

Mimic Crayfish

Distocambarus carlsoni

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DESCRIPTION

Taxonomy and Basic Description

The dorsal surface of the carapace is reddish- or greenish-brown. The dorsal surface of the thoracic region is also dark, but the ventral surface is a lighter lavender-cream color. The tail is tan and pinkish, and the chelae are lavender with a dark brown dorsal stripe and 5 to 7 tubercles on the mesial surface. The first few adult specimens collected ranged from about 50-62 mm (2-2.5 in.) in total length (Hobbs 1983).

Status

NatureServe (2011) does not currently identify a ranking in South Carolina for the Mimic Crayfish, but it lists its global ranking as imperiled to vulnerable (G2/G3). It was considered to be a threatened species by Taylor et al. (2007). Recently, the Mimic Crayfish was included on a list of 404 species being petitioned for consideration as candidates for federal protection (USFWS 2011).



POPULATION SIZE AND DISTRIBUTION

The Mimic Crayfish is a terrestrial obligate burrower endemic to South Carolina, and is known only from 7 counties in the western Piedmont (Hobbs 1989, USNM records).

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

Not much is known about the habitat requirements of the Mimic Crayfish. Like other primary burrowers, soil type is probably critical in determining its distribution. Hobbs (1983) described the habitat at the type locality as a swampy area with a water table fluctuating from the surface to 0.8 m (31.5 in.) below. The soil was described as sandy clay, with areas rich in hummus and a leaf litter. It was shady and had a canopy composed of sweet gum, tulip tree, alder, and several pine and oak species.

CHALLENGES

More research is needed to determine more specifically the distribution and habitat associations of the Mimic Crayfish within this region. The SWAP panel of experts was very concerned that this species may be in decline, although it is difficult to determine with limited data.

CONSERVATION ACCOMPLISHMENTS

There are no significant conservation accomplishments specifically for the Mimic Crayfish at this time.

CONSERVATION RECOMMENDATIONS

- Conduct research to determine the distribution, habitat associations, and population status of the Mimic Crayfish.
- Investigate the need to initiate the process to achieve special concern status for the Mimic Crayfish in South Carolina.
- Develop and conduct landowner and general education programs that stress the unique nature of terrestrial burrowing crayfish and their importance in South Carolina.

MEASURES OF SUCCESS

The collection of data that better describes the distribution, habitat associations, and population status of the Mimic Crayfish may be considered a measure of success. Assessing participation in education programs would assist in measuring success of the programs.

LITERATURE CITED

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