

chytridiomycosis (Fellers et al. 2001. *Copeia* 2001:945–953; Mazzoni et al., *op. cit.*). A protracted larval stage may increase exposure to *B. dendrobatidis* and increase the likelihood of infection compared to single-season larvae (Fellers et al., *op. cit.*; Bosch et al., *op. cit.*). Mortalities among anuran larvae with oral chytridiomycosis have not been reported (Fellers et al., *op. cit.*). However, long-lived larval bullfrogs may serve as year-round reservoirs of *B. dendrobatidis*, and following completion of metamorphosis, may become vectors of the infection without demonstrating clinical signs or exceptional mortality rates (Daszak et al., *op. cit.*; Mazzoni et al., *op. cit.*). Moreover, laboratory experiments using fungal isolates suggest that transmission of *B. dendrobatidis* can occur between congeneric anurans, as well as between urodeles and anurans (Davidson et al. 2003. *Copeia* 2003:601–607; Nichols et al. 2001. *J. Wildl. Dis.* 37:1–11). Disease transmission is of particular concern in the Pacific Northwest, where bullfrogs occur sympatrically with native ranid species of concern (e.g., *Rana pretiosa*, *R. aurora*, *R. boylei*). We encourage further study of *Batrachochytrium* infection in Bullfrogs in western North America, and reiterate the need for researchers to wash and disinfect field gear between field sites.

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RANA CATESBEIANA (American Bullfrog). **DIET.** Predation on vertebrates by adult American Bullfrogs is well documented (Bury and Whelan 1984. *US Fish and Wildlife Serv. Publ.* 155. USDI, Washington, DC). A recent literature review of prey items listed eight species of snakes taken as prey (Casper and Hendricks 2005. *In* Lannoo [ed.], *Amphibian Declines: The Conservation Status of United States Species*, pp. 540–546. Univ. California Press, Berkeley), including one species of rattlesnake, *Crotalus atrox* (Clarkson and DeVos 1986 *J. Herpetol.* 20:42–49) Herein I report another rattlesnake species (*C. oreganus*) previously undocumented as American Bullfrog prey.

On the evening of 17 May 2004, I collected a male (160 mm SVL, 384 g) and female (160 SVL, 503 g) *R. catesbeiana*, in amplexus, in End-of-the-Line Pond in Santa Clara County, California, USA (37°23'15.042"N, 121°44'51.413"W). The frogs were humanely killed and placed on ice overnight. They were subsequently dissected for stomach content analysis. The stomach of the gravid female contained a nearly intact *C. oreganus* (SVL not available; remaining carcass was 260 mm in length and weighed 12.5 g). This is the second documented case of *R. catesbeiana* eating rattlesnakes with no apparent ill effects.

I thank Mark R. Jennings for advice on processing specimens. Specimens were obtained under California fishing license number 044275–20. The frog and its stomach contents have been accessioned into the permanent collection at the Museum of Vertebrate Zoology, University of California, Berkeley (Accession No. MVZ 13907).

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RANA CHIRICAHUENSIS (Chiricahua Leopard Frog). **REPRODUCTION.** Northern populations of *Rana chiricahuensis* occur along the southern edge of the Colorado Plateau in central and eastern Arizona and western New Mexico in the USA, while southern populations are found in southeastern Arizona, southwestern New Mexico, and in northern Sonora, the Sierra Madre Occidental of Chihuahua, and northern Durango in Mexico (Platz and Mecham 1979. *Copeia* 1979:383–390). This species is federally listed as threatened in the USA (U.S. Fish and Wildlife Service 2002. *Fed. Regist.* 67:40790–40811, 13 June 2002), thus additional life history information is important to aid recovery efforts. Winter breeding of northern populations of *R. chiricahuensis* at high elevation sites in Arizona has not been reported previously. Populations of *R. chiricahuensis* inhabiting sites above 1800 m elev. in Arizona and New Mexico were thought to have a short breeding season that spanned June through August (Frost and Platz 1983. *Evolution* 37:66–78). Data from New Mexico, including observations of egg masses in December and March and young tadpoles in December, January, February, and March, indicate that winter breeding above 1800 m is possible in areas fed by warm springs of 21–28°C (Jennings 1988. *Ecological Studies of the Chiricahua Leopard Frog, Rana chiricahuensis*, in New Mexico. New Mexico Dept. Game and Fish, Santa Fe, New Mexico, 14 pp.; Scott and Jennings 1985. *Occas. Pap. Mus. Southwest. Biol.* 3:1–21). On 21 Feb 2002 at 1225 h, we discovered two egg masses in a 0.2 ha spring-fed pond at 2546 m elev. in the Three Forks area of Apache-Sitgreaves National Forest, Apache County, Arizona, USA. Snow still covered the surrounding hillsides and made many forest roads impassible. Thin ice was present along the grassy edges of the pond. The egg masses were 55 cm apart and located on the NE side of the pond. A spring vent, identifiable by a line of gravel and light upwelling of water, ran lengthwise between the two egg masses. The temperature of the water at each egg mass and at the spring vent was 18°C. Water temperature 6 m away from the eggs was 14°C. Air temperature was 15°C. The first egg mass was 8 × 6 × 4 cm and was located 24 cm from the shore in water 5.5 cm deep with the top of the egg mass 1 cm below the water's surface. The second egg mass was 10 × 5 × 4 cm and was 18 cm from the shore in water 6.5 cm deep with the top of the mass at the water's surface. Algae surrounded both egg masses. The embryos of the first and second masses were at Gosner stage 15 and 12. The next day at 1015 h embryos in the first egg mass had reached Gosner stages 16–17 and in the second mass stages 12–14.

On 25 February, we collected a small portion of each egg mass for our captive rearing and release program, which also allowed us to confirm the identity of the resulting metamorphs. The first egg mass had mostly hatched in captivity by 28 February and the