



## Two new species of Leptoceridae (Trichoptera) from Florida, USA

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### Abstract

Diagnoses, descriptions, and illustrations of male and female genitalia are given for two new species of Leptoceridae: *Setodes chipolanus* n. sp. from limestone-bottom streams within the Chipola River Basin and *Ceraclea limnetes* n. sp. from small natural lakes lying within the Munson Sandhills of the Apalachicola National Forest.

**Key words:** Trichoptera, Leptoceridae, *Setodes*, *Ceraclea*, caddisfly, new species, Apalachicola National Forest, Florida

### Introduction

Ongoing faunal surveys of aquatic insects in Florida have resulted in the discovery of a number of caddisfly species new to science. In this paper, two new species of Leptoceridae are described, one in the genus *Setodes* Rambur and one in the genus *Ceraclea* Stephens. With these new species, a total of two species of *Setodes* and 13 named species of *Ceraclea* are now known in Florida (see Pescador *et al.* 2004).

*Setodes* is a large genus of Leptoceridae comprising more than 200 species (Schmid 1987). Members of the genus are found on all continents except South and Central America. With the description of this new species, a total of nine North American species of *Setodes* are known, all of them occurring in eastern North America. A thorough review of adult males and females, except the female of *S. guttatus* (Banks) which was unknown at the time, was provided by Holzenthal (1982). In that publication, two new species of *Setodes* from the Southeastern Coastal Plain, *S. dixiensis* Holzenthal and *S. arenatus* Holzenthal, were also described. The female of *S. guttatus* was later described by Holzenthal and Harris (1985). Larvae of eight North American species were described and keyed by Nations (1994). Prior to that Merrill and Wiggins (1971) provided descriptions and illustrations of the larva, pupa, and adult of *S. incertus* (Walker). In addition, they also observed case-building and burrowing behavior of this species. *Setodes* larvae are known to be adept at burrowing in sand and are most often collected in fast-flowing streams within sandy deposits on the leeward sides of rocks or in sandy pockets on limestone shoals.

As noted above, two *Setodes* species are known in Florida, *S. chipolanus* n. sp. and *S. guttatus*. *Setodes chipolanus* n. sp. appears to be endemic to the Florida panhandle, specifically the Chipola River and its tributaries. The streams in this region are calcareous, spring-fed systems flowing through an area of karst topography. Adults of *S. chipolanus* n. sp. and *S. guttatus* were collected together in light traps from several localities along the Chipola River and from Rocky Creek, a tributary of the Chipola River. Larvae of *Setodes* collected from this region were examined by Victoria Nations who identified three possible species in the collections: *S.*