

Cedar Creek Crayfish

Procambarus chacei

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DESCRIPTION

Taxonomy and Basic Description

This species is very similar to the Black Mottled Crayfish (*Procambarus enoplosternum*), and there is a concern that the two species may be synonymous (Hobbs 1981, 1989). It is also closely related to or conspecific with the Waccamaw Crayfish, *P. braswelli* (W. Poly, pers. obs.).

The chelae of *P. chacei* are slender and elongate and covered in tubercles. The fingers of the chelae are not gaping and have well-developed longitudinal ridges on the upper and lower surfaces. This species is greenish-tan in color with darker specks on the rostrum and black saddle-like markings. The chelae are greenish tan with dark and light spots and reddish fingers, while the legs are pale greenish-cream (Hobbs 1958).

Status

NatureServe (2011) has identified *P. chacei* as imperiled (S2) in Georgia and apparently secure (S4) in South Carolina. The Cedar Creek Crayfish was considered to be currently stable in Georgia and South Carolina by Taylor et al. (2007).

POPULATION SIZE AND DISTRIBUTION

P. chacei is found in streams from the Wateree and Congaree River Basins in South Carolina to the Ogeechee and Canoochee River Basins in eastern Georgia. It has been recorded in 18 Coastal Plains counties in South Carolina (A. Eversole, Clemson University, pers. comm., 2004; SCDNR stream assessment data).



HABITAT AND NATURAL COMMUNITY REQUIREMENTS

This species is found in Coastal Plain streams (Hobbs 1989). *P. chacei* frequents swamps, ponds, lakes, roadside ditches, springs and streams. It occurs in lentic and lotic habitats and burrows (A. Eversole, pers. comm.).



photo by
Jennifer Price
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CHALLENGES

Little is known about *P. chacei* or its conservation status. Surveys are needed to provide more information on all aspects of its natural history. Both morphological and genetic work are needed on this species, which may be conspecific with *P. enoplosternum* (Hobbs 1981, 1989) and *P. braswelli* (W. Poly, pers. obs.).

CONSERVATION ACCOMPLISHMENTS

Significant distribution records of *P. chacei* have been gathered from the South Carolina Stream Assessment (2006–2011), adding 13 counties to the known distribution of the species for a total of 18 counties. These data have considerably expanded the species' known range in South Carolina.

CONSERVATION RECOMMENDATIONS

- Conduct research to determine the range, population densities, and habitat associations for *P. chacei*.
- Conduct taxonomic studies to determine the relationship between *P. enoplosternum* and *P. chacei*.

MEASURES OF SUCCESS

Describing the range, population densities, and habitat associations for *P. chacei* may be considered a measure of success. Additionally, completion of taxonomic studies to determine the relationship between *P. enoplosternum* and *P. chacei* would be considered a sign of success.

LITERATURE CITED

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