



## Saving an Endangered Southern River

## Crandall, GA

The Conasauga River courses through Jimmy Petty's corn, bean and dairy farm near the Tennessee line.

Petty and his brothers own seven miles of riverfront, much of it covered one recent morning in bright green winter wheat, along both sides of the Conasauga. The mountains of the Chattahoochee National Forest offer a postcard-perfect backdrop.

The rural idyll, though, belies the river's trauma. Sedimentation, pesticides, chicken litter and industrial runoff threaten one of the nation's most biologically diverse streams. The Conasauga is also one of the Southeast's most threatened river basins, according to a new study, with the extirpation in recent years of possibly one-fourth of its fish and mussel species.

The U.S. Fish and Wildlife Service, U.S. Department of Agriculture, U.S. Forest Service, Georgia Department of Natural Resources and the Nature Conservancy will soon ratchet up conservation measures intended to protect the river and keep at-risk critters from being listed as endangered.

Cindy Dohner, Regional Director for the U.S. Fish and Wildlife Service in the Southeast, says private landowners can help "conserve as many at-risk species as possible through voluntary and innovative measures."



Conasauga logperch, credit Georgia DNR/ Brett Albanese.



The Conasauga River, credit USFWS.

Jimmy Petty is doing his share. He and brothers Don and Jerry participate in a handful of federal, state and nonprofit water-quality measures to control runoff from their 5,000-acre farm and forest.

"Daddy always said if you take care of the land, the land will take care of you. That pertains to the river too," Petty says.

The Conasauga needs all the help it can get.

Beginning amid the 4,000-foot peaks of the Cohutta Wilderness Area, the river dips into Tennessee before turning south, passing the Petty's farm and, eventually, reaching Dalton. It joins, 95 miles from its source, the Coosawattee River to form the Oostanaula River before flowing into Alabama (as the Coosa River). The aquatic biodiversity of the Conasauga watershed is "exceptional" with at least 76 species of native fishes and 18 species of native mussels. The more-heralded Upper Colorado River Basin, by contrast, contains 14 species of native fish.

The Conasauga, though, is imperiled. Jason Wisniewski, an aquatic zoologist with the Georgia DNR, estimates that the river once supported at least 33 species of mussels. Today, maybe 23 species remain with seven mussels (including the Coosa moccasinshell and the Georgia pigtoe) listed as endangered.

Three federally listed fish (including the Conasauga logperch) also make the endangered list.

"It's one of the most diverse eco-systems in the country with quite a few species that are endemic," said Robin Goodloe, a supervisory biologist with the Service in Athens, Ga. "And for several species that previously occurred, to a large extent, in the Upper Mobile River Basin, the Conasauga is the only place where they are left."

The Tennessee Aquarium and the University of Georgia recently analyzed nearly 300 Southeastern watersheds across 11 states to determine which were most imperiled and in need of help. The study, funded by the National Fish and Wildlife Foundation, was based on a simple calculus: three points were assigned for each endangered species in the watershed; two points for each threatened species; and one point for each vulnerable, or potentially, at-risk, species.

## The Conasauga ranked as the seventh most imperiled watershed.

Overall, the Alabama River Basin, which includes the Conasauga, and the Tennessee River Basin fare the worst.

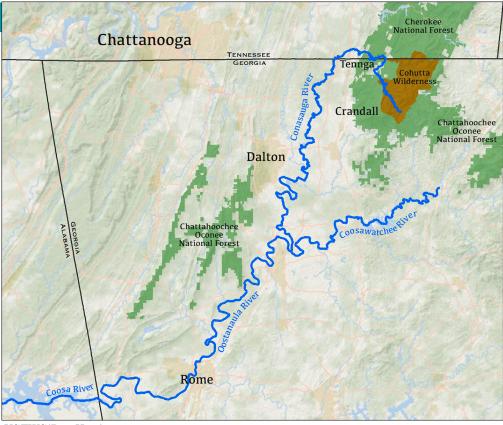
"Relative to other areas of the United States, the Southeast has little land in national parks or other forms of protected areas and receives a disproportionately small percentage of federal expenditures for endangered species protection," reads the report entitled The Southeastern Aquatic Biodiversity Conservation Strategy.

The Conasauga, in particular, is bedeviled by agricultural runoff; sedimentation; pesticides; herbicides; Roundup-ready seeds; and chicken litter which fertilizes the crops.

Studies show that glyphosate (Roundup) and phosphorous (chicken debris) harm fish and mussels. Drainage ditches that carry a field's runoff towards the Conasauga and its tributaries, as well as inadequate river buffers, exacerbate the river's woes.

Further degradation could push at-risk species, including the holiday, bridled and trispot darters, onto the endangered list.

The Service's at-risk plate is already full. Environmental groups, since 2011, have requested that Fish and Wildlife evaluate nearly 500 species to determine if they are "threatened" or "endangered." The Southeastern U.S. is home to roughly 60 percent of the possible listings. The Service, though, in concert with state agencies, private landowners, businesses, and others, determined that 97 of the proposed species don't need federal protection.



USFWS/Roy Hewitt

Fish and Wildlife and the USDA's Natural Resources Conservation Service will soon offer private landowners additional financial incentives to conserve land voluntarily so species won't have to be listed. The Working Lands for Wildlife program, for example, already targets the holiday, bridled and trispot darters, and the Conasauga, for conservation. The goal: wildlife-friendly improvements to 10,800 acres within two years.

The Pettys, the largest private landowners in the Conasauga watershed, will continue to do their share. They long ago enrolled their 14 miles of river frontage into the USDA conservation reserve program. They allowed a 35-foot buffer of trees – poplars, oaks, river birch, sweet gums – to regrow along both sides of the river. Another 30 feet remains un-farmed and serves as additional buffer.

The conservation program pays the Pettys about \$30 an acre annually; they could make a lot more farming to the river's edge. Instead, they've added rock filter dams to slow runoff through ditches; prudently managed, burned and replanted their 500-acre forest; and recycled dairy water to repeatedly rinse out the stalls.

In 2006, the Pettys won Georgia's first Environmental Stewardship Award.

"I don't know if I've ever broached a subject with them that they weren't willing to entertain," said Cindy Askew, the USDA's conservationist in Northwest Georgia. "If you give them an option for something beneficial, they're almost always going to be interested. I give them all the credit in the world."

Jimmy Petty crossed the cement bridge over his stretch of the Conasauga and pointed to the spot below where his children were baptized. A rope swing hung invitingly from an oak, Fishing for catfish and floating the river on lazy summer days are but two of the many pleasures the Conasauga affords the Pettys.

"We don't intend on quitting the conservation programs," Jimmy Petty said. "They protect the river. And they make for good habitat for deer, fish and other wildlife."

## For more information, contact

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