# New County Records for the Eastern Mole, *Scalopus aquaticus* (Soricimorpha: Talpidae) and Woodland Vole, *Microtus pinetorum* (Rodentia: Cricetidae), in Oklahoma

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The eastern mole, *Scalopus aquaticus* (L.) is a robust insectivore that ranges from the northeastern United States west to the Midwest as far as southeastern Wyoming and south through Texas to northern Tamaulipas, Mexico; it is also found in eastern Canada (Yates and Schmidly 1978; Schmidly 1994; Reid 2006). In Oklahoma, *S. aquaticus* occurs over most of the state where suitable soils allow extensive burrowing (Caire et al. 1998); however, there are apparently no records for eight counties of the state (Fig. 1).

The woodland vole, *Microtus pinetorum* is a small mouse found throughout the eastern and midwestern U.S. and extreme southern Ontario, Canada, from southern Maine southwest to central Texas and southern Louisiana (Smolen 1981; Reid 2006). In Oklahoma, *M. pinetorum* is found predominantly in the eastern one-half of the state (Caire et al. 1998). Here, we document new county records for *S. aquaticus* and *M. pinetorum* in southeastern Oklahoma.

On 6 August 2014, a sub-adult male *S. aquaticus* (total length 125 mm, length of tail 21 mm, length of hind foot 20 mm) was collected alive by hand from underneath a rock in its unexposed burrow on the Eastern Oklahoma State Campus off North Hill Street in Wilburton, Latimer County (34.915673°N, 95.327506°W). There were no obvious runs (burrow system) atop the ground. Habitat was

a mowed lawn dominated with an overstory of oaks (*Quercus* spp.) and pines (*Pinus* spp.). The voucher specimen (alcoholic) was deposited in the Henderson State University Mammal Collection (HSU), Arkadelphia, Arkansas as HSU 706.

Since the seminal publication of Caire et al. (1989), 10 additional county records for S. aquaticus have been documented as follows: Alfalfa (McDonald et al. 2006), Cimarron (Dalquest et al. 1990), Cotton (Stangl et al. 1992), Delaware (Braun and Revelez 2005), Jefferson (Stangl et al. 1992), Kiowa (Braun and Revelez 2005), Roger Mills (Braun and Revelez 2005), Texas (Roehrs et al. 2008), Tillman (McDonald et al. 2006), and Washita (Clark and Tumlison 1992). Prior to the present record in southeastern Oklahoma, there was a five-county hiatus in the range of S. aquaticus with noticeable distributional gaps in Atoka, Coal, Choctaw, Haskell and Latimer counties (Caire et al. 1989, p. 103) (Fig. 1). It is unknown why the eastern mole has not been previously reported from these counties since moist alluvial and sandy soils are present as well as Baird's pocket gophers, Geomys breviceps who also use these soils (see Connior et al. 2013). In addition, south of Choctaw County, Oklahoma, across the Red River in Texas, vouchers of eastern moles have not yet been collected in Fannin, Lamar and Red River counties (Schmidly 1994). We



Figure 1. Records of *Scalopus aquaticus* in counties of Oklahoma. Dots = previous records; star = new record.



Figure 2. Records of *Microtus pinetorum* in counties of Oklahoma. Dots = previous records; star = new record.

recommend further attempts be made at collecting *S. aquaticus* in counties without vouchers in order to help explore this oddity.

An adult female *M. pinetorum* (total length 138 mm, length of tail 30 mm, length of hind foot 16 mm, length of ear 13 mm; weight 40.7 g), deposited in the Eastern Oklahoma State College Collection-Wilburton (EOSC 48), was collected by M. Nunn on 10 January 1989 from SE of Stigler Lake, Haskell County

(35.235156°N, 95.106121°W). The habitat consisted of open fields with *Pinus* and *Quercus* spp.

Caire et al. (1989, p. 258) showed 27 counties of Oklahoma with previous records of *M. pinetorum* (Fig. 2). Numerous records have been documented since 1989, including those for Love and Murray (Stangl et al.1992), Washita (Clark and Tumlison 1992), Le Flore (Lutterschmidt et al. 1996), Major and Kiowa

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(Braun and Revelez 2005), and Alfalfa, Custer, Dewey, Garfield, Kay, Mayes, and Ottawa (McDonald et al. 2006) counties. The current record (Fig. 2) helps fill a gap in records from southeastern Oklahoma and those more northward in Muskogee County.

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