The LCRI Monitor

LCRI News and Notes

Tim Mihuc, LCRI Coordinator

Good day, I trust this finds you in good spirits. For those of you who have left campus recently and moved on, let me say Hello, we miss you! This newsletter is intended to provide an update and link to our past and present students and local citizens affiliated with LCRI. For this issue we will introduce LCRI in general. Look for future issues to highlight exciting research in a variety of areas.

So, what is the Lake Champlain Research Institute? Let’s start by introducing the staff. Dr. Tim Mihuc is LCRI coordinator, responsible for administration of the Institute’s operations and budget. Tim also teaches Ecology courses in the Center for Earth and Environmental Sciences. Jeff Jones is the LCRI lab manager and boat captain (argh!! matey!), responsible for managing lab operations and LCRI field and boat operations. Mark Malchoff is the Lake Champlain Sea Grant specialist (see section below for Sea Grant description). Finally, Janet Manolet is the LCRI office manager, keeping us all in line.

Sea Grant Update

Mark Malchoff, Lake Champlain Sea Grant

LC Sea Grant is a cooperative program of the University of Vermont and SUNY Plattsburgh and part of a national network coordinated by the National Oceanic and Atmospheric Administration. The project’s executive director is located at UVM, and I’m based at LCRI with the title of Aquatic Resource Extension Specialist. My duties are primarily the extension of research-based information (i.e. workshops, presentations, fact sheets, etc.) related to aquatic invasive species and fisheries issues. Early in 2006, Sea Grant co-organized a Lake Champlain Algae Impact Workshop. Approximately 60 people attended the event, which communicated risks and problems posed by invasion of non-native alewife. Publications in the past 20 months include: Feasibility of Champlain Canal Aquatic Nuisance Species Barrier Options.

NSF Watershed Integrity project participants

What do we do? Our primary mission as an institute is to support student research. We support research in any discipline. While LCRI supports some graduate students, most work is conducted primarily by undergraduate students. LCRI has over 50 research affiliates with ~ 30 from on-campus departments and the rest from regional institutions. LCRI helps faculty seek external grant support, provides research facilities and access to vehicles (including boats), operates a 5000 sq. office/lab complex and provides direct support to >20 student researchers per year. LCRI usually employs 5-10 full-time summer students on various research projects. Recently the Institute has served to host several major research projects funded by NOAA and the National Science Foundation (NSF watershed project group is shown in the photo).

Copies are available from our office or online starting at www.uvm.edu/~seagrant/. Sea Grant also contributed heavily to the Adirondack Park Aquatic Nuisance Species Management Plan. This plan serves as a guide for the Adirondack Park Aquatic Nuisance Species Committee’s efforts to help prevent, control and eradicate non-native nuisance species in the Park.
LCRI student focus—Lake Champlain Plankton

This student focus will serve as an update about the Lake Champlain Plankton research project. Future issues will cover other research areas (watershed dynamics, etc.).

It’s been almost 8 years since we started identifying zooplankton in Lake Champlain for NYDEC. Over 20 undergraduate students and two graduate students have worked on the project. You know who you are...! In 2002 LCRI also began another large project on blue-green algae, the MERHAB (stands for Monitoring and Environmental Recovery of Hazardous Algal Blooms). LCRI plankton student interns have participated in all aspects of both zooplankton work and MERHAB. Numerous student research projects and two Master’s research projects have resulted from this work.

The busiest year to date was 2006, when we mapped algal blooms using a geospatially linked flow-through fluorometer to create lakewide bloom maps for total algae and for blue-green algae. Sean Thomas, Meghan Groene, Carriann Pershyn, and Alex Mihailek all contributed endlessly to 2006 field and lab work. Sean, Tim Mihuc and Meghan are shown (left) sampling in Missisquoi Bay.

Thanks to Eileen Allen the GIS research lab we have produced some very nice maps of algal bloom conditions on the lake (see side panel). The Monitor mapping tracks for 2006 are shown below. Needless to say LCRI is very busy these days with on-lake research. Many thanks to Jeff Jones for getting us on the water safely.

Jeff’s corner—the lab and the boat
Jeff Jones, LCRI Boat Captain/Lab Manager

It looks like the lake ice is actually going to melt and it’s time to prepare for the 2007 field season. Both our 32’ RV Monitor and 17’ Bayliner have seen some wear and tear but should be ready to go by early May. April will be busy with work on the Monitor and installing a 90HP 4 stroke motor for the Bayliner. If all goes well we will be doing some early season trawl work for larval fish and then plenty of sampling through the season for plankton and especially blue green algal blooms.

LCRI boats have been busy the past few years with over $40,000 in paid boat time on research grants. 2006 was a very busy year with over 20 days of on-lake field cruises. Most of that was spent mapping algal blooms.

News from the Office
Janet Manor, Office Manager

Have you lost track of your fellow classmates? Well here’s some good news. Tim has allotted me this piece of the newsletter to keep you up on what everyone is doing. With that being said, I can only be successful if you participate. Please send me a quick note or give a call and catch me up on what’s happening so it can be printed in the next newsletter—oh what memories this will trigger.

The updates I have are: Sean Thomas, W06 and his wife, Lexi, moved to Syracuse, NY and he is working for BSE while working on his masters degree.

Chris Stall (aka “Shine”), S06 is in grad school at NC State.

We really haven’t heard much from Chris after the Patriots lost though—ohhmm. Carla Canjar, S03 is employed at Castella Waste Management in Clinton County, NY. Occasionally she visits the LCRI Office.

To help expand my updates in our next newsletter, please contact me at the address below:
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