

## Short Notes

### Notes on Some Nebraskan Bats

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According to Jones (1964:90), the big brown bat, *Eptesicus fuscus pallidus* Young, is a common summer resident on the Pine Ridge of northwestern Nebraska and along the Niobrara River into Cherry and Boyd Counties to the east. Jones (*Ibid.*, p. 92), citing an untitled collection of notes concerning Nebraskan mammals by M. H. Swenk, also recorded this subspecies from Funk, Phelps County, in south-central Nebraska, based on geographic probability.

On the evening of July 11, 1964, I collected three bats here referred to *Eptesicus fuscus pallidus* from Alma, Harlan County, Nebraska. Of these, two were juvenile females and the other a juvenile male, which were among a large number of big brown bats that were roosting between the rain gutter and roof studs in the rear of a building in downtown Alma. Bamboo poles were used to probe into the small crevices to disturb them. Tenants of the building complained that the bats frequently entered the building by way of the chimney.

Juvenile status was confirmed by examination of the epiphyseal region of the phalanges. The pelage was plumbeous, typical of juveniles, and distinctly bicolored dorsally. When compared to Maerz and Paul (1950), the pelage on the dorsum was judged to be *Smoke Brown* (Plate 16, 2A) basally, whereas terminally the pelage was paler (Plate 15, with variations between J9 and L9).

The two females weighed 9.9 and 12.3 grams, whereas the male weighed 11.3 grams. These bats provide the first record of occurrence for this subspecies from Harlan County.

According to Jones (*op. cit.*, p. 97), the evening bat, *Nycticeius humeralis humeralis* (Rafinesque), reaches the northwestern limit of its geographic distribution in Nebraska. This distributional record is based on four female specimens reported by Jones and Vaughan (1959:246-247) from 2 mi. N and 2 mi. E of Bellwood, Butler County.

In July of 1964, I collected nine additional specimens of the evening bat. Five of these, from 6 mi. S and  $\frac{3}{4}$  mi. E of Lincoln, Lancaster County, were shot at dusk as they foraged among trees along Salt Creek

as follows: one juvenile female on July 16; one juvenile male on July 17; two adult females and one juvenile male on July 23.

On the evening of July 24, 1964, 4½ mi. W and 1 mi. N of Lewiston, Pawnee County, I shot two juvenile males and one adult female *Nycticeius* as they foraged over an open pasture adjacent to deciduous woodland along Turkey Creek, a tributary to the south fork of the Nemaha River. On the same evening, 6 mi. S and ½ mi. W of Vesta, Johnson County, I caught a lactating female in a mist net stretched over Turkey Creek.

Juveniles were easily distinguished from adults owing to their plumbeous and distinctly monocolored pelage and unfused epiphyses. The dorsal pelage of juveniles ranged between *Smoke Brown* (Plate 16, A2) and *Owl* (Plate 16, A9) of Maerz and Paul (*op. cit.*).

One female, Department of Zoology, University of Nebraska (Z 427), appears to be a stage of an annual molt. The typical adult dorsal pelage was sparse from the head to the pelvic region.

Average and extreme external and cranial measurements (in millimeters) of the four adult females are as follows: total length, 87.5 (83–90); length of tail vertebrae, 38 (35–39); length of hind foot, 8.5 (8–9); length of ear from notch, 13 (12.5–14.0); greatest length of skull, 14.4 (14.1–14.5); condylobasal length, 13.6 (13.5–13.8); zygomatic breadth, 9.9 (9.8–10.1); interorbital breadth, 4.3 (4.3–4.4); breadth of braincase, 8.1 (7.9–8.3); length of maxillary tooth row, 5.5 (5.4–5.5); length of mandibular tooth row, 6.9 (6.9); weight, 10 (9.9–10.1) grams.

Corresponding average and extreme external and cranial measurements for the five juveniles are as follows: 81 (76–84); 35.8 (34–37); 7.6 (7–8); 12.7 (12–14); 14.0 (13.5–14.5); 13.4 (13.0–13.9); 10.0 (9.8–10.3); 4.2 (4.1–4.4); 8.1 (7.9–8.3); 5.4 (5.3–5.4); 6.8 (6.5–7.0); weight, 7.7 (7.1–8.7) grams.

These nine specimens document the distribution of this species in three additional counties in the state.

According to Jones (*op. cit.*, p. 83), the little brown bat, *Myotis lucifugus lucifugus* (Le Conte), is known from but one locality in the state. This record is based on seven male specimens from Kiewit Stone Quarry, ½–1 mi. W of Meadow, Sarpy County. In June and July of 1964, I collected a total of 18 *Myotis lucifugus lucifugus* from this same locality. On July 30, 1964, I collected 11 specimens, 10 of which were males. The one female, Department of Zoology, University of Nebraska (Z 450), provides the first record of a female of this subspecies from this quarry, as well as from the state.

**Literature Cited**

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