

court. It is my belief, shared by others who saw the hawk, that it somehow became bewildered and unable to recognize that freedom was easily accessible if it flew upward.—FRANK C. CROSS, 9413 Second Avenue, Silver Spring, Maryland.

#### SHRIKE ATTACKED BY BARN SWALLOWS

The Barn Swallow (*Hirundo rustica erythrogaster*), though normally a peaceable bird, appears to lack no courage in attacking its enemies. Bent (1942, *U. S. Nat. Mus. Bull.* 179: 452) reported that he once saw a pair of Barn Swallows attacking and chasing a Sharp-shinned Hawk which had approached their nest too closely.

On August 2, 1949, I saw 5 Barn Swallows attack a Migrant Shrike (*Lanius ludovicianus*) near Colesville, Maryland. They harrassed the shrike, which was perched on a telephone wire, until they forced it to take wing and flee across a field with its tormentors in hot pursuit. This attack seemed to be entirely unprovoked; the date was well past the period when Barn Swallows are known to nest in the vicinity. Apparently, they merely recognized the shrike as an enemy and set upon it for no other reason.

Recognition of the shrike as an enemy is evidently not universal among small North American birds. About one month earlier, near Osborne, Kansas, I had seen a Meadowlark (*Sturnella neglecta*) and a Redwing (*Agelaius phoeniceus*) calmly sharing a stretch of telegraph wire less than 6 feet long with another shrike. These 2 species are not listed by Miller (1931, *Univ. of Calif. Pub. in Zool.* 38-2: 198, 200) among the victims of shrikes, but he lists other birds, including the Mourning Dove, Cardinal, Robin, and quail, which are as large or larger.—FRANK C. CROSS, 9413 Second Avenue, Silver Spring, Maryland.

#### PECULIAR BEHAVIOUR AT THE NEST OF *FLUVICOLA PICA*

The small white and black tyrant (*Fluvicola pica*), known in Surinam as the Cotton Bird frequents banks of ditches and watercourses and is quite common in the coastal area. It builds its domed nest with a side entrance in branches overhanging the water. At a nest found on July 24, 1946 near Nieuw Nickerie I observed a peculiar behavior of one of the parent birds. The nest was lined with white feathers and contained one egg and one newly hatched chick. The parent birds were not present. I was much surprised to see suddenly one of the parent birds hopping nervously on the branches near the nest with a large white feather in its bill, but it did not actually enter the nest. At this stage of the breeding cycle the lining of the nest seemed quite out of place. So I attribute this behavior as the outcome of nervous agitation caused by my presence, when the bird returned to its nest. It seems to me to be a typical example of a "displacement activity", a behavior so common among birds. Armstrong (*Bird Display and Behaviour*, 1947) mentions many examples of fidgeting with nest material by birds in a great variety of situations and my observation of *Fluvicola pica* seems to be another example.—FR. HAVERSCHMIDT, Paramaribo, Surinam, Dutch Guiana.

#### RED-WINGS FEEDING ON WHITE ASH

A review of the literature shows few examples of Red-wings (*Agelaius phoeniceus*) feeding on seeds of trees. Beal (1900, *U. S. Biol. Surv. Bull.* 13: 41) lists "fruits of the wild cherry", beechnuts, and gives a personal account of Red-wings extracting seeds from pine cones, which he considers a case of necessity.

On October 15, 1949, I observed 2 male Red-wings (second year birds) feeding on the seeds of a White Ash (*Fraxinus americanus* L.) near a marsh at Lake Waubesa, Madison, Wisconsin. Both birds remained in the tree for half an hour, during which time they continually seized, manipulated, and dropped ash fruits. At first it appeared that the birds were simply picking off the fruits in play, so quickly did they handle them, but closer examination showed that they

were crushing the fruits in order to obtain the seeds, and immediately dropping those fruits which were not easily opened.

The method by which they removed the seed from the fruit seems interesting enough to be described. The birds seized the fruit with their beaks, pinching the edges of the blade near the distal end of the enclosed seed in such a manner that the fruit split open. Though they generally picked at the fruits from stretched positions, they sometimes carried one to a branch and held it with their claws. It is possible that this method of feeding is a habit of general occurrence. Wetmore (1919. *Auk*. **36**: 190-197) records an equally unusual food-securing technique in the Bronzed Grackle, whereby the shells of acorns were split in two by repeated impressions around the shells from the keel on the palate.—ROBERT NERO, University of Wisconsin, Madison, Wis.

#### MORTALITY IN MEADOWLARKS AS A RESULT OF SEVERE WINTER WEATHER

In January and February of 1949, in the vicinity of Lawrence, Douglas County, Kansas, there was prolonged sub-zero weather accompanied by sleet and snow. Storms occurred frequently, and the ground surface, particularly in open areas, remained covered with ice which prevented birds from reaching food on the ground. Beginning 3 miles east of Lawrence, birds were observed on a 3.5 mile stretch of highway bordered by cultivated fields and meadows. The observer made a round trip over the highway each day on his way to and from Lawrence. There is an open deciduous forest adjoining the eastern and southern margin of the fields and meadows. There are brush covered hills to the west and fallow fields to the north. In the area studied the Meadowlark (*Sturnella magna*) was the most conspicuous species. In early January several species of fringillids, in company with the Meadowlarks, foraged at the margins of the highway. The snow plow, in clearing ice from the pavement, had left a strip 2 feet wide on the shoulder of the highway on either side of the concrete and it was on this open ground that the birds congregated. With the continued icy conditions, fewer fringillids were seen; many individuals probably retreated to the protected wooded area on the eastern margin of the field. However, the Meadowlarks remained, clinging tenaciously to the narrowly cleared strip.

In early February the Meadowlarks were noticeably weakened, and some individuals on being flushed seemed to have difficulty in flying for a distance of as much as 30 feet. As the days passed there were progressively fewer Meadowlarks along the margin of the highway, and on occasion freshly dead individuals were noted.

A brief search of forested and brushy land bordering the fields and meadows was made on February 20, 1949, but there was no indication that the Meadowlarks had sought food and shelter in these areas. Probably they remained along the roadway in spite of inadequate cover and, I suppose, with a constantly diminishing food supply, with the resulting high mortality. There was no evidence of mortality among the fringillids; these birds seemingly dispersed to more favorable areas. The Meadowlark, according to Grinnell (1928, *U. Calif. Chronicle*, XXX. 429-450), "is equipped to get its food safely and in adequate amount only from ground surface which is open-clothed with a low type of plant cover". The fact that these birds failed to use the adequate food in the adjoining, though ecologically different, habitats is testimony to the limited ecological tolerance Grinnell pointed out.—PHILIP H. KRUTZSCH, Museum of Natural History, University of Kansas, Lawrence, Kansas.

#### EARLY WOODCOCK NESTING FAILURE

On March 17, 1949, Aiden Ripley advised me that he had located the nest of a Woodcock (*Philohela minor*) with 2 eggs in Lexington, Mass. On March 18th it began to snow in the Boston area at about 9 A.M. and by midnight, when the temperature had dropped to approxi-