Hi from LCRI.
Welcome to our newsletter. If you are a former student, a faculty affiliate, or a current student I hope this finds you in good spirits and ready for a great summer in 2012. LCRI is as busy as ever this summer. Just about the time the students graduate and faculty and students leave town LCRI kicks into high gear as many of you already know.

We have been doing some very interesting projects in recent years. In total LCRI had over 15 people working full-time in summer 2011 on a variety of projects. Two main projects take up most of our time, Lake Champlain Monitoring and the Black Bass telemetry study on Lake Champlain. Yes, if you have not been around LCRI in a while we are now doing fish telemetry, a study of smallmouth and largemouth bass dispersal patterns following professional Bass tournaments on the Plattsburgh waterfront. We tag fish, do surgeries and then track fish all over the lake. George Maynard (M.S. candidate) is working on a thesis project along with a host of undergraduates (Alex Sotola, B.S. Ecology 12', AJ Reyes, B.S. Ecology 12', Caleb Smith, B.S. Ecology 12'). Mark Malchoff and Tim Mihuc are the project PIs. Summer 2011 was our second year working for NY-DEC sampling for the Lake Champlain Monitoring program. We are continuing that work in 2012. Luke Myers runs this program and supervises student employees. The crew samples 15 lake sites every two weeks throughout the field season. This keeps us busy and it’s great to provide many students with real on the job experience.

LCRI is doing well, helping students and always looking for new exciting projects. Keep in touch and if you’re a former LCRI research student and want to catch up with us and tell us about your current exploits please send an e-mail to: timothy.mihuc@plattsburgh.edu

Finally, the years of zooplankton work are paying off. Many of you know since you at one time were probably doing plankton samples in the lab (at least 25 of you that is). That work has resulted in publication of a paper titled “Long-term patterns in Lake Champlain’s Zooplankton: 1992-2010.” Its authored by Tim Mihuc., Fred Dunlap, Casey Binggeli (B.S. Ecology 09', M.S. Natural Science 11'), Luke Myers, Carrianne Pershyn (B.S. Ecology 08'), Amanda Groves (B.S. Biology 10'), and Allison Waring (B.S. Environmental Science 10') and is published in the Journal of Great Lakes Research. 38: 49-57.

The paper illustrates two major shifts in Lake Champlain’s zooplankton community, one in the mid–1990s associated with the zebra mussel invasion and one in the mid-2000s after the alewife invasion. Clearly we are of the mindset that species invasions are a major factor in Lake Champlain. This is the first long-term zooplankton study since the 1970s research by Dr. G. Gruendling.
Dr. Schultz is an Assistant Professor of Environmental Science in the Center for Earth and Environmental Science at SUNY Plattsburgh. She received her Bachelors of Science degree from Northland College where she began her research career as a technician on various ecological studies. These studies included investigating the effects of water level regulation on wetland and aquatic vegetation in Voyageurs National Park, MN and Lake Ontario. Her mentor, Dr. James Meeker, involved Rachel in the conceptualization and design of research projects, which she enjoyed so much she decided to continue on to graduate school to pursue higher degrees in ecology.

In 2004, Rachel enrolled in the Masters program in Ecology at the Technical University of Munich in Germany. In this program, she was able to focus her studies on vegetation ecology and limnology while conducting a field study on carbon dioxide emissions from restored and degraded peatlands. She and her colleagues found that restoring the hydrology of fen ecosystems converted the peatland area from being a “source” to a “sink” for carbon dioxide, a major greenhouse gas. Intrigued by research in wetland biogeochemistry, Rachel jumped directly into a PhD program at The Ohio State University to work with Dr. Virginie Bouchard after completing her Masters. In Ohio, she investigated linkages between plant biodiversity and nutrient cycling using both field and mesocosm studies, which were funded by the National Science Foundation. Following graduation, Rachel conducted post-doctoral research on the effects of invasive aquatic plants on aquatic communities at Mississippi State University. She currently teaches Wetland Ecology and Management, Ecology, Environmental Science Seminar, and will be teaching Statistical Analysis in R during fall semester 2012. Current projects involving undergraduates include surveys of vernal pools on the Plattsburgh campus and GIS and field sampling of vegetative communities of Wickham Marsh. This summer and fall, Rachel will be establishing experimental wetlands (mesocosms) at the W.H. Miner Agricultural Research Institute in Chazy, NY. She is very interested in involving reliable, inquisitive undergraduates in her research. For more information about Dr. Schultz: http://schultzre.weebly.com/.

The LCRI labs are part of the Hudson Renovation and we hope to be in new space for the whole institute by early 2013. This year we are like all of the Sciences, in limbo in temporary space waiting to move in. We do have a lab in the new Hudson Annex (pictured right), which is currently supported courses and research. Most of the rest of LCRI can’t wait until the new labs open and we can move in to Hudson Hall again.

Did you know? LCRI purchased a new boat this year, the 24 ft Linnaeus (shown on page 1). Its main use is for fish research.

Dr. Schultz and Caleb Smith at Wickam Marsh

Faculty Focus—Dr. Rachel Schultz

Students in the Instrumentation and water quality analysis class in the new LCRI labs

LCRI students Alex Sotola (left) and George Maynard (right) presenting at the Northeast Natural History Conference. Bob Daniels (NYS Museum) is in the Center.