

**LEPTODACTYLUS KNUDSENI** (Knudsen's Bullfrog).

**PREDATION.** During May 1999, at the field station of the Nouragues (4°5'N, 52°41'W, 110 m elev.), 8 km N of Saut Pararé, Arataye River, French Guiana, one of us (RB) observed an adult giant tarantula *Theraphosa leblondi* (Theraphosidae) preying on a *Leptodactylus knudseni* (ca. 90 mm SVL) during a rain at dusk. The tarantula was maintaining the freshly dead frog with its chelicera, on the ground along a stream. When disturbed, the tarantula escaped underwater with the frog. This frog could not be found again, but there is a voucher specimen from the same population and locality deposited at the Museum National d'Histoire Naturelle, Paris (MNHN 1999.4934, collected by Jean-Pierre Gasc). In the same locality and month, *T. leblondi* was reported to prey on the caecilian *Osgaecilia zweifeli* (Boistel and Pauwels 2002. Herpetol. Rev. 33:120–121).

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#### **MANTELLA NIGRICANS** (NCN). **NOCTURNAL ACTIVITY.**

The Malagasy poison frogs of the genus *Mantella* are considered diurnal species. This is corroborated by their aposematic bright coloration, a character which is usually correlated with diurnal activity (Vences et al. 1999. *Alytes* 17[1–2]:3–72). To my knowledge there are no records of nocturnal activity for any of the 17 species of this genus. Here I report nocturnal activity in *M. nigricans* in NE Madagascar, Masoala Peninsula, Menamalona Site (Antalaha Fivondronana, Antsiranana Faritany, 15°22.87'S, 49°59.27'E, 780 m elev.). Menamalona is also a new site for the species' distribution. Species determination and locality were verified by M. Vences. On 15 December 1999 at 1930 h (ca. one hour after sunset), while searching for other amphibians following standard methods (opportunistic searching and bioacoustic identification), I heard chirping and metallic notes emitted by frogs at ground level. I recorded these calls for several minutes. I then spotlighted the calling frogs—two male *M. nigricans* engaged in territorial/sexual interactions. Vocalizations in this species (as in other *Mantella* spp.) are usually emitted during the daytime when temperatures are sufficiently high. The nocturnal vocalization reported herein may be explained by the high sexual motivation of the frogs (they were likely at the peak of their breeding activity) and the high air temperature (23°C).

The specimens are catalogued in the herpetological collection of Museo Regionale di Scienze Naturali, Torino, Italy (temporary numbers: MRSN-FAZC 10399-10400). Thanks to J. E. Randrianirina for help in the field, and to the Wildlife Conservation Society for logistical assistance.

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#### **RANA AURORA DRAYTONII** (California Red-Legged Frog)

**PREDATION.** Predation on the federally threatened *Rana aurora draytonii* tadpoles and metamorphs by the introduced bullfrog (*Rana catesbeiana*) has been documented (Cook and Jennings 2001. Herpetol. Rev. 32:182–183). Here, I expand on the life stages of California red-legged frog taken by bullfrogs.

On 16 March, 2001 at Ledson Marsh, Annadel State Park, Sonoma County, California an adult female bullfrog (195 mm SUL, 805 g [including stomach contents], and 71 mm gape) was observed at a known California red-legged frog breeding site. The bullfrog was lethargic and was easily captured. Inspection of its stomach contents produced an adult male California red-legged frog (95 mm SUL, 85 g) with partially digested legs. The bullfrog and prey are catalogued at the California Academy of Sciences; CAS 221058 (*R. catesbeiana*) and CAS 221059 (*R. a. draytonii*).

This predation observation indicates that bullfrogs are capable of taking adult-sized California red-legged frogs. The predator bullfrog was a large individual, although not the largest observed at the marsh. The average SULs of adult bullfrogs at this locality are  $167.2 \pm 10.3$  mm (N = 17 males) and  $162.071 \pm 31.3$  mm (N = 14 females). The ingested *Rana aurora draytonii* was of average size for males. The average SULs at this locality are  $99.4 \pm 10.4$  mm (N = 72 males) and  $108.0 \pm 14.3$  mm (N = 73 females).

Predation on adult *R. a. draytonii* can have a disproportionate effect on a population compared to the predation on younger life stages. The California red-legged frog has an r-strategy approach to reproduction, including production of many offspring; low survival rate at the egg, tadpole, and metamorphic life stages; and few frogs reaching sexual maturity. Therefore, resource managers should be aware that the loss of a few breeding adults could significantly decrease reproductive output and frog numbers in a local population. Also, adult males are likely to be more vulnerable to predation during breeding periods because of their increased activity and congregation at breeding choruses.

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#### **TESTUDINES**

#### **GOPHERUS POLYPHEMUS** (Gopher Tortoise). **NEONATE DIET.**

Although a variety of food items (principally foliage, but also including insects, carrion, rocks, charcoal, and bone material) are reported to be consumed by adult and young gopher tortoises (Garner and Landers 1981. Proc. Conf. Southeast Assoc. Fish and Wildl. Agencies 35:120–134; Macdonald and Muschinsky 1988. Herpetologica 44:345–353; Jackson and Ostertag 1999. Herpetol. Rev. 30:40), little is known about the dietary requirements of neonates. On 30 August 2000 a neonate gopher tortoise was found on the apron of an active adult gopher tortoise burrow on the Wade