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George A. Feldhamer
Southern Illinois University Carbondale

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A BRAZILIAN FREE-TAILED BAT (*Tadarida brasiliensis*) IN SOUTHERN ILLINOIS

George A. Feldhamer
Department of Zoology
Southern Illinois University
Carbondale, Illinois

ABSTRACT

The second record of a Brazilian free-tailed bat from Illinois is reported. A young female was collected 18 October 1984 from Carbondale, Jackson County.

RESULTS AND DISCUSSION

A female free-tailed bat (*Tadarida brasiliensis* Rafinesque) was collected 18 October 1984 by Mr. Jeff Christopherson on the campus of Southern Illinois University, Carbondale, Jackson County (SIU-C Zoology No. 1521). Body measurements were: total length, 94 mm; tail length, 31 mm; hind foot length, 10 mm; ear length, 16 mm; and forearm length, 42 mm. Skull measurements were: total length, 16.5 mm; zygomatic breadth, 9.2 mm; interorbital breadth, 4.2 mm; breadth of braincase, 8.5 mm; breadth of rostrum at M², 6.9 mm; length of maxillary toothrows, 6.1 mm; and length of mandibles, 11.6 mm. The specimen was in excellent condition, and was considered a juvenile based on the lack of tooth wear.

The only previous record of *T. brasiliensis* in Illinois is a specimen from the campus of Northern Illinois University, DeKalb, DeKalb County, taken on 17 October 1969 (Walley, 1970). On the basis of coloration and measurements, presumably size characteristics given by Shamel (1931), Walley assigned the initial Illinois specimen to the western subspecies *mexicana*, as opposed to the eastern subspecies *cynocephala*. However, as noted by Schwartz (1955), the degree of overlap in skull measurements among these two subspecies is considerable, and probably precludes subspecific designation on that basis.

Both Illinois specimens are probably *T. b. mexicana*, however, as this subspecies is highly migratory, while *cynocephala* is not. Unlike the recent range expansion of *T. brasiliensis* into North Carolina (Lee and Marsh, 1978), both Illinois speci-

mens probably represent only extralimital occurrences by migrants. There are two extralimital records for Ohio (Smith and Goodpaster, 1960; Mills, 1971), however, *T. brasiliensis* has never been reported from a state bordering Illinois. Most extralimital records of this species occur in fall, during migration periods.

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