



On the parental care of the dwarf snakehead (*Channa kelaartii*) in Sri Lanka

The dwarf snakehead, *Channa kelaartii* (Günther, 1861) is a freshwater fish, widely distributed in streams and ponds of Sri Lanka and south India (Sudasinghe *et al.* 2020). This paper describes a record of intraspecific aggression behavior exhibited by *C. kelaartii* as a display of parental care in a natural ecosystem, along with a few other observations on parental care and protective instincts. Fishes were identified in the field, based on their morphological characters.

Intraspecific aggression. On 17 June 2023 at 12:35 h, we observed a male *C. kelaartii* chasing another adult snakehead which was trying to get closer to its juveniles (~2 cm), possibly for predation, at Heel Oya (alt. 632 m a.s.l.; 7°18'51.5"N, 80°47'24.5"E), Central Province Sri Lanka. As soon as the invading adult crossed into the nesting territory, the parent fish swiftly directed its attention toward the invader. It positioned itself slightly ahead, protecting the school of juveniles, which were safely behind its pectoral fin level. Then the parent snakehead gradually tracked the movement of the invader, turning the body towards left and right and chasing the invader up to a distance ~50 cm. The parent snakehead attacked the invader in the post-dorsal region and the pelvic area (Fig. 1). After the chase, the parent fish promptly returned to the juveniles, ensuring their protection.

Protective instincts. On the same day at 08:40 h, we observed another nesting adult snakehead with juveniles. The adult was ~12 cm and juveniles were ~2.5 cm in length and the sex was not determined. It was in an isolated location from the only predators in the habitat which could prey on its juveniles: adult *C. kelaarti*. Other than snakehead, *Plesiopuntius bimaculatus*, *Devario malabaricus*, *Garra ceylonensis*, and *Lepidocephalichthys thermalis* were also recorded from the same habitat. This separation of the parent fish with juveniles might be an adaptation to reduce the likelihood of predation.

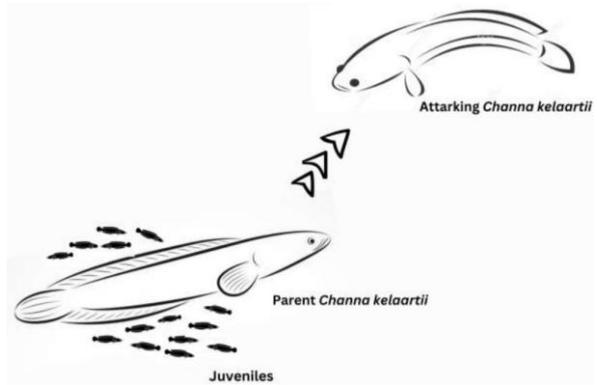


Figure 1. Parental care and intraspecific aggression displayed by a male snakehead towards another adult.

Habitat relationship. In both observations, juveniles were observed just below or slightly closer to the water surface (depth of the water column is ~5–6 cm) at littoral zones of the habitats, with a schooling behavior while the parent (either female or male) inhabited the bottom of the water column below the school of juveniles. Both habitats were shady, sandy to pebble substrate, and contained moderately flowing water.

Acknowledgements

This work was supported by the Biodiversity Educational Research Initiative (BERI) and Thema Collection Sri Lanka.

Literature cited

Sudasinghe, H., R. Pethiyagoda, M. Meegaskumbura *et al.* (2020). *Channa kelaartii*, a valid species of dwarf snakehead from Sri Lanka and southern Peninsular India (Teleostei: Channidae). *Vertebrate Zoology*, 70(2):157–170.

Submitted: 7 Jul 2023, Accepted: 30 Apr 2024
Section Editor: Upali S. Amarasinghe

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