

## GENERAL NOTES

**Reactions of Chipping Sparrows to displaced nestlings.**—A number of workers have set up experiments to test the reactions of young and adult birds in nesting situations. The natural occurrence described below has some elements which appear to be worthy of record in this regard.

On July 7, 1953, about 9:30 a.m., we saw a Chipping Sparrow (*Spizella passerina*) fly up from three young on the ground in the wooded edge of a baseball diamond at the University of Michigan Biological Station, Cheboygan County, Michigan. The young were huddled in a small open area of bare ground between low bushes. Their heads were together and they lay almost directly below the nest, one side of which had broken loose from its attachment to a twig near the end of an oak branch about five feet from the ground, probably in the heavy wind storm (with a little rain) the previous afternoon. Both adults gave alarm notes nearby.

As a marker to prevent our stepping on the young, two pieces of board a few inches long were placed end to end and at right angles to one another about five inches from the young birds. A few minutes later one of the adults had returned to the young and was brooding them, though unable to cover all three with its body and slightly spread wings. As the young were huddled close together, it was evident that the flat surface of the ground was a less favorable situation for brooding than the cupped depression of the nest.

The next day, we each visited the birds independently. One of us made photographs of young and brooding adult from as close as four feet. Only the youngest bird was being brooded; it had moved to the nearest board, under which its head rested while its posterior end protruded from the adult's breast feathers. The other two young had moved into the angle between the boards, where they lay largely under the raised edges, one facing outward, the other parallel to the board with its head against the tail of the first. One of these had its eyes open, and both had the entire dorsum covered with feathers; the tips of the remiges had broken from their sheaths.

The next visit was at 9 p. m., July 8. An adult flushed from the nest or a twig close to it, apparently having gone to roost there. All three young were huddled together and flattened close to the ground in the angle between the boards and mostly under the overhanging edges.

Next day, July 9, a visit at 7:45 a. m. showed that the young were not at the boards, but the adults kept low overhead and scolded. Two fecal pellets, fairly fresh, were in the angle between the boards. After a brief hunt did not disclose the young, we hid 150 feet away and watched the adults. They flew to the ground several times in the next 20 minutes, but a search there at the end of this time did not disclose any young.

Another look at the boards showed that the feces were gone—presumably taken by one or both adults on their trips to the ground. As they gave alarm notes nearby, one had a worm in its bill.

At 7:30 p.m. another search did not disclose the young. Two adult Chipping Sparrows were about 50 yards from the nest, one singing from a high perch and briefly chasing the other as it started to fly across the open ball field. No alarm notes were given. We do not know whether the young had moved some distance away or whether they had been removed by a predator, perhaps one of the *Citellus tridecemlineatus* in the area.

The most significant features of the reactions of adults and young to the abnormal situation described above may be briefly summarized as follows: the huddling of the young in the partial enclosure of the boards; brooding of the young on the ground by at least one adult; removal of feces from the ground where the young had been for more than 24 hours; and roosting of the adult at the nest rather than with the young.

The minimum temperature the night of July 8, as registered by a maximum-minimum thermometer laid on the ground near the young was 51° F. The temperature of the previous night was not measured there but was probably similar.—FREDERICK H. TEST, *Department of Zoology, University of Michigan, Ann Arbor, Michigan*, and ELIZABETH R. VANDEGRIFT, *Muskegon, Michigan, March 23, 1954*.

**Bob-white eggs in pheasant nest.**—The parasitic practice of the European Cuckoo (*Cuculus canorus*) and our cowbirds (*Molothrus*) in depositing their eggs in the nests of other birds is well known.



The practice is probably more common than is generally supposed in isolated cases among several species of birds. The accompanying half-tone shows a nest of the Ring-necked pheasant (*Phasianus colchichus*) filled with eggs of the Bob-white (*Colinus virginianus*). It was discovered on the property of Dr. Claire Straith on the outskirts of Detroit, Michigan. This pheasant nest was first found when there were about six pheasant eggs present. About one egg was added daily for several days and then quail eggs began to appear, so that about a week later there were thirteen pheasant eggs and eight quail eggs present in the nest, at which time the photograph was taken. The pheasant abandoned the nest and the eggs all spoiled.

The above incident was referred to D. W. Douglass of the Technical Staff of the Michigan Department of Conservation, who replied as follows: "Mr. Tucker discussed with me your letter regarding quail eggs in a pheasant nest. I have asked around the Division to see if we could get any definite records of this sort. We have not made an exhaustive effort but have so far failed to come up with any cases. However, referring to Stoddard's 'The Bobwhite Quail,' (1932, Charles Scribner's Sons, New York) we find that he mentions that so-called aggregate or dump nests, in which several female quail deposit eggs in one nest, are fairly common in the quail country.

"There have been found as many as twenty-eight eggs in one nest with reports of as many as forty or more from other areas. Also, Stoddard reports on Bob-whites laying in chicken nests. It would not be at all surprising, therefore, if occasionally a quail laid eggs in a pheasant nest. This is a rather common occurrence among many birds."—ALEXANDER W. BLAIN, 2201 Jefferson Avenue East, Detroit 7, Michigan, November 2, 1953.