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GREAT HORNED OWLS (Bubo virginianus) NESTING IN A GREAT BLUE HERON (Ardea herodias) HERONRY

GARY BURKHOLDER AND DWIGHT G. SMITH

From 1981-1987 we studied nesting ecology of Great Blue Herons (Ardea herodias) at a heronry located at Knox Lake, Knox County, Ohio. Knox Lake was created in 1955 for flood control, and the heronry was located in the remains of a mixed mesophytic woodland which was destroyed following flooding. Standing trees were leafless and in various stages of decay. In 1981, 1982, 1983 and 1984 Great Horned Owls (Bubo virginianus) used heron nest sites for breeding. Herein we report our observations of Great Horned Owl nest site selection, breeding chronology and reproductive efforts within the heronry.

Great Horned Owls used nests constructed by Great Blue Herons in previous years: nest bowls contained feathers but were otherwise unaltered. All nests used were in trees located in the interior of the heronry. Typically each tree contained from two to seven nests placed at varying heights; Great Horned Owls used nests located in the middle of the remaining limbs of the dead trees while Great Blue Herons occupied nests in the upper limbs of trees but did not use nests below or adjacent to an active owl nest until the owlets fledged or the nest was deserted. Minimum observed distances between active heron and owl nests were about 2 m. In 1982, 1983 and 1984 herons occupied and repaired several of the unused adjacent and lower nests after owls had departed the nest tree area. Reluctance to use nests near active owl nests may have been influenced partly by the behavior of the young owls, which usually left the nest at 2-3 wks of age to move about on adjacent limbs.

Although not actually observed, backdating (Anderson and Hickey, Wilson Bull. 82(1):14-28, 1970) from the time young were first recorded in the nests suggests that nest

site selection by owls occurs in February, shortly before Great Blue Herons arrive; thus, the owls usurp the nest of their choice. Incubation dates ranged from 5 March-7 April, while earliest dates in which young were found in nests were 1 April-7 May. Earliest observed fledging date was 8 May but young typically fledged in late May or early June. Comparatively, herons arrived in late February and early March and apparently selected and began to repair nests shortly thereafter. Heron eggs were laid in late March and early April and young were in the nest from late April through June and sometimes July.

Great Horned Owl nests averaged 2.5 young/nest (range one-three) but in 2 of the 4 yrs young did not fledge. In both years disappearance of the 2-3-wk-old young occurred during a period of severe storms and associated high winds.

Although infrequently reported, the use of heron nests by Great Horned Owls is apparently widespread: Bent (U.S. Natl. Mus. Bull. 170, Pt. 2, 1938) recorded owl use of nests of larger herons in Canada and the eastern United States and Black-crowned Night Heron (Nycticorax nycticorax) nests in California. In central Utah we have found both Great Horned Owls and Long-eared Owls (Asio otus) nesting in a Great Blue Heron heronry along the western edge of Utah Lake, Utah County, in 1969 and 1982.

Science Division, Mount Vernon Nazarene College, Mount Vernon, OH. Address of second author: Biology Department, Southern Connecticut State University, New Haven, CT 06515.

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