

northwest Tanganyika Territory, and the Kisaka district of eastern Ruanda; June 30, 1907; Rudolf Grauer collector.

DIAGNOSIS: Like *L. s. souzae* Bocage of Angola, but lacking almost all trace of the rufous brown on the lower back which is so characteristic of that nominate race. Neither is there any dusky vermiculation there, or on the upper tail-coverts. The wings and tail are much less rufous, secondaries and wing-coverts being dark gray-brown, with only a narrow fringe of warm brown on their outer webs.

An adult female of this new race was also secured by Rudolf Grauer at Lake Burigi on June 8, 1907. It is not quite so grayish on the lower back as the male, but the wings and tail are similar. Furthermore, the rufous area on the posterior flanks, indicative of its sex, is markedly deeper in color and more extensive than in any female examined from Angola. The underparts of both examples seem whiter than in birds from Angola.

MEASUREMENTS: The male (type) has: wing-length, 86 mm.; tail, 89; culmen to base, 18.5; and tarsus, 23. Female: wing, 81 mm.; tail, 79; culmen to base, 17; and tarsus, 22. The outer primaries are in molt, so the wing-length of the female should probably be increased by about 3 mm.

Ten males from Angola have wings, 85–90 mm., and tails, 81–90. Twelve females from Angola have wings, 81–88 mm., and tails, 76–89.

RANGE: The northwestern part of Tanganyika Territory, from Lake Burigi and the upper Kagera Valley southward to the Uvinza district just east of Lake Tanganyika.

Mr. Moreau has kindly arranged for the British Museum to lend me the two specimens collected by him. The male agrees closely with the type of *L. s. burigi*, although its plumage is somewhat abraded, and has the wing 83 mm. long, tail 80 mm. The female is somewhat more brownish on crown and back than the female from Lake Burigi but shows no dark vermiculation on lower back or upper tail-coverts and has the same large rufous patch on the posterior flanks. The inner secondaries and greater wing-coverts show more extensive rufous edging and a little more dusky barring, but even this can scarcely be regarded as marking any transition to the nominate race. This female seems not to have been fully adult; its wing measures 83 mm., and its tail 81 mm.

There can be little doubt that the Uvinza birds are referable to the race *burigi* which may yet be found to extend farther south along the eastern side of Lake Tanganyika. However, the birds of Nyasaland seem not to belong to this new form. We have only one male in the American Museum, from Livingstonia, so more material should be examined from that colony and compared with skins from Angola.—JAMES P. CHAPIN, *American Museum of Natural History, New York*.

**Starlings Catching Insects on the Wing.**—A note by Raymond Cayouette (Auk, 64: 458, 1947) on the catching of insects on the wing by the European Starling, *Sturnus v. vulgaris*, has prompted me to bring together three observations I have on this odd feeding behavior. It should be understood that it is a common sight to see a starling "flycatching" from a perch, but unusual to see them flying in large circles for a long period of time and catching insects without returning to a perch.

On October 19, 1946, I saw a group of five birds flying in small circles catching insects which I thought to be box-elder bugs which were abundant at this time of the year. On the afternoon of October 4, 1947, at Credit Island, Scott County, Iowa, I saw about 30 birds of this species flying in circles 125 feet up in the air. One would circle in the air apparently until it saw an insect; it would fly up, catch the insect and circle again until another victim was sighted. They seemed to be quite expert at

this operation. On October 18, 1947, in the same area, I saw a pair going through this performance, but I was unable to determine what kind of prey they were securing. On November 2, 1947, in Scott County, a group of 20 migrants was seen at 1:00 p. m. "riding the wind" in the manner of the larger hawks. The majority of the birds were only 30 feet from the ground, but several were over 75 feet in the air. All were going through the flycatching maneuver.—JAMES HODGES, 3132 Fair Avenue, Davenport, Iowa.

**Starling Catching Insects on the Wing.**—With reference to the note by Raymond Cayouette (Auk, 64: 458, 1947) it seems worth pointing out that the habit of hawking insects on the wing with a somewhat swallow-like flight is a quite frequent and regular one of the starling, *Sturnus vulgaris*, in Europe, especially when flying ants are in the air. It is mentioned briefly by the present writer in "The Handbook of British Birds" ". . . when hawking for high-flying insects adopts distinct wheeling and gliding action recalling swallow," and indeed must be familiar to most observers of birds on the British Isles. It would be interesting to know whether it is really as unusual in America as your correspondent's note suggests.—B. W. TUCKER, University Museum, Oxford, England.

**Notes on the Breeding Behavior of the Bell's Vireo.**—A pair of Bell's Vireos, *Vireo bellii bellii*, was discovered June 10, 1947, constructing a nest on the Robert Allerton Park of the University of Illinois, Piatt County, Illinois. Due to the excellent location and the early stage of nesting, a study of the birds was made, involving 12 hours of detailed observations at the nest.

The nesting territory of this pair of birds comprised 3.1 acres of grassland containing scattered trees and shrubs. The nest itself was situated in a blackberry patch, adjacent to a small intermittent stream, and bordered on the east by a small grove of 40-foot willow trees. The briar patch, some 50 feet in diameter, was located in a relatively undisturbed area of forest-edge. When discovered, the shape of the nest was barely discernible, poorly formed and somewhat lop-sided. The structure was suspended between the stalk and a leaf stem of a leaning briar plant 30 inches from the ground.

Both sexes engaged in nest-building. The female, however, worked faster and more energetically, with only occasional pauses for food. The male followed the female on many of her trips and often paused to sing. However, he brought a considerable share of the material and for short periods the birds alternated regularly in bringing materials and working them into the nest. The male appeared just as adept at handling nest material as the female, even to shaping the bowl by settling low in the structure and turning around and around. During one hour and ten minutes, the female made nine trips to the nest with material and the male six. Three times the male accompanied the female to the nest without material. The nest was completely built in four or possibly five days. Pitelka and Koestner (Wilson Bull., 54: 97-106, 1942) stated, "the females apparently built the nests unaided," and Nice (Condor, 31: 13-20, 1929) said that the male may or may not assist in the nest-building. These observations substantiate the fact that the male helps to a considerable degree in nest construction.

The first egg was laid on the day following the completion of the nest. Egg number two was deposited during the morning of the second day, and steady incubation commenced with the laying of that egg. The clutch of four eggs was completed two days later.

Both sexes participated in incubation. The male appeared more "nervous" at