

Saluda Burrowing Crayfish

Distocambarus hunteri

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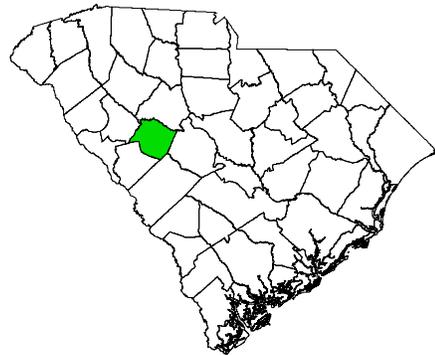
DESCRIPTION

Taxonomy and Basic Description

The color of the Saluda Burrowing Crayfish is variable, from lighter brown in recently molted individuals to darker brown in older intermolts. The thoracic sections are mottled and fade to reddish-brown posteriorly. The chelae are ash-brown with dark brown tubercles and reddish tips. The species has small, pigmented eyes and occasionally has one cervical spine on the carapace. Adult individuals examined in the process of describing this species ranged from approximately 35-58 mm (1.4-2.3 in.) in length (Fitzpatrick and Eversole 1997).

Status

NatureServe (2011) does not currently identify a state ranking for Saluda Burrowing Crayfish, but it tentatively lists the global ranking as potentially critically imperiled (G1?). Endangered status was recommended for this species by Taylor et al. (2007).



POPULATION SIZE AND DISTRIBUTION

The Saluda Burrowing Crayfish is a very rare, obligate burrower that is endemic to South Carolina. Only 2 populations are known, both of which are in the Saluda River Basin in Saluda County (Fitzpatrick and Eversole 1997).

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The type locality for the Saluda Burrowing Crayfish consists of wet, sandy soils with a relatively high water table in a forest with an overstory of loblolly pine, red maple, willow oak, and American elm. This species digs burrows among root mats (Fitzpatrick and Eversole 1997).

CHALLENGES

There is concern that *D. hunteri* may be endangered; however the status of this species is difficult to determine with the limited data currently available. Given its restricted distribution, *D. hunteri* should be protected. If the distribution of *D. hunteri* is actually as restricted as it appears, one or two development projects in the vicinity of its habitat could result in the global extinction of this species.

CONSERVATION ACCOMPLISHMENTS

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

CONSERVATION RECOMMENDATIONS

- Conduct surveys in the Saluda drainage to look for additional populations of *D. hunteri*.
- Investigate the need to initiate the process to achieve South Carolina special concern status for *D. hunteri*, based on survey results.
- Develop and conduct landowner and general education programs that stress the unique nature of terrestrial burrowing crayfish and their importance in South Carolina.
- Preserve habitat where *D. hunteri* is found through conservation easements or land acquisition.

MEASURES OF SUCCESS

Assessing participation in education programs would assist in measuring the success of these programs.

LITERATURE CITED

- FitzPatrick, J.F. and A.G. Eversole. 1997. A new crawfish of the genus *Distocambarus*, subgenus *Fitzcambarus* (Decapoda: Cambaridae) from South Carolina. *Proceedings of the Biological Society of Washington* 110(2):272-279.
- NatureServe. 2011. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>.
- Taylor, C.A., G.A. Schuster, J.E. Cooper, R.J. DiStefano, A.G. Eversole, P. Hamr, H.H. Hobbs III, H.W. Robison, C.E. Skelton, and R.F. Thoma 2007. Reassessment of the Conservation Status of Crayfishes of the United States and Canada after 10+ Years of Increased Awareness. *Fisheries*. 32(8):372–389.