Additional Distribution Records of Scolopendromorph Centipedes in Oklahoma

David Bass

Department of Biology, University of Central Oklahoma, Edmond, OK 73034

Kinsey Tedford

Department of Biology, University of Central Oklahoma, Edmond, OK 73034

Courtney Bass Harlin

Department of Biology, University of Central Oklahoma, Edmond, OK 73034

Rowland M. Shelley

Florida State Collection of Arthropods, Division of Plant Industry, P. O. Box 147100, Gainesville, FL 32614-7100

Centipede distributions in Oklahoma were largely unknown until the synopsis of North American Scolopendromorpha (Shelley 2002) was published. Subsequent works on this order by McAllister et al. (2003, 2004, 2006, and 2014) have supplemented this knowledge base and provided a more complete documentation of distributions within the state.

Collections in the University of Central

Oklahoma Natural History Museum, the Sam Noble Museum of Natural History, and the Oklahoma State University Entomology Museum were examined, enabling us to report four scolopendromorph species and three families from five Oklahoma counties where centipedes have not been previously recorded (Fig. 1). Additional documentations are expected as research into the Oklahoma centipede diversity and distribution continues.

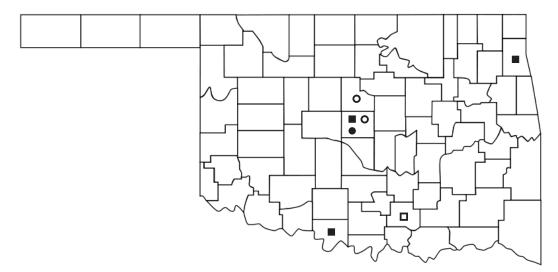


Figure 1. New Oklahoma records of *Hemiscolopendra marginata* (solid dot), *Scolopendra heros* (solid square), *Scolopocryptops rubiginosus* (open dot), and *Theatops posticus* (open square).

Scolopendridae

Scolopendra heros Girard, 1953. The largestbodied North American centipede, *S. heros*, exhibits a variety of colors and color patterns; in Oklahoma forms, the heads/cephalic plates are generally reddish, along with the 1st and 2nd tergites (Fig. 2). It is expected statewide in Oklahoma (Shelley 2002, McAllister et al. 2014), as opposed to congeneric species, *S. viridis* Say, 1821 and *S. polymorpha* Wood, 1861, which are unknown from the eastern periphery. Sightings in Oklahoma County (Co.) as far back as seven years ago have been communicated to David Bass, and are documented below:



Figure 2. *Scolopendra heros* at Lake Hefner Dam, 24 July 2014.

Oklahoma Co. in general [number of individuals = 4], 29 November 2008, J. Mears (UCONHM 12516), det. DB; Oklahoma City, Lake Hefner Dam, 24 July 2014, CBH (UCONHM 12545), det. DB (Figure 2); Arcadia Lake, Oklahoma Wildlife Department Land, 10 June 2009, W. Lord (UCONHM 12462), det. DB; Oklahoma City, Martin Park Nature Center, 29 May 2015, A. Jones (UCONHM 12546), det. DB.

Jefferson Co., [number of individuals = 4], 5 mi. west of Waurika near State Highway 70, 11 April 2015, E. Van (UCONHM 12536), det. DB.

Delaware Co., [number of individuals = 1], Lat. 36° 32' 56.16" N, Long. 94° Proc. Okla. Acad. Sci. 95: pp 94 - 95 (2015) 58' 3.49" W, 6 September 2015, A. Prince (UCONHM 12775), det. DB.

Hemiscolopendra marginata (Say, 1821). Prior records of *H. marginata* have been limited to southeastern Oklahoma (Shelley 2002, McAllister et al. 2014), so its occurrence in Oklahoma Co. is its westernmost documentation. This may reflect an allopatric population in the center of the state, or it may be an artifact of limited collections from those counties lying in between.

Oklaho	oma	Co.	in	gene	eral	[number
of indiv	viduals	=	1],	28	April	1965,
Dyer (UCON	ΗM	124	60),	det.	RMS.

Scolopocryptopidae

Scolopocrytops rubinosus L. Koch, 1878. This scolopocryptopid occurs throughout the eastern 2/3 of Oklahoma, except for the southeastern corner (Shelley 2002, McAllister et al. 2014), but no records exist for the following two counties:

	Loga	an	Со.,	[num	ber	of	individuals
=	1],	27	Septe	mber	1987	, R.	Grantham
(U	CON	IHM		12459)),	det.	RMS.

Oklahoma Co., [number of individuals = 1], 28 April 1965, Dyer (UCONHM 12461), det. RMS.

Plutoniumidae

Theatops Newport, 1844, with two species in Oklahoma, is readily distinguished by the enlarged forcipulate caudal in contrast to other Oklahoma sclopendromorphs. *Theatops posticus* (Say, 1821) lacks distomedial preformoral spines on the caudal legs, whereas *T. spinicaudus* (Wood, 1862) possess these structures. *T. posticus* has been found previously in southeastern Oklahoma and the following county record may be added:

Johnston Co., Blue River State Recreation Area, [number of individuals = 1], 13 September 1999, DB (UCONHM 12344), det. DB.

References

McAllister CT, Robison HW, Connior MB.

2014. New geographic distribution records for centipedes (Chilipoda: Scolopendromorpha) from Oklahoma. Proc. Okla. Acad. Sci. 94: 44-47.

- McAllister CT, Shelley RM, Cameron ML. 2004. Significant new distribution records for the centipede, *Theatops posticus* (Say) (Chilopoda: Scolopendromorpha: Cryptopidae), from Oklahoma, with four new records from the Ark-La-Tex. Proc. Okla. Acad. Sci. 84:73-74.
- McAllister CT, Shelley RM, McAllister JT III. 2003. Geographic distribution records for scolopendromorph centipedes (Arthropoda: Chilopoda) from Arkansas, Oklahoma, and Texas. J. Ark. Acad. Sci. 57:111-114.
- McAllister CT, Shelley RM, Robison HW. 2006. Additional distributional records for scolopendromorph centipedes (Chilopoda) from Arkansas, Kansas, Louisiana, New Mexico, Oklahoma, and Texas, with the first report of *Theatops spinicaudus* (Wood) (Cryptopidae) from Texas. Texas J. Sci. 58:299-308.
- Shelley RM. 2002. A synopsis of the North American centipedes of the order Scolopendromorpha (Chilopoda). Virginia Mus. Nat. Hist. Mem. No. 5:1-108.

Received August 17, 2015 Accepted October 16, 2015