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# Conserving South Carolina's At-Risk Species:

## *Species facing threats to their survival*

### Septima's clubtail

(*Gomphus septima*)



*Septima's clubtail*/Photo credit: Will Cook

### Description

The Septima's clubtail is a medium sized dull green and brown dragonfly with nearly absent lateral thoracic stripes, no black facial stripes, and a small abdominal club which has small pale lateral spots. Larvae of the species are undescribed. The flight period has moved forward by a week to 10 days over the past decade, once being quite rare before very late April. Now the flight period is mid-April to the end of May, and sparingly to mid-June – with peak during the first half of May. Males perch on the ground near rivers, but they also perch on rocks in the rivers.

### Range

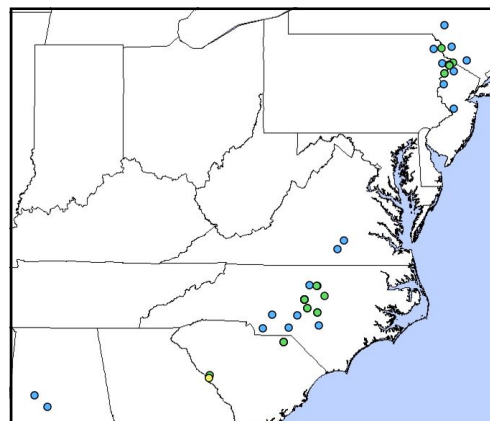
The species has a disjunct range, occurring in a narrow northeast-southwest band from southern NY through central NC, and sparingly southwest to central AL. Known from approximately 16 rivers (most in NC) it is absent so far from DE, MD, and GA. In SC, the species is known from Chesterfield and McCormick Counties.

### Habitat

Septima's clubtail breeds in clean, high-quality, fast rivers and very large streams that are well oxygenated but not too cold. Adults forage from the ground or trees.

### Status

The U.S. Fish and Wildlife Service was petitioned to list the species in April 2010 and published a substantial 90-day finding in September 2011 indicating listing may be warranted. Despite being uncommon and widespread with a rather limited range, documented occurrences have been increasing in the past few years. Until about 15 years ago, the species was apparently only known from NC and AL and was one of the rarest dragonflies in the eastern United States. It has since been found far to the north in NY, PA, and NJ. Researchers in NC indicate the species is clearly on the increase in the state, and is now one of the more readily found clubtails along the larger rivers in the eastern third of the Piedmont.



*Septima's clubtail* occurrences - accepted and pending (yellow dots)

### Threats

Dragonflies are closely tied to aquatic environments. Depending on species, an individual dragonfly may spend months to years in the aquatic larval or nymph stage, and only a few weeks as a flying adult. Many of the 154 species of dragonflies found in SC have specific habitat requirements, and changes in the condition of rivers, streams, ponds and swamps will likely affect the assemblages. In that way, dragonflies can indicate the integrity of

freshwater habitats. Threats to the integrity of those habitats include alterations associated with agricultural practices, commercial and residential developments that result in sedimentation, bank destabilization and potential degradation of water quality from pesticide and fertilizer runoff.

### Management/Protection Needs

Incentive programs to help farmers implement best-management practices could improve instream habitat by decreasing sedimentation and runoff and increasing riparian forest cover. Forestry operations should follow best-management practices for water quality. Outreach and education to developers and local governments will assist with sharing information about minimizing the impacts from new home construction and commercial developments. There is also a need for additional surveys to document new populations and for periodic monitoring of known populations.

### References

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- Contact**
- U.S. Fish & Wildlife Service  
South Carolina Field Office  
843/727-4707  
[christopher\\_hernandez@fws.gov](mailto:christopher_hernandez@fws.gov)