

# Rat predation by a Black-crowned Night-Heron

By Dennis A. Meritt, Jr.

The Illinois state-endangered Black-crowned Night-Heron (*Nycticorax nycticorax*) uses a range of freshwater habitats and is primarily nocturnal outside of the nesting season. As with other members of the heron family, primary foods include appropriately sized aquatic animals including crayfish, insects, mussels, fish and frogs (Baughman 2003; Levenson 2005; Sibley 2001). Most authors consider Black-crowned Night-Herons as generalists and opportunists. Mlodinow (1984) reports this species present in the Chicago area from late March through the end of September. De Vore et. al (2000) identifies sites within the region where this heron may be observed. Breeding is reported from late April through June (Fisher et al. 1998).

Bohlen (1989) lists habitat destruction and hunting as reasons for decline in Illinois. On a broader scale, Kaufman (1996) also identifies habitat loss and includes water pollution. Levenson (2005) said the absence of large tracts of wetlands as well as prolonged flooding of regional rivers as having negative impacts on this heron.

Black-crowned Night-Herons have used the area of the Caldwell Lily Pool located at Cannon and Fullerton Drive in Lincoln Park on an intermittent basis since 1967 and probably much earlier. Records indicate that use is more intensive post-fledging than pre-nesting. Occasional nesting attempts have been made (most recently in May of 2010) but the site has not been favored by this species except as a day roost before and after the breeding season (Meritt pers. obs., Murley unpublished obs.)



*Black-crowned Night-Heron photo by Joe B. Milosevich.*

A first summer Black-crowned Night-Heron landed on a limestone shelf on the west side of the Alfred Caldwell Lily Pool at approximately 0900 hours on 31 May 2005. The heron was observed by DePaul University avian biology students. The bird was at the water's edge some 18 inches above the surface. This area of the Alfred Caldwell Lily Pool is a favored refuge site for resident bullfrogs (*Rana catesbeiana*) and a sunning area for various sized red-eared slider (*Trachemys scripta elegans*) and painted turtles (*Chrysemys picta*). Among the fish present were carp and a bass species as well as minnows.

The heron faced the water's edge and remained largely immobile with only slight adjustments to body position for almost 30 minutes. It was undisturbed by observers on the opposite side of the Lily Pool. It was apparent that the heron was searching for food from this perch.

A young adult Norway rat (*Rattus norvegicus*) appeared between pieces

of limestone adjacent to the heron's perch. Almost immediately and with one fluid motion, the heron reached out and down, grabbing the rat by the neck. The heron began hitting it against the edge of the limestone outcropping and within two to three minutes the rat was motionless and the heron attempted to swallow it. After several unsuccessful attempts, head first then tail first, manipulating the carcass without dropping it, the heron held the rat by the tail and repeatedly dunked it in the pond.

After several dunks, the carcass was soaking wet and dripping with water. The heron returned to its rock perch turned the carcass around and began to swallow it head first. Once the body was swallowed a 2- to 4-inch length of the tail tip remained hanging outside the left side of the heron's bill. The heron remained in place, bill slightly ajar making swallowing movements. After approximately 15 minutes the tail disappeared; the heron closed its bill and remained