

Carolina Sandhills Crayfish

Procambarus pearsei

Contributor (2005): Jennifer Price
(SCDNR)

Reviewed and Edited (2012): William Poly
(SCDNR)

DESCRIPTION

Taxonomy and Basic Description

The Carolina Sandhills Crayfish is a small species, cylindrical in shape, and light brown in color with pastel highlights and often with dark speckles. The chelae are large but not robust (NCWRC 2005). Adult specimens examined in the process of writing the original description of the Carolina Sandhills Crayfish ranged from approximately 48-58 mm (1.9-2.3 in.) in length (Creaser 1934). A re-description of the Carolina Sandhills Crayfish was recently published (Cooper 2011b).



Status

NatureServe (2011) currently identifies the ranking of the Carolina Sandhills Crayfish as vulnerable (S3) in South Carolina and apparently stable (S4) in North Carolina. Taylor et al. (2007) listed the species as currently stable in North and South Carolina.

POPULATION SIZE AND DISTRIBUTION

The majority of the range of the Carolina Sandhills Crayfish is in North Carolina, but it does extend into the Waccamaw and Lumber-Little Pee Dee River Basins of South Carolina (Cooper 2011). It has been found in 5 counties in South Carolina and also might be expected to occur in other nearby counties (SCDNR stream data, Cooper 2011).



HABITAT AND NATURAL COMMUNITY REQUIREMENTS

Generally, the Carolina Sandhills Crayfish is found in lentic waters and subterranean burrows. It is a secondary burrower (NCWRC 2005). Hobbs (1989) listed it as being found in streams, so it may be able to inhabit a wide variety of habitats.

CHALLENGES

Our experts recommend that the Carolina Sandhills Crayfish be designated as a species of special concern in South Carolina due to an apparently restricted distribution. More research is needed on the habitat associations and distribution of this species before it can be determined if this ranking is appropriate.

CONSERVATION ACCOMPLISHMENTS

A re-description of the species, update of its distribution, and limited life history information was recently published (Cooper 2011b).

CONSERVATION RECOMMENDATIONS

- Conduct research on the life history and habitat requirements of the Carolina Sandhills Crayfish.
- Investigate the need to initiate the process to achieve special concern status for the Carolina Sandhills Crayfish in South Carolina.

MEASURES OF SUCCESS

The collection of data that better describes the life history and habitat requirements for the Carolina Sandhills Crayfish may be considered a measure of success.

LITERATURE CITED

- Cooper, J.E. 2011b. Redescription and distribution of the crayfish, *Procambarus (Ortmannicus) pearsei* (Creaser, 1934) (Decapoda: Cambaridae), with notes on its biology. *Proceedings of the Biological Society of Washington* 124(1): 9–22.
- Creaser, E.P. 1934. A new crayfish from North Carolina. *Occasional papers of the museum of Zoology, University of Michigan*. 285, 4 pages, figures 1-3.
- Hobbs, H.H. Jr. 1989. An Illustrated Checklist of the American Crayfishes (Decapoda: Astacidae, Cambaridae, and Parastacidae). *Smithsonian Contributions to Zoology*. 480. 236 pp.
- NatureServe. 2011. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>.
- North Carolina Wildlife Resources Commission (NCWRC). The Crayfishes of North Carolina. Accessed March 2005. http://www.ncwildlife.org/pg07_wildlifeSpeciesCon/nccrayfishes/nc_crayfishes.html.
- 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.