

The Birmingham News

Alabama's many endangered aquatic species are unprotected

Dam removal killed 11,760 darters Sunday, October 05, 2008
KATHERINE BOUMANews staff writer

When Birmingham city employees last month removed a dam at a Roebuck Springs pool filled with endangered fish, scientists and wildlife officials were shocked.

The pool was almost instantly drained. Biologists Friday reported a final number: 11,760 endangered watercress darters were stranded and killed.

Friday's report includes a restoration plan that will take months. It's unclear whether the genetic diversity of the Roebuck Springs population of the fish will rebound or it will be a stunted and inbred group.

About half of Alabama's imperiled aquatic species are vulnerable to the same kind of actions, experts say. Mostly, they say, Alabama's rare fish rely on the simple wisdom and charity of neighbors and landowners with no science expertise.

"A situation like this is what concerns us the most," said Nick Nichols, assistant chief of fisheries for the Alabama Department of Conservation and Natural Resources. "We're not so much worried about a big federal project rolling along without enough federal oversight."

Alabama is No. 1 in the nation in aquatic diversity, biologists say. With that wealth comes a great number of species that need protection: 64 fish, mussels, snails and a cave shrimp. A recent study found Alabama is the No. 3 state in the nation for imperiled fish.

Most of those are on or next to private land. The areas that recharge their streams may not even be apparent to casual observers.

The watercress darter is the rare creature with its own federal refuge. The 24-acre Watercress Darter National Wildlife Refuge in Bessemer protects one of the four native populations of the colorful 2-inch fish.

Only about 3 percent of land in Alabama is in federal ownership, and it's unlikely more money will become available for similar land purchases, biologists say.

"We are not going to be able to buy our way out of this," said Bernie Kuhajda, manager of the fish collection at the University of Alabama. "We are going to have to educate and communicate."

Aquatic species are uniquely confined to their habitat. Some, like mussels and snails, are almost immobile.

Biologists often list the Alabama cavefish as one of the state's most precarious species. By nature, it lives only in Key Cave in north Alabama. That has been purchased by the U.S. Fish and Wildlife Service.

But if the headwaters feeding that cave were poisoned by any sort of toxic spill, the entire species would be finished in one accident, Kuhajda said.

In most cases a toxic spill or poisoning should be prevented by the Clean Water Act.

Aquatic species get some special protections simply because federal laws prohibit poisoning the water or altering it - draining or damming - without federal permission.

As soon as a federal permit or federal money is involved, a series of reviews should be put in motion that include review for endangered or threatened species.

The Fish and Wildlife Service's office in Alabama conducts hundreds of such reviews a year, said Rob Tawes, deputy field supervisor.

"We need the assistance of federal agencies, everybody," Tawes said. "Our mission is to protect federal trust resources."

To protect the nation's fish and wildlife, the agency also conducts educational programs and works with willing landowners to improve habitat or take other steps to help its endangered species.

Although the federal government can't offer huge incentives to landowners, it can work with the pride that often is already there, Kuhajda said.

Coincidentally, another Birmingham population of watercress darters is an example of such pride.

In 2002, biologists discovered the fish in tiny, urban Seven Streams, which runs through land owned by Faith Apostolic Church in Powderly.

The church not only determined to protect the fish; it celebrated it. The congregation has laid out a meditation garden around the stream featuring a tile mosaic of the colorful fish.

"We want to do all we can to preserve it," said Bishop Heron Johnson. "It could so easily be destroyed."

The church, which has a building across the street from the spring, donated an easement to the Freshwater Land Trust so the stream would be protected from development or harm forever. The church never considered anything but protecting the fish and its habitat, Johnson said.

"It's our obligation to care for it," he said. "It's God-given."

E-mail: kbouma@bhamnews.com

© 2008 The Birmingham News. All rights reserved.

This material may not be published, broadcast, rewritten or redistributed.