



The Sugarloaf Interpreter

A publication of
Sugarloaf Interpretive Center Association

Volume 1, Number 2

in care of University of Minnesota, Duluth

Phone (218) 726-7201

Winter, 1994

SUGARLOAF INTERPRETIVE CENTER ASSOCIATION is a Minnesota nonprofit corporation with its purpose stated in the By-Laws as:

- 1) Committed to preservation and protection of a tract of land which includes Sugarloaf Beach, Cove and Point, a portion of which is a designated scientific and natural area that has statutory protection.
- 2) Committed to the establishment of a public interpretive forum which includes staff, and appropriate non-invasive physical facility, and ongoing, year-round educational programs. This center would depict the diverse aspects of the North Shore of Lake Superior including, but not limited to, geology, biology of native plants and animals, economic origins, history and cultural heritage.
- 3) Committed to obtaining adequate private and public funding to build and maintain the physical facility, establish a staff and programming, and create an endowment fund for the center's long-range future.

To fulfill these commitments, the Association is established for the collaborative efforts of many people and organizations of shared purpose.

**NEXT SUGARLOAF EVENT
SHORELINK NETWORKING MEETING
Tuesday, January 25, 1994, 1PM - 4 PM
Split Rock Lighthouse of the Minnesota Historical Society
(located on Highway 61, Two Harbors)
Tour - Presentation by Deaton Museum Services - Networking Discussion
ALL MEMBERS ENCOURAGED TO ATTEND**

NETWORKING MOVES AHEAD

The second Shorelink networking meeting occurred Saturday, October 9, 1993, in Two Harbors. Those present drafted and adopted the following mission statement confirming collaborative interests.

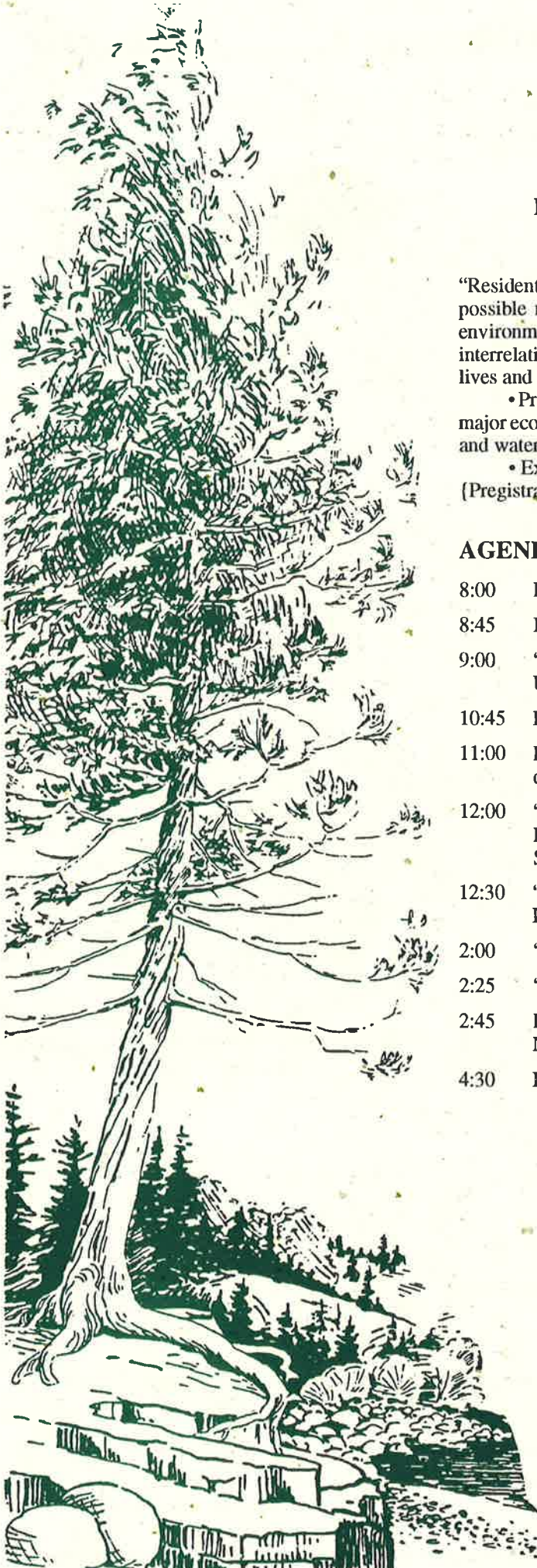
Shorelink Mission Statement

Shorelink is a cooperating communication network of interpretive and educational organizations in the Lake Superior region of northeastern Minnesota. Its purpose is to sustain and to improve the services and capabilities of member organizations and individuals in providing effective and educational programming. This collaborative venture will benefit the natural and cultural environment, residents, visitors, and the world beyond Minnesota through facilitating the organizations' missions.

Additionally, participants on October 9, 1993, formulated lists of immediate and second priority tasks for the network, designed a flow chart relating organizations, constituencies, and resources, and decided to hold substantive quarterly meetings, beginning in January, 1994. SICA will produce a directory of interpretive and educational organizations in the Lake Superior region to aid communication among the groups.

Shorelink will remain organizationally informal, facilitated by the Shorelink Committee of Sugarloaf Interpretive Center Association.

Sugarloaf Interpreter is published quarterly by Sugarloaf Interpretive Center Association. Emily E. Andersen, Copy Editor. Articles, graphic arts, and letters to the editor warmly encouraged. Subscription to *Interpreter* is one of the benefits of membership in SICA; single copies available upon request. SICA, in care of 140 Engineering Building, College of Science and Engineering, UMD, Duluth, MN 55812.



University of Minnesota Sea Grant Extension
presents a Public Workshop on
Lake Superior's Future
Effective Management of Our Coastal Resource
January 20, 1994
Duluth Entertainment Convention Center (DECC)
350 Harbor Drive, Duluth, Minnesota

"Residents of the Lake Superior region are being inundated with information about possible new regulatory programs and initiatives designed to protect the region's environment. While we all share a desire to sustain the beauty of our home, the interrelationships among all these programs and the effects that they may have on our lives and livelihoods are difficult to sort out. This workshop will:

- Provide an educational forum for residents of the state of Minnesota to examine major economic and environmental issues facing Minnesota's Lake Superior coastline and watershed in the next two decades,
 - Examine existing and proposed regulatory programs that affect this resource.
- {Registration cost \$15; information available at (218) 726-8712}

AGENDA

- 8:00 Registration and coffee
- 8:45 Introduction
- 9:00 "Minnesota's Coast in the 21st Century," Keynote speaker: Steven Born, University of Wisconsin, Madison
- 10:45 Filmed Interviews with Local Residents, Planners, and Officials
- 11:00 Panel: "How can we position our coastal region to meet the needs and demands of the 21st Century?" Moderator, Henry Hanks, ARDC
- 12:00 "State of Minnesota Programs—How Can They Benefit the Lake Superior Region?" Speaker, Ron Harnack, Executive Director, Board of Water and Soil Resources
- 12:30 "The Clean Water Act in the 21st Century," Congressman James Oberstar
Lunch
- 2:00 "Impacts of Federal Government Programs," William Millhouser, NOAA
- 2:25 "Binational Program," Jake Vander Wal, Lake Superior Program, Ontario
- 2:45 Panel: "Major Issues in Other Coastal States, Moderator, Carol Johnston, Natural Resources Research Institute, Duluth
- 4:30 Final Forum. "Open Discussion," Facilitator, Luther Gerlach, U of M

Interpretive Programming Continues

Four presentations comprised our Twin Cities program this fall, held October 2, 1993, at the Minnesota Valley National Wildlife Refuge in Bloomington, Minnesota. They were "Introduction to the Sugarloaf Interpretive Center Association"—Elmer L. Andersen; "Photographs of the North Shore"—Donald Breneman, Photographer; "Natural Communities of Gooseberry Falls"—Harvey Djerf, Naturalist; and "North Shore Geology"—Dr. Richard Ojakangas, Geologist.

The audience relished each of the spoken interpretations and also the photographic images, maps, graphs, and diagrams which accompanied them.

SICA's next series of interpretive programs will be listed in the Spring, 1994, *Interpreter*.



Sugarloaf Field Guide

Number 1

Winter, 1994

Scientific and Natural Areas Along the North Shore

By Janet Green

In 1968, the State of Minnesota began to establish a system of public nature preserves that protect the rarest and most significant of Minnesota's natural features, including plant and animal species, native plant communities, and important geological sites. These places are called Scientific and Natural Areas (SNA's), the most protective land designation in our state. They are proposed, designated, and managed by the Department of Natural Resources with advice from the public through a citizens advisory committee. Located throughout the state, natural areas are established for a variety of purposes —

- Places where the public can view rare plant and animal species or quietly appreciate and study nature in an unspoiled setting
- Outdoor classrooms for teaching and research in the natural sciences
- Research sites to gain insights into natural processes and as benchmarks or reference points against which to measure changes in our environment.

State Scientific and Natural Areas are open to the public for nature observation, education, and research. However, they are sensitive areas that could be damaged if misused or overused. Therefore, activities such as picking flowers, hunting, snowmobiling, camping, and collecting rocks are generally prohibited.

Several SNA's have been established in the ecoregion known as the Lake Superior highlands, that strip of land along the North Shore and inland to encompass the first range of hills. From south to north, they are:

- 1) Moose Mountain, 55 acres, established in 1989
- 2) Sugarloaf Point, 3 and 1/2 acres, 1990
- 3) Butterwort Cliffs, 53 acres, 1990
- 4) Spring Beauty Hardwoods, 400 acres, 1991
- 5) Hovland Woods, 280 acres, 1992.

You are encouraged to enjoy these sites, to share them with others, and to protect their special values. As the recognition has increased of the importance of the biological diversity of our natural environment to human well being, so has the effort to protect these undisturbed remnants of our natural heritage.

MOOSE MOUNTAIN

55 Acres

St. Louis County

Twp 51N Rng 13W Sec 29

Located just N of Duluth: from US Hwy 61, 3 mi N on Lester River Rd (Co Rd 12)

Moose Mountain is an excellent example of old growth northern hardwood forest. Sugar maple, basswood, and yellow birch dominate this site. The rare plants white baneberry and moschatel are found here. The thirty to forty acres of northern hardwoods occurring on Moose Mountain, only one mile north of the city limits of Duluth, is extremely unusual. Somehow this stand has escaped logging, fire, and development unlike the adjacent lands on Moose Mountain and forested lands throughout this part of St. Louis County. In addition, it is the only known extant old growth northern hardwood stand in a gap between the St. Louis River stands south of the city of Duluth and the stands in the North Shore Highlands in Lake and Cook Counties. The best time to visit this site is during spring wildflower blooming season and late fall for the fall color.

SUGARLOAF POINT

3 1/2 Acres

Cook County

Twp 58N Rng 5W Sec 29

Located approximately 6 1/2 mi NE of Little Marais on State Highway 61.

Sugarloaf Point contains pre-historic and modern beaches and a world-class example of the physical features of thin, fluid basalt lava flows of Pre-cambrian age. The North Shore Volcanic Group in which these basalt features are found erupted during the development of the Mid-continent Rift of North America about 1.1 billion years ago, and their lavas were never deformed or metamorphosed. The beach is composed of well-rounded boulders, cobbles, and pebbles of a wide variety of rock types, some of which originated in Canada and were brought down by the Pleistocene ice sheet. On the point at the east end of the beach, wave action on the tilted lavas has produced excellent exposures of the surface and internal features of each lava flow. Their pipe amygdules (mineral fillings formed in the cavities of lava flows), and ropy, thin-bedded pahoehoe (smooth, undulating surface) can be clearly seen. Flows range from less than a meter to a few tens of meters thick. The range of eruptive styles and clear exposure of flow mechanisms make Sugarloaf Point geologically unique.

BUTTERWORT CLIFFS

53 Acres

Cook County

Twp 61N Rng 1W Sec 32,33

Located from Grand Marais 8 mi W on US Hwy 61 in Cascade River State Park

The significant resources of this area are found along the wave-swept rocky shore and basalt cliffs that face Lake Superior. The Wet, Rock Shore natural community and its component rare plant species form a narrow strip along the southern edge of the SNA. Two plant species listed as special concern in Minnesota are found there: butterwort and northern eyebright. These arctic flowers reach a southern boundary on the north shore of Lake Superior. Thomsonite, a unique state mineral, is found in deposits in the lava-rock along the shore. Herring gulls nest on the steep cliffs of Ergo Bay in the western-most portion of the tract. This SNA is closed from May 1 to August 15 to protect this herring gull nesting colony. Aspen-Birch Forest originating 40-65 years ago following logging and fires occurs between the shore and the highway. Part of this stand blew down in the high winds of September 1992; it will be left to see how the forest recovers naturally.

SPRING BEAUTY HARDWOODS

400 Acres

Cook County

Twp 62N Rng 3E SW Sec 1 and 2
Twp 62N Rng 4E Sec 6

Located approximately 3 mi N of Hovland on the Arrowhead Trail, then 1 1/2 mi W on the State Forest Road. Park adjacent the Hovland Fire Tower.

The Spring Beauty Hardwoods SNA contains a rare, old-growth, northern hardwoods forest and several protected plant species associated only with these communities. The large size and location of this forest along the northern edge of its normal range make this site particularly significant. A continuous canopy of old-growth sugar maple arches over lower-growing maple species. White cedar, white spruce, white pine, and yellow birch occur occasionally, their numbers diminished by selective cutting after portions were logged and/or used as a sugar bush. Look for the rare Chilean sweet cicely, blunt-fruited sweet cicely, and broad-leaved spring beauty, which occur only in this type of community.

HOVLAND WOODS

280 Acres

Cook County

Twp 63N Rng 03E Sec 34

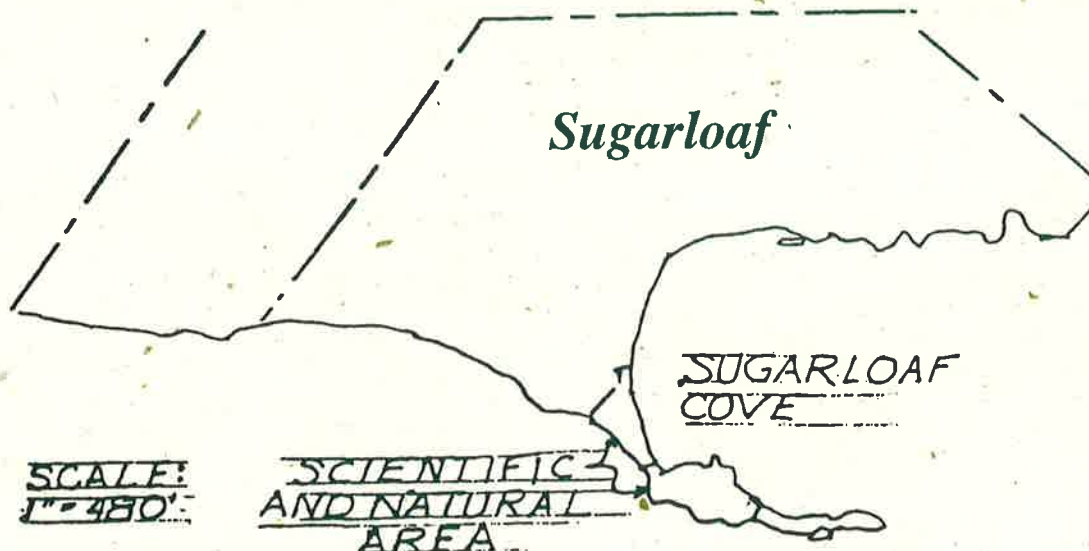
Located from Hovland: 2 Mi W on County Road 69, then 4 mi N and W on County Road 70, then 1 and 1/4 mi right on a logging trail. Park along the dirt road, then hike 1/2 mile to your right to Hovland Woods.

Hovland Woods features mature and old-growth virgin forest, with about 30 percent swamp, bog, and flooded beaver

flowage. While access to this site is difficult, four natural forest communities await the intrepid visitor. The northern hardwood-conifer forest, predominantly of maple with scattered balsam fir, shows no evidence of logging. Upland white cedar forest consists of white cedar, white spruce, white birch, and a sparse supercanopy of white pines. The spruce-fir forest, primarily balsam fir, features white spruce up to 200 years old. The Great Lakes pine forest type consists primarily of white pines. Eastern gray wolf and marten inhabit the area. Carolina spring beauty and the threatened large-leaved sandwort bloom in spring and summer respectively.

MN HWY 61

(This information abstracted from material provided by the Scientific and Natural Areas Program, DNR, Section of Wildlife, Box 7, 50C Lafayette Road, St. Paul, MN 55155.)



(Map design by Martin Berg)

Located at mile marker 73, approximately 6 1/2 miles NE of Little Marais, MN