

## Comely Shiner

### *Notropis amoenus*

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## DESCRIPTION

### Taxonomy and Basic Description

The Comely Shiner is a member of the genus *Notropis*. Containing about 71 species, *Notropis* is considered the genus of true shiners (Rohde et al. 1994). The true shiners are generally small and nearly all lack a barbel. Silver color is dominant; breeding males of many species have bright colors (chiefly red) and some are boldly black-patterned. A great deal of variation occurs across the genus in morphology, color, and biology.

The Comely Shiner is a slender fish with a somewhat pointed snout. The dorsal fin is quite posteriorly placed. The anal fin margin is strongly concave. These fish have 8 dorsal rays and 10 to 12 anal rays. Breeding males have small tubercles on the head. Adults range in length from 55 to 75 mm (2.2 to 2.9 in.) (Jenkins and Burkhead 1994).

### Status

The Comely Shiner is currently not ranked (SNR) in South Carolina. It is considered secure (G5) globally (NatureServe 2013).

## POPULATION SIZE AND DISTRIBUTION

The Comely Shiner occurs in Atlantic slope drainages (Upper Coastal Plain and Piedmont) from the Hudson and Susquehanna drainages in New York, south through the Cape Fear drainage in North Carolina. There is a recent record from Rocky Creek, part of the Yadkin River system in Montgomery County, North Carolina. Globally, the Comely Shiner is considered common (NatureServe 2013). Records from the Pee Dee drainage may be a result of an introduction (Jenkins and Burkhead 1994). In South Carolina, there have been only 2 records of the Comely Shiner; both were from the upper Pee Dee River.

The Comely Shiner is considered common to uncommon in the southern portion of its range, with a very limited distribution in South Carolina. South Carolina is the southern-most extreme portion of its range but may not be part of the natural range of the Comely Shiner. Conservation actions in South Carolina may have little impact on the overall status of these fishes. However, due to the limited habitat available for this species in South Carolina, if it is to be maintained as part of South Carolina's fauna, then it is essential that the habitat requirements for these fishes be better understood and actions taken to protect and preserve appropriate sites for the survival of

this species. The Comely Shiner was not collected at any randomly selected wadeable stream sites in the South Carolina Stream Assessment (2006-2011).

#### HABITAT OR NATURAL COMMUNITY REQUIREMENTS

The Comely Shiner uses a variety of habitats; it is usually found in runs and flowing pools of creeks and medium to large rivers, especially in channels, over sand, gravel or rubble (NatureServe 2013).

#### CHALLENGES

This species is vulnerable in South Carolina due to its very limited distribution, but is currently stable throughout much of its range. Challenges to this species are similar to those of other aquatic fauna and include point and nonpoint source pollution, deforestation and loss of riparian corridors, impoundment development, channelization and siltation from poor land use practices and unplanned or poorly planned urban and suburban development. Because of its limited distribution, it is also vulnerable to habitat losses due to anthropogenic influences such as water withdrawals or environmental disturbances such as drought.

#### CONSERVATION ACCOMPLISHMENTS

Educational materials have been developed in order to raise public awareness of nongame species and their ecological importance to the natural history of South Carolina's aquatic habitats, including:

- The Reel Art program creates a topic for secondary school students and judges the artists' submissions (e.g. a list of the Piedmont Fishes of SC to select from as subjects for drawing or painting).
- We compiled information and photographs for the development of nongame fish description web pages which are currently in development.
- We developed the Blackwater River Guide and interactive Powerpoint.
  - <http://www.dnr.sc.gov/education/pdf/BlackwaterInteractivePoster.pdf>
  - <http://www.dnr.sc.gov/education/pdf/BlackwaterRivEdGuide.pdf>
- We developed and printed the Fish Species of Concern Coloring Book (2009).
  - <http://www.dnr.sc.gov/aquaticed/pdf/SCFishesofConcernColoringBook.pdf>

#### CONSERVATION RECOMMENDATIONS

- Determine the existence and viability of the Comely Shiner in the Pee Dee drainage since the South Carolina Stream Assessment (2006-2011) encountered none.
- Protect critical habitats from future development and further habitat degradation by following Best Management Practices (BMPs) and protecting and purchasing riparian areas.
- Promote land stewardship practices through educational programs both within critical habitats with healthy populations and in other areas that contain available habitat.
- Encourage responsible land use planning.

- Consider this species' needs when participating in the environmental permit review process.
- Continue to develop educational materials in order to raise public awareness of nongame species and their ecological importance to the natural history of South Carolina's aquatic habitats.
- Educate motor vehicle operators on the negative effects of crossing streams at multiple locations and using stream bottoms as trails.

## MEASURES OF SUCCESS

Determining the distribution, life history, habitat needs, and Southeastern population structure and trends would represent a measure of success for this species. Methods that protect water quality are also likely to protect this species. In the event that more protective BMPs are implemented, population studies of these fish could assist in determining the effectiveness of those measures.

## LITERATURE CITED

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- Rohde, F.C., R.G., Arndt, D.G. Lindquist and J.F. Parnell. 1994. *Freshwater Fishes of the Carolinas, Virginia, Maryland, and Delaware*. The University of North Carolina Press. Chapel Hill, North Carolina. 222 pp.