

birds which had made a nest in an abandoned mine shaft. Just below the top of this shaft, rising and lowering water had hollowed out a bowl-like excavation, on the under section of the top part of which the blackbirds had made a nest in a tunnel under a rock. No animal or human could reach it and no bird could see it from above.

The blackbirds perhaps used this device to adapt their nest to an environment in which it was threatened by more than one kind of hawk which used adjacent pine trees—the only trees for a mile or more in any direction. These birds made themselves safe from predators by changing their tree-nesting habits to one more like that of a Bank Swallow.

They were secure at least until their young were ready to fly. Whether the young will be able to fly upwards when they leave their nest, or how the parents will save their brood from being drowned in the water in the bottom of the shaft or sump, is uncertain.—FISHER C. BAILY, *Reno, Nevada*.

**A Summer Tanager, *Piranga rubra*, Annihilates a Wasp Nest.**—In November 10, 1948, I saw one female Summer Tanager destroying the nest of large red hornets. The events were as follows: At 9:30 a. m. my attention was attracted toward an active tanager on a tree some ten meters from my work room in the museum.

The nest of hornets was long and uncovered externally. With my binoculars I could plainly see the pupae and larvae of the wasps. The bird was making short flights from a branch some three meters from the hornets. In each flight the bird grasped with its bill a hornet from the nest. The angry insects followed the bird a short distance. Once on its perch or on any twig not far from the wasps, the tanager triturated the insect and swallowed it. An instant later the bird was making other flights and capturing other hornets, and so on and on all morning.

Sometimes the tanager could not capture the wasp in passing near the nest, but as the insects rushed after the bird it would turn suddenly, grasp one of them and dive to escape the insects. It would then return promptly and take another hornet. The bird did not always swallow the insects; many times it merely killed the hornets and dropped them to the ground which soon became covered with many dead hornets.

All this continued, with only occasional resting periods for the bird until about noon when, after an attack from the tanager, the hornets suddenly *en masse* deserted the nest. Promptly the bird alighted on the nest and gorged on the larvae and pupae and caught any hornet that approached the nest. At 1:30 p. m. the bird flew out of sight and I had to go to lunch, but on my return at 4:00 p. m. I was surprised to see that the hornets had returned to the damaged nest. The bird was not within sight and did not return all afternoon.

I concluded that the tanager was through with these hornets, but the following morning it came back punctually at 9:00 a. m. and once more I found myself witnessing the same interesting events. This time, however, the hornets withstood the bird only until 10:45 a. m.; at this hour the remaining insects deserted the nest. The tanager once more alighted on it, swallowing the pupae and larvae left the previous day and tearing to pieces the damaged hornets' nest.

Was the tanager merely eating the adult insects or was its interest focused on trying to force the adult hymenoptera away so that it could feed on the tender young?—MIGUEL ALVAREZ DEL TORO, *Museo de Historia Natural, Tuxtla Gutiérrez, Chiapas, Mexico*.

**Winter Courtship Display of Female Cardinal, *Richmondia cardinalis*.**—We have outside our window a feeder used by a pair of Cardinals, as well as other birds. On February 16, 1949, my wife called me to the window to look at the

fluttering of a female Cardinal. She was in a squatting position with crest erect and wings and tail outspread with wings fluttering and beak raised. As we watched, the male flew up and alighted about two feet from her. She then stood upright and slowly swayed back and forth sideways, in the meantime displaying the red portions of her plumage. At the extremity of each sway, she would hold her pose for a moment. The latter part of the display was accompanied by a "whispered" song on her part. Although the song was very faint, her throat could be seen working. The song was a whistled 'chew-chew-chew.' The male in the meantime showed a lively interest and looked down into the feeder, as though possibly searching for a suitable seed to feed to her. He then flew off in the midst of her posturing, and she immediately followed.

Although the temperature was about 38° F., the day was cloudy and far from springlike which might otherwise account for this behavior.—F. J. FREEMAN, *Iasca, Illinois*.

**First Winter Occurrence of Painted Bunting, *Passerina ciris*, in South Carolina.**—Due to the extremely unseasonable warm weather of January in much of eastern United States, it is probable that extraordinary instances of avian occurrence will be reported. The writer has obtained, thus far, the first winter record of *Passerina ciris* for South Carolina.

On January 27, 1949, Mrs. Gertrude Miles and her husband, of Pineola Plantation, McClellanville, S. C., saw two males of this species about 15 miles north of Charleston on U. S. Highway 17. The birds were at the shoulder of the road, in bright sunlight at a range of a few yards. Mrs. Miles is a native of the Carolina low country and has been familiar with the "nonpareil" since childhood. The high temperature of the day was 78° F.

The Painted Bunting usually arrives in Charleston about April 16, and the earliest record, hitherto, was March 21. The writer is indebted to Mrs. Miles for making this occurrence known.—ALEXANDER SPRUNT, JR., *The Crescent, Charleston, South Carolina*.

**Carpodacus Finches Feeding on Nectar.**—During the flowering season of the various domestic cherries in the Willamette Valley of western Oregon, the Purple Finch, *Carpodacus purpureus*, becomes an agricultural pest that at times assumes considerable importance. Flocks of these finches can destroy a large number of flowers in a few hours' feeding. Single trees about residences seem to suffer most severely, but extensive damage has been observed in several commercial orchards.

The birds pick a blossom from its peduncle, crush and maul it in their bill, and then drop it. Examination of many flowers has revealed a uniform pattern of feeding, there being no part of the flower missing, but rather the receptacle and base of the calyx and corolla are thoroughly crushed. Since there is no preliminary examination of the flowers, and a single bird will pick each flower within reach as it moves up or down a limb, it seems certain that these finches are extracting the small quantity of nectar present in the flower. When this behavior was first noticed I hoped to find that these finches were feeding upon small insects present in the flowers, but subsequent investigation did not substantiate this belief.

Beal (Yearbook U. S. Dept. Agr. for 1904: 247) noted that White-crowned Sparrows, *Zonotrichia leucophrys*, and House Finches, *Carpodacus mexicanus*, destroyed numerous blossom buds. Later, Beal (U. S. Biol. Surv. Bull. no. 30: 15, 1910) stated that both House Finches and Purple Finches destroyed "buds and blooms of fruit trees instead of the fruit itself." He further remarked (*op. cit.* 16) that he found