Journal of the Arkansas Academy of Science

Volume 55

Article 34

2001

New Records of the Woodchuck (Marmota monax) from Southern Arkansas

C. Renn Tumlison *Henderson State University*

Anna Smith Henderson State University

Randy Frazier Pinnacle Mountain State Park

Follow this and additional works at: http://scholarworks.uark.edu/jaas

Recommended Citation

Tumlison, C. Renn; Smith, Anna; and Frazier, Randy (2001) "New Records of the Woodchuck (Marmota monax) from Southern Arkansas," *Journal of the Arkansas Academy of Science*: Vol. 55, Article 34. Available at: http://scholarworks.uark.edu/jaas/vol55/iss1/34

This article is available for use under the Creative Commons license: Attribution-NoDerivatives 4.0 International (CC BY-ND 4.0). Users are able to read, download, copy, print, distribute, search, link to the full texts of these articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author.

This General Note is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Journal of the Arkansas Academy of Science by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu.

New Records of the Woodchuck (Marmota monax) from Southern Arkansas

Renn Tumlison* and Anna Smith Department of Biology Henderson State University Arkadelphia, AR 71999 Randy Frazier Pinnacle Mountain State Park 10200 Hwy 300 Roland, AR 72135

* Corresponding Author

The groundhog or woodchuck (*Marmota monax*) is a heavy-bodied squirrel that digs burrows in which it nests. An exception among rodents, the enamel of the incisors is white, and the postorbital processes, a familial trait of the Sciuridae, are robust and project at almost right angles to the sagittal plane of the skull (Hall, 1981). The fur is thick and coarse and grizzled in appearance, except for the underparts, which tend to have a reddish tinge, and the feet and tail, which usually are black (Sealander and Heidt, 1990; Kwiecinski, 1998).

Distribution of the woodchuck in Arkansas is confined primarily to the Interior Highlands, with most specimen records originating in counties in the Ozark Mountains (Sealander and Heidt, 1990). Hall (1981) indicated marginal records for Arkansas in Lincoln and Hempstead Counties, however, he did not provide documentation of those records. A specimen from Pulaski County is the southernmost woodchuck recorded by Sealander and Heidt (1990) for Arkansas. Their distribution map indicated several sight records extending into southwestern Arkansas, but they noted that the woodchuck is "almost absent from the West Gulf Coastal Plain (except perhaps on the extreme western edge.)"

Considering the appearance and size of this rodent, sight records likely are more valid than they might be for other species that are more difficult to identify. However, specimens verifiable in collections have been lacking for the Ouachita Mountains or Gulf Coastal Plains regions of Arkansas. Herein, we report specimen records from Garland, Clark, and Howard Counties, preserved in the Henderson State University collection of vertebrates, a specimen from Desha County, preserved in the University of Arkansas at Monticello collections, and a specimen from Hot Spring County, to be preserved in the collections at the University of Arkansas at Little Rock.

An adult male woodchuck from Howard County was collected 4.0 km West of Athens and 0.2 km N Hwy 26 (S8 or S9 T5S R28W). No precise date of collection is available, but the specimen dates to 1993 or 1994. The preparation is a skin and skeleton, HSU197. Standard measurements were 655 mm (total length), 160 mm (length of tail), 86 mm (length of hind foot), and 32 mm (length of pinna).

On 14 June 1997 a road-kill woodchuck was collected 12.9 km NE of Hot Springs National Park on Hwy 5 (S27 T1S R18W) in Garland County. The preparation is skeleton only, HSU345. The specimen was an adult as evidenced by wear of the teeth and epiphyseal closure. State of decomposition precluded determination of sex. No measurements are available, but homologous bones were smaller than those of HSU197.

A road-kill specimen was collected at the Malvern exit from Interstate 30 (I-30), S9 T4S R17W, on 6 June 2001. The adult male specimen was found about 100 m N I-30 and about 400 m east of the Ouachita River. This woodchuck is a county record for Hot Spring County and is being prepared for storage in the collections at the University of Arkansas at Little Rock.

All three of the preceding specimens verify previous sight records of distribution in the counties. However, a new county record is represented by HSU418, a male specimen prepared as a skin and skeleton, collected 7 March 2001 in Clark County, 8.1 km W Arkadelphia on St. Hwy 26 (S32 T7S R20W - Fig. 1). A dog had pursued this individual, resulting in it climbing about 2 to 3 m into a hardwood tree of about 20 cm dbh. It later was captured by guiding it from a brush pile, in which the dog had it bayed, and into a wire cage. Standard measurements were 630 mm – 150 mm – 85 mm – 28 mm, respectively.

The most southeastern reported record of the woodchuck in Arkansas was a sighting in NW Phillips County (Sealander and Heidt, 1990). However, on 10 March 1996, a specimen was collected farther south, in Desha County (SW¼ SW¼ S29 T10S R1W). The specimen (skin and skull) had standard measurements of 615 mm, 134 mm, 84 mm, and 34 mm, and was an adult female. The individual was taken in proximity to the dry side of the Mississippi River levee, at a farm located about 4.0 km E Kelso. It is housed at the University of Arkansas at Monticello (UAM904) and represents a new county record.

In addition to these specimen records, we also document a new sight record (by RT) near the border between Montgomery and Garland Counties, in Garland County, at Camp Clearfork (S6 T3S R22W). This Ouachita Mountains National Forest camp is located about 5 km west of Crystal

Journal of the Arkansas Academy of Science, Vol. 55, 2001



Fig. 1. Distribution of the woodchuck (*Marmota monax*) in Arkansas (modified from Sealander and Heidt, 1990). Smaller solid circles represent specimen records and stars represent sight records as presented by Sealander and Heidt (1990). New records are indicated by larger solid circles; the new sight record is represented by a solid square.

Springs off US Hwy 270. The individual had a burrow in the root system of a persimmon tree (*Diospyros virginiana*), located in the mowed area near the man-made pond. It was seen on several occasions around 17 June 1995, before increased seasonal activity of humans at the camp apparently forced it to move.

The southwestern extreme of the distribution of the woodchuck may occur in Arkansas. Specimens from Red Oak in Latimer County (McCarley and Free, 1962) and from Hodgen in LeFlore County (Caire et al., 1989) are the southernmost records for Oklahoma. Both are from a latitude about equal to that of Waldron in Scott County, Arkansas, and about 85 km north (by latitude) of the Clark County, Arkansas, record. One report of the woodchuck is documented for Bossier Parish, Louisiana, based on a newspaper article and photograph of a specimen, which Lowery (1974) discounted as a valid record of natural occurrence. Davis and Schmidly (1994) indicated no records of the woodchuck in Texas. The Clark County specimen, therefore, appears to be the southwesternmost record for this mammal in the United States, and the Desha County record presently is the most southern for Arkansas.

ACKNOWLEDGMENTS.—Information about the Hot Spring County record was supplied by T. Finley, and about the Desha County record by R. W. Wiley.

Literature Cited

- Caire, W., J. D. Tyler, B. P. Glass, and M. A. Mares. 1989. Mammals of Oklahoma. Univ. Oklahoma Press, Norman. 567 pp.
- Davis, W. B., and D. J. Schmidly. 1994. The mammals of Texas. Texas Parks Wildlife Dept., Austin, 338 pp.
- Hall, E. R. 1981. The mammals of North America, 2nd ed. John Wiley and Sons, New York, 1181 pp.
- Kwiecinski, G. G. 1998. Marmota monax. Mammalian Species 591:1-8.
- Lowery, G. H., Jr. 1974. The mammals of Louisiana and its adjacent waters. Louisiana State Univ. Press, Baton Rouge, 565 pp.
- McCarley, H., and P. Free. 1962. A new record of the woodchuck from Oklahoma. J. Mammal. 43:272.
- Sealander, J. A., and G. A. Heidt. 1990. Arkansas Mammals. Univ. Arkansas Press, Fayetteville, 308 pp.

Journal of the Arkansas Academy of Science, Vol. 55, 2001