

## Predation of *Feihyla hansenae* (Hansen's bush frog) eggs by a nursery web spider

SINLAN POO<sup>1,2\*</sup>, FRANCESCA T. ERICKSON<sup>3</sup>, SARA A. MASON<sup>4</sup> & BRADLEY D. NISSEN<sup>5</sup>

<sup>1</sup>Memphis Zoo, 2000 Prentiss Place, Memphis, Tennessee 38112, USA

<sup>2</sup>Sakaerat Environmental Research Station, Wang Nam Khieo, Nakhon Ratchasima 30370, Thailand.

<sup>3</sup>U.S. Geological Survey Brown Treesnake Project, P.O. Box 8255 MOU-3, Dededo, 96912 Guam.

<sup>4</sup>Nicholas Institute for Environmental Policy Solutions, Duke University, Durham, North Carolina 27710, USA.

<sup>5</sup>Watershed Protection Department, City of Austin, 505 Barton Springs Road, Austin, Texas 78704, USA.

\*Corresponding author Email: sheilapoo@gmail.com

*Feihyla hansenae* (Cochran, 1927) is an arboreal-breeding frog distributed in Thailand, Cambodia, and Myanmar (Taylor, 1962; Aowphol et al., 2013). Eggs are laid in a gelatinous hemispherical clutch overhanging ponds and are cared for by female frogs until they hatch (Average egg stage = 5 days). Maternal care, viz. suppling water (Poo & Bickford, 2013) and deterring invertebrate predators (Poo et al., 2016a), is essential to the development and survival of eggs. The primary source of egg mortality is predation (Poo & Bickford, 2013). Known egg predators include ants, katydids, and snakes (Poo & Bickford, 2013; Poo et al., 2016b). In cases of partial clutch predation, threats from egg predators can lead to premature hatching in *F. hansenae* (Poo & Bickford, 2014), which can negatively affect the fitness and survival of hatchlings in subsequent life stages (Gomez-Mestre & Warkentin, 2007).

Here, we report the first observation of *F. hansenae* egg predation by a nursery web spider, *Nilus* cf. *albocinctus* (family Pisauridae, Fig. 1). Field observations were conducted at a dammed pond within the Sakaerat Biosphere Reserve in northeastern Thailand (14.5090° N, 101.9537° E, WGS 84). At 00.57 hrs on 24 July 2013, we observed an adult *N. cf. albocinctus* preying on a *F. hansenae* egg clutch (Fig. 1). The egg clutch was attached to a blade of grass and was located roughly 50 cm above the pond surface. Embryos within the egg clutch had not started neural fold development, and there was minimal egg jelly covering the outer surface of the clutch. Based on the developmental stage of embryos, the egg clutch was laid within 24 hours prior to the predation event. We concluded our observations five minutes later, with no change in spider behaviour. No female frog was observed to be caring for the egg clutch or present within the vicinity of the egg clutch during our observations.

Little is known about spider predation of frog eggs in Southeast Asia. However, in the Neotropics, spiders in the family Pisauridae are known to prey on adult and juvenile frogs (Menin et al., 2005). To our knowledge, *Nilus* species predation of frog eggs has not been reported for arboreal-breeding frogs in Southeast Asia thus far.



**Figure 1.** Predation of *F. hansenae* egg clutch by *N. cf. albocinctus*.

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