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First record of predation on the Guttural Toad, *Sclerophrys gutturalis* (Power, 1927), by the Singlespine River Crab, *Potamonautes unispinus* Stewart & PA Cook, 1998, at the University of Limpopo, Limpopo Province, South Africa

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Freshwater crabs are crucial components of freshwater ecosystems and are generally considered omnivorous, feeding on plant material, invertebrates, and occasionally small vertebrates (Rosa et al., 2014; Wehrtmann et al., 2019). They have been observed to prey on all stages of amphibians, including eggs, tadpoles, juveniles, and adults (Schäfer and Rödel, 2019). Previous records of freshwater crab predation on adult amphibians include: *Hydrothelphusa* sp. preying on *Boophis rufioculis* Glaw & Vences, 1997 in Madagascar (Rosa et al., 2014); *Liberonautes latidactylus* (de Man, 1903) preying on Allen's Giant Frog, *Conraua alleni* (Barbour & Loveridge, 1927), in Guinea (Schäfer and Rödel, 2019); *Potamon karpathos* Giavarini, 1934 preying on the Karpathos Water Frog, *Pelophylax ridibundus* (Pallas, 1771) in Greece (Christopoulos et al., 2024); and *Parathelphusa convexa* De Man, 1879 preying on the Oriental Narrow-mouthed Frog, *Microhyla orientalis* Matsui et al., 2013, in Indonesia (Eprilurahman et al., 2025). Wehrtmann et al. (2019) reported the freshwater crab *Ptychophallus uncinatus*,Campos & Lemaitre, 1999 holding the head of a frog *Cruziohyhla calcarifer* (Boulenger, 1902) in its cheliped in Costa Rica. Gutsche and Elepfandt (2007) represented the first record of *Potamonautes* sp. predating on *Xenopus laevis* (Daudin, 1802) in Mpumalanga Province, South Africa. There are also records of marine crabs preying on freshwater frogs; e.g., Pyke et al. (2013) reported that the marine crab *Leptograpsus variegatus* (Fabricius, 1793) preyed on a freshwater frog *Ranoidea aurea* (Lesson, 1830).

On 27 October 2025, an iNaturalist user observed an adult Singlespine River Crab, *Potamonautes unispinus* Stewart & PA Cook, 1998, eating a Guttural Toad, *Sclerophrys gutturalis* (Power, 1927), at the University of Limpopo, along the canal transporting wastewater (Fig. 1; 23.88529°S, 29.73862°E; elevation ~1314 m). The crab was witnessed gripping the toad by a hind limb and feeding on tissue from the limb. Based on the observer's information, the outcome of the predation was not recorded, and it remains unknown whether the toad survived. The Singlespine River Crab is widely distributed in the Limpopo River system and adjacent lowland catchments of southern Africa, where it shelters in rocks, boulders, and aquatic vegetation (Stewart and



Figure 1. Adult Singlespine River Crab (*Potamonautes unispinus*) feeding on an adult Guttural Toad (*Sclerophrys gutturalis*) at the University of Limpopo, Limpopo Province, South Africa. Photo by Dimakatjo Mothapo.

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Cook, 1998). It has also been reported in ecosystems exposed to high organic pollution and sewage inputs (Stewart and Cook, 1998; Dalu et al., 2016). Freshwater crabs may be more prevalent predators of amphibians than currently known, as such interactions are typically recorded opportunistically and occur often at night (Schäfer and Rödel, 2019; Wehrtmann et al., 2019). The majority of frogs are nocturnal and active during the warm, rainy months of the year. During the breeding season, several species form large aggregations near bodies of water (Phaka et al., 2017). This high activity can alert opportunistic predators such as crabs.

This is the first reported case of the Singlespine River Crab preying on anurans. The present observation offers new insights into the trophic ecology of the Singlespine River Crab and contributes to growing evidence that freshwater crabs can actively prey on adult amphibians or exhibit opportunistic predation when trapped together or space is constrained. The observation also underscores the importance of citizen science platforms for reporting various types of ecological interactions. Citizen science has been identified as a tool to mobilise information on species interactions (Groom et al., 2021), and images contributed to iNaturalist can provide ecological information beyond species occurrence records (Putman et al., 2021). Daniels et al. (2022) demonstrated that iNaturalist observations have a significant role in improving the understanding of freshwater crab biodiversity in southern Africa. The current record shows how observations from inside the community might document new predator-prey interactions of poorly known freshwater organisms.

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