

CHELYDRA SERPENTINA (Snapping Turtle). FEEDING BEHAVIOR. *Chelydra serpentina* is an omnivore, known to consume a diverse array of prey items, including aquatic vegetation, flatworms, annelids, arthropods, snails, and various vertebrate species. Amphibians compose a sizeable portion of the vertebrate prey category, with anurans representing the most common amphibians consumed by *C. serpentina* (Punzo 1975. J. Herpetol. 9:207–210). When feeding on large prey items, either plants



FIG. 1. A) Failed attempt by *Chelydra serpentina* to engulf an adult *Lithobates catesbeianus* whole; B) Defensive display performed by *C. serpentina* in response to observation during feeding. Note the removal of skin from the midsection of the *L. catesbeianus* resulting from the claw-raking behavior of the turtle.

or animals, *C. serpentina* has been observed using the foreclaws to shred or dismember prey prior to ingestion (Moldowan et al. 2015. Can. Field-Nat. 129:403–408). This account provides a detailed description of the specific timing and behaviors observed during one such predation event.

At 2021 h on 29 June 2019, an adult *C. serpentina* was observed feeding on an adult *Lithobates catesbeianus* (American Bullfrog) in an artificial pond located behind the Black Warrior Work Station in William B. Bankhead National Forest, Lawrence County, Alabama, USA (34.34343°N, 87.33833°W; WGS 84; 307 m elev.). The turtle was initially found submerged underwater, grasping the frog in its jaws by the left hindlimb while using the foreclaws to rake the dorsal and lateral surfaces of the frog's body and head. This activity persisted for 4 min, after which the only apparent damage to the frog consisted of a few claw marks on the dorsal surface of the pelvic region. At this point, the turtle began to move its jaws over the frog (starting with the left hindlimb and moving anteriorly), engulfing all but the head, forelimbs, and right rear foot of the frog (Fig. 1A). This process took 30 sec and concluded with the turtle expelling the body of the frog from its mouth and resuming the previously described claw-raking action. Three additional failed attempts to orally engulf the frog were observed over a period of 2 min and 11 sec, after which intermittent claw-raking had resulted in a nearly complete removal of skin from the mid-section of the still living *L. catesbeianus*. Continued claw-raking resulted in bisection of the frog at the pelvic region 18 min after the initiation of the predation process. Following this event, the turtle rapidly consumed first the anterior and then the posterior portion of its prey, each piece swallowed whole.

Various portions of this event were photographed and recorded, and while the turtle was not collected or approached beyond the edge of the pond, the animal was aware that it was being observed. No attempt was made by the turtle to retreat deeper into the pond, but at four points throughout the predation event, it paused to raise its head above the water, expanding the buccal region and rapidly releasing air in such a way that a growl-like vocalization was produced—all while continuing to grasp the frog in its jaws (Fig. 1B). Following each display, the turtle returned to normal claw-raking behavior beneath the water, in one instance audibly blowing bubbles through the rostrum as it lowered its head back into the pond. The duration of the entire predation sequence was just over 20 min, suggesting that ingestion of large prey items may be more expensive for *C. serpentina* in terms of energy expenditure than consumption of multiple, smaller prey

items due to the extensive period of time required for successful mechanical breakdown of large prey.

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