

***Tanagra minuta*, an addition to the Mexican list.**—While examining bird skins in the collection of the Moore Laboratory of Zoology, Phillips found in a series of *T. affinis* a previously undetected specimen of the White-vented Euphonia, *T. minuta* Cabanis. The specimen, apparently an adult male, is labeled Palenque, Chiapas, altitude 210 m, 9 May 1946, and was taken by Mario del Toro Avilés. It represents the only known record of this species from Mexico, and an extension of the species' range 300 km northeastward from the former northernmost known locality of occurrence, at Cobán, Guatemala. The bird is No. 43767 in the Moore collection. According to Griscom (1932. *Bull. Am. Mus. Nat. Hist.*, 64:373), *T. minuta* is “. . . exceedingly rare north of Costa Rica,” and seemingly only two specimens have been reported (Salvín and Godman, 1883. *Biologia Cent.-Am.*, Aves, 1:259) north of there—both from Cobán. It seems possible, however, that the species' seeming rarity may result from the failure of collectors to search for it, in distinction to the very similar *T. affinis*, which is so common in many parts of Mexico and Central America. For this reason we deem it desirable to call attention to the field characters of *T. minuta* that might distinguish it from other species. Females are readily distinguishable by a broad band of dull yellowish crossing the breast and forming a marked contrast to the grayish throat and abdomen. Males are much more difficult, but might possibly be distinguished from *T. affinis* by their more tawny, less purely yellow chest and by the white crissum, a character which *minuta* shares with no other species of *Tanagra* in its northern range. In the hand, *T. minuta* is readily distinguished by its less swollen mandible, the outline of which is nearly straight. In direct comparison with *T. affinis*, *T. minuta* is distinctly smaller. Although the area of Palenque, Chiapas, is one in which this species might be expected to occur, it is still desirable that ornithologists having an opportunity to visit there, or in other similar habitats in Chiapas and Tabasco, attempt to learn more of the distribution and abundance of this supposedly rare euphonia.—ALLAN R. PHILLIPS, *Instituto de Biología, Universidad Nacional Autónoma de México, México, D.F.*, AND JOHN WILLIAM HARDY, *Moore Laboratory of Zoology, Occidental College, Los Angeles, California, 6 June 1964.*

**Birds feeding on an ant mating swarm.**—From 1600 to 1900 hours (DST) on 23 August 1961, we watched 13 species of birds feed on a mating swarm of *Lasius alienus* (Foerster), a common Holarctic species of ant. We first noted this activity through the aerial feeding of Starlings over a large grassy field on the Drumlin Farm Wildlife Sanctuary, Lincoln, Massachusetts. A brief trip around Lincoln showed that the mating swarm was restricted to this Drumlin Farm field; later, a few ants were seen in another part of Lincoln, 1 mile to the north, and several swarms were noted in Wayland, at distances varying from 1 to 3 miles southwest of Drumlin Farm.

During the period of observation there was a solid overcast (a few light showers), the temperature was in the lower 60's, and it was essentially windless.

#### SPECIES ACCOUNT

Nighthawk (*Chordeiles minor*).—A flock of 19 first appeared over the field around 1615, fed for a period of 15 or more minutes, and gradually drifted south, out of sight. At 1700 this same flock was seen about ½ mile east of the field, flapping and gliding in a manner usually associated with migratory flight. However, at 1730, the same (?) flock reappeared over the field and for a brief period resumed their characteristic feeding flight. Feeding altitude in this species was highly variable.

Chimney Swift (*Chaetura pelagica*).—A maximum of 15 swifts fed over the general

area of the field between 1600 and 1730. Most fed between 200 and 300 feet; occasionally one or two came lower to treetop level (50–60 feet).

Eastern Kingbird (*Tyrannus tyrannus*).—At least two were seen fly-catching from the tops of trees lining one edge of the field.

Swallow sp.?—Fleeting glimpses of several swallows with white bellies were obtained but identification was not made.

Barn Swallow (*Hirundo rustica*).—There were relatively few swallows in the aggregation and most were of this species (8–10 max.). This and the previous species fed at heights over 200 feet.

Purple Martin (*Progne subis*).—Three martins (one adult male and two immatures or females) appeared with the Nighthawk flock and remained in the area for 10–15 minutes. They fed at varying altitudes but stayed mainly below the swallows and Nighthawks.

Blue Jay (*Cyanocitta cristata*).—One was seen feeding low (between the trees) in an apple orchard adjacent to the field. Its feeding behavior consisted largely of level flight, with a slight veering after a capture. Later, about  $\frac{3}{4}$  mile away in Wayland, two jays were seen feeding among the branches of a dead tree, hopping from branch to branch with only short fly-catching flights between the branches.

White-breasted Nuthatch (*Sitta carolinensis*).—At 1720, a nuthatch appeared in a tall elm on the upper slope of the field and immediately started fly-catching. It would sally forth, catch an ant, then return to either the elm or the roof of an adjacent building. This was repeated many times.

Catbird (*Dumetella carolinensis*).—Along the edge of a marsh in Wayland, two were seen to hop out of the bushes into a dead tree. One hopped almost to the top of the tree and flew; after a short zigzag flight, it veered upwards, caught an ant, and continued flying to some distant bushes.

Cedar Waxwing (*Bombycilla cedrorum*).—Several were seen fly-catching over a lawn adjacent to the field.

Starling (*Sturnus vulgaris*).—When first noted the Starlings were circling and gliding in a swallow-like manner over the full extent of the open field. This activity was maintained (for 15 or more minutes) until the Starlings were supplanted in the air space over the field by the Nighthawks, martins, and swallows; the Starlings then resorted to fly-catching from the tops of trees bordering the field. After the Nighthawks drifted away, the Starlings resumed their flap and glide (swallow-like) feeding over the field. This relinquishing of the air space over the field by the Starlings was repeated an hour later when the Nighthawks reappeared momentarily.

By 1745 the number of feeding Starlings had lessened and by 1753 there were none feeding in the Drumlin Farm area. However, at 1805 in an adjacent township (Wayland), flocks of Starlings were seen going to roost. One flock perched at the top of a tall elm numbered around 100 birds and was being constantly augmented by small flocks flying in from the NE; many of these perched birds were fly-catching.

Both types of Starling feeding behavior were at relatively low altitudes, between 50 and 100 feet.

Red-winged Blackbird (*Agelaius phoeniceus*).—At 1710 an immature male flew into the top of a tall oak adjacent to the field and began fly-catching. It continued this activity for at least 15 minutes. Later, at 1830 in Wayland, a flock of Red-winged Blackbirds and grackles were seen atop a dead tree in the middle of a marsh; all were actively fly-catching.

Common Grackle (*Quiscalus quiscula*).—One was seen fly-catching from the same

grove as the immature Red-winged Blackbird at Drumlin Farm, and grackles were part of the blackbird flock seen fly-catching in Wayland.

Seven species of birds which did not feed on the ants were noted passing through or pausing momentarily in areas where ants were flying. These species were Sparrow Hawk (*Falco sparverius*), Mourning Dove (*Zenaidura macroura*), Yellow-shafted Flicker (*Colaptes auratus*), Robin (*Turdus migratorius*), House Sparrow (*Passer domesticus*), Brown-headed Cowbird (*Molothrus ater*), Song Sparrow (*Melospiza melodia*).

#### DISCUSSION

Although many species of birds are known to be opportunists in feeding situations such as this, we feel that documentation of such behavior is of value. In addition to the above species account there are four points in need of further clarification.

First, the supplanting of the Starlings by the Nighthawks over the field was especially pronounced. One can only speculate on whether this was a case of mistaken identity (confusing the Nighthawk shape with that of a falcon) or whether it represented a dominance order. It appeared to us that the supplanting took place without any overt threat or contact. Of further interest in this connection is the adaptability of the Starlings as shown by their shifting from a swallow-type feeding behavior to a fly-catching feeding behavior after being supplanted.

Secondly, among the birds utilizing the temporarily abundant food supply were species which regularly feed on the wing (Nighthawk, Chimney Swift, Eastern Kingbird, Barn Swallow, and Purple Martin), some that do so irregularly (Cedar Waxwing and Starling), and others which rarely display this type of feeding behavior (Blue Jay, White-breasted Nuthatch, Catbird, Red-winged Blackbird, and Common Grackle). That no fewer than five species that rarely fly-catch were seen to do so gives rise to speculation concerning the motivation of this aberrant feeding behavior: Was it the extraordinary abundance of this easily obtained food? Or was it a matter of social stimulation, at least in the case of the Drumlin Farm birds? This leads us to the third point.

Our attention was first called to the mating swarm by the activities of the Starlings, and we subsequently noted the other participating species. However, it was the Starling that persisted throughout the period of observation, the other species being more transitory in their feeding. Even the aerial feeders remained in the area for only a short time. Could it have been coincidence when at 1800, after the Starlings had left for their roost, that *all* feeding activity ceased, even though we could detect no apparent reduction in the number of ants? It appears to us that at Drumlin Farm this mass utilization of a temporarily abundant insect food was stimulated by the feeding activities of the Starlings.

Finally, mass utilization by the birds would appear to exert extreme selection on the queen ants, because of their much larger size. Such selection would begin with the emergence of the winged females from their natal colonies, continue during their nuptial flights, and end with the dropping of the fertilized queens to the ground. The extreme vulnerability of the ants would appear to lessen once the queens reach the ground, for we saw no instances of predation on grounded ants.

We would like to thank Professor E. O. Wilson for identifying the ants that we collected.—JAMES BAIRD, *Massachusetts Audubon Society, Lincoln, Massachusetts* AND ANDREW J. MEYERRIECKS, *University of South Florida, Tampa, Florida, 24 July 1964.*