

WILDLIFE SANCTUARY

Dedicated to Conservation and Education in the Somes Pond Watershed

Summer 2014

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Somes-Meynell Wildlife Sanctuary

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> Executive Director David Lamon



Message from the Board

by Dan Kane

I remember standing on the old Mill Pond bridge as a kid back in the 70's watching thousands of silvery alewives churn the water below as they made their way from the Sound up toward Somes Pond. My friends and I rode our bikes down to watch the show every spring. The water was so filled with fish that it seemed you might be able to walk across on their backs.

Over the next 25 years, the fish stopped returning, and by the early 2000's there were nearly no more alewives migrating into Somes Pond. Like Atlantic salmon and other anadromous fish, alewives migrate from salt to fresh water in order to spawn, and without access to fresh water, they can't reproduce. Observers wondered if the fish ladders at the Mill Pond and along Brookside Cemetery no longer allowed fish to swim upstream.

In 2005 the Somes-Meynell Wildlife Sanctuary began a project to restore the fishways from Somes Sound all the way to Long Pond and started counting the alewives that returned every spring. At the start of this project in 2005 only a few hundred alewives passed up into the Mill Pond. Last year, the number was over 37,000.

Historically, alewives have been an important source of food, fertilizer, and bait. They and other anadromous fish are also important for the nutrients they transport into their spawning grounds. From birds and mammals that eat the fish, to microorganisms that digest any parts left over, virtually every living thing in the watershed benefits from a healthy fish run. By restoring the alewife run into the Somes Pond watershed, the Sanctuary has improved the health of the whole ecosystem.

Abandoned dams that no longer serve any useful purpose block thousands of waterways on both the East and West coasts. People are beginning to recognize the economic and environmental burdens placed on surrounding communities by these blocked waterways. Local organizations like ours are taking action to either remove the abandoned dams or provide fish ladders around them. I'm proud that the Somes-Meynell Wildlife Sanctuary is at the forefront of this movement. Collectively, this fishway restoration up and down the Maine coast will help improve the health of the entire Gulf of Maine, a resource vitally important to our state. If you are able, I hope you'll consider a financial contribution to the Sanctuary to support this important work.

I'll think about alewives (and also avoiding snapping turtles) as my family swims out to the rock on Somes Pond this summer. I hope to see you there!

Sanctuary Receives Grant To Support Citizen Science

The Somes-Meynell Wildlife Sanctuary recently received a \$4,000 grant from the Hancock County Fund of the Maine Community Foundation for support of its "Citizen Science Corps" program.

"Citizen Science" is organized research in which members of the public engage in the process of scientific investigations: asking questions, collecting data, monitoring natural phenomena in much the same way as trained scientists. "As a small non-profit with a mission of environmental research, conservation and education the Somes-Meynell Wildlife Sanctuary relies on community volunteers to help carry out many of its programs," says David Lamon, the Sanctuary's Director. The "MDI Loon Monitoring Project," the "Somesville Fish Passage Restoration Project," and the "Long Pond Courtesy Boat Inspection Program" are a few examples of some of the Sanctuary's programs that rely on volunteer citizen scientists. "On any given day during the spring and summer seasons you might find MDI High School students collecting data on migrating alewives, retired couples monitoring and observing nesting loons on MDI's lakes, or a local resident greeting and educating boaters about invasive plant species at the public landing on Long Pond," said Lamon. "Engaging citizens with local environmental research and monitoring projects benefits our local communities by developing knowledgeable and committed individuals who will become active stewards of their own local environment, it's a win/win situation," says Lamon.

With offices in Ellsworth and Portland, the Maine Community Foundation works with donors and other partners to improve the quality of life for all Maine people. To learn more about the foundation, visit www.mainecf.org.



Mount Desert Island High School Students participate in annual alewife research as part of the Sanctuary's Citizen Science Corps.

For more information on the "Citizen Science Corps" program or how to become involved please contact the Somes-Meynell Wildlife Sanctuary at 244-4027, email wildlife@gwi.net, or visit www. somesmeynell.org.

Sanctuary Receives Land Gift

More head (Mike) Kennedy has donated a 10acre parcel of forest and forested wetland that abuts the Sanctuary's northern boundary. "This undeveloped land serves as an important buffer to the larger wetland area which drains into Somes Pond," says Sanctuary Director, David Lamon. Mr. Kennedy's wish for the land to remain forever wild found a compatible home in the Sanctuary's mission of environmental stewardship and conservation within the Somes Pond watershed. "Mike's love of this land is evident to anyone who accompanies him on a walk through this beautiful forest," says Lamon. "He knows it like the back of his hand."

Mike Kennedy (pictured on right) leads Sanctuary Director, David Lamon through the forested parcel of land he recently donated to the Sanctuary.



2014 SUMMER PUBLIC PROGRAM SERIES

POND CRITTERS *Monday, June 30th 7:30PM*

Somes Pond is famously home to loons who feast upon its fish. But what do those fish eat? Naturalist **Lynn Havsall** will help you learn fun and fascinating facts about aquatic insects and other tiny invertebrates that call Maine ponds home. After a slide talk introduction we will meet some of these creatures up close and personal.

LOONS AND LEAD Sunday, July 6th 7:30PM

Lead poisoning from fishing tackle is the leading cause of death of adult loons in Maine; it is responsible for close to one-third of the documented mortality over the past 25 years. Maine Audubon staff will answer all your questions about loons during this stunning multi-media presentation. Lead-free sinker & jig samples will be available for attendees to take home

FULL MOON PADDLE ON SOMES POND Saturday, July 12th, 7:30PM & Sunday, August 10th, 7:30PM

Open your senses to the sights and sounds nighttime has to offer while paddling under a moonlit sky. Watch for muskrat, bats and listen to the loons calling across the pond. Group size is limited –please call ahead for details.

ORCHIDS OF MAINE Thursday, July 17th, 7:30PM

Orchids are prized the world over for their beauty, and plant explorers have traveled far and wide to discover new species and bring them into cultivation. Join botanist **Jill Weber** on some travels closer to home as she discusses the orchids of Maine. Some are common, some are rare, but each has a story. She will talk about the orchids that grow here, their ecology and their pollination biology.

PENGUINS TO HUMMINGBIRDS: A BIRDING TRIP TO PERU Sunday, July 20th, 7:30PM

Join birder **Bob Brown** as he takes us along on his recent trip to Peru this past winter. A retired biology teacher, Bob became interested in birding in the 1980s here in Maine. Since then, he has expanded his birding by traveling to the southwestern US, Mexico, Costa Rica, Trinidad, Ecuador, and Peru. His next birding trip will be to Cuba in March.

LIVING ON THE EDGE Sunday, July 27th, 7:30PM

Local Author and Naturalist, **Ruth Grierson** will discuss the various forms of life at the edge of the sea on Mount Desert Island and why it's a special environment only suited for those able to survive 'living on the edge'.

UP CLOSE AND PERSONAL...THE BIRDS OF MOUNT DESERT ISLAND Sunday, August 3rd, 7PM

Join nature photographer **John Rivers** as he presents his recent photos from around Mount Desert with a focus on our local birds. John's work is especially noteworthy for his ability to get in close to the birds and draw out their personalities and characteristics. The presentation will include a look at bird activity during the annual alewife run in the Somes-Meynell Wildlife Sanctuary's watershed.

MDI'S LOONS: A REPORT FROM THE FIELD Sunday, August 17th 7PM

Interested in loons? Would you like to find out more about the latest research and information on the loon population of MDI and throughout Maine? Join Sanctuary staff members for an informative evening of all things loons. We'll explore loon natural history and share thirteen years of data on Mount Desert Island's nesting loon population. If you love loons, then this is the program for you!

Species Spotlight: Lichens by Roberta Sharp

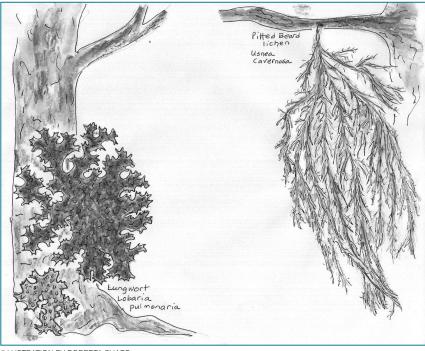
ichens are organisms consisting of a fungus, the Lomycobiont partner, and an alga, the photobiont partner. Lichens are named for the fungus. Fossil records date lichens back to 400 million years. Worldwide fourteen thousand species have been identified. You've got to like the way lichens take care of each other in their symbiotic partnership. The fungal component can't make its own food because it lacks chloroplasts, so it depends on its photosynthetic partner, the alga, to synthesize carbohydrates. It only takes a few hours of photosynthesis daily to meet the nutritional needs of the lichen. In turn the fungus provides moisture, protection from ultraviolet exposure, and a house or structure for the photobiont, algae (90%) or cyanobacteria (10%). A true water conservationist, green algae lichens can hydrate at night using water vapor, but they can withstand drought conditions. Blue cyanobacteria, nitrogen fixators, benefit the fungus by making nitrogen available from the atmosphere.

Lichens are identified by their shape and the substrate that they grow on which includes trees, rocks, or soil. Three common growth forms are crustose, foliose, and fruticose. Lichen biochemistry is complex, and involves unique chemical adaptations that can act as repellants, attack microbes, control light exposure, and reduce competition in their environment. It is essential to know their chemistry accurately to identify some species. Reproduction can be accomplished by either sexual or asexual methods. During sexual reproduction, fungal spores found in structures called ascomata, are ejected into the air in hope of finding a suitable partner algae. Asexual reproduction, a more assured way to reproduce, is achieved by either fragmentation of the lichen or by dispersing soredia, bundles of microscopic granules of algal cells wrapped in the fungus, or isidia, small hotdog shaped packets that contain both algal and fungal components. Wind, water, and animals are responsible for dispersal.

Lichens require clean air, adequate moisture, sunshine, and the right substrate to thrive. They are slow growers. They have been used as a bio indicator of pollution since they lack the capacity to filter or expel the toxins that they absorb from air and water. They can endure extremes in temperatures and radiation. Lichens on a tree trunk provide a micro ecosystem for multiple organisms by providing shelter, food, and camouflage. Both herbivores and carnivores co-exist in the food web that it fosters.

Next time that you walk the Sanctuary's trails, think of bringing a reference book to help you identify a few basic lichens.

In addition to her work on the Sanctuary's Board of Directors, Roberta Sharp has recently completed the Maine Master Naturalist Program –congratulations Roberta!



Pitted Beard Lichen, Usnea cavernosa

Usnea or old man's beard is a fruticose lichen that drapes over the branches of spruce trees. The Northern Parula warbler uses this lichen for nest building. It contains usnic acid in its central cord which is known to have antibiotic properties. It is also a pollution sensitive lichen.

Lungwort, Lobaria pulmonaria

Lungwort, a leafy appearing foliose lichen, is one of my favorites. The bumps on the undersides, cephalodia, look like air sacks of lung tissue, and contain the photobiont partners of green alga and cyanobacteria. It is an indicator species of clean air and is sensitive to pollution, especially sulfur dioxides in acid rain. I have done a local survey of Lobaria, and find that it grows best where you find large old maple stands. Its beauty shines on a dreary rainy day when its translucent thallus allows the colorful algae to be seen, magically changing it from an olive brown to a lush green.

ILLUSTRATION BY ROBERTA SHARP

Volunteer Profile: Jim Keene



Jim Keene monitoring nesting loons on Long Pond.

Jim Keene's connection with the natural world was fostered at an early age while spending summers camping with his family in the Catskill Mountains. "Nature was all around, it was part of what we did," reflects Jim. Several family camping trips to Mount Desert Island acquainted Jim with this area and led him to a summer job working at the Asticou Inn during his high school years. But it wasn't until his retirement in 1995 that Jim and his wife Pricilla permanently

moved from Long Island, New York to Seal Cove, Maine. Not long after moving to MDI Jim's schedule was full; he has a knack for making himself useful. He began by serving the Town of Tremont as a Planning Board Member, and later served on the Board of Appeals, the Comprehensive Planning Committee (which he chaired), the fire department (currently he is the Board President), and has driven an ambulance. It was his wife Pricilla's interest in birds that first brought the couple to a public education program at the Sanctuary. It wasn't long after that Jim was making himself useful at the Sanctuary during volunteer work days and participating in

the Loon Monitoring Project along with Pricilla. "It's been a real pleasure to learn more about loons and their behavior," says Jim. "Now when I'm out on the water I feel like I know what they're thinking." Jim and Pricilla will be moving from their home on MDI later this year and relocating to Orono... where we're sure Jim will be making himself useful!



Jim Keene makes repairs to a loon nesting raft on Long Pond this spring.





Meet this summer's Field Assistant, Evan James

Evan is entering his junior year at College of the Atlantic in Bar Harbor where he has taken a variety of classes, ranging from Natural History and Ornithology to Native American Literature and Wilderness in Landscape Art. In working with the Sanctuary, Evan hopes deepen to his understanding of and relationship with the ecology of Mount Desert Island. He is particularly excited to observe Common Loons on Mount Desert Island, having the opportunity to study the bird's behaviors and relationship with its surrounding ecology. Evan's interests include music, writing, walking, backpacking, and drinking coffee (which will come in handy during this busy field season).



57 Pretty Marsh Road PO Box 171 Mt. Desert, ME 04660 Phone: 207-244-4027 Email: wildlife@gwi.net www.somesmeynell.org

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Please Help Support Our Work!

Your financial support is an important part in helping the Sanctuary carry out its mission of environmental conservation and education.

Looking for other ways to support the Somes-Meynell Wildlife Sanctuary? Here's a list of some items we need:

- Picnic Table
- Vacuum Cleaner
- Small Microwave
- Small boat w/outboard
- Pickup truck

All donations to the Somes-Meynell Wildlife Sanctuary are tax-deductible.

Thank You for your support!

Mount Desert Elementary School Science Teacher Brian Cote and his students participate in data collection during the annual Somesville alewife run.

