NOTES

EGG MASS FIDELITY SUGGESTS OOPHAGY IN THE ILLINOIS CHORUS FROG (*PSEUDACRIS STRECKERI ILLINOENSIS*)

Many species of larval anurans engage in oophagy by feeding on conspecific eggs or egg remnants within their clutch. (Crump, 1983. American Nat. 121: 281-287). On 24 February 2000, three amplectant pairs of *Pseudacris streckeri illinoensis* were collected from a breeding chorus located in Clay County, Arkansas. The three pairs were housed communally in a 15x30x15 cm plastic box with about 4 cm of dechlorinated tap water. The following morning (25 February 2000), several small clutches of eggs were present. A total of 170 eggs was laid averaging 57 eggs per female. The eggs were incubated at 20°C in the same boxes where they were laid. For seven days following hatching, the tadpoles were allowed to remain with their egg masses. The first free-swimming *P. s. illinoensis* larvae were observed 1 March 2000. By 4 March 2000, 112 larvae were free-swimming. Nearly all larvae remained with the egg masses for at least six days (7 March) despite appearing fully capable of dispersing. On 7 March, the tadpoles began dispersing about the rearing container and by 8 March they were nearly evenly distributed throughout this chamber. Since the yolk appeared to be absorbed by 4 March 2000, the tadpoles may have been feeding on the remnants of the egg mass. Such behavior is highly adaptive because the remaining egg materials are undoubtedly highly nutritious. Utilization of egg components by larvae might further offset the costs of egg production by the female. If the offspring of a female feed on the remains of her egg mass, her parental investment in those tadpoles may be increased without additional resource allocation on her part. The female must provide the resources eaten by the tadpoles anyway. Behaviors such as these, that improve offspring survivorship without additional parental resource partitioning to reproduction, should quickly spread throughout populations due to intraspecific competition between strategists and non-strategists (Clutton-Brock, 1991. The Evolution of Parental Care. Princeton Univ. Press, New Jersey, 368 pp.). Foraging strategies that reduce foraging efforts resulting in lowered energy expenditures and reduced exposure to predators are highly adaptive (Stephens and Krebs, 1987. Foraging Theory. Princeton Univ. Press, New Jersey. 262 pp.). Since oophagic larvae aren't required to search for food, they may improve marginal gains in energy allocation. Since they are not traveling between foraging sites, they may also experience increased survivorship due to reduced predator exposure. The lack of necessary traveling for foraging may lower the larvae's likelihood of contacting predators (Stephens and Krebs, 1987 op. cit.). Improved survivorship through lowered larval energy expenditures and reduced exposure to predators while foraging translates into higher returns to the parent in actual reproductive output (Clutton-Brock, 1991 op. cit.). Considering the advantages of oophagy combined with the extended fidelity for the egg mass, it seems probably that the tadpoles were utilizing the egg mass as a food source. While these observations were observed in captivity, the nature of oophagy combined with its common occurrence in other hylid species provide further evidence that this behavior is a natural phenomenon and not an artifact of captive rearing.

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A NEW MAXIMUM SIZE RECORD FOR *CROTALUS MOLOSSUS* (BAIRD AND GIRARD, 1853)

The Blacktail Rattlesnake, *Crotalus molossus*, is a medium-sized rattlesnake, with adults typically measuring 800 to 900 mm in total length (TL) (Price, 1998). The maximum TL of *C. molossus* reportedly ranges from 1257 to 1331 mm (Tennant, 1984; Stebbins, 1985; Boundy, 1995; Hardy and Greene, 1995; Price, 1998; Dixon and Werler, 2005). On 14 June 2008, Dallas and Doug Backer collected a Blacktail Rattlesnake that exceeded the previously reported size maxima for this species. The snake was collected on a private ranch (29°31'20.8"N, 103°23'33.2"W; Musgrave Road, ca. 16 km east of Rt. 118) in Brewster County, Texas. The elevation of the collection site was ca. 1020 meters and the vegetation was similar to the Lechuguilla-Creosotebush-Cactus Association described by Wauer (1971). The TL of the snake measured 1524 mm (60 inches), exceeding the previously reported maximum size record (1331 mm) by 193 mm. A voucher photograph (SRSU 6752) of this snake was deposited in the James F. Scudday Vertebrate Collection at Sul Ross State University, Alpine, Texas.

Literature Cited

Boundy, J. 1995. Maximum lengths of North American snakes. Bull. Chicago Herpetol. Soc. 30: 109–122.

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