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New Distributional Records of Ants in Arkansas for 2008

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The ant diversity of Arkansas remains largely unstudied (AntWeb 2002). Updating the faunal list for the state will take much effort, time, and money (Warren and Rouse 1969). We have, however, been discovering new state records even with meager resources. We report the results of our ant sampling in 2008.

We surveyed 7 natural areas in 5 counties in southern Arkansas: 1) Arkansas Oak Natural Area (NA) in Nevada Co., 2) Miller County Sandhills NA, 3) Warren Prairie NA in Bradley Co., 4) White Cliffs NA in Little River Co., 5) Nacatoch Ravines NA, 6) Rick Evans Grandview Prairie Wildlife Management Area (WMA), and 7) Ozan WMA, all in Hempstead Co.

We used pitfall trapping and 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). We used the most appropriate and latest taxonomic references to identify the ants to genus (Fisher and Cover 2007) then to species (Bolton 1994, 2000, 2003, Bolton et al. 2007, MacGown 2006, Snelling 2005, Snelling 1995, Trager 1984, Ward 1985, and Wilson 2003). We then sent specimens 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 Entomological Museum of the University of Arkansas, Fayetteville, AR and MCZ, Cambridge, MA.

Twelve species are newly recorded from Arkansas, including 4 putatively undescribed species (Cover, MCZ, personal communication). In addition, we established 138 new county records of species. Table 1 lists the new species records by county.

Table 1. List of new species records in 5 counties of Arkansas (new AR species records in boldface).

Species	County				
	Bradley	Hempstead	Little River	Miller	Nevada
<i>Aphaenogaster fulva</i>	√	√		√	√
<i>Aphaenogaster lamellidens</i>	√	√	√	√	
<i>Aphaenogaster texana</i>	√	√	√	√	√
<i>Aphaenogaster tennesseensis</i>	√				
<i>Aphaenogaster treatae</i>				√	
<i>Brachymyrmex depilis</i>	√		√	√	√
<i>Camponotus castaneus</i>	√				√
<i>Camponotus decipiens</i>			√		
<i>Camponotus pylartes</i>		√	√	√	
<i>Camponotus snellingi</i>	√		√	√	√
<i>Crematogaster ashmeadi</i>			√	√	
<i>Crematogaster cerasi</i>	√	√		√	√
<i>Crematogaster lineolata</i>	√				
<i>Crematogaster minutissima</i>	√		√	√	
<i>Crematogaster missuriensis</i>				√	
<i>Discothyrea testacea</i>	√		√		
<i>Dorymyrmex bureni</i>	√			√	√
<i>Forelius pruinosus</i>	√		√	√	√
<i>Forelius speciesAR-01</i>				√	
<i>Formica pallidefulva</i>	√		√		
<i>Hypoponera opacior</i>	√		√	√	
<i>Hypoponera opaciceps</i>		√			

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Table 1. List of new species records in 5 counties of Arkansas.

Species	County				
	Bradley	Hempstead	Little River	Miller	Nevada
<i>Monomorium minimum</i>	√		√	√	
<i>Myrmecina americana</i>	√		√	√	√
<i>Myrmica pinetorum</i>	√			√	
<i>Myrmica punctiventris</i>		√		√	√
<i>Neivamyrmex swainsonii</i>				√	
<i>Paratrechina faisonensis</i>	√				
<i>Paratrechina terricola</i>	√		√		
<i>Paratrechina wojciki</i>	√				√
<i>Pheidole dentata</i>	√	√	√	√	
<i>Pheidole dentigula</i>		√		√	
<i>Pheidole metallescens</i>				√	√
<i>Pheidole pelor</i>		√	√		
<i>Pheidole pilifera</i>			√		
<i>Pheidole tetra</i>				√	√
<i>Pogonomyrmex comanche</i>					√
<i>Ponera exotica</i>				√	
<i>Ponera pennsylvanica</i>	√		√	√	√
<i>Prenolepis imparis</i>		√			
<i>Proceratium pergandei</i>				√	√
<i>Protomognathus americanus</i>		√			
<i>Pseudomyrmex pallidus</i>	√			√	
<i>Pseudomyrmex ejectus</i>			√		
<i>Pyramica clypeata</i>				√	√
<i>Pyramica membranifera</i>				√	
<i>Pyramica ohioensis</i>				√	
<i>Pyramica ornata</i>	√			√	
<i>Pyramica reflexa</i>				√	
<i>Pyramica speciesAR-01</i>		√		√	
<i>Pyramica speciesAR-02</i>				√	
<i>Solenopsis invicta</i>	√	√	√	√	√
<i>Solenopsis molesta</i>	√	√	√		
<i>Solenopsis pergandei</i>				√	
<i>Solenopsis speciesAR-01</i>	√				
<i>Strumigenys louisianae</i>		√	√	√	√
<i>Tapinoma sessile</i>	√		√	√	√
<i>Temnothorax curvispinosus</i>	√		√	√	√
<i>Temnothorax pergandei</i>	√		√		√
<i>Trachymyrmex septentrionalis</i>	√		√		√
Total New Records	32	16	27	40	23

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Literature Cited

- Bolton B.** 1994. Identification guide to the ant genera of the world. Cambridge (MA): Harvard University Press. 222 p.
- Bolton B.** 2000. The ant tribe Dacetini. *Memoirs of the American Entomological Institute* 65:1-1028.
- Bolton B.** 2003. Synopsis and Classification of Formicidae. *Memoirs of the American Entomological Institute* 71:1-370.

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- Bolton B, GD Alpert, PS Ward, and P Naskrecki.** 2007. Bolton's catalogue of ants of the world, 1758-2005. Cambridge (MA): Harvard University Press (CD-ROM).
- Fisher BL and Cover SP.** 2007. Ants of North America: a guide to the genera. Berkeley (CA) University of California Press. 194 pp.
- General DM and LC Thompson.** 2007. Ants (Hymenoptera: Formicidae) of Arkansas Post National Memorial. Journal of the Arkansas Academy of Science 61:59-64.
- MacGown J.** 2006. Formicidae of Mississippi and Alabama. Available at: <http://www.msstate.edu/org/mississippiantmuseum/Researchtaxapages/Formicidaehome.html>. Accessed 2009 Feb 15.
- Snelling GC.** 2005. New World Army Ants. Available at: <http://www.armyants.org/>. Accessed 2009 Mar 30.
- Snelling RR.** 1995. Systematics of Nearctic ants of the genus *Dorymyrmex* (Hymenoptera: Formicidae). Contributions in Science, Natural History Museum of Los Angeles County 454, 14 p.
- Trager JC.** 1984. A revision of the genus *Paratrechina* (Hymenoptera: Formicidae) of the continental United States. Sociobiology 9(2):51-162.
- Ward PS.** 1985. The Nearctic species of the genus *Pseudomyrmex* (Hymenoptera: Formicidae). Quaestiones Entomologicae 21:209-46.
- Warren LO and EP Rouse.** 1969. The ants of Arkansas. University of Arkansas (Fayetteville) Agricultural Experiment Station Bulletin 742. 67 pp.
- Wilson EO.** 2003. *Pheidole* in the New World: A dominant, hyperdiverse ant genus. Cambridge (MA): Harvard University Press. 794 pp.