

ERIE Program sponsors professional training workshops in ecosystem restoration at University at Buffalo



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

(January 2010) The *Ecosystem Restoration through Interdisciplinary Exchange* (ERIE) Program at the University at Buffalo (UB), partnered with UB's Great Lakes Program and the School of Engineering and Applied Sciences, annually offers its summer workshop, "Engineering for Ecosystem Restoration". Entering its sixth season in June of 2010, the workshop is designed to train specialists in "ecosystem engineering", working with natural processes to restore ecological function. The three one-week courses teach professionals in restoration of waterway resources through applied field-based learning and classroom lectures in theoretical concepts of ecosystem restoration. The distinctive, interdisciplinary workshop courses are team-taught by hydrologists, ecologists, geomorphologists and engineers—leading experts in ecosystem restoration, river and Great Lakes ecology, fluvial geomorphology and environmental modeling. In addition to UB, lecturers come from the U.S. Department of Agriculture, the U.S. Fish & Wildlife Service, Buffalo State College, Ecology & Environment and River Research Design. Attendees represent a range of government, environmental and industrial organizations, including the U.S. Army Corps of Engineers, the New York State Department of Environmental Conservation, Buffalo/Niagara Riverkeeper, and the Monroe County Water Authority. Field learning is extensive; in the past, the participants have visited



a number of creeks in Western New York and have sampled Lake Erie and studied the ecological networks found there. A new feature of the 2010 workshop is a module on Great Lakes ecology, chemistry, emerging contaminants, invasive species and modeling. This novel, interdisciplinary workshop provides the western New York community of practitioners an intensive experience that aids in the ecological recovery of Western New York waterways.