

Public educational outreach a key initiative for the ERIE Program at UB



(January 2010) The PhD students in the *Ecosystem Restoration through Interdisciplinary Exchange* (ERIE) Program at the University at Buffalo (UB) are engaged in activities designed to enrich their doctoral training with experience in **public science education** in western New York. A core trainee activity includes outreach to local K-12 science programs to emphasize regional environmental stewardship and implementation of ecosystem restoration projects. Two ERIE trainees have begun to share their academic training through the development of relation-

Ecosystem Restoration

A broad range of activities to assist the recovery of aquatic and terrestrial ecosystems that have been impaired, damaged or destroyed.

The ERIE Program:

An interdisciplinary doctoral program at UB that advances ecosystem restoration science and engineering. ERIE addresses critical knowledge gaps by training researchers in ecological restoration science, engineering, policy, ethics, and cultural considerations, through focus on issues facing the Great Lakes and western New York.

The ERIE collaborative partnership spans eight graduate programs at UB:

- American Studies
- Biology
- Chemistry
- Environmental Engineering
- Evolution, Ecology and Behavior
- Geography
- Geology
- Philosophy

ships with K-12 educational partners across the region. ERIE Trainee Bernadette Clabeaux, a 2nd year ERIE trainee and Ph.D. student in UB's Biology Department recently participated in a teaching opportunity called the *Green to Clean Project* involving 4th to 6th grade students at the Futures Academy in Buffalo, NY (Buffalo Public School #37). Invited to teach by the non-profit *Keep Western New York Beautiful*, Clabeaux taught a four-week class to young students about phytoremediation – the removal of contaminants from soils using plants—and its potential to mitigate common urban environmental problems such as lead contamination. Clabeaux designed age-appropriate educational materials, lectures, and laboratory and field activities to guide student learning about the effects of environmental lead contamination and on the potential role of phytoremediation in combating it. Another ERIE Trainee, Robert Earle, has initiated a curriculum development program with Canisius High School. Working with faculty from Canisius' Science department, Earle is helping to develop high-school level lectures and field components regarding environmental science, stewardship, and restoration centered on Canisius' West Seneca oxbow



wetlands field site, a regionally-rare and remnant ecotype in the Buffalo River watershed. Through community outreach and educational initiatives such as these, in conjunction with its cutting-edge research on ecological restoration theory and practice, the ERIE Program will help to advance the ecological awareness and environmental know-how of the western New York community.