

**GREAT BLUE HERON (*Ardea herodias*) CAPTURES
AND KILLS HORNED GREBE (*Podiceps auritus*)**

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At approximately 0739 CST on 17 January 2016 at the Maxwell-Gunter Recreation Area near the Mid-Bay Bridge on Chocktawhatchee Bay in Niceville, Okaloosa County, Florida, I observed a mature adult Great Blue Heron (*Ardea herodias*) flying toward me from the direction of the Mid-Bay Bridge with a still-living Horned Grebe (*Podiceps auritus*) in its bill. The heron alighted on the beach at the water line about 30 m in front of me. Its mandibles were grasping the neck of the Horned Grebe just below the head. The heron alternately shook and dipped the grebe into the water as the grebe flapped its wings and kicked its legs in a futile attempt to escape. This behavior is consistent with other similar observations of Great Blue Heron and grebe interactions. (Stolen 2001, Rivers 2006). I documented this event with both video and still images between 0740 and 0749 (Fig. 1a.). At 0746, the heron flew a short distance along the beach but quickly landed after approximately 30 m. It was then that I saw a second Great Blue Heron farther down the beach, approximately 80 m distant. After another 2 min 19 s (0748), the first heron once again took flight toward the second heron, which flew away toward open water. The first heron, with the grebe still in its mandibles, landed close to the second heron's former location. Images taken during this latter portion of the encounter appear to show that the grebe was dead. The last dunking was at 0745 and the grebe appeared motionless after that time. (R. Bayer pers. comm.) suspects that this flight of the Great Blue Heron with the Horned Grebe toward the other heron may have been related to the defense of its feeding territory since Great Blue Heron adults defend their feeding areas. In a **Supplanting Flight**, with its feathers erect and while calling, a heron flies at another bird. The attacker lands on the spot vacated by its opponent. (Kushlan 2011). Though I did not observe erect feathers or hear a call (calling would have been muffled with the grebe in its mandibles), I believe it is possible that the Great Blue Heron that I observed was defending a feeding territory.

Though I did not witness the capture of the Horned Grebe, I believe one of the possibilities was an ambush attack from the ledge of a bridge abutment of the Mid-Bay Bridge on the unsuspecting grebe as it swam within range of the Great Blue Heron's attack. The ledges are approximately 1 m above the water surface of Chocktawhatchee Bay, thus too high for an **Upright stand and wait** attack typical of the Great Blue Heron (Kushlan 1976). Great Blue Herons may launch themselves into the water from perches, either by **Diving** head first or by **Jumping** feet first to seize prey (Kushlan 2011). I observed and photographed a Great Blue Heron perched on such an abutment less than 100 m from the landing location six minutes before this event (Fig. 1b.) Whether this was the same heron that captured of the Horned Grebe is unknown, as the majority of the ledge perching locations on the Mid-Bay Bridge were hidden from my view. However, I feel it unlikely that two mature male Great Blue Herons would be found in such close proximity given their propensity to aggressively defend their territories (R. Bayer pers. comm.).

Although not a frequently documented occurrence, Great Blue Herons have previously been observed preying on at least three different species of grebes (Family Podicipedidae).



Figure 1a

Figure 1b

Figure 1c

I believe the encounter I describe here is unique since it was documented with numerous still images and video. These grebe predations had three different outcomes. Bayer (1978) reported a Great Blue Heron capturing a Horned Grebe, which escaped after less than one minute. A Pied-Billed Grebe (*Podilymbus podiceps*) was captured, escaped, and recaptured by a Great Blue Heron, then swallowed while still alive about 10 min after initial capture (Stolen 2001). An Eared Grebe (*Podiceps nigricollis*) was captured and killed by a Great Blue Heron but later abandoned after a 15-min unsuccessful attempt by the heron to swallow the prey (Rivers 2006).

The three grebe species referenced in the previous paragraph are essentially the same size though individuals would of course vary in size. During this timeframe, the Horned Grebe would have completed its fall migration to this Florida location by early to mid-November and thus, would have had plenty of time to regain any weight lost during migration (Stedman 2000). In this instance, whether the Great Blue Heron attempted to ingest the Horned Grebe is unknown, as I did not watch the Great Blue Heron after it flew toward the second heron. However, 1 h and 25 min later, a dead Horned Grebe was found on the water line of the beach near the last known location of the Great Blue Heron (Fig. 1c). I believe that this was most likely the Horned Grebe that had been captured by the Great Blue Heron.

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