



**Common Name:** ROCK DARTER

**Scientific Name:** *Etheostoma rupestre* Gilbert and Swain

**Other Commonly Used Names:** none

**Previously Used Scientific Names:** none

**Family:** Percidae

**Rarity Ranks:** G4/S2

**State Legal Status:** Rare

**Federal Legal Status:** none

**Description:** The rock darter has a small, subterminal mouth, and a blunt (downcurved instead of pointed) snout that is connected to the upper jaw by a fleshy bridge of tissue (the frenum). It reaches about 84 mm (3 $\frac{3}{8}$  inches) total length. Its large pectoral fins and six, square-shaped dorsal saddles are prominent when viewed from above. There are 6-9 markings on the sides that can be represented as either blotches or vertical bars. Dark markings are usually evident before and below the eye and on the base of the pectoral fin. Breeding males have green in all fins, as blotches along the sides, and on the underside of the head.

**Similar Species:** The speckled darter (*Etheostoma stigmaeum*) also has six dorsal saddles, but these are hour-glass shaped rather than square. The speckled darter is further differentiated by lacking a frenum and having smaller pectoral fins. Coosa darter (*E. coosae*) and holiday darter (*E. brevirostrum*) also have blunt snouts, but lack frenums and have more (8-9) dorsal saddles than the rock darter.

**Habitat:** As both its scientific and common names suggest, the rock darter occurs over rocky substrates in swift riffles. It is often associated with riverweed (*Podostemum ceratophyllum*). A study in the Etowah River found that rock darters were three times more likely to occur when riverweed is present in a single seine-sample than when it is absent. Most Georgia records are from large rivers, such as the Conasauga and Etowah River mainstems.

**Diet:** No diet studies have been completed for the rock darter. Like other darters, it probably preys on aquatic insects and other aquatic invertebrates.

**Life History:** Very little is known about the biology of this species. Breeding occurs between late March and May. Clutch size ranged from 18-94 eggs for a population studied in Alabama. Length frequency data suggests a lifespan of at least 3 years.

**Survey Recommendations:** Disturbing the substrate upstream of a kick-set seine is an effective technique for capturing many darter species. Backpack electrofishing upstream of a seine is also effective, but may cause mortality of the rock darter and many other protected species with which it occurs.

**Range:** The rock darter is endemic to the Mobile Basin in Mississippi, Alabama, Georgia, and a small portion of Tennessee. Most Georgia records are from the mainstem of the Conasauga and Etowah Rivers, but the rock darter is also known from the Coosawattee and Oostanaula River systems. Check the [Fishes of Georgia Webpage](#) for a watershed-level distribution map.

**Threats:** Non-point pollution associated with agriculture and residential development are primary threats in the Conasauga system. The Etowah population is threatened by urbanization and water supply development.

**Georgia Conservation Status:** The largest populations of this species in Georgia occur in the Etowah and Conasauga mainstems. Some of the headwater streams in these systems occur on public lands.

**Conservation and Management Recommendations:** Conserving populations of the rock darter will require a watershed-level focus. Incentive programs to help farmers implement best-management practices could improve instream habitat by decreasing sediment, nutrient, and chemical runoff and increasing riparian forest cover. Conservation groups should work cooperatively with developers and local governments to minimize the impacts from new home construction and commercial development. Additional water withdrawals and impoundments should be minimized by promoting water conservation practices and augmenting existing water storage whenever possible.

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