



# FINGER LAKES INSTITUTE

June 2009

## Education Outreach

### Teachers! Professional Development Opportunities Offered at the FLI

The **3<sup>rd</sup> Annual My Place in the Finger Lakes Conference** will be held at the Finger Lakes Institute on the Hobart and William Smith Colleges campus on October 3<sup>rd</sup>, 2009. This year's theme is the flora and fauna of the Finger Lakes and opportunities to conduct field science in the region. Education Outreach Coordinate Sheila Myers has arranged to have speakers from Finger Lakes Community College, Liverpool High School, Geneseo Middle School, SUNY ESF as well as Hobart and William Smith Colleges. Participants will be able to choose to attend educational sessions focusing on aquatic ecology, coyotes, birds of prey, and field trips to Muller Field Station, Letchworth State Park, and earth science expeditions in the Finger Lakes region. Cost is \$30. To register visit the FLI website and download the [brochure](#) (.pdf) at <http://fli.hws.edu/education.asp>

### Summer Finger Lakes Exploration Camp for Middle School Youth

Photos by Sheila Myers

This summer from July 7-13<sup>th</sup> the FLI Education Outreach staff will offer a **Finger Lakes Exploration Camp** program for youth grades 6-8. During the week students will visit exciting natural areas in the Finger Lakes region, such as Grimes Glen on Canandaigua Lake and Watkins Glen State Park, to learn more about aquatic and terrestrial environments of the region. Space is limited so please register soon! To register for the camp please visit the Hobart and William Smith Kid's College registration page and download the [brochure and application](#) (.pdf). Learn more at [http://www.hws.edu/offices/conferences/exploration\\_camp.aspx](http://www.hws.edu/offices/conferences/exploration_camp.aspx).

(Photo (right): Students collect aquatic plants dockside of Bozzuto Boathouse at HWS)



### School Without Walls Visits HWS

Photos by Sheila Myers



One of the mission statements listed on the home page of the School Without Walls (Rochester, N.Y.) states: "We're developing the personal and academic skills we need to be lifelong explorers, learners, and problem solvers." It was not a big surprise, then, when Janet Siegel, a science teacher from the high school brought her students to the HWS campus for a Science on Seneca (SOS) field trip to explore firsthand the Seneca Lake environment and to learn about campus life.

(Photo (left): Emily Cochran '09 observes a student counting plankton aboard the *William Scandling*)

The journey began last fall when Siegel took advantage of the bi-annual Science on Seneca training opportunity. She and other

science teachers joined faculty from the HWS geoscience, chemistry and biology departments aboard the *William Scandling* to learn how to use limnological equipment; they then returned with their classes. Because this was such a new experience for both Siegel and her students, Sheila Myers, education outreach coordinator for the Finger Lakes Institute and student intern Emma Cochran '09 assisted on the boat.

After the field trip, the students from School Without Walls had an interactive session with Aisha Rivers '07 from the Intercultural Affairs Office. Rivers talked about what attracted her to the HWS campus and how she became involved in several clubs and organizations including student government, the Black Student Union and a study abroad program. Finally, the students were taken on a tour of campus with admissions tour guide Emily Clemetson '11.

(Photo (right): John Abbot, first mate of the *William Scandling*, assists a student taking a water sample from Seneca Lake)

Myers developed a Wiki page where students could later post comments about their experience and several did so:

"Hands on experience is one of the only ways I can find to appreciate science as a subject of study, and this was one of the few experiences I've had that got me excited to look deeper into a scholastic topic," wrote one student. "I was on a boat, and got to enjoy the majesty of the dangerously deep mystery."

"This whole trip made me seriously re-evaluate my role in the environment in general. For the first time, I saw science class as something that I might be able to use after high school. Thank you for the experience," expressed another student.

Yet another wrote about the opportunity to be on a college campus, "The tour of the campus really introduced us to a different kind of atmosphere and helped us gain hands on scientific work experience. Thanks again."

This project was made possible by a grant from the Genesee Valley Chapter of the New York Water Environment Association.



## Community Outreach and Public Service

### Greening for the Greater Good: Demonstration Rain Garden Planted at the FLI

Photos by Sarah Meyer and Sheila Myers

Rain gardens are shallow, pie pan-like depressions, specifically designed to soak up and store excess rainwater and snowmelt and filter contaminants, meanwhile attract birds and beneficial insects. Rain gardens are incorporated into a landscape design to protect water quality and limit the introduction of sediment into natural waterways. In suburban and urban areas water runs off the land, especially driveways, patios, roofs, and sidewalks, and impacts local streams and lakes. A rain garden reduces soil erosion and compaction, lessens the intensity and velocity of stormwater flow, and encourages the infiltration of water to recharge groundwater.

On May 30, as part of the FLI's public service program, volunteers from the Geneva community and the HWS campus gathered to plant the Finger Lakes Institute's demonstration rain garden located in its lakeshore backyard. Volunteers were given a brief overview of the purpose of the rain garden and the history of its construction and design. The garden, constructed by HWS Building and Grounds, incorporates a variety of flowering plants, sedges, and grasses native to New York, such as foamflower, anise hyssop, purple coneflower, bee balm, northern sea oats, swamp milkweed, joe-pye

#### Benefits of a Rain Garden:

- Recharges groundwater
- Reduces mosquito breeding by removing standing water
- Creates habitat for birds and butterflies
- Reduces the potential for home flooding
- Protects rivers and stream by filtering pollutants
- Sustains adequate flows in streams during dry spells
- Reduces the need for costly municipal stormwater treatment
- Reduces erosion of stream banks and lakeshores



weed, and switch grass, to complete the its coloration, texture, and aesthetics. Along the far side of the garden is a berm, planted with solomon seal, intended to contain water during heavier rain events.

Photo(left): Volunteers Sage Gerling, Gillian Mead, and Chris Gerling help plant over 60 plants into the FLI's rain garden.

The FLI's demonstration rain garden will be incorporated into future FLI educational programs to explain and recognize the benefits of stormwater management, the identification of native plants, and value of environmental stewardship. During this summer's Finger Lakes Exploration Camp, FLI Education Coordinator Sheila Myers expects to review how rain gardens are used in watershed protection with middle school age students from the Finger Lakes Region. Community Outreach Coordinator Sarah Meyer hopes that once the interpretive signage is

installed college students, community members, garden enthusiasts, and naturalists, alike, will regularly visit the garden.

Those Finger Lakes citizens interested in learning more about the details of the FLI's Demonstration Rain Garden design or plant selection can learn more by reviewing the [public presentation](#) (.pdf) given by Sarah Meyer on May 27. Common resources and "how-to" guides are hyperlinked throughout the program and listed at the end.

## Two Part Lake-Friendly Homeowners Program



The Finger Lakes region is home to over 1.5 million residents, of which over 550,000 are provided municipal drinking water. The remaining residents rely on groundwater wells for drinking water. Approximately 22 million people visit the Finger Lakes region annually. Only a few statistics about the Finger Lakes "bring it home" how much we rely on the lakes and how important it is to protect our water resources. Although the water of the Finger Lakes is often taken for granted, residents and visitors of the Finger Region are encouraged to tread lightly with a lake-friendly mindset when living and renting in the watersheds. In June and July, the Finger Lakes Institute will offer a two-part evening educational program promoting efforts that can be made to live a lake-friendly lifestyle within the Finger Lakes watersheds.

On June 30 and July 7, Community Outreach Coordinator Sarah Meyer will provide an overview of how homeowners and renters can assess their household environmental risk in order to protect their health and the environment. Participants will receive practical information pertaining to drinking water, septic systems, landscaping, fuel storage and household hazardous waste. At the conclusion of the program, homeowners will be able to identify potential risks to the environment around their home and how to take action to correct them. The guidelines used throughout the program will reference Home-A-Syst, a nationwide pollution prevention and risk assessment program supported by the United States Department of Agriculture (USDA) and the United States Environmental Protection Agency (EPA).

Each program participant will receive a complimentary copy of [Home a Syst: an Environmental Risk-Assessment Guide for the Home](#) created by Northeast Regional Agriculture Engineering Service located in Ithaca, NY. The program, sponsored by the Ontario County Water Resources Council Special Projects Fund, is free and open to the public. Please refer to the event postings below for further details.

## Diet for a Small Lake

The New York State Federations of Lake Associations, Inc. recently published *Diet for a Small Lake: The Expanded Guide to New York State Lake and Watershed Management* in cooperation with the New York State Department of Environmental Conservation. The hefty 300-page document is a testament to NYSFOLAs efforts to provide a source of dependable information to the diverse lake associations across New York State. With new developments in watershed management techniques and a need for understanding lakes, streams and

watersheds, this new edition focuses on lake management activities and promotes the public's knowledge and understanding of the ecological and societal aspects of lakes. Case studies and contents of this helpful guide include:

- Designing a Health Plan for a Lake
- Lake Ecology: Getting Your Feet Wet
- From Montauk to Erie: 7850 New York Lakes
- Lake Problems: Acid Rain to Zebra Mussels
- Problem Diagnosis: Seeing Beyond the Symptoms
- Fisheries Management: Matching Expectations to Reality
- Aquatic Plants: Not Just Weeds
- Algae and Other Undesirables: Getting Rid of Yuck
- User Conflicts: Learning to Share
- Watershed Management: The Big Picture
- Legal Framework: It Helps to Know the Rules
- Management Plan Development: Putting the Pieces Together
- Implementation and Evaluation: Don't Stop Now

To order a copy of Diet For a Small Lake, 2<sup>nd</sup> Edition visit <http://www.nysfola.org/diet/>

## Planning for Recreational Paddling in the Finger Lakes

Blueways are small boat and paddling routes that combine recreation and environmental awareness and allow users to travel to designated stops along the way for rest, overnight stays, and enjoyment of land-based attractions in the vicinity. The Genesee Finger Lakes Regional Planning Council is seeking to identify, describe and rank lake, canal and riparian corridors throughout the nine-county Genesee-Finger Lakes Region based upon their suitability for blueway use and designation. A major component of the *Genesee-Finger Lakes Regional Blueway Analysis Project* involves seeking input from vested stakeholders associated with paddle sports, outdoor recreation, waterfront planning, water quality advocacy, and other related areas of interest.



The Finger Lakes Institute will host the first stakeholder meeting on June 15<sup>th</sup> in its Seneca Room to focus specifically on Cayuga, Seneca, Keuka, Canandaigua Lakes. The western Finger Lakes will be a focus of the stakeholder meeting on June 18<sup>th</sup> at the Livingston County Highway Department. There are two remaining stakeholder meetings taking place in Rochester (June 17<sup>th</sup>) and Basom, NY (June 16<sup>th</sup>). Those interested in attending these meetings are asked to RSVP **by June 12** to Brian Slack, G/FLRPC Senior Planner/Project Coordinator at [bslack@hws.edu](mailto:bslack@hws.edu) or (585)454-0190 x 21. More information about the Genesee-Finger Lakes Regional Blueway Analysis can be found at <http://www.gflrpc.org/blueways.htm>.

## FLI June Programs

**June 15, 7:00 pm, [Otisco Lake Marina](#)**

### Talking and Teaching About Aquatic Plants: A Workshop for Educators

**Kelly Somerlot, Onondaga Cornell Cooperative Extension**

Interested in getting the word out about weed issues in Otisco Lake? Want to increase your knowledge-base about aquatic plants so that you can better answer questions from the public? Cornell Cooperative Extension of Onondaga County is offering specialized, more detailed aquatic plant classes open to community group/municipal leaders, educators, civic spokespeople, and anyone else who interfaces with the public about aquatic plant issues. This class will review local cases of nuisance plants in the Finger Lakes and greater Central New York region, as well as past and upcoming management strategies and research



projects. Participants will also be provided with a sampling of educational materials and ideas for successful public outreach campaigns. For more information, contact [Kelly Somerlot](#). This program is partially funded by the New York State Great Lakes Protection Fund Large Grant Program.

**June 15, 7:00- 9:00 pm, Finger Lakes Institute Seneca Room**

### **Genesee-Finger Lakes Regional Blueway Analysis Stakeholder Meeting: Finger Lakes Region**

**Brian Slack, Genesee/Finger Lakes Regional Planning Council**

*Hosted by the Finger Lakes Institute*

Genesee/Finger Lakes Regional Planning Council has coordinated four regional stakeholder meetings in an effort to inform paddling enthusiasts and other paddling stakeholders about the Blueway Analysis Project and to solicit important input from them. Stakeholders will be provided with a presentation on the project and will then be asked to lend their knowledge and expertise regarding access point locations, site conditions, and paddling conditions.

Attendees will also be asked to lend their general thoughts and concerns pertaining to the project as a whole. The success of a blueway system is based largely on connectivity from one corridor to another. Participants are therefore encouraged to discuss waterways outside of meeting's geographic region. Further, if you are unable to attend a meeting in your preferred region, please feel free to attend at another location. For more details about the multiple stakeholder meetings, contact Brian Slack at [bslack@gflrpc.org](mailto:bslack@gflrpc.org) or (585) 454-0190 x21. Learn more at <http://www.gflrpc.org/blueways.htm>.



**June 25, 6:30 pm, Finger Lakes Institute Classroom**

### **A Homeowners Guide to Aquatic Plants**

**Sarah Meyer, FLI Community Outreach Coordinator**

*Cosponsored by Onondaga Cornell Cooperative Extension*

To reduce the emergence and spread of invasive aquatic plants in the Finger Lakes, community members must be educated and supported in early detection, rapid response, and proper management techniques. In this evening presentation, participants will learn about various invasive aquatic weeds that wreak havoc and continue to threaten Finger Lakes waters, including frogbit, fanwort, water chestnut, Eurasian watermilfoil, curly pondweed. This evening program will focus on the types and benefits of aquatic plants, invasive and native plants identification, aquatic plant management, and nutrient management. This program is partially funded by the New York State Great Lakes Protection Fund Large Grant Program.

Topics will include:

- **Name that Plant** – Distinguishing one aquatic plant from another by learning basic plant identification. Live plant specimens will be available for practice.
- **Aquatic Plant Management** – An overview of aquatic plant management, including in-water control options for invasive plants, volunteer opportunities, and case-study examples
- **Don't Feed the Plants** – A look at upland inputs of nutrients that promote excessive aquatic plant growth in the lake, and homeowner and community strategies for controlling nutrient inputs.

This program is free and open to the public.

**June 30, 6:30 pm, Finger Lakes Institute Classroom**

### **Lake-friendly Households: Is Your Home Healthy and Environmentally Friendly? Part 1**

**Sarah Meyer, FLI Community Outreach Coordinator**

*Sponsored by the Ontario County Water Resource Council Special Projects Fund*

There are multiple sources of pollution to the Finger Lakes environment, including households. Whether you live along a lakeshore, in view of a lake, or draw drinking water from Finger Lakes groundwater, all households can become more lake friendly. Every household in the Finger Lakes watersheds can improve water quality through simple and constructive efforts on their property. This program will identify the correlations between lakeshore and watershed development and water quality and household environmental risk. Participants in this 2-part series program will learn about household water quality, health, and environmental risks and discuss topics such as drinking water wells, water conservation, wastewater and solid waste management, stormwater runoff, fuel storage, and heating/cooling systems. This program is free and open to the public.

July 7, 6:30 pm, [Finger Lakes Institute Classroom](#)

## Lake-friendly Households: Is Your Home Healthy and Environmentally Friendly? Part 2

**Sarah Meyer, FLI Community Outreach Coordinator**

*Sponsored by the Ontario County Water Resource Council Special Projects Fund*

There are multiple sources of pollution to the Finger Lakes environment, including households. Whether you live along a lakeshore, in view of a lake, or draw drinking water from Finger Lakes groundwater, all households can become more lake friendly. Participants in this program will gain a better understanding of how to become more environmentally friendly, protect their personal health, and reduce their ecological footprint. This program will identify the correlations between lakeshore and watershed development and water quality and household environmental risk. Topics of discussion in Part 2 will include greening your household and cover topics such as phosphorus free living, yard and garden care, composting, hazardous household products, and reducing energy consumption. This program is free and open to the public.



**The Finger Lakes Institute at Hobart and William Smith Colleges**

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