



FIG. 1. *Leptophis ahaetulla* preying upon a *Osteocephalus taurinus*.

L. ahaetulla but assumed the “head-first” ingestion enhanced the foraging success of this gape-limited predator (Albuquerque et al. 2007, *op. cit.*). Unsuccessful predation attempts involving snakes and larger anurans may be related to the relative sizes of the predator and prey, which may be particularly difficult to subdue and immobilize (Costa and Trevelin 2020. Herpetol. Notes 13:649–660).

FABIO ANDREW GOMES CUNHA, Programa de Pós-Graduação em Ecologia Aquática e Pesca, Universidade Federal do Pará, 66075-110, Belém, Pará, Brazil (e-mail: fabioagcunha@gmail.com); **BELMIRO NETO**, Secretaria Municipal de Meio Ambiente, Juruti, Pará, 68170-000, Brazil (e-mail: belmiron1983@gmail.com); **RICHARD CARL VOGT**, Centro de Quelônios da Amazônia, Instituto Nacional de Pesquisas da Amazônia, Manaus, Amazonas, 69.067-375, Brazil (e-mail: vogt@inpa.gov.br); **RUAN LUCAS COSTA RIBEIRO BARBOSA** (e-mail: ruan.lucascrb45@gmail.com) and **CARLOS EDUARDO COSTA-CAMPOS**, Laboratório de Herpetologia, Departamento de Ciências Biológicas e da Saúde, Universidade Federal do Amapá, Campus Marco Zero do Equador, 68903-419, Macapá, Amapá, Brazil (e-mail: dududeducampos@gmail.com).

PELOPHYLAX RIDIBUNDUS (Marsh Frog). DIET. Some anurans (e.g., Pipoidea and Ranoidea) are known to consume other frogs (Measey et al. 2015. PeerJ. 3:e1204). *Pelophylax ridibundus* predominantly preys on various invertebrates but has also been reported to feed on small vertebrates, including fish, amphibians, reptiles, and rodents (Ruchin and Ryzhov. 2002. Adv. Amphib. Res. Form. Soviet Union 7:197–205; Mollov et al. 2010. Bulg. J. Agric. Sci. 16: 298–306). *Pelophylax ridibundus* are known to cannibalize their eggs, larvae, and juveniles (Ruchin and Ryzhov. 2002, *op. cit.*; Bogdan et al. 2012. Acta Zool. Bulg. 64:253–262; Cicort-Lucaciu et al. 2013. Biharean Biol. 7:33–36; Çiçek and Mermer. 2016. North-West. J. Zool. 2:57–72). The larvae and juveniles of *Rana arvalis* (Moor Frog) and *Pelobates fuscus* (European Common Spadefoot) have also been reported in the diet of *P. ridibundus* (Ruchin and Ryzhov. 2002, *op. cit.*).

At 21:11 h on 29 April 2023, in the region of the Fisher settlement south of Burgas City (42.4363°N, 27.5323°E; WGS 84; 3 m elev.), we observed a *P. ridibundus* preying upon a *Hyla orientalis* (Eastern Tree Frog). We did not observe the initial capture, as the *P. ridibundus* had mostly engulfed the *H. orientalis* when first observed (Fig. 1). About six minutes after the initial detection,

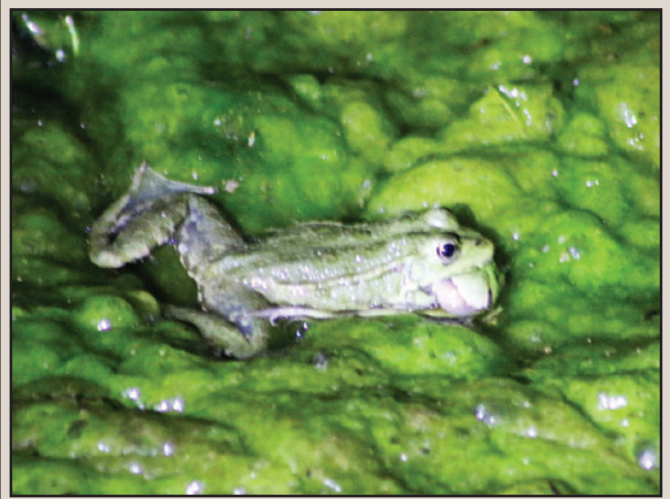


FIG. 1. *Pelophylax ridibundus* preying on an adult *Hyla orientalis* in the Region of Burgas City, Bulgaria.

the *P. ridibundus* dove under the algae with the *H. orientalis* in its mouth. The weather was cloudy, and the air temperature was 10°C. The water temperature was 12°C; water conductivity was 72 $\mu\text{s}/\text{cm}$; pH was 7.58; Chlorophyll content was 0.8mg/m³; the hydro-flora consisted mainly of *Zygonema* sp., *Spirogyra* sp. *Ceratophyllum demersum*, and *Lemna* sp.

In frogs, size positively correlates with the tendency toward anurophagy (Measey et al. 2015, *op. cit.*). The lack of a drastic size difference between adult *P. ridibundus* and *H. orientalis* makes our observation noteworthy. To our knowledge, this is the first record of a *P. ridibundus* preying on an adult anuran and the first record of *H. orientalis* as prey for *P. ridibundus*.

DIMITAR PAZDERKOV, Commercial High School, Mihail Lermontov 1, 8000, Burgas; (e-mail: mitkopazderkov@gmail.com); **KIRIL VALKANOV**, Faculty of Biology, Sofia University, Dragan Tzankov 8, 1164, Sofia; (e-mail: kirilvalkanov55@gmail.com); **MARKO IVANOV**, Herpetologica Ltd. Burgas, Bulgaria 8000 (e-mail: marco.ivanov@gmail.com); **NIKOLAY NATCHEV**, Department of Biology, University of Shumen, Universitetska 115, 9700 Shumen, Bulgaria, Department of Evolutionary Zoology, University of Vienna, Djerassiplatz 1, 1030 Vienna, Austria (e-mail: natchev@shu.bg).

RANA DRAYTONII (California Red-legged Frog). IDIOPATHIC CLOACAL PROLAPSE. *Rana draytonii* is a declining ranid species in California and northern Baja California (Thomson et al. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press, Berkeley, California. 408 pp.). It is critical to understand the mechanisms that may confound recovery of this species; therefore, reports of the conditions under which the species exists, particularly those that indicate conditions that could negatively affect the species' persistence, are important for management.

Prolapse of the cloaca of captive amphibians is not unusual (Phillott and Young 2009. Dis. Aquat. Organ. 86:77–80). Many authors have reported on the potential causes of this syndrome: exposure to toxins (Kaplan and Overpeck 1964. Herpetologica 20:163–169), nematode infection (Ippen and Zwart 1996. Rev. Sci. Tech. Off. Int. Epiz. 1996:43–54), adenocarcinoma (Ledwoń et al. 2017. Med. Weter. 73:510–512; Stilwell et al. 2021. J. Herpetol. Med. Surg. 30:237–241), neoplasia, dehydration, hyperthermia, malnutrition, convulsions, cystic calculi, gastroenteritis, hypocalcemia, physical trauma, gastrointestinal obstruction



FIG. 1. Two post-metamorphic *Rana draytonii* with an idiopathic prolapsed cloaca, September 2022.

or impaction (Wright and Whitaker 2001. Amphibian medicine and captive husbandry. Krieger Publishing Company, Malabar, Florida. 499 pp.; Mader 2006. Reptile medicine and surgery. Saunders Elsevier, St. Louis, Missouri. 1242 pp.), mycobacterium infection (Mader 2006, *op. cit.*), or any combination therein. Here, we report the cloacal prolapse of three individual *R. draytonii* from a site previously unoccupied by the species.

We hand-collected and PIT-tagged 160 post-metamorphic *R. draytonii* at South Pond, Wragge Ridge, Napa County, California (38.44260°N, 122.16520°W; WGS 84; 446 m elev.). This site is the recipient of translocated frogs from an adjacent county (Sonoma County). Four egg masses were separated into halves, and one-half of each mass was translocated to this site in February 2022 to establish a population of *R. draytonii* in an area where the species was absent. The embryos hatched out in March 2022 and have grown at this site independent of additional intervention. Among the 160 individual *R. draytonii* collected in the summer of 2022, three had a cloacal prolapse—evidenced by small pinkish soft tissue protruding ca. 2–3 mm from the cloaca (Fig. 1). We closely examined the frogs, recorded their PIT tag numbers, collected photographs, and released them at the site of capture.

Although Ledwoń et al. (2017, *op. cit.*) reported that cloacal prolapse does not resolve itself, Stilwell (2021, *op. cit.*) suggested a specimen they worked with spontaneously resolved a prolapsed cloaca while in captivity. We assumed the minor amount of prolapse would likely resolve on its own and allowed the release of the specimens. A prolapsed cloaca in this species has been observed by JAA one time in Sonoma County in 2010. This has

also been observed by a colleague several times (J.T. Wilcox, Sonoma Mountain Ranch Preservation Foundation, Petaluma, California), but we believe this is the first published report of this condition in *R. draytonii*. We contend that reports of any anomalous conditions related to the health, persistence, or decline of special-status species are critical. These occurrences of cloacal prolapse are idiopathic, and resolution in this population is not likely but will be monitored closely.

We thank the Land Trust of Napa County for providing support for this project and access to the site. Handling was permitted under Endangered Species Conservation Fund (Section 6) Traditional Section 6 (FY2021) Recovery of the California red-legged frog in the Lake Berryessa Tributaries Core Area, Napa County, California through translocation, invasive predator management, and monitoring. Grant Agreement Number–Q2130003. We are also grateful for assistance in the field from Lincoln Allen, Frank Bradley, Joseph Clark, Jennifer Colin, Vanessa Danielson, Julian Garrido, Mackenzie Gilliam, Megan Lilla, Natalie Miraglia, and Clarissa Rosas.

JEFF A. ALVAREZ, The Wildlife Project, P.O. Box 188888, Sacramento, California 95818, USA (e-mail: jeff@thewildlifeproject.com); **TANNER L. LICHTY**, Lotic Ecological, 1015 Riley Street #1174, Folsom, California 95763, USA; **NICOLETTE E. MURPHEY**, Blackbird Basin Biological, 1121 West Valley Boulevard, Suite I-145, Tehachapi, California 93561, USA; **MIKE PALLADINI**, The Land Trust of Napa County, 1700 Soscol Avenue, Suite 20, Napa, California 94559, USA.

RHACOPHORUS MALABARICUS (Malabar Gliding Frog) and **CLINOTARSUS CURTIPES** (Bicolored Frog). **INTERSPECIFIC AMPLEXUS**. *Rhacophorus malabaricus* is a species known for its explosive breeding habits (Biju et al. 2013. Zootaxa 3636:257–289). During the monsoon season, groups of males congregate near water and emit advertisement calls. Once a male successfully attracts a female, they engage in amplexus that typically lasts for two to three hours (Fig. 1A). Here, I report interspecific amplexus between two endemic frogs of the Western Ghats, *R. malabaricus* and *Clinotarsus curtipes* in the Kodagu region (12.1392°N, 75.9392°E; WGS 84; 856 m elev.) and other instances of amplexus between 2013–2015. On 27 May 2014 at 0312 h during an amphibian survey, interspecific amplexus between *R.*

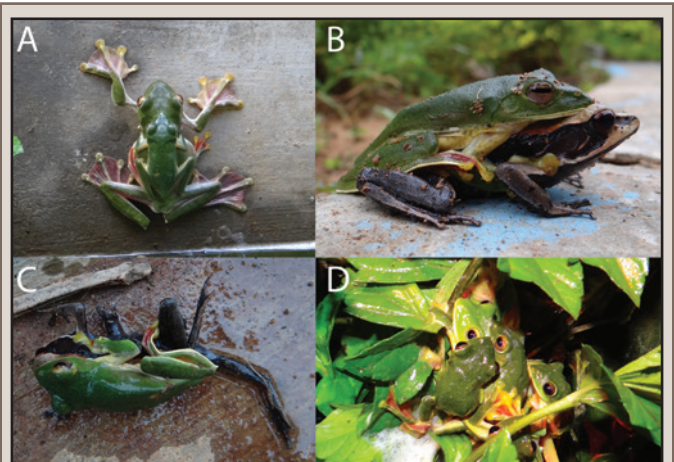


FIG. 1. A) Normal amplexus of *Rhacophorus malabaricus*; B) interspecific amplexus between *Rhacophorus malabaricus* and *Clinotarsus curtipes*; C) *Clinotarsus curtipes* trying to escape from amplexus; D) multiple amplexus in *R. malabaricus*.