

came upon the bird sitting on the top wire of a fence. We watched it for 15 minutes from a distance of 50 feet. Several times it dropped into the grass and picked up insects. For a few minutes it sat on the topmost branch of a *Crataegus*, then returned to its perch on the wire.

In Northern Ohio in 1962 the first three weeks of May were unseasonably warm. We had severe electrical storms accompanied by violent winds from the southwest. Perhaps this contributed to the appearance of the Scissor-tailed Flycatcher. During the afternoon of 18 May this bird was observed by at least 30 people from Findlay, Arlington, and Jenera, Ohio. By the morning following it had disappeared.—RICHARD S. PHILLIPS, 834 Liberty St., Findlay, Ohio, 5 February 1963.

Two observations of avian predation.—On 12 January 1963, I observed the display flight of a male Anna's Hummingbird (*Calypte anna*) above a dense growth of *Baccharis* one-half mile east of Berkeley. After the flight the bird perched on a dead branch protruding above one of the bushes and began to preen. At the same time I noticed a Sharp-shinned Hawk (*Accipiter striatus*), judged by its size to be a male, flying rapidly along the *Baccharis* toward the hummingbird. The hawk dashed along about one foot above the ground, apparently using the brush as a screen; when it was approximately opposite the hummingbird, it suddenly swooped up and over the bushes and seized the Anna's. In doing so, the hawk barely checked its flight and continued to a stand of Baytrees (*Umbellularia californica*), where it disappeared.

On 17 April 1961, I visited the nest of a Great Horned Owl (*Bubo virginianus*) seven miles southeast of Danville, Alameda County, California. Approximately 30 feet from the nest, which held two half-grown young and was located in an oak, I found a pellet containing an entire, undigested tarsometatarsus and foot of a small owl as well as other avian and mammalian remains. Upon comparison at the Museum of Vertebrate Zoology, the foot proved to be that of a Burrowing Owl (*Speotyto cunicularia*).

I have not been able to locate in the literature other reports of avian predation on either the Anna's Hummingbird or the Burrowing Owl. Apparently the only other known capture of a hummingbird by a hawk is one reported by G. H. Lowery, Jr. (1938. *Auk*, 55:280), who found the remains of a Ruby-throated Hummingbird (*Archilochus colubris*) in the stomach of a female Pigeon Hawk (*Falco columbarius*).—HANS J. PEETERS, *Museum of Vertebrate Zoology, Berkeley, California, 1 February 1963.*

Ruff observed in Missouri.—On 28 April 1962, Walter George and I were observing shorebirds at Squaw Creek National Wildlife Refuge, Mound City, Missouri. At 7:00 AM we arrived at the northern part of the refuge where mud flats were most extensive and shorebirds were numerous. While driving on a dike and stopping every few feet for observation, our attention was suddenly focused on an unusual-looking shorebird next to the dike. It was observed with 8 × 40 binoculars at 50 feet for about five minutes before it flew away from the dike to join the multitude of shorebirds on the far-out mud flats. Following both Peterson's and Pough's descriptions as given in their eastern field guides (which we had at the time), the bird was identified as a female Ruff, or Reeve (*Philomachus pugnax*).

This seems to be the first recorded observation of the Ruff in Missouri, as Widmann (1907. "Birds of Missouri," *Trans. Acad. of Sci., St. Louis*, 17:1-296) and Bennett (1932. "Check-list of the Birds of Missouri," *Univ. of Mo. Studies, Col.*, 7:1-81) fail to mention this species. A review of *The Bluebird*, quarterly publication of The Audubon Society of Missouri, also failed to reveal any records.

That the Ruff has been observed in the Midwest (Ohio, Indiana, Iowa) is mentioned by Hall (1960. "A Gathering of Shore Birds," 242 pp.).

It was most interesting to note that Camp (1962. *Aud. Field Notes*, 16:381-450) collected a male Ruff on 26 April at Winous Point, Ohio, two days prior to our observation.

Since our observation, two Ruffs have been observed during the fall of 1962 at St. Louis, Missouri, by members of the St. Louis Audubon Society.—DAVID A. EASTERLA, *Kansas City Junior College, Kansas City, Kansas, 8 February 1963.*

Three species observed anting on a wet lawn.—On 2 September 1962, I watered my lawn after a prolonged drought. Within about 30 minutes the water attracted 25 Robins (*Turdus migratorius*), three Starlings (*Sturnus vulgaris*), and one Yellow-shafted Flicker (*Colaptes auratus*) to feed, bathe, and in some instances, to ant.

About 10 minutes after arriving, an adult female Robin actively applied ants to the feathers under the wings (apparently the wing-linings as well as the sides of the body), the crissum, and occasionally to the breast and upper tail coverts (near the uropygial gland). The behavior was similar to that described by several authors (see Whitaker, 1957. *Wilson Bull.*, 69:195-262). During the next 45 minutes she applied ants to her plumage no fewer than 25 times. Several times the bird tripped and fell. This may have resulted from a loss of balance caused by the bird's unusual position during anting. No state of "ecstasy," as described by some authors, was apparent. Between periods of anointing itself the bird continued normal Robin-like feeding activities. Several times during, or immediately after anting, I noticed swallowing movements in the bird's throat. After swallowing, the Robin usually resumed anting motions but without an ant in its bill. The behavior was observed at three locations on the lawn.

I collected the Robin (NIUM No. 482) and searched the plumage with an aspirator and 20× hand lens for external parasites. No parasites were located, but a crushed small tan ant (*Lasius neoniger* Emery) was among the breast feathers. This is a rather common lawn ant and many were found over the lawn. Autopsy produced several larger black ants (*Formica fusca* L. complex) from the gizzard. Several members of this collective species were found on the ground and on the branches of a cottonwood (*Populus deltoides*) sapling. At least three ants of this species had been eaten by the Robin. No internal parasites were found in the alimentary tract. The bird had little fat and was in fresh plumage. Some teleoptiles on the head, neck, and sides (under the wings) were in the early stages of development. Perhaps the growth of these feathers irritated the bird and stimulated it to ant. Possibly anointment with crushed ants lessened the irritation. There appears to be an absence of literature in which anting behavior is compared with the stages of molt. None of the other Robins anted nor did they appear influenced by the one bird's behavior.

Just before I collected the Robin, three Starlings, in winter plumage, landed near the watered portion of the lawn. One after the other the birds began active anting. Each bird anointed the underwing area for a brief period and then fed normally.

The flicker anted passively several times during the same period. Intermittent to feeding it flattened its body parallel to the ground, extended its neck, slunk along the ground, and then remained motionless for a few moments. Afterwards it fed and then anted again. The tan lawn ants were most abundant where the flicker performed this activity.

I searched the lawn for ants and found only two species, the same two obtained from the Robin. The tan ants were found in several places but the black ants were found in only two areas. I am grateful to Dr. W. L. Brown, Department of Entomology, Cornell University, for identification of the ants.