

Broad River Spiny Crayfish

Cambarus spicatus

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DESCRIPTION

Taxonomy and Basic Description



NCWRC

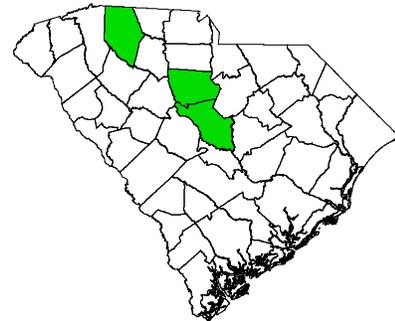
The Broad River Spiny Crayfish is gray-green with cream, pink, purple, and brown highlights. The chelae are green with orange tips and a double row of tubercles (NCWRC 2005). The rostrum has marginal spines, and the chelae are broad with long fingers. The holotypic, allotypic and morphotypic specimens ranged from about 60-78 mm (2.4-3.1 in.) in length (Hobbs 1956a).

Status

Taylor et al. (2007) recommended that the Broad River Spiny Crayfish be listed as vulnerable in both North and South Carolina. The National Museum of Natural History considers it to be of special concern. NatureServe (2011) currently identifies this crayfish with a ranking of imperiled (S2) in North Carolina and vulnerable (S3) in South Carolina. Recently, the Broad River Spiny Crayfish was included on a list of 404 species being petitioned for consideration as candidates for federal protection (United States Fish and Wildlife Service 2011).

POPULATION SIZE AND DISTRIBUTION

The Broad River Spiny Crayfish is restricted to the Broad River Basin. In South Carolina, it is found in Fairfield, Richland, and Spartanburg Counties. It has a more restricted distribution in North Carolina. It is not very abundant at any of the sites at which it has been found (Eversole 1995) and was not collected at any of 59 South Carolina Stream Assessment random sites in the Broad River basin during 2010 (Poly 2010).



HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The streams in which the Broad River Spiny Crayfish has been found exhibit signs of flash flooding, including sand deposits and log jams. This species is usually found in or beneath debris (Eversole 1995). Many of the Broad River tributaries sampled in 2010 appeared to have degraded habitat, possibly unsuitable for *C. spicatus*, but the species was not present in a high quality habitat site such as London Creek (Cherokee Co.) based on multiple samples with several gear types (Poly 2010). An occasional *C. spicatus* was caught in eel traps in the Broad River during 2010–2011. The species might prefer primarily large river habitats (Poly 2010).

CHALLENGES

Due to the fact that the Broad River Spiny Crayfish is not abundant when collected, concern exists that its status may need to be upgraded. Because the Broad River Spiny Crayfish has a very restricted distribution and surveys for it are not recent, updated surveys are needed to determine if it is in decline, stable, or increasing. Research on the life history and habitat preferences of this species is also greatly needed because we currently lack this information.

CONSERVATION ACCOMPLISHMENTS

There are no significant conservation accomplishments specifically for the Broad River Spiny Crayfish at this time.

CONSERVATION RECOMMENDATIONS

- Conduct additional surveys to determine the range and habitat preferences for the Broad River Spiny Crayfish.
- Based on surveys, investigate the need to upgrade the South Carolina special concern status for the Broad River Spiny Crayfish from S3 to S2.

MEASURES OF SUCCESS

An increase or no net decrease in numbers of individuals collected in future surveys would be considered a sign of success.

LITERATURE CITED

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