Common Name: FRECKLED DARTER

Scientific Name: *Percina lenticula* Richards and Knapp

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Percidae

Rarity Ranks: G2/S1

State Legal Status: Endangered

Federal Legal Status: none

Description: The largest darter, reaching 200 mm (7.9 in) total length, this species is characteristically dusky in appearance with at least 77 lateral scales, about eight dark blotches and smaller spots along the sides, eight dorsal blotches and three dark spots at the base of the caudal fin. Males have 1-2 rows of enlarged, toothed scales on the belly. There may be a dark teardrop beneath each eye, and the fins are darkly banded. A basal black spot characteristically occurs at the front of the second dorsal fin. Neither males nor females develop bright coloration during the spawning season. The above photo shows a specimen from Georgia; the photo at the bottom of the account shows a more darkly colored specimen from Mississippi.

Similar Species: This species can be distinguished from the blackbanded darter (*Percina nigrofasciata*) by the presence of up to 8 large, dark lateral-blotches and more than 77 lateral scale rows. Blackbanded darters have 12 or more oval to elliptically-shaped lateral blotches and 64 or fewer lateral scale rows. The bronze darter (*Percina palmaris)* also co-occurs with the freckled darter and can be distinguished by 70 or fewer lateral scales, 10 or more rectangular lateral blotches and bright chromatic coloration in males and females, especially during breeding.

Habitat: Found in larger streams, this darter prefers riffles and runs with swift current

over rocky substrates or around large woody debris. The freckled darter may occupy relatively deep (>50 cm, 20 in) portions of riffles and runs.

Diet: Aquatic invertebrates. A study in Mississippi found that freckled darters feed on relatively large insects, including net-spinning caddisflies, dragonflies, and hellgrammites.

Life History: Little is known of the life history of this relatively rare darter. Larval freckled darters have been collected in Alabama in March, suggesting an early spring spawning season. Eggs are probably buried beneath gravel or sand in riffle and run habitats. Adults have been observed foraging on woody debris in fast currents.

Survey Recommendations: Seining in swift shoals, in habitats containing woody debris or large boulders, is the best method to encounter the freckled darter. This species can be collected in the same or similar habitats as the amber darter and Coosa madtom. Electrofishing is discouraged in these habitats due to the increased risk of mortality.

Range: The freckled darter occurs in Gulf of Mexico tributaries from the Pearl River drainage east to the Mobile River drainage (Louisiana, Mississippi, Alabama and Georgia). In Georgia, this species is known from isolated localities in the Etowah River (Cherokee County) and Conasauga River main-stems in the upper Coosa River system. It was first collected in Georgia in 1950, from the Etowah River at the mouth of Town (Canton) Creek and the species was detected again at this site in 2007. Check the Fishes of Georgia Webpage for a watershed-level distribution map.

Threats: Extensive habitat loss due to impoundments threatens the survival of this fish. Water development and construction projects in the Etowah and Conasauga basins that reduce water quality and increase sediment input, or that may diminish flow in riffle and run habitats, especially threaten this species in Georgia.

Georgia Conservation Status: The freckled darter is a rare species and has been collected only 53 times since 1950, based on occurrence records in the Georgia Museum of Natural History. Annual surveys in the Conasauga and Etowah rivers over the past decade or more (through 2008) suggest a small spottily distributed population, with continued occurrences at the same collection sites.

Conservation and Management Recommendations: The freckled darter requires swift-flowing habitats in medium to large streams with good water quality. Maintaining populations of this species in Georgia depends on maintaining in-stream habitat quality in the less-impacted upstream portions of the Conasauga and Etowah rivers. This can be accomplished by eliminating sediment runoff from land-disturbing activities (such as roadway and housing construction) and inputs of contaminants (such as fertilizers and pesticides), while maintaining both forested buffers along the banks of the rivers and their tributary streams and natural stream-flow patterns (by preventing excessive water withdrawal or unnaturally flashy runoff such as from urban storm water runoff). The freckled darter and other fishes that similarly depend on riffle and run habitats are

especially vulnerable to stream-flow depletion, because habitats with swift currents are diminished at low flows. Technical guidance on how to minimize the impacts of development on sensitive fishes is available through the Etowah HCP website.

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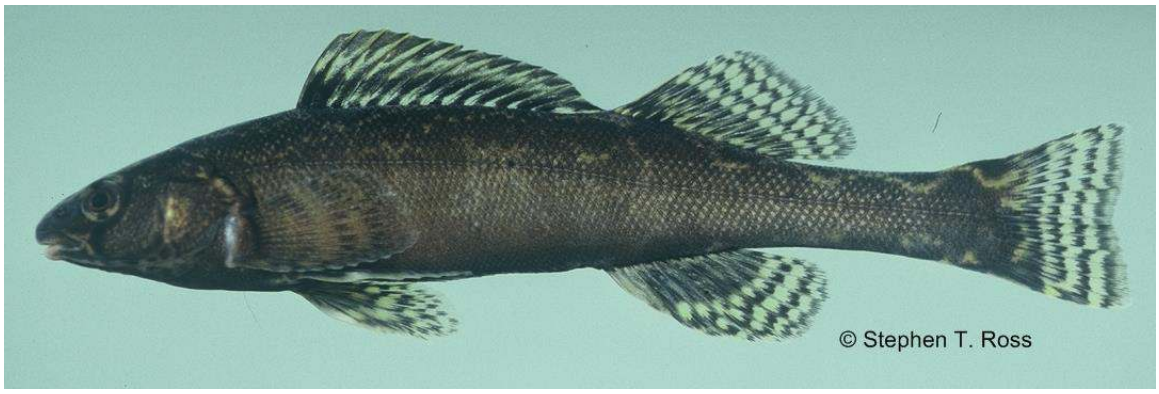
Author of Account: Byron J. Freeman

Date Compiled or Updated:
B. Freeman, 1999: original account
K. Owers, Jan, 2009: Added picture, updated status and ranks, added fish atlas link, converted to new format, minor edits to text
B. Freeman – updated July 2009, added photo, general account update
Z. Abouhamdan, April 2016: updated links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