

- 4:01 Egg completely within snake's mouth.
- 4:02 Egg at a position just back of the head.
- 4:05 A cracking noise heard, apparently caused by breaking of the egg. Egg not crushed, however, since it still forms a bulge in the body.
- 4:06 Egg moving back much faster.
- 4:08 Egg has reached a position 6 inches behind the head and still moving fast. Snake attempting to take another egg.
- 4:12 Egg about 15 inches behind snake's head. Snake attempting to obtain grasp on second egg. It seems that pains are taken in selecting the large end of the egg. In approaching the egg, snake had turned its head in opposite direction from that in which first egg was consumed. In this operation the egg was shifted slightly. Snake shows no fear of us as we stand within a few feet of the nest.

We caught the snake before it had swallowed the second egg. On killing it and opening the alimentary tract, we found the shell of the first egg cracked and the yolk running out. The estimated total length of the snake was 54 inches. We did not see nor hear the hen grouse while making these observations.

At 8:30 a.m. on May 18 we visited the nest again, flushing the hen from her clutch of three eggs, all of which seemed to be in perfect condition. We continued to visit the nest almost daily until May 31, on which date we found it empty.

2. On May 14, 1950, at 7:25 a.m., I visited a nest four miles east of Alpine, Pulaski County, finding it empty. I had first visited this nest on April 14, on which date it had held three eggs. On April 26 the ninth and last egg of the clutch had been laid. The nine eggs had been incubated about 17 days when I last saw them on May 13. On the 14th the nest was warm and dry, in contrast to the surrounding leaves which were wet from a recent shower. I decided that it had been unoccupied only a short time. While I was critically examining the leaves of the nest's bowl a grouse flushed about 30 feet away. For half an hour I could hear the bird calling intermittently in the distance. It did not return to the nest. At 8:15 I found and captured a black-snake 21 feet from the nest. On cutting open the intestinal tract, I found the entire clutch of nine grouse eggs, each cracked, and each containing a large embryo. The snake was 60½ inches long.—FREDERICK C. HARDY, 133 North Central, Somerset, Kentucky.

**Abnormal throat-color in male Bob-white Quail.**—In three male Bob-white Quail (*Colinus virginianus*) which I have had occasion to examine recently, the white throat-patch was boldly divided by a median black area or stripe. In one individual, a bird shot near Alva, Woods County, Oklahoma by Arnold Purviance of Mooreland, a black stripe about a quarter of an inch wide extended from the chin almost to the end of the throat-patch. The rest of the plumage of the head and body was, so far as I could see, normal. Wallace Hughes made a sketch of the head of this bird. A black and white reproduction of this sketch appeared on the back cover of the February, 1949, issue of *Oklahoma Game and Fish News*.

The two other abnormally colored specimens were among six male birds shot from one covey in eastern Cleveland County, Oklahoma, in December, 1949, by Earl Johnson of Norman. In these birds the black median area was a quarter of an inch wide, about as in the Woods County specimen discussed above. The heads of the two specimens were mounted and placed in the University of Oklahoma Museum in Norman.

Stoddard (1931. "The Bobwhite Quail. Its Habits, Preservation and Increase", p. 88 and plate 18) states that this color variation occurs very rarely. I have not found any other reference to Bob-whites with partly black throats.—GLENN JONES, 1115 W. Garver, Norman, Oklahoma.

**Egg-laying, incubation, and fledging periods of the Spotted Sandpiper.**—Witherby *et al.* (1940. "Handbook of British Birds", 4: 303) stated that the period of incubation for the

Spotted Sandpiper (*Actitis macularia*) was 21 days, "not 15 as given in Bent's work." A more detailed account by Miller and Miller (1948, *Auk*, 65: 562) gave, for three nests at Belle Isle, near Detroit, Michigan, 20 to 22 days, and references showing periods from 19½ to 21 days. Nelson (1930, *Bird-Banding*, 1: 8) gave an incubation period of 21 days for one Michigan nest.

Miller and Miller (*op. cit.*, p. 561) stated that in seven nests observed by them one egg was laid daily, but that in two other nests one day was skipped between the laying of the second and third eggs. The latter part of this statement was, according to a personal letter from the authors, slightly in error: in one of the "two other nests" a day was skipped between the laying of the first and second eggs; in the other a day was skipped between the third and fourth eggs. These authors stated, in their paper (*op. cit.*, p. 566) that the chicks began to fly at 14–15 days of age.

At a nest which I found in May, 1950, the egg-laying pattern was distinctly different from anything suggested above. The nest was near the Carrie Dam in the Preston Frith, in Butler County, Pennsylvania, 30 miles due north of downtown Pittsburgh. A transcript of my record follows:

Sunday, May 14, 1950, shortly before noon E.D.S.T. the bird was flushed from one egg, presumably shortly after she had laid it.

May 15	5 p.m.	still only one egg
May 16	5 p.m.	two eggs
May 17	5 p.m.	two eggs
May 18	7 p.m.	three eggs
May 19	5 p.m.	four eggs, and bird sitting
June 11	noon	four eggs, none hatched
June 12	7 p.m.	one dead young in nest, other three gone.

The slow rate of egg-laying surprised me: it took five days (May 14–19) to increase the clutch from one to four eggs—almost two days per egg. The weather was favorable, but cool at night at the water's edge.

The incubation period was between 23 and 24 days (May 19–June 12), appreciably longer than anything recorded in the literature above mentioned.

So far as I could tell, the hatching was normal. The dead young one was dry and fluffy, apparently having been for some hours outside the shell.

From the time incubation started I noted only one adult sandpiper at the dam at any time, this despite the frequency of my observations. I do not know what the sex of the one bird was. After the eggs hatched I several times observed one adult and two young some two hundred feet from the nest in the spillway from the dam, and later along the shore close to the nest-site. Witherby *et al.* (*loc. cit.*) stated that the young were "tended by one parent." Nelson (*op. cit.*, p. 2) stated that incubation and brooding were done by the male bird only.

On June 26 and 27, when the young were 14–15 days old, they did not fly, even when my dog chased them, but on the 30th they flew without provocation. Their fledging period was a day or so longer than that reported by Miller and Miller.—F. W. PRESTON, *Butler, Pennsylvania*.

**Short-billed Marsh Wren breeding in Kansas.**—On August 26, 1950, in a field south of and adjacent to U.S. Highway No. 40, and eight miles west of Lawrence, Douglas County, Kansas, we discovered at least six singing Short-billed Marsh Wrens (*Cistothorus platensis*). A specimen shot by Tordoff that day proved to be a male (UKMNH No. 29664) with much worn plumage, completely ossified skull, and considerably enlarged (about 6 x 4.5 mm.) testes.

A search of the literature revealed that, despite Gosse's calling the Short-billed Marsh Wren a rare summer resident in the state (1891, "History of the Birds of Kansas," p. 617), the A.O.U. Check-List's inclusion of eastern Kansas in the breeding range (1931, p. 249), and Bent's statement that the species breeds south "to . . . central Missouri (St. Louis and Kansas City)" and "west to western Missouri (Kansas City) . . ." (1948, *U. S. Natl. Mus. Bull.* 195: 274), there was no definite breeding record for Kansas.