

FIELD NOTES**HISTORY OF A KILLDEER'S NEST.**

The following notes from my notebook are about a killdeer's nest, which I found in our thirty-acre corn field about one mile northeast of the town of Wall Lake, Iowa:

June 8, 1911.—I found a killdeer's nest while cultivating corn. The nest was merely a slight depression hollowed out in the ground beside an old corn husk and a piece of stalk and contained two eggs. The mother bird tried to draw me away by uttering all sorts of cries, squatting, fluttering her wings and occasionally spreading her tail very wide in a fan shape. A part of the time two male killdeers were around, but they did not come close. I moved the eggs about twelve feet while I plowed the corn row they were in, then I moved them back again.

The nearest running water to the nest is about one-half mile away, a small creek, while the nearest marshy places, such as killdeers usually feed in, are over a mile away. The nearest blue-grass pasture is about one-fourth mile away.

June 9th.—Found the killdeer absent from her nest at 7:40 a. m., and three eggs in it. The killdeer soon returned and sat on the nest most of the forenoon.

June 11th.—The killdeer's nest contained four eggs at 6:42 a. m. At 8:30 p. m. the nest contained only three eggs. The wind blew very hard from the northwest all day, but I do not think the egg blew away.

June 14th.—I found the missing egg about five rods southwest of the nest. As the wind blew from the northwest on the 11th it could not have blown there. The shell was pierced and empty, with yolk stains around the opening. It appears that some small animal carried off the egg and sucked it, although I could not determine what, or why it did not return for the other eggs.

June 18th.—My sister and I went out to the nest after dinner. The killdeer left the nest without making an outcry while we were yet about five rods away and did not return until we had gone quite a distance from the nest, when it flew around us with outcries and led us further from the nest. It then flew away, but did not return to the nest while we were in sight.

June 24th.—I saw six old killdeers all in a bunch in the hayfield this evening, which were calling and acting as though there were young killdeer there. (The hayfield is located north of the cornfield and about one-fourth mile away.)

June 25th.—I went out to the killdeer's nest this morning. The three eggs are still there and have not hatched. The killdeer has

collected quite a quantity of small weathered pieces of cornstalks and scattered them in and around the nest.

June 28th.—The killdeer's eggs have not hatched yet.

July 2d.—I went out to the killdeer's nest this morning about 3 o'clock. The three eggs were just pipped; that is, the shell cracked out, not broken through. At 3 p. m. the eggs were still in the same condition. Both old birds were there and somewhat solicitous, although they did not come very near. I went out to the nest again at 6:30 p. m. I could hear one chick peep inside the shell several times, otherwise conditions were unchanged.

July 3d.—The killdeer's eggs were pipped through the shell and membrane this morning. At noon they were not yet hatched and were in the same condition at night. The old killdeers were in the vicinity of the nest morning and evening, but not at noon.

July 4th.—The eggs were not hatched early this morning. I could hear one chick peeping very loudly.

July 5th.—The killdeer's eggs were not hatched at 6 a. m. and I could hear the chicks peeping. As the weather had been very dry and very hot the past week I concluded that the eggs needed moisture and poured the stale water from my water jug over them. The female killdeer was a little alarmed at this. At 1 p. m. I again visited the nest and found the eggs hatched. The young birds were squatted flat on the ground in the nest, two of the three not yet dry, and they were puffing from the heat. The temperature was 102° F in the *shade*, and they were exposed to the full glare of the sun upon the dark earth. The old birds were both there, but made only a slight outcry. About 2:30 p. m. a shower of rain fell, which would have supplied the moisture had I not done so. Some friends and I again went out to the nest at 8 p. m., but although the old birds circled about, the young killdeers were gone.

July 9th.—I saw the two old killdeers and two chicks in the bluegrass pasture about one-fourth mile from where they were hatched. I followed one chick slowly for about five rods, when I was able to capture it. It called repeatedly just before I caught it and was apparently tired out. After replacing it on the ground I could not persuade it to move, so I left it.

My father saw the chicks in the same locality about two days later, so I hope they survived.

According to these notes the incubation period would be either twenty-one or twenty-two days, depending on when the incubation commenced, had the eggs hatched the day they were pipped. As conditions were, the period of incubation was either twenty-four or twenty-five days, which shows how hardy the killdeer chicks were.

I did not put it down in my notes, but I also moved the eggs the second time I cultivated the corn.

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NOTES FROM LAKE COUNTY, OHIO.

Iceland Gull—On December 3, 1916, a White-winged Gull was flying about the piers and breakwaters at Fairport Harbor, and was under my observation for some time. The bird was an immature and very dark in coloration, except for the end third (primaries) of the wings, which were pure white. The general color was as dark as the darkest immature Herring Gull one ever sees, and this brought out the white tips of the wings in striking contrast. Even when the bird flew far out over the lake, where the glass was necessary to distinguish it at all, these pure white wing tips were very evident. I called it Iceland rather than Glaucous because, from among the immature Herring Gulls about for comparison, it did not show appreciably larger. The bird winged back and forth and settled upon the water at times, but made no vocal outcry whatever.

Purple Sandpiper—The bird mentioned in the December issue of the Bulletin stayed about the stone breakwater for some time and was last seen on November 12. On this date it showed a tameness worthy of record. A friend and I walked up to within fifteen feet of the bird and then sat down to observe it at our ease. It watched us also for a while and then deliberately tucked its bill under its wing and took a snooze. Nor did it withdraw its bill when we arose and left. Later in the day I went out on the stones again alone and was keeping an eye in the air for ducks, when I became aware that something was trying not to get stepped on. I looked down and there was the Sandpiper again at my feet calmly walking away. The bird was injured in no way, for it took long flights across to the other breakwater and was a splendid fat specimen. Before I could get down again with a camera a severe winter storm had occurred and I saw him no more.

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THE MAY MIGRATIONS, 1917, AT OBERLIN, OHIO.

If one needed concrete evidence that the weather does have a profound influence upon the movements of the birds during their periods of migration, he has it.

March was not unusual, and while the records show a somewhat erratic migratory movement for that month—in the unusually early