Getting the Lake Superior Message Out

Outreach for
UMD and MN DNR

Molly Thompson
Program Manager
Sugarloaf: The North Shore Stewardship Association
Who is Sugarloaf?

From 1941 – 1971 Consolidated Papers, Inc. used Sugarloaf Cove as a pulpwood landing area.
Who is Sugarloaf?

1985 – Land donated to The Nature Conservancy
1987 – TNC sold 34 acres of land to MN DNR
1992 – DNR designated 3.5 acres as SNA; added 6.7 acres in 1996 for a total of 10.2 acres
1993 – SICA was founded
1998 – 24 acres of land transferred from DNR to SICA
2000 – Interpretive Center built
In 2004 SICA became:

Mission:

“To inspire the preservation and restoration of the North Shore’s unique environment through education and exemplary stewardship, especially at Sugarloaf Cove.”
Sugarloaf’s North Shore Outreach Projects

Learning Cart

North Shore Interpretive Center
Learning Cart – What is it?

Short, fun learning activities about the natural and cultural history of Minnesota’s North Shore.
Learning Cart

Program topics include:

- Water quality
- Geology
- Invasive species
- North Shore birds and mammals
- Rip Currents
Learning Cart locations

- State Parks
- Canal Park Duluth
- SNAs
Learning Cart Funding

• Began in 2005 as the ShoreLink Learning Cart
• Funded by a Lake Superior Coastal Program grant
2006 Learning Cart Funding

Funded by a variety of partners
2007 Learning Cart Funding

Started a pilot program with the Scientific and Natural Areas Program

Produced a North Shore SNA guide
2007 Learning Cart Funding

Received funding for the remainder of the summer from:

- Minnesota's Lake Superior Coastal Program
- W L S S D
- Sea Grant Minnesota
- Sugarloaf The North Shore Stewardship Association
Learning Cart Assessment

- 2006 – 3025 visitors
  2007 – 3092 visitors
- Surveys
- Informal comments
Sugarloaf’s North Shore Outreach Projects

North Shore Interpretive Center
North Shore Interpretive Center

Goals:
To serve as an interpretive gateway to the North Shore
To provide information about current Lake Superior related research efforts
North Shore Interpretive Center

Funding sources:

• Minnesota’s Lake Superior Coastal Program

• Northland Foundation
Recruited and trained 20 volunteers

North Shore Ambassadors
North Shore Interpretive Center
Spring - Summer 2007
Developed Posters with University Partners

Department of Geology – North Shore Geology
LIMNOLOGISTS SAY:

Lake Superior still holds many mysteries

The large lakes of the world, including Lake Superior, are not only beautiful to look at, but they also are important sources of fresh water, valuable fish resources, and are used for commercial transport. Despite their importance, we know more about the oceans than large lakes. For instance, we don’t know exactly how climate change affects lake levels. Our understanding of Lake Superior’s climate dates from studies done in the 1990s with glas bottles thrown overhead.

How do we know this?

What Lake Superior mysteries are being solved?

WHAT IS THE BOTTOM LIKE?

Using equipment such as a multibeam sonar or a side-scan sonar (placed left), geologists can create images of the lake-bottom. The multibeam and side-scan sonar both use sound to image the lake-bottom.

This is a 3-D multibeam image of the deepest point in Lake Superior. The white part of the image represents a part of the lake at least 1320 feet deep. For years people have said Lake Superior is 1330 feet deep, but the LEO found it was only 1260 feet deep.

WHAT ENVIRONMENTAL CHANGES HAVE OCCURRED?

Limnologists can collect and study the chemicals in lake-bottom sediments to see how the conditions of the lake have changed. They use several tools to collect sediment. One such tool, a multicorer, is pictured far left.

Pictured near left are same data from multicores collected from Lake Superior. The graph indicates how the lead and cadmium content of the sediment has decreased. Notice that the lead content of the sediment peaks in the 1970s, just before controls on leaded gasoline were put in place.

• Bathymetry
• Environmental changes
North Shore Interpretive Center Poster development
Minnesota Sea Grant

- Fisheries
- Aquatic Invasive Species
North Shore Interpretive Center
Poster development

Great Lakes Maritime Research Institute
- Great Lakes shipping history

NRRI – Watersheds and Great Lakes Environmental Indicators Study

Weber Stream Initiative – Stream restoration
North Shore Interpretive Center
Summer 2007

• Opened May 30

• Wednesdays through Saturdays 10-5

• Served over 650 visitors — from Duluth to Africa!

• Over 600 volunteer hours
North Shore Interpretive Center
Future Plans

- Improve signage
- Renovate Limno lab
- Use Limno lab as the gateway center to the North Shore
  - Visitor information
  - Short film
  - Bookstore
  - Exhibits