
Millipeds (Arthropoda: Diplopoda) of the Ark-La-Tex. IV. New Geographic Distribution Records From Southcentral and Southeastern Oklahoma

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McAllister et al (2002a) reported 11 species of millipeds from collections at several sites in western and central Arkansas and eastern and southeastern Oklahoma, part of the Ark-La-Tex region as defined by McAllister et al (2002a). Prior to this report, it had been nearly a half century or more since the last such documentation for Oklahoma (Chamberlin 1931, 1940, 1943, Causey 1953, 1955, 1959), which was primarily restricted to the northeastern part of the state. In addition, Harrel (1960, 1963) reported three milliped taxa from Wild Woman Cave, Murray County, and Black (1971) reported records of several millipeds from additional caves of the state. Based on the diversity of the topography, climate, and vegetation of the nine major physiognomic regions of Oklahoma (see Caire et al 1989), the state is expected to support an equally diverse milliped fauna as evidenced by records in taxonomic papers (Shelley 1982, 1984, 1990, 2000a, 2000b, 2002, Shelley et al 2003) and range descriptions in the latest continental checklist (Hoffman 1999). Although a consolidated listing has never been prepared, our work in Oklahoma is part of a larger effort by R. M. Shelley to document the North American fauna as a whole, and we report here additional Oklahoma localities for species and subspecies. This paper is the fourth in a series of reports on millipeds of the Ark-La-Tex region (McAllister et al 2002a, 2002b, 2003).

MATERIALS and METHODS

Between April 2002 and August 2003, C. T. McAllister collected millipeds at several sites in five counties (Atoka, Choctaw,

LeFlore, Marshall, and McCurtain) of southcentral and southeastern Oklahoma. Most specimens were discovered in damp areas along trails in pine and hardwood forests by overturning decaying logs and leaf litter with potato rakes; a few specimens were uncovered by peeling bark from rotting logs and stumps. At each locale, specimens were placed in individually labeled vials containing 70% ethanol and returned to the laboratory for processing, sorting and preliminary identification. They were then shipped to R. M. Shelley and identified to the lowest taxonomic level (using primarily features of the male genitalia, i.e., aperture and gonopods). Voucher specimens were deposited in the North Carolina State Museum of Natural Sciences (NCSM).

Ten milliped species, representing nine genera, nine families, and six orders, are reported herein. The species collected and examined are listed below along with pertinent distributional information. Ten new county records are documented and specimens collected by C. T. McAllister are indicated by the initials CTM.

List of Species

Order Polydesmida

Family Eurymerodesmidae

Eurymerodesmus birdi birdi Chamberlin, 1931.
McCurtain Co., Beaver's Bend State Park, David Boren Trail, ♂, 18 April 2002, CTM and 11.3 km S. of Smithville off US 259 on co. rd. 891, ♂, 13 September 2002, CTM & J. E. Kessler (**new county record**). The type locality is an unknown site in Murray County (Chamberlin 1931), and the species

has been previously reported from Cherokee, Garvin, LeFlore, Payne, Pottawatomie, Seminole, and Wagoner counties; it also occurs in western Missouri and Arkansas into central and eastern Louisiana and Texas (Black 1971, Shelley 1990, McAllister et al 2002a, 2003).

Eurymerodesmus dubuis Chamberlin, 1943. **Choctaw Co.**, vicinity of Fort Towson off US 70, ♂, 18 April 2002, CTM (**new county record**). **McCurtain Co.**, Beaver's Bend State Park, David Boren Trail, ♂, 18 April 2002, CTM. The former record represents the westernmost locality ever reported for the species and only the second record of *E. dubuis* from Oklahoma as McAllister et al (2002a) reported it for the first time in the state from the latter locality.

Family Euryuridae

Auturus louisianus louisianus (Chamberlin, 1918).

LeFlore Co., Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, 4♂, 9 November 2002 and 3 April 2003, CTM. **McCurtain Co.**, Beaver's Bend State Park and 11.3 km S. of Smithville off US 259 on co. rd. 891, 3♂, 2♀, 13 September 2002, CTM & J. E. Kessler. McAllister et al (2002a, 2002b, 2003) previously reported *A. l. louisianus* from both counties above and Polk County, Arkansas. Given the proximity of the latter sites in the Ark-La-Tex region, this taxon may eventually be discovered in extreme northeastern Texas.

Family Paradoxosomatidae

Oxidis gracilis (Koch, 1847).

Marshall Co., University of Oklahoma Biological Station, Lake Texoma, ♂ ♀, 24 April 2003, CTM & G. Torres. The "hot-house" milliped is a very common introduced species that could be encountered in any urban habitat throughout the state.

Family Polydesmidae

Pseudopolydesmus pinetorum (Bollman, 1888).

Atoka Co., Boggy Depot State Park, off St. Hwy 7, ♂, 31 October 2002, CTM (**new county record**). **Choctaw Co.**, vicinity of Fort Towson off US 70, ♂, 18 April 2002, CTM, and Raymond Gary State Park, 24

April 2003, ♂, CTM & G. Torres (**new county record**). **LeFlore Co.**, Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, 6♂, 2♀, 27 September 2002, 11 October 2002, 9 November 2002, 3 April 2003, and 27 May 2003, CTM, J. T. McAllister, III & Z. Ramsey (**new county record**). **Marshall Co.**, Univ. of Oklahoma Biological Station, Lake Texoma, 18 April 2002, CTM (**new county record**). The type locality of *P. pinetorum* is Little Rock, Pulaski County, Arkansas (Bollman 1888). The species is the most common polydesmid in woodlands west of the Mississippi River and Harrel (1960, 1963), Black (1971), and McAllister et al (2002a) previously reported specimens from Wild Woman Cave, caves in Delaware, Johnston, and Murray counties, and a riparian site at Beaver's Bend St. Park, respectively. In addition, McAllister et al (2003) recently reported seven county records for *P. pinetorum* in Arkansas. Although Withrow (1988), in an unpublished dissertation, reported *P. pinetorum* from Adair, Cleveland, Logan, Murray, Payne, and Pontotoc counties, the genus is desperately in need of comprehensive review and revision.

Order Callipodida

Family Abacionidae

Abacion tessellatum Rafinesque, 1820.

LeFlore Co., Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, 2♂, 2 juveniles, 27 September 2002, 11 October 2002, 9 November 2002, and 9 June 2003, CTM (**new county record**). **McCurtain Co.**, 11.3 km S. of Smithville off US 259 on co. rd. 891, 3♂, 3♀, 13 September 2002, CTM & J. E. Kessler (**new county record**). Shelley (1984, see Fig. 12) previously reported the species from Craig County, near the Kansas border, and our specimens herein represent only the second and third records from the state. McAllister et al (2002a) also reported *A. tessellatum* from adjacent Polk County, Arkansas.

Order Julida

Family Parajulidae

Aliulus caddoensis Causey, 1950.

LeFlore Co., Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, 2♂, 3♀, juvenile, 27 September 2002 and 11 October 2002, CTM (**new county record**). The type locality is an unspecified site in Caddo County, Oklahoma, west of Oklahoma City, and *A. caddoensis* has been previously reported from Dallas, Howard, Pike, Polk, and Sebastian counties, Arkansas (Causey 1950, 1953, McAllister et al 2003). Causey's revision of this family was never completed, so it will have to be restudied *de novo*.

Order Chordeumatida

Family Trichopetalidae

Trigenotylo vago Causey, 1959.

LeFlore Co., Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, ♀, 27 Sep-tember 2002, CTM (**new county record**). Causey (1959) described *T. vago* from an unspecified site at "a river ravine" in Latimer County, Oklahoma. Additional records of *T. vago* include cave sites in counties to the west (Shear 2003), and the species may be widely distributed south of the Canadian River, but only in forested habitats with riparian corridors and in caves (Shear pers comm).

Order Spirobolida

Family Spirobolidae

Narceus americanus (Palisot de Beauvois, 1817).

LeFlore Co., Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, ♂, 13 August 2003, CTM. **McCurtain Co.**, Beaver's Bend State Park, David Boren Trail, ♂, ♀, 3 June 2003, C. T. McAllister & Biological Science Class 405 Summer I 2003 class. McAllister et al (2002a) previously reported the species from the latter site.

Order Platydesmida

Family Andrognathidae

Brachycybe lecontei (Wood, 1864).

LeFlore Co., Choctaw Nation Historic site at junction of St. Hwy 1 and AR St. Hwy 88, 2♂, ♀, 27 September 2002 and 13 August 2003, CTM. McAllister et al (2002a)

previously reported *B. lecontei* from this site and adjacent Polk County, Arkansas, and it appears to be a very common milliped on Rich Mountain of the Ouachita National Forest westward into eastern Oklahoma atop the outcroppings along the Talimena Scenic Highway. In addition, Black (1971) reported *B. lecontei* from Bear Den Cave, LeFlore County.

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