Minnitaki Kames Provincial Nature Reserve Interim Management Statement

Ontario
Ministry of Natural Resources
Hon. Vincent G. Kerrio
Minister

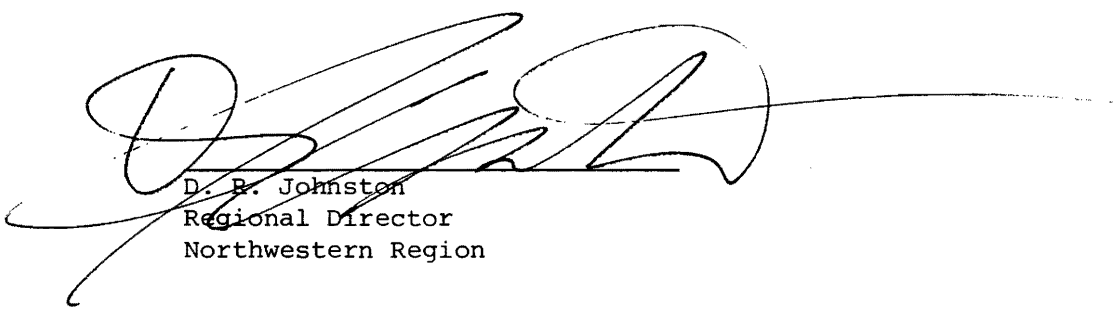
January, 1989

REGIONAL DIRECTOR's APPROVAL STATEMENT

This Interim Management Statement will provide interim direction for the management of the Minnitaki Kames Provincial Nature Reserve until a comprehensive Park Management Plan is prepared.

This statement will provide the basis for the subsequent preparation of the Park Management Plan.

I am pleased to approve this Interim Management Statement for the Minnitaki Kames Provincial Nature Reserve.



D. R. Johnston
Regional Director
Northwestern Region

INTRODUCTION

The purpose of this Interim Management Statement is to identify:

i) park values which are to be protected;

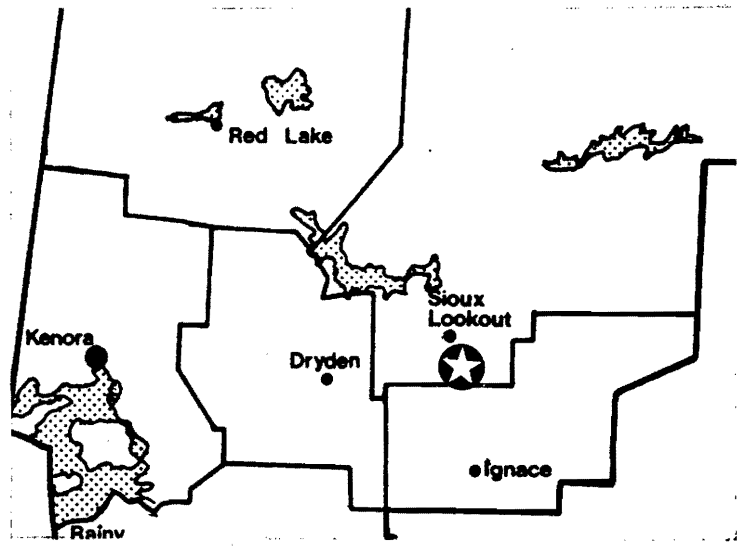
ii) resource management prescriptions necessary to protect these values; and

iii) restrictions on use of natural resources within the park.

This Interim Management Statement is not intended to replace a Park Management Plan. Rather it is intended to guide the use of natural resources and related activities within the park until such a time as a Park Management Plan is prepared.

BACKGROUND INFORMATION

NAME: MINNITAKI KAMES	**REGIONAL SETTING MAP**
PROPOSED CLASS: Nature Reserve	
M.N.R. DISTRICT: Sioux Lookout	
M.N.R. REGION: Northwestern	
TOTAL AREA(ha): 4,422 **LAND:** **WATER:**	
SITE REGION: 43-Lake Wabigoon	
SITE DISTRICT: 4S-3	
DATE In REGULATION:	



TARGETS

1 LIFE SCIENCE REPRESENTATION

site type/landscape unit	species/communities
L.U. 27 - Minnitaki Drift Complex	Southern Boreal Forest Region and associated vegetative patterns.

2 EARTH SCIENCE REPRESENTATION

geological theme	feature
Wisconsinin Timiskaming Interstadial	Lac Seul Moraine - modified kame deposit - wave cut terraces - Lake Agassiz strandlines

3 CULTURAL RESOURCE REPRESENTATION

theme	theme segment
N/A	N/A

4 RECREATION OPPORTUNITIES

day use	car camping	wilderness/back country
N/A	N/A	N/A

INVENTORIES

level \ type	earth science	life science	cultural	recreational	other
reconnaissance completion date	Nov. 1979	Dec. 1979			
detailed completion date					
required?	yes	yes			

MANAGEMENT GUIDELINES

I Land Tenure

There are presently no alienated forms of land tenure within the park area and none will be considered pending the completion of the park management plan.

II Land Acquisition/Disposition

There is presently no patented land within the park area and no disposition will occur pending the completion of the park management plan.

III Existing/Proposed Development

There is no existing development within the park and none will be considered pending the completion of the park management plan.

IV Recreation/Activities

Sport hunting, fishing and a limited amount of camping occur along the shoreline of Minnitaki Lake within the vicinity of the park.

Guideline

Sport hunting will not be permitted within the Minnitaki Kames Provincial Nature Reserve. Enforcement will be accomplished through communication within park literature and signage along the shoreline of the park.

Camping along the shoreline of Minnitaki Lake within the park area will be permitted to continue for Ontario residents. Non-residents of Canada are subject to the conditions of the Crown Land Camping Program which presently prohibits Crown land camping within 500 metres of Minnitaki Lake. The Minnitaki Lake Provincial Nature Reserve is considered to be a non-operating park and normal park fees will not apply.

V Commercial Activities

Portions of two traplines (TR98-18, TR98-20) and one trapper's cabin are presently located within the park.

The park lies within the Great Lakes Forest Products Ltd. English River Forest Management Agreement area.

Guideline

Trapping will be permitted to continue as a non-conforming use and will be phased out over time. The phase out will occur over a 21 year period (effective January 1, 1989) or when the trapper retires or dies, whichever comes sooner. In the event of a request for a transfer of either of the above two licences, the area contained within the park will be excluded from the reissued licence. The trapline cabin will be removed or dismantled when no longer required and the site rehabilitated to its natural condition.

Timber harvesting is not permitted in the park area. The park has been excluded from the English River F.M.A. This situation will be reflected in all management and operating plans that cover the park area.

No other commercial activities will be permitted pending the completion of the park management plan.

VI Natural Resources

A number of earth and life science values have been documented for the park area and detailed in the attached check sheets. Interim management efforts will be directed towards the protection of these resource values.

Due to the proximity of the park to forest harvesting areas and the susceptibility of the park values to fire, all fires within the park will be subject to initial attack and fire suppression efforts. Fire suppression techniques used will have as minimal effect as possible on the park environment. Such means of suppression as bulldozing, helipad locations, firecamps, and waterbombing with chemical additives will not be permitted except in critical conditions.

VII Research

A more complete and detailed life science inventory will be necessary prior to the preparation of the park management plan.

Research activities that will enhance our scientific and resource knowledge of the park will be encouraged.

VIII Native Interests

The park lies within the Treaty #3 area. Status Indians enjoying treaty rights to carry on traditional natural resources harvesting activities will be permitted to carry on those activities in accordance with the terms of their treaty within the Minnitaki Kames Provincial Nature Reserve. Accordingly such Status Indians will be permitted to carry on those activities in certain circumstances. The details of those circumstances will be the subject of further discussion and review.

IX Cultural Resources

There are no known cultural resources within the park area.

Sources/References

Gray, Stephen L. 1980. Life Science Systems Planning Report
West Patricia Land Use Plan

Harvey, E.T. 1980. Earth Science Systems Planning in the
West Patricia Planning Area, Final Report.

Harvey, T., S. L. Gray, B. Thacker 1980. Landscape Units of the
West Patricia Land Use Planning Area.

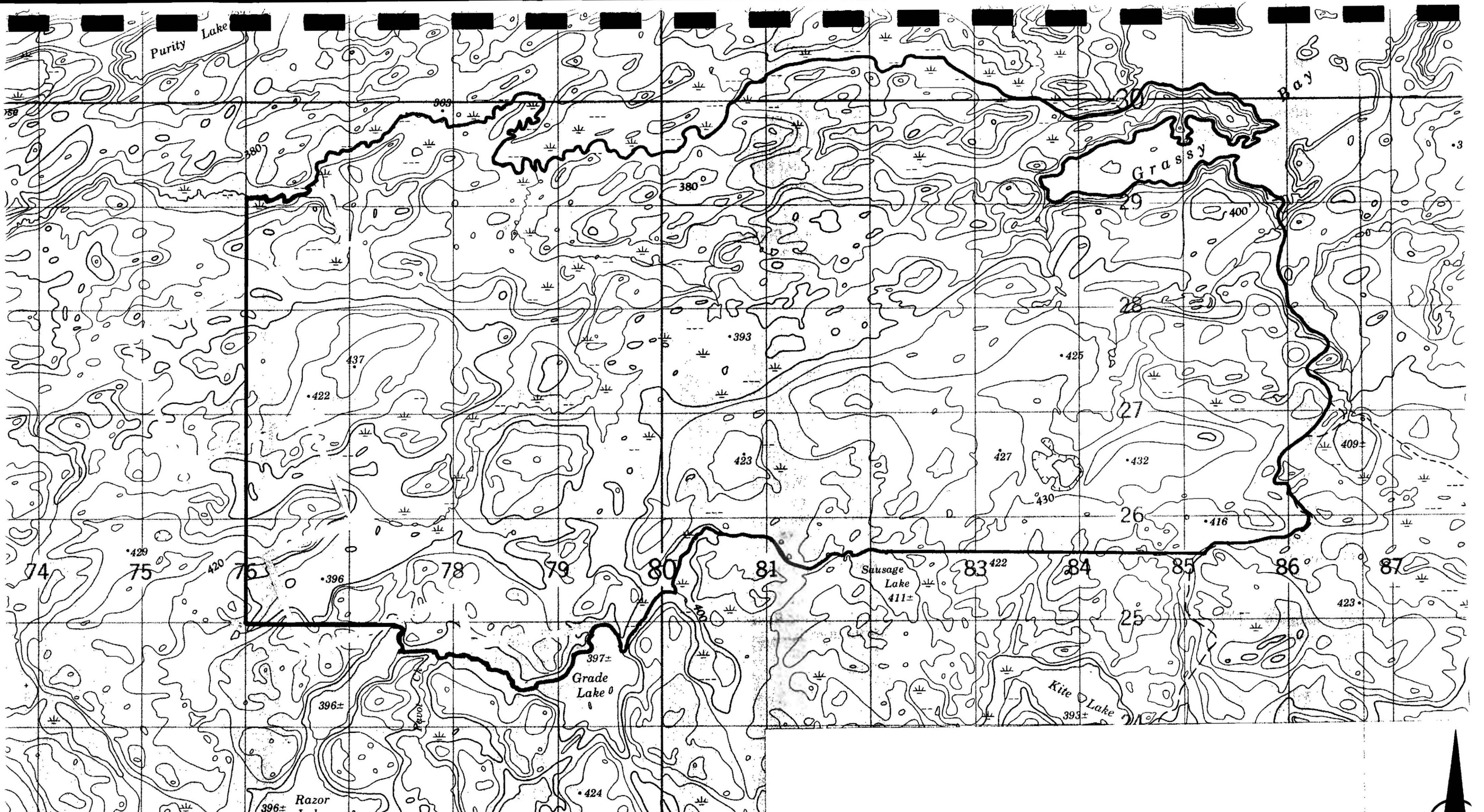
Ontario Ministry of Natural Resources, Backgrounder - District
Land Use Guidelines, June 1983

Source: Backgrounder
District Land Use Guidelines
OMNR, 1983

Table IV

RECOMMENDED NATURE RESERVE CANDIDATES

Name	MNR Region	Size (ha)	Uses Recommended to continue prior to and after regulation						
			Mineral Exploration/ Development	Hunting	Trapping	Commercial Tourism	Commercial Fishing	Bait Fishing	Other
1. Trout Lake*	NW	7,850			Phase out				
2. Windigo Point*	NW	380			Phase out				
3. Lola Lake	NW	6,350	Yes	Yes	Yes			Yes	
4. Butler Lake	NW	3,290	Yes	Yes	Yes				
5. Bonheur	NW	720							
6. Minitaki Kames*	NW	4,340			Phase out				
7. Sable Island	NW	1,800		Yes	Yes			Yes	
8. Gameland	NW	2,200	Yes	Yes	Yes			Yes	
9. Nelles Township	NW	800	Yes	Yes	Yes				
10. Blue Township	NW	1,600	Yes	Yes	Yes			Yes	
11. West Bay	NC	1,140			Yes				
12. Windigo Bay	NC	8,300		Yes	Yes				
13. Sedgeman Lake	NC	5,800		Yes	Yes				Wild Rice
14. Edward Island	NC	530	Yes						
15. Kiashk/Gull River	NC	230							
16. White Fish Lake (W)	NC	1,150							
17. White Fish Lake (E)	NC	190	Yes						
18. Thompson Island	NC	170	Yes						
19. Craig's Pit	NC	480	Yes	Yes	Yes			Yes	
20. Matawin River	NC	2,650		Yes	Yes				
21. Pantagruel Creek	NC	2,200			Yes				
22. Kab River	NC	1,970		Yes	Yes				
23. Fraleigh Lake	NC	870		Yes	Yes				
24. Devon Road Mesa	NC	90							
25. Pigeon River Clay Plain	NC	2,870	Yes		Yes				
26. Prairie River Mouth	NC	290	Yes	Yes	Yes			Yes	
27. Gravel River	NC	790	Yes	Yes	Yes			Yes	
28. Arrowhead Peninsula	NC	490							
29. Pie Island Mesa	NC	50							



Purity Lake
Grassy Bay
Sausage Lake 411±
Grade Lake
397±
Kite Lake
393±
Razor
396±
380
400
437
422
393
425
423
427
432
430
416
409±
429
420
396
424
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ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Minnitaki Lake - Kames - Pine Stands	Yonde	52G/13	830270

COUNTY, DISTRICT or REGIONAL MUNICIPALITY
District of Kenora

LOCALITY
Sioux Lookout

TOWNSHIP | LOTS | CONCESSIONS

AREA
11,500 acres 4,608 ha

OWNERSHIP
Crown

ADMINISTRATION
Ministry of Natural Resources

FOREST REGION AND DISTRICT: B.11-U.English R.
SITE REGION AND DISTRICT: 4S-3 (Sunstrum)
MNR REGION AND DISTRICT: NW-Sioux Lookout
CONSERVATION AUTHORITY:

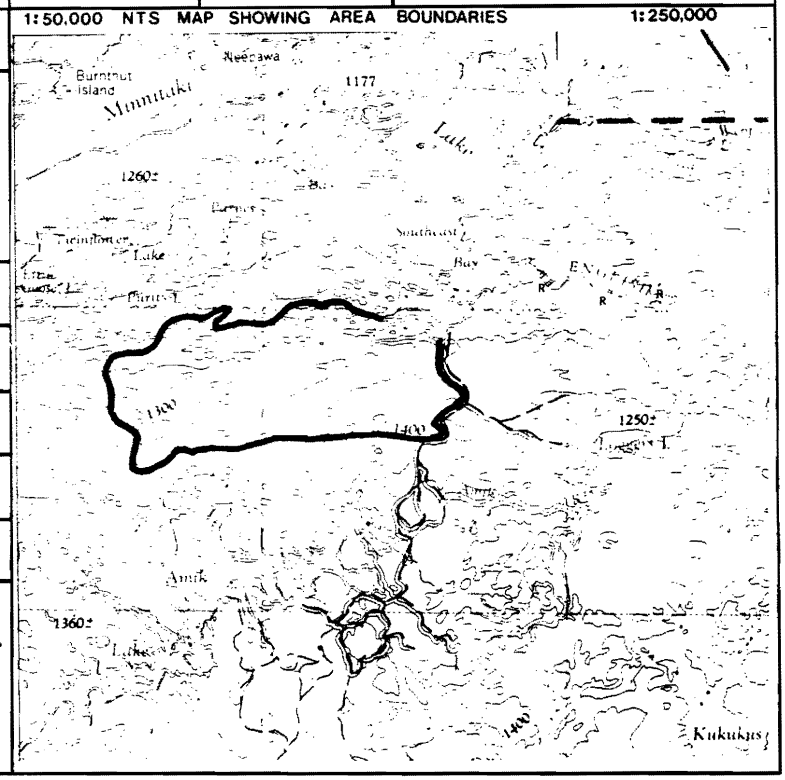
AERIAL PHOTOGRAPHS
BASE MAP: 498914

YEAR	ROLL	FLIGHT LINE	NUMBERS
A 13561, 90-92			

scale 1 inch = 1 mile

LAT.	LONG.	ALT. MIN.	ALT. MAX.
49 ° 54 'N	91 ° 50 'W	358 m	437 m

1:50.000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Located south of Minnitaki Lake is a group of five large kame features (Zoltai, 1965). They occur here as the dominant landform feature on a moderately broken plain of shallow bedrock controlled drift with intervening lacustrine clay deposits in low areas. These features represent the largest kame deposits in northwestern Ontario and have added significance for the numerous raised shoreline features located on their slopes. These features are related to glacial Lake Agassiz. For a more detailed description of the morphology of these kames, see the earth science check-sheet (same UTM number) by P. Kor.

These kames have both biophysiographic and plant community significance in that they stand out as distinct units above the surrounding landscape. This distinction is accented by the fact that each of the kames is completely covered by an extensive jack pine dominated closed coniferous forest. These features exhibit excellent integrity and have scientific, educational and interpretive value regarding landform-vegetation relationships. All five of these kames are not necessary for representation. Two kames located at UTM 820270 and 775275 are of major earth science significance and their resultant protection would ensure adequate life science representation. The area between these two kames and immediately surrounding them may have potential for representing moderately broken sandy till terrain with lacustrine clay in the low-lying areas. The river environment used as the northern boundary may support a wild rice marsh community.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

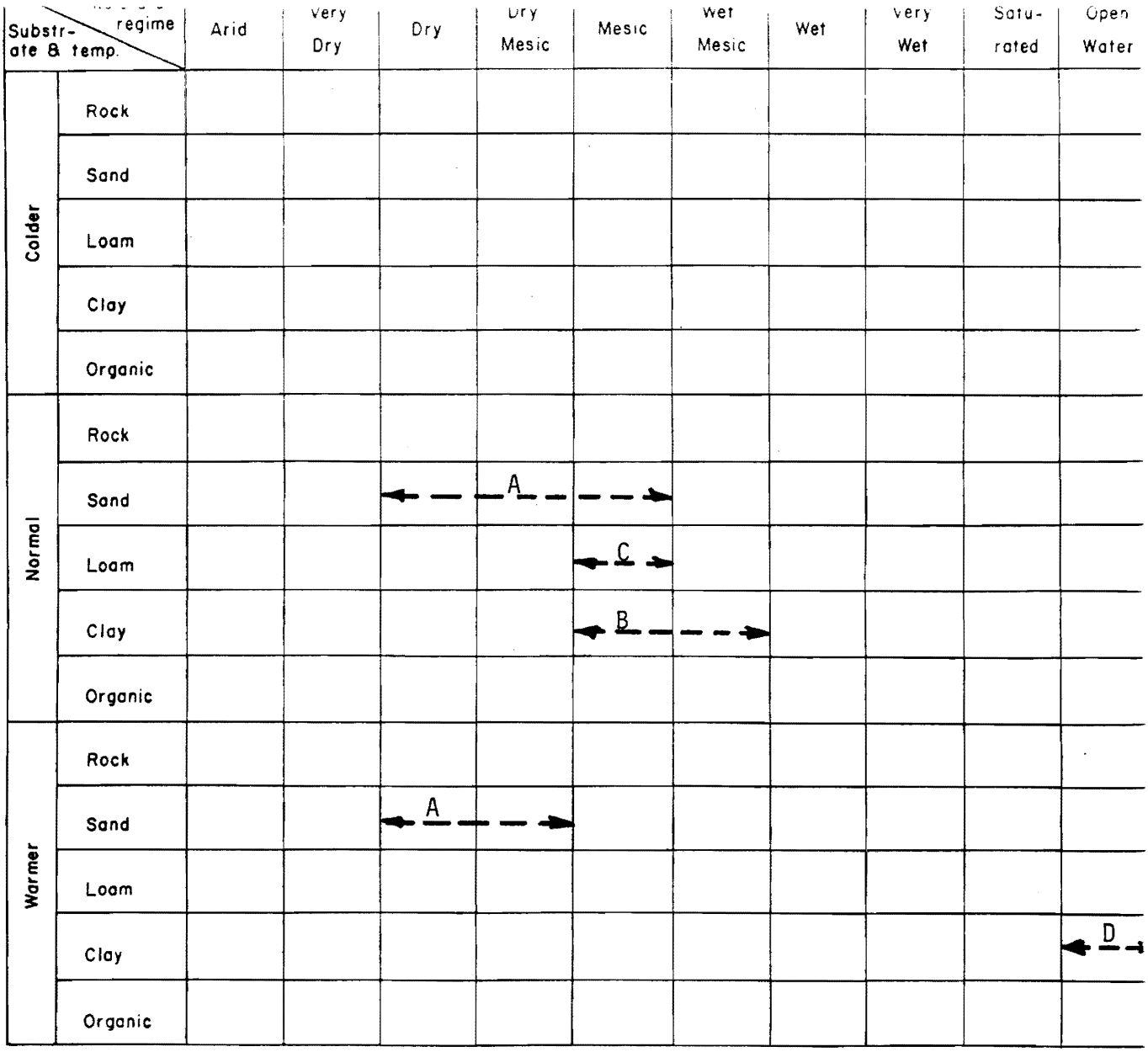
Zoltai, 1965.

EVALUATION AND PRIORITIES

This area has excellent potential for representing landform-vegetation features which are not widespread in the site region.

DATE COMPILED	COMPILER
December 3, 1979	T. Noble

1979/rev.1976



A Closed Coniferous Forest - esker-kame complex (sand)

B - lacustrine clay

C - sand till

D Marsh (wild rice?)

Note: Potential site type representation


SOUTHEAST
BAY
358±
Kendall Island
Twin Bay
358±
Creek
Tumbleweed Lake
Parvus Lake
400
Sausage Lake
411
37
88
89

EARTH SCIENCE INVENTORY CHECKLIST

NAME	MAP NAME	MAP NUMBER	UTM REFERENCE
Minnitaki Lake Kames	Yonde	52G/13	830270

COUNTY	LAT.	LONG.	ALT. MIN.	ALT. MAX.
	49°54'	91°50'	358 m	437 m

TOWNSHIP

LOT CONCESSION
about 22 km south of Sioux Lookout, south and west of Southeast Bay, Minnitaki Lake, inaccessible by road.

AREA
acres ha.

OWNERSHIP

ADMINISTRATION

MNR REGION & DISTRICT	CONSERVATION AUTH.
NWR-Sioux Lookout	

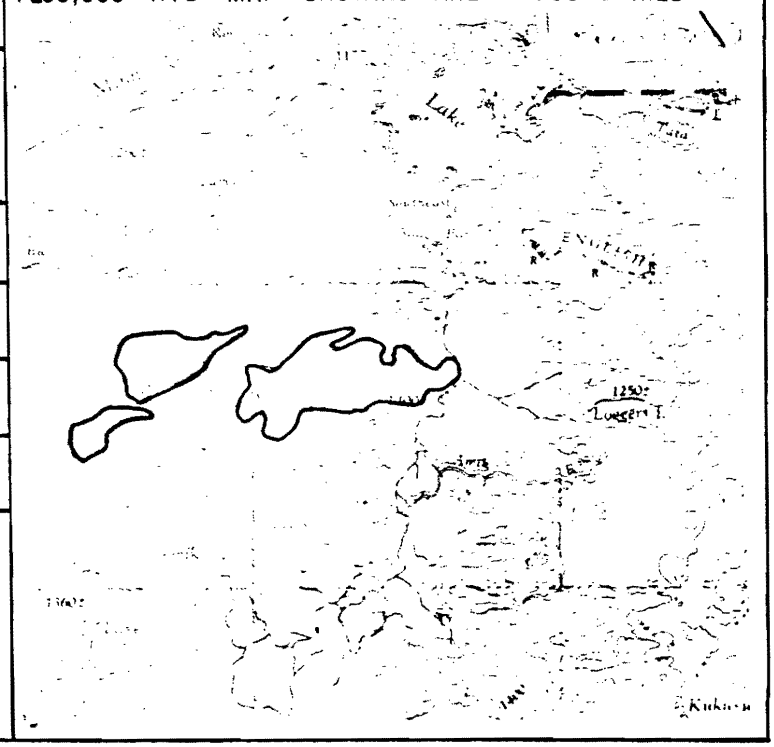
AERIAL PHOTOGRAPHS – BASEMAPS

YEAR ROLL FLIGHT LINE NUMBERS

Federal series A 13561, 90-92.

Scale 1" = 1 mi.

1:250,000 NTS MAP SHOWING AREA BOUNDARIES



EARTH SCIENCE FEATURES

- three major east-west trending kames which form the dominant features in an otherwise gently rolling bedrock-controlled upland. The kames may actually represent interlobate or ice-recessional features. They were deposited during the Timiskaming Interstadial about 9500-10,000 B.P.

SENSITIVITY

- sensitive to denudation of vegetation cover, which may initiate destructive erosion

SIGNIFICANCE

- major raised shoreline features related to glacial Lake Agassiz
- largest kame deposits in northwestern Ontario by preliminary survey

MAJOR REFERENCES

Zoltai, S.C., 1965
Hurst, M.E., 1933

DATE COMPILED	COMPILER
29 November 1979	P. Kor

Ontario Ministry of Natural Resources, Division of Parks, Parks Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

Physical Features:

The features described in this checksheet were initially reported by Zoltai (1965, p.256). Air photo reconnaissance and two fixed-wing aircraft flights over the features constituted all the work attempted by the field crew. Landings were not possible, and the area is no longer accessible by road. Despite the size and significance of these landmarks, they have not been well-documented in the literature.

Zoltai (1965, p.256) describes a remarkable group of five large kames south of Minnitaki Lake. The largest (centre UTM 830270, 52G/13) is over 12 sq. km in size, rising up to 30 m above the surrounding terrain. The somewhat elongated hills are oriented roughly east-west to southwest-northeast, forming distinct landforms in otherwise gently-rolling to abrupt granitic terrain (Hurst, 1933, Map 41j). The irregular hills are distinctly wave-washed, often with a flat-topped character. All the kames have at least four well-developed wave-cut terraces, while the largest kame is reported to have an additional three strandlines (Zoltai, 1965, p.256). These strandlines are particularly well-developed on the smaller kame due north of Razor Lake (UTM 775275, 52G/13), where the higher strandlines completely circle the kame knoll. The material of which the kames are made was not observed and has not been documented, but probably consists of sand and gravel, unsorted to water-stratified (Embleton and King, 1975, p.485). The shorelines were formed in glacial Lake Agassiz.

Kames may be formed in many different ways, but most are associated with heavily-laden meltwater streams which flow into small ponds on or within a stagnant ice mass. This forms an isolated mound when the surrounding ice melts away (Embleton and King, 1975, p.487). Kames generally occur in those areas where the ice sheets stagnated, melting away slowly and in such a way that much fairly coarse material was available. Much meltwater must also have been present to redistribute the debris and deposit it in and around the margins of the static and decaying ice masses (Embleton and King, 1975, p.490). They may be associated with esker ridges where they are formed in poorly-aligned rows of isolated mounds.

The kames described in this checksheet bear a striking morphological resemblance to recessional or interlobate moraines observed elsewhere in northern Ontario. In the complex events of deglaciation which occurred during the Timiskaming Interstadial, it is conceivable that interlobate material was deposited perpendicular to the ice front in the stagnating ice sheet south of Minnitaki Lake. These observations require a great deal of research, but they are presented here for future consideration.

Significance:

The kames south of Minnitaki Lake are doubly significant from an earth science point of view. They represent the largest such features observed to date in northern Ontario. The kames also represent strandline development related to glacial Lake Agassiz in Ontario. The kame south of Grassy Bay (centre at UTM 820270) is the largest kame of the group, measuring roughly 6 km long and 2 km wide, and contains at least 7 levels of raised strandlines. The wave-cut terraces are best-developed on the smaller kame to the west (UTM 775275), where the upper levels completely circle the knoll. The features contribute to the representation of features related to the major deglaciation of the Timiskaming Interstadial.

Recommendations:

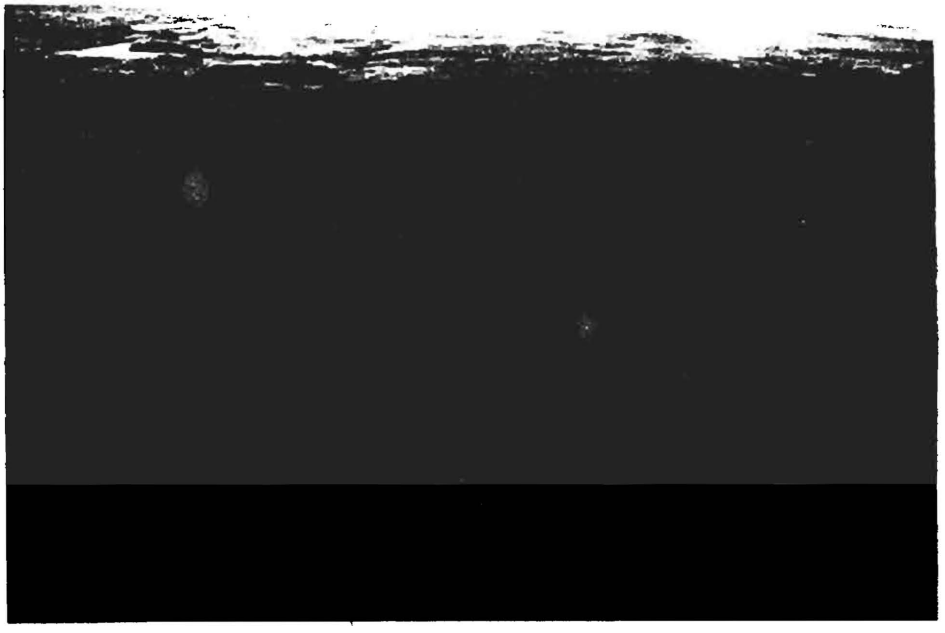
It is strongly recommended that at least the two kames mentioned above (at UTM's 820270 and 775275) be incorporated within a protective zone of the parks system. Economic pressures seem to be low, with only logging appearing to be the major threat in the near future. For the purposes of scientific evaluation and in order to retain interpretive and educational values, it is necessary to retain the integrity of the kames.

References:

Embleton, C. and King, C.A.M., 1975. Glacial Geomorphology. Edward Arnold (Publishers) Ltd., Great Britain.

Hurst, M.E., 1933. Geology of the Sioux Lookout Area. Ont. Dept. Mines, Vol. XLI, Pt.VI, 1932, p.1-33.

Zoltai, S.C., 1965. Glacial Features of the Quetico-Nipigon Area, Ontario. Can. J. Earth Sci., V.2, p.247-269.



Aerial view, looking East, of smaller of two kames.
(52G/13 UTM 775275)

SCALE 1:50,000

MINNITAKI LAKE – KAMES

SCALE 1" = 1 mile

MINNITAKI LAKE – KAMES.