

# Great Lakes 'F-EX' (Field Experiences) for Watershed Educators Lake Ontario Workshop (Including Oneida Lake)

*Providing meaningful teacher experiences to promote Great Lakes education discoveries for students*

## July 22 – 25, 2013

### Host sites:

SUNY Oswego

Cornell University Biological Field Station, Bridgeport

NYSDEC's Salmon River Hatchery, Altmar

USGS Lake Ontario Biological Station, Oswego

*Limited to  
15 teachers!*

**WHO:** Formal educators of students in grades 5 – 12 located in the Lake Ontario/Oneida Lake watershed. Pairs or teams of teachers within a grade level, building or district are encouraged to apply.

Join us for this **FREE** workshop to help promote the stewardship, protection, and restoration of coastal areas in the Lake Ontario watershed. Inspire your students with meaningful watershed educational experiences using NOAA curricula focused on Great Lakes watersheds. Using the learning cycle of *Excite, Explore, Explain, Elaborate, and Evaluate*, the **Great Lakes F-EX** (Field Experiences) workshop will provide you with experiences in the Great Lakes system using science, technology, engineering and math (STEM) education.

### WORKSHOP FORMAT:

NOAA Sea Grant educators and scientists will offer place-based, experiential learning opportunities to ultimately engage students in practices that value and promote a sustainable society. Educators will be prepared to help students:

- Raise awareness and understanding about the importance of protecting and sustaining Great Lakes watersheds
- Learn from five NOAA-developed curricula that you will receive or can access online
- Increase critical thinking skills and authentic learning in STEM disciplines
- Gain experience in solving locally-relevant problems
- Develop stewardship projects that improve Great Lakes Literacy (Focusing on Lake Ontario and Oneida Lake)

In addition to the content provided at the workshop, a menu of stewardship project ideas will be supplied. These projects could include students developing a blog, a Facebook page, a YouTube video, a poster session at school or at a community event, a community Great Lakes Awareness Day, an Adopt-a-Beach clean-up, etc. The intention is to share watershed protection and revitalization information with other schools in the Great Lakes basin.

### WORKSHOP SUPPORT

- Materials, food and lodging (if needed) for 4 days (3 nights) in Oswego, NY.
- Documentation of 20+ contact hours for professional development
- **\$400 Stipend** to develop a Community Stewardship Project. (Upon completion of the workshop and project.)
- **Funding for bus transportation** to take students to an outdoor watershed field experience
- Funding for one teacher to co-present at the Science Teachers Association of New York State (STANYS) annual conference. (*Selection based on exemplary Community Stewardship Project developed by the teacher and students.*)

To apply for the Lake Ontario "F-EX" workshop, please complete the attached application by **May 17, 2013** and e-mail to Helen Domske, New York Sea Grant at [hmd4@cornell.edu](mailto:hmd4@cornell.edu).



# Great Lakes 'F-EX' (Field Experiences) for Watershed Educators

## Lake Ontario- Oneida Lake Workshop

**July 22 – 25, 2013**

### Preliminary Agenda and Topics

Lodging at the Quality Inn, located in Oswego, will be provided for teachers coming from outside the Oswego area. Dinner for Monday, Tuesday and Wednesday evening will also be provided for those participants.

Dates/Times for pre-workshop introductory teleconference to be determined (early July)

A follow-up teleconference will be held in October – date/time to be determined.

#### **Monday, July 22**

**9:00 - 4:00** [*lunch provided*]

The first day will begin on the campus of SUNY Oswego

Topics include: orientation to the workshop, community stewardship information, overview of Lake Ontario, invasive species, pharmaceuticals in the environment and regional impacts of climate change. Participants will learn how to bring the Great Lakes into the classroom, curricula overview and planning for the Community Stewardship Projects.

Afternoon field trip to the H. Lee White Maritime Museum

[www.hleewhitemarinemuseum.com/](http://www.hleewhitemarinemuseum.com/)

#### **Tuesday, July 23**

**9:00 – 4:00** [*lunch provided*]

Location: Salmon River Hatchery and Lake Ontario Dunes <http://www.dec.ny.gov/outdoor/21663.html>

We will spend an exciting day working with NYSDEC biologists and NYSG Coastal Community Development Specialist, Mary Penney, as we learn about the fishes of Lake Ontario and the unique ecological role of the sand dunes. Mary Penney will discuss Adopt-a-Beach activities and other Stewardship opportunities utilizing the dunes.

#### **Wednesday, July 24**

**9:00 – 4:00** [*lunch provided*]

Location: *USGS Lake Ontario Biological Station*

Interact with biologists from the US Geological Survey to learn about the ecology of Lake Ontario and the important research being conducted at the biological station.

#### **Thursday, July 25**

**9:00 – 3:00** [*lunch provided*]

Location: Cornell University Biological Field Station, Bridgeport [www.cbfs.dnr.cornell.edu/](http://www.cbfs.dnr.cornell.edu/)

The day will be spent working with Cornell researchers and students to learn about food web interactions and other ecological topics through experiential learning.

Wrap-up and finalize expectations.

#### **PARTICIPANT EXPECTATIONS:**

- Complete and participate in pre- and post-experience surveys/evaluations and teleconferences.
- Attend and be engaged in all activities that are a part of the four-day, place-based workshop.
- Develop and facilitate a student-based stewardship project focusing on protection and revitalization of students' local watershed in the Lake Ontario/ Oneida Lake basin (with assistance from workshop facilitators, as needed).
- Provide requested reporting data and documentation (e.g., photos, video clips, student presentations) of stewardship projects in a timely fashion.