

**House Wren attempts incubation in two nests simultaneously.**—In the course of our studies of the eggs and nesting behavior of birds we come across many anomalous situations. Among the birds most easily studied in our neighborhood is the House Wren (*Troglodytes aedon*), for which in 1957 we had provided some 40 boxes on the Preston Laboratory grounds. These boxes are about six inches square inside. The wren fills the whole base of the box with twigs and generally makes the nest cavity in one of the two rear corners, remote from the entrance hole, which is centrally located in the front. A fair proportion of the birds make the cavity halfway between the two corners, but the most interesting case was a wren that tried to make a nest in both corners and succeeded at the second attempt. This was the wren that occupied our box no. 15.



In late May she scooped out two hollows, but lined only one, and laid her six eggs consecutively from May 24 to May 29, inclusive. These we collected, as we did many others, for studies of shape, pigment, and gloss. We also removed the nesting material in its entirety. The bird was orthodox in proceeding to make a new nest immediately. This time she not only constructed two cavities but proceeded to line them and to lay in them, once more six eggs, one a day from June 17 to June 22, inclusive.

The first egg went into the right pocket, and the second into the left, evening the score. The third went into the left, but the fourth into the right, once more evening the score. The fifth went into the right, and, perhaps to our disappointment, she laid the sixth egg in the right also (see photograph).

Having now distributed her eggs reasonably well between two nests, she proceeded to incubate both. Feeling inquisitive as to how well she could succeed, we left the eggs exactly as she put them. Maybe we should have had still more interesting results if we had placed three eggs in each nest. Although it is practically certain that a "split personality" of this sort is a lethal behavioral mutation, since otherwise species would be known that regularly operate with a plurality of nests, the weather was warm, the box was snug, and we thought she might have a chance. Some days one clutch would be warm, sometimes the other. It seems certain however that the four eggs got more attention than the two.

The first egg hatched on July 4 in the four-egg nest. Two more, in the same nest, hatched on the following day, and the fourth egg hatched on July 6. As soon as one young hatched, the bird ignored the two-egg nest and the eggs were cold. On July 6 we took them out and broke them open. They appeared to have been incubated effectively for two or three days.

It thus appears that a double menage of this type is likely to reduce the output of offspring by one-third or one-half.

When the eggs hatched, the young were necessarily for some days in the nest where the eggs had been, but by July 17 we sometimes found all the young in the other nest, or two in each nest. This continued until July 21 when all four young left the box.

The photograph shows the two nests well lined with feathers. A few hours after the young left not a single feather was left in either nest. We believe they began to disappear before the young left but kept no careful account. What happened to them is not clear.—F. W. PRESTON, *Preston Laboratories, Inc., Box 149, Butler, Pennsylvania, July 6, 1957.*

**Cedar Waxwings and Fox Sparrows feed upon Multiflora Rose.**—Multiflora rose (*Rosa multiflora*) is generally considered something of a "starvation food" by some workers who have observed and made use of it in plantings. Johnson (1951. *Jour. Wildl. Mgmt.*, 15(2): 221-222), and Spiegel and Reynolds (1954. *Trans. Nineteenth N. Amer. Wildl. Conf.*: 153-155) demonstrated, however, that the hips are nutritious to pheasants. Rosene (1950. *Jour. Wildl. Mgmt.*, 14(3): 315-319) noted that the seeds were carried by water and by birds. At the Patuxent Research Refuge, Prince Georges County, Maryland, casual observations suggest that when there is a crop of hips, Mockingbirds (*Mimus polyglottos*) subsist almost entirely on multiflora rose throughout the winter.

Most of the rose plantings at the Refuge are mature enough to bear a large crop of fruits and there was an abundant supply of these hips during the winter of 1955-56. On February 1, the first flock of Cedar Waxwings (*Bombycilla cedrorum*) for the winter was noted on the Conservation Farm and a perceptible build-up in numbers occurred as the month wore on. On February 23, Leonard Llewellyn made a count of 1,325 birds as they settled on a two-wire power line that extends across the farm. This was a record concentration for the Refuge. Most of the waxwings did not remain after that date, the subsequent counts ranging between approximately 150 and 400, and the last record being about 180 on March 2.

To get an indication of the amount of seed dispersed in places where the birds were frequently seen perching, a piece of burlap sacking, measuring 12¼ square feet was left under a small tree for 6½ hours. At the end of that time there were 16 regurgitations containing 100 seeds or nutlets on the burlap.

A check of tall-fescue sod under 7 large trees which covered 2½ acres as a loose stand and which were used as perches by the birds, showed that large amounts of seed had been deposited, and had worked down into the grass. A randomly selected square-foot of ground close to one of the rose fences was sampled under a large willow oak (*Quercus*