

Stygobromus curroae (Curro's Amphipod)

No Photo Available

Taxonomy

- **Class:** MALACOSTRACA
- **Order:** CRUSTACEA
- **Family:** CRANGONYCTIDAE
- **Genus:** Stygobromus
- **Scientific Name:** *Stygobromus curroae* Wang and Holsinger, 2001
- **Common Name:** Curro's Amphipod
- **Synonyms:**
- **Taxonomic Name Source:** ITIS. 2024. Integrated Taxonomic Information System (ITIS). Available at: <https://www.itis.gov/>.

Agency Status

- **NMDGF:**
- **Federal Status:**
- **BLM Sensitive:**
- **USFS:**
- **IUCN Red List:** [Not Evaluated](#)
- **Nature Serve Global:** [G1](#)
- **NHNM State:** S1
- **NM Endemic:** YES

Description

Curro's Amphipod (*Stygobromus curroae*) is a small groundwater amphipod; the largest females and males are 4.8 mm and 4.5 mm, respectively. It is similar in form to *S. holsingeri* and *S. arizonensis*, but it can be distinguished by the following characteristics: maxillae one and two have fewer hairs on the inner plates; the palm of the propod of gnathopod one has more spine teeth; coxal plates three and four have more hairs; it has a relatively long distally expanded telson with 18-20 notched spines and a rather deep notch; uropods one and two have thicker longer spines; and it has tiny, simple, paired lateral sternal gills on pereonites six and seven (Wang and Holsinger 2001).

Habitat and Ecology

Like most other member of the suborder Grammaridea, this species is found in a subterranean environment; it was discovered in hyporheic groundwater, approximately 30 cm beneath Gallina Creek, where it was sampled with PVC pipe with a pump (Wang and Holsinger 2001). Restriction to groundwaters likely inhibits dispersal abilities, resulting in extreme isolation. Little else is known about the ecology of this species.

Geographic Range:

Curro's Amphipod (*Stygobromus curroae*) is endemic to New Mexico, where it is known only from the type locality, in groundwater beneath Gallinas Creek, near Taos, in the Sangre de Cristo Mountains (Wang and Holsinger 2001).

Conservation Considerations:

There are no conservation measures in place for this species. Though it has been petitioned for listing under the United States Endangered Species Act (ESA) (Rosmarino and Tutchtton 2007), the US Fish and Wildlife Service found the petition lacked substantial scientific information to warrant listing (USFWS 2009). Therefore, the species is not currently

protected under the ESA. Research is needed to better understand the distribution, population size and trend, habitats and ecology, and threats to this narrowly endemic species.

Threats:

The threats to this species are not known, as the habitat and ecology are not well understood. As the species is restricted to groundwater, any potential drawdown of the aquifer, as a result of increasing incidence and severity of drought due to climate change, for example, may be problematic. In addition, many species of *Stygobromus* are used as biological indicators of water quality and therefore, may be sensitive to groundwater pollution (Wang and Holsinger 2001).

Population:

Nothing is known about the population size and trend of this species. It is unclear whether it has been seen since the type specimen was collected in 1994 (Wang and Holsinger 2001).

References:

- Wang, D. and Holsinger, J.R.. 2001. Systematics of the subterranean amphipod genus *Stygobromus* (Crangonyctidae) in western North America, with emphasis on species of the *hubbsi* group. *Amphipacifica* 3: (39-147).
- [U.S. Fish and Wildlife Service \(USFWS\). 2009. Endangered and threatened wildlife and plants: Partial 90-day finding on a petition to list 475 species in the southwestern United States as Threatened or Endangered with Critical Habitat. Federal Register 74: \(419-427\).
<https://www.govinfo.gov/content/pkg/FR-2009-01-06/pdf/E8-31454.pdf>](#)
- Rosmarino, N.J. and Tutchtou, J.J.. 2007. A Petition to List All Critically Imperiled or Imperiled Species in the Southwest United States as Threatened or Endangered Under the Endangered Species Act, 16 U.S.C. §§ 1531 et seq.. Forest Earth Guardians, Santa Fe, NM .

More Information

