

Lake Champlain Research Consortium
2006 Spring Student Symposium
McCardell Bicentennial Hall, Middlebury College
Saturday, April 29 2006

8:30 to 9:00 Coffee and refreshments available in room 219; set up posters in room 219

Oral Presentations (begins with joint session with Vermont Geological Society in room 220)

9:00 *Sediment Bedforms: Causes and History in Lake Champlain* - Katie Hayo, Geology Department, Middlebury College; research advisors - Pat and Tom Manley

9:15 *Circulation and Hyperpycnal Plume Dynamics within Shelburne Bay, Vermont; for use by Champlain Water District* – Donovan Dums, Geology Department, Middlebury College; research advisor - Tom Manley

9:30 *Geochemical and Mineralogical Analysis of K-Bentonites in the Champlain Valley of Western Vermont: Possible Connections to 460 Ma Island Arc Magmatism* - Kristiaan Joseph, Geology Department, Middlebury College; research advisor -Peter Ryan.

9:45 *An Evaluation of Soil Chemistry for Acid Deposition on Bolton Mountain, Vermont* – Dan Berkman, Geology Department, Middlebury College; research advisor - Peter Ryan.

10:00 Break – refreshments in room 219; LCRC reconvenes in room 216

10:15 *The Effects of Fisheries Stocking of Rainbow trout (*Oncorhynchus mykiss*) on the Size-Class Structure of Zooplankton Populations* - Taylor Leach, Biology Department, Middlebury College Biology; research advisor - Sallie Sheldon

10:35 *A Preliminary Evaluation of the Effects of the Spruce Peak Development in Relation to Surface Water Flow* - Andrew Blount, Integrated Environmental Science program, Johnson State College; research advisor - Tania Bacchus

10:55 *Heterogeneity of Stream Hydraulic Parameters as an Indicator of Instream Habitat Quality* - Jessica S. Clark, Civil & Environmental Engineering, University of Vermont; research advisor - Donna M. Rizzo.

11:15 *Classification of Riparian Buffers Using LIDAR Data* - Maeve McBride, Civil & Environmental Engineering, University of Vermont; research advisor - Donna M. Rizzo.

11:35 *Assessment of Denitrifying Bacteria Diversity in the Compost Layer of a Constructed Wetland through Identification of the Nitrogen Reductase Gene* - Matthew Cunningham, Plant and Soil Science Department, University of Vermont; research advisors - Aleksandra Drizo and Rosanna Giordano

11:55 *From Dirt to Iron: The Socioeconomic Rise and Decline of St. Albans, Vermont, 1850-1927* - John Hart, Jr., History Department, Saint Michael's College; research advisor- Susan Ouellette

12:15 Brief summaries of posters

12:30 Lunch and poster session (posters listed on next page)

Posters – set up for viewing in room 219

Assessing Linkages Between Stream Geomorphic Condition and In-stream Habitat - Jennifer Gagnon, Civil & Environmental Engineering Department, University of Vermont; research advisors - W. Cully Hession and Donna Rizzo

An Examination of Arsenic Source in Stowe, Vermont Through Geochemical Analysis of Private Wells, and Ultramafic Rocks - Kevin Bright, Geology Department, Middlebury College; research advisor - Peter Ryan

Influence of Particle Size on the Ability of Limestone to Neutralize Acid Rain - Ian Smith, Biology and Environmental Science Department, Johnson State College; research advisor- Dr. Leslie Kanat

Diversity of Springtails (Insects) in High and Low Disturbance Sandy Beaches of Eastern Lake Champlain - Natasha Bencivenga, Biology Department, University of Vermont; research advisor - Felipe N. Soto-Adames