

point the gosling appeared to be wet and tired. It trailed the family as they headed to the next series of riffles and disappeared from sight.

The above incident has shown that a newly hatched Blue Goose gosling lacks the swimming ability, in fast water, of newly hatched Common Eiders and is unable to adapt itself to their mode of feeding.—BERNARD C. LIEFF, *Department of Zoology, University of Western Ontario, London, Ontario, 28 October 1968.*

Shell color of eggs laid by yearling, 2-, and 3-year-old Pheasants.—In an earlier paper (Wilson Bull., 78:379, 1966), we reported that the shell color of eggs laid by individual yearling Pheasants (*Phasianus colchicus*) varied noticeably. Further investigation revealed that the shell color of eggs laid by these same hens as 2- and 3-year-olds showed similar seasonal variation.

Mean eggshell color changed with increasing breeding age for some Pheasant hens but not for others (Table 1). The eggs laid by hens 335 and 345 showed considerable

TABLE 1
MEAN SHELL COLOR OF EGGS LAID BY INDIVIDUAL PHEASANTS AS YEARLING, 2-, AND 3-YEAR-OLD BREEDERS IN 1964, 1965, AND 1966, RESPECTIVELY*

Hen	Age of Hen		
	Yearlings	2-Year-Olds	3-Year-Olds
335	14-E-6† (47) ‡	15 ^a -G ^a -10 ^a (74)	—
337	13-D-3 (78)	13-D-3 (86)	—
340	12-C-2 (84)	12-C-2 (98)	12-C-2 (95)
342	13-E-5 (104)	13-F ^a -5 (122)	13-F-5 (94)
343	13-E-5 (65)	13-F-5 (82)	—
344	13-E-5 (88)	13-E-6 ^s (84)	—
345	12-C-2 (43)	13-E ^s -3 ^s (99)	12-C ^s -1 ^s (74)

* All hens were maintained individually in outdoor cages at Urbana, Illinois, and were fed a standard ration and water, ad libitum.

† Color values are expressed according to the system of Maerz and Paul (A dictionary of color, 1950). The numerals preceding the letter refer to the plate numbers in the orange to yellow color group, which contains eight plates (Nos. 9–16). The plates progressively designate decreasing degrees of purity (e.g., increasing amount of gray), reflecting 86 (Plate 9), 74, 67, 48, 38, 28, 20, and 10 (Plate 16) per cent light, respectively. Each plate is divided into 12 columns (lettered A–L) and 12 rows (numbered 1–12), and shows 23 analogous hues corresponding to the squares in the far right column (L) and in the bottom row (12). Each hue, at its level of purity, is thus expressed in 12 degrees of strength, grading from full strength at the terminal position (lower right) to no hue (upper left). Thus, the letter and following numeral measures hue and its strength. A numerical system was derived so that the differences for each value of mean color could be compared statistically between successive years. The superscript *s* denotes a significant shift ($P < 0.05$) in color value from the previous year.

‡ The numbers of eggs laid by each hen are in parentheses.

variation in mean shell color between successive years whereas those eggs laid by hens 337 and 340 showed no deviation in mean shell color from year to year. The degree of purity in the shell color of eggs laid by individual Pheasants in successive years was a more stable character than was hue (and strength of hue).

Although eggshell color is generally thought to be genetically controlled (Labisky and Jackson, op. cit.), it is obvious that the expression of the genotype in Pheasants is dependent on environmental factors and is subject to modification with age.—RONALD

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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. APPLIGATE (*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