

# EELS

FROM A1

river to generate the power needed to fuel the state's industrialization.

But there cannot be progress without a price, and on the Susquehanna, the price of industrialization and electrification was paid by the river's native wildlife: the shad and the eels, which require an unobstructed pathway for their migrations.

The eel, cut off from its native habitat, all but disappeared, leaving only the remains of old weirs, or enclosures for catching fish, in the river, marked by their distinctive V shapes.

By the turn of this century, the eel was a rarity. Regular anglers along the river might encounter one every once in a great while, but the annual runs of eels down the river in their thousands were a distant memory — or forgotten altogether.

The great life cycle of the eel in the Susquehanna was broken. Now, almost 100 years later that circle is finally being closed, and the eel, in all its ugly glory, is once making a return to its ancestral waters.

## SURVEYING SPECIES

Standing amid the turbid chocolate-colored waters of the Conewago Creek outside Elizabethtown, Aaron Henning is hunting for eels.

In one hand, the fish biologist with the Susquehanna River Basin Commission has a net. In the other, he holds an electric "wand," which he slowly sweeps back and forth through the muddy run. Attached by a power cable to a backpack, carried by another wader, the wand sends shocks through the water, stunning fish. Once stunned, the fish surface, and Henning's net darts out to capture them.

He is working with a group — Penn State extensioners, basin commission biologists and interns, local conservation district employees and the Tri-County Conewago Creek Association — to survey the fish species present in the creek, a tributary of the Susquehanna River.

Like the river it flows to, the Conewago was once in dire straits after decades of runoff and pollution caused it to be placed on the state's impaired-waterway list in 1998. It was found to be too polluted to support typical fish and other aquatic wildlife that called the creek home.

Since then, there have been a number of restoration projects along the creek, funded by state and federal grants and led by the Conewago Creek association. One of the largest of those projects was along the Conewago Recreational Trail, where in 2007 workers and volunteers restored 15 acres of wetlands and 20 acres of forest along the creek's banks.

Now volunteers and professionals have returned to the creek to document the number of fish species living there, part of ongoing monitoring efforts to track the health of the creek and the efficacy of the restoration work.

They work up the small creek in a line across, two backpacks and four "fishers," wading at a slow, steady pace punctuated by the dart of a net. The stunned fish are transferred from the nets to waiting buckets. Once the fishing is completed, the fish will be identified and their species recorded (a DNA sample will also be collected, part of another ongoing research project that hopes to allow fish species surveying to be completed through water sampling and not fishing) before being returned to the stream.

In all, they will identify 25 species of fish along this stretch of creek, a marked improvement from years before the restoration work, the surveyors said. But for now, they wade through the stream with their waving wands and darting nets before them.

**SEE EELS, A9**