

INCUBATION PERIOD OF THE MOCKING BIRD.

BY JOHN W. DANIELS, JR.

Little has appeared concerning the exact time required by various species of birds for the incubation of their eggs. The period of time necessary for the development of the egg contents, from the fresh state to the hatching point, must needs vary with species and be subject to the many diversified conditions under which birds breed. Features of climate, as sunshine, atmospheric humidity, precipitation and temperature enter, along with locality, time of year, nesting site, nesting material, and nesting habits in general, as potent factors of control. In order to determine the period of incubation of any species the closest observation is necessary, and the observer should visit the nest daily, from the time of the laying of the first egg until the young leave the nest; and better still, if his observations commence with the laying of the foundation of the nest and are carried on until the young are able to fly. Exact data, as to the time necessary for the incubation of the eggs of even our commonest birds, is very meager—so here is a little-worked and profitable field for research; and as the securing of this information involves no destruction of bird life, it may be had without sacrifice of any sort save that of time and patience.

The following data regarding the period of incubation of the Mocking Bird (*Mimus polyglottos*) was secured in Campbell county, Virginia, April 29th to June 3rd, 1901, inclusive. Upon the former date the half-completed nest was found, and upon the latter date the young were seen to leave the nest. The nest was five feet up among the lower branches of a Norway spruce, which grew within twelve feet of the veranda of our home, in our front yard. Thus, the nest could not have been more favorably located for my purposes of observation, as its nearness to my home allowed me to visit it daily, regardless of weather, and at short intervals:

April 29. Found the half-completed nest.

May 3. Examined the nest and found it completed, apparently ready for eggs.

May 4. Nest still empty.

May 5. First egg laid.

May 6, 7 and 8. An egg followed each morning for three days. Parent bird started incubating with egg No. 1, and was on nest constantly thenceforth. Visited nest early and often each morning with a view to getting data as to time of laying of each egg. It was not possible to find out the precise time, but an approximate schedule was made as follows.

Egg No.	1,	deposited	8:30	A. M.
“	“	2,	“	9:00
“	“	3,	“	8:00
“	“	4,	“	8:45

May 9, 10 and 11. Visited nest. Both parents present, one on nest and other in adjoining shrub.

May 12. Examined nest and was sorry to note that one egg had disappeared—no doubt the work of a jay or crow. Parents around, though seeming shy.

May 13. Visited nest. Both birds present, one on nest. Both very demonstrative.

May 14. Visited nest. Parent bird incubating, as usual.

May 15. Much to my regret I found another egg missing from the nest this morning. Both birds around, apparently much distressed. Would like to catch the thief.

May 16. Visited nest and was glad to find bird sitting upon the two remaining eggs.

May 17. Visited nest. Parent flew from it. Both present. They scolded, and one fluttered so close as to almost touch me.

May 18. Visited nest. Parent flew from it upon my approach. One bird seems to stay on guard on the topmost branch of a nearby shrub while the other bird incubates. On nearly every visit this has been the case. The bird on guard utters a wheezing sort of note on my approach, which seems to warn the sitting bird, as she at once leaves the nest.

May 19. Visited nest. Both birds present, scolding vigorously; are becoming accustomed to me, as they approach nearer.

May 20. Visited nest. One bird on guard on topmost branch of a nearby tree, as usual. Both birds very noisy and approached quite near to me when I examined nest.

May 21. Visited nest. Both birds around as usual; bolder than ever; very demonstrative. Both alighted in branches of the spruce a few feet above my head.

May 22. Visited nest. Birds around as usual.

May 23. Visited nest. Lo! the two eggs have disappeared and two young now occupy the nest. Both old birds still bolder, approaching within a few feet of me when I go near the nest. Young have not opened their eyes yet, and are entirely naked, save for a few patches of down.

May 24. Visited nest. Both birds constantly scolded and fluttered at me. Young have not changed appreciably; their eyes are still closed.

May 25. When I approached the nest the parent birds became bolder than ever. They have now become accustomed to me and take liberties. One struck the brim of my hat with its wings, first hovering just above my head and then descending with quick a movement. Young have not opened their eyes but seem lively, and open their mouths for food when I touch the nest. Not changed much in appearance.

May 26. Visited nest. Young slightly larger; points of primaries appearing; eyes open; mouths open at slightest movement near nest; old birds demonstrative as usual.

May 27. Visited nest. Rainy day. Parent bird sitting on young; young larger and feathered tracts further developed since yesterday.

May 28. Visited nest. Young appreciably larger since yesterday. Primaries and secondaries now good sized "pin" feathers. Feathers of dorsal area fairly well developed. White, fluffy feathers on sides of breast and flanks of considerable length. Less down.

May 30. Visited nest. Further development of young

since yesterday noticeable. Feathers show still more distinctly; less down. Young more vivacious, chirping when I took them out of the nest to examine them. Both parents present.

May 31. Visited nest. Young further developed since yesterday. The remiges have broken out of the follicles. Only slight trace of down remaining. This is confined to the crown and to the dorsal area. Feathers of ventral tract fluffy in appearance and well developed.

June 1. Visited nest. Young further matured; well feathered; very slight trace of down; parents present. Young fed at intervals of five or ten minutes.

June 2. Nest visited, but the young have vacated it. A search of the neighborhood revealed them among the high grass some 150 yards distant. They are able to fly a few feet at a time. Parents continue to feed them.

To summarize, the following positively established results are apparent: Length of incubation (dating from the laying of the last egg of the set), thirteen (13) days; young in nest, after hatching, ten (10) days.

A BIRD NEW FOR OHIO.

BY LYNDS JONES.

Mr. Irving A. Field, a student in Dennison University, Granville, Ohio, reports the capture of a European Widgeon (*Mareca penelope*) on the Licking Reservoir, March 29, 1902, by Mr. Peter Hayden, of Columbus, Ohio. The specimen was given to Mr. Field, and is now in the collection of Dennison University. The frequent occurrence of this Old World form in the eastern part of this country makes it a possible visitor to any of our inland lakes. This record for central Ohio fills a considerable gap in its inland distribution.