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***Terrapene ornata* (Ornate Box Turtle) Predation on Cliff Swallows**

Turtles are known to have broad, omnivorous diets that include plant material, aquatic and terrestrial invertebrates, and vertebrates (Klimstra and Newsome, 1960, *Ecology* 41:639–647). During a 25-year study of Cliff Swallows (*Petrochelidon pyrrhonota*) in southwestern Nebraska, we observed *Terrapene ornata* prey, or attempt to prey, on 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). Consequently, they are very unlikely prey for turtles.

On 4 July 2002, one of us (MBB) was netting Cliff Swallows with a stationary mist net placed near the entrance of a culvert underneath a railroad embankment near Keystone, Keith County, Nebraska, USA (41.3841667°N, 101.7988889°W). The colony consisted of 200 swallow nests. On one occasion as large numbers of birds flushed and hit the net, the weight of the birds pulled the net down to ground level. One *T. ornata*, which was seen regularly at the colony, approached one adult Cliff Swallow that was very low in the net and killed it by biting and eating its head. After killing the bird, the turtle walked away carrying the head. Nesting at Cliff Swallow colonies is usually quite synchronous (Brown and Brown, 1996, *op. cit.*). Most colonies are initiated in mid-May, incubation lasts until mid-June, and most nestlings have fledged by mid-July. It is not uncommon for nestling Cliff Swallows to fall out of their nests (or jump out in response to nest parasites). Because these birds are too young to fly back to their nest and parent swallows do not attend nestlings on the ground, these nestlings become chilled, starve, and die. During peak periods of nesting synchrony, relatively large numbers of doomed nestlings can be found on the ground underneath nests at large colonies. From 2002 to 2007, at one large Cliff Swallow colony (1000–1800 nests) near Keystone, Keith County, Nebraska, USA (41.3555556°N, 101.6286111°W), we regularly observed two *T. ornata* patrolling the ground underneath the nests, killing and eating the moribund nestlings and scavenging dead nestlings. The turtles would walk up to nestlings that were alive and bite their heads, usually grabbing the nestlings by the front part of the head (in the beak and mouth area). Based on unique markings on their carapaces, we are confident that the same two turtles were present at this colony

throughout the nesting season, and we suspect that the same two turtles returned to this colony site to feed for several consecutive years. *T. ornata* are known to be most active during June, which coincides with the swallow's nestling period (D. Ferraro, pers. comm.). *T. ornata* are rarely seen at colonies during the birds' incubation period or after most of the nestlings have fledged. Our observations are anecdotal in nature, but it appears that *T. ornata* recruit to and remain at Cliff Swallow colonies during the nestling period, when a reliable food resource is available.

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