

# *African Herp News*

**Newsletter of the  
Herpetological Association of Africa**



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## NATURAL HISTORY NOTES

### PIPIDAE

#### *Xenopus laevis* (Daudin 1802) African Clawed Frog

### DIET

On 11 November 2013, we were seine netting Lamloch farm-stall dam, near Kleinmond (34°19'49"S, 19°04'55"E) to remove *X. laevis* whose numbers had built up to high levels at this site which is traditionally associated with *X. gilli* (cf. Measey & Davies 2011; Picker & De Villiers 1989). Upon capture, an adult male *X. laevis* (snout to vent length: 65.0 mm; head width: 16.6 mm; mass 28.0 g) regurgitated an adult male *Stongylopus grayii* (SVL 32.9 mm; HW 10.7 mm; remaining mass 2.8 g). The prey was partially digested (near the vent) suggesting that this item had been ingested some time previously, and that it had been captured from behind.

Invasive populations of *Xenopus laevis* are now documented from four continents, with some extensive work published on the ecology of these extralimital populations (see Measey *et al.* 2012 and references therein). The reputation of these frogs as voracious predators appears to be well deserved, as studies have documented that the diet to include fish (Lafferty & Page 1997; McCoid & Fritts 1980), mammals, birds (Measey 1998) and larval amphibians (Crayon 2005; Schramm 1987). Stewart (1967) observed *X. laevis* consume a post-metamorphic *Ametia* (presumably *A. angolensis* complex), although the relative sizes of these animals was not mentioned (also see Channing 2001). Other studies have inferred that the greatest effect that *X. laevis* populations may be on tadpoles of native species, but direct evidence is often lacking (Fouquet & Measey 2006; Lillo *et al.* 2005; Lobos & Measey 2002; Measey 1998). The difficulties of finding direct evidence of vertebrate meals have led some authors to speculate that predation pressure on other amphibians may be negligible (Lobos & Jaksic 2005). Compared to studies on invasive populations, there is still remarkably little known about the ecology of native southern African populations of *Xenopus laevis*.

Populations of *Xenopus laevis* are known to occupy the habitat of many threatened frogs in the southwestern cape, and at this site both *Microbatrachella capensis* (Critically Endangered) and *X. gilli* (Endangered) are known to breed. We suspect that large numbers of *X. laevis* at these sites are not only detrimental to these frogs due to competition, but also through direct predation of adults and presumably also tadpoles.

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Figure 1. Male *Xenopus laevis* regurgitating adult *Strongylopus grayii*.



Figure 2. Adult *Strongylopus grayii* (top) and *Xenopus laevis* (bottom).

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