

The threatened North Shore: partnerships for progress

WHAT DO YOU LOVE MOST ABOUT THE NORTH SHORE?

THE DRAMATIC VISTAS
OF LAKE AND LAND?

THE TRAILS THAT WIND
THROUGH WILD
PLACES?

THE SMELL OF SPRUCE
AND LICHEN ALONG
THE ROCKY SHORE?

Sugarloaf is working closely with the Minnesota Land Trust and other conservation organizations to protect those unique qualities of the shore.

In a groundbreaking move, Minnesota Land Trust has convened all of the major Minnesota land conservation groups in identifying and addressing the biggest threats to the North Shore landscape. With help from Sugarloaf, the Land Trust's North Shore Protection Initiative has identified the shore's 25 most endangered parcels and regions. These range from proposed developments in the middle of a state park to a potential greenway corridor heading up the shore out of Duluth.

"We're getting ahead of the curve," said the Land Trust's state conservation director, Kris Larson. "It's just not enough to respond one landowner at a time. We've got to look at the bigger picture."



Many important issues have already come out of the Initiative. Conservation groups have learned:

- *The wooded corridor of the Superior Hiking Trail through Duluth and in many places along the North Shore is threatened by property sales.*
- *Many of the North Shore state parks have unique opportunities to consolidate their land, making more shoreline available to the public and reducing the impact of neighboring development on these statewide treasures.*

Along the North Shore, there are shoreline stretches as long as 12 miles with no public or protected land at all. Collaboration between conservation groups and all levels of government will yield mutual benefits.

The needs and opportunities for land conservation on the North Shore have been well-documented. The work at Sugarloaf Cove stands as one of the best examples yet of private land conservation for the public good. 34 acres of industrially-used shoreline property has been returned to benefit North Shore communities and ecology.

If you would like to learn more about the North Shore Protection Initiative, contact Sugarloaf or the Minnesota Land Trust.

SUGARLOAF'S VISION is a healthy Minnesota North Shore of Lake Superior where an informed citizenry takes personal and group responsibility to ensure that natural and ecological systems and human economic and social systems coexist in a fashion sustainable into the future.

Sugarloaf this Summer

Summer intern to probe wildflower mysteries

Are the violets blooming in April this spring? Or are they pushing up through the snow in May? The dates when wildflowers bloom can tell you a

lot about what the weather has been like this year. But do those dates say anything about larger patterns of climate change? Next to Lake Superior, whose cold waters and foggy days can change everything and the snow can last into May, no one really knows. But at Sugarloaf, we're going to start to try to find out.



According to Project BudBurst, phenology is the study of the timing of life cycle events in plants and animals. In a sense, keeping phenology records is creating the basis for some future ecological historian to analyze and understand ecological change over time.

Sugarloaf Cove is going to look a bit more scientific this summer. Research plots and spreadsheets will appear, all in an effort to see if there is a link between global climate change and our local wildflowers.

Through a grant from the Higher Education Coalition for Urban Affairs, Sugarloaf has hired Kelsey Bauer of St. Olaf as a summer intern. Kelsey will set up sampling sites across Sugarloaf Cove and develop a system for recording wildflower blooming dates and other natural events. Come and visit...you'll help make history!

Trail planning to ensure great interpretive trail at Cove

Thanks to a \$9800 grant from the Duluth Superior Area Community Foundation, the trail at Sugarloaf Cove is receiving a much-needed update, starting this summer.

If you've hiked the Sugarloaf's one-mile interpretive trail lately, you've probably seen the exposed roots and crumbling hillsides. The trail has been well-used and well-loved. Although built more like the Superior Hiking Trail, with a narrow trailbed and little construction, it's used



by families and naturalists, not just hikers. Sugarloaf wants the trail to be safe for all users. The grant from the Community Foundation allows Sugarloaf to hire a trail planner, who will create a 3-5 year improvement schedule. The grant also allows Sugarloaf to hire two Minnesota Conservation Corps crews this summer to implement the first stages of the plan. Possible improvements include trail hardening, wooden steps, and better erosion control.

ARE YOU A PHENOLOGIST? HAVE YOU KEPT TRACK OF WILDFLOWER BLOOMING DATES ON THE NORTH SHORE? YOUR DATA COULD BE VERY USEFUL. PLEASE CONTACT MOLLY AT molly@sugarloafnorthshore.org OR (218) 525-0001.

Accomplishments

A popular self-help saying from the 1970s was, "Today is the first day of the rest of your life." Well, 2007 was the first year of the rest of Sugarloaf. Sugarloaf staked its claim to a shorewide programmatic presence while strengthening its core work at Sugarloaf Cove.



At the Cove

At beautiful Sugarloaf Cove, it was a busy spring and summer. With help from volunteers and school groups, we planted nearly 100 conifer trees on site, including a new planting area down by the mouth of Sugarloaf Creek. Our popular Saturday programs went from once a month to once a week, and ran the gamut from geology to search and rescue. Our annual week-long visit from a Minnesota Conservation Corps crew led to important stewardship work on site, including thinning of alders for conifer regeneration and a sample trail widening project.

Two other major site improvements were completed in 2007. With support from Arrowhead Electric, we planned and installed a rain garden near the visitor center to absorb runoff from the driveway. Also, inside the visitor center, we finished much-needed adjustment work, to account for the settling of the red pine logs over the last eight years.

The biggest event of the summer was the reunion of Consolidated Paper workers. Over 90 former workers, family members and friends attended a one-day reunion at the site on Labor Day weekend. While for many it was an opportunity to see friends and colleagues again after 35 years away, it was a great opportunity for Sugarloaf to record oral history interviews and learn more about the colorful history of the Cove. Thanks to the Mead Witter Foundation for their support!

Up and down the shore

This was the summer in which Sugarloaf "took over" the North Shore. The Sugarloaf learning cart brought fun and informative hands-on programs to public sites from Duluth to Grand Marais. Sponsored by Minnesota State Parks, Minnesota Scientific and Natural Areas, Minnesota Sea Grant, the Lake Superior Coastal Program and Western Lake Superior Sanitary District, the program reached over 3000 people.

In what might be a preview of huge things to come, this summer also kicked off Sugarloaf's presence at the Lester River in Duluth. The UMD Limnology Building, a former federal fish hatchery, came back to life this summer as a North Shore visitor center. An exhibit about the North Shore and UMD's scientific research opened in the old "boat house" building. Despite poor traffic flows, nearly 1000 people came to see the exhibits and talk with our well-trained volunteers, the "North Shore Ambassadors." The Limnology Building also houses Sugarloaf's administrative offices.

A summary of the year would not be complete without acknowledging the work Sugarloaf accomplishes with our partners. The North Shore Scenic Drive (with participation by Sugarloaf staff) worked to protect North Shore viewsheds, improve interpretive signage and ban new billboards. Our friends at Wolf Ridge initiated a major forest restoration project with Sugarloaf's help.

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Sugarloaf 2007 Balance Sheet

ASSETS

Current Assets

Checking/Savings	
Business Checking - US Bank	8,215.10
Checking- Grand Marais Bank	546.58
Petty Cash — Cove drawer	70.00
Savings — US Bank	12,580.35
Total Checking/Savings	21,412.03
Accounts Receivable	
Accounts Receivable	9,927.65
Total Accounts Receivable	9,927.65
Other Current Assets	
Endowment (Schwab)	20,318.62
Inventory Asset	3,878.53
Total Other Current Assets	24,197.15
Total Current Assets	55,536.83

Fixed Assets

Accumulated depreciation	-26,231.54
Computer Software	334.99
Furniture & Fixtures	11,268.38
Land	570,989.00
Office Equipment	916.37
VC fixed assets	183,180.00
Total Fixed Assets	740,457.20

Total Assets

795,994.03

LIABILITIES & EQUITY

Liabilities

Current Liabilities

Accounts Payable	6,884.05
Total Accounts Payable	6,884.05
Total Current Liabilities	6,884.05
Total Liabilities	6,884.05

Equity

Restricted Fund Balance	18,414.81
Permanently restricted net assets	454.44
Retained Earnings	-4,825.15
Unrealized Gain (Loss)	3,411.02
Unrestricted Fund Balance	762,087.87
Net Income	9,566.99
Total Equity	789,109.98

Total Liabilities & Equity

795,994.03

2007 Financial Statement (Jan - Dec)

Ordinary Income/Expense

Income

Contributions Income	35,291.21
Grants	79,145.64
Interest earned	2.95
Membership Dues	25,865.00
Program Fees	11,535.00
Sales	93.95
Total Income	151,933.75

Expense

Advertising	456.63
Bank Service Charges	228.41
Contract Labor	10,624.00
Dues and Subscriptions	794.96
Equipment Purchase	1,552.97
Insurance	4,416.60
Internet access	1,131.39
Miscellaneous	347.48
Office Supplies	1,204.36
Payroll Expenses	84,378.41
Postage and Delivery	2,790.45
Printing and Reproduction	4,519.83
Program Expense	5,881.36
Rent	3,704.32
Telephone	2,869.59
Training	568.25
Travel & Ent	7,068.71
Visitor's Center Costs	9,829.04
Total Expense	142,366.76

Net Ordinary Income

9,566.99

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Bluefin Bay
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North Shore Ledgerrock: Ancient Beauty

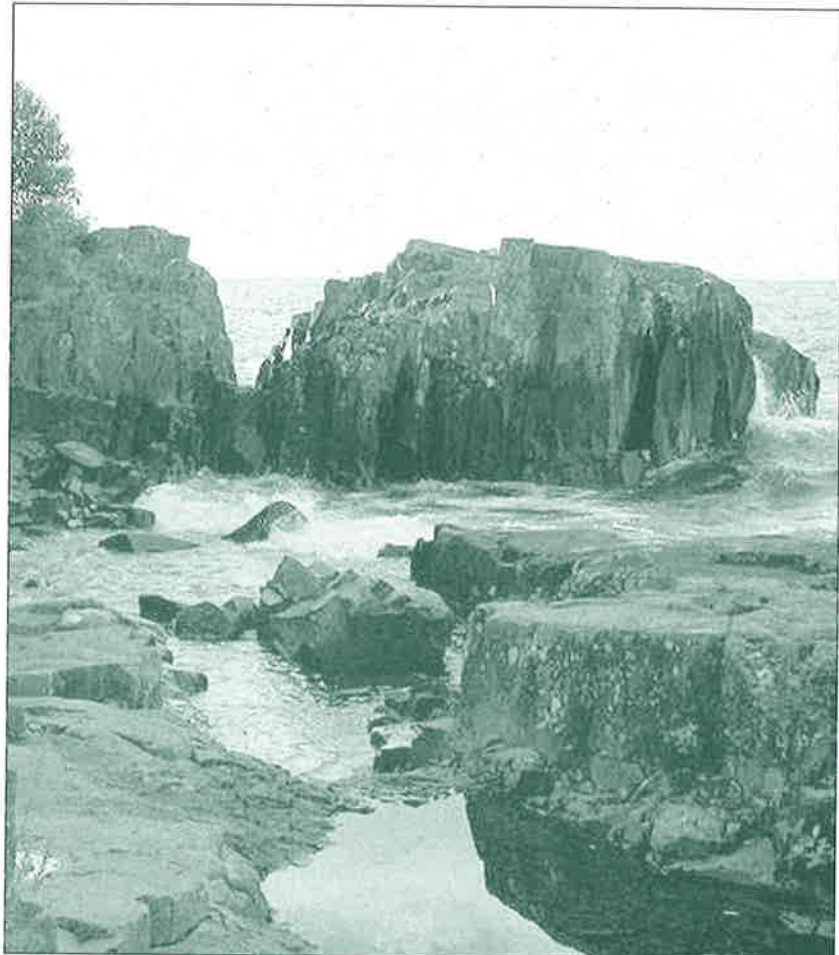
By Jeannie Hanson

Although there are more kinds of basalt and other interesting rocks on the North Shore than you can shake a stone at, we'll focus on a common one: the ledgerrock. This dark rock, black or weathered to gray, is exposed to view along the lake shore, on hilltops, along river beds, and elsewhere in outcroppings.

This rock is ancient lava. About 1.1 billion years old, formed long before Lake Superior did. It poured out in massive volcanic eruptions that blanketed the land here for more than 100,000 years. If you were to peel back the thin soil layers of the Arrowhead region, you'd see that this rock is pervasive. Our black pebble beaches are mostly this basalt, too, just ground up and smoothed off by the waves. The boulders on the shore are also larger chunks of it, more recently broken off.

Two especially convenient—and interesting—places to see the dark basalt ledgerrock are out Artist's Point in Grand Marais and on the peninsula arm that forms Sugarloaf Cove about 70 miles east of Duluth. At Artist's Point, walk out into the broad expanse of ancient ledgerrock, then look for specific places where something large and powerful seems to have clawed right into the basalt. It was an "ice monster": the glacier. Under its heavy "paws," rocks picked up inland by the ice scratched these lines or dents right into the hard ledgerrock as the glacier moved. They're called glacial striations.

At Sugarloaf Cove, walk to the big lake side of the Point and get close enough to see the ledgerrock's layers. In some of them are easily visible small holes, now filled with light quartz rock. These were once hot gas bubbles in the flowing lava. When the lava cooled, the bubbles popped, allowing light-colored calcite and zeolite minerals to find the cavities over time. This rock



"Artists Point Rocky Shore IV", Gregory Harp

is called amygdaloidal basalt. On many North Shore beaches, you can find pebbles and rocks that look "bubbly" in just this way. They're broken off pieces of the gaseous lava ledgerrock, easy to take home to tell the tale.

When lava drenched the North Shore, it was one of the most dramatic periods of "flood basalt" in our planet's history. It is called a "flood" because the lava flowed ceaselessly out of deep fissures where the ground had cracked open. Cracks filled in with the molten flood, while new cracks opened up, and the lava flowed out again. The fissure lines extended as present-day Kansas. Gradually all the open cracks filled in with more lava, and calm returned.

No one think volcanic activity will return to the North Shore any time soon. Relax on the ledgerrock any time.

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