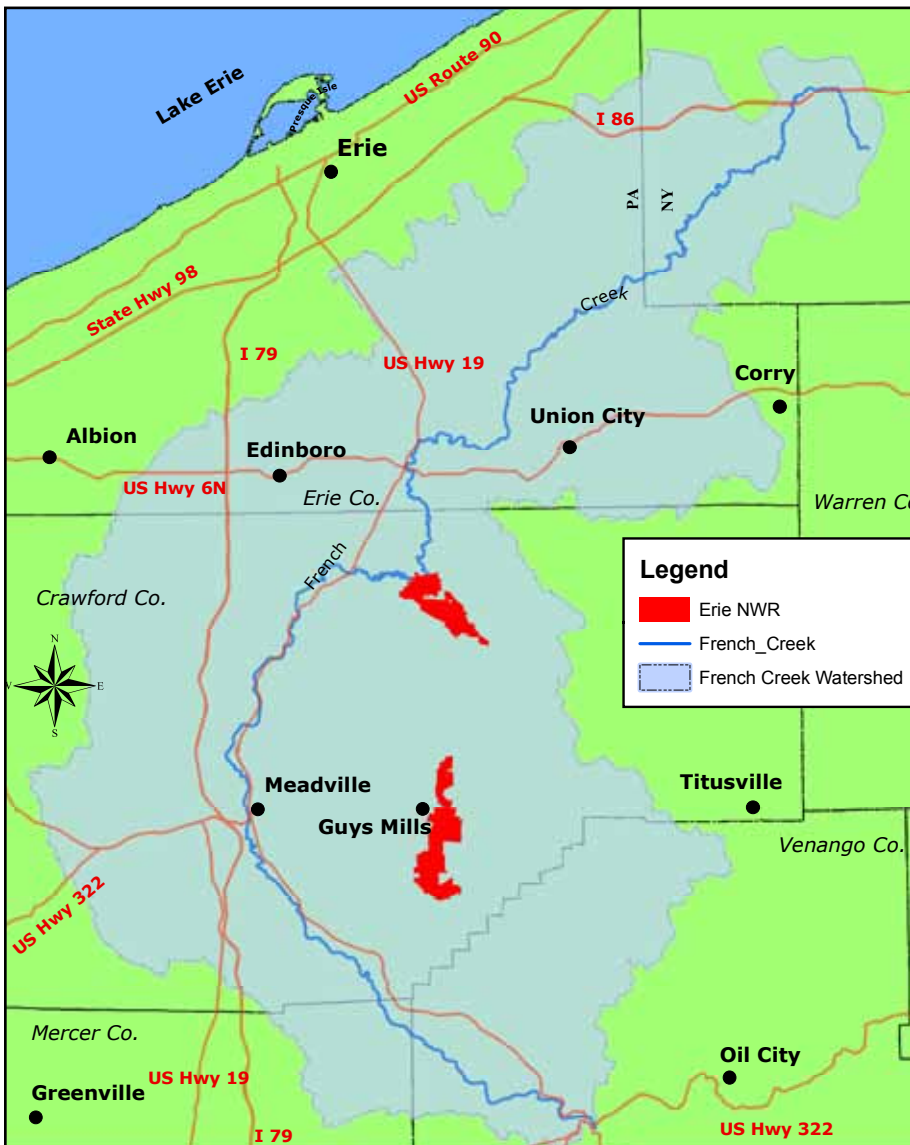




# INSIDEerie



## The French Creek Connection

When Crawford County Conservation District representatives visit schools and events, they often bring a topological model of the French Creek Watershed — the 1,235 acres of rolling hills and valleys that drain into French Creek. Students sprinkle cocoa powder on the model landscape, and then spray it with water, getting a birds-eye view of how pollution that may seem far from the creek can ultimately wash into it.

“It gets people thinking about what a watershed is, what watershed they live in and how the things they do can affect it,” says Lynn Sandieson, district manager of the conservation district. “If you change your oil in the driveway, what happens to that? What happens if you lose soil off your land? Where does it go?”

The model demonstrates one of the greatest threats to the health of French Creek — non-point source pollution. Non-point source pollution is water pollution that can't be tracked to a single source. Contaminants and sediment scattered throughout a watershed can eventually wash into the water, adding up to levels that damage water quality and fragile organisms that live in and around the water.

So far, the 117-mile French Creek remains healthy. More than 80 different species of fish inhabit it, including very rare species like the Pennsylvania-endangered eastern sand darter and spotted darter. Rare freshwater mussels also can still be found in French Creek and some of its tributaries such as Muddy Creek, which passes through Erie National Wildlife Refuge's Seneca Division.

*A simplified map of the location of Erie NWR in the French Creek Watershed; Many, many small streams flow into French Creek which are not able to be shown here.*

*(story continued on page 3)*

## Comprehensive Conservation Plan Update

As always, it's been a very busy field season this year. Perhaps you've seen some of our staff, youth employees and volunteers out and about on the refuge.

The summer **Youth Conservation Corps** crew consisted of 10 local teens and their two leaders. Over the eight-week program, they maintained trails, rehabilitated the fishing pier, improved the photo blind, built two information kiosks, replaced dozens of boundary signs, and installed new trailhead and highway information signs.

**RV camper volunteers** assisted with everything from hunting permits to maintenance tasks to creating new interpretive programs and digitizing old photographs and slides.

Our **maintenance staff and volunteers** spent much time on working to install beaver deterrents to culverts and water control structures, and removing debris from refuge lands.

**Biological staff** worked on controlling invasive plants and monitoring on-going management activities, and a habitat management plan.

The whole staff was involved in the Heritage Fest and in celebrating the refuge's 50th Anniversary.

Though specific progress on the CCP gets stalled a bit during the field season, as you can see, much is happening on the Refuge!



*Youth Conservation Corp enrollees Brock Mason and Sam Tome work to rehabilitate a refuge photo blind to enhance viewing and photography opportunities.*



*The clubshell is one of the endangered mussels found in French Creek.*

## What can I do to help maintain the health and diversity of French Creek?

- Regularly clean out my septic tank and make sure it is functioning properly.
- Dispose of waste motor oil and other chemicals properly.
- Leave an undisturbed, vegetated strip of land between farm fields and streams.
- Keep livestock out of streams.
- Keep stream banks wooded.
- Use best management practices when logging.
- Never release leftover live bait into streams.
- Don't drain or fill wetlands.
- Learn as much as I can about wetlands and watersheds.

**Erie National Wildlife Refuge**  
11296 Wood Duck Lane  
Guys Mills, PA 16327

Phone: 814/789 3585  
Email: [fw5rw\\_ernwr@fws.gov](mailto:fw5rw_ernwr@fws.gov)  
Website: [www.fws.gov/northeast/erie](http://www.fws.gov/northeast/erie)

## The French Creek Connection (cont.)

Its one of the most biologically diverse watersheds in the United States,” says Nick Pinizzotto, senior director of watershed conservation and conservation services for Western Pennsylvania Conservancy. “Not only is it unique to Pennsylvania, but to the whole Northeast.”

But the French Creek is fragile, he adds. “If we’re not careful how we manage it, that biodiversity may be lost.”

Keeping the creek healthy consists of a two-pronged effort by people and communities in the watershed. The first part is to prevent contaminants from entering the water. For individual residents, this can be as simple as minimizing pesticides and fertilizers in lawn care, and making sure that oil and other household hazardous wastes are properly disposed.

The Crawford County Conservation District offers a program for farmers to develop best management practices that reduce the runoff of waste, soil and nutrients from agricultural lands. Thanks to grants from the state and county, the district can cover 75 percent of the costs for improvements. (For

information, go to [Crawfordconservation.com](http://Crawfordconservation.com).)

The second prong of protecting French Creek’s water quality is to preserve natural buffers along the creek and its tributaries, and throughout the watershed. Wetlands are very important for their unparalleled ability to filter contaminants. Also creekside trees and brush are crucial for shading the waters, regulating water temperature and providing food and habitat for wildlife.

Erie’s 8,800 acres of protected lands, two-thirds of which are wetlands, contribute to the health of Muddy Creek and other waters downstream. The refuge has planted trees along Muddy Creek, does not spray for mosquitos, and requires leased croplands on the refuge to have vegetation buffers along waterways.

Of course, the natural lands and vegetative buffers necessary to keep French Creek healthy extend far beyond refuge borders. Many landowners are adopting practices to better protect French Creek and its tributaries, Sandieson notes.



*French Creek is considered to be one of the most biologically diverse streams in the United States.*

The nonprofit French Creek Valley Conservancy, in partnership with The Nature Conservancy and Western Pennsylvania Conservancy, works with landowners in Crawford, Erie, Mercer and Venango counties to permanently conserve natural lands bordering the creek and its tributaries. “By protecting the adjoining lands, you help protect what’s going into the creek,” says French Creek Valley Conservancy President John Tautin.



## Twelfth Biennial Amateur Nature Photo Contest

**Sponsored by the Friends of Erie National Wildlife Refuge and Presque Isle Audubon Society**

**Entry Deadline:** September 28, 2009

**Three Categories:** Plant Life, Wildlife, Landscape

Awards in all 3 categories, for the best student photo and the best photo taken on Erie National Wildlife Refuge.

For details about contest guidelines, please visit our website, [www.fws.gov/northeast/erie](http://www.fws.gov/northeast/erie), or call the Refuge at 814-789-3585.

*This photo of a woodcock, taken by Steve Parkin, won the Best of Show award in the 2007 photo contest.*

## *A sampling of French Creek biodiversity*



*Pictured clockwise from the bottom left: Rabbitsfoot Mussel; Channel Darter \* (Jenkins & Burckhead, photographers); Northern Riffleshell Mussel; Eastern Hellbender\*\* (R.W. VanDevender); Bluebreast Darter\* (Roston); Wood Turtle\*r\* (A. C. Hulse.); Long Solid Mussel; Wood Duck Pair. [\* published courtesy of American Fisheries Society; \*\* published courtesy of Cornell University Press].*