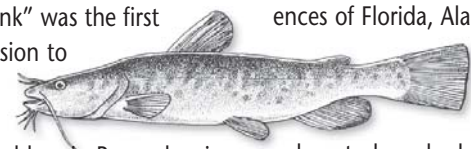


## Introduced Flathead Catfish: Prize or Plague?

Urban Coastal Environmental Agent Ann Faulds organized a meeting of the minds in early March that brought together 17 fisheries biologists and conservationists from academia and local, state, and federal agencies in four states to explore ways to slow the spread of flathead catfish in the Delaware Estuary. This "think tank" was the first comprehensive discussion to communicate and evaluate the scope of the flathead catfish problem in Pennsylvania.

Introduced flathead catfish represent a management dilemma because they are prized as a sport fish, but have the potential



to dramatically change the character of rivers and reservoirs outside their native range. Now found in the rivers and reservoirs of 18 states where they were previously unknown, this catfish multiplies quickly and greatly impacts native fish and crustacean communities. Pennsylvania hopes to learn from the experiences of Florida, Alabama, Georgia, North Carolina, Virginia, and South Carolina when developing biological controls and education programs.

For more information about flathead management efforts, contact Ann at 215-471-2216 or e-mail [afaulds@psu.edu](mailto:afaulds@psu.edu).

## Contribute to "Keystone Shorelines"

Pennsylvania Sea Grant welcomes contributions or story ideas for inclusion in *Keystone Shorelines*, which is published quarterly. Contact Steve Curcio at 814-898-6358 or via e-mail at [xsc2@psu.edu](mailto:xsc2@psu.edu) for more information. We'll be glad to include your contributions as space permits. The deadline for submission for the Summer 2002 newsletter is June 16.



**Sea Grant**  
Pennsylvania

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A QUARTERLY PUBLICATION OF PENNSYLVANIA SEA GRANT

Pennsylvania Sea Grant, part of the National Sea Grant Program, is a partnership of Penn State, the Commonwealth of Pennsylvania, and the National Oceanic and Atmospheric Administration dedicated to the sustainable development of coastal resources.

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S P R I N G 2 0 0 2

## Committee Recommends 'Recovery Stage' Designation for Presque Isle Bay

The Presque Isle Bay Public Advisory Committee (PAC) voted on April 22 to recommend that the bay has improved to the point it could be considered to be in a "recovery stage."

Presque Isle Bay was designated a Great Lakes Area of Concern (AOC) in January 1991 based on two impairments: presence of fish tumors or other deformities and restrictions on dredging activities.

The committee's vote indicates a real improvement in the bay and that all reasonable and practical steps available to rid the bay of pollutants have been taken, with final recovery in part dependent on the passage of time.

The PAC is composed of representatives from local, state, and federal agencies, environmental and civic organizations, academia, and industry. Pennsylvania Sea Grant staff members serve as active members of the PAC.

The committee's vote sends the issue to the state Department of Environmental Protection (DEP), which must review the restoration efforts and develop a specific monitoring plan before approving the move to recovery stage status and passing the plan on to the Environmental Protection Agency (EPA). EPA guidelines for this designation call for a pollution-prevention plan and a monitoring program to reduce the risk of future degradation and en-



sure that recovery continues. The monitoring program should help identify emerging issues and enable the committee to address them.

For more information, contact Kelly Burch of the DEP at 230 Chestnut Street, Meadville, PA 16335, telephone 814-332-6816, e-mail [kburch@state.pa.us](mailto:kburch@state.pa.us). Or, visit the following Web sites:

[www.epa.gov/glnpo/aoc/presque.html](http://www.epa.gov/glnpo/aoc/presque.html)  
[www.great-lakes.net/envt/pollution/aoc.html](http://www.great-lakes.net/envt/pollution/aoc.html)

## Do You See What The Students See?

*A Watershed Success Story*

Imagine that you are walking along a stream on a warm and a sunny day. Sunshine shimmers on the crystal-clear water, which flows with ease over colorful stones and beautiful dark green plants. Long-legged insects and noisy geese glide across the water, while fuzzy animals approach the stream for a refreshing afternoon drink. As you reflect on the peaceful scene, what thoughts are passing through your mind?

Imagine that you are walking along another stream on a cold and a dreary day. Clouded water, which never disappears, even once the rain has stopped falling, prevents anything beyond a few millimeters of the oily surface from being seen. Instead of aquatic plants and animals, enormous concrete blocks, greasy car parts, rusty metal, rotten garbage bags, broken home appliances, and almost all other forms of waste possible inhabit the stream. As you reflect on the depressing scene, what thoughts are passing through your mind?

Several Lake Erie-Allegheny Earth Force students from East High School, Harborcreek Youth Services, Northwest Pennsylvania Collegiate Academy, Strong Vincent High School, and Villa Maria Academy examined the watersheds in which their respective schools are located. Some of the students (to their satisfaction) observed that their watersheds closely resembled the scenic stream, and some of the students (to their disappointment) discovered that their watersheds closely resembled the polluted stream. Even though these students noticed countless differences between their respective watersheds, each and every student saw the opportunity to educate himself/herself and, at the same time, the people in the Erie community.

(continued on page 2)



## Web Honors!

Pennsylvania Sea Grant's Web site was recognized as the Great Lakes Information Network's Site of the Month in April! We work hard to keep the site informative, interesting, and useful.

Check us out online at [www.pserie.psu.edu/seagrant](http://www.pserie.psu.edu/seagrant)

## Do You See What the Students See? (continued from page 1)

At the request of these enthusiastic and concerned Earth Force students, a proposal was written for a Pennsylvania Department of Environmental Protection Growing Greener grant, which would finance the creation of a new student organization called the Junior Pennsylvania Lake Erie Watershed Association (JrPLEWA). Even though the grant proposal was not accepted, the students persisted, and, with much work and some revision to the original document, another grant proposal was sent to the DEP. This time, the grant proposal was accepted, and the JrPLEWA was officially formed in fall 2001.

Since the beginning of JrPLEWA, the students have been taking and analyzing water samples from their respective watersheds, learning about watersheds in general, attending PLEWA meetings and watershed workshops, conducting steering committee and school meetings for JrPLEWA, preparing



for a weekend forum in March, and, through all of the above activities, making new friendships.

When the Earth Force JrPLEWA students visited their respective watersheds, they saw the chance to challenge themselves and to advance their knowledge about the environment. When you visit a watershed, do you see what the students see? Will you allow the JrPLEWA students to influence how you view your watershed and teach you about your watershed? With some assistance and continuous encouragement, JrPLEWA will be able to make a lasting and positive difference in the Erie community and its watersheds.



Submitted by Alison Phillips  
Lake Erie-Allegheny Earth Force  
Youth Advisory Board member  
Villa Maria Academy

## Great Lakes Restoration Funds Awarded to Erie County Projects

The Pennsylvania Coastal Zone Advisory Committee has approved nine projects to receive Great Lake Restoration Fund monies. GLRF is a one-time funding allocation by the National Oceanic and Atmospheric Administration that has awarded slightly more than \$1.8 million to Pennsylvania for projects within the Lake Erie Coastal Zone. The nine projects are:

**Presque Isle Greenway:** The acquisition of up to 47 acres for a planned greenway project adjacent to Presque Isle State Park in Millcreek Township. A major component of the greenway will be a multi-purpose trail that will allow visitors to access a number of attractions within the vicinity of the planned Presque Isle visitors' center.

**Headwaters Park Expansion:** The acquisition of 32 acres immediately adjacent to Headwaters Park in Millcreek Township. This tract would be owned and operated by the Erie County Conservation District for wetland preservation, nonpoint source pollution control from Interstate 90, and educational workshop purposes. The ECCD would use the site to showcase various best-management practices and wetland issues, including preservation and education about wetland areas.

**Cascade Creek Wetlands Restoration/ Invasive Species Removal:** Creation of a detailed plan for the restoration of Cascade Creek wetlands in Millcreek Township. A 1998 assessment of the area concluded that invasive plants are interfering with the proper functioning of the wetlands.

**Invasive Plant Species Project 2002:** Funding for ongoing efforts to control invasive plant species threatening species native to Presque Isle State Park.

**Confined Disposal Facility Reclamation:** Reclamation of this facility at the entrance to Presque Isle Bay and adjacent to Lampe Marina would create a future recreational site and would prevent leaching and contamination of Presque Isle Bay and Lake Erie. The site has been used by the Corps of Engineers to accept contaminated sediments dredged from the inner harbor of Presque Isle Bay that cannot be placed in open lake disposal. The Erie-Western Pennsylvania Port Authority ultimately plans to develop the site into open space, a 54-lot campground, and a public picnic area.

**Mission Fish Raceway:** A concrete fish raceway on Godfrey Run in Girard Township will be used to raise fish to improve coastal fisheries. The site will also provide public access and educational opportunities through school field trips.

**Four Mile Creek Stream Erosion Control Enhancements:** Rehabilitation of the Four Mile Creek stream bank and channel in Lawrence Park Township through the removal of concrete debris, the reduction of nonpoint source sediment pollution, and the construction of a 150-foot extension to an existing retaining wall for bank stabilization.

**North East Township Community Park:** This 27-acre lakefront property at the mouth of Twenty Mile Creek offers more than 800 feet of beach frontage, and is one of the few available locations for public open space adjacent to Lake Erie that is not obstructed by high bluffs.

**Robert Reed Estate Property Acquisition:** This 8.2-acre site is located in Harborcreek Township just east of Twelve Mile Creek. It is also one of the few available locations for lakefront public open space not obstructed by high bluffs.

For more information on these projects, go to the Erie County Department of Planning Web site at [www.eriecountyplanning.org](http://www.eriecountyplanning.org), visit the department in Room 119, Erie County Courthouse, 140 W. Sixth St., or call 814-451-6336.

## School Notes



The Environmental Rediscoveries program is booking for the Fall 2002 sailing season. Dates are filling fast. Please call today to reserve a date for your class. Please view the Environmental Rediscoveries pages on the Sea Grant Web site for more information.

Professional development workshops for Act 48 credits! Two exciting workshops will be conducted this summer on the shores of Presque Isle Bay.

**Environmental Rediscoveries**  
July 30, 8:30 a.m. to 3:30 p.m.

A hands-on introduction to an environmental education program that increases awareness of issues related to the health of Presque Isle Bay. Participants will board the Friendship Sloop Momentum, a 42-foot traditionally rigged wooden sailboat, to investigate the interrelationship of biological parameters and their effect on the bay ecosystem.

**Exotics Are on the Move and Making a Great ESCAPE!**

July 31, August 1, or August 2, 8:30 to 3:30 p.m.

A one-day introduction to the world of exotic species. Participants will discover numerous exotics, including the zebra mussel, round goby, sea lamprey, spiny water flea, and Eurasian watermilfoil. You'll also board the Friendship Sloop Momentum for a bay sail in search of exotic species.

Act 48 workshops are presented in conjunction with the Northwest Tri-County Intermediate Unit. For information, please contact the Intermediate Unit at 814-734-5610.

## If Sea Grant Ran the Circus Great Lakes Carnival Might Be Model for Education Programs Elsewhere

In early April, Pennsylvania Sea Grant staff conducted a Great Lakes Carnival at Belle Valley Elementary School to teach the students about maritime history, biology, recreation, and invasive species.

The event was the first of its kind put on by Pennsylvania Sea Grant and could become a model used at schools throughout the state; it was also featured in the *Erie Times-News*.

Anne Danielski, Sea Grant education specialist, told the *Times-News* the carnival idea originated when a parent asked her to do a program at Belle Valley Elementary. Danielski said she wanted to do something hands-on with the students.

The result was a carnival with eight stations that the students rotated through. They learned to tie knots, make signal flags like those used by the Coast Guard, and "fish" with a magnetic pole. Children who could identify the species of their paper catch won prizes such as fish-shaped notebooks.

At another station, students served as the pieces in a giant board game about exotic species. The players were asked questions such as: Exotic species are: A. rare organisms, B. organisms brought into an environment not their own, or C. worth a lot of money.

Children who knew the answer was "B" got to roll a fuzzy red die and then move from space to space marked out on a blue tarp game board.

The Great Lakes Carnival was well received by students and teachers at Belle Valley, and plans are already in the works to take the carnival on the road. For more information, contact Anne at 814-898-6420 or e-mail [add118@psu.edu](mailto:add118@psu.edu).



## Coastal Zone Fellow Helping to Improve State's Aquatic Resources

First, there were vacations in the Outer Banks full of sand-filled swimsuits and sneak-attacks on unsuspecting ghost crabs. Next, came summer camp at Wallops Island Marine Science Center. Finally, a summer internship at the University of Delaware College of Marine Studies, and Kirstin Wakefield was hooked. So she decided to pursue a graduate degree in Marine Biology-Biochemistry with Dr. Nancy Targett at the College of Marine Studies in Lewes, Delaware.

While in graduate school, Kirstin studied chemical ecology, or how marine plants and animals use chemical cues for communication. Specifically, she focused on identifying an alternative bait for local commercial fisheries that were dependent upon horseshoe crabs. During the 1990s, increased harvest for use as bait contributed to a decline in the Mid-Atlantic horseshoe crab population. Through a combination of field and lab experiments, Kirstin identified the chemical cue that made horseshoe crab eggs such attractive bait for eel and conch.

While she enjoyed 2 a.m. horseshoe crab egg hunts and wading knee deep in marsh muck to recover wayward traps, emerging conservation policy for horseshoe crabs also piqued her interest. Seeing ocean and coastal resource management as a perfect opportunity to combine her science background with policy applications, Kirstin applied for and received a two-year NOAA Coastal Management Fellowship, and was placed with the Pennsylvania Coastal Zone Management Program in Harrisburg beginning last October.

The NOAA Fellowship is providing Kirstin with excellent on-the-job training and education in coastal resource management. Currently assisting with ocean resources program development in conjunction with Pennsylvania Sea Grant, she is focusing on policy and outreach to limit the introduction and spread of aquatic nuisance species in the Lake Erie and Delaware Estuary coastal zones.