



A new species of *Percina* (Perciformes: Percidae) from the Apalachicola River drainage, southeastern United States

MARY C. FREEMAN^{1,4}, BYRON J. FREEMAN², NOEL M. BURKHEAD³ & CARRIE A. STRAIGHT²

¹U. S. Geological Survey, Patuxent Wildlife Research Center, Athens Georgia 30602, USA

²Georgia Museum of Natural History and Odum School of Ecology, University of Georgia, Athens, Georgia 30602, USA.

E-mail: bud@trout.ecology.uga.edu; carrie@trout.ecology.uga.edu

³U. S. Geological Survey, 7920 NW 21st Street, Gainesville, Florida 32653, USA. E-mail: nburkhead@usgs.gov

⁴Corresponding author. E-mail: mcfreeman@usgs.gov or mary@trout.ecology.uga.edu

Abstract

Percina crypta, the Halloween Darter, is described as a new species endemic to the Chattahoochee and Flint River systems in Georgia and Alabama. *Percina crypta* differs from sympatric *Percina nigrofasciata* in having narrowly separated dorsal saddles (inter-saddle spaces typically less than or equal to saddle width, compared to frequently wider than saddle width in *P. nigrofasciata*), in usually possessing a single modified scale between the pelvic bases (compared to two or more in *P. nigrofasciata*), and in having dark wide bands on pectoral-fin rays (versus pectoral fin clear, or with irregular dark marks or weak tessellations on fin rays in *P. nigrofasciata*). Phylogenetic relationships of *P. crypta* to other species of *Percina* are obscure. *Percina crypta* occurs in shoal and riffle habitats in the Chattahoochee and Flint River mainstems and in a few tributary systems, with the known extant range comprising four disjunct areas separated by mainstem impoundments and altered river reaches.

Key words: *Percina crypta*, *Percina nigrofasciata*, Chattahoochee River, Flint River, Halloween Darter, Blackbanded Darter

Introduction

Historically, only a single species of the genus *Percina*, *P. nigrofasciata* (Agassiz), has been reported from the Apalachicola River drainage, Georgia, Alabama and Florida, USA. Herein we describe a new species of *Percina*, endemic to the Chattahoochee and Flint River systems of the Apalachicola River drainage. The new species is sympatric with *P. nigrofasciata*, which it cryptically resembles and with which it is often collected.

Percina nigrofasciata, the Blackbanded Darter, occurs in Atlantic Coast drainages from the Edisto River in South Carolina to peninsular Florida and on the eastern Gulf Coast from the Suwannee River westward to Thompson Creek, an eastern tributary of the Mississippi River, in Mississippi and Louisiana (Crawford 1956; Guillory 1976). Across its range, *P. nigrofasciata* occurs in a variety of flowing-water habitats including small tributaries and larger rivers in the Blue Ridge, Piedmont and Coastal Plain physiographic provinces (Crawford 1956; Boschung & Mayden 2004). The species also is notably variable in pigmentation, particularly in the number and elongation of the vertical lateral bars that give the species its common name.

Noting variability in appearances and habitats occupied, Ronald W. Crawford examined geographic variation in meristic and morphometric characters of *P. nigrofasciata* in the 1950's. Crawford (1956) recognized two subspecies: *P. nigrofasciata raneyi*, restricted to the Savannah River drainage above the Fall Line, Georgia and South Carolina, and *P. nigrofasciata nigrofasciata*, regarded as eight geographic races based on modal