



# Reporter

The Biological Field Station is a facility of the State University of New York College at Oneonta

## Summer Interns

**Brianna Olsen** from SUNY Oneonta was awarded a Biological Field Station SUNY Oneonta Internship. She delineated a wetland in Cooperstown that receives the Village's wastewater effluent before it is discharged into the Susquehanna River. She also measured phosphorus uptake by emergent plants in and adjacent to the wetland.

**Carter Bailey**, a student from SUNY Environmental Science and Forestry at Syracuse, was

supported by the Canadarago Lake Improvement Association (CLIA). He described the benthic communities of tributaries to Canadarago Lake.

**Nicholas Mazziotta** from SUNY Oneonta, a CLIA intern, monitored fecal coliform bacteria populations in Canadarago Lake and its watershed.

**Shane Putnam** from SUNY Oneonta held a Rufus J. Thayer Otsego Lake Research Internship. He monitored water quality in Otsego Lake tributaries as part of the BFS responsibilities

to the Otsego Lake Watershed management Plan.

**Tyler Smith**, SUNY Oneonta was sponsored by the CLIA and the Lake Moraine Association. He completed surveys of aquatic plants in Canadarago and Moraine Lakes.

**Cleo Szymgiel** from the University of Connecticut was sponsored by the Otsego county Conservation Association (OCCA). She assisted with a survey of the parasite fauna of local fishes.

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We are now routinely posting Otsego Lake water quality updates on our web page ([www.BFS.Oneonta.edu](http://www.BFS.Oneonta.edu)) as well as that of the OCCA: [www.OCCAinfo.org](http://www.OCCAinfo.org).

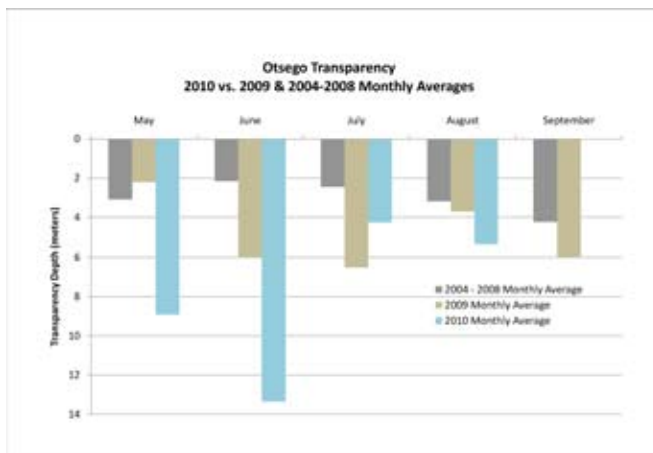
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Summer 2010 interns, staff and faculty.

Located in Cooperstown and founded in 1968, the Biological Field Station is a unique facility serving the Upper Susquehanna Watershed, Otsego County and the immediate Cooperstown area. It is primarily a teaching and research center for undergraduate and graduate students from across New York, the United States, and Canada. Directed by Dr. Willard Harman and staffed with talented, experienced professionals, the Biological Field Station is presently the focal point for information about issues affecting Lake Otsego and the Susquehanna River.



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From 1987 to present he has practiced dentistry in Shreveport, Louisiana. His wife Pam is an attorney, his son Jared is a sophomore at LSU. He is an avid shooter, competing in pistol events regularly. He recently became a NRA certified pistol instructor. He has plans to head for Montana very soon.

Donna Vogler taught Wetland Plant Identification and Delineation (Biol 683) this summer out of the facilities at Greenwoods Conservancy. Students Susan Wood, Karen Teitlebaum, Marcie Foster, Tom Lancing and Eamonn Hinchey waded through the wetlands at the BFS and the central part of the State to practice State and federal delineation protocols as they learned the local wetland plants. The class assisted intern Brianna Olsen with her wastewater treatment wetland project, and Brie's help in the course was much appreciated. One of the students, Marcie Foster, did a GPS survey of populations of the invasive marsh thistle (*Cirsium palustre*) and Donna is now working on a grant proposal that will

extend this work next summer at the BFS.

Twelve vernal ponds were constructed by the Upper Susquehanna Coalition with funding from the US fish and Wildlife Service on Rum Hill last year. They have served their intended function by providing breeding habitat for 1000s of frogs, toads and salamanders in the region.

Work at the Main Laboratory near Cooperstown continues. After putting up with the crowded conditions at the Thayer Farm Hop House this year some of us will be happy to occupy the newly renovated structure. Ample modern laboratory space will seem a luxury! At this time the sewer system and finishing touches on grounds work are being addressed while painting and casework installation is dominating inside work. We are planning to re-occupy the building before Christmas.

BFS intern Dave Parker, a fisheries biologist, is now working for the Federal Bureau of Land Management (US Department of the Interior) out of

**Otsego Lake Transparency 2004 to 2010:** Otsego Lake water transparency has increased substantially over the past two years, as illustrated by this comparison of monthly averages before (2004-2008) and after (2009, 2010) the establishment of zebra mussels. Increased water clarity likely results from filtration of water by the expanding zebra mussel population.

Fairbanks, Alaska. He spends a lot of time around Nome and near Kotzebue Sound above the Arctic Circle. His work involves all five species of Pacific salmon, sheefish and Dolly Varden char. He performs National Environmental Policy Act analyses in advance of proposed actions such as road development, mining, etc., on public lands. Typically he sets up remote camps at sites accessed only by helicopter and spends a week or so inventorying each area. He indicates he really loves his job. It does seem tough, but someone has to do it!

Jim Vogler has earned his PADI divemaster certification. Excepting Paul Lord, our official Divemaster, Jim is the first active BFS volunteer diver to earn the certification. Congratulations Jim! He has been a steadfast volunteer working with Paul on a NYSDEC contract to evaluate unionid mussels (native freshwater clams) of "Greatest Conservation Need" in the Susquehanna Watershed in New York.

Starry Stonewort (*Nitellopsis obscura*) was found

just west of Sunken Island in late July during a field trip with members of Oneonta's Center for Continued Adult Learning. Shortly thereafter more was encountered in the Lake adjacent to Goodyear Swamp Sanctuary. It looks like a typical stonewort such as *Chara* but it supports white star shaped starch bodies on the large (up to 10cm) cells that make up the "stems". It's the 24<sup>th</sup> documented introduction into Otsego Lake since 1900.



**European Frogbit**

Donna Vogler recently found European Frogbit (*Hydrocharis morsus-ranae*) in Weaver Lake. An aggressive plant, it is recognized by leaves that look like a dwarfed white water lily (*Nymphaea odorata*) and grows just below the water

*An ice cutting saw supporting zebra mussels on all portions exposed above the sediment it was partially buried in.*



## Updates, cont. from p. 2

surface in shaded quiet waters. Control of this plant will be similar to efforts to control water chestnut, i.e., hand pulling into canoes.

Renovations at the **Thayer Farm Hop House** are nearing completion. It will house three laboratories, conference and office spaces. When finished the building will provide year around access to research sites where we are evaluating the effects of local agriculture on land cover and its impacts on

the character of Otsego Lake. We hope to show that local farming practices represent the best alternative land use to minimize negative cultural impacts on aquatic resources in Susquehanna headwaters in New York, Pennsylvania and West Virginia. 🐼

## Summer Interns, cont. from p. 1

**Bradley Bowers** from SUNY Cobleskill was awarded a Robert C. MacWatters Internship in the Fisheries Sciences. He

evaluated littoral fish in Otsego Lake and tracked walleye tagged with sonic transmitters to study optimal foraging behaviors.

**Henry Bauer**, a high school student from Cooperstown, was supported by the OCCA and the Village of Cooperstown.

He monitored Upper Susquehanna River water quality and Otsego Lake chlorophyll<sub>a</sub> concentrations as a proxy for algal population densities.

A group of students from SUNY Oneonta worked with **Florian Reyda** this summer: **Crystal Wiles** was funded with BFS monies to complete a survey of the protozoan parasites of dragonflies (Anisoptera) and damselflies (Zygoptera) of the area. **Michael Bergman** was funded as a research assistant with a National Science Foundation grant supplement to study new species of tapeworms in stingrays. He is also conducting a study of selected species of intestinal parasites of fish in Otsego Lake. **Stefan Armstrong**, **Kathryn Cavanaugh** and **Danielle Willsey** assisted with the abovementioned survey of the parasite fauna of local fishes. 🐼

## Otsego Lake Zebra Mussel Update

- In an attempt to provide timely information to lake-side residents and lake users that wish to protect their personal property from negative impacts of zebra mussels our anecdotal observations of zebra mussel settling patterns and densities continue: Most hard substrates including plants, as well as aluminum, fiberglass and wooden structures are now covered with at least this year's juvenile mussels. Most boat hulls in the lake for the last month or so support large populations of sand grain sized young mussels. Natural hard substrates, except in the shallowest waters, are colonized by several year classes of zebra mussels. Links to information and measures you can take to protect people and infrastructure can be found on the BFS web page.
- The only BFS boat that remains in the water year around now is the RV Anodontoides, the pontoon barge. It appeared free of mussels last fall but now two obvious year classes of mussels are present. Our dive team will be asked to scrape the vessel next spring. Notable during the 2010 annual Otsego Lake Cleanup Day was the preponderance of mussels on all items retrieved from the lake bottom.
- We are concurrently seeing vigorous growth of rooted aquatic plants and attached algae on the lake bottom. These kinds of luxuriant plant growth are expected because as zebra mussels filter algae from the water, making it clearer (see histogram) enhancing plant photosynthesis, they also move nutrients to the bottom where plants can access them more easily. However, this summer's high temperatures also may partly responsible for stimulating excessive plant growth.

# Updates



*OCCA dinner honoring Bill Harman. Clockwise from left: Katie Devlin, Sam Harman, Barb Harman, Bill Harman, Cynthia DeFelice, Buzz De Felice, and Dan Rosen.*

☛ **Rick Lally** reports catching a walleye 27 inches long weighing 7.3 pounds in Otsego Lake. A nice fish!

☛ The **OCCA** hosted a dinner honoring **Bill Harman's** 40+ year's efforts on Otsego Lake while taking the opportunity to develop an endowment for Field Station internships. OCCA committee members: **Matt Albright, Joe Homburger, Darla Youngs, Martha Clarvoe, Nancy New, Will Settle, Currie Marr and Len Sohacki.** Honorary members were **Lou Hager, Jr., Michael Moffitt, Nancy Kleniewski, Dan Larkin** and, **Bill Pietrafesa.** One hundred people attended, with many others contributing to the endowment. As of this writing about \$40,000 was received for the cause. This year the hope is for \$100,000 with \$400,000 the final goal. We enjoyed seeing the images of BFS activities from times past. You can see some of them by logging on to

our web page and opening the link to them.

☛ Four proposals for the use of BFS resources were approved for summer research and student involvement by **Tom Horvath, Nigel Mann, Florian Reyda** and **Donna Vogler.** Tom used BFS boats for Zebra Mussel population research, Nigel worked with students on the Upper Site and Rum Hill assessing songbird distribution and abundance, Florian directed students in surveys of fish parasites and Donna was involved with wetland delineation, increasing the list of plant species occurring in Otsego County and keeping an eye on exotic introductions.

☛ **Bill Harman** was certified by the North American Lake Management Society (NALMS) as a Lake Manager (CLM) this spring. He had been urged to apply for certification by NALMS CLM's who served as external reviewers

for a Master of Science in Lake Management program, the first in the country, proposed by the SUNY Oneonta Biology Department. That proposal has been approved at Systems Administration by the SUNY Interim Provost and Senior Vice Chancellor for Academic Affairs. It now goes to the State Education Department for final disposition.

☛ **Dr. Michael Greco,** SUNY Oneonta '72' has been sending us insects and spiders for identification. Just after he sent the last specimens he killed another spider in his office; a female Black Widow! He taught biology in high school from 1973-76, attended Fordham University from 1975-77 and SUNY Purchase in 1977. In 1978 he enrolled in dental school and received his DDS from LSU Health Sciences Center in 1982. Mike spent from 1982-85 in the US Air Force Dental Corps.

The work of the Biological Field Station is strengthened and enhanced by private financial support from individuals, foundations, businesses, corporations and civic organizations. In fact, these contributions are necessary for the continued success of the Biological Field Station and all of the services provided to the community. For more information, call or write:

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As an academic program within the State University College at Oneonta, the Biological Field Station receives fund raising services through the College at Oneonta Foundation, a nonprofit charitable organization. All gifts and grants for the BFS are tax deductible. They are managed by the Foundation and used expressly for the purposes for which they were given. Estate planning gifts such as bequests and trusts are also sought and appreciated. More information is available by contacting:

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