

# “I’ve Got an Alabama, Sturgeon”

## Alabama’s Rare and Elusive Fish

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Steve Rider could barely contain his excitement as he called his boss, Fisheries Chief Stan Cook on the radio.

"Stan, I've got an Alabama sturgeon."

"Are you joking?"

Cook replied.

"No; Stan, I've got an Alabama sturgeon,"

Rider repeated.

"Seriously?"

Cook asked again.

"Stan, I've got an Alabama sturgeon—right now,"

Rider repeated again.



*Alabama sturgeon collected on April 3, 2007 by WFF biologist Steve Rider and assistant Travis Powell below Claiborne Lock and Dam.*

To assure Cook he was not joking, Rider and his assistant, Travis Powell, took a photo with a camera phone and emailed it from their position on the Alabama River to Cook in Montgomery.

It was, indeed, an Alabama sturgeon, an extremely rare fish.

**On April 3, 2007,** fisheries biologists with the Alabama Wildlife and Freshwater Fisheries Division (WFF) collected an Alabama sturgeon below Claiborne Lock and Dam on the Alabama River. This is significant because this species is considered the rarest large fish in North America and is the first specimen collected in nearly eight years. Unbelievably, only 39 confirmed Alabama sturgeon have been collected since 1953! This specimen is also the second largest ever collected, measuring nearly 31 inches and weighing 3.7 pounds. This species is listed as endangered under the Endangered Species Act, and is also afforded State protection through the WFF nongame species regulation.

## Caught and Tagged

The WFF has been sampling for this rare and elusive species since 1997 in an attempt to propagate and restore it. Sampling has been conducted from fall to spring in most years. Funding for this project has been provided by the U.S. Fish and Wildlife Service (USFWS).

After capture, the fish was transported to the Marion Fish Hatchery where it was isolated and allowed to acclimate for several days.

A surgical procedure was then performed to determine its gender and reproductive state. The only way to determine the gender was by internal examination. With this recent Alabama sturgeon capture, it was hoped this specimen would be a female or reproductively-active male. However, the fish was determined to be a mature male, but reproductively inactive.

After consultation with the USFWS, it was decided this specimen would be most valuable by releasing it back into the Alabama River. However, the fish would be implanted with a 48-month sonic tag in the abdominal cavity to allow fisheries biologists to track its movements. The sonic tag sends out a series of beeps that are received by a sonic receiver listened to by biologists. The sonic tag has a unique series of beeps coded for a particular tag so biologists know which fish they are tracking if multiple fish are tagged in the same area. While numerous movement studies have been conducted on many fish species, this is the first study of its kind for this rare species.



Biologists implanting a sonic tag in the Alabama sturgeon.

REBECCA LEIGH WHITE



BILLY POPE

Steve Rider tracking the Alabama sturgeon after its release.

## Tracking the Sturgeon

How could tracking the movement of this fish help with conservation of the species? Biologists hope to gain valuable insight into this species' seasonal habitat use, spawning migration, and movement patterns. This information will hopefully lead biologists to new sampling areas in the hope of collecting additional fish.

The recently captured Alabama sturgeon was released at point of capture below Claiborne Lock and Dam on April 17, 2007. Initial efforts consisted of 24-hour continuous tracking, then nearly daily tracking for the next month. Thereafter, frequency of tracking would be based on the amount of movement by the fish. Typically, fisheries biologists would track the fish twice weekly; then, one 24-hour period would be monitored each month. Tracking for 24 hours continuously would give biologists an idea of movement between day and night periods.

Upon release, the fish stayed in the vicinity of the capture location for approximately six hours and then slowly made his way downriver. The fish was next


detected approximately six miles downriver three days after release. Approximately two days later, the fish was detected nearly 30 miles downriver. Generally, throughout the summer months, the fish was located in this area. Biologists believe the main reason for the fish residing in this area is due to the spring-fed creek that flowed into the river. This creek provided a thermal refuge during the hot Alabama summer. Typically, the fish would be located below where the spring-fed creek entered the Alabama River. While the summer

Alabama River temperatures ranged from 86 to 90 F, temperatures from this spring-fed creek ranged from 73 to 79 F.

In the eight short months of tracking, several other observations were noted. The fish has been found in shallow (2 feet) to deep (more than 20 feet) depths throughout the river. This indicates the shoreline to main channel is important habitat for this species. Also, 24-hour tracking indicates the fish tends to move more in the early morning hours (midnight to dawn). This could indicate when he is actively feeding. And as the river temperature has decreased in the fall, the fish has been moving longer distances from downriver to upriver.

This fish has also led biologists to sample new areas. In the past, much effort was conducted during the supposed spawning migration below the locks and dams in late winter to early spring. However, sampling effort was redirected near his summer areas. Although sampling did not collect any additional specimens in these new areas, it is hoped with increased effort and newly identified areas, more Alabama sturgeon will be collected in the future.

## Summary

So what do we know at this point? The entire Alabama River is critical to the survival of this vanishing species. All governmental agencies, non-governmental organizations, various businesses and private citizens must work together to protect the Alabama River from further habitat degradation such as dredging activities, non-point source pollution, and altered flow regimes. Fish-bypass opportunities must be developed to allow potential spawning Alabama sturgeon to traverse the various sets of locks and dams to spawning habitat in the Cahaba River. If this does not happen, then Alabama will have the dubious distinction of allowing its namesake sturgeon to become extinct. 

## Watch the Video

Documentation of the catch and subsequent release of the Alabama sturgeon by fisheries biologists in 2007 can be viewed on the ADCNR Web site:  
[www.outdooralabama.com/video/fisheriesvideos.cfm](http://www.outdooralabama.com/video/fisheriesvideos.cfm)