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LEPTODACTYLUS PENTADACTYLUS (South American Bullfrog). **DIET.** *Leptodactylus pentadactylus* is a large nocturnal frog found in the Amazon basin of Bolivia, Brazil, Colombia, Ecuador, French Guiana, Peru, and Suriname (Heyer 2005. *Arq. Zool.* 37:269–348). Here we report on the stomach contents of a male adult *L. pentadactylus* (snout–urostyle length [SUL] = 150 mm), captured at 2130 h on 19 January 2018 in the Cancão Municipal Natural Park of the village of Pedra Preta, Serra do Navio, Amapá, Brazil (0.90275°N, 52.00497°W; WGS84). An adult *Rhinella margaritifera* (SUL = 30.8 mm) was found partially digested in the stomach contents (Fig. 1), and had been swallowed headfirst. It appears that *L. pentadactylus* has a generalist and opportunistic diet, feeds on a variety of arthropods (Galatti 1992. *J. Herpetol.* 26:23–31), anurans (Duellman 1978. *Misc. Publ. Univ. Kansas Mus. Nat. Hist.* 65:1–352), lizards (Couto and Menin 2014. *Herpetol. Notes* 7:37–39), and bats (Castro et al. 2011. *Acta Amazonica* 41:171–174). The present report is the first record of *R. margaritifera* as prey of *L. pentadactylus*.

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LITHOBATES BERLANDIERI (Rio Grande Leopard Frog). **MALFORMATION.** Although published reports of malformations in frogs date back over 300 years, they have become increasingly common in recent decades (Lannoo 2008. *Malformed Frogs. The Collapse of Aquatic Ecosystems.* University of California Press, Berkeley, California. 270 pp.). Many natural and manmade causes have been implicated including predation, increased levels of ultraviolet radiation, pesticide and chemical contaminations, and parasitic infections (specifically the trematode *Ribeiroia ondatrae*), among others, and these or other factors might act alone, or together in any given instance (Lannoo 2008, *op. cit.*). In Tamaulipas, Mexico, statewide herpetological surveys were conducted from 2003–2009 including 316 field days (Farr et al. 2013. *Herpetol. Rev.* 44:631–645). In these surveys, data were collected on 839 anurans, including 149 *L. berlandieri*, and many of these observations included multiple individuals of a species seen together at one time and locality (e.g., choruses, aggregations at ponds, streams, segments of road, etc.); only one malformed frog was encountered in the Tamaulipas surveys. Here I report on that individual and present the first published record of a malformation in *L. berlandieri* and the first published record of a malformed anuran from Tamaulipas, Mexico.

At 1155 h on 23 September 2003 (29.4°C), a malformed *L. berlandieri* was found on the banks of a stream just southeast



FIG. 1. A *Lithobates berlandieri* missing hind limbs, from the Municipality of Tula, Tamaulipas, Mexico.

of Gallos Grande, Municipality of Tula, Tamaulipas, Mexico (22.7261°N, 99.5955°W, WGS 84; 1009 m elev.) with both rear limbs missing (Fig. 1). The cause of the missing limbs in this instance is unknown. Although the frog could not jump, locomotion was achieved with some degree of agility and speed by dragging its body with its forelimbs. The frog had a SVL of ca. 6 cm, verging on adult size of 5.7–10 cm (Powell et al. 2016. *Field Guide to Reptiles and Amphibians of Eastern and Central North America*, 4th ed. Houghton Mifflin Harcourt Publishing Company, New York, New York. 494 pp.). Interestingly, the fact that this frog had attained near adult size and did not appear thin suggests it was successful in obtaining food despite its amelia. The frog was photographed and then released where found.

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LITHOBATES SPHENOCEPHALUS (Southern Leopard Frog). **REPRODUCTION.** At 1449 h on 10 April 2017, we found a *Lithobates sphenoccephalus* egg mass in a tidal rivulet that meandered through a tidal freshwater forested wetland. The wetland was located on the lower Savannah River near Hardeeville, Jasper County, South Carolina, USA (32.24107°N, 81.15342°W; WGS 1984). The globular egg mass contained several hundred eggs and was attached to a twig protruding from the substrate. The rivulet drained completely soon afterwards, and neither the egg mass nor any of the larvae appeared to survive the drainage event. This record provides a description of anuran reproduction, specifically for *L. sphenoccephalus*, in tidal freshwater forested wetlands. There is a lack of information regarding amphibian reproduction in tidal freshwater wetlands of the United States (Swarth and Kiviat 2009. *In* Barendregt et al. [eds.], *Tidal Freshwater Wetlands*, pp. 71–88. Backhuys Publishers, The Netherlands). However, this record supports Swarth and Kiviat's (2009, *op. cit.*) position that amphibians are likely limited by the dynamic hydrology that is present in tidal freshwater wetlands. Only one *Lithobates* tadpole was detected in any of the tidal freshwater wetlands we sampled, despite several months of field surveys and trapping efforts by the authors.

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PITHECOPUS HYPOCHONDRIALIS (Orange-legged Leaf Frog). REPRODUCTIVE BEHAVIOR. *Pithecopus hypochondrialis* is found on Andean slopes of eastern Colombia, northern and eastern Venezuela, the Guianas, and throughout Brazilian Amazonia (Cole et al. 2013. Proc. Biol. Soc. Washington 125:317–578). There are records for unusual amplexus for species in the genus *Pithecopus* (formerly *Phyllomedusa*), such as polyandry (Prado et al. 2006. Herpetol. Rev. 37:206–207; Santos-Silva et al. 2012. Herpetol. Notes 44:410–414) and amplexus between males in *P. azurea* (Costa et al. 2010. Phyllomedusa 9:99–108). At 2235 h on 4 March 2015, we found two male *P. hypochondrialis* in amplexus (SVL = 3.5 cm, 2 g; SVL = 3.6 cm, 2 g) in a regenerated forest near Paragominas, Pará State, Brazil (3.24200°S, 47.7000°W, WGS 84; 85 m elev.). The individuals were in an abnormal amplexus position; the male on top had its snout oriented toward the cloacal region of the bottom male in an inverse amplexus (Fig. 1). The specimens remained in amplexus 30 min. after the initial observation and manipulation for measurements.

A photograph of this observation was deposited at the Florida Museum of Natural History (UF 157256, photo voucher). This study is part of the Biodiversity Research Consortium Brazil-Norway (BRC). This publication is number 003 in the BRC publication series (<http://brc.ufra.edu.br/>).



FIG. 1. Inverted amplexus between two males of *Pithecopus hypochondrialis*.

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PHYSALAEEMUS CUVIERI (Barker Frog). PREDATION. *Physalaemus cuvieri* is a small leptodactylid widely distributed in South America (Gambale and Bastos 2014. Herpetol. J. 24:31–39). Herein, we report predation of *P. cuvieri* by the spider *Ancylometes concolor* (Araneae: Ctenidae). On 5 January 2017, we observed an *A. concolor* feeding on a *P. cuvieri* male (Fig. 1) on the banks of a temporary pond from an Urban Park at Goiânia municipality, Goiás State, Brazil (16.62703°S, 49.25462°W, SAD 69; elev. 717 m.). The air temperature at the site was 21.7°C, water temperature was 27.8°C, and humidity was 72%. The spider had its chelicerae inserted between the thighs of the frog (Fig. 1) and the frog was already dead when we found it. Although *P. cuvieri* has been reported as prey to several spider species, including an unidentified spider in the genus *Ancylometes* (Toledo 2005, *op. cit.*; Maffei et al. 2010. Herpetol. Notes 3:167–170), this is the first record of predation by *A. concolor*, improving the knowledge concerning potential predators of *P. cuvieri*.



FIG. 1. *Ancylometes concolor* preying on an adult *Physalaemus cuvieri*, in Goiânia, Goiás, Brazil.

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PLEURODEMA THAUL (Four-eyed Frog). LEUCISM. *Pleurodema thaul* (Fig. 1A) is endemic to Chile and Argentina, and exhibit variable coloration, with a dorsal area of gray, brown, black, green, and/or small yellow spots. Additionally, they exhibit a pair of contrasting lumbar glands, which have the appearance of a pair of eyes (Ceí 1962. Los Batracios de Chile. Ediciones de la Universidad de Chile, Santiago. 128 pp.).