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# Conserving South Carolina's At-Risk Species:

## *Species facing threats to their survival*

### Mountain river cruiser (Margarita river skimmer) (*Macromia margarita*)



Female Mountain river cruiser

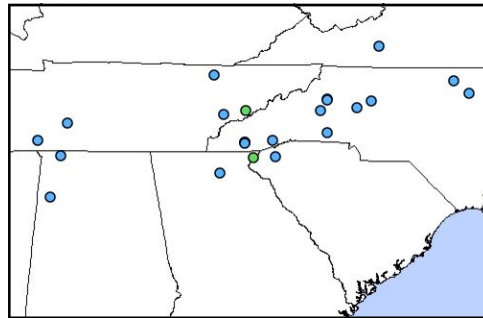
#### Description

The Mountain river cruiser is a large metallic black dragonfly with a yellow band around the thorax. Males have yellow bands on abdominal segment 2 and 7, that on 2 are interrupted dorsally. In females, these bands are interrupted laterally. The larvae of the species are undescribed. Males have brilliant green eyes and the face is black with a yellow band across the middle and a pair of small yellow spots above. Females are colored much like the males but the lower half of the eyes is duller. Abdominal spots are usually larger than those of male. Females have a cylindrical abdomen with no hint of a club. Their wings are tinged with brown at maturity. Flight is mid-May and August with possibly 2 flight periods. Males patrol lengthwise along creeks and rivers but how often they fly and perch away from breeding sites has not been reported.

#### Range

The species is recorded from Alabama, Georgia, North Carolina, South Carolina, Tennessee and Virginia. Formerly

thought to be endemic to the southern Appalachians, several recent records exist for the Piedmont of North Carolina, west-central Tennessee, and northwestern Alabama. In South Carolina, the species has only been recorded in Pickens County.



Mountain river cruiser occurrences; Source - OdonataCentral.

#### Habitat

Their preferred habitat is mountain, sometimes piedmont, streams and rivers with good current and high water quality, forested watersheds, and silt deposits among rocks.

#### Status

The species is considered vulnerable with a limited number of known occurrences (less than 20). All known populations are small. 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.

#### 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 South Carolina 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 development 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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