



**Common Name:** BLACKBANDED SUNFISH

**Scientific Name:** *Enneacanthus chaetodon*

**Other Commonly Used Names:** none

**Previously Used Scientific Names:** none

**Family:** Centrarchidae

**Rarity Ranks:** G4/S1

**State Legal Status:** Endangered

**Federal Legal Status:** Not Listed

**Description:** The blackbanded sunfish is a small, laterally compressed and deep-bodied species reaching a maximum total length of 100 mm (4 inches). There is a prominent notch separating the spinous and soft-rayed portions of the dorsal fin. It is distinctively marked with 5-6 black bars along the sides that extend from the dorsum to the venter. The first of these bars passes through the eye, and the third extends through the first three membranes of the spinous dorsal fin to the upper edge of the fin. No other sunfish has this barring pattern. The blackbanded sunfish is also very colorful with black vertical bars, olive-brown to variegated-brown on the dorsum and upper sides, and orange-copper marking the leading edge of the pelvic fins and the irises.

**Similar Species:** The small body size and distinctive color pattern make it difficult to confuse the blackbanded sunfish with any other fish species in Georgia waters. It may superficially resemble the banded (*Enneacanthus obesus*) and bluespotted (*E. gloriosus*) sunfishes, which differ in having only a shallow notch separating the spinous and soft-rayed portions of the dorsal fin and lacking the prominent dark bar extending through the anterior dorsal fin membranes.

**Habitat:** Blackbanded sunfish are restricted to shallow, low-velocity, non-turbid waters of lakes, ponds, rivers and streams. They are strongly associated with aquatic plants, which provide habitat for foraging and cover. Occupied waters are tea-stained and usually, but not always, with low pH. Beaver ponds appear to be important habitats for breeding and for juvenile life stages.

**Diet:** Small invertebrates associated with aquatic vegetation.

**Life History:** Spawning occurs in the spring and has been reported as early as March in North Carolina to as late as June in Delaware; reported water temperatures range from 20-28 °C (68-82 °F) for several field studies. Most spawning behavior studies are based upon aquarium observations. Adults create nests (depressions) in sand or gravel substrates beneath aquatic vegetation, or in hollows made among plant roots or in masses of plants. Nests are usually shallow, approximately 10 cm (4 inches) in diameter, and are guarded by the males. Data from more northern populations suggest a lifespan of 3-4 years.

**Survey Recommendations:** Because of rarity and its association with densely vegetated habitats, this species is very difficult to collect. Multiple surveys using a variety of gear types (e.g., seines, traps, dipnets) are required to ensure a high probability of detecting this species when present.

**Range:** The blackbanded sunfish ranges below the Fall Line in Atlantic and Gulf Coast drainages from New Jersey to northern Florida. Distribution throughout the Coastal Plain of Georgia is spotty; museum records indicate populations in the Savannah River drainage, St. Marys River drainage (Okefenokee Swamp), Suwanee River drainage (Okefenokee Swamp and the Alapaha River system) and the Aucilla River system. Unknown populations could occur in the Coastal Plain portions of any Atlantic or Gulf Coastal drainage east of the Ochlockonee River drainage. The blackbanded sunfish is rare to uncommon throughout most of its range, except for areas in North Carolina and New Jersey. Check the [Fishes of Georgia Webpage](#) for a watershed-level distribution map.

**Threats:** Populations of this species are small and extremely localized, which makes each population vulnerable to extirpation with very limited opportunities for subsequent population recovery. A variety of human-caused and natural factors could lead to local population loss, including drainage modification, changes in aquatic plant communities, extreme drought or excessive water withdrawal, and nutrient pollution. A non-native apple snail species has become established in southeast Georgia and could threaten the aquatic plants utilized by the blackbanded sunfish. Several authors have suggested that competition with or predation by other centrarchid sunfishes may explain the absence from or rarity within habitats that would otherwise be suitable for the blackbanded sunfish.

**Georgia Conservation Status:** The only protected populations of this species are within Okefenokee Swamp National Wildlife Refuge, where the last confirmed Georgia occurrence was documented in 2001. Tanya Darden surveyed all 6 historic sites of the blackbanded sunfish in Georgia within the year 2000, along with 27 additional sites within its potential Georgia range. She did not collect this species at any of her survey sites.

**Conservation and Management Recommendations:** Conservation of populations of blackbanded sunfish depends upon maintaining habitat quality in the Okefenokee Swamp and in other appropriate habitats. Habitat loss through pollution, drainage and hydrologic alteration of Coastal Plain swamps and rivers must be avoided. Surveys should be conducted throughout the potential range in appropriate habitats to determine if other populations exist.

**Selected References:**

Burkhead, N. M. And R. E. Jenkins. 1991. Fishes. Pages 321-409 in K. Terwilliger (coord.). Virginia's endangered species. McDonald and Woodward, Blacksburg, Va.

Darden, T. 2000. Survey for blackbanded sunfish in Georgia. Unpublished report to Georgia Department of Natural Resources, Nongame Conservation Section, Social Circle.

Jenkins, R. E. and N. M. Burkhead. 1993. Freshwater fishes of Virginia. Am. Fish. Soc., Bethesda, Md. 1079pp.

Johnson, S. A. and W. J. Barichivich. 2004. A simple technique for trapping *Siren lacertina*, and *Amphiuma means*, and other aquatic vertebrates. Journal of Freshwater Ecology 19 (2): 263-269.

Kilian, J.V., S.A. Stranko, R.L. Raesly, A.J. Becker, and P. Ciccotto. 2009. *In Press*. *Enneacanthus chaetodon* (blackbanded sunfish): an imperiled element of Maryland's Coastal Plain Ichthyofauna. Southeastern Naturalist

Laerm, J. and B. J. Freeman. 1986. Fishes of the Okefenokee Swamp. Univ. Georgia Press, Athens. 118pp.

Lee, S. L., C. R. Gilbert, C. H. Hocutt, R. E. Jenkins, D. E. McAllister, and J. R. Stauffer. 1980. Atlas of North American fishes. North Carolina State Mus. Nat. Hist. 867pp.

Page, L. M. and B. M. Burr. 1991. A field guide to freshwater fishes of North America north of Mexico. Houghton Mifflin, Boston. 432pp.

Tate, W.B. and S.J. Walsh. 2005. Distribution and ecological requirements of the Okefenokee pygmy sunfish and the blackbanded sunfish in Florida. Final Report. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida.

**Author of Account:** Byron J. Freeman, Stephen Vives, and Brett Albanese

**Date Compiled or Updated:**

B. Freeman, 1999: original account.

K. Owers, January 27<sup>th</sup>, 2009: added picture, updated status and ranks, added fish atlas link, converted to new format, minor edits to text.

B. Albanese, February 10, 2009: general update of entire account, incorporation of info provided in Vives' protected species nomination form.

Z. Abouhamdan, April 5, 2016: updated link