INTRODUCTION

Willard N. Harman

Mark Cornwell has been continuing the monitoring of recently stocked walleye on Otsego Lake alewife populations and the resulting zooplankton communities. Paul Lord has continued his work with Eurasian water milfoil herbivore predators related to biocontrol efforts in Madison County lakes. Mike Stensland is working on the macrobenthic invertebrates of the upper reaches of Butternut Creek. Wesley Tibbits has been conducting research on lake trout behavior and genetics. Both Mike Gray, with interests in zebra mussel biology in lotic environments, and Connie Tedesco, with botanical interests, have been accepted into the graduate program. Mike will be advised by Tom Horvath while Connie is working with Donna Volger.

Selinda Schlierman from Worcester High School was supported by the Village of Cooperstown to conduct research on the upper Susquehanna River. Jessica Harman from Cooperstown Central and Katie Wayman from Worcester were supported via F.H.V. Mecklenburg Conservation fellowships.

College undergraduate intern Bekka Brodie Connie Tedesco and from SUNY Oneonta shared responsibilities for the NYS Power Authority and Greenwoods Conservancy internships. Brian McDonnell from SUNY Cobleskill held an R.C. MacWatters Internship in the Aquatic Sciences. Holly Meehan from SUNY College of Environmental Science and Forestry, Rebecca Hamway from Dickenson College, Jessica Martin from William Smith College and Sarah Merzig from Taylor University held Rufus J. Thayer Otsego Lake Research Assistantships. Most interns, lead by Jessica Harman, shared the responsibilities related to the Madison County Lakes research. Pilar Conde, SUNY Oneonta, worked in a diversity of areas supporting the pre-college “Learning Adventures” program with funding from AmeriCorps. Dave Warner, from the Cornell BFS, was the visiting researcher and continued his studies on alewife population dynamics in Otsego Lake.

Students were enrolled in several SUNY Oneonta and SUNY Cobleskill on-campus courses and attended field exercises on site. Biol.683, Wetland Ecology and Delineation (Biol 683) was taught by Dr. Donna Vogler. 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 third 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 third 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 and Tom Brooking from Cornell's BFS. Walleye from the first year of stocking have now attained up to 19 inches in length. The OCCA continued sponsorship of the precipitation based water quality monitoring in the Shadow Brook drainage basin. The NYS Dept. of Transportation continued to support research on highway deicers in the Village. Biocontrol efforts to reduce the purple loosestrife in Goodyear Swamp Sanctuary appear to have been completely 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 Corp of Engineers is scheduled to begin in 2003. Defined as wetlands that have been degraded through agricultural use in the past 100 years, construction efforts are being focused on restoring the wetlands natural ability to take up and store nutrients as they run off from developed upland sites. The projects also hope to restore habitat for area wildlife and aid in flood attenuation. The specific role of the BFS in this project will be to quantify nutrient budgets for two degraded (and subsequently restored) wetlands as well as a pristine reference wetland. Data collected from the restoration sites over the two-year monitoring period will be compared to that from the reference site. The objective of this monitoring effort is to demonstrate that the restoration techniques employed by the ACE foster the biological, physical, and chemical conditions necessary for effective nutrient retention. 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 implementation of large-scale environmental initiatives.

Cleanup, building stabilization and renovation at the Thayer Farm continues. Electricity is now available at the clubhouse. The parking area and the lawns there are in reasonable shape. All of the trash along the road from the north gate to the pond on the shale road has been removed. About an acre of land that lies between the above mentioned pond, the pond just upstream and the springhouse, has been cleared and the trash removed. 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. The lawns, fruit trees and grape trellis between the boathouse and NYS Rt. 80 have been refurbished and are now being maintained. A floating dock has been installed. Dale Webster has been employed part-time to renovate, repair and bring buildings up to usable and safe conditions. We expect to be able to use the boathouse for pre-college programs and research support this coming summer.

Jeane Bennett-O’Dea has been working part-time in the office assisting with administrative tasks. Her botanical expertise has been a valuable bonus. 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.

We conducted the annual Otsego Lake Boat census on August 9th. The BFS provided personnel and boats for Otsego Lake Cleanup and Water Chestnut Days.

Recent Otsego Lake Boat Censuses

<table>
<thead>
<tr>
<th>Types of Boats</th>
<th>7/14/95</th>
<th>7/23/96</th>
<th>7/18/97</th>
<th>7/7/98</th>
<th>7/29/99</th>
<th>8/24/00</th>
<th>8/10/01</th>
<th>8/9/02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sailboats</td>
<td>208</td>
<td>207</td>
<td>183</td>
<td>236</td>
<td>238</td>
<td>187</td>
<td>190</td>
<td>171</td>
</tr>
<tr>
<td>Rowboats &amp; Canoes</td>
<td>313</td>
<td>325</td>
<td>312</td>
<td>372</td>
<td>309</td>
<td>349</td>
<td>389</td>
<td>384</td>
</tr>
<tr>
<td>Outboards</td>
<td>430</td>
<td>378</td>
<td>371</td>
<td>377</td>
<td>412</td>
<td>381</td>
<td>375</td>
<td>319</td>
</tr>
<tr>
<td>Inboards</td>
<td>13</td>
<td>36</td>
<td>13</td>
<td>20</td>
<td>15</td>
<td>23</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Inboard-Outboards</td>
<td>267</td>
<td>260</td>
<td>275</td>
<td>261</td>
<td>265</td>
<td>287</td>
<td>285</td>
<td>216</td>
</tr>
<tr>
<td>Per. W. C.</td>
<td></td>
<td></td>
<td></td>
<td>32</td>
<td>28</td>
<td>29</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Misc.</td>
<td>84</td>
<td>66</td>
<td>40</td>
<td>57</td>
<td>49</td>
<td>53</td>
<td>66</td>
<td>43</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,315</td>
<td>1,272</td>
<td>1,235</td>
<td>1,351</td>
<td>1,317</td>
<td>1,299</td>
<td>1,359</td>
<td>1,187</td>
</tr>
</tbody>
</table>

Public support makes our work possible. Funding for BFS research and educational programs was procured in 2002 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
Prof. and Director, BFS
The information contained herein may not be reproduced without permission of the author(s) or the SUNY Oneonta Biological Field Station
OCCASIONAL PAPERS PUBLISHED BY THE BIOLOGICAL FIELD STATION

No. 1. The diet and feeding habits of the terrestrial stage of the common newt, Notophthalmus viridescens (Raf.). M.C. MacNamara, April 1976.

No. 2. The relationship of age, growth and food habits to the relative success of the whitefish (Coregonus clupeaformis) and the cisco (C. artedi) in Otsego Lake, New York. A.J. Newell, April 1976.


Annual Reports published by the biological field station from 1968-2001, and Technical Reports # 1-12 are Available from Willard N. Harman, BFS, 5838 St. Hwy. 80, Cooperstown, NY 13326.