

ADVISORY COMMITTEE TO THE CONSERVATION COMMISSIONER  
FOR SCIENTIFIC AND NATURAL AREAS

Further Considerations Of A Plan For Use Zonation Of Itasca State Park

June 26, 1970

At the last meeting of the Advisory Committee a proposed plan for zoning Itasca State Park for purposes of management and manipulation of vegetation was presented and discussed at length. The outcome of that discussion was a request by the Committee that further consideration be given to zoning of the Park - at a special meeting for that purpose, if necessary - with special reference to ecological implications of special areas and uses.

There is presented here for the Committee's consideration a modification of the zoning plan presented at the last meeting, and incorporates facets of the area's natural features, ecology and use. The modified zones are as follows:

- Zone 1. - WILDERNESS SANCTUARY - An area already designated and dedicated in conjunction with the Minnesota Academy of Science. Adhere to the provisions of the agreement originally made. Only roadside work needed for public safety to be permitted. Use to include research and educational purposes following a wilderness sanctuary philosophy. General public use to be discouraged and motorized equipment, except in cases of emergency, prohibited.
- Zone 2. - SCIENTIFIC AND NATURAL AREAS - restricted areas with particular scientific and natural area values within the Park to be managed and/or preserved along lines adopted for State of Minnesota Scientific and Natural Areas.
- Zone 3. - SPECIAL RESEARCH USE - Areas presently designated and ones designated as need arises for special research, study, use, or management utilization.
- Zone 4. - RESTRICTED MANAGEMENT ZONE - as previously described as zone #2 in Dr. Hansen's proposal.
- Zone 5. - DEVELOPMENTAL MANAGEMENT ZONE - as previously described as zone #3 in Dr. Hansen's proposal.
- Zone 6. - INTENSIVE USE ZONE - as previously described as zone #4 in Dr. Hansen's proposal.

There follows descriptions of certain specific areas that are to be included among the above zones:

Maple Basswood Stand (Sec 6 R36W T142N) Becker County

This stand, lying in the southwest corner of the park adjacent to Highway #113, is the best example of this forest type in the Park. It is rich in fauna and flora that are to be expected in such a forest. The area is frequently used for study by classes from the Biology Station, as well as others, and is of particular importance in teaching of ecology as a contrast with the prairies which are visited on field trips to the west in the vicinity of Waubun.

LaSalle Creek Watershed (Sec 6 R35W T143N)

This region of approximately 200 acres in the northeast corner of the Park is an outstanding example of inter-relationships among the physiographic, hydrologic, and biotic factors of a forest area. A quality trout stream courses through this valley and evidence of beaver activity occurs here as an excellent field demonstration of the role of this aquatic mammal as an "influential" in forest communities. This area has been used extensively for field studies by University Biology Session students, other classes, and the Park Naturalist,

Bog D complex (Sec 30 R35W T143N)

This bog area has been termed the "most nearly perfect example of classic bog succession" to be found in Minnesota. Rings of sedge mat, bog birch and willow, tamarack, black spruce, and fir-ash types around the small bogs allow for dramatic presentation of bog succession to classes. Intensive research on the paleoecology, plant zonation, distribution of lichens, amphibians, as well as birds and mammals has been carried on here. The area was first discovered and described by Dr. Rosendahl of the University in 1912.

Roberts Nature Trail Area (Sects 13 & 24 R36W T143N)

This nature trail, including an expanse of natural boundary surrounding

Encourage  
and visit to  
this place  
beneath road!

Lyendecker Lake, is important for use by Park visitors. The self-guiding nature trail receives extensive educational and recreational use by tourists as well as by groups led by the Park Naturalist. This is an area of natural value to the Park which has a fragility factor due to its close proximity to the high use area of Douglas Lodge; and warrants the protection that a natural and scientific zone would afford it.

Bear Paw Point (Sec 11 R36W T143N)

This area is adjacent to the Lake Itasca Forestry and Biological Station and contains the bogs of Floating Bog Bay along with uplands of Maple-Basswood and Spruce Fir stands. It has been the site of botanical studies and some 500 species of plants have been listed as occurring here. It is also particularly rich in orchid stands and song bird populations. The area is frequently used by individual students and classes from the University Biology Sessions.

Mississippi River Zone (Sec 35 R36W T144N)

This near-source point of one of the country's great rivers receives a tremendous tourist pressure. It is considered significant that a small length of the Mississippi be designated as a natural and scientific area in the Park - marked as such - and protected and maintained.

French Creek Bog (Sec 2 R36W T143N)

This large bog area is an outstanding tract for field studies and for demonstrating preservation of bog habitats. The edge of the bog has an "ice pressure" ridge formerly thought to be a beaver dam. The ridge, distribution of plants and fauna have been studied intensively here. The edge of the bog supports a large population of the mink frog, which, in addition to its natural history value, has been an excellent teaching example in

population dynamics in ecology course work. There is an old Indian campground at the tip of the point which has been studied by archeologists. Schoolcraft Island should also be included in this scientific and natural area of the Park since small bird and mammal populations have been studied intensively on this island since 1954.

Morrison Lake - White Pine Stand (Sec 33-34 R35W T142N)

This promontory between the two arms of Morrison Lake supports the largest area of virgin white pine stands in the park and adjacent to it is an excellent Maple-Basswood stand. Due to its inaccessibility these types will no doubt remain here and serve as outstanding examples for future study; however, the area warrants designation as a natural and scientific area in the Park to assure continued protection.

Mary Lake Deer Exclosure (Sec:19 R35W T143N)

This 3-acre exclosure was constructed in the fall of 1937 by CCC crews to demonstrate by protecting vegetation the effects of the then overabundant deer herds in forest plants. The fence has been maintained since then and was refurbished in the fall of 1969. The exclosure is an excellent site to demonstrate the problems of deer overpopulations and forest succession to the public and to University classes. It is frequently visited by the Park Naturalist as well as other classes.

La Salle Trail Forest Management Manipulation Site (Sec 1 R36W 143N)

A special research and use zone "developed" by the new road to the upper campground, the sewage lagoon, and power lines. It has been the site of forestry research involving manipulation of stands, use of herbicides, etc., over a very long period of time. It is currently being used in studies of managing forest vegetation by cutting, herbicides, and fire.

Squaw Lake Forest Management & Manipulation Study Area (Sec. 5 R36W T143N)

A special research and use site containing an extensive aspen stand to the east of Squaw Lake is being manipulated by logging and herbicides in the studies of the management of forest habitats for recreational purposes.

Whipple Lake Heronry Area (The west half of the southwest quarter ( $W\frac{1}{2} SW\frac{1}{4}$ ) of Section 27; the southeast quarter of the southeast quarter ( $SE\frac{1}{4} SE\frac{1}{4}$ ) of Section 28; the northeasterly half of the northeast quarter of the northeast quarter ( $NE-ly\frac{1}{2}$  of  $NE\frac{1}{4}$ ) Section 33; and the northwest quarter of the northwest quarter ( $NW\frac{1}{4} NW\frac{1}{4}$ ) of Section 34, all in Township 143 N, Range 36 W, in Clearwater County.)

The Whipple Lake area is important in that a Great Blue Heron Rookery occurred in this vicinity. According to Dr. Wm. H. Marshall, Director, Biology Sessions, University of Minnesota, this area consists of an old red pine stand which served as a great blue heron rookery from 1950 to 1965. Two to three hundred nests were active during this time. Data have been recorded from the early 1950's regarding the ground vegetation, dead and dying trees, heron population and other aspects of this rookery's natural history. Marshall's opinion is that it is desirable that this rookery be left in as undisturbed a condition as possible so that changes following abandonment can be recorded and evaluated.

Dr. Dwain Warner, Curator of Birds, Biology Sessions, University of Minnesota, evaluated this as an outstanding area in which the changes brought about by its utilization as a great blue heron rookery can be studied. The natural succession could be easily disturbed by any activity in the area and long term studies of such areas (50-100 years) are necessary if we are to develop an understanding of great blue heron rookery succession.

Nicollet Lake Area (The southeast quarter of the northeast quarter ( $SE\frac{1}{4} NE\frac{1}{4}$ ) and the east half of the southeast quarter ( $E\frac{1}{2} SE\frac{1}{4}$ ) of Section 21; also the southwest quarter of the northwest quarter ( $SW\frac{1}{4} NW\frac{1}{4}$ ) and the west half of the southwest quarter ( $W\frac{1}{2} SW\frac{1}{4}$ ) of Section 22; also the west half of the northwest quarter ( $W\frac{1}{2}$  of  $NW\frac{1}{4}$ ) of Section 27; also the east half of the northeast quarter ( $E\frac{1}{2} NE\frac{1}{4}$ ) and the northeast quarter of the southeast quarter ( $NE\frac{1}{4} SE\frac{1}{4}$ ) of Section 28, all in Township 143 N, Range 36 W, in Clearwater County.)

This region is rich in historic value in the development of the park and has forest stands, associated vegetation and fauna of types which provide excellent study for the student of natural history as well as a casual observer, hiker or tourist. Important here is an isolated small lake, which flows via Nicollet Creek into the south end of the west arm of Lake Itasca. Good bog development on both the north and south ends of this lake occurs, with many species of bog

plants not found in great abundance on other bogs.

Dr. Gerald A. Cole, Limnology Professor, Biology Sessions, University of Minnesota, characterizes this as an excellent example of an undisturbed merometric lake, well protected from wind, and further judged it a classic deep water lake. It should certainly be left undisturbed.

Dr. John Thomson, Botany Professor, Biology Sessions, University of Minnesota, stated that the flora of the Nicollet Lake and Nicollet Creek is unique and without question one of the best areas within the park.

Since this topic occurs along with other items on an agenda for a single meeting of the Committee, there will be time only for an introduction of this proposal. It is requested that a special meeting be called by the chairman for purposes of treating this subject alone at an early date convenient to members of the Committee.

Respectfully submitted,

L. D. Frenzel, Jr. *LDF*

Don Lawrence

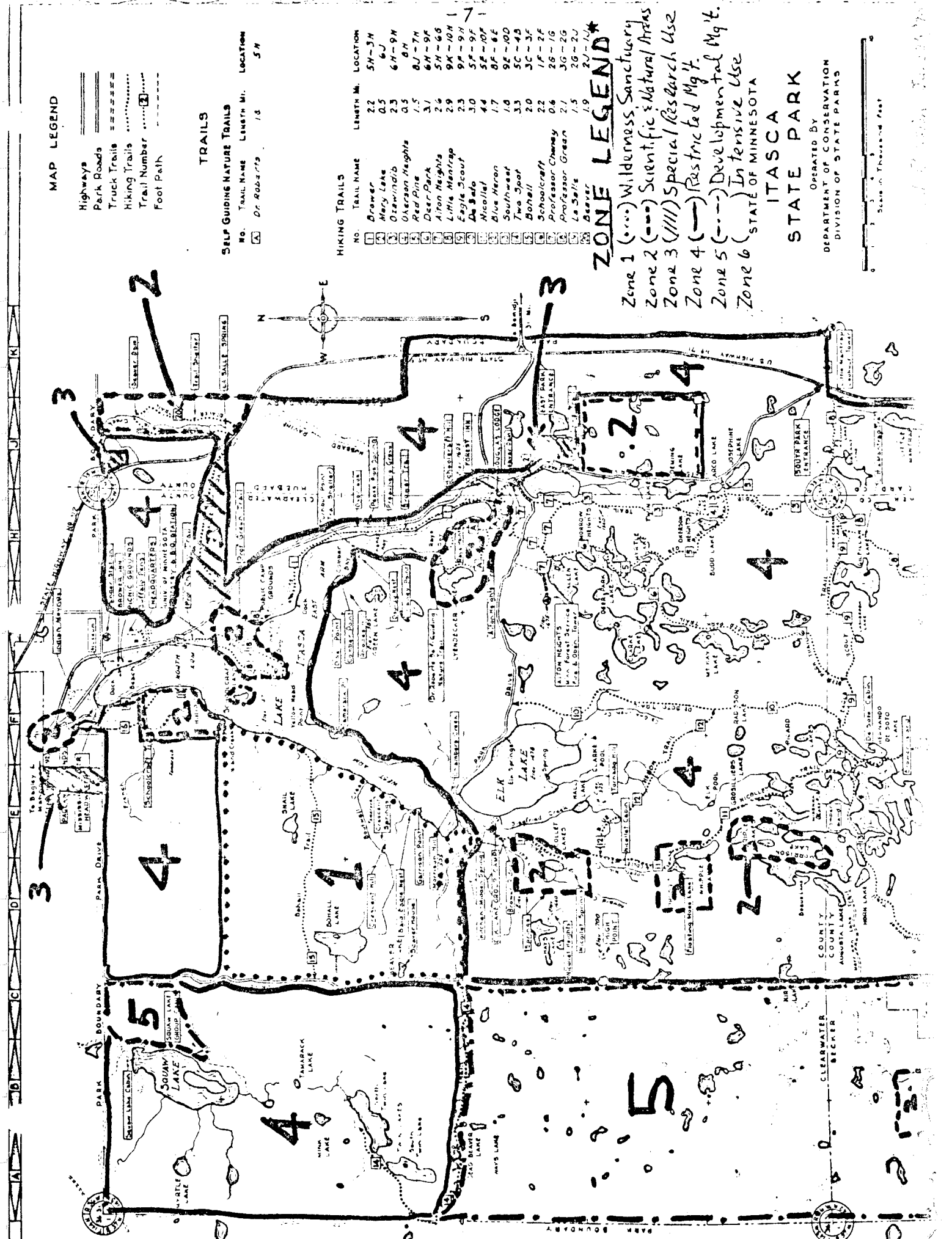
Wm. H. Marshall

Thomas Morley

Ben Thoma

and in consultation with

David W. French



**MAP LEGEND**

- Highways
- Park Roads
- Truck Trails
- Hiking Trails
- Trail Number
- Foot Path

**TRAILS**

**SELF GUIDING NATURE TRAILS**

NO.	TRAIL NAME	LENGTH MI.	LOCATION
1	Dr. Roberts	1.8	5 N

**HIKING TRAILS**

NO.	TRAIL NAME	LENGTH MI.	LOCATION
1	Drower	2.2	5H-3H
2	Mary Lake	0.5	6J
3	Ozawindib	2.3	6H-9H
4	Oakman Heights	0.5	8H
5	Red Pine	1.5	8J-7H
6	Deer Park	3.1	6H-9F
7	Aron Heights	2.6	5H-6G
8	Lithia Manitrap	2.9	9A-10H
9	Eagle Scout	2.3	9F-9H
10	De Bado	3.0	5F-9F
11	Nicollal	4.4	5F-10F
12	Blue Heron	1.7	9F-6E
13	Southwest	1.0	9E-10D
14	Two Spots	3.3	5C-4B
15	Bohail	2.0	3C-3F
16	Schoolcraft	2.2	1F-2F
17	Professor Cheney	0.6	2E-1G
18	Professor Green	2.1	3G-2G
19	La Salle	1.5	2G-2U
20	Beaver	1.9	2U-1U

**ZONE LEGEND\***

- Zone 1 (---) Wilderness Sanctuary
- Zone 2 (---) Scientific & Natural Areas
- Zone 3 (///) Special Research Use
- Zone 4 (—) Restricted Mgt.
- Zone 5 (---) Developmental Mgt.
- Zone 6 (---) Intensive Use

ITASCA STATE PARK

OPERATED BY  
DEPARTMENT OF CONSERVATION  
DIVISION OF STATE PARKS



2-12-77