

Archeological Investigations

at

Voyageurs National Park

June 1984

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National Park Service
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Table of Contents

List of Figures.....	ii
List of Tables.....	iii
Acknowledgements.....	iv
Abstract.....	v
Project Descriptions.....	1
Black Bay Survey.....	1
West Kabetogama.....	8
Investigations at Clean-up Sites.....	9
Rainy Lake City.....	12
Summary.....	27
References Cited.....	29
Appendix I - Faunal Report.....	30

List of Figures

Figure	Pg.
1. Voyageurs National Monument. Sites mentioned in the text.....	2
2. Black Bay development area.....	3
3. Black Bay mound.....	4
4. Black Bay mound. View to east.....	5
5. 21SL73. Sketch map.....	10
6. Rainy Lake City plat.....	13
7. Rainy Lake City.....	14
8. Rainy Lake City. Feature 8 left of boathouse. Feature 16 left of 8.....	17
9. Rainy Lake City. Artifacts.....	24

List of Tables

Table	Pg.
1. Building removal sites investigated June, 1984....	11
2. Depressions at Rainy Lake City.....	15
3. Rainy Lake City. Identified faunal remains.....	19
4. Rainy Lake City. Unidentified faunal remains.....	20
5. Rainy Lake City. Inventory of recovered artifacts.....	21

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Chris Riddle washed the artifacts and did the initial sorting. Debbie McBride and Nancy Hartman are responsible for the illustrations. Helping with the artifact analysis, both Douglas Scott and W.E. Sudderth gave freely of their time and advice and helped the ignorant author sort out her historic artifacts. Mark Lynott was integral in helping to identify the prehistoric ceramics. Susan Monk identified the faunal remains, wrote Appendix I, and lent the author her notes from which further discussion was drawn.

All errors are, of course, wholly a product of my own efforts.

Abstract

During the period from June 4, 1984 through June 22, 1984, the Midwest Archeological Center conducted investigations at Voyageurs National Park. The 1984 investigations were under the direction of Mark Lynott. The field crew was under the direction of Melissa Connor and consisted of Steven Daron, Ted Krieg and John Northrip. This report details the nature and significance of the archeological remains investigated in June, 1984. Recommendations relating to proposed construction projects within the subject archeological survey areas are also offered.

Project Description

The purpose of these surveys was to inventory archeological materials present in the project areas, so they could either be avoided or mitigated before construction, clean-up, or for a National Register nomination, depending on the project. The work at Voyageurs during June, 1984 consisted of four separate projects (Figure 1):

A) Black Bay - This is a major development planned to the primary public access for the park, affecting ca. 150 acres on the south side of Rainy Lake. Presently consisting of wooded acreage, planned development includes roads, trails, parking areas, boat ramps, a visitor's center, a maintenance facility and a remote trailer parking area.

B) West Kabetogama - This is a smaller development, planned to be a secondary public access to the park. It will affect 18.5 acres in the resort community of Kabetogama. The construction area will include road and parking lot work, dock construction and other visitor facilities.

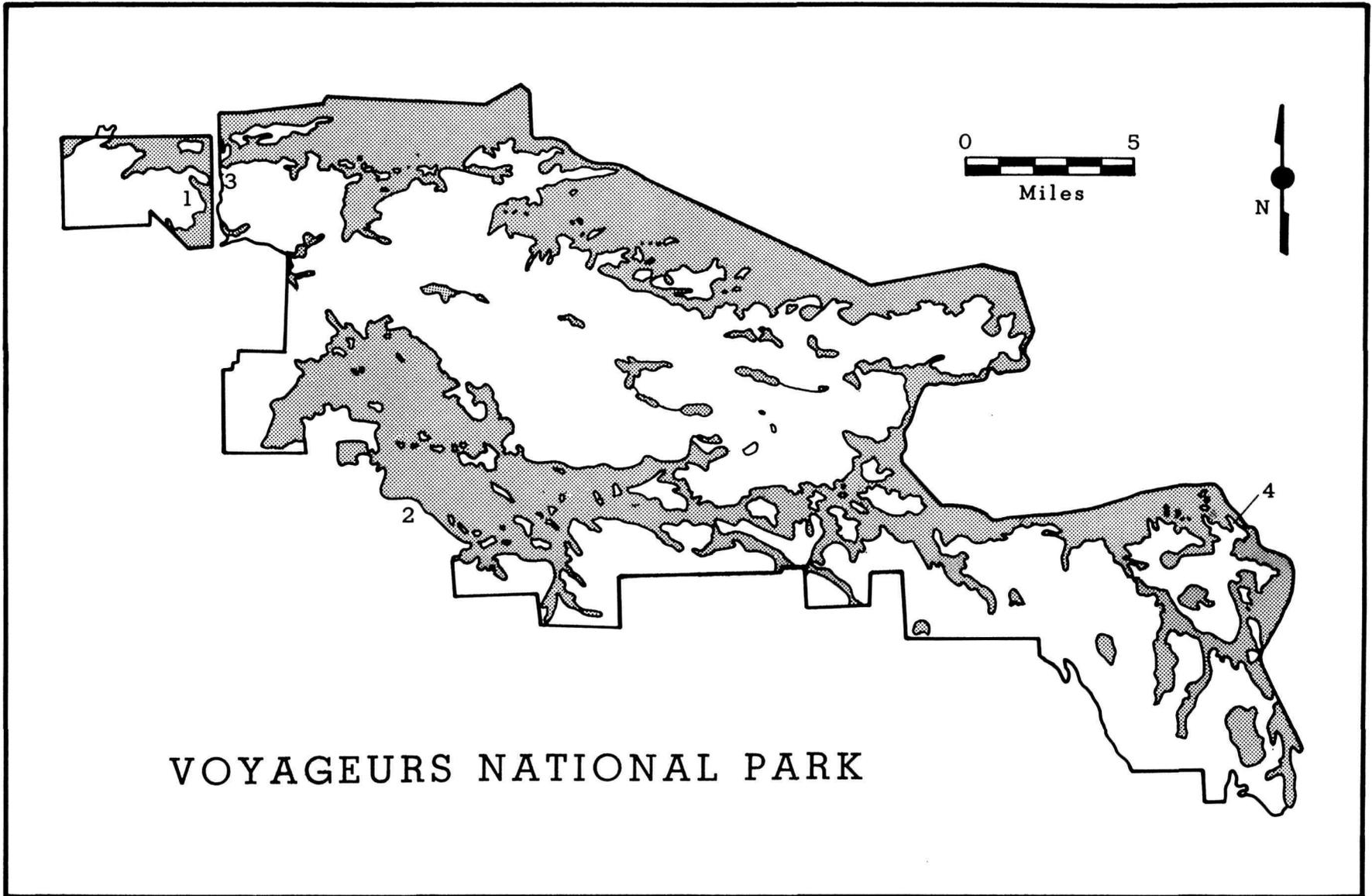
C) Clean-up of areas throughout the park - This project involves the demolition and removal of non-historic structures and fuel tanks at 16 sites throughout the park.

D) Rainy Lake City - This site is an abandoned town site from the turn of the century, which has been nominated to the National Register of Historic Places. Mapping and testing of the site was planned to enhance the data for the nomination.

Black Bay Survey

Methods

In order to inventory archeological materials in the designated area (Figure 2), the area was shovel tested. A shovel test consists of a shovel hole ca. 20-30 cm. wide dug to bedrock, subsoil or ground water, whichever comes first. The dirt from this shovel hole is pushed through a screen with a quarter inch mesh. The material remaining in the screen after the soil is removed is examined for cultural material.



VOYAGEURS NATIONAL PARK

Figure 1. Voyageurs National Park. Sites mentioned in the text.

1. Black Bay Development Area 2. West Kabetogama Development Area 3. Rainy Lake City 4. 21SL73

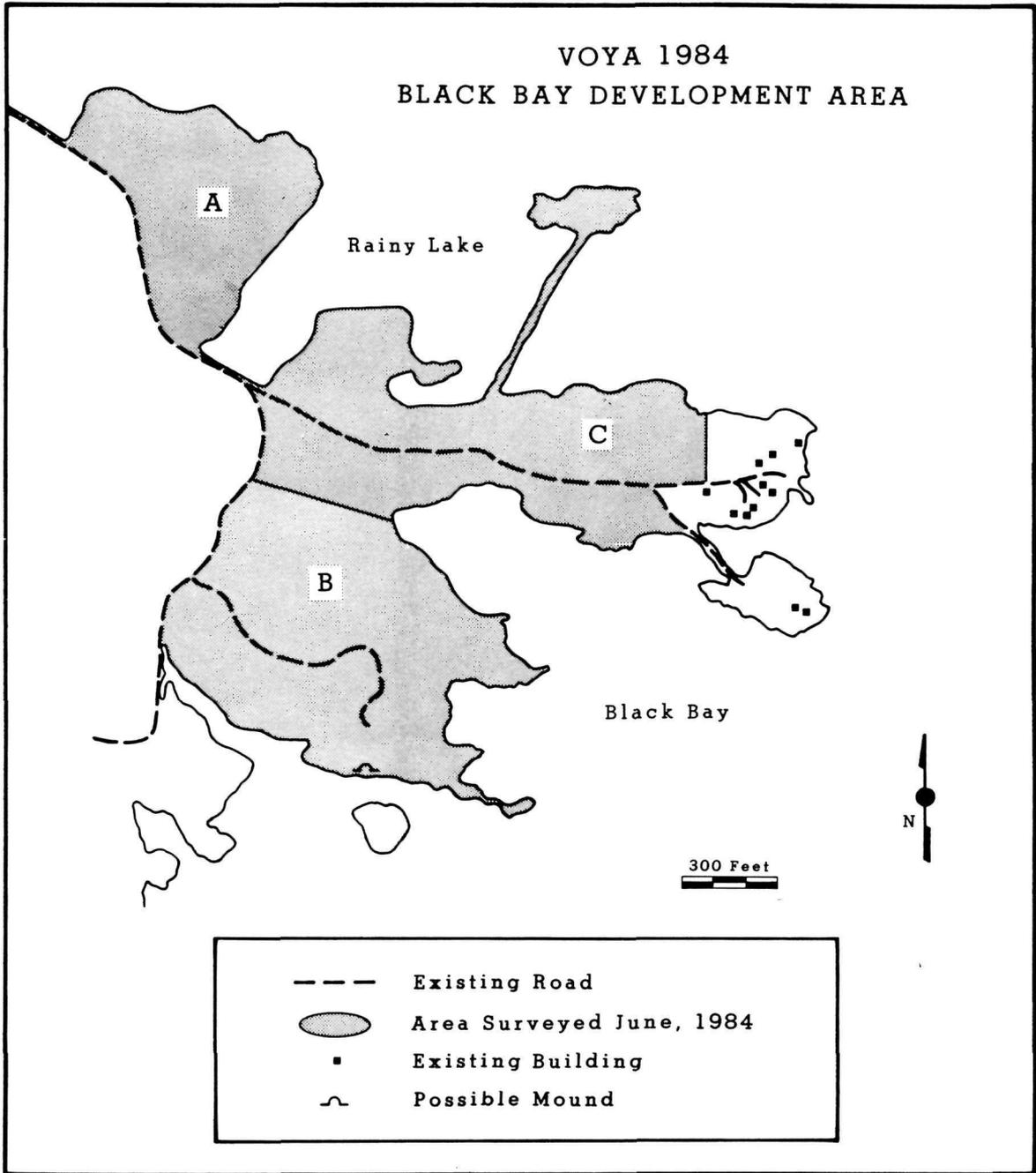


Figure 2. Black Bay Development area.

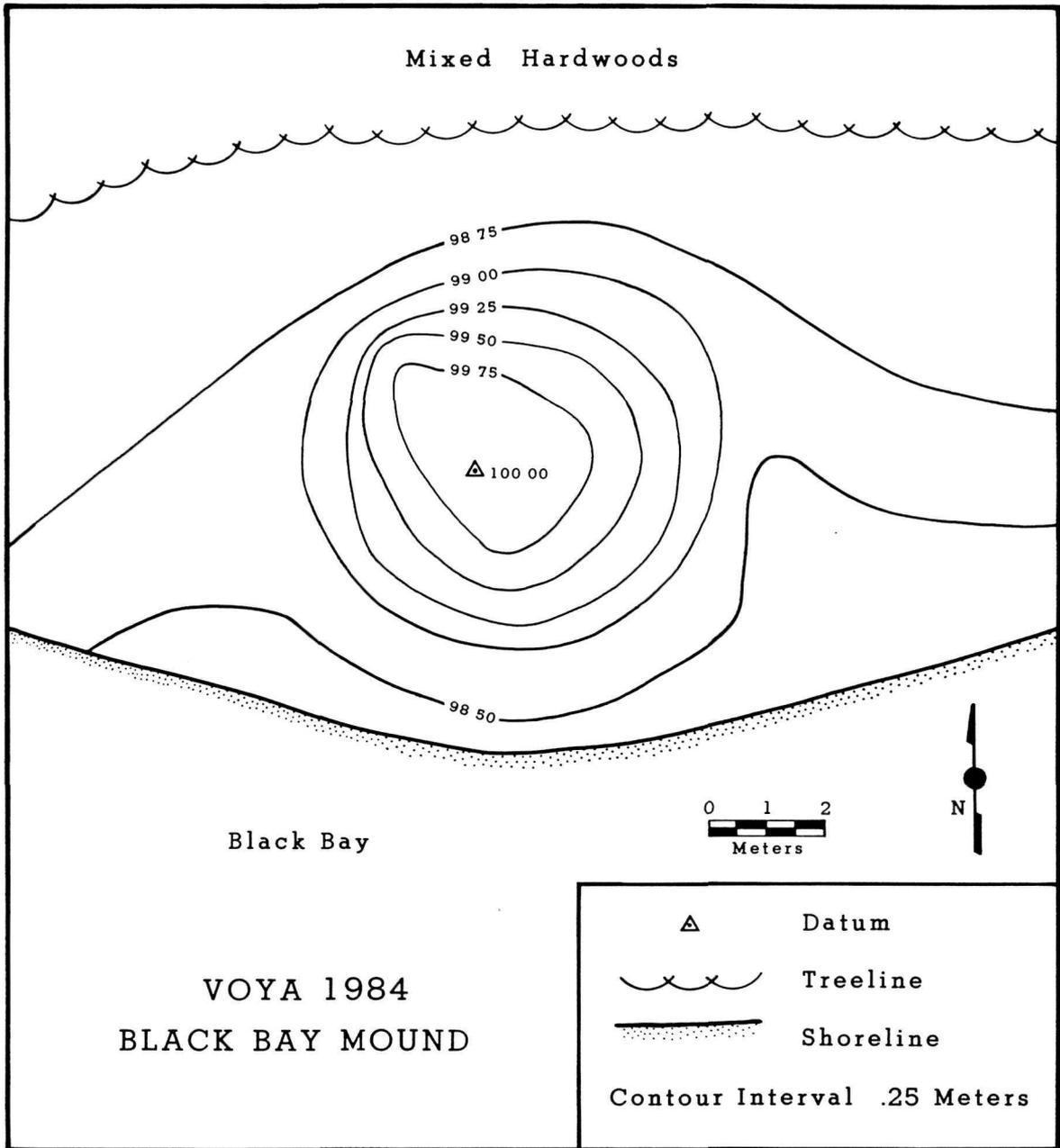


Figure 3. Black Bay Mound.



Figure 4. Black Bay Mound. View to east.

At Black Bay, the shovel tests were executed at 10 meter intervals across a square grid oriented north/south. The grid was constructed by following compass lines either north or south and executing a shovel test every 10 meters along the line. The compass lines followed were also spaced 10 meters apart and are referred to as transects in this report.

For testing, the Black Bay area was divided into three sub-areas: A) the future trail area, B) future remote trailer parking and maintenance area, and C) the future VIC area (Figure 2).

Results

The future trail area (Area A, Figure 2) was tested using approximately 322 shovel tests at ten meter intervals. This consisted of 30 transects with an average of 10.7 shovel tests in each. Several of these shovel tests contained charcoal, however, the frequent incidence of forest fires and recent campers' hearths in this area, as well as the lack of other cultural material, makes it unlikely that the charcoal is a result of either prehistoric or historic cultural activities.

Also found in this area were four pieces of widely scattered quartz and quartzite shatter (transect 8 shovel test 11, transect 12 shovel test 18, transect 19 shovel test 5, and transect 21 shovel test 3). Such shatter can result either from natural breakage or from a prehistoric tool manufacturing technique known as bipolar percussion. Because of the widely scattered nature of the pieces found, the lack of other cultural material, and the abundance of natural quartz in the area, the shatter found during this survey is probably natural.

The future maintenance and remote trailer parking area was tested with ca. 741 shovel tests in 40 transects. One isolated piece of quartz shatter (transect 21, shovel test 18) and a single wire nail (transect 21, shovel test 5) were found. No further cultural material was found, and these do not represent significant archeological finds.

There was, however, a large earthen mound on the south end of Transect 24 (Figures 2, 3, and 4). The mound is approximately six meters in diameter and rises 1.5 m above the surrounding terrain. The vegetation in the immediate area consists mostly of swampgrass, with a few scattered trees. The mixed hardwood forest which characterizes the Black Bay area begins a few meters to the north of the possible mound. Shovel tests were executed on the top and sides of the mound. The soil profile consisted of a thin sod layer on top of fill which is consistent with that of prehistoric burial mounds. However, no paleosol was found under the mound, which would make the possibility of it being the result of cultural activities much more likely. No artifactual material was found with this mound during the shovel testing.

The island on the north end of the project area was also shovel tested. Testing consisted of approximately 42 shovel tests in 12 transects. No cultural material was found.

Area C, the area for the future VIC, was tested using 547 shovel tests. Two pieces of quartzite shatter were found during this testing, one in transect 3, shovel test 2, the other in transect 33, shovel test 18. Intensive testing around each of these areas revealed no further cultural

material. Again, because of the scattered nature of the material, the lack of other cultural material and the abundance of natural quartz, it is probable that these materials are not cultural.

There were two parcels of land required for the construction of the VIC that had not been acquired by the park in June, 1984, and were not included in this survey. This includes the eastern tip of the peninsula, the Four Islands resort owned by Zitka, and the island on the south side of the peninsula owned by Swanbeck (Figure 2). According to prehistoric land-use patterns developed from earlier surveys of the park (Lynott et al. 1984), the topographic location of this area makes it archeologically sensitive, and it should be inventoried before construction begins.

The results of this survey suggest that neither Phase 1 nor Phase 2 construction will disturb significant archeological resources (excluding, of course, the unsurveyed lands). In later construction, problems with the possible burial mound may be found. However, consultation of the project maps and discussions with the Chief of Maintenance, Raoul Luftberry, indicated that this area would not be affected by construction, and could easily be avoided. Based on this information, no further testing of the mound was conducted during this survey.

However, should this area later be affected by construction and should further testing conclude that this feature is indeed a burial mound, then the present political sensitivity of aboriginal burials would make this a difficult resource to mitigate. It is strongly recommended that the mound be avoided during construction.

West Kabetogama Development Area

Methods

The area designated to undergo construction was delimited for the field

crew by Raoul Luftberry, and was then shovel tested as described above. A grid was only used in presently undeveloped areas. Developed areas were tested with isolated shovel tests in potentially undisturbed soils. South of the present dirt road, leading from the bituminous highway to the maintenance facilities, where the plans call for parking lots, much of the area was inundated and swampy. Areas with standing water were not shovel tested.

Results

Approximately 115 shovel tests were used to test the 18.5 acres planned for development. No archeological remains were found during this survey.

Investigations at Clean-up Sites

The following clean-up areas were investigated. The area to be disturbed at each site was delimited for the field crew by maintenance foreman Keith Meinning. Investigations consisted of shovel tests in the areas of potential disturbance.

The only site at which clean-up could endanger cultural resources is the building site at Namakan Narrows (432). The buildings here are located on archeological site 21SL73. The site was originally recorded in 1976 in a survey done through the University of Minnesota and directed by G. Gibbon. Collected during this survey were both Blackduck and Laurel ceramics, a chert scraper and lithic debitage (Gibbon 1977: 46)

The 1976 survey delineated the site as an area 80 m NE/SW by 40 m NW/SE (Figure 5). The site is confined to the eastern edge of the peninsula (by the Namakan Narrows Lodge road), and bedrock delimits the western edge of the site.

During the June, 1984 survey, 25 pieces of lithic debitage were collected. This included 14 chert flakes, 7 chalcedony flakes and 4 pieces

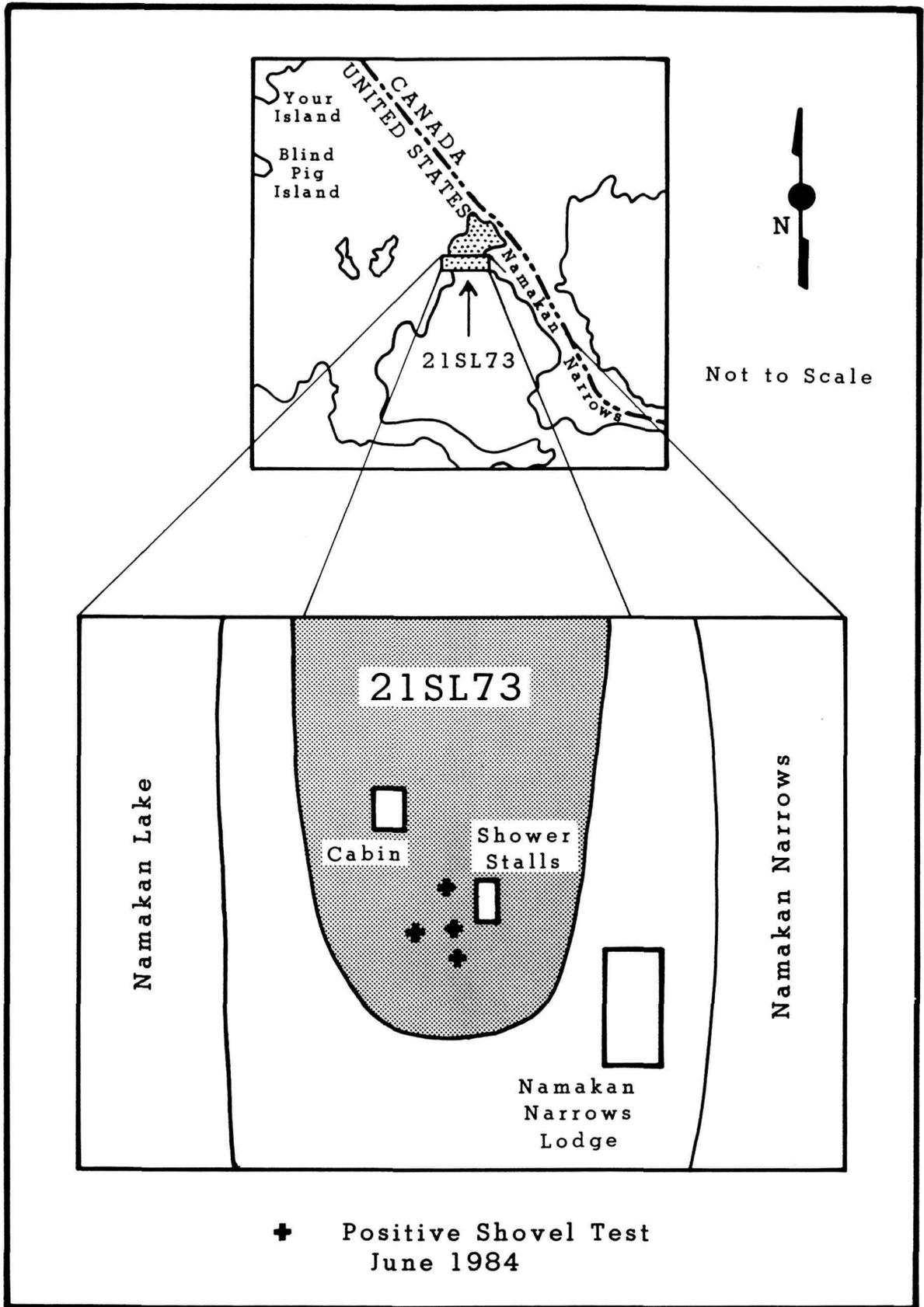


Figure 5. 21SL73. Sketch map.

Table 1. Building Removal Sites Investigated June, 1984

<u>Location</u>	<u>Site Number</u>
Fuel Tank Removal	
Ranta Bay	254
Hammer Bay	301
Big Sky Island	310
Hoist Bay	311
Mukooda Lake	406
Namekan Narrows	432
Building Removal	
Samuelson's	201
Devort Lands	205
YMCA Camp	218
Fox Farm	230
Zollner Island	244
Bittersweet Island	249
Footes Island	321
Back of Moon	403
Clark's Resort	414
Namakan Narrows	432

of non-diagnostic quartzite shatter. This was from four shovel tests near a former shower building. Shovel tests near the other structures produced no archeological material, and none were seen eroding from the bank near the Lodge.

Presently, the park would like to remove the structures at the site, the former Namakan Narrows Lodge, and a cabin and shower building. This should not disturb the archeological material, as long as it is done without ground disturbance. Presently, the park plans for YCC people to remove the building debris by hand and haul the debris off the peninsula for disposal. This should not cause ground disturbance.

Rainy Lake City

The Gold Mines sites in Koochiching County, Minnesota were accepted to the National Register of Historic Places on May 6, 1977. In February, 1982 an addendum to that nomination was submitted to include the site of Rainy Lake City as a Gold Mine site. The addendum thoroughly documented the significance and history of the site, but lacked documentation of what presently exists at the site.

Therefore, during the 1984 field season at Voyageurs, the crew scheduled 1.5 days to document the present condition of the site. On arrival at the site, it was found that the large area involved and thick vegetation precluded mapping of the entire site, so a smaller area around the former Minnesota Avenue was mapped (Figures 6 and 7). This area included a portion of a roadbed (probably Minnesota Avenue) and sixteen probable structural features.

The majority of these features lie in a mowed lawn. This made it possible to recognize and map these features in the amount of time allowed. Other features, unmapped, were recognized throughout the wooded areas to the

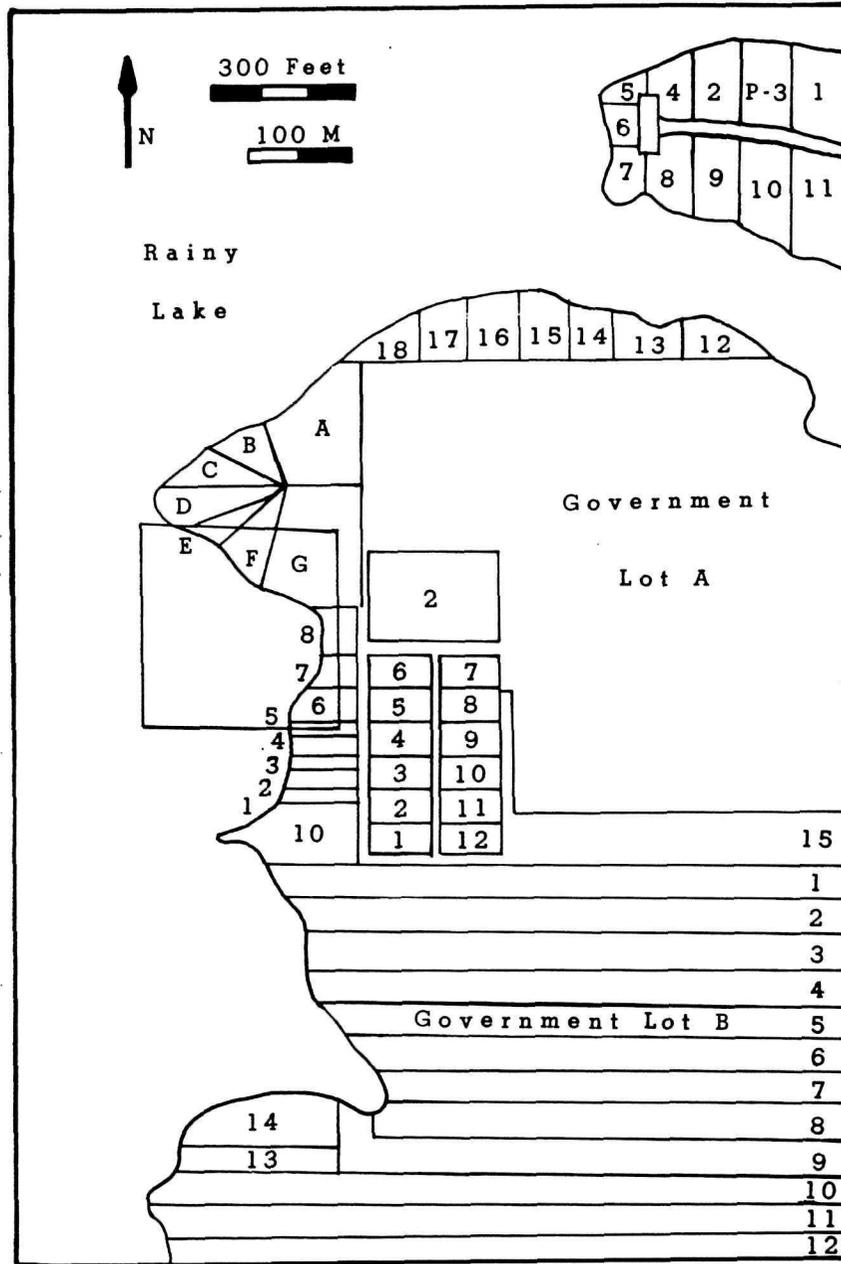


Figure 6. Rainy Lake City plat.

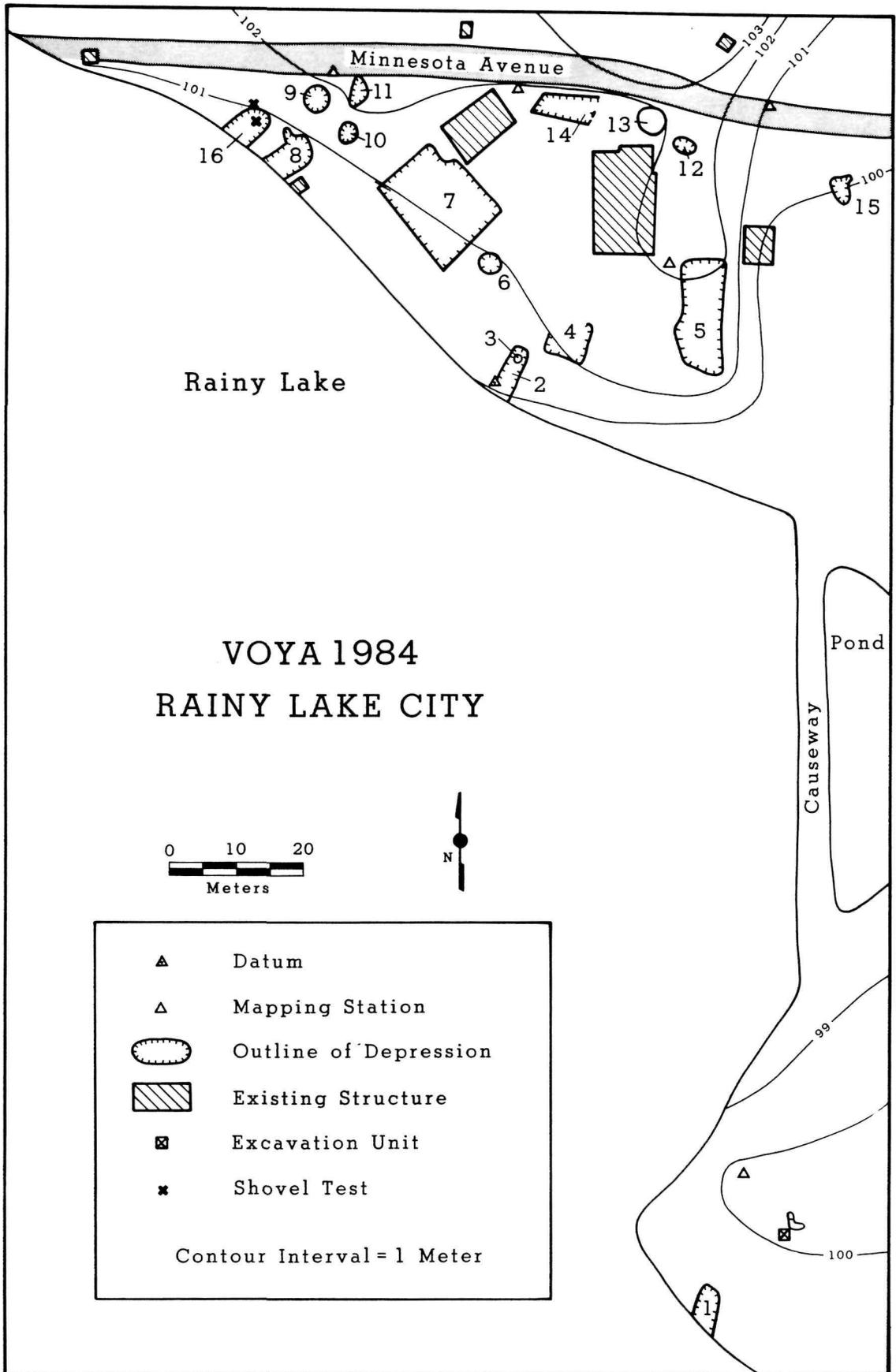


Figure 7. Rainy Lake City. Plan view.

Table 2. Depressions at Rainy Lake City.

Feature 1 - This sub-rectangular depression is ca. 3 m (E/W) x 5.5 m (N/S) and is located on the south side of the slope into Rainy Lake.

Feature 2 - This is another sub-rectangular depression. It is approximately 2 m (E/W) x 7 m (N/S). Located on the northeast side of this depression, on the slope into Rainy Lake, is a piece of concrete with a pipe embedded into it. Written in the concrete is L/9. This pipe was used as datum in mapping.

Feature 3 - This feature is a metal ring set in the ground. It is approximately one meter in diameter, and located in the northern portion of depression 2.

Feature 4 - This is a faint berm, locatable only because the area is clear of trees and undergrowth and the grass was mowed. Measuring approximately six meters square, the east wall is very faint and the north wall and portions of the west wall were not visible at all.

Feature 5 - This is a large, deep depression, measuring approximately 6 m (E/W) x 17 m (N/S). Over a meter deep, the depression has been used as a trash dump, and the bottom is covered with recent historic material.

Feature 6 - This is a small, shallow, circular depression, ca. 2.5 m in diameter.

Feature 7 - This is a large (ca. 12 m SW/NE x 16 m NW/SE) rectangular berm, relatively pronounced.

Feature 8 - Measuring ca. 7 m (NE/SW) x 4 m (NW/SE), this depression slopes into Rainy Lake. The interior of the depression included a recently planted flowerbed at the time the crew visited the site, and purple bottle glass was collected eroding from this garden. On the north side of this

Table 2. Depressions at Rainy Lake City. (cont.)

feature is a small, rectangular depression which abuts the north side of this feature.

Feature 9 - This is a circular depression measuring ca. 3 m in diameter.

Feature 10 - This is also a shallow, circular depression, measuring ca. 2.5 m in diameter.

Feature 11 - A shallow, sub-triangular depression, this measures ca. 2 m (E/W) x 4 m (N/S).

Feature 12 - This is a shallow, ovoid depression measuring ca. 3 m (E/W) x 2 m (N/S).

Feature 13 - This is a small, circular mound, ca 3 m in diameter. In the center is a slight depression.

Feature 14 - This is a low, semi-rectangular berm, ca. 4 m (N/S) x 8 m (E/W). The north and west sides are most easily distinguishable, the south side is very faint, and the east side could not be distinguished.

Feature 15 - This is a small, sub-rectangular depression, measuring approximately 2 m (E/W) x 4 m (N/S). The vegetation in the area of this depression was a tall grass which made it very difficult to accurately determine the dimensions of this feature.

Feature 16 - This is a fairly deep, sub-rectangular depression, ca. 4 m (E/W) x 6 m (N/S). It lies parallel to Feature 8, and like Feature 8, slopes into Rainy Lake.



**Figure 8. Rainy Lake City. Feature 8 left of boathouse.
Feature 16 next to 8.**

north, east and southeast of the mapped area. The roadbed for the former Minnesota Avenue could be followed further east, to a possible junction with Bay Avenue. Further north, the junction of the former Colorado Avenue and Rainy Lake was found. Depressions were found throughout this area which probably relate to former structures.

The mapped area was surface collected, and two 50 cm square shovel tests were executed. Also, a single meter square excavation unit was excavated on the south end of the mapped area. Although the northern portion of the mapped area, may have been better placement for the unit archeologically, the care give the tenants' lawns suggested it would have been an unwelcome intrusion there. The unit was excavated in 10 cm levels. Unfortunately, the unit was close to a recent historic structure and the majority of the material that came out of the unit was very recent. Interestingly, however, mixed with the historic material were a number of prehistoric items (Table 2).

A summary of the historic materials shows the majority are recent historic. These could come from the early portion of this century, but are not diagnostic of it. One of the more interesting artifacts is a side portion of a panel bottle (Figure 8). Embossed on the side of the bottle is 'TA'. A possible origin for this piece could be a bottle from Tarrent and Company, Druggists (W.E. Sudderth 1984, personal communication). The company operated from 1859 through 1905. After 1905, the company name changed to the Tarrent Co., and it continued to operate until sometime between 1925 and 1930 (Sudderth 1984: 53).

A brick was found on the surface near Feature 2. A common, salmon colored brick, it measures 3 1/2" x 2 1/4" x 8". This is a little smaller than the standard size for common bricks of 4" x 2 1/4" x 8 1/4" adopted by the national Brick-makers Association in 1887 (Kelly and Kelly 1977: 85).

The company brand, °C T & B Co'is enclosed in an impressed rectangle 3/4" deep. The brand is presently unidentified. Both the indented brand and rectangle were thought to save raw materials as well as giving the mortar more surface (ibid: 87). No mortar remains on the brick.

The brown bottle glass found is very possibly portions of historic beer bottles, although the fragments are too small to be diagnostic. It would not be unusual if the green and clear fragments of bottle glass were portions of liquor or medicinal flasks, but, again, the fragments are small and have no distinguishing marks.

Faunal materials relevant to the historic occupation come from the excavation unit. These include remains of pig, fish, cow, bird, muskrat and rabbit. The cow sample consists of a left ilium and acetabulum, which show butchering marks and probably represent the remains of a rump roast (Appendix 1). This sample suggests reliance on both domestic and native species, although probably not all of the faunal remains date to the occupation of Rainy Lake City. The muskrat remains, particularly when combined with the piece of a trap found in Unit 1, Level 3, suggest trapping as a form of economy.

Table 3. Rainy Lake City. Identified fauna.

<u>Species</u>	<u>Provenience</u>	<u>Element</u>
<u>Sylvilagus</u> sp.	Unit 1, Level 1	left humerus
	Level 2	left ulna
<u>Sus scrofa</u>	Unit 1, Level 3	1st phalange
<u>Bos taurus</u>	Unit 1, Level 3	left ilium and acetabulum
<u>Ondatra zibethicus</u>	Unit 1, Level 4	humerous, proximal epiphyses

Table 4. Rainy Lake City. Unidentified fauna.

Provenience	Pisces		Mammalia		Artiodactyla	
	wt.(g)	#	wt.(g)	#	wt.(g)	#
Shovel test 2	1	8	73	84	4	3
Unit 1, Level 1	0	0	3	6	0	0
Level 2	0	0	1	5	0	0
Level 3	1	5	45	11	0	0
Level 4	0	0	27	9	0	0

The activities reflected in the historic material include trapping, horse keeping, and building construction. These are activities expected in a town from the time period of Rainy Lake City. However, no materials specific to the gold mining industry were found. The trapping material suggests that gold mining was not the only economic activity at the site. More extensive excavations at Rainy Lake City could provide information of the lifestyle of a gold-mine boom town and how it compares to other towns of similar time periods. Rainy Lake City was a dynamic part of the gold-mining industry. The information encompassed at the site can help to illuminate not only the anthropology of small turn-of-the-century towns in this area, but also the gold industry itself.

Within the bounds of historic Rainy Lake City are four prehistoric sites, 21KC13-16. Neither the excavation unit nor the shovel test are within the defined boundaries of any of these sites. The excavation unit is east of 21KC14, and the shovel tests are northwest of 21KC13 along the shore of Rainy Lake.

Table 5. Rainy Lake City. Inventory of recovered artifacts.

Surface

Historic

glass	2 pieces purple bottle glass
	1 piece clear bottle glass
	1 piece purple, ribbed bottle glass
brick	1 brick stamped 'C T & B Co'

Shovel Test #1

Historic

glass	1 fragment clear bottle glass
metal	2 wire nails
ceramics	2 fragments whiteware
brick	4 fragments brick

Shovel Tests #2

Historic

glass	1 window glass fragment
-------	-------------------------

Prehistoric

lithics	1 chert (Knife River?) retouched flake	
	7 chert flakes	
	3 basalt flakes	
	1 chert biface fragment	
	1 quartzite nodule	
	8 pieces quartzite shatter	
	4 pieces quartz shatter	
	ceramics	1 plain sherd with comb and dentate stamps
		2 sherds with comb stamping
		1 plain sherd with a dentate stamp
17 cord-marked body sherds		
13 plain body sherds		
	35 body sherds too eroded to see cord-marking	

Excavation Unit 1

Level 1 (0-10 cm)

historic artifacts

glass	panel bottle fragment with 'TA' embossed
	brown glass base of liquor-style bottle
	5 clear bottle glass fragments
	1 brown bottle glass fragment
	1 white glass, 4-hole, shirt button
	5 window glass fragments

metal

safety pin fragment
crown cap
1 .22 cal. short cartridge
2 .22 cal. long cartridges
1 .22 cal. extra long cartridge
tin foil
1 staple
4 roofing nails

Table 5. Rainy Lake City. Inventory of recovered artifacts.

3 finishing nails		
		2 tacks
		3 wire nails
	brick fragments	
	mortar fragments	
	prehistoric artifacts	
	lithics	
		2 chert flakes
		2 pieces quartzite non-diagnostic shatter
Level 2 (10-20 cm)		
	historic	
	glass	49 window glass fragments
		1 piece heated, fused glass
		1 fragment (clear) bottle shoulder
		1 brown bottle glass fragment
		1 green bottle glass fragment
		2 clear bottle glass fragments
	metal	7 wire nails (variable sizes)
	prehistoric	
	lithics	1 chert end scraper
		14 chert flakes
		4 pieces quartzite non-diagnostic shatter
Level 3 (20-30 cm.)		
	historic	
	glass	2 window glass fragments
		2 clear bottle glass fragments
	metal	1 harness buckle
		4 wire nails (various sizes)
		1 rivet in leather
		1 bent rod
		riveted sleeve
		1 °trip' lever for trap
	prehistoric	
	lithics	11 chert flakes
		1 chalcedony flake (utilized)
		13 pieces quartz shatter
		1 possible hammerstone
Level 4 (30-40 cm.)		
	historic	
	metal	2 wire nails
		brick fragments
	prehistoric	
	lithics	2 chert flakes
		1 quartzite flake
Level 5 (40-80 cm)		
	prehistoric	
	lithic	1 piece quartz non-diagnostic shatter

Figure 9.

- A. Clear bottle glass fragment with 'TA' embossed.
- B. Prehistoric ceramic fragment, possibly from a Blackduck mortuary vessel.
- C,D. Prehistoric ceramics, combed-stamped sherds.
- E. Retouched flake, chert.
- F. Biface fragment, chert.
- G. End scraper, chert.

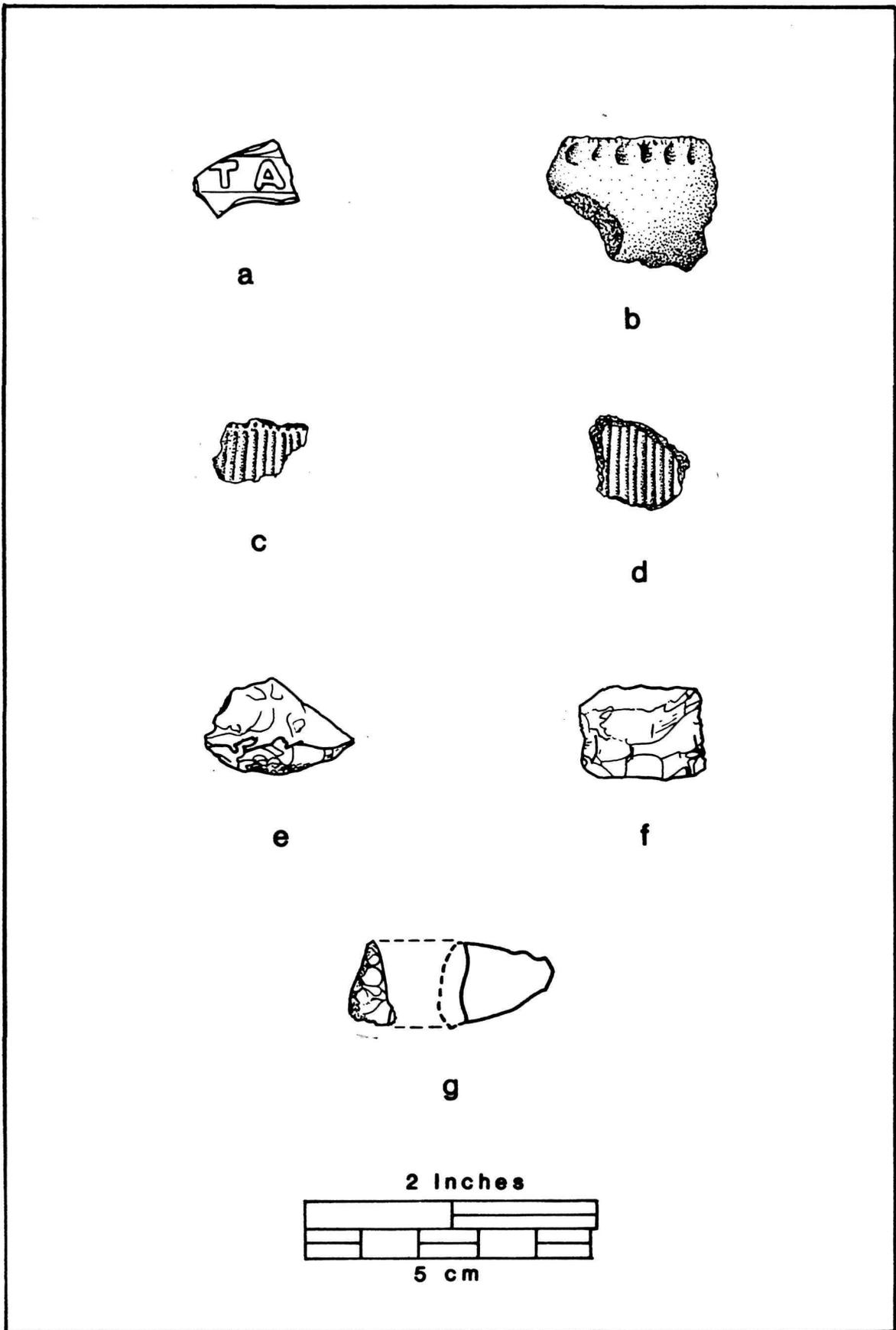


Figure 9. Rainy Lake City. Artifacts.

Shovel test #2, near Feature 8, contained a dense deposit of faunal material and prehistoric ceramics. Based on the ceramics, the prehistoric assemblage results from a minimum of two components, a Blackduck and a Laurel. In the excavation unit, the prehistoric material is mixed with the historic, but this could be the result of the proximity of the unit to a historical structure. Areas undisturbed by historical construction could have some stratigraphical separation between historic and prehistoric material. Further work is necessary to test that hypothesis.

All ceramics, except one sherd in the excavation unit, come from Shovel Test 2 (the shovel test outside of Feature 16). The large number of plain body sherds and the single sherd with dentate stamping are indicative of the ceramics of the Laurel Culture in the Voyageurs' area (Anderson 1979: 126; Lynott et al. 1984). The Laurel culture is characterized by a hunting-gathering subsistence base and intensive exploitation of fish during the warmer seasons (Anderson 1979: 126).

The cord-impressed body sherds and the combed sherds are indicative of the Blackduck culture (Lugenbeal 1979: 26). The Blackduck people seem to rely heavily on aquatic resources - predominately fish and wild rice.

One small sherd, a rim, is decorated with punctate marks spaced ca. 1/8" apart along the top. Above the punctates is a single line of combing. The sherd is grit-tempered and has an average thickness of 1/8". The sherd is probably a portion of a Blackduck mortuary vessel (Lynott 1984, personnel communication). No other indications of mortuary activity were found.

The ceramics of both the Laurel and Blackduck cultures have been divided into finer temporal categories (Lugenbeal 1976, 1978; Stoltman 1973). However, the meager amount of ceramics from this testing does not warrant further analysis.

Several varieties of chert are represented, as well as quartz and quartzite. Tools include a chert end scraper, a chert biface fragment, and several utilized flakes (Figure 9). These are fairly generic tools, and do not represent a specialized tool kit. The fish remains in shovel test 2 suggest fish was at least a portion of the prehistoric diet at this site.

Although more intensive testing is necessary to classify the prehistoric portion of the site, the range of lithic and ceramics and the moderate to high artifact density, make it possible that this is a summer base camp (Lynott et al. 1984) .

The extent of the prehistoric material was not defined during this testing. If similar to other sites in the area, the prehistoric material is probably concentrated within several hundred feet along the shoreline.

In view of the small amount of testing done at Rainy Lake City, the prehistoric component is dense and could yield much information. The prehistoric materials at the site include Laurel and Blackduck ceramics, and a generalized lithic tool kit. The faunal remains suggest fishing occurred at the site prehistorically. The preservation of the faunal remains could yield information on seasonality as well as diet and nutrition. More intense testing could yield floral remains as well.

However, the small amount of testing at Rainy Lake City did not help tie the structural depressions into the gold mining occupation. The majority of the historical artifacts could result from the time period during which the city was occupied, however, they are not diagnostic of that time period.

Management of this site should stress preservation, in accordance with Service policy. Although avoidance is one of the best methods of preserving sites, because of the standing structures and present occupants of the site,

stronger measures may be necessary. When removing buildings that are no longer in use, ground disturbance should be avoided. Tenants should also be encouraged to avoid ground disturbance. At the time of this visit, no erosion was noticed which would endanger cultural materials. Should such erosion be noticed by park personnel, MWAC should be contacted to assess the danger of losing important portions of the site.

Summary

Black Bay Development - The early phases of construction should have no impact on cultural resources. When the maintenance facilities are constructed, there is a possible prehistoric burial mound (Figures 2, 3, and 4) which needs to be avoided. Present construction plans do avoid the mound.

West Kabetogama Development - No cultural materials were found which would be impacted by the construction planned at this site.

Clean-up sites - The only clean-up area which could impact an archeological site is #432 at Namakan Narrows. The buildings to be removed overlie archeological site 21SL73. Removal of the buildings without the use of heavy equipment and without ground disturbance should not impact the site.

Rainy Lake City - Testing of this site demonstrated two prehistoric components, Laurel and Blackduck, as well as the historic component. Historic artifacts recovered include items which could be from the time period associated with Rainy Lake City, but are not diagnostic of it. Sixteen features and one roadbed were mapped, the features are probably a result of structures built during the occupation of Rainy Lake City.

The archeological resources at Voyageurs National Monument are many and varied. The preservation and investigation of these resources should be considered an effort pertinent to the mission of the National Park Service. The ongoing archeological investigations at Voyageurs are, we hope, producing data useful to the management and interpretation of archeological resources in the park. We appreciate the cooperation of the Superintendent and his staff and hope our research will be useful to them.

References Cited

- Anderson, Dean L.
1979 Laurel Ware. In A Handbook of Minnesota Prehistoric Ceramics, S. F. Anfinson (ed.). Occasional Publications in Minnesota Anthropology #5. Minnesota Archeological Society.
- Kelly, Roger and Marsha Kelly
1977 Brick Bats for the Archeologist. Historical Archeology 11: 84-89.
- Lynott, Mark, Jeffrey Richner, and Mona Thompson
1984 Archeological Investigations at Voyageurs' National Park: 1979 and 1980. Manuscript on file, Midwest Archeological Center, Lincoln, Nebraska.
- Lugenbeal, Edward
1976 The Archeology of the Smith Site: A Study of the Ceramics and Culture History of Minnesota Laurel and Blackduck. PhD dissertation, University of Wisconsin Madison.

1978 The Blackduck ceramics of the Smith site (21KC3) and their implications for the history of Blackduck ceramics and culture in northern Minnesota. Midcontinental Journal of Archeology 3(1): 45-68.

1979 Blackduck Ware. In A Handbook of Minnesota Prehistoric Ceramics, S.F. Anfinson (ed.). Occasional Publications in Minnesota Anthropology #5.
- Stoltman, James B.
1973 The Laurel Culture in Minnesota. Minnesota Prehistoric Archeology Series #8, Minnesota Historical Society.
- Suddereth, W.E.
1984 Grant-Kohrs Ranch - The Golden Years. Manuscript on file, Midwest Archeological Center, Lincoln, Nebraska.

Appendix 1. Vertebrate Fauna Recovered from Rainy Lake City,
Voyageurs National Park, Minnesota

Susan M. Monk

A total of 153 g of faunal debris was recovered during examination of Rainy Lake City. All of these remains were recovered from shovel test two and excavation unit one. mammal remains (n=141, wt=151g) comprise over 92% of the total remains. The remainder is composed of fish with 13 specimens weighing two grams, and bird (n=3) with a weight of less than one gram. Of these 153 remains, less than 17 percent was charred, all of these being mammal.

Identifiable elements include Sylvilagus sp. (rabbit), two elements (left proximal ulna and left distal humerus), Ondatra zibethicus (muskrat) with one right complete humerus, one immature Artiodactyla right ischium and acetabulum, one Bos taurus (domestic cow) left ilium and acetabulum, probably representing a rump roast (historic butchering), one Sus scrofa (domestic pig) first phalange and 11 fish remains not identified to a lower taxonomic level. The fish remains could not be identified any lower due to their poor condition and inadequate reference material.

The small amount of identifiable remains should not be viewed in a negative regard toward the integrity of the Rainy Lake City site. The potential of recovering an enormous amount of subsistence information in the form of faunal remains is excellent. If this small sample is indicative of the entire site, a wealth of dietary and economic data is located here.

