Journal of the Arkansas Academy of Science

Volume 63

Article 28

2009

New County Distribution Record for the Seminole Bat in Arkansas

T. L. Klotz Arkansas State University, tracyl.klotz@smail.astate.edu

Thomas S. Risch Arkansas State University

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

Recommended Citation

Klotz, T. L. and Risch, Thomas S. (2009) "New County Distribution Record for the Seminole Bat in Arkansas," *Journal of the Arkansas Academy of Science*: Vol. 63, Article 28. Available at: http://scholarworks.uark.edu/jaas/vol63/iss1/28

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 County Distribution Record for the Seminole Bat in Arkansas

T.L. Klotz^{1,2} and T.S.Risch¹

¹Arkansas State University, Department of Biological Sciences, State University AR 72467

²Correspondence: tracyl.klotz@smail.astate.edu

Arkansas is home to sixteen species of bats (Chiroptera) (Sealander and Heidt 1990) including three federally endangered species. An additional four species are listed in the Arkansas Wildlife Action Plan (Anderson 2006) as species of greatest conservation need: Rafinesque's big-eared bat (Corynorhinus rafinesquii), Small-footed bat (Myotis leibii). Southeastern bat (Myotis austroriparius), and Seminole bat (Lasiurus seminolis). The Seminole bat has a global rank of secure; however in Arkansas it is ranked S3-rare to uncommon. We captured an adult female Seminole bat during the fall of 2008 in a bottomland hardwood forest in Poinsett County, AR.

The Seminole bat has previously been reported from southern and western Arkansas (Sealander and Hoiberg 1954, Saugey et al. 1989, Heath et al. 1983, Steward et al. 1986, Wilhide et al. 1998, Tumlison et al. 2002, Perry and Thill 2007). However there is little information on the presence of this species in the Arkansas delta (Fokidis et al. 2005, Sasse and Saugey On 17 September 2008 an adult female 2008). Seminole bat was captured in the Earl Buss/Bayou De View Wildlife Management Area (WMA). This area contains 1721.5 ha of primarily bottomland hardwood The capture location was 2.9 km west of forest. Weiner. Poinsett County at N35°37'22.3" W90°56'35.7". The bat was captured using a mist net placed over an access road and was released at the site of capture after data collection. The bat was nonreproductive thus it is not known if this species is utilizing the area for maternity roosting. Previous research conducted at this study site (Fokidis et al. 2005; Medlin and Risch 2008) did not reveal this species. However a single non-reproductive female Seminole bat was captured in Wapanocca National Wildlife Refuge located in Crittenden County, AR and a single non-reproductive female at Holland Bottoms WMA located in Lonoke County, AR (Fokidis et al. This species has also been documented in 2005). Woodruff County, however no specific details about the capture were reported (Sasse and Saugey 2008). These capture locations, like Earl Buss/Bayou De

View WMA, contain areas of large bottomland hardwood forest.

Proper management of this infrequently encountered Arkansas species will require additional data, distribution and habitat affiliations, to determine appropriate conservation actions. Although the Seminole bat is not encountered often in the Arkansas delta, the recent captures suggest that this species may be utilizing this habitat more extensively than previously suspected. Additional research on the Seminole bat in the Arkansas delta is needed to determine the overall importance of this ecoregion to Seminole bat.

Acknowledgments

Special thanks for assistance in the field to Stephen Brandebura, Phillip Jordan and the students enrolled in the fall 2008 Mammalogy class at Arkansas State University.

Literature Cited

- Anderson JE (Ed). 2006. Arkansas Wildlife Action Plan. Arkansas Game and Fish Commission, Little Rock, Arkansas.
- **Fokidis HB, SC Brandebura**, and **TS Risch**. 2005. Distribution of bats in bottomland hardwood forests of the Arkansas Delta Region. Journal of the Arkansas Academy of Science 59:74-9.
- Heath DR, GA Heidt, DA Saugey, and VR McDaniel. 1983. Arkansas range extensions of the Seminole bat (*Lasiurus seminolus*) and the eastern big-eared bat (*Plecotus rafinesquii*) and additional county records for the hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivigans*) and evening bat (*Nycticeius humeralis*). Proceedings of the Arkansas Academy of Science 37:90-1.
- Medlin RE Jr, and TS Risch. 2008. Habitat associations of bottomland bats, with focus on Rafinesque's big-eared bat and Southeastern Myotis. The American Midland Naturalist. 160:400-12.

Journal of the Arkansas Academy of Science, Vol. 63, 2009 190

New County Distribution Record for the Seminole Bat in Arkansas

- Sasse D, and D Saugey. 2008. Rabies prevalence among and distribution records of Arkansas bats. Journal of the Arkansas Academy of Science 62:159-60.
- Saugey DA, DR Heath, and GA Heidt. 1989. The bats of the Ouachita Mountains. Proceedings of the Arkansas Academy of Science 43:71-7
- Sealander JA, and GA Heidt. 1990. Arkansas Mammals: their natural history, classification, and distribution. The University of Arkansas Press, Fayetteville 308p.
- Sealander JA, and J Hoilberg. 1954. Occurrence of the Seminole bat in Arkansas. Journal of Mammalogy 38:584.

- Steward TW, VR McDaniel, DA Saugey, and DR England. 1986. The bat fauna of Southwest Arkansas. Proceedings of the Arkansas Academy of Science 40:72-3.
- **Tumlison R, T Fulmer, T Finley** and **D Saugey.** 2002. Bats of the Jessieville Ranger District, Ouachita National Forest, Arkansas. Journal of the Arkansas Academy of Science 56:206-11.
- Wilhide JD, B Baker, and DA Saugey. 1998. Arkansas range extension of the Seminole bat (*Lasiurus seminolus*). Journal of the Arkansas Academy of Science 52:140-1.

Journal of the Arkansas Academy of Science, Vol. 63, 2009 191