Common Name: BROADSTRIPE SHINER

Scientific Name: *Pteronotropis euryzonus (Suttkus)*

Other Commonly Used Names: none

Previously Used Scientific Names: *Notropis euryzonus*

Family: Cyprinidae

Rarity Ranks: G3/S2

State Legal Status: Rare

Federal Legal Status: none

Description: The broadstripe shiner is a colorful minnow attaining a maximum total length of about 7 cm (2.8 in). Broadstripe shiners have a deep, compressed body that tapers toward the caudal fin. The bluish gray lateral stripe covers over half the area of the side, extends from the tip of the snout to the base of the caudal fin, and is bordered above by a narrow orange band. The small, wedge-shaped caudal spot is not continuous with the lateral stripe and is bordered above and below by small red spots. The central caudal rays immediately beyond the caudal spot are not pigmented, creating a clear window in the center of the fin. This species has a complete lateral line, 9-11 anal fin rays, and a modal pharyngeal tooth count formula of 2-4-4-2. There are large tubercles present on the ventral surface of the lower jaw (i.e., mandibular tubercles) of males and females. The dorsal and anal fins of males have much longer rays than those of females and the anterior dorsal fin rays of nuptial males extend past the posterior fin rays when the fin is depressed. Breeding males also develop a bright orange caudal fin and a dull orange anal fin. The interradial membranes of the dorsal fin of nuptial males are primarily dark except for orange pigment along the base of the fin and yellow-green pigment on the tips of the fin rays.

Similar Species: The broadstripe shiner is not known to co-occur with any other members of

Pteronotropis in the Georgia portion of its range. However, its range closely abuts with the range of the Apalachee shiner (*Pteronotropis grandipinnis*) and specimens from the Chattahoochee River system in Seminole, Early or Clay counties should be carefully examined. The Apalachee shiner differs from the broadstripe shiner in having a caudal spot that is continuous with the lateral stripe, pigmented central caudal fin rays (vs. depigmented or with a clear window) and anterior fin rays that do not extend beyond posterior rays in the depressed dorsal fins of nuptial males.

Habitat: The broadstripe shiner occurs in small and medium-sized streams. Preferred habitats include pools and runs in moderate current velocities over sand, silt, and bedrock, often near logs, snags and aquatic vegetation. The broadstripe shiner is tolerant of moderately low pH waters that are often stained with organic acids. These stained water streams, or blackwater systems, have naturally low pH values ranging down to pH 4 or even less.

Diet: This species feeds on drifting aquatic insects and may also consume detritus.

Life History: The biology of the broadstripe shiner is unstudied.

Survey Recommendations: Close relatives of the broadstripe shiner, such as the Apalachee shiner, are easily captured by making downstream seine hauls through the upper portion of the water column. Schools of Apalachee shiners can be readily spotted from above the water surface, which improves sampling efficiency. These recommendations may also apply to the broadstripe shiner.

Range: The broadstripe shiner is endemic to the middle Chattahoochee River system of Georgia and Alabama near and below the Fall Line. Georgia records are currently bounded by Talbot County (Upatoi Creek System) to the north and Clay County (Kolomoki Creek System) to the south, but the species could also occur in poorly sampled tributaries beyond this range. Check the Fishes of Georgia Webpage for a watershed-level distribution map.

Threats: The major threat to the survival of broadstripe shiners is water quality and habitat degradation in tributary streams to the Chattahoochee River. A recent study showed that their abundance was negatively associated with catchment disturbance on a military base. Restricted range and localized distributions further contribute to the vulnerability of this species.

Georgia Conservation Status: The status of this species has not been rigorously assessed, but the broadstripe shiner appears to be currently stable in Georgia. About 30 locations are represented in the Nongame Conservation Section's Database as of 2009, the majority of which have been documented within the last 10 years. The broadstripe shiner is very abundant within some of these locations.

Conservation and Management Recommendations: Conservation of the broadstripe shiner depends upon identifying and protecting specific habitats within its range. This includes protecting streams that have abundant aquatic vegetation and coarse woody debris (i.e., logs). Watershed clearing and increasing urban development can modify habitats by altering hydrology and increasing nutrients in stream systems that may be naturally nutrient poor. Additional research on the life history, habitat requirements, and current range of this species is also needed.

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 photo, similar species, and info from new references.
Z. Abouhamdan, April 2016: updated link