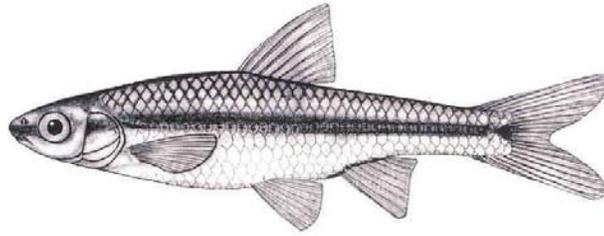


Cape Fear Shiner



What is a Cape Fear shiner?

The Cape Fear shiner (*Notropis mekistocholas*) is a small, moderately stocky minnow, rarely exceeding 2.5 inches in length. The fish's body is flushed with a pale silvery yellow, somewhat pointed yellowish fins, and a black band that runs along the sides of its body. During the spawning season, the yellowish golden body color is intensified in the males, and the females take on a silvery cast. This species is distinguished from similar species by the black upper and lower lips.

Unlike most other members of the genus *Notropis*, the Cape Fear shiner's diet primarily consists of plant material. Spawning occurs in early spring when the water temperature begins to warm; a secondary spawning may occur during the late summer. Additional information is presently being collected on the species' breeding behavior, ecology, and life history. Preliminary results of such research indicate that the species survives about two to three years in the wild, but may live up to six years in captivity.

Where does the Cape Fear shiner occur?

The Cape Fear shiner, as its name implies, is endemic to the Cape Fear River basin in the east-central Piedmont region of North Carolina. The species is found only in Randolph, Moore, Lee, Harnett, and Chatham counties. All populations are known from the main stem reaches of, and tributaries to, the Deep, Rocky, Haw, and Cape Fear Rivers. The largest population is located around the confluence of the Rocky and Deep Rivers. The Cape Fear shiner may use the smaller tributaries of these four rivers, such as during the winter months or when unfavorable water conditions exist in the river's main stem. However, observations indicate that shiners stay within two miles of the creek's confluence with the larger river. Total numbers are unknown, but all Cape Fear shiner populations appear to be small.

The Cape Fear shiner inhabits slow pools, riffles, and runs with gravel, cobble, and boulder substrates, often around beds of aquatic vegetation. The Cape Fear shiner is typically associated with schools of other related species, but it is never the dominant species.

Is the Cape Fear shiner protected?

To help secure the future of the Cape Fear Shiner, the U.S. Fish and Wildlife Service added this fish as an endangered species to the Federal Endangered and Threatened Species List on September 25, 1987. The United States Congress, recognizing that many of our Nation's valuable plant and wildlife resources have been lost and that others are imperiled, passed the Endangered Species Act in 1973 to provide a means to help preserve species and their habitats for future generations. An "endangered" species is one that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is one that is likely to become endangered in the foreseeable future.

Why was it listed as Endangered?

The Cape Fear shiner may have always existed in low numbers. However, dam construction in the Cape Fear River system has probably had the most serious impact on the species. Dams change the flow of water from a free-flowing stream – the species' preferred habitat – to an impounded or flooded stream, thereby isolating populations from one another. These small isolated populations lack the opportunity to exchange genetic information and are vulnerable to habitat degradation (e.g., lower water quality associated with toxic chemical spills and run-off from road, residential, agricultural, silvicultural and other land use practices). Collectively, these ecological problems reduce the Cape Fear shiner's chance for recovery unless we intervene on its behalf.

Why should you be concerned about the loss of species?

Extinction is a natural process. Normally, new species develop through a process known as speciation at about the same rate that other species become extinct. However, because of air and water pollution, over-hunting, extensive deforestation, the loss of wetlands, and other man-induced impacts, extinctions are now occurring at a rate that far exceeds the speciation rate, thus diminishing the diversity and complexity of life on Earth. The loss of a single species may seem insignificant; however, all life on Earth is interconnected. If enough "living connections" are broken, entire ecosystems could fail and the balance of nature could be forever altered.

What can you do to help the Cape Fear shiner?

- Support land-use planning that overtly maintains vegetated riparian buffers and water quality. Plant and maintain native vegetation along streams and creeks. These "vegetated buffers" prevent the erosion of soil and sediments into the water after heavy rains, keeping the stream clear and clean.
- Be careful using and disposing of toxic substances such as motor oil, pesticides and fertilizers, and other chemicals near creeks and streams. Always follow the instructions for chemical use, and properly dispose of any remaining material and the container.
- Keep livestock out of rivers and streams. Livestock can damage the stream banks by eating the bank vegetation and by causing erosion of the bank. Livestock and their waste can also pollute the water.
- Watch for fish kills, illegal dumping of waste, unusual water color or smell, and other changes in the river's condition. Report environmental emergencies (e.g., fish kills, oil or chemical spills) affecting water resources to the North Carolina Division of Emergency Management by calling 1-800-858-0368.

Conservation Partners of the U.S. Fish and Wildlife Service in Cape Fear Shiner Recovery:

NC Wildlife Resources Commission
NC Division of Parks and Recreation
NC Zoological Park
Conservation Fisheries, Inc.

Chatham Conservation Partnership
Haw River Assembly
Triangle Land Conservancy
Citizens like you!!!

For more information, visit our website at <http://www.fws.gov/nc-es/fish/cfshiner.html>, or contact:

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