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Predation of Eared Grebe by Great Blue Heron

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ABSTRACT.—Great Blue Herons (*Ardea herodias*) typically prey upon fish and other aquatic organisms, and they occasionally take small mammals and birds. We observed a Great Blue Heron attack, kill, and attempt to consume an Eared Grebe (*Podiceps nigricollis*). The heron was unable to swallow the grebe, and it abandoned the carcass after approximately 30 min. An examination of the carcass showed that the grebe lacked obvious physical deformities. Our observation, coupled with a similar one nearby, indicates that Great Blue Herons attack and kill birds larger than reported previously. *Received 11 January 2005, accepted 19 September 2005.*

On the morning of 14 November 2004, we witnessed an adult Great Blue Heron (*Ardea herodias*) attack, kill, and attempt to consume an Eared Grebe (*Podiceps nigricollis*) at Oso Flaco Lake (35° 00′ N, 120° 30′ W) in San Luis Obispo County, California. The incident occurred shortly after the heron landed near the grebe and began foraging in shallow (~30 cm deep) water. At approximately 11:25 PST, the heron caught the grebe with a stabbing motion as the grebe swam underwater. The heron then proceeded to subdue the grebe by grasping its neck, shaking it, and submerging it intermittently. After approximately 15 min, the grebe appeared to be dead. At this point, the heron briefly released the grebe to deliver several sharp blows to its head and chest area.

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The heron attempted several times to swallow the grebe, but it had difficulty maneuvering the grebe into its mouth. During one attempt, it was able to maneuver the carcass into position, but the grebe's diameter, its limp wings, or both prevented the heron from swallowing it. After attempting to swallow the grebe for approximately 15 min, the heron abandoned the carcass, preened briefly, and then flew off. The grebe weighed 255 g (weighed after the grebe was frozen and then thawed), and although that is low body weight for this species (Cullen et al. 1999), it is typical of grebes arriving on a wintering area after a migratory flight (Jehl 1997; J. R. Jehl, Jr. pers. comm.). When we examined the grebe, we found no deformities or obvious indications of poor condition (e.g., loss of pectoral muscle).

On the day previous to our observation (13 November 2004), H. R. Pedersen (pers. comm.) observed a Great Blue Heron at Lake Cachuma in Santa Barbara County, California (~130 km southeast of Lake Oso Flaco), capture an Eared Grebe. The heron was foraging and caught the grebe in shallow water, grasped it by the neck in the same manner we witnessed, and submerged it several times. After a brief struggle, the grebe escaped and appeared unharmed (H. R. Pedersen pers. comm.).

We know of no previous reports of Great Blue Herons capturing, killing, and attempting to consume Eared Grebes, or any other bird species of that size; however, McCanch (2003) reported a Grey Heron (*Ardea cinerea*) that had choked to death while attempting to ingest a Little Grebe (*Tachybaptus ruficollis*). Great Blue Herons have a diverse diet that includes songbirds and mammals of various sizes (Peifer 1979, Butler 1992), and they have been observed abandoning large prey items that they were unable to swallow (R. W. Butler pers. comm.). Thus, it is possible that the herons may have targeted the grebes as potential prey items, but were unable to successfully consume them because of their size. Alternative explanations are (1) that the herons mistook the grebes for fish or (2) that the herons were acting to defend a foraging area. Indeed, an observer at Lake Cachuma reported seeing a foraging heron attack and kill an American Coot (*Fulica americana*) with no attempt to eat it (L. R. Mason pers. comm.). The heron we observed, however, expended a substantial amount of effort subduing and attempting to consume the grebe, indicating a deliberate act of predation. Evidently, small grebes are potential prey items for Great Blue Herons, and herons may attack and kill large birds more commonly than is recognized.

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