

## NOTES

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**AMERICAN ALLIGATOR PREDATION ON ADULT NORTHERN BOBWHITE**

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Predation on Northern Bobwhites (*Colinus virginianus*; hereafter bobwhites) is the leading cause of mortality throughout the range of the species (Stoddard 1931, Rollins and Carroll 2001). In the Southeast there are numerous predators that prey upon adult bobwhites such as raccoons (*Procyon lotor*), bobcats (*Lynx rufus*), and hawks, including Cooper's Hawks (*Accipiter cooperii*) and Sharp-shinned Hawks (*Accipiter striatus*) (Stoddard 1931, Burger et al. 1995, Burger et al. 1998, Rollins and Carroll 2001, Madison et al. 2002, Cox et al. 2004). Reptilian predation on full-grown bobwhites is less common—although reptiles have been documented as common nest predators (Staller et al. 2005), and American alligator (*Alligator mississippiensis*) predation on adult bobwhites, to our knowledge, has never been documented. Alligator predation on certain birds is relatively common (Elsey et al. 2004, Rice 2004), but in all cases reported before now the bird species were those that live in or primarily around water (e.g., Mottled Duck, *Anas fulvigula*).

As part of a long-term project studying various aspects of bobwhite ecology, we have radio-tagged  $\geq 3,000$  adult bobwhites. Our study sites have ranged from the coastal plain of North Carolina to the southern Peninsula of Florida. The predation reported herein was observed on a private ranch in Osceola County, south-central Florida. The landscape in this part of Florida is interspersed with wetland habitats. These areas are often in close proximity or within areas of upland habitats. Therefore, traditional bobwhite habitats are associated with alligator habitats. The study site has historically been managed for multiple uses including cattle and wildlife. Recently, Northern Bobwhite management has been the primary objective and prescribed fire and roller-chopping have been common habitat management tools.

We monitored a nesting female bobwhite in an ecotone of two freshwater marshes. Within one of these marshes was a man-made water hole approximately 5 m deep. In the afternoon we located the bobwhite away from the nest and, as indicated by the radio-telemetry signal, near the man-made water hole. The presence of an American alligator was noted in the water hole near the estimated telemetry signal locale. We left the signal and came back the next day to investigate; we determined that the transmitter emitted a mortality signal. After homing in on the location of the transmitter, we discovered that it was inside the alligator. To verify our presumption, we legally harvested the alligator for further examination. During necropsy we found the radio-transmitter in the upper portion of the proventriculus in the gastrointestinal tract. Notably, no other evidence of the bobwhite was present, and the entire intestinal tract was devoid of food.

The predation occurred during a moderate drought on the study site, and the bobwhites' usual sources of water (dew and food) may have been scarcer than usual. We hypothesize that this lack of water and limited alligator food resources potentially contributed to this uncommon phenomenon. Bobwhites rarely seek surface water (Stoddard 1931), but due to the lack of dew resulting from the drought, the general prevalence of water on the study site, and the close proximity of the water hole to the bobwhite's nest we assume that the bobwhite visited the water hole to drink.

Predation on bobwhites by alligators does not have specific demographic ramifications given its rarity. Perhaps the most notable concern is for the safety of the researchers who track radio-tagged bobwhites in the range of alligators.

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