

INTRODUCTION

Willard N. Harman

Paul Lord has completed his graduate work with Eurasian water milfoil herbivore predators related to biocontrol efforts in Madison County lakes. Mike Stensland is completing working on the macrobenthic invertebrates of the upper reaches of Butternut Creek. Mark Cornwell has been continuing the monitoring the impacts of recently stocked walleye on Otsego Lake alewife populations and lake water quality. Wesley Tibbits has been conducting research on lake trout behavior and genetics. Mike Gray, advised by Tom Horvath, has been working on lotic transport of zebra mussel veligers in Madison and Otsego Counties. Connie Tedesco, with botanical interests, has been working with Donna Vogler. Karen Teitlebaum and Todd Paternoster have recently been accepted into the graduate program.

Matt Polus from Cooperstown High School was supported by the Village of Cooperstown to conduct research on the upper Susquehanna River. Rob Schmitt from Cherry Valley-Springfield High was supported via a FHV Mecklenburg Conservation fellowship.

College undergraduate intern Jordan Titus from Cornell University was supported by the NYS Power Authority for work on the right-of way at Greenwoods Conservancy. Heather Burgess from SUNY Oneonta was supported by the Peterson Family Trust for work at Greenwoods Conservancy. Jamie High from SUNY Cobleskill held an R.C. MacWatters Internship in the Aquatic Sciences. Holly Meehan from SUNY College of Environmental Science and Forestry and Rebecca Hamway from Dickenson College held Rufus J. Thayer Otsego Lake Research Assistantships. Claire MacNamara, Hobart and William Smith Colleges, held the Cooperstown Lake and Valley Garden Internship and Lee Hingula, Vassar College, was supported by the SUNY Research Foundation Graduate Research Initiative. Ryan Burns, SUNY Oneonta, held the Madison County Internship. Andrea Armstrong, Jess Harman and James Wells were employed with monies from the Madison County Planning Department dedicated to Paul Lord's research. Dave Warner, from the USGS Great Lakes Research Center, was the visiting researcher and continued his studies on alewife population dynamics in Otsego Lake.

Rob Barron (SUNY Cobleskill) and Melissa Bennett volunteered considerable time in their fields of expertise, fisheries management and entomology, respectively.

Students were enrolled in several SUNY Oneonta and SUNY Cobleskill on-campus courses and attended field exercises on site. Biol.644, Advanced Entomology, was taught by Dr. Bill Harman. Dr. Tom Horvath taught Stream Ecology to graduate students Mike Gray and Connie Tedesco, who were involved in individual enrollments. More than 1,200 K-12 students visited the BFS and received hands-on experiences on Otsego Lake and BFS woodlands over the year.

For the fourth year no water chestnuts (*Trapa natans*) were found in Otsego Lake despite a day of intensive searching by BFS interns, graduate students and a cadre of volunteers. Early

recognition of the problem and removal of plants in 1999 apparently contributed to its eradication. We will continue to keep an eye on the situation. Thanks to Otsego 2000 and the OCCA for their far-sighted support.

For the fourth year, we stocked Otsego Lake with walleye fingerlings varying in size from two to more than 6 inches in length. Monitoring was continued, staffed by BFS graduate student Mark Cornwell, with advice and help from Dave Warner (USGS) and Tom Brooking from Cornell's BFS. Walleye from the first year of stocking have now exceed 20 inches in length. The DEC will begin co-sponsoring stocking efforts in 2004. The OCCA continued sponsorship of the precipitation based water quality monitoring in the Shadow Brook drainage basin. Biocontrol efforts to reduce purple loosestrife in Goodyear Swamp Sanctuary appear to have been successful. We continue to monitor to document the return of native plants and observe the behavior of *Gallerucella*, the control organism.

Restoration of eight area wetlands by the Army Corps of Engineers was completed in December 2003. Restoration efforts were focused on creating the biological, physical and chemical conditions necessary for the retention of nutrients in runoff from upland agricultural sites. Additionally, the project also hopes to improve wetland habitat and increase biodiversity in plant, amphibian, and avian species. Throughout 2003 the BFS collected and analyzed nutrient concentrations in water samples from two wetland restoration sites and 1 reference wetland. Next year each site will be equipped with flow meters, auto samplers, atmospheric deposition collectors, and rain gauges to facilitate the calculation of nutrient budgets that will reveal if the restored wetlands are performing as desired. Monitoring of this type, as well as measuring biodiversity indices, will be continued until 2009 to evaluate the development of nutrient pools and biological communities over time. In addition to the documentation of these ecological benefits, will be the demonstration that this unique collaborative effort between Federal, State, and local agencies is practical for large-scale environmental initiatives.

Cleanup, building stabilization and renovation at the Thayer Farm continues. Dale Webster has been employed part-time to renovate, repair and bring buildings up to safe and usable conditions. We expect to be able to use the boathouse for pre-college programs and research support this coming summer. Major renovation to the clubhouse is slated for 2004, thanks to a legislative grant from Senator James Seward. The dam and spillway on the upper pond has been repaired. Several tons of clean fill that had been dumped in that location in the past were moved to a fill along NYS Rt. 80 to create a school bus pull-off for student access to the boathouse. The entire area has been regraded and seeded. About five acres of abandon fields on fairly seep slopes have been mowed to create meadows for future educational endeavors. Another ½ acre near the Getman barn has been cleaned up and regarded for mowing.

Jeane Bennett-O'Dea continues to work part-time in the office assisting with administrative tasks. Several talented citizen volunteers again helped at the BFS during the year. They included Kathy Ernst, Earle Peterson, Dan Rosen, Marilyn Digasper, and Doug Willies and the following SCUBA divers: Dale Webster, Jeff Back, Jeff Opar, Lee Ferrara, Andrew Lachut, Jennifer Szarek, Heather Taggart and Brian Sydow.

Public support makes our work possible. Funding for BFS research and educational programs was procured in 2003 from many citizens and local organizations. Special thanks go to the Clark Foundation who generously supports our annual needs. Thanks also to the Gronewaldt Foundation and Doug Willies for providing the resources for the Otsego Lake walleye stocking program, The Peterson Family Conservation Trust, the OCCA, Otsego 2000, the Village of Cooperstown, SUNY Oneonta, the SUNY Graduate Research Initiative, the Madison County Planning Department and the New York State Power Authority.

Willard N. Harman
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