

FROM FIELD AND STUDY

Determinate Laying by House Sparrows.—In Larchmont, Baltimore County, Maryland, in 1960, an experiment was conducted on removal of eggs from a nest of the House Sparrow (*Passer domesticus*). As eggs were laid, they were taken, leaving always a single nest-egg. This procedure failed to cause continuous laying. Addition of eggs in a second nest on the first laying day failed to inhibit laying. The first bird laid clutches of 5 and 4 separated by a four-day interval in April and May and then deserted; the second bird laid either 4 or 5 eggs in May. In Baltimore City, in earlier years, House Sparrows using my boxes laid two clutches of 5 in April, and one in May and one in June, each of 4 eggs. My experiments, therefore, resulted only in normal, determinate laying. In a review of this subject, Davis (Condor, 1955, 57:82-83) found suggestions in the literature of indeterminate laying by this species when eggs were removed, but he said addition of eggs had never been tried. Barrows (The English Sparrow in North America, 1889:161) gives reports of indeterminate laying when eggs were removed. My experiments suggest that the "indeterminate" laying thus reported may really have been determinate laying of two or more clutches with intervals between.

The following are the details of events at the nest boxes. In the removal test the male was a color-banded bird and was identified during both laying periods. The female was unmarked. The first egg was laid on April 27. Beginning on April 28 I removed one egg each day, always leaving the latest laid. An egg was laid daily through May 1. I could not watch this box until May 1; at 10:10 a.m., E.S.T., there was copulation, then the female incubated steadily. Brief watching on May 2 and 3 showed almost no incubation being done. I could not watch on May 4 or 5. I do not know whether the female ever spent the night in this box. Laying was resumed May 6, and beginning that day I removed one egg daily as before. An egg was laid each day through May 9. The female did a little incubating on May 7 and 8, and she did much on May 9. But from May 10 on I never again saw the female at the box except on May 11 when copulation was noted and the female attacked a Starling (*Sturnus vulgaris*) there. The male also was seldom in evidence, although he defended the box occasionally through May 13. However, on May 13 a Starling broke the final egg; I replaced it, but the box was abandoned. The last egg of each clutch here was much lighter in color than the others, as is commonly true in the House Sparrow.

At the box where eggs were added, the adults were unmarked. The first egg was laid on May 13; I found it at 7:41 a.m., marked it, and immediately added 4 of the marked eggs I had taken from my other box. At 8:05 a.m. the male looked into the box and the female entered, so both birds learned of the 5 eggs with great promptness. On the next three days my wife inspected the box and found the following: 6 eggs on May 14 at 7:27 p.m.; 6 on May 15 at 10:57 a.m., and 4 on May 16 at 10:12 a.m. On May 17 at 9 a.m. I found there were 5 eggs—this female's first one, one of those I had added, and three unmarked ones. On this evening the female for the first time roosted in the box. At two House Sparrow nests which I observed in earlier years, the females began sleeping in the box only when, or after, their clutches were complete. Presumably three of my week-old eggs were thrown out of this test nest, and either one of this female's own eggs also was thrown out or else she skipped a day in her laying. However, she laid either 4 or 5 eggs, one of which was a light-colored one and this one was the last to hatch.—HERVEY BRACKBILL, Baltimore, Maryland, June 29, 1960.

Quail Nesting inside Woodrat Houses in Baja California.—In the summer of 1957 ectoparasites were collected from the houses of woodrats (*Neotoma lepida*) at localities scattered the length of Baja California. On two occasions in the Cape region, south of La Paz, quail nests were found in the internal cavities of the woodrat houses. The first such association was discovered 5 miles north of Todos Santos on July 14, 1957, at an elevation of 800 feet. When this house was opened, a bird ran rapidly from the brushpile-like structure and into the surrounding vegetation. Six eggs were present in the nest; these eggs were collected and subsequently identified by Mr. W. C. Hanna of Colton, California, as those of the California Quail (*Lophortyx californicus achrusterus*). No woodrat was seen in this nest but the nest did have all appearances of having been recently active. The kissing-bugs, *Triatoma rubida rubida* and *Triatoma peninsularis*, were present in this nest; these bugs are obligate ectoparasites and rats of the genus *Neotoma* are their usual hosts.

A second similar association was found 9 miles northeast of Santiago on July 17, 1957. The quail

eggs in this nest had hatched but no birds were seen. There was no rat in this nest; it apparently had been eaten by a rattlesnake which was present in the nest at the time of inspection. This nest also contained *Triatoma rubida rubida* and *Triatoma peninsularis*.

The authors are reporting this biological association in the hope that it may be of some future value to ornithologists studying the ecology of quail. Funds for this expedition were made available from The Associates in Tropical Biogeography of the University of California at Berkeley and the College of Medical Evangelists of Loma Linda.—RAYMOND E. RYCKMAN and JOSEPH V. RYCKMAN, *Department of Microbiology, College of Medical Evangelists, Loma Linda, California, May 26, 1960.*

Baikal Teal in British Columbia.—On December 20, 1957, an immature male Baikal Teal (*Anas formosa*) was taken by the writer at Ladner, British Columbia. Contrasted with the specimen of a drake shot in May in central Siberia, the specimen has no white on the elongated scapulars but these are margined on the outer vane with rusty red and on the inner vane with pale tan-khaki. The patterns on the head are the same, except that on the specimen from Ladner the feathers of the four light patches are margined with gray. The black stripes on the side of the posterior neck, and, to a lesser extent, the mid-face stripes, have light tan-whitish feather margins; the black feathers of the front and crown are margined with a rusty color.

A Baikal Teal has been recorded from California (A.O.U. Check-list, 5th ed., 1957:76), but doubt exists as to whether the bird was wild or an escaped captive. The record of a wild bird in British Columbia tends to weaken somewhat the supposition that the California specimen was a captive.

The specimen from British Columbia is now the property of the Department of Zoology, University of British Columbia.—J. HATTER, *Fish and Game Branch, Department of Recreation and Conservation, Vancouver, British Columbia, February 1, 1960.*

Records of the Bar-tailed Godwit and Tufted Duck on Midway Atoll.—Through the courtesy of the United States Navy and financial aid provided by the American Philosophical Society, and the Bureau of Aeronautics, United States Navy, the author spent 14 days on Midway Atoll in the Pacific Ocean in December of 1959. The primary purpose of the trip was to obtain avian specimens for morphological and parasitological studies. However, a few study skins were prepared, and among these are two worthy of recording.

One female Bar-tailed Godwit, *Limosa lapponica baueri*, was taken on Sand Island on December 12, 1959. Although this species is known to migrate over water southward from the Aleutian Islands, there seems to be no specimen from Midway; the nearest locality of record, supported by a skin, is Laysan Island.

On December 5, 1959, a very emaciated, male Tufted Duck, *Aythya fuligula*, landed in a shallow puddle on a macadam road on Sand Island of the Midway group. The nearest known occurrence to the north is Wilson's sight record (Condor, 50, 1948:126) on Attu Island, some 1900 miles away. The nearest known occurrence to the west is in the Marianas Islands.

Both skins are in the collection of Southern Illinois University.

I am grateful to Dr. A. L. Rand of the Chicago Natural History Museum for identifying these two specimens, representatives of which I had never seen.

On each of my trips to Midway (1945, 1946, and 1959) there have been repeated reports of "owls and cormorants," made by naval personnel. In March, 1959, Mr. John W. Atwell (U.S. Navy) sent me a colored slide of two owls, taken as the birds left the perch. They were not identifiable except as owls. In December, 1959, a jaeger (*Stercorarius*) was observed repeatedly, but it could not be obtained. It would seem worthwhile for persons visiting the atoll to make an attempt to take specimens.—HARVEY I. FISHER, *Southern Illinois University, Carbondale, Illinois, May 16, 1960.*

An Instance of Piracy by the Red-tailed Hawk on the Peregrine Falcon.—On December 17, 1959, I went out just at dawn to feed my flock of pigeons. As I walked past the building in which they are kept the entire flock flushed at high speed from the roof where they had been perched. As they passed overhead, there was a sharp, hissing rush followed by a snapping crack, as though a dry stick had been broken. I looked up to see an adult male Peregrine Falcon (*Falco peregrinus*)