

Common Name: SANDBAR SHINER

Scientific Name: *Notropis scepticus* (Jordan and Gilbert)

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Cyprinidae

Rarity Ranks: G4/S2

State Legal Status: Rare

Federal Legal Status: none

Description: The sandbar shiner is a medium-sized minnow attaining lengths up to 90 mm (3.5 in). It has silvery sides and an olive dorsum, lacking any chromatic coloration in the fins. The back scales are darkly outlined and the lateral-line pores are stitched with black pigment. A prominent feature of the sandbar shiner is its large eyes, which are wider than the length of the snout. This species also has a large terminal mouth with black pigment on its lips. There are usually 10-11 anal fin rays and the pharyngeal tooth count formula is typically 2-4-4-2.

Similar Species: The sandbar shiner is not likely to be confused with other sympatric minnows in the Savannah River system. It may be superficially similar to the whitefin shiner (*Cyprinella nivea*), which differs in having a smaller eye, distinctly diamond-shaped scales, 8 (7-9) anal fin rays, and a pharyngeal tooth count formula of 1-4-4-1. The eastern silvery minnow (*Hybognathus regius*) also has a large eye and a silvery body, but differs in having a distinctive subterminal mouth, 8 anal fin rays, and an extremely long and coiled intestine.

Habitat: The sandbar shiner is found over sandy bottoms in flowing pools near gravel rocky riffles in medium-sized streams. It usually avoids small headwater tributaries, large rivers and reservoirs.

Diet: The sandbar shiner is sight-feeder and primarily consumes terrestrial and aquatic insects.

Life History: The life span of the sandbar shiner is approximately 3 years. Most individuals reach sexual maturity at 2 years. Studies indicate that spawning occurs during late May through early July in South Carolina populations when water temperatures range 18-24°C (64-75°F). Spawning behavior is unknown and has not been studied.

Survey Recommendations: This schooling species is vulnerable to seining.

Range: The range of the sandbar shiner extends from the Cape Fear drainage in North Carolina down to the Savannah drainage in Georgia. This species occurs primarily in Piedmont streams in the area, but extends into both the Coastal Plain and Blue Ridge along the boundaries of its range. Georgia records are primarily from the Broad and Little River systems (Savannah River drainage), with additional occurrences in the mainstem Savannah River, Chattooga River, and Beaverdam Creek. Check the Fishes of Georgia Webpage for a watershed-level distribution map.

Threats: The sandbar shiner occurs in clear streams with high water quality. One study concludes that the sandbar shiner is primarily a sight feeder, based upon the species' large eyes and the prey items the fish consumes. The sandbar shiner is threatened by stream degradation resulting from poor land-use practices in forestry and agriculture, as well as failure to control soil erosion from construction sites and bridge crossings. Increased stormwater run-off from developing urban and industrial areas further threatens the sandbar shiner where populations still exist. The central portion of its range, especially in the Carolinas, is an area of intense current growth and historical widespread textile development.

Georgia Conservation Status: The sandbar shiner has a limited range in Georgia. Although its status has not been rigorously assessed, the sandbar shiner is represented by many recent records in the Broad River system.

Conservation and Management Recommendations: Conserving populations of the sandbar shiner in Georgia depends on maintaining habitat and water quality in streams of the middle Savannah River drainage. These streams are highly susceptible to impacts from various land-disturbing activities. It is essential to eliminate sediment runoff (from activities such as roadway and housing construction), inputs of contaminants (such as fertilizers and pesticides), and chronic discharges of industrial effluent and sewage while maintaining forested buffers along stream banks and natural streamflow patterns. Watershed clearing and urban development can lead to unnaturally flashy stormwater runoff, which scours stream channels and results in lower baseflows.

Selected References:

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Date Compiled or Updated:

B. Freeman, 1999: original account.

K. Owers, Jan, 2009: updated status and ranks, added fish atlas link, converted to new format, minor edits to text

- B. Albanese, Dec 2009: added similar species, conservation status, minor edits.
- Z. Abouhamdan, April 2016: updated link