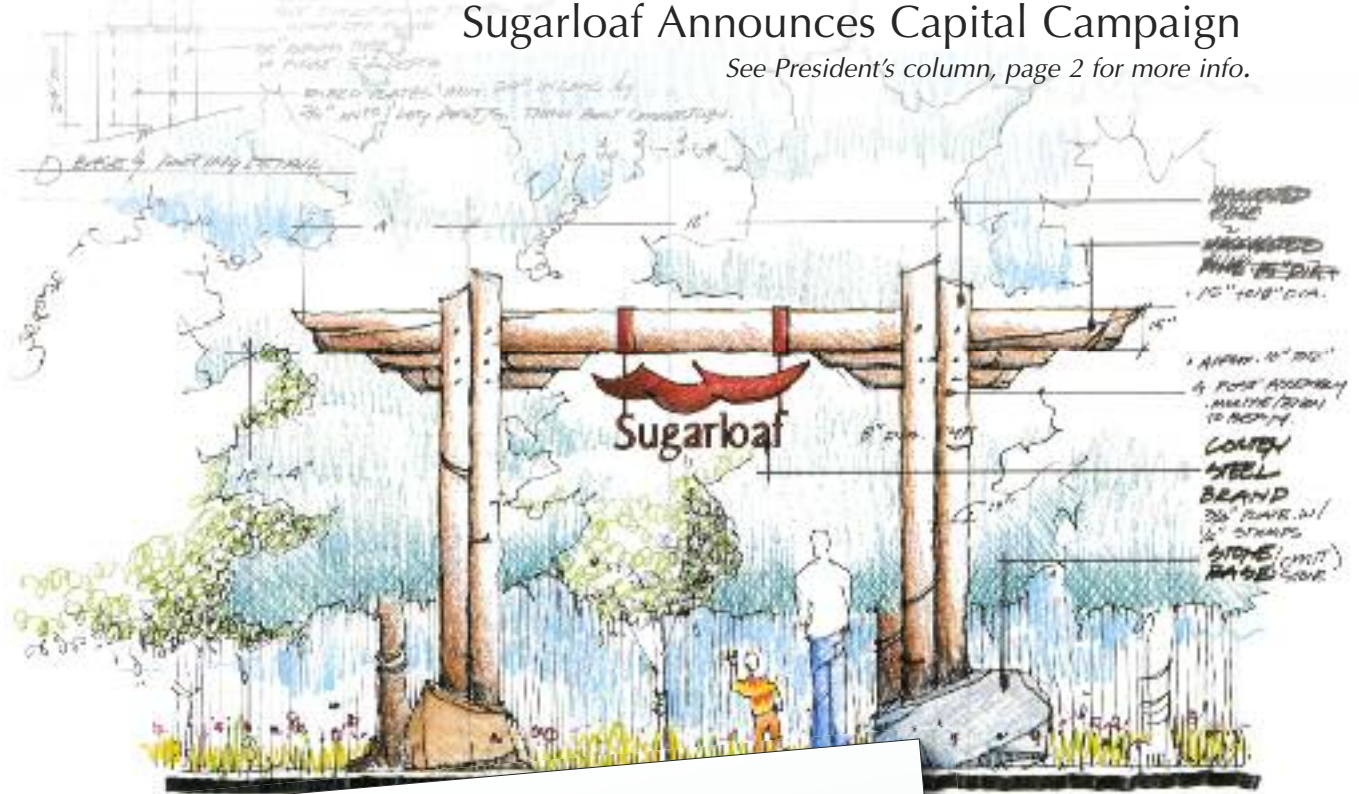


Invite, Receive, and Educate –

Sugarloaf Announces Capital Campaign

See President's column, page 2 for more info.



*Make your reservation—
Cruise the North Shore
August 8, 5:00 - 7:30 pm*

Join us August 8 after the annual meeting for a scenic cruise along the North Shore aboard the *Wenonah*.

Enjoy a 2 hour tour of the North Shore with naturalist Margie Menzies and fellow Sugarloaf supporters. Margie will point out interesting geologic features while you enjoy food, drinks and music.

Boarding begins at 5 pm at the Silver Bay Marina.
Departure at 5:30 pm.

The tour includes beer, wine, hors d'oeuvres, and live music by the Two Harbors Ukulele Group (THUGs). \$50 per person. Register online at sugarloafnorthshore.org



John Bathke

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Molly Thompson, Executive Director

Margie Menzies, Naturalist

BUSINESS OFFICE:

6008 London Road

Duluth, MN 55804

218-525-0001

Email: sugarloaf@boreal.org

www.sugarloafnorthshore.org

SUGARLOAF COVE:

9096 Highway 61

Schroeder, MN 55613

(not a mailing address)

218-663-7679

MISSION STATEMENT

Sugarloaf: The North Shore Stewardship Association strives to inspire the preservation and restoration of the North Shore's unique environment through education and exemplary stewardship, especially at Sugarloaf Cove.

VISION

Sugarloaf values and believes in 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.

Message from Greg Koschinska

Board President



Spring has “sprung” on the North Shore and summer is sure to follow! Executive Director Molly Thompson and Naturalist Margie Menzies have again assembled a season of interesting and informative programs, birding experiences, hikes, etc., all in response to the interests of Sugarloaf members and visitors. Many of those programs and events are detailed further in this newsletter.

As many of you have observed, the Cove has experienced significant growth in the number of visitors over the last several years. Friends and visitors from near and far take part in programs and activities, hike the trails, and often just take in the day at one of the few publicly accessible North Shore beach and coastal area sites being preserved in its natural state.

In response to rapid visitor growth, the Board of Directors has recognized the need to improve facilities and programming to better invite, receive, and educate our visitors. To that end, this winter Sugarloaf’s Board undertook a \$60,000 capital campaign. Funds raised will be used for enhanced signage, parking and building improvements to allow easier

access and for better educational opportunities.

Last winter the campaign team, led by former board member Margit Berg, solicited our Board of Directors for their participation, which resulted in 100% commitment. Those funds and conversations with other friends of Sugarloaf have moved us about half way to our goal. In April we launched the public phase with a mailing to members and friends which details the work to be done.

This capital campaign and all our work is directed to the pursuit of our mission: *To inspire the preservation and restoration of the North Shore's unique environment through education and exemplary stewardship, especially at Sugarloaf Cove.* As you review campaign materials, please give thoughtful consideration to a generous gift to help further our work. If you have questions, please contact Margit Berg – 612-802-5382, Molly Thompson – 218-525-0001 or myself – 612-210-5204.

I am looking forward to another great season and hope to see you on the “Shore”!

Greg Koschinska, President

Mark Your Calendars

Annual Member Meeting and Ice Cream Social August 8, 1 pm

You are invited to help us celebrate another successful year of North Shore stewardship at our annual Ice Cream Social and membership meeting, Saturday, August 8.

The activities start at 1 pm with a short general membership meeting. Ice cream sundaes and a talk about the Geological and Biological Aspects of Population and Natural Resources by Dick Ojakangas will follow. Then join us at 5 pm for a special evening cruise on the Wenonah (see front page for details).

The annual meeting is FREE. You do not need to be a member to attend.

The boat trip is \$50 per person, preregistration required. See sugarloafnorthshore.org to register.



Forest Stewardship Updates

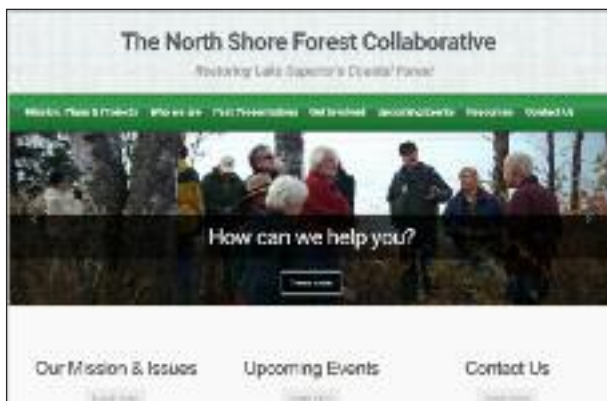
NORTH SHORE FOREST COLLABORATIVE

Joint Chief's Partnership provides help and funding for North Shore Forest Restoration Efforts:

As part of a national partnership, the USDA Forest Service and Natural Resource Conservation Service are coordinating technical resources and funds totaling \$200,000 in Fiscal Year 2015 (up to a potential \$950,000 over a 3 year period) to support forest restoration efforts along the North Shore of Lake Superior.

Since much of the North Shore is in private ownership, a concerted effort between public and private landowners is essential to achieving forest restoration at a landscape scale. With this new partnership and funding, agency staff will be jointly dedicated to coordinating small scale work on private land with larger scale activities on the national forest.

New Website for the North Shore Forest Collaborative: The NSFC unveiled its new website in April. Funding for the new site was from a grant from the Duluth Superior



Area Community Foundation. The Resources and Upcoming Events pages are especially helpful for landowners. You can visit it at northshoreforest.org.

NSFC Plan Completed: A plan to help guide the operations and projects of the Collaborative and work toward restoring the North Shore Forest is now completed. The plan identifies the mission, goals, objectives, and strategies of the Collaborative and lists various projects important to restoration. It will also be used in seeking funding to implement the identified projects. Portions of this plan were presented at public meetings in

January. The plan was funded in part by Minnesota's Lake Superior Coastal Program and by a grant from the Duluth Superior Area Community Foundation. The plan can be viewed or downloaded from www.northshoreforest.org. Visit the Mission, Plans and Projects page.

COOK AND LAKE COUNTY INVASIVES TEAMS

This year has brought with it exciting new developments in the war on invasive species in the Minnesota Arrowhead. The Lake County Invasives Team (LCIT) is now up and running and preparing for its first field season as a collaborative group. In January, Laurel Wilson was hired to fill the role of invasive species coordinator for the LCIT and Cook County Invasives Team (CCIT). Laurel has spent the last few months catching up on past CCIT projects and planning events for the summer. In March, Laurel gave a presentation to the Master Naturalist class at Sugarloaf Cove focusing on invasive plants of the North Shore and control options. Over the winter months, the two teams unveiled a new, combined website which can be found at arrowheadinvasives.org. The site features information about invasive species found in the Arrowhead region, Invasives Team newsletters and details about projects and upcoming events. An online reporting form for invasive species sightings can also be found on the site.

This year the LCIT will be focusing on mapping invasive plant populations in Lake County to help guide future control activities. The group will also be organizing invasive plant control events in communities throughout the county to raise awareness and develop a public presence. In Cook County, the CCIT will be continuing treatment of invasive plants in gravel pits that were treated by the Conservation Corps of Minnesota crews in 2014. The CCIT will also be working to control invasive plants along roadsides with a focus on high priority species listed by the Minnesota Department of Agriculture.

Additionally, the CCIT received a grant from the Minnesota Lake Superior Coastal Program to fund invasive species outreach

Continued on page 4



Continued from page 3

and education events in Cook County. The events include radio interviews on WTIP, online discussion forums, and a series of workshops featuring expert guest speakers. Events will focus on different topics relating to invasive species prevention and control such as native plants and restoration techniques and invasive plants and control options. Visit the CCIT/LCIT website for more details, arrowheadinvasives.org.

Sugarloaf Community Shed trainings and equipment checkout continues this summer. The Community Shed is located at Sugarloaf Cove and houses tools, herbicide application equipment, and herbicides that are available free of charge, for anyone to use. Those who wish to use herbicides must participate in a two hour training on herbicides, safety, and invasive plants of the North Shore. During the training participants will calculate their calibration rates. Herbicides and herbicide application equipment is available only during training times. Visit Sugarloaf's website for dates and registration information.

Cove Updates

SUGARLOAF COVE VOLUNTEERS ARE INVALUABLE

Volunteers contribute to Sugarloaf in many ways. They serve as hosts in the Nature Center, help with controlling invasive plants, assist with bird banding, and provide trail maintenance. Last year we had a wonderful cadre of volunteers, many of whom had completed the Master Naturalist Volunteer training at the Cove. There are several from this year's class who have also indicated an interest in volunteering. But we can always use more. Many volunteers are part-timers on the shore so cannot take on a regular schedule.

If you are interested in being a volunteer, our web site has a link to the volunteer application. Or if you want to learn more about what volunteering entails before you complete an application, give Margit Berg, Volunteer Coordinator, a call. She can be reached at 612-802-5382.

For those who prefer to host in the Nature Center, there will be duplicate orientations on

Friday, May 22nd from 10:30 to 1:00 and on Saturday, May 30th from noon to 2:30. The orientation provides basic information about the Cove's history, trails, and what visitors might see on the trails. There are other basics that are covered too, such as how to handle sales, organization of the office, and expectations of volunteers.

Those who want to volunteer with the bird banding program, should contact Margie Menzies, our naturalist, at 218-525-0001. If you are interested in trail work or maintenance of the grounds and controlling invasive species, there will be several one-time opportunities for that. Just let Margit or Margie know that you'd like to be included.

There's no place like Home— Explore Cook County.

Friday afternoons at 1:00 pm
June 26-August 7 and August 21,
Sugarloaf is presenting a new program especially for Cook County residents - *There's No Place Like Home – Explore Cook County*.

We all know Cook County is a special place. Here's an opportunity to have a more in-depth exploration of Cook County's special places with your neighbors. Each week will feature a new unique habitat or location which participants will explore with Sugarloaf's naturalist. People participating in five or more sessions will receive a North Shore field guide.

This program is sponsored in part by the Cook County Community Fund, an affiliate of the Duluth Superior Area Community Foundation.

Sugarloaf Spring 2015 Update

by Margie Menzies

April is over and the summer season is rolling right on in. We have had another amazing Master Naturalist class this winter/spring with another 22 Master Naturalists. I'm always proud, but kind of sad, when we end one of these classes – such great sessions with a really engaged audience, I always want it to go on forever.

The bird banding season has already started, at least in a small way, with the first winter birds banded at Sugarloaf. We had a glorious session in March with lots of Common Redpolls and Pine Siskins, as well as a few Black-capped Chickadees and a beautiful male Downy Woodpecker. We will be banding weekly again this summer beginning in late May, look for dates on our website.

As for our summer programs, our summer speaker series slots are chock full of wonderful and interesting topics including the popular speakers Larry Weber and Peter Juhl. Exploring the unique geology of Sugarloaf and learning the basics of the common rocks of the North Shore will also happen weekly on Sunday mornings at 10 am throughout the season. Take an opportunity to learn why Sugarloaf is a world class geology destination, and perhaps the best place on the shore to explore basaltic lava flow features.

New this season, we will be offering a set of Friday afternoon adventures called "There's No Place Like Home." In this grant funded



Master Naturalist class of 2015. Photo credit: Margie Menzies

series, we will investigate a variety of habitats in Cook County, identifying their unique features and determining why these habitats occur where they do. If you participate in at least 5 or more sessions you will be given a North Shore field guide! These sessions will begin at 1:00 pm on June 26, and will meet at Sugarloaf to start and travel to these unique habitats! Look for dates on our website.

Come join us at Sugarloaf Cove for up close looks at many natural wonders through the spring and into the amazing summer season. Hope to see you there!

Become a Sustaining Member!

Enjoy the satisfaction of knowing your monthly donation gives Sugarloaf the security of a steady, reliable stream of income.

Visit sugarloafnorthshore.org
or call 218-525-0001
to donate or for more information.



Master Naturalists explored the geologic features of Sugarloaf Cove. Photo credit: Margie Menzies

Association Members

Names listed are for new and renewing memberships received between January 2014 and December 2014.

WHITE PINE (\$1000+)

Jane Bratager
Jerry Meigs
William and Judy Walter

WHITE CEDAR (\$500+)

Margit and Tom Berg
Amy Bergquist and Erik Larson
Mary Ellen and Darrell Cash
Allen and Kathleen Lenzmeier
Bridget and Ross Levin
Mary and Mark Maher
Mary and Malcolm McDermid
Anne McKinsey
Jim and Fran Mullin
Harriet Smith
David A. Vose

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Julian and Jamie Andersen
Russell Baker
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Skip and Linda Lamb
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 Susan Zimmerman

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 Rosanne and Michael Monten
 Jane Sweet

2014 Statement of Financial Position

ASSETS

Current Assets

Checking/Savings	
Business Checking - US Bank	36,095
Schwab account	194,392
Petty cash bag	5
Sales bag	20
Savings - Restricted & Reserves	59,061
Total Checking/Savings	289,573
Other Current Assets	
Investments	266
Unrecorded incoming funds	2,150
Total Other Current Assets	2,416
Total Current Assets	291,989

Fixed Assets

Accumulated depreciation	-68,994
Building and improvements	191,309
Equipment	1,525
Land	570,989
Total Fixed Assets	694,829

Other Assets

Investment in non-traded stock	83,550
Total Other Assets	83,550

Total Assets **1,070,368**

LIABILITIES & EQUITY

Liabilities

Current Liabilities	
Total Accounts Payable	481
Other Current Liabilities	
Deferred revenue	21,883
Total Other Current Liabilities	21,883
Total Current Liabilities	22,364
Total Liabilities	22,364

Equity

Unrealized Gain (Loss)	14,802
Unrestricted Fund Balance	741,605
Unrestricted Net Assets	31,690
Temp. Restricted Net Assets	14,877
Net Income	245,031
Total Equity	1,048,005

Total Liabilities & Equity **1,070,369**

2014 Statement of Activities (Jan - Dec)

Ordinary Revenue/Expense

Revenue

Realized gain/loss	-236
Contributions Income	272,662
Grants	67,667
Interest earned	406
Membership Dues	29,806
Merchandise Sales	2,078
Miscellaneous Income	35
Program Fees	1,876
Total Revenue	374,294

Expenses

Advertising	125
Bank Service Charges	431
Contract Labor	20,699
Depreciation Expense	5,205
Dues and Subscriptions	95
Fundraising	534
Insurance	3,407
Internet expenses	1,102
Merchandise purchases	2,428
Miscellaneous	193
Office Supplies	1,634
Payroll Expenses	70,568
Postage and Delivery	938
Printing and Reproduction	3,089
Program Expense	472
Rent	3,000
Telephone	1,034
Training	168
Travel	4,084
Visitor's Center Expenses	10,059
Total Expenses	129,265

Net Ordinary Revenue **245,029**

Note: Sugarloaf received a one-time unrestricted bequest from a donor's estate and through discussions, a portion will be used to support our recently announced Capital Campaign and the balance will be allocated to our Board Designated Endowment fund.

Sugarloaf Donors 2014

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 and their generosity
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 Bob and Alice Peters
 Tim Wilson and Amy Andersen

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In memory of Colleen Peterson
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 by Peter and Lee Wonson

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A special thank you to all of our volunteers. We really appreciate your donation of time and talents. You are a vital part of Sugarloaf: The North Shore Stewardship Association.

Thank you!

Sugarloaf thanks the following business members for their generous support:

Bluefin Bay on Lake Superior, Tofte, MN; 1-800-BLUEFIN (258-3346); www.bluefinbay.com

Integrated Compensations Systems, Inc., St. Paul, MN; 612-259-5260; www.icomppayroll.com

Lambs Resort on Lake Superior, Schroeder, MN; 218-663-7292; www.lambsresort.com

Lutsen Mountains, Lutsen, MN; 218-663-7281; www.lutsen.com

Lutsen Resort, Lutsen, MN; 800-258-8736; www.lutsenresort.com

North Shore Federal Credit Union, Silver Bay, MN; 218-226-4401; www.northshorefcu.org

Sawbill Canoe Outfitters, Tofte, MN; 218-663-7150; www.sawbill.com

Temperance Liquors, Inc., Schroeder, MN; 218-663-0111; www.northshorecabins.com

Hudson Bay Eyebright – Small but Tough

by Katie Winkler, PhD student, University of Minnesota Duluth

Sugarloaf Cove is home to several unique arctic relict plant species whose range in Minnesota is restricted to the rocky shoreline of Lake Superior. The cold microclimate near the lake and disturbance, caused by ice-thrust scouring the rocks, mimic arctic conditions. This unique habitat has allowed these species to persist in Minnesota at the far southern edge of their range since the last glacial maximum approximately 10,000 years ago.



Hudson Bay eyebright. Photo credit: Katie Winkler

One of these species, Hudson Bay eyebright (*Euphrasia hudsoniana* var. *ramosior*), is listed as a species of special concern by the Minnesota DNR due to the threats of habitat loss, including development along the shore and recreation, and warmer temperatures associated with climate change.

Hudson Bay eyebright is an herbaceous plant that grows up to 14" tall, but is usually shorter than 8", with small white flowers. In areas where it occurs along the shore, many plants can often be seen growing together in cracks in the rocks, in patches of moss, or on the edges of vegetation. Plants begin to emerge in late June and July, and are typically flowering in July and August. One interesting characteristic of this species is that it is a hemiparasite, meaning it can obtain nutrients from other plants growing nearby by attaching to their roots. However, this relationship is not necessary for the plant's survival; eyebrights are capable of growing and reproducing without parasitizing another plant, but may be smaller and produce fewer seeds than plants that do.

Aside from climate change and habitat

loss, another concern for this species is that it is likely hybridizing with invasive eyebright species that are spreading throughout the Arrowhead. Non-native eyebrights can be found at several locations along the North Shore and can be difficult to distinguish from the native species. The end result of hybridization between native and non-native eyebrights is unclear. On one hand, hybridization may result in loss of the

unique genetic makeup of Minnesota's populations of this species. On the other, it is possible that hybridization will introduce genetic variation into native populations that could allow this species to adapt to environmental change.

During the summer of 2014, I conducted research to determine whether populations of Hudson Bay eyebright differ along the shore, whether sites differ with respect to temperature and humidity, and whether natural selection differed at sites along the shore. Answering these questions can provide some preliminary information on whether plants are currently adapted to conditions along the shore, and how they may respond as temperatures change. I visited four sites, including Sugarloaf Cove, throughout the growing season and measured a variety of plant traits to answer these questions. This study showed that eyebright populations did differ depending on the site where they were growing. **Most notably, the plants at Sugarloaf Cove were particularly robust and fit compared to plants at other sites: they had**

Continued on page 10

Continued from page 9

larger stems, larger leaves, more branches, and produced more fruits than plants at other sites. Interestingly, Sugarloaf was also the coldest site on average, and had the highest humidity, which may mimic the cold, arctic conditions where this species more typically occurs. This suggests that climate change resulting in warmer temperatures could reduce fitness for populations on the North Shore.

At all sites, plants with larger leaves had more fruits, meaning that natural selection was favoring them. In addition, most of the other plant traits measured were under natural selection, but only indirectly because of their correlation with other traits. However, without knowing more about the genetic diversity of these populations, we can't tell if they can adapt. Additional research is planned for summer 2015 to examine the population genetics of Hudson Bay eyebright to determine if there is any evidence of inbreeding

depression within its relatively small, isolated populations along the North Shore and whether there is genetic evidence for hybridization with non-native species.

If you would like more information, or can offer information on additional places where you've found eyebrights (native or not) you can contact me at wink0113@d.umn.edu or 218-260-1250.

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Program Sponsors

Thank you to the following people for sponsoring a program at Sugarloaf Cove this summer:

Russ Baker	Temporary Rock Sculptures, July 4
Jane Sweet	Native Plants and Restoration Techniques, July 25
Tammy Magney, Magney Architecture	The Big Picture with Dick Ojakangas, July 18
Nancy and Evan Anderson	Bird banding
Karen Dingle	In a Patch Of Goldenrods with Larry Weber, August 15

If you are interested in sponsoring a program at Sugarloaf Cove call 218-525-0001.

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Help us preserve Sugarloaf Cove and the North Shore landscape.

upcoming events

See sugarloafnorthshore.org for complete descriptions and updates

MAY 22

Volunteer training, 10:30 - 1 pm

MAY 23 - 25, 30, JUNE 6

Bird Banding at Sugarloaf Cove, 7 am – noon

MAY 30

Volunteer training, noon - 2:30 pm

JUNE 13

Wildlife of the North Shore, 10 am

JUNE 19

Bird banding at Sugarloaf Cove, 7 am - noon

JULY 4

Temporary Rock Sculptures with Peter Juhl, 10 am

JULY 11

What the Soil and Water Conservation District Can Do For You, 10 am

JULY 18

The Big Picture – “Continental Drift” and Plate Tectonics Theory with Dick Ojakangas, 10 am

JULY 25

Native Plants and Restoration Techniques, 10 am

AUGUST 1

How to See in the Dark: Monitoring Bats on the Superior National Forest, 10 am

AUGUST 8

Annual Member Meeting and Ice Cream Social, followed by presentation about Population and Natural Resources with Dick Ojakangas, 1 pm

Cruise the North Shore, 5 pm. Pre-register on our web site, \$50 per person.

AUGUST 14

Gunflint Trail Geology Exploration, see web site for details and pre-registration. \$50 per person.

AUGUST 15

In a Patch of Goldenrods with Larry Weber, 10 am

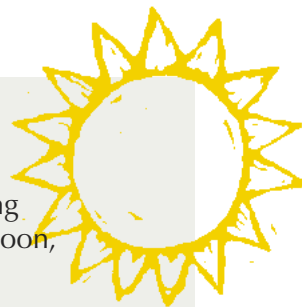
AUGUST 22

Nature Journaling Workshop, 10 am

AUGUST 29

The Limits of the Universe, Neutrinos and Dark Matter!, 10 am

summer programs



Thursdays – Bird banding demonstration, 7 am - noon, beginning June 25

Fridays – There’s No Place Like Home, 1 pm (except August 14), beginning June 26

Saturdays – Guest speakers, 10 am unless otherwise noted

Sundays – Geology walk, 10 am, beginning June 6

Community Shed Training

June 25, 6 pm	July 30, 6 pm;
July 2, 2 pm	August 7, 2 pm;
July 8, 6 pm	August 13, 4 pm;
July 16, 2 pm	August 21 & 27, 2 pm
July 24, 2 pm	

PRE-REGISTRATION REQUIRED for all of these dates. Visit our website.

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Visit our web page to sign up or send your email address to sugarloaf@boreal.org

Sugarloaf: The North Shore Stewardship Association

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