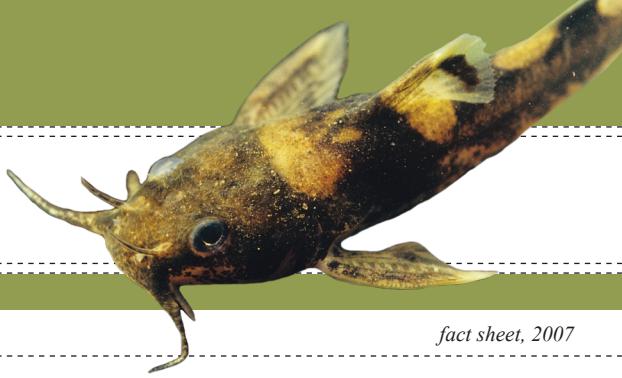


# CAROLINA MADTOM



NORTH CAROLINA WILDLIFE RESOURCES COMMISSION

fact sheet, 2007

**W**hile it may look cute and harmless, the Carolina madtom can pack quite a punch if you get stung by one. Venomous ducts inside large spines on its pectoral fin give the species its name, *Noturus furiosus*, which is Latin for “mad or raging.”

The Carolina madtom belongs to the family Ictaluridae, which also includes bullheads and catfish. Other than its small size, the Carolina madtom differs from its larger cousins by its adipose fin, which is fused to its caudal fin. The genus name *Noturus*, which means “back tail” in Latin, refers to this fusion.

## HISTORY AND STATUS

The Carolina madtom is a native species found only in North Carolina. It is found in the relatively larger streams that flow into the Tar and Neuse rivers, so its range and abundance are limited.

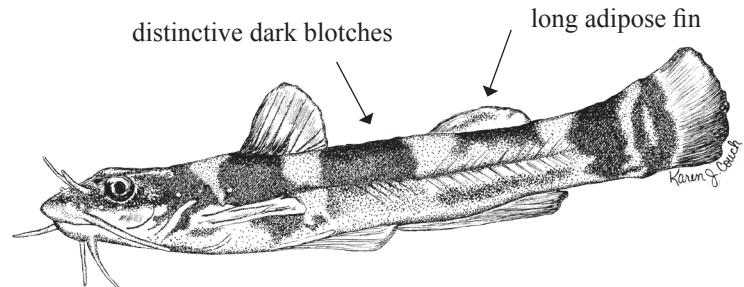
It was once common in the Neuse and Tar rivers but is now found mostly in the Tar River. Because the species has a restricted range and occurs only in certain types of waters, the Carolina madtom is listed as a Federal Species of Concern and State Threatened. Its small size makes it unappealing to anglers, and it is classified as a nongame species.

## DESCRIPTION

This small fish reaches a maximum length of nearly 5 inches. When compared to other madtoms, the Carolina has short, chunky body and a distinct color pattern. Three dark saddles along its



back connect a wide, black stripe along its side extending from its snout to the base of its tail. The adipose fin has a dark blotch that does not quite reach the fin’s edge, giving the impression of a fourth saddle. Yellowish to tan blotches space the saddles, while the rest of the fish is tan. The belly is unspeckled, and the tail has crescent-shaped brown bands near its edge and center. Its pectoral spines have well-defined serrae (saw-like projections) along both margins, with the anterior margin possessing fine, sharp serrae and the posterior edge exhibiting large, curved serrae.



## SURVEYS AND MONITORING

Biologists with the N.C. Wildlife Resources Commission launched a project during 2007 to find where madtoms occurred. They conducted 60 surveys throughout the Tar and Neuse River basins to determine the status of the fish.

In the Neuse River basin, the Carolina madtom was discovered at only 10 percent of the areas where the fish historically occurred. Only two populations were identified during the 2007 surveys in the entire Neuse basin!

On the other hand, the Tar River populations are doing much better; 90 percent of the sampled sites that historically harbored the Carolina madtom still maintain healthy populations.

## HABITAT PROTECTION

Why is this fish disappearing from the Neuse River but stable in the Tar River? Biologists suspect that urban development in and around the Neuse River has played a key role in the decline of this Carolina treasure. The Triangle area is located mainly within the Neuse River basin. Tremendous growth and deforestation near streams have degraded water quality and aquatic habitat. The Tar River basin, on the other hand, is dominated largely by rural communities, farmlands and forests, which have fewer impacts on aquatic ecosystems.

See the “How You Can Help” box below for ways you can help improve water quality and aquatic habitat for the Carolina madtom.

### HOW YOU CAN HELP

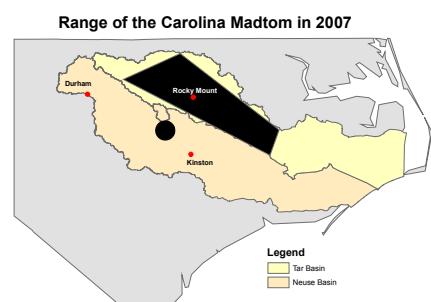
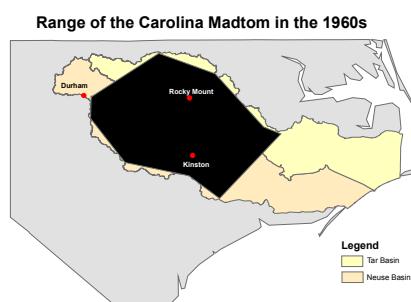
1. Preserve natural areas and trees around streams.
2. Throw unused medications in the trash and not the toilet.
3. Don’t hose off driveways. This will help prevent petroleum products from entering the waterways.
4. Practice water conservation.



Searching for the rare Carolina madtom.

## INTERACTIONS WITH PEOPLE

As a nongame fish with a restricted range, the Carolina madtom rarely interacts with people. Anglers may see one when collecting bait from streams or rivers. If you do encounter a Carolina madtom, do not handle it or otherwise disturb the fish. Because they are imperiled and have specific riverine needs, no one should attempt to confine them to an aquarium. If the ongoing urbanization of the state’s landscape continues to cause declines for this species, future interactions between people and this rare and beautiful fish may disappear completely.



### North Carolina Wildlife Resources Commission



1721 Mail Service Center  
Raleigh, N.C. 27699-1722  
(919) 707-0050  
[www.ncwildlife.org](http://www.ncwildlife.org)