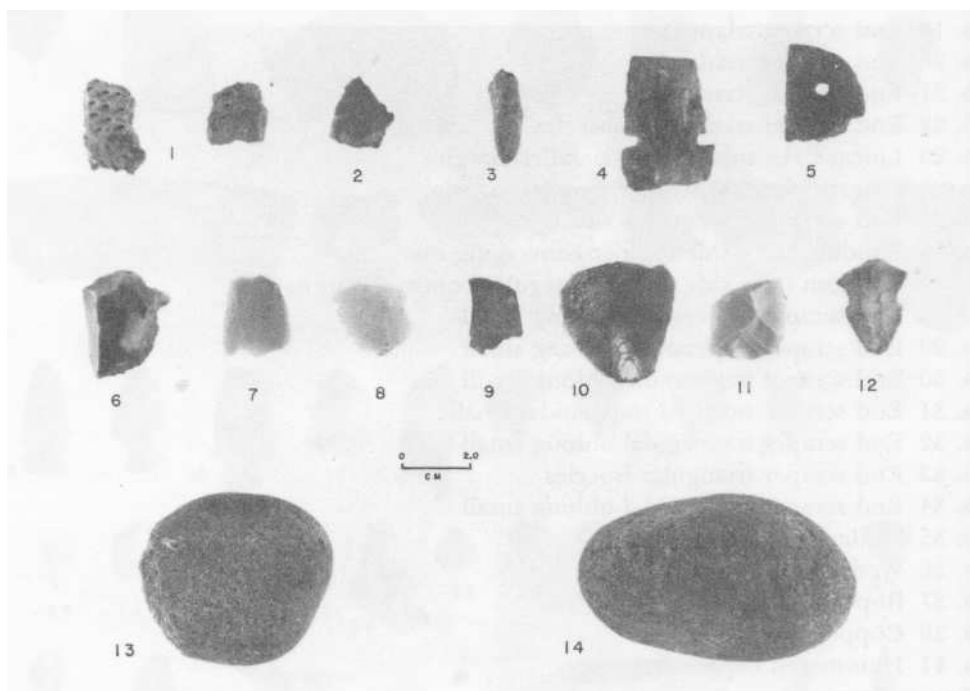


Fig. 10 Wabinoash River site recoveries (1, 2, 3 & 5, Upper Terrace; 4, 7 to 14, Lower Terrace)

Upper Terrace

- No. 1 Decorated sherds, punctate variety
- No. 2 Decorated sherd, dragged stamp variety No.
- 3 Ceramic Waste - coil
- No. 5 Slate pendant fragment

Lower Terrace Area B

- No. 4 Side notched projectile point (TP)
- No. 6 Utilized flake with graver spur (TP)
- No. 7 Random flake side scraper straight margin No.
- No. 8 Random flake side scraper straight margin No.
- No. 9 End scraper trapezoidal small oblong
- No. 10 Large end scraper triangular oblong variety damaged dorsal margin
- No. 11 End scraper trapezoidal prolate (TP)
- No. 12 Notched end scraper (TP)
- No. 13 Circular granitic hammerstone (TP)
- No. 14 Linear granitic hammerstone (TP)

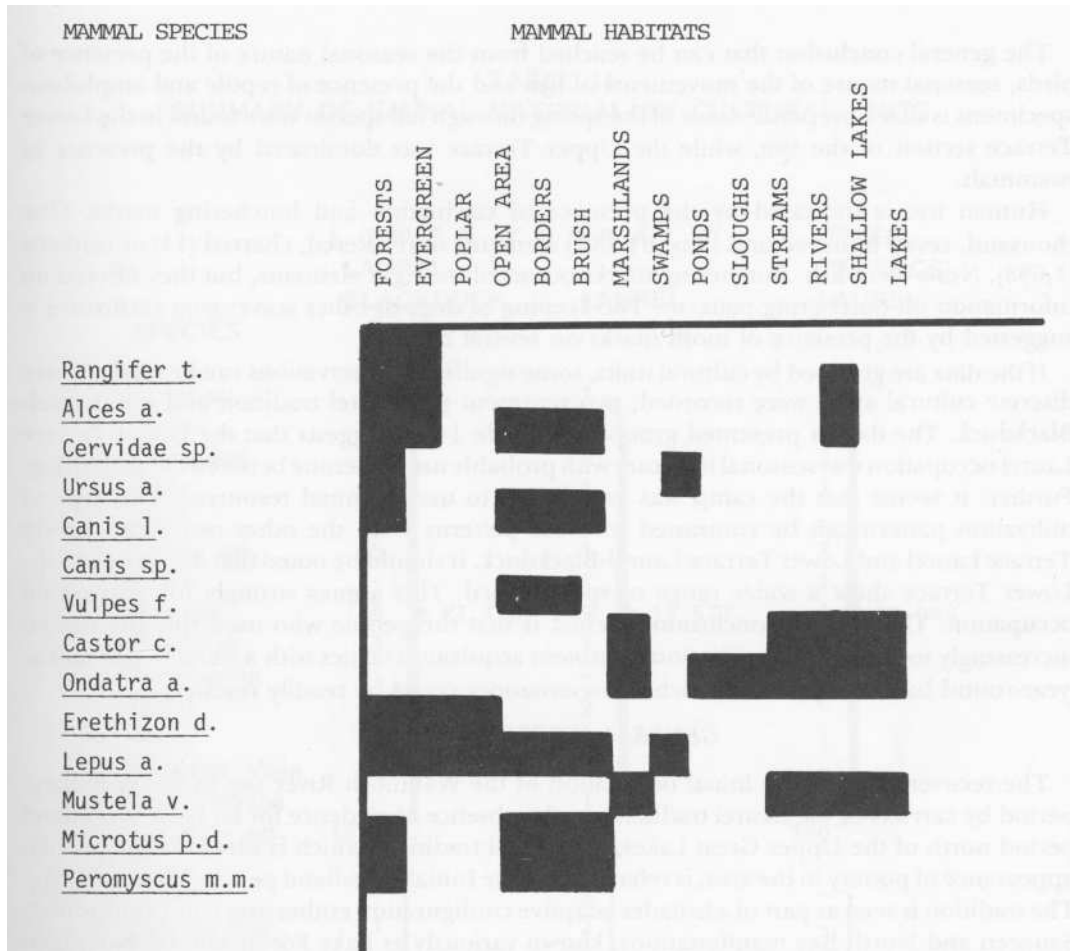


Fig. 11. Mammal Habitats: A general representation of mammal habitats of those species represented at the Wabinoash River site.

indicated a lack of osteological maturity through missing epiphyses and epiphyseal plates. However, in large mammal species specimens this would not necessarily indicate a particular season as the closure of the epiphyseal line would vary not only from bone to bone, but from species to species and even between sexes within the same species. With the beaver specimens, these indications could well mean late fall through to the next spring as season of death. A general conclusion would be that the mammal resources were tapped throughout the year. No conclusion on the discrimination of items as to age can be made from this sample.

The bird species identified at the site are available spring through fall. If the pickeral and burbot used at the site were caught in the Wabinoash River, this would suggest a spring to early summer occupation. If, however, these species were obtained in nearby lakes, the seasonal considerations are not important, for these species are active throughout the winter. Lake fishing is suggested by the presence of lake trout assuming deep water fishing techniques, otherwise they would only be available during the fall and spring after break-up. One species, the smallmouth bass, suggests wide ranging for resources, for its availability is confined to the tributaries of the Nipigon River and Lake Superior (Scott and Crossman 1973: 729).

The general conclusion that can be reached from the seasonal nature of the presence of birds, seasonal nature of the movements of fish and the presence of reptile and amphibian specimens is that a preponderance of the spring through fall species were found in the Lower Terrace section of the site, while the Upper Terrace was dominated by the presence of mammals.

Human use is indicated by the presence of calcination and butchering marks. One thousand, seven hundred and four (61.23%) elements were altered, charred (11) or calcined (1,693). None were fish. Butchering marks occurred on eight elements, but they offered no information on butchering patterns. The keeping of dogs or other scavenging carnivores is suggested by the presence of tooth marks on several bones.

If the data are grouped by cultural units, some significant observations can be made. Three discrete cultural areas were recorded; two represent the Laurel tradition and one Laurel-Blackduck. The data is presented grouped in Table 14. It suggests that the Upper Terrace Laurel occupation was seasonal in nature with probable use sometime between fall and spring. Further, it seems that the camp was established to use mammal resources. This type of utilization pattern can be contrasted to those patterns from the other two areas: Lower Terrace Laurel and Lower Terrace Laurel-Blackduck. It should be noted that the camps on the Lower Terrace show a wider range of species used. This argues strongly for year-round occupation. The general conclusion reached is that the people who used this site moved increasingly to species diversification in protein acquisition tactics with a trend to use sites as year-round base camps from which many ecozones could be readily reached.

GENERAL INTERPRETATION

The recoveries place the initial occupation of the Wabinoash River site in the Woodland period by carriers of the Laurel tradition. In the absence of evidence for an Early Woodland period north of the Upper Great Lakes, the Laurel tradition, which is identified by the first appearance of pottery in the area, is referred to as the Initial Woodland period (Wright 1972b). The tradition is seen as part of a broader adaptive configuration embracing Point Peninsula 2, Saugeen and North Bay manifestations, known variously as Lake Forest Middle Woodland and Northern Tier Middle Woodland (Fitting 1970; Mason 1966, 1969). It occurs in the regions around the Upper Great Lakes roughly between 300 B.C. and A.D. 700. Laurel sites are primarily confined to the Transitional Forest in southwestern Quebec, northern Ontario, the north central regions of Manitoba and adjacent Saskatchewan and the extreme northern regions of Michigan and Minnesota. They are located in (varied but favourable) ecotone zones where the density of faunal species tends to be higher. In northern Ontario, elements of the Laurel tradition were first described by Dr. James V. Wright of the National Museum of Man (1967). He saw the tradition as commencing ca. 700 B.C. and terminating ca. A.D. 1000 (1972b).

At the Wabinoash River site sparse evidence of Shield Archaic tools on the Lower Terrace suggests that the Laurel occupation may have included remnant Archaic peoples who first adopted pottery. This indicates a time depth for the Laurel occupation in excess of 2,000 years, while the presence of Laurel vessels with mixed Laurel-Blackduck-Selkirk attributes suggest a continuance of the occupation into the Terminal Woodland period.

The Laurel occupation appears to have been a semi-permanent village. There is little evidence of artifacts suggestive of social stratification and no evidence of village structures suggestive of sedentary settlement. Other nearby locations on the lake yielded evidence of scattered smaller Laurel occupations (Dawson 1976a), which suggests that the Wabinoash River site was a core village with smaller satellite groups clustering in close proximity (cf. Syms 1976a:15).

TABLE 14
SUMMARY OF FAUNAL MATERIAL BY CULTURAL UNITS

SPECIES	LOWER TERRACE				UPPER TERRACE	
	LAUREL- BLACKDUCK		LAUREL		LAUREL	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Caribou	10		1		1	
Moose	6	} 62.176	2	} 13.577	-	} 14.044
<i>Cervidae</i>	10		4		2	
Bear	-		1		2	
Wolf	1		1		-	
<i>Canis</i> sp.	5		1		3	
Fox	-		1		1	
Beaver	16		7		1	
Muskrat	3		1		-	
Porcupine	1		-		-	
Hare	4		2		-	
Mink	-		-		1	
Meadow Vole	-		1		-	
Deer Mouse	-		1		-	
Mammal sp.	1675	355	380			
Brant	-	} 1.077	2	} 0.323	-	} 0.215
<i>Branata</i> sp.	1		2		-	
Loon	-		-		1	
Merganser	3		-		-	
Scoter	1		-		-	
Avian sp.	26		5		5	
Pickrel	9	} 4.022	19	} 2.658	-	} 0
Bass	1		1		-	
Lake Trout	-		1		-	
Burbot	12		-		-	
Sucker	-		2		-	
<i>Osteichthyes</i>	90		51		-	
Frog	1	0.035	1	0.035	-	0
Turtle	1	0.035	-	0	-	0
Shell	-	0	3	0.107	-	0
Unknown	27	0.969	6	0.215	13	0.466

These groups would spend portions of each year at the Wabinoash River site. The scattered small encampments and the nature of the faunal recoveries indicate a group of nomadic hunters who relied primarily on a diffuse subsistence strategy.

From the Lower Terrace two radiocarbon dates were obtained from hearth charcoal associated with mixed Laurel and Blackduck ceramics scattered in Levels II and IV (Filteau 1978). Neither date is applicable to the Laurel tradition occupation. One date, A.D. 1480 ± 60 (S - 1395), is an acceptable date for the later Blackduck tradition occupation. The other date, A.D. 1790 ± 63 (S-1394), probably represents recent carbon intrusions from the historic period or from forest fires.

While distribution tables do not show the horizontal provenience within levels, it was evident during the excavation of Levels III and IV of the Lower Terrace that discrete ceramic traditions (Laurel and Blackduck) were frequently clustered separately. This suggests two distinct and separate occupations. Further, the exclusive presence of Laurel ceramics below Level IV on the Lower Terrace indicates a Laurel occupation prior to the Blackduck occupation.

From the pure Laurel occupation of the Upper Terrace, two radiocarbon dates were obtained from charcoal associated with Laurel ceramics, A.D. 855 ± 180(S-680) and A.D. 1240 ± 175 (S-681). The first date is acceptable for the late Laurel occupation while the minimum date (A.D. 1065) for the second is consistent with other terminal Laurel occupations to the west (Dickson 1976). A third date, A.D. 1600 ± 100 (S/682) obtained from charcoal associated with a vessel with Blackduck and Laurel attributes is too recent.

The dates compare to those from the mixed Laurel-Blackduck Notigi Lake site in north central Manitoba - A.D. 750 ± 130 (S-746). A.D. 1030 ± 150 (S-744) and A.D. 1485 ± 165 (S-745) - obtained from charcoal associated with Laurel ceramics (Wiersum and Tisdale 1977:18). The last two dates are of interest for the recovery situation parallels that seen at the Wabinoash River site Upper Terrace. The charcoal samples were associated with a mixed Laurel-Blackduck attribute vessel, which the authors suggest reflects temporal overlap (Wiersum and Tisdale 1977:6; 142). The date of A.D. 1030 was considered acceptable.

The in situ occurrence of mixed attribute ceramics is significant, for the late presence of the Laurel tradition in the west ca. A.D. 1000 to A.D. 1200 and the early presence of the Blackduck tradition ca. A.D. 700 to A.D. 900 (Dickson 1976; Syms 1977) suggests coevality of the two traditions in the northwest. In Manitoba, similar ceramics (Lockport Cord-wrapped Stick) were initially considered part of the Laurel ceramic tradition (MacNeish 1958:155). Syms suggested in his extensive study of the Woodland period in Manitoba that such hybrid ceramics appear to result from contact rather than evolutionary change (1976a). This more closely accords with the situation in northwestern Ontario than development which was suggested by their earlier provisional identification as transitional Laurel (Dawson 1974, 1976a, 1976b, 1978). The presence of vessels with mixed attributes is now attributed to an era of coalescence. In addition to the Wabinoash River site, such vessels also occur at three other sites on Lake Nipigon (Albert Island, Victoria Island and Abeki Point) and at the Mound Island and McCluskey sites on Whitefish Lake, 210 kilometers to the southwest (Dawson 1974, 1976a, 1978). These ceramics are virtually non-existent east of Lake Nipigon. Pollock does allude to their possible presence in the Kirkland Lake District (1975:23, 1976:188).

The mixed attribute vessels from the Lower Terrace differ from those on the Upper Terrace. The former, considered earlier, are Laurel vessels with Blackduck-Selkirk decoration. Such vessels have a sparse occurrence on sites with late Laurel phases in the northwestern regions of Ontario and Manitoba (Dawson 1974, 1976a, 1978; MacNeish 1958; Wiersum and Tisdale 1977).

The Upper Terrace vessel is a Blackduck vessel with Laurel decoration. Such vessels have a dominant presence on Terminal Woodland period sites with early phases in the northern Boreal Forest (Dawson 1976b; Koezur and Wright 1976). One such vessel was reported in association with Blackduck vessels in the lower stratum of the Pic River site on the north shore of Lake Superior (Koezur and Wright 1976; Wright 1966). The stratum was radiocarbon dated at A.D. 950 ± 80 (GSC-85) (Wright 1968:46).

It is evident that the Laurel peoples initially inhabited the Lower Terrace of the Wabinoash River site and subsequently occupied both terraces. Based on (1) the sparse presence of Archaic-like lithics on the Lower Terrace in lower levels; (2) the dominance of the early pseudo-scallop shell impressed ceramics in these levels, (Table 2); (3) the absence of Archaic lithics on the Upper Terrace and the upper levels of the Lower Terrace; and (4) the range of Laurel ceramic types on the Upper Terrace and on the upper levels of the Lower Terrace, the site is considered to be comprised of at least two Laurel phases, a small early phase on the Lower Terrace Levels V and VI and an expanded later phase on both the Lower and Upper Terraces.

The general artifact categories for the two Laurel phases and the Heron Bay Laurel type site (Wright 1967: Table 31) are given in Table 15. The latter site lies 240 kilometers to the southeast at the mouth of the Pic River on the Lake Superior shore. Excluded from the table on the basis of insufficient information are chipping debitage, cores and bone recoveries. As can be seen from Table 15, the Wabinoash River site phases have the typical traits characteristic of Laurel sites - sherds, scrapers, paint stone nodules, copper, copper flakes, biface blades, projectile points, abraders, copper beads and ceramic wastage. Linear flakes, net sinkers, heavy scraper tools and copper nuggets are absent from the Wabinoash River site suggesting spatial differences.

Net sinkers and heavy scraper tools are considered by Wright to have a substantial time depth (1967:101-102). Their absence from the Wabinoash River components may indicate a later occupation for the site than that of the Heron Bay site and/or the different ecological setting. Temporal affinity is suggested by the small convex blade edge, side-notched projectile points which correspond to those from the Heron Bay site and the dominant early linear variety hammerstones.

Comparative analysis is largely limited to ceramics and scrapers. The latter are the only lithics which have a sufficient representation to enable comparison. Wright has demonstrated that end scrapers increase in frequency with time, while side scrapers decrease through time (1967: Table 35). This suggests that the Lower Terrace phase with 23.8% end and 38.1% side scrapers is earlier than the Upper Terrace with 3.5% end scrapers and 17.8% side scrapers. However, the high frequency of random scrapers on both phases suggests a marked regional variation. Metrical data support the proposition that the Lower Terrace phase is earlier for simple end scraper maximum length and widths are approximately equal and the height of the end scraping face is greater on the Upper Terrace (Table 5 and 11). The former traits Wright considers to be representative of an earlier position (1967:103). The end scrapers are larger than those from Heron Bay and the linear scrapers are shorter and thicker and lack the varieties. The lithic comparisons which can be made suggest a chronological sequence of two relatively early phases.

Ceramic traits provide a more extensive basis for comparison. Wright, after a detailed study of sixteen Laurel sites across northwestern Ontario, established a temporal sequence for the era, based on ceramic bossing, either interior or exterior or both, and other attributes (1967:99). He concluded that bossing was a relatively stable attribute which increased in frequency through time. At the earliest site (Heron Bay) bossing occurred on 10% of the rims

TABLE 15
GENERAL ARTIFACT TRAIT LIST FOR THREE LAUREL COMPONENTS

	HERON BAY		WABINOSH RIVER			
	<i>f</i>	%	Upper Terrace		Lower Terrace	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
CERAMICS						
Sherds	2379	59.5	928	92.4	262	83.7
Waste	33	0.8	8	0.8	4	1.3
LITHICS						
Scrapers	598	14.9	45	4.5	22	7.0
Projectile Points	46	1.2	4	0.4	1	0.3
Biface Blades	39	1.9	2	0.2	-	-
Lances or Knives	2	x	2	0.2	-	-
Wedges	-	-	2	0.2	1	0.3
Linear Flakes	58	1.5	-	-	-	-
Scraper Tools	5	0.1	-	-	-	-
Hammerstones	21	0.5	4	0.4	8	2.6
Net Sinks	20	0.5	-	-	-	-
Abraders	21	0.5	-	-	1	0.3
Paintstone Nodules	544	13.6	5	0.5	7	2.2
Mano	1	x	-	-	-	-
Ground Slate Knives	3	x	-	-	-	-
Gouge-like Implement	1	x	-	-	-	-
Steatite Block	1	x	-	-	-	-
Slate Pendants	-	-	2	0.2	-	-
COPPER						
Beads	34	0.9	-	-	1	0.3
Bars	28	0.7	-	-	-	-
Awls	26	0.6	1	0.1	-	-
Barbs	12	0.3	-	-	1	0.3
Bangles	11	0.3	-	-	-	-
Chisels	3	x	-	-	-	-
Scrapers	2	x	-	-	-	-
Projectile Points	1	x	-	-	1	0.3
Knife	-	-	-	-	1	0.3
Miscellaneous	2	x	-	-	1	0.3
Flakes	80	2.0	1	0.1	2	0.6
Nuggets	31	0.8	-	-	-	-
TOTAL	4002	100.0	1004	100.0	313	99.8

NOTE: The Lower Terrace phase includes only recoveries from Levels V and VI. Large plano side scrapers and perforators have been included under scrapers and the anvil stone has been included under hammerstones.

TABLE 16
RIM SHERD SERIATION FOR SEVEN NORTHERN LAUREL SITES AND TWO COMPONENTS

		PSEUDO-SCALLOP SHELL		DENTATE STAMP		DRAGGED PUNCTATE Wright's Linear Punctate (1967)	DRAGGED STAMP	INCISED	LINEAR STAMP	MISCELLANEOUS	PUNCTATE	TOTALS
LONG SAULT	%	4.2	0.7	1.4	17.2	48.8						
	f	12	2	4	49	139						
	%	4.9		67.4			12.9	8.4	3.2	3.2		100.0
	f	14		192			37	24	9	9	-	285
HUNGRY HALL	%	10.8		29.7	16.2	16.2						
	f	4	-	11	6	6						
	%	10.8		62.1			21.6	2.7		2.7		99.9
	f	4		23			8	1	-	1	-	37
MACGILLIVRAY	%	14.0	8.5	33.8	9.9	7.0						
	f	10	6	24	7	5						
	%	22.5		50.7			9.9	1.4	11.3		4.2	100.0
	f	16		36			7	1	8	-	3	71
WABINOSH RIVER Upper Terrace	%	12.5	39.6	4.2	22.9	6.2						
	f	6	19	2	11	3						
	%	52.1		33.3			14.6					100.0
	f	25		16			7	-	-	-	-	48
MOUND ISLAND	%	46.5	9.3	18.6	11.6	2.3						
	f	20	4	8	5	1						
	%	55.8		32.5			9.3	2.3				99.9
	f	24		14			4	1	-	-	-	43
TAILRACE BAY	%	53.4	10.8	4.9	26.1							
	f	143	29	13	70	-						
	%	64.2		31.0			3.3	1.5				100.0
	f	172		83			9	4	-	-	-	268
WABINOSH RIVER Lower Terrace	%	56.4	12.8	10.2	10.2							
	f	22	5	4	4	-						
	%	69.2		20.4			5.1		2.6	2.6		99.9
	f	27		8			2	-	1	1	-	39
PELICAN FALLS	%	51.1	13.4		6.7	4.4						
	f	23	6	-	3	2						
	%	64.4		11.1			22.2	2.2				100.0
	f	29		5			10	1	-	-	-	45
HERON BAY	%	47.2	17.9	4.0		5.7						
	f	58	22	5	-	7						
	%	65.1		9.7			23.6				1.6	100.0
	f	80		12			29	-	-	-	2	123

while on the most recent sites, Hungry Hall and Long Sault, located some 590 kilometers to the west, it occurred on 84% and 74% of the rims, respectively. At the Wabinoash River site bossing occurred on 20% of the vessels of the Upper Terrace and 32.3% of the vessels from the Lower Terrace. The latter frequency includes two plain bossed rims recently recovered from the Lower Terrace (Filteau 1978). The comparatively low frequencies for bossing suggests a relatively early position for the occupation of both terraces.

Wright also examined the chronological trends of the dominant decorative techniques. Rim sherd seriation for seven northern Laurel sites and the two Wabinoash components is given in Table 16. Adjustments made in published reports to permit the comparisons to be made were given in the Macgillivray site report (Dawson 1980). Recoveries from the early phase on the Lower Terrace are not sufficient to treat the phase separately. Pseudo-scallop shell impressed rims are considered an early trait. In contrast to bossing, this trait, with frequency of 56.4% on the Lower Terrace at the Wabinoash River site and 12.5% on the Upper Terrace, suggests that the Lower Terrace was the earliest occupation. Vessels with combined techniques are generally considered early, taken together with pseudo-scallop shell they show a frequency of 69.2% on the Lower Terrace and 52.1% on the Upper Terrace. The frequencies indicate that both terraces are early in Wright's sequence. Dragged punctate, Wright's linear punctate (Dawson 1978:55), dentate stamp and plain are considered late traits. Taken together, these traits have a frequency of 20.0% on the Lower Terrace and 33.3% on the Upper Terrace, again indicating an earlier Lower Terrace occupation and a relatively early position for both.

In contrast, combined techniques when considered separately have a frequency of 39.6% on the Upper Terrace and 12.8% on the Lower Terrace, again suggesting that the Upper Terrace is the earlier. The frequency on the Upper Terrace exceeds all other sites. This is interpreted as a reflection of regional variation. Regional distinctions can also be seen in the low frequencies of the dragged stamp technique which Wright considered was a relatively constant technique.

Metrical attributes at the sites examined by Wright showed temporal differences consistent with the changing decorative techniques (Wright 1967: Table 34). The mean distance of the encircling punctates below the lip is 14.6 mm on vessels from the Lower Terrace at the Wabinoash River site. This is the same frequency as that for the Heron Bay site, whereas the Upper Terrace has a mean of 12.7 mm, identical to the late Long Sault site. The mean vertical length of the punctates from the Lower Terrace at 3.7 mm compares to 3.8 mm at the Heron Bay site, whereas the Upper Terrace mean of 3.2 mm is less than any of the sites examined by Wright. The mean distance for punctate spacing, 12.1 mm on vessels from the Lower Terrace, 10.2 from vessels on the Upper Terrace compared to the sites examined by Wright, where the range was 5.1 to 10.2 mm for the most recent site, suggests a regional difference.

In general, the trait attributes place the Wabinoash River site occupations early in Wright's sequence, with the Lower Terrace being slightly earlier than the Upper Terrace, but cognizance should be taken of the limited and often equivocal data upon which the discussion is based. The *in situ* model of unilineal evolution with variability due to change through time within a stylistically homogeneous area, implicit in the temporal sequence, does not adequately account for the difference seen at the Wabinoash River site (cf. Syms 1977; Brose 1970:89). Uniform stylistic conservatism across the area occupied by the northern Laurel peoples would appear to be unrealistic given the unstable resource base of the subarctic forest zone which necessitated an adaption based on small highly mobile agamous groupings who resided for only short periods in ecologically favourable zones for food extraction (Dawson 1977; cf. Fisher 1969; Rogers and Black 1976; Syms 1977). Prevailing traits, and trait changes which resulted through time, would be differentially distributed. Similarly, changes resulting from interaction with other related groups in adjacent areas would be unevenly spread.

These factors more adequately account for the diversity seen at the Wabinoash River site. Only if local sequences could be developed would it be possible to fit the sequence accurately into a broader temporal configuration.

Wright suggests that Laurel ceramics developed independently in the northern forest, commencing as early as ca. 700 B.C., after diffusion of the essential techniques of manufacture, from the region immediately to the southeast (1972b:59;n.d.). The general eastern affinity of the ceramics has been long recognized but the expert craftsmanship seen in the northern ceramics argues for the intrusion of peoples rather than simple diffusion and the late radiocarbon dates in northern Ontario do not support Wright's early base date. This also holds true for adjacent regions (Fitting 1970:141; Syms 1976a:225; Stoltman 1974:88).

There are two recently reported early dates from components identified as Laurel near the mouth of the Michipicoten River some 125 kilometers south of Heron Bay on the northeast shore of Lake Superior (Brizinski and Buchanan 1977). From hearth charcoal associated with ceramics, a date of 1165 B.C. \pm 425 (S-1265) was obtained from the Michipicoten Harbour site. While the ceramics are almost singularly decorated with pseudo-scallop shell impressions and the minimum date of 740 B.C. falls close to Wright's estimate, the vessels are not characteristic of Laurel ceramics, nor are the lithics. The vessels were manufactured by paddle and anvil in contrast to the coiled Laurel pottery. End scrapers comprise the overwhelming number of scrapers in contrast to the lower number on early Laurel sites and the projectile points are atypical broad points. Charcoal associated with ceramics from the Wawa site has been dated at 535 B.C. \pm 250 (S-1266), the ceramic manufacturing technique is paddle and anvil, and pseudo-scallop shell impressed decorations are virtually absent and much of the lithic recoveries have affinities with the Shield Archaic and Early Woodland periods (Brizinski and Buchanan 1977). Such recoveries cannot be subsumed under the traits characteristic of the Laurel tradition. A third questionable early date, 490 B.C. \pm 140 (DIC, 443), for which association details have not been published, was obtained from a site further south on the coast (Conway 1980:46).

The two other comparatively early dates which have been reported are also rejected. One was from the MacGillivray site on Whitefish Lake some 275 Kilometers west of Heron Bay. A date of 290 B.C. \pm 80, (Gak-2178) was obtained from charcoal which lacked clear cultural association (Dawson 1980:48). Another was from the Montreal River site on Lake Timiskaming some 530 kilometers east of Heron Bay. A date of 180 B.C. \pm 280 (Gak-2803) (Knight 1977:34) was obtained from pit refuse associated with ceramics and lithics. The only identifiable vessel is Point Peninsula 1 Vinette 1 ware. The date cannot be accepted as dating the Laurel component at the site (Knight, personal communication). The earliest acceptable date, 150 B.C. \pm 165 (DIC 575), was obtained from the Ballysadare site near Kenora from a clearly demarcated Laurel stratum (Rajnovich 1980:54).

At the McCluskey site on Whitefish Lake a radiocarbon date of 40 B.C. \pm 90 (Galt 1282) was considered to date the sparse Laurel recoveries from this Blackduck tradition site (Dawson 1974:87). At the Laurel tradition MacGillivray site wood from a mound crib yielded a date of A.D. 20 \pm 200 (Gak-1492) (Dawson 1980:48). At the Ouimet site north of the height of land on the Attawapiskat River, a date of A.D. 250 \pm 225 (S-464) was obtained from carbonized birch associated with Laurel sherds (Wilmeth 1978:131). At the Sand River site some 175 kilometers south of Heron Bay on the shore of Lake Superior, charcoal from a hearth feature yielded a date of A.D. 320 \pm 100 (M-1507) (Wright 1967:69). From a clearly demarcated Laurel stratum (IV) at the Cressman site on Lac des Mille Lacs 295 kilometers west of Heron Bay, a radiocarbon date of A.D. 625 \pm 185 (S-1248) was obtained from a charcoal sample (McLeod 1977). Radiocarbon dates from carbon samples obtained from the Heron Bay site range from A.D. 140 to A.D. 790-

A.D. 140 ± 150 (GSC-686), A.D. 410 ± 160 (GSC-445), A.D. 610 ± 170 (GSC-208), A.D. 700 ± 60 (S-171) and A.D. 790 ± 130 (GSC 499). While Wright rejects these dates as too recent (1967:95), the arithmetic mean of the five radiocarbon dates (A.D. 530 ± 132) and the weighted mean (Syms 1976b) (A.D. 625 ± 47) suggest that the major period of occupation was between A.D. 398 and A.D. 672. There are a series of four reported Laurel radiocarbon dates from Lake of the Woods which range from A.D. 115 ± 50 to 490 ± 130 (Rajnovich and Reid 1978: Appendix 1). Two late dates, A.D. 620 ± 50 (DIC 1143) and A.D. 710 ± 80 (1-10-970), were obtained from a Laurel component on the Albany River (Riddle 1980:180) and a second late date, A.D. 880 ± 260 (S-469), was obtained from a clearly demarcated Laurel component at the Ouimet site (Wilmeth 1978). From the Armstrong Laurel mound crib at the Long Sault site, a date of A.D. 957 ± 100 (Y-2594) was obtained (Kenyon 1970:82).

Acceptable dates for Laurel in northwestern Ontario range from 150 B.C. to A.D. 1190. Sym's tabulation of radiocarbon dates for the surrounding regions reflects a similar spread (1976a: Table 4). In Manitoba the spread is A.D. 30 to A.D. 1030 suggesting that the western Laurel penetration was later than in northern Ontario, while the terminal date may be about the same. Syms has suggested a terminal date in Manitoba of A.D. 1100 (1976a:225), while Dickson, based on a re-assessment of radiocarbon dates places the terminal date at A.D. 1200 (1976:39). With a spread from A.D. 30 to A.D. 430 in Michigan to the southeast, the Laurel penetration there also appears slightly later as is also the case to the southwest in Minnesota where the spread is 30 B.C. to A.D. 560. In both these regions the terminal dates appear earlier than in the north; however in Minnesota Stoltman has suggested a terminal date closer to A.D. 900 (1974:88).

In northern Minnesota Stoltman sees an expansion of the Laurel tradition taking place during the middle and late Laurel times, A.D. 300 to A.D. 900, with the early Laurel sites generally located in the southern portion of the Laurel range between 100 B.C. and A.D. 300 (Stoltman 1974:89). He proposes a number of temporal variants based on typological evidence and radiocarbon dates and sees Wright's early sites as having their closest affinities with his middle period McKinstry phase (A.D. 500 to A.D. 900) and Wright's late sites as having a close affinity with his final Smith phase.

Laurel ceramics in early context to the south including the Malmo focus in Minnesota Morrison Mound 13, 690 B.C. ± 200 (1-787), and the Saugeen tradition in southern Ontario Donaldson site 530 B.C. ± 60 (S-119) (Wright 1976:95) and the absence of early northern dates does not support early, independent northern development of the Laurel tradition. Radiocarbon dates (Table 17) do not suggest a base date closely approximating that proposed by Wright; at best a date some 500 years later is suggested. Based on this, the beginnings of the Laurel occupation at the Walbinosh River site is placed at ca. 200 B.C.

The occupation of the Wabinoish River site appears to have extended over a discontinuous but prolonged period represented by at least two phases, an early phase ca. 200 B.C. to A.D. 500 on the Lower Terrace and a later phase on both terraces, ca. A.D. 500 to A.D. 1200. The early phase is represented by a sparse assemblage reflecting a small population while the later phase occurs throughout the site reflecting a considerably expanded population. It can be divided into two, a middle to late stage ca. A.D. 500 to A.D. 900 and a terminal stage at a time of reduced population in the region (Dawson 1977:168) and coalescence with the later Blackduck tradition ca. A.D. 900 to A.D. 1200. Evidence for these stages comes from trait differences in the absence of stratigraphy. Overlapping of the two cultures seen in the terminal era has also been tentatively suggested in northern Minnesota (Stoltman 1974:88) and an overlap of at least 300 years has been proposed in southern Manitoba (Syms 1977:106). Coevality of Laurel and Blackduck then appears to characterize the late period in the west but at this time the same cannot be said of the east.

TABLE 17
NORTHWESTERN ONTARIO AND MANITOBA
LAUREL TRADITION RADIOCARBON DATES

DATE		SITE/LOCATION		REFERENCE
<i>B. C.</i>				
150 ± 165	(DIC-575)	Ballysadare	NWO	Rajnovich 1980
40 ± 90	(Gak-1282)	McCluskey	NWO	Dawson 1974
<i>A. D.</i>				
20 ± 200	(Gak-1492)	MacGillivray	NWO	Dawson 1980
60 ± 90	(Gak-6067)	Kame Hill	MAN	Dickson 1976
130 ± 150	(A-1424)	The Pas	MAN	Long & Tamplin 1977
140 ± 150	(GSC-686)	Heron Bay	NWO	Wright 1967
250 ± 225	(S-464)	Ouimet	NWO	Wilmeth 1978
305 ± 195	(S-959)	Wapisu Lake	MAN	Dickson 1976
320 ± 100	(M-1507)	Sand River	NWO	Wright 1967
360 ± 50	(A-1368)	The Pas	MAN	Long & Tamplin 1977
360 ± 60	(DIC-445)	Sinclair Cove	NWO	Conway 1980
410 ± 160	(GSC-445)	Heron Bay	NWO	Wright 1967
610 ± 170	(GSC-208)	Heron Bay	NWO	Wright 1967
620 ± 50	(DIC-1143)	Wasp Sting	NWO	Riddle 1980
625 ± 100	(A-1294)	The Pas	MAN	Long & Tamplin 1977
625 ± 185	(S1248)	Cressman	NWO	McLeod 1977
660 ± 150	(Gak-6063)	Kame Hill	MAN	Dickson 1976
700 ± 60	(S-171)	Heron Bay	NWO	Wright 1967
710 ± 80	(I-10-970)	Wasp Sting	NWO	Riddle 1980
750 ± 130	(S-746)	Notigi Lake	MAN	Wiersum & Tisdale 1977
790 ± 130	(GSC-449)	Heron Bay	NWO	Wright 1967
815 ± 65	(S-1079)	Oscar Point	MAN	Dickson 1976
855 ± 180	(S-680)	Wabinoash River	NWO	Dawson 1980
880 ± 260	(S-469)	Ouimet	NWO	Wilmeth 1978
957 ± 100	(I-2594)	Long Sault	NWO	Kenyon 1970
1030 ± 150	(S-744)	Notigi Lake	MAN	Wiersum & Tisdale 1977
1240 ± 175	(S-6811)	Wabinoash River	NWO	Dawson 1980
<i>NWO - Northwestern Ontario</i>			<i>MAN - Manitoba</i>	

The last phase of the Initial Woodland period appears to have been marked by a decline in population in northwestern Ontario (Dawson 1977:168) and a movement into the area of a new population, carriers of the Blackduck tradition commencing about A.D. 800. The population is considered to be derived from the same southeastern base as the earlier population. Apart from new ceramic technology there is no recognizable discontinuity in the archaeological assemblages. Early radiocarbon dates from Blackduck sites across the north - A.D. 950 ± 80 (GSC-85) from the Pic River site on Lake Superior (Wright 1968:46), A.D.

785 ± 120 (1-790) from the Scott site northern Minnesota (Johnson 1964:45), A.D. 780±90 (S-652) and A.D. 845 ± 85 (GX-1192) from Lord and Calf mountain sites in central Manitoba (Syms 1974: 18), A.D. 860 ± 120 (Gak-6495) at the Wapisu site in northern Manitoba (Wiersum and Tiesdale 1977:6) suggests that movement coincided with the climatic amelioration in the latter part of the Scandic episode and the beginnings of the Neo-Atlantic episode (Dawson 1977; cf. Syms 1977).

Evidence for the movement is based on the occurrence of a ceramic shift from smooth, coil made, conical vessels, decorated with pseudo-scallop shell impressions and dentate stamping to textile-impressed, globular vessels made by paddle and anvil or fabric mold, decorated with cord-wrapped object impressions and the replacement of elongated projectile points by small triangular forms. Absence of sites with transitional developments in technology and lack of clinal gradient from east to west suggests a rapid spread (Syms 1976a; 1977).

Ceramic attribute mixing seen in northern Ontario (Dawson 1974, 1976a, 1976b), northern Minnesota (Evans 1961; Stoltman 1973: 25-30), and Manitoba (Syms 1976a) is attributed to contact between the two traditions. The new tradition is assigned to the Algonkians (Dawson 1974, 1977; Lugenbeal 1978; Wright 1972b; Syms 1976a). While band identity was a changing phenomenon the tradition has been assigned in northwestern Ontario to the Northern Ojibwa (Dawson 1974, 1976a, 1977; Wright 1971).

Recent analysis of the northern Minnesota Smith Mound site suggests two Blackduck phases (Lugenbeal 1978). A radiocarbon date of A.D. 930 ± 65 (Wis. 616) represents an early phase which Lugenbeal states has strong southern affinities while a later phase dated at A.D. 1165 ± 67 (based on five weighted tree ring correlated dates) generally lacks southern affinities. It is closely allied with the northerly Blackduck sites (Lugenbeal 1977).

The Terminal Woodland period has a comparatively sparse representation on the Wabinoosh River site. Recoveries were confined to the Lower Terrace being concentrated in the upper levels of Area B. Slightly less than one third of the total ceramics from the terrace were from the Blackduck tradition of the period and on a comparative basis they are not from an early phase. A middle occupation is indicated by the radiocarbon date A.D. 1480 ± 60 (S-1395). These factors suggest a short, late occupation, probably a small seasonal camp. Ceramic recoveries permit comparisons but mixed lithic recoveries deny their separation and hence comparison.

The sparse presence of mixed attribute ceramics reflects the early presence of the carriers of the Blackduck tradition on the lake. Two radiocarbon dates, A.D. 1115 ± 110 (S-1396) and A.D. 1315 ± 110 (S=1397) (Filteau 1978) from the Abeki Point site on Lake Nipigon, which has a Blackduck component, provide evidence for the earlier presence of the tradition on the lake. At the Mound Island site on Whitefish Lake where the two traditions also occurred, temporal displacement was evident (Dawson 1978) and predicated on the late date of the Blackduck occupation at the Wabinoosh River site it appears to be also true of this site. The evidence does not indicate the cultural gap which has been suggested for areas to the southeast (McPherron 1967:274).

Based on ceramic modes established in northwestern Ontario for the Blackduck Tradition (Dawson 1973), a rough comparison of the tradition on the lake with other regions has shown that the sites have their closest affinities with sites immediately to the southwest at Whitefish Lake and to the west in north central Manitoba (Dawson 1976b). While the relationship is held to have general validity, the typical socio-cultural organization of the residents of the subarctic region, being characterized by intermittent and unstable associations of autonomous family hunting groups temporarily united by common residence at seasonal encampments, does not accommodate uniform variability due to change through time

TABLE 18
BLACKDUCK VESSEL MODES FOR LAKE NIPIGON SITES
AND THE MOUND ISLAND AND McCLUSKEY SITES ON WHITEFISH LAKE

	MODE 1		MODE 2		MODE 3		MODE 4		MODE 5		MODE 6		MODE 7		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
WABINOSH RIVER	4	50.0	1	12.5	-	-	-	-	-	-	2	25.0	1	12.5	8	100.0
WABINOSH CACHE	7	63.3	2	18.2	-	-	1	9.1	-	-	-	-	1	9.1	11	99.7
TOWNSEND	7	53.8	1	7.7	1	7.7	-	-	-	-	3	23.0	1	7.7	13	99.9
SIX CAMPSITES LAKE NIPIGON	9	60.0	4	26.6	1	6.6	-	-	-	-	-	-	1	6.6	15	99.8
MOUND ISLAND	3	37.5	-	-	2	25.0	1	12.5	-	-	2	25.0	-	-	8	100.0
McCLUSKEY																
Level I	20	58.8	6	17.7	1	2.9	4	11.8	1	2.9	2	5.9	-	-	34	100.0
Level II	22	64.7	3	8.8	2	5.9	4	11.8	-	-	3	8.8	-	-	34	100.0
Level III	4	66.6	1	6.6	-	-	1	6.6	-	-	-	-	-	-	6	99.8
Level IV	4	100.0	-	-	-	-	-	-	-	-	-	-	-	-	4	100.0
Level V	6	85.7	1	14.3	-	-	-	-	-	-	-	-	-	-	7	100.0
Other Areas	44	52.4	14	16.6	10	12.0	4	4.7	-	-	9	10.7	3	3.6	84	100.0

(Dawson 1977) and hence areally separate components are not directly temporally comparable. Comparisons of ceramic recoveries at the Wabinoash River site are therefore primarily limited to the Lakes Nipigon and Whitefish.

Table 18 shows the ceramic seriation based on modes for three sites on the lake, the Wabinoash River site, the Wabinoash Cache site at the mouth of Wabinoash Bay, the Townsend site on Pijitawabik Bay at the southeastern corner of the lake, six campsites combined and shown as one, (Pikigushu, Abeki Point, Harris, Billings Island, Sutherland and Caribou Island), and the Mound Island and McCluskey sites on Whitefish Lake (Dawson 1974, 1976a, 1978).

The McCluskey site is considered to have a time span of roughly 1,000 years terminating in the late prehistoric era ca. A.D. 1600. The Mound Island site is considered to represent a middle time period ca. A.D. 1100 - A.D. 1400 (Dawson 1978:65). The sites on Lake Nipigon have collapsed stratigraphy, thus, while they have associated trade goods it cannot be said with certainty that they extended into the historic period. The spread of modes suggests that they are temporally positioned in the middle time range. They have a greater number of modes than the lowest levels of the McCluskey site but they do not have the wide variety of modes of terminal Level I at the McCluskey site.

The frequency of Modes 1 and 2 at the Wabinoash River site reflects a close relationship with the Whitefish Lake region sites. The comparatively high frequency of Mode 6 reflects close affinities to the late McCluskey site levels, ca. A.D. 1400 to A.D. 1600 which is consistent with the radiocarbon date. Western affinities are also indicated by the presence of Mode 6 while Mode 7 indicates southwestern affinities with northern Minnesota (Dawson 1976b). The Townsend site has similar affinities but the sparse presence of Mode 3 indicates some southeastern influences. The absence of Mode 6 and the presence of Mode 4 at the Wabinoash Cache site indicates even stronger eastern ties (Dawson 1976c). The campsites on the lake are similar but differ in the specific eastern relationships in that they have Mode 3 representations but not Mode 4. The high frequency of Modes 1 and 2, 86.6% at the campsites, 81.5% at the Wabinoash Cache site, indicates that they are closer to the early occupations of the McCluskey site ca. A.D. 1100 to A.D. 1400 which is consistent with the radiocarbon dates from the Abeki site, while the Townsend and Wabinoash River sites have 61.5% and 62.5% respectively, indicating their later temporal position.

The composition of the family hunting groups at each site is reflected in the modal distribution while the nuclear family composition can be identified on the basis of the varieties of the modes represented (Dawson 1977). At the Wabinoash River site there are three varieties of Mode 1: variety 100 (50%), 103 (25%) and 110 (25%). The Townsend site had 85.7% variety 100 and 14.3% variety 135; and the Wabinoash Cache site had 71.4% variety 100, 14.7% variety 110 and 14.7% variety 135.

If the Brainerd-Robinson correlation matrix is taken to rank the mode differences, the Wabinoash River site is seen to stand closest to the Townsend site with a coefficient of similarity of 177. The Townsend site stand closest to the other Lake Nipigon sites having a coefficient of 171 while they in turn stand closest to the Wabinoash Cache site with a coefficient of 170. These sites stand relatively close to the test pit and surface recoveries from the McCluskey site with coefficients of 159, 167, 159 and 160 respectively, suggesting that none have a close temporal affinity with the earliest levels and this can be seen in the low coefficients (mean 129) with Levels IV and V.

The Wabinoash River, Townsend and Wabinoash Cache sites are similar in that the ceramics are almost exclusively Blackduck, whereas the other sites on the lake and in other regions have a half dozen or more late ceramic traditions (Dawson 1977:164, 1979). This exclusive presence suggests that the region is close to the heartland of the Southwestern Area Algonkian Culture which is identified by the Blackduck tradition (Dawson 1975).

SUMMARY

The Wabinoash River site was occupied on a semi-permanent basis by peoples who exploited the varied ecozones of the region. The site appears to have been used as a localized core area village or, to use an ethnographic term, a home base camp (Rogers and Black 1976). The chronology of the site reflects an overlapping series of phases with coexisting groups responsible for the varied archaeological assemblages seen in the recoveries. Diversity can be seen in the trait attributes and this is attributed to independent changes occurring in isolation in time and interdigital diffusion of traits across the vast areas occupied by peoples of the Woodland period.

The site was first occupied in the Initial Woodland period by carriers of the Laurel tradition. The period is divided into a sparse early phase ca. 200 B.C. to A.D. 500 characterized by residual Archaic-like lithics and pseudo-scallop shell ceramics and a later phase ca. A.D. 500 to A.D. 1200 characterized by a wide variety of Laurel ceramics. The later phase can be divided into two stages, an early stage ca. A.D. 500 to A.D. 900 characterized by an expanding population and a terminal assemblage characterized by a declining population and a coalescence with a new but related population ca. A.D. 900 to A.D. 1200.

The new peoples, carriers of the Blackduck tradition of the Terminal Woodland period, are seen as moving rapidly into the area from the south during a period of climatic amelioration. The small clustered occurrences of the recoveries at the site and their ceramic affinities to a late phase of the tradition in the region suggests an actual occupation of the site ca. A.D. 1400. The absence of associated trade goods indicates a termination before the historic period ca. A.D. 1650. Archaeologically, the recoveries are classed as a manifestation of the Southwestern Area Algonkian culture. The people are considered a distinct grouping of the Algonkian speakers who, in historic times, are known as Northern Ojibwa.

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