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Noteworthy Records of the Seminole Bat, Lasiurus seminolus (Chiroptera: Vespertilionidae), from Southwestern Arkansas and Northeastern Texas

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The Seminole bat, Lasiurus seminolus, is a medium-sized vespertilionid bat that ranges from most of the southeastern states along the Gulf of Mexico and the southern Atlantic seaboard from eastern Texas to North Carolina (Wilkins, 1987). Extralimital records for this bat are as far north as New York (Layne, 1955) and Pennsylvania (Poole, 1949) and east to Bermuda (Van Gelder and Wingate, 1961) to as far south as Veracruz, Mexico (Villa-R., 1955, 1966). There is a noticeable geographic distribution gap in far southwestern Arkansas (Sealander and Heidt, 1990), northwestern Louisiana (Lowery, 1974), and extreme northeastern Texas (Schmidly, 1991, 2004), a region collectively termed the Ark-La-Tex. However, recent fieldwork in this region has now documented the Seminole bat in Arkansas and Texas counties not previously reported to support the species.

On 21 June 2001, an adult male L. seminolus was collected by ZDR from a field in Miller County, Arkansas, 0.8 km N jct. St. Hwy 160 off St. Hwy 71, vicinity of Doddridge. This site is approximately 9.7 km (6 mi) north of the Louisiana border (Caddo Parish) and 14.5 km (9 mi) east of the Texas border (Cass County). In addition, an adult male red bat, Lasiurus borealis was collected at the same site. The difference in pelage of both specimens allowed identification between the two species, which are often confused with one another. The habitat of the area was a closed canopy pine-oak forest near the Red River/Sulphur River watershed. The specimen (skin and skull) was deposited in the Arkansas State University Museum of Zoology, Collection of Recent Mammals (ASUMZ 28063). Measurements (in mm) for the specimen were as follows: total length, 92; length of tail, 38; length of hind foot, 8; length of ear, 14; length of forearm, 41; length of tragus, 5. The specimen was not weighed.

On 18 July 2003, an adult female *L. seminolus* was taken by NES in Cass County, Texas, 4.8 km N Bloomburg off FM 251. This site is approximately 19.3 km (12 mi) northwest of the Miller County site reported herein and only 3.2 km (2 mi) due west of the Arkansas border. Habitat included pine-oak forest in the vicinity of Cypress Creek. The specimen (skin and skull) was deposited in the Texas A&M University-Texarkana Collection of Vertebrates as TAMU-TCV 1003. Measurements (in mm) were as follows: total length, 90; length of tail, 41; length of hind foot, 8; length of ear, 10; length of forearm, 43; length of tragus, 5.

The specimen was not weighed.

The Arkansas record, the first for Miller County, is approximately 97 km (60 mi) southeast and southwest of the nearest Arkansas records in Little River and Nevada counties, respectively (see Steward et al., 1986; Wilhide et al., 1998). There are 10 additional Arkansas counties previously reported with records of L. seminolus including Baxter, Bradley, Franklin, Garland, Grant, Jefferson, Logan, Ouachita, Polk, and Yell (Sealander and Hoiberg, 1954; Baker and Ward, 1967; Heath et al., 1983, 1986; Steward et al., 1986; Saugey et al., 1989; Wilhide et al., 1998; Tumlison et al., 2002). In addition, the Texas record is the first for Cass County and within the range depicted in Schmidly (2004), although no specimens have been reported from adjacent counties in any direction. The closest records in the state are to the due south and west in Harrison and Titus counties, respectively. Also of interest is the fact that, except for an isolated record of L. seminolus from McCurtain County, Oklahoma, near the extreme southwestern border of Arkansas (Glass, 1958), no seminole bats to our knowledge have been reported from other areas of the Ark-La-Tex region (Lowery, 1974; Caire et al., 1989; Sealander and Heidt, 1990; Schmidly, 2004). Although this bat is included on a checklist of mammals of Caddo and Bossier Parishes in northwestern Louisiana (Hardy, 1982), none have actually been taken in either county (A. Crnkovic, pers. comm.). A map (Fig. 1) showing county records of L. seminolus for all of Arkansas and most of Texas and the nearest county and parish records in other parts of fourstates region of the Ark-La-Tex is provided. With known occurrence in fringes of the Ark-La-Tex (see Fig. 1), emphasis should be placed in attempting to collect Seminole bats in similar forested habitat, particularly in northeast Texas and northwestern Louisiana, where we anticipate the species occurs in additional counties and parishes.

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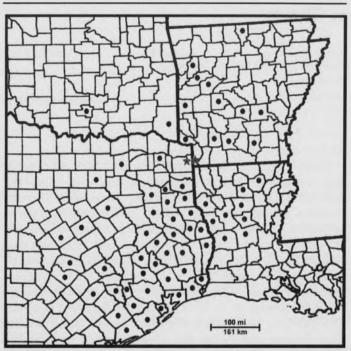


Fig. 1. County or parish records of the Seminole bat in Arkansas and Texas and adjacent areas of Louisiana and Oklahoma (dots). New records for Miller County, Arkansas, and Cass County, Texas (stars). A recent disjunct record from southwest Texas (Val Verde County) not shown (see Schmidly, 2004).

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