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Second Record of the Dipluran, Occasjapyx carltoni Allen, 1988 (Japygidae), from Arkansas

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In North America, the genus Occasjapyx Silvestri, 1948 (Diplura: Japygidae) currently includes 5 species, O. americanus (MacGillivary, 1893), O. californicus Silvestri, 1948, O. carltoni Allen, 1988, O. koboidi Silvestri, 1928, and O. sierrensis Smith, 1959 (Smith, 1959; Reddell, 1983; Allen, 2002). Four of these taxa occur in the far western United States in various parts of California, whereas O. carltoni is found in the east-central U.S. in the Ozark Mountains of northern Arkansas. Allen (1988) described O. carltoni based on 2 specimens collected near the Buffalo River at Kyle's Landing, Indian Creek, Newton County, Arkansas on 7 March 1988. The specimens were collected under rocks along a creek bank. Allen (1988) reported that both types were deposited in the University of Arkansas Insect Collection, but Robison and Allen (1995) gave the American Museum of Natural History, New York, NY as the holotype repository and Arkansas as the paratype repository. The latter specimen was apparently later transferred to the Academy of Natural Sciences, Philadelphia (R. T. Allen, pers. comm.). Since the original description, we are unaware of additional reports of the species in the literature other than a color photograph, a line drawing, and additional commentary of this Arkansas endemic in Robison and Allen (1995).

On 30 December 2004, the first author collected a single specimen of an unknown japygid species in muddy substrate within the twilight zone of Blevins Cave (formerly Cave Creek Spring Cave), 9.8 km (6.1 mi) north of Pleasant Plains off US 167 along Powers Creek, Independence County, Arkansas. The specimen was placed in a vial containing 70% ethanol and sent to the second author for identification. Based on the terminal lamina of the lacinia, antennae, cerci, and dorsal chaetotaxy, the specimen was tentatively identified as *O. carltoni*. A voucher specimen is deposited in the invertebrate collection of the Louisiana State Arthropod Museum.

The new collection site is approximately 167 km (104 mi) southeast of the type locality (Fig. 1). Interestingly, records of diplurans from Arkansas caves are rare (see McDaniel and Smith, 1976; McDaniel et al., 1979; Dunivan et al., 1982; Graening et al., 2003). As such, we suggest additional collecting of diplurans in epigean habitat in the state.

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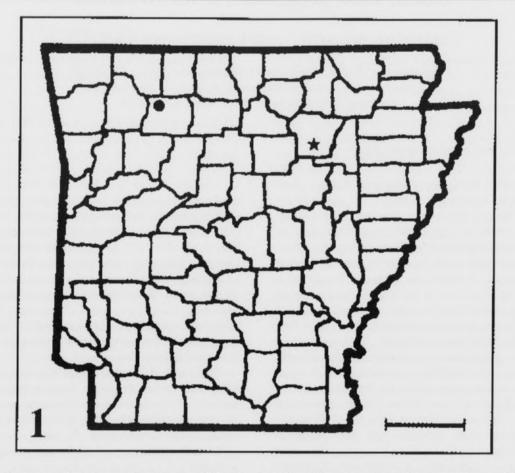


Fig. 1. County outline map of Arkansas showing localities for *O. carltoni*. Type locality in Newton County (dot), new locality in Independence County (star). Scale bar = 81 km (50 mi).

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