

**A specimen of the Golden-cheeked Warbler from Florida.**—On 24 August 1964, R. Reynolds and H. W. Kale, II, collected a warbler of the genus *Dendroica* near St. Petersburg (4.8 miles north and 1.9 miles west of City Hall) in Pinellas County, Florida. The bird was prepared as a study skin by Sievert A. Rohwer (original number 280). Later examination showed the specimen to be a Golden-cheeked Warbler, *D. chrysoparia*, which hitherto had been recorded in the United States only from Texas, the state which encompasses its entire breeding range. Although the event was cited in *Audubon Field Notes* (19: 32, 1965), its uniqueness and some additional facts obtained warrant further notice.

The gonads were not detected, but Warren M. Pulich, who is studying the species (see *Aud. Field Notes*, 19: 545–548, 1965), examined the specimen and agrees (pers. comm.) that in plumage it resembles a male. Rohwer recorded the skull as incompletely ossified, and the weight as 9.1 g with little fat. The stomach contents were determined by Kale to include lepidopteran larvae (possibly two or three), one anthribiid and one curculionid weevil, a few spider fragments, and many unidentified insect fragments.

The specimen was collected half a mile northeast of Sawgrass Lake on an open sand ridge dominated by sand live oak, *Quercus geminata*. The area apparently resembles the breeding habitat described by Pulich (*op. cit.*) as containing little or no understory beneath ash juniper interspersed with Spanish, live, and shin oaks and other deciduous trees.

Golden-cheeked Warblers leave their breeding grounds in south-central Texas early; although later sight records exist (Pulich, *op. cit.*), the latest specimen record for the state is 15 August. Apparently the species winters in southern Mexico, Guatemala, and Nicaragua, and migrates through eastern Mexico (A. C. Bent, *U. S. Natl. Mus., Bull.* 203, 1953). Although heavy rainfall, followed by a drop of seven degrees in the maximum daily temperature, occurred in St. Petersburg on 20 and 21 August, weather maps for the two weeks preceding 24 August show no widespread climatological disturbance that might account for the appearance of an individual almost 1,000 miles east of its normal migratory route. The only previous record of a Golden-cheeked Warbler outside of its normal range is a sighting on St. Croix, Virgin Islands, on 23 November 1939 and 8 January 1940 by H. A. Beatty (*Auk*, 60: 110, 1943). The Florida specimen resides in the University of South Florida collections.—GLEN E. WOOLFENDEN, *Department of Zoology, University of South Florida, Tampa, Florida.*

**Fossil owls from the Hagerman local fauna (Upper Pliocene) of Idaho.**—In the summers of 1962, 1964, and 1965 field parties led by Claude W. Hibbard of The University of Michigan Museum of Paleontology collected fossils from the Glens Ferry Formation in Twin Falls County, Idaho, just west of the Snake River near Hagerman. Among the several hundred avian fossils recovered from these deposits are four specimens of owls, one of which represents a new species. Previously reported birds from the Hagerman local fauna are aquatic forms (A. Wetmore, *Smiths. Misc. Coll.*, 87: 1–12, 1933; P. Brodkorb, *Wilson Bull.*, 70: 237–242, 1958), as are most of the birds of the present collection.

The most reliable potassium-argon date for the Hagerman local fauna, which has been assigned to the Upper Pliocene by Hibbard *et al.* (p. 512 in *The Quaternary of the United States* [H. E. Wright, Jr., and D. G. Frey, eds.] Princeton, Princeton Univ. Press, 1965), is  $3.48 \pm 0.27$  million years (J. F. Evernden *et al.*, *Amer. J. Sci.*, 262: 191, 1964).

We wish to thank Claude W. Hibbard for the opportunity to study and report on these fossils, Robert W. Storer and Harrison B. Tordoff for critical reading of the manuscript, and Karoly Kutasi for photographing the type. Financial support for Dr. Hibbard's work in Idaho was provided by the National Science Foundation (G-19458 and GB-1528).

*Speotyto megalopeza* Ford

Distal 18 mm of a left radius (UMMP 48908) from United States Geological Survey Cenozoic locality 20765 (= Dwight W. Taylor no. 540—NW  $\frac{1}{4}$  of SW  $\frac{1}{4}$ , Sec. 28, T7S, R13E, elevation 3,025 ft. [C. W. Hibbard, *Papers Michigan Acad. Sci., Arts, and Letters*, 44: 4, 1959]). In palmar view, the distal end of the radius of *Speotyto* is characterized by having a relatively broad, blunt ligamental prominence that is not strongly deflected from the shaft. The fossil agrees closely with the Burrowing Owl, *Speotyto cunicularia*, except for being somewhat larger. We therefore assign it to the larger *S. megalopeza* (N. L. Ford, *Condor*, 68: 473-475, 1966) of the Upper Pliocene of Kansas, the radius of which is unknown.

*Measurements*.—Width across distal end, 4.9 mm; depth of shaft, 1.9 mm (measured 10 mm from distal end); width at same level, 1.7 mm. The corresponding mean measurements of 12 specimens of *S. cunicularia* are: 4.6 mm (range, 4.4-4.8); 1.8 mm (1.7-1.9); 1.4 mm (1.3-1.5).

*Asio brevipes* new species

The distal end of the tarsometatarsus of *Asio* is characterized as follows: outer rim of middle trochlea considerably greater in diameter than inner rim; on plantar aspect outer rim of same trochlea longer than inner rim, and the two rims slightly convergent; on distal view anterior surface of outer rim of this trochlea sloped; on lateral view articular surface of trochlea for digit 4 smooth, not indented.

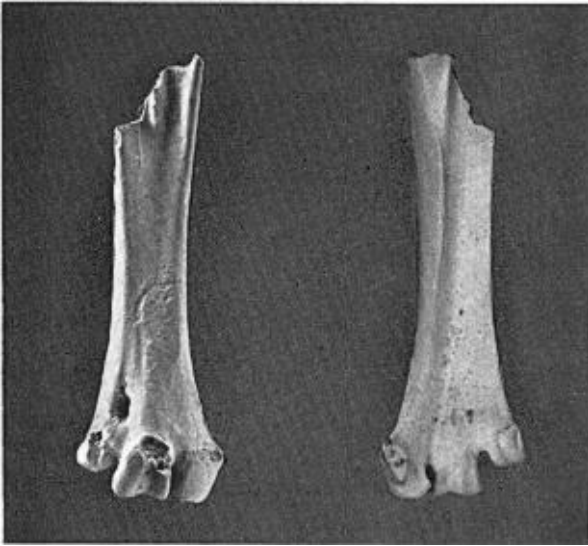


Figure 1. Type tarsometatarsus of *Asio brevipes* (UMMP no. 49490). Left, anterior view; right, posterior view. Twice natural size.

TABLE 1  
MEASUREMENTS OF TARSOMETATARSI OF *ASIO FLAMMEUS*, *A. OTUS*, AND *A. BREVIPES*<sup>1</sup>

Measurement	A. flammeus		A. otus		A. brevipes (UMMP 49490)
	Male (N = 5)	Female (N = 3)	Male (N = 6)	Female (N = 3)	
Distal width across trochleae	10.0 (9.6-10.4)	10.6 (10.4-10.7)	9.3 (9.0-9.7)	10.2 (10.0-10.6)	9.5
Narrowest width of shaft	4.3 (4.0-4.5)	4.5 (4.5-4.6)	4.0 (3.8-4.1)	4.4 (4.4-4.5)	4.6
Distance from tubercle for <i>tibialis anticus</i> to distal end	29.7 (28.8-30.3)	31.0 (29.6-32.0)	27.6 (26.8-28.6)	27.8 (26.7-28.5)	24.0
Over-all length	43.1 (41.7-44.9)	45.2 (43.8-46.8)	40.7 <sup>2</sup> (39.8-41.8)	41.6 (40.8-42.3)	36.7 <sup>3</sup>

<sup>1</sup> Means and ranges are given in mm.

<sup>2</sup> N = 5.

<sup>3</sup> Estimate, based on *A. otus* (UMMZ 152903), the specimen that gave the largest value for the ratio "over-all length/distance from tubercle for *tibialis anticus* to distal end."

*Type*.—Distal 29 mm of right tarsometatarsus, broken diagonally across upper end of tubercle for *tibialis anticus*; trochleae slightly worn (Figure 1). The University of Michigan Museum of Paleontology no. 49490, collected by Claude W. Hibbard and party, 6 June 1964. Upper Pliocene, Glenss Ferry Formation, Twin Falls County, Idaho: 1,500 to 1,725 feet north and 750 to 775 feet east of the southwest corner of SW ¼ Sec. 28, T7S, R13E, elevation 3,025 feet.

*Diagnosis*.—The tarsometatarsus most closely resembles those of the Short-eared Owl, *Asio flammeus*, and the Long-eared Owl, *A. otus*, in size but differs from them in having a relatively wider shaft and in being shorter (Table 1).

*Remarks*.—The short, stout tarsometatarsus of this Pliocene species also distinguishes it from the modern Stygian Owl, *Asio stygius*, and from *A. priscus* Howard (*So. California Acad. Sci. Bull.*, 63: 27-31, 1964) from the Pleistocene of California, both of which are larger than *otus* and *flammeus*. The only previous Upper Pliocene record of *Asio* from North America is from the Rexroad local fauna of Kansas (Ford, *op. cit.*).

#### Strigidae, genera indet.

The proximal 26 mm of a left tarsometatarsus (UMMP 52272) with the external cotyla badly worn, from U.S.G.S. Cenozoic locality 20765 (see above), agrees closely with the modern Screech Owl, *Otus asio*, in morphology, size, and proportions, and probably represents a form much like it. However, we prefer to leave this specimen unidentified because we have been unable to find any characters of the proximal end of the tarsometatarsus, other than size, by which the genus *Otus* can be distinguished from several other genera.

The distal 18 mm of an ulna (UMMP 52306) from locality UM-IDA3-64 (700 feet east and 900 feet south of northwest corner of NW ¼ Sec. 21, T7S, R13E, elevation 2,950 feet), which is also the size of that of *Otus asio*, is too fragmentary to permit specific identification.—NORMAN L. FORD and BERTRAM G. MURRAY, JR., *The University of Michigan Museum of Zoology, Ann Arbor, Michigan*.