

In this fall Coastlines, we educate our readers about watersheds— what they are and the issues that affect the quality of our precious water resources

Says **EPA Administrator Carol Browner**, “Water quality restoration across the country over the past 25 years has had dramatic environmental, recreational and economic benefits. Despite this progress, serious water pollution problems persist.” Therefore, the EPA has scheduled a National Watershed Outreach Conference in San Diego next April to further address the matter.

In doing its part, **New York Sea Grant** supports a wide range of research and outreach education that, as featured inside, deals with such related concerns as aquatic contaminants, hypoxia and invasive species. In addition, several NYSG extension specialists integrate water resource education into their individual program efforts, including this issue’s feature writer, **Kimberly Zimmer**.



Photo courtesy of Nordica Holochuck

Suited up and ready to board

Nordica Holochuck, NYSG Hudson Valley Specialist (kneeling at left), instructed nine K-12 teachers during a City University of New York Hudson River Ecology summer course that she developed. The educational forum, a partnership between Rockland County Teachers Center and Rockland County Cornell Cooperative Extension, included field explorations aboard a research vessel.

Students Pledge Stewardship

Helen Domske, NYSG coastal education specialist, helped plan and host the NYSG-co-sponsored Third Biennial Great Lakes Student Summit held in Buffalo this past May. Isaac Hunter (pictured), a Detroit student in attendance who read the Summit’s “Statement of Stewardship,” is flanked by fellow students, East Aurora teacher John Newton (at back), and Harvey Shear of Environmental Canada (far right). See story on p. 13.

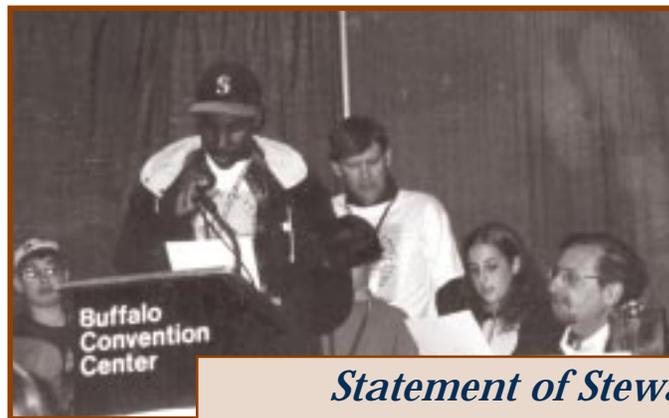


Photo by
Lauren
Makeyenko

Statement of Stewardship

I am proud to take stewardship of the water, land, and air in any way that I can. As I return to my home, I pledge to:

- 1. Study the ecology of my area*
- 2. Teach others about my area’s ecology*
- 3. Increase my own awareness of the effects that I have on the environment*
- 4. Promote wise use of products and packaging*
- 5. Devote time every year to group community service to benefit and beautify the environment*
- 6. Participate in the conservation of water, energy, and natural resources*
- 7. Get involved in local decision-making*
- 8. Invite scientists and others to help us*
- 9. Do what I know is right*



Students test water quality aboard the *Niagara Clipper* with help from Mike Goehle, assistant manager of the BSC Great Lakes Center Field Station (seated) and Buffalo teacher Karen Arnold (center).

Students Keep the Lakes Great

CURRICULUM

New York Sea Grant and the Great Lakes Program at the University at Buffalo were proud to help sponsor the third Biennial Great Lakes Student Summit (GLSS). The event brought over 260 students, volunteers and teachers together in Buffalo, New York, from May 12-14, 1999. Participants, representing 17 schools, 6 counties, 3 states and 2 countries, came together to learn about the Great Lakes and share their research and environmental awareness. The theme for 1999, "The Great Lakes: Your Concerns, Our Concerns, Areas of Concern," encouraged students to examine their local environmental concerns while learning about the International Joint Commission's Areas of Concern (AOC).

Helen Domske, NYSG coastal education specialist and associate director of the Great Lakes Program, has been part of the planning teams and has served as a co-host and workshop presenter for each of the Student Summits since their inception six years ago. According to Domske, "Every GLSS gets better and better. I am truly amazed by the knowledge, interest and environmental savvy of these students. They are the best and brightest, and they will go on to be formidable stewards of the Great Lakes."

During the event, students were involved in workshops, field experiences and sharing sessions, learning from agency representatives, other outside experts and each other about the Great Lakes and AOC. One evening was spent exploring Niagara Falls, from the thundering waters of the cataract to the deserted quiet of the former Love Canal site. A visit to the Aquarium of Niagara brought them eye-to-eye with Great Lakes fishes, including sturgeon, trout, salmon and catfish.

The final day found the participants getting to know the biology, geology or chemistry of the Great Lakes through trips to Tiff Nature Preserve, Penn Dixie Paleontological Outdoor Education Center, a water pumping station and local wastewater treatment plant. Then students boarded ship to cruise the Buffalo River, a local AOC, where they learned about the river from experts. The highlight of the cruise was a rendezvous with an electroshocking boat of the U.S. Fish and Wildlife Service. The fishery biologists provided living proof of the biological diversity of the river, a sign that the ecosystem is improving. Students were amazed by the sight of a huge carp, a large northern pike and several common goldfish which had been identified as exotic invaders during one of the student workshops.

The most memorable experience of the entire event was the creation and delivery of the Statement of Stewardship that was presented to a panel of representatives from local, state and U.S. and Canadian federal governments (see page 3). The students' commitment, determination and genuine concern for the Great Lakes expressed by that statement impressed the distinguished panel. When the event was over and students exchanged mementos and hugs, they left with a pledge to continue their stewardship efforts for the Great Lakes. Event organizers left with a feeling of hope for the future, knowing that these students are better prepared for their stewardship roles. Sponsors knew that they should begin at once to plan the Fourth Biennial to keep this environmental momentum going. Government and agency representatives left knowing that the next generation is preparing to take over where they leave off and will continue to work to keep the lakes GREAT!

—Helen Domske
Coastal Education Specialist