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Lithobates catesbeianus (American Bullfrog) Predation on Cliff Swallows

The American Bullfrog is known to have a broad, omnivorous diet that includes plant material, aquatic and terrestrial invertebrates, and vertebrates (Bury and Whelan, 1986, Ecology and Management of the Bullfrog, USFWS Res. Publ. 155, Washington, DC). During a 25-year study of Cliff Swallows (*Petrochelidon pyrrhonota*) in southwestern Nebraska, we observed *Lithobates catesbeianus* prey on, or attempt to prey on, Cliff Swallows. Cliff Swallows feed exclusively on insects caught in flight. They are quick, agile fliers and rarely alight on the ground (Brown and Brown, 1996, *Coloniality in the Cliff Swallow: The Effect of Group Size on Social Behavior*, University of Chicago Press, Chicago, Illinois), thus they are very unlikely prey for *L. catesbeianus*.

As we were mist-netting Cliff Swallows at a 10-nest colony on 7 July 1998, a *L. catesbeianus* attempted to eat a Cliff Swallow that was caught in the net. We were dropping the net over the side of a road culvert (Brown and Brown, 1996, *op. cit.*; Lueschen, 1962, Eastern Bird-Banding Association News 25: 109) in which the birds' nests were built, near Roscoe, Keith County, Nebraska, USA (41.11931°N, 101.57523°W; NAD 83). When the net was lowered into place, the top was ca. 45–60 cm above the ground. The birds were caught in the net when they flew out of the culvert. The net was lowered over the culvert entrance for, at most, 10 seconds. A wet, marshy area, with ca. 20–25 cm of standing water, was situated at the mouth of the culvert. On one drop, with 3 adult swallows in the mist net, a large (36–41 cm SVL) *L. catesbeianus* jumped up into the net from the standing water and caught a swallow by the head. We immediately raised the net. In the 15–20 seconds it took to raise and secure the net, the frog had swallowed the bird as far down as the bird's legs. The bird was still alive although seemingly stunned, and its feathers were matted with saliva when removed from the frog's mouth. The *L. catesbeianus* was released unharmed.

Submitted by Mary Bomberger Brown, Tern and Plover Conservation Partnership, University of Nebraska, Lincoln, Nebraska, USA (email: mbrown9@unl.edu); and Charles R. Brown, Department of Biological Sciences, University of Tulsa, Tulsa, Oklahoma, USA.