

Devil crayfish - *Cambarus diogenes*

Abundance: Unknown

Status: NSSU

NatureServe: G5 SNR

Population Status: Unknown

Limiting Factor: Unknown

Comment: None

Introduction

Devil crayfish (*Cambarus diogenes*) are olive or tan in color (Pflieger 1996). These crayfish may have orange or red tips on their pincers and along the margins of their body (for example, rostrum, abdominal segments, and tail). Some specimens have one or three stripes along the midline of their abdomen. Form I males (breeding males) are 7.9 to 12.2 cm (3.1 to 4.8 inches) in length, whereas mature females are smaller (7.1 to 10.2 cm or 2.8 to 4.0 inches in length). Devil crayfish have a large native range, extending from Ontario to Texas and Wyoming to North Carolina (NatureServe 2009). This crayfish is considered imperiled (New York) to secure (Illinois, Louisiana, Alabama, Georgia, and Tennessee) across the range, and is not found outside its native range. Little is known about the life history of the devil crayfish, because this species lives in burrows. These crayfish construct burrows with one to multiple entrances along streams or in wetlands (Pflieger 1996). At the burrow entrance, devil crayfish can build chimneys up to 30.5 cm (12 inches) in height. The devil crayfish is thought to eat terrestrial vegetation and other organic matter while out of the burrow on moist nights. During dry times, the crayfish seals burrow entrances to retain moisture and exclude predators. Mating and rearing young may occur in burrows or in open water. Mating may occur in the fall and eggs likely hatch in spring. In Wyoming, the devil crayfish was collected in a tributary of the North Platte River (Horse Creek; Hubert 1988), but few collections were made in suitable habitat in eastern Wyoming. Furthermore, the burrowing nature of the devil crayfish makes this species difficult to collect.

Habitat

The devil crayfish builds burrows in forested habitats near temporary or permanent water, or where the water table is near the surface (Pflieger 1996). Females with young can be found in shallow surface waters until the young disperse and build burrows. Because of their burrowing nature, these crayfish are typically found in areas with fine sediment.

Problems

h Females tend to rear young in temporary waters without fish.

Conservation Actions

h None.

Monitoring/Research

None.

Recent Developments

In 2009, the Wyoming Game and Fish Department personnel completed new statewide collections of crayfish to expand upon and update the survey by Hubert (1988). Hubert (2010) did not identify any devil crayfish; however, Horse Creek was not re-sampled in the recent survey nor any other streams in the North Platte River drainage.

References

Hubert, W. 1988. Survey of Wyoming crayfishes. *The Great Basin Naturalist* 48:370-372.

Pflieger, W.L. 1996. *The Crayfishes of Missouri*. Missouri Department of Conservation, Jefferson City, Missouri.

NatureServe. 2009. NatureServe Explorer: An online encyclopedia of life [web application] Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: January 14, 2010).

Hubert, W. A. 2010. Survey of Wyoming crayfishes: 2007-2009. Wyoming Game and Fish Department, Cheyenne.

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SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Game and Fish Department. A range map is unavailable for the taxa because distribution and ecology are poorly known in Wyoming.