

An observation of ovoviviparity in the Baleh Water Skink, *Tropidophorus sebi* Pui, et al., 2017

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Tropidophorus sebi is a semi-aquatic skink, known to be restricted to Putai in the Upper Baleh region of Kapit District, central Sarawak, East Malaysia, on the island of Borneo (1.5946°N, 113.7898°E; datum WGS84; Pui et al., 2017). The only known aspect of its life history is that it inhabits rocky streams. On 16 April 2020, at 19:44 h, a gravid *T. sebi* (snout–vent length, SVL = 91.5 mm; tail tip missing) was collected from within a rock crevice 17 cm deep, at the edge of a small rocky stream (1–4 m wide, 15–40 cm deep), in a hill dipterocarp forest. A visual inspection of its venter revealed two late-stage embryos and it weighed 16 g (Fig. 1). The individual was fitted with a BD–2T transmitter (Holohil Limited Systems, Canada) and observed for 8 days (18–26 April 2021), as part of a larger study of the spatial ecology and thermoregulation in this species.

The individual spent ca. 80% of the tracking period in a complex substrate structure of rocks, about 2 m from the stream. At the end of the tracking period the skink was recaptured and one embryo was missing, which we assume was released. The individual was brought back to lab for monitoring.

The female skink was housed in an Exo Terra® terrarium 60 x 45 x 45 cm (W x D x H), with artificial plants and places for concealment. To create a thermal gradient in the terrarium, between 23–32°C, one side of the tank was kept dry, with a 4 cm deep substrate and one lighting system (Exo Terra Solar Glo UVA; 80 watts) placed directly over the dry side. A moist side was created using moist substrate and no light source.

The thermal gradient was monitored using an Exo Terra Digital Combometer (PT2470; accuracy 0.1°C). We fed the individual with Turkestan cockroaches and Mealworms. On 4 May 2021, a hatchling (SVL 64 mm; weight 0.56 g) was observed in the tank and it closely resembles the adult colouration (Fig. 2). The hatchling was fed live cockroach nymphs.

There is little published information on the reproductive habits of skinks of the genus *Tropidophorus*. Ovoviviparity in the genus has been recorded for multiple species, including the following: *T. berdmorei* (Blyth, 1853) and *T. laotus* Smith, 1923 by Smith (1935); *T. grayi* Günther, 1861, *T. misaminius* Stejneger, 1908, and *T. partelloi* Stejneger, 1910 by Brown and Alcalá (1980); *T. grayi* by Eggers (1999); *T. brookei* (Gray, 1845) by Inger and Greenberg (1966) and Goldberg (2010). Year-round breeding and multiple clutches were reported only for *T. brookei* (Goldberg, 2010). Our observations present the first report of ovoviviparity and birth of young in the months of April and May in *T. sebi*.

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Figure 1. Gravid *Tropidophorus sebi* (SVL 91.5 mm) showing two large embryos. Photo by Awang Khairul Ikhwan.



Figure 2. Female and day-old offspring of *Tropidophorus sebi*. Black line = 10 mm. Photo by Awang Khairul Ikhwan.