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**The drowning of Bobwhites in a large reservoir.**—Establishment of the causes of natural mortality in animal populations is a vital but perplexing problem. The following observations illustrate a dramatic, but probably not unusual demise of Bobwhite (*Colinus virginianus*) living in proximity to a large reservoir.

A covey of 20 Bobwhites was found drowned in Bull Shoals Reservoir, Arkansas, 11 October 1966, by the writers while engaged in limnological studies. Evidently these birds mistakenly landed in the water when confused by a dense early morning fog. They were first observed at about 09:00 when visibility was poor. Examination of several of the birds showed no rigor mortis, bright clear eyes, but no body heat. The water temperature was 68°F and the air temperature 38°F.

Approximately 10 miles from the location of the covey, a single drowned Bobwhite was observed about 200 yards from shore. This bird was fresh but stiff. The time was then 11:30, the fog had burned off and the air temperature had risen to 75°F. One-half hour later 20 bodies, now stiff, were re-examined floating in the water about 50 yards off a small point. Scavengers at the scene included three Crows and three Turkey Vultures.

Discussion with two fishing guides disclosed that on three occasions over a 10-year period they had rescued groups of four to ten live Bobwhites from the reservoir under similar conditions.

Arkansas-Missouri Ozark impoundments are frequently shrouded in dense morning fogs in the fall, resulting from slow cooling combined with windless nights and bowl-type basins. The surrounding hardwood-covered ridges do not support dense Bobwhite populations, but the scattered coveys are attracted to shoreline areas where annual plants are dominant and tree growth is held in check by infrequent fluctuations in water level. Although the breadth of this area between the top of the flood control pool and the top of the normal power pool is limited, its edge effect is large. At Bull Shoals it amounts to 740 shoreline miles, or to an area about one-half that of the 45,440-acre reservoir itself. Thus it can be seen that the potential for Bobwhite drownings under such circumstances is large whereas the chance of observing such occurrences is small.—JAMES W. MULLAN (*Present Address: Bureau of Sport Fisheries, 95 South Vernal Avenue, Vernal, Utah*) AND RICHARD L. APPLGATE (*Present Address: South Dakota Cooperative Fisheries Unit, South Dakota State University, Brookings, South Dakota*), *South Central Reservoir Investigations, Bureau of Sport Fisheries and Wildlife, Fayetteville, Arkansas, 5 July 1968.*

**Resting by Barn and Great Horned Owls.**—In late March 1968, a pair of Barn Owls (*Tyto alba*) was found nesting in a cavity in the side of a 10 m deep irrigation ditch six miles northeast of Fort Collins, Larimer County, Colorado. Activities inside the shallow hole could be observed from the opposite bank. A spring snow storm accompanied by strong north winds partially filled the cavity with snow on 3 April. When I visited the site on 4 April, five eggs were visible half covered with snow. One adult was standing near the clutch in the 3 m × 0.5 m × 0.5 m hole. I returned on 10 April to observe an adult, assumed to be the female, apparently brooding while the original eggs were scattered about the cavity floor. On 20 April, I climbed to the nest

for the first time. Both adults were in the hollow with five clean white eggs in a depression of broken pellets. Three of the darkened, cracked eggs from the initial clutch were pushed against the opposite wall. The second clutch contained eight eggs, all of which hatched.

East (Bird Lore, 32:4-7, 1930) observed a Barn Owl that incubated a clutch of infertile eggs three months before starting a new one. The Colorado birds evidently ceased incubating their frozen eggs and within six days began a replacement clutch.

I also observed renesting by Great Horned Owls (*Bubo virginianus*) caused by loss of the male early in incubation. A pair chose a cavity 8 m high in a large cottonwood (*Populus* sp.) located on the lawn of a rural home south of Fort Collins. They seemed relatively indifferent to the frequent human activities near them. On 16 February and subsequently the female sat in the cavity and the male roosted nearby. The male disappeared on 8 March and was not seen again. After four days of incubation following the male's disappearance, the female abandoned the eggs. It is not known if the female fed during this time. (The male supplies food to his mate during incubation, making his presence essential to success at least through that period.) After waiting several days, I examined the four eggs and found them to be fertile. Following 13 days of absence, a pair of owls returned to the nest site. Although the female had no distinguishing marks, she was assumed to be the original by her unconcern for human approach. This male, however, was obviously not the original for he was much more wary of human observers. A second clutch of two eggs was laid in the same cavity and both young fledged.

Renesting, at least in the same nest site, following an interruption of the nesting cycle apparently is unusual in owls. The Barn Owl, however, displays a very adaptable reproductive pattern and this may explain its ability to renest. A number of multiple broods have been reported (Wallace, Michigan Agr. Exp. Sta. Tech. Bull., 208, 1948; Stewart, Auk, 69:227-245, 1952; Morejohn, Auk, 72:298, 1955; Ames, Wilson Bull., 79: 451-452, 1967). Double, overlapping broods were observed in 1967 at this same Colorado nest site (Marti, Colorado Field Ornithol., 3:7-8, 1968). Ames (op. cit.: 452) suggests that this indicates a pair of Barn Owls may retain its breeding capability longer than most large raptors, and this facilitates production of second broods. It would facilitate renesting even more.

The Great Horned Owl seems to be less versatile in its reproduction. In this case, because interruption by loss of the male occurred early in incubation, the female's hormonal control may have had time to recycle, allowing her to find a new mate and start a second time. I know of no reported cases of renesting or of double broods in Great Horned Owls in this type of situation.

I would like to thank Dr. and Mrs. Robert D. Haberstroh for their cooperation in observing the Great Horned Owls noted in this paper.—CARL D. MARTI, *Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, Colorado 80521, 20 January 1969.*

**Foraging association of Green-barred Flickers and Campo Flickers in Argentina.**—Approximately 10 observations were obtained of association in foraging between the more arboreal Green-barred Flicker (*Colaptes* [*Chrysoptilus* auct.] *melanochloros*, including the subspecies *nigroviridis*, *perplexus*, and hybrids between *melanochloros* and the former two races) and the terrestrial Campo Flicker (*Colaptes campestris campestroides*) in Argentina. These observations were made during September to November