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New Distributional Records of Ants in Arkansas for 2009 and 2010 with Comments on Previous Records

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We are continually updating the ant faunal list for the state (Warren and Rouse 1969) and report the results of our ant sampling in 2009-10. In 2009, we surveyed 5 prairies and several nearby wooded areas: 1) Railroad Prairie and woods, 2) Downs Prairie, 3) Konecny Prairie and woods, all in Prairie Co., 4) Roth Prairie in Arkansas Co. and 5) Locust Ridge Prairie in Union Co. In 2010, we surveyed pine stands at Warren Prairie in Drew Co., and found a new species for Arkansas Oak NA in Nevada Co. while documenting harvester ant colonies there.

In 2009, for the prairies we used pitfall trapping, and for the wooded areas we used intensive plot sampling techniques, namely, sifting of leaf litter and duff followed by Berlese extraction, breaking into rotten wood, beating of low vegetation, and hand collecting (General and Thompson 2007). In 2010, we used pitfall trapping in the pine forests. The most appropriate and latest taxonomic references were used to identify the ants to genus (Fisher and Cover 2007) then to species (Bolton 1994, 2000, 2003, Bolton et al. 2007, Johnson 1988, LaPolla et al. 2010, MacGown 2006, Snelling 1995, Trager 1984, Trager et al. 2007, Ward 1985, and Wilson 2003). Specimens were sent to the Museum of Comparative Zoology (MCZ) of Harvard University for verification by Mr. Stefan P. Cover. Vouchers of all new state records will eventually be deposited at the Arthropod Museum of the University of Arkansas, Fayetteville, AR and MCZ, Cambridge, MA.

Formica incerta is newly recorded from Arkansas, being very common in the prairies. In addition, we established 72 new county records for the 46 species collected (Table 1). We also recognize the first collection of *Pachycondyla gilva* (formerly *Cryptopone gilva*, sensu Mackay and Mackay 2010) by Mr. Cover from the Boston Mountains, Franklin County in 1996 (AntWeb 2002).

Finally, we amend the records reported in previous publications of our updating efforts. *Aphaenogaster texana* is listed in General and Thompson (2007, 2008, 2009). A fortuitous visit to MCZ in 2009 by DMG revealed that these ants are properly named *Aphaenogaster rudis*. New county distributional

records for *Dorymyrmex bureni* and *Pyramica reflexa* are revised to new state distributional records for 2008 (General and Thompson 2009). In the process of creating a relational database of Arkansas ant records, we discovered that records of these 2 species had not been previously published.

Acknowledgments

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Table 1. List of new distributional records for Arkansas in 2009 and 2010.

Species	County				
	Arkansas	Drew	Nevada	Prairie	Union
<i>Amblyopone pallipes</i>		√			
<i>Aphaenogaster fulva</i>		√		√	
<i>Aphaenogaster lamellidens</i>		√			
<i>Aphaenogaster rudis</i>		√		√	√
<i>Aphaenogaster treatae</i>		√			
<i>Brachymyrmex depilis</i>		√		√	√
<i>Camponotus castaneus</i>					√
<i>Camponotus pylartes</i>		√			
<i>Crematogaster atkinsoni</i>		√			
<i>Crematogaster cerasi</i>				√	
<i>Crematogaster lineolata</i>				√	
<i>Crematogaster minutissima</i>					√
<i>Dolichoderus mariae</i>			√		
<i>Forelius pruinosis</i>		√		√	√
<i>Formica incerta</i>	X	X		X	X
<i>Formica pallidefulva</i>				√	
<i>Hypoponera opaciceps</i>		√			√
<i>Hypoponera opacior</i>				√	
<i>Lasius alienus</i>		√		√	
<i>Lasius neoniger</i>				√	
<i>Monomorium minimum</i>				√	√
<i>Myrmecina americana</i>				√	√
<i>Nylanderia terricola</i>				√	√
<i>Pheidole bicarinata</i>		√		√	√
<i>Pheidole dentata</i>		√			
<i>Prenolepis imparis</i>		√			
<i>Proceratium croceum</i>		√			
<i>Proceratium pergandei</i>		√			
<i>Protomognathus americanus</i>		√			
<i>Pseudomyrmex pallidus</i>		√			
<i>Pyramica clypeata</i>					√
<i>Pyramica dietrichi</i>		√		√	√
<i>Pyramica membranifera</i>					√
<i>Pyramica ohioensis</i>		√		√	
<i>Pyramica ornata</i>				√	√
<i>Pyramica pilinasis</i>		√			
<i>Pyramica rostrata</i>		√			√
<i>Solenopsis invicta</i>				√	√
<i>Solenopsis molesta</i>				√	√
<i>Stenamma brevicorne</i>		√			
<i>Stenamma impar</i>		√			
<i>Strumigenys louisianae</i>				√	√
<i>Tapinoma sessile</i>		√			
<i>Temnothorax curvispinosus</i>				√	
<i>Temnothorax pergandei</i>		√		√	
<i>Trachymyrmex septentrionalis</i>				√	

Key to Table 1. X = New AR record of species; √ = New county record of species

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