

A Checklist of the Ants of Oklahoma

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ABSTRACT — A list of 89 species of ants found in Oklahoma is based on the literature and the authors' own collections. The list includes 7 species in Ponerinae, 8 in Dorylinae, 39 in Myrmicinae, 7 in Dolichoderinae, and 28 in Formicinae. Distribution is given by counties and, where known, by location of collection.

In 1964 Young and Howell published an excellent pamphlet on "The Ants of Oklahoma." It included keys, synonymies, range, Oklahoma distribution by counties, and descriptions.

In the following 25 years there have been changes in taxonomy and nomenclature, and new species and new records have been reported in the literature. To take care of these changes we offer this list.

BIOMES

Blair and Hubbell (1938) gave a good account of the biotic districts of Oklahoma, which was based on Orthoptera and mammals. It does, however, support Odum's map (1971:380) showing two biomes and the ecotone between them. A narrow strip along the eastern border is in the Deciduous Forest Biome; adjoining this on the west is the Ecotone; the remainder (perhaps half of the state) is in the Grassland Biome. Ecological data are so scarce that we have not attempted to correlate the ants with the biomes.

PLAN OF THE LIST

The arrangement of the taxa follows that in Wheeler and Wheeler (1985). The species of a genus are arranged alphabetically. Under each species we have copied from Young and Howell the names of all counties (see Fig. 1) from which it had been reported, but we have alphabetized them. Since we deplore the lack of localities given in a checklist, we have added next (designated *Smith*) any localities given in Smith's 1935 list or in any recent publications. Then we have added species and records from our own collection. We collected in Oklahoma in 1922, 1929, 1948, 1951, and 1960 in these counties: Comanche, Le Flore, Murray, Muskogee, Osage. Our records in this list are preceded by *GCW/JW*. Finally we added a few records (*CJ*) supplied by Clifford Johnson (University of Florida).

Our records include one species new to the list; they add 26 county records and 34 locality records. D. R. Smith (1979) added one genus (*Discothyrea*) and eight species, but he gave few localities. Johnson added one genus (*Srumigenys*) and one species to the list. The total for Oklahoma is now 89 species.

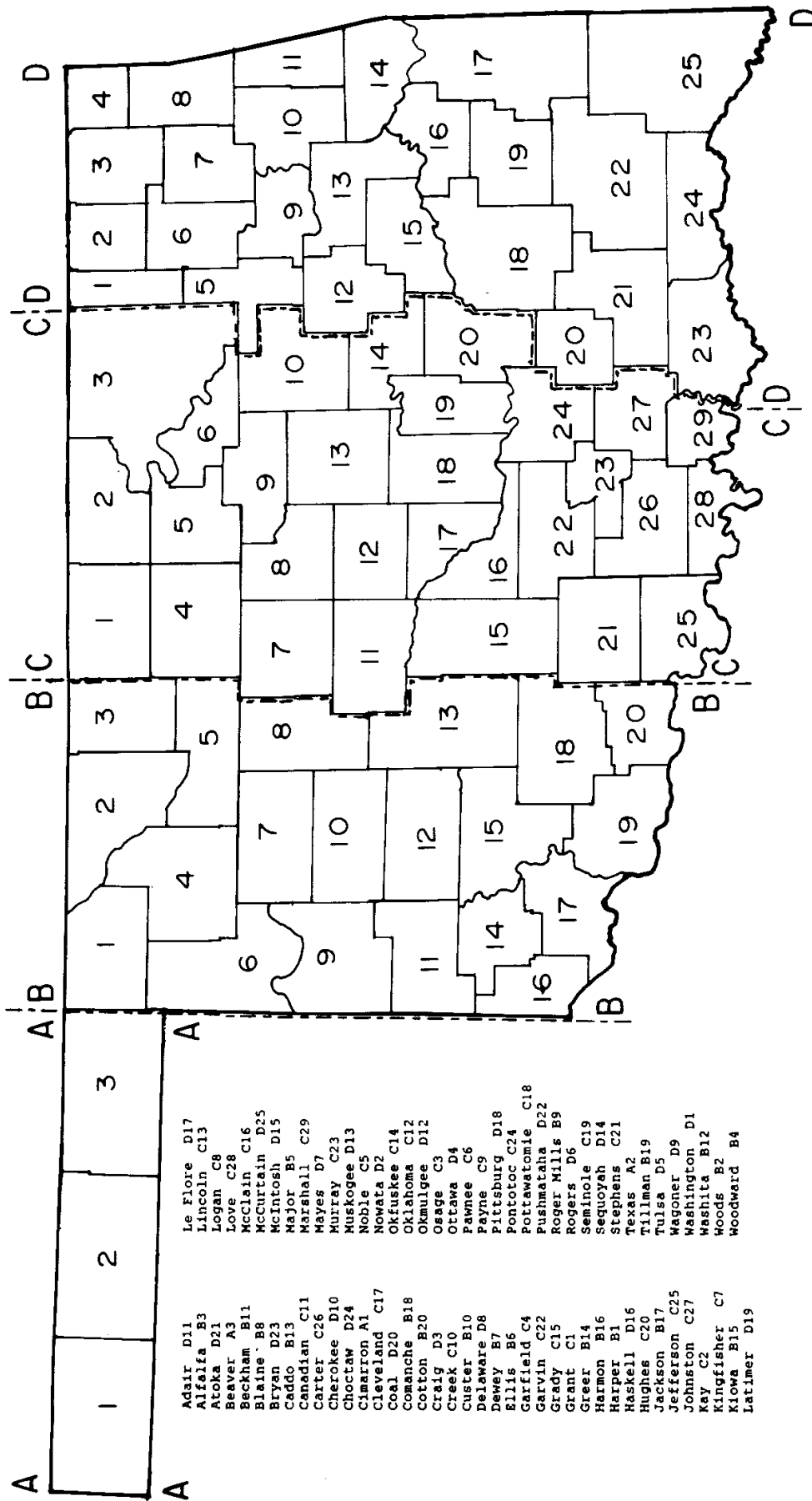


Figure 1. The counties of Oklahoma.

SUBFAMILY PONERINAE

Genus *Amblyopone* Erichson

pallipes (Haldeman). Payne.

Genus *Discothyrea* Roger

testacea Roger. D. R. Smith 1979.

Genus *Hypoponera* Santschi

opaciceps (Mayr). Bryan, Jackson.

opacior (Forel). Beckham, Chocktaw, Comanche, Delaware, Kay, Latimer, McCurtain, McIntosh, Payne, Pushmataha, Washington. *Smith*: Comanche: Wichita Nat. For. *GCW/JW*: Comanche: Wichita Nat. Wildlife Refuge; Le Flore: Poteau; Muskogee: Greenleaf St. Pk.

Genus *Ponera* Latreille

exotica M. R. Smith. McCurtain, Payne. (Taylor 1967.)

pennsylvanica Buckley. Osage.

Genus *Proceratium* Roger

croceum (Roger). Payne, Pontotoc.

SUBFAMILY DORYLINAE

Genus *Labidus* Jurine

coecus (Latreille). [listed by Smith 1935, but no locality given.]

Genus *Neivamyrmex* Borgmeier

harrisi (Haldeman). Payne.

leonardi (Wheeler). D. R. Smith 1979.

melsheimeri (Haldeman). Latimer.

minor (Cresson). Payne.

nigrescens (Cresson). Cleveland, Comanche, Latimer, Oklahoma, Payne, Woodward. *Smith*: Comanche: Wichita Nat. For.

opacithorax (Emery). Caddo, Payne, Roger Mills. *GCW/JW*: Le Flore: Poteau.

pilosus mexicanus (F. Smith). Adair, Bryan, Latimer, Le Flore, Mayes.

SUBFAMILY MYRMICINAE

TRIBE MYRMICINI

Genus *Ephebomyrmex* Wheeler

imberbicus Wheeler. Comanche, Harmon. *Smith*: Comanche: Wichita Nat. For.

Genus *Myrmica* Latreille

pinetorum Wheeler. Latimer.

Genus *Pogonomyrmex* Mayr

barbatus (F. Smith). Alfalfa, Beaver, Beckham, Blaine, Caddo, Canadian, Carter, Cimarron, Cleveland, Comanche, Cotton, Custer, Dewey, Ellis, Garvin, Grady, Greer, Harmon, Harper, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, McLain, Nobel, Osage, Pawnee, Payne, Pontotoc, Roger Mills, Texas, Tillman, Washita, Woods, Woodward. *Smith*: Caddo: Anadarko; Cleveland: Norman; Garvin: Pauls Valley; Jackson: Snyder; Payne: Stillwater. *GCW/JW*: Murray: Sulphur; Muskogee: Muskogee.

californicus (Buckley). Cimarron.

comanche Wheeler. D. R. Smith (1979)

desertorum Wheeler. Cotton. *GCW/JW*: Comanche: Wichita Mts.; Murray: Arbuckle Mts.

occidentalis (Cresson). Alfalfa, Beckham, Canadian, Cimarron, Cleveland, Custer, Ellis, Greer, Harmon, Kiowa, Payne, Texas, Washita, Woodward. *Smith*: Alfalfa: Cherokee; Cimarron: Kenton; Custer: Clinton.

rugosus Emery. D. R. Smith (1979: "W. Okla.").

TRIBE PHEIDOLINI

Genus *Aphaenogaster* Mayr

- carolinensis* Wheeler. Latimer.
fulva Roger. Cleveland, McLain.
tennesseensis (Mayr). Atoka, Caddo, Latimer, McCurtain, Payne, Washington.
texana (Emery). Latimer, Payne, Washington.
treatae Forel. Comanche, Latimer, Woods. *Smith*: Comanche: Wichita Nat. For.
treatae pluteicornis G. C. & E. W. Wheeler. Payne, Pushmataha. *GCW/JW*: Le Flore: The only ant described from Oklahoma. Type locality Poteau. (1934, *Psyche* 41:7.)

Genus *Pheidole* Westwood

- bicarinata vinelandica* Forel. Beaver, Beckham, Canadian, Cimarron, Comanche, Craig, Grady, Harmon, Harper, Kay, Le Flore, Marshall, Noble, Nowata, Osage, Ottawa, Pawnee, Payne, Sequoyah, Texas, Washington, Woods, Woodward. *Smith*: Comanche: Wichita Nat. For.; Grady: Chickasha; Marshall: Madill.
cockerelli Wheeler. Beckham. *GCW/JW*: Murray: Arbuckle Mts.
dentata Mayr. Alfalfa, Atoka, Beckham, Blaine, Bryan, Caddo, Choctaw, Comanche, Garfield, Grant, Greer, Harmon, Harper, Haskell, Hughes, Jackson, Kay, Kingfisher, Latimer, Le Flore, McCurtain, McIntosh, Major, Noble, Osage, Pawnee, Payne, Pittsburg, Pontotoc, Pushmataha, Roger Mills, Sequoyah, Washington, Woods. *CJ*: McIntosh: 2 mi E. Checotah.
hyatti Emery. Carter, Comanche, Cotton, Grady, Greer, Harmon, Jackson, Kiowa, Tillman. *Smith*: Carter: Ardmore; Comanche: Lawton, Wichita Nat. For.; Grady: Chickasha; Jackson: Altus, Snyder.
morrisi impexa Wheeler. Noble, Osage, Pawnee, Payne, Pottawatomie.
pilifera (Roger). Cimarron, Texas, Woodward.
sitarches campestris Wheeler. Beckham, Comanche, Harmon, Latimer, Noble, Nowata, Ottawa, Pawnee. *Smith*: Comanche: Wichita Nat. For.

TRIBE CREMATOGASTRINI

Genus *Crematogaster* Lund

- ashmeadi* Mayr. Beaver, Jackson, Latimer, Le Flore.
laeviuscula Mayr. Adair, Alfalfa, Bryan, Caddo, Canadian, Carter, Choctaw, Cleveland, Coal, Comanche, Cotton, Delaware, Dewey, Ellis, Garvin, Grady, Greer, Haskell, Jackson, Johnston, Kay, Latimer, Le Flore, Logan, McCurtain, McIntosh, Muskogee, Noble, Osage, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Sequoyah, Texas, Washington, Woods. *Smith*: Bryan: Durant; Choctaw: Hugo, Valiant; Cleveland: Norman; Cola: Coalgate; Comanche: Lawton, Wichita Nat. For.; Garvin: Pauls Valley; Payne: Stillwater; Pittsburg: McAlester; Pontotoc: Ada. *GCW/JW*: Muskogee: Muskogee, Greenleaf St. Pk.; Murray: Arbuckle Mts. *CJ*: Atoka: 2 mi N Atoka; Pittsburg: 5 mi N McAlester.
lineolata (Say). Adair, Atoka, Beaver, Caddo, Canadian, Cherokee, Cimarron, Cleveland, Coal, Comanche, Craig, Creek, Ellis, Grady, Harmon, Harper, Haskell, Hughes, Johnston, Kay, Latimer, Lincoln, Love, McClain, McCurtain, McIntosh, Major, Marshall, Noble, Okfuskee, Oklahoma, Osage, Payne, Pawnee, Pittsburg, Pontotoc, Pushmataha, Roger Mills, Seminole, Texas, Tulsa, Wagoner, Woodward. *CJ*: Bryan: Colbert.
minutissima Mayr. Canadian, Comanche, Grady, Latimer, McClain, Payne. *Smith*: Comanche: Wichita Nat. For.; Grady: Chickasha. *GCW/JW*: Murray: Arbuckle Mts.
punctulata Emery. Beckham, Comanche, Cotton, Grady, Harmon, Jackson, Kiowa, Latimer, Le Flore, Logan, McClain, McCurtain, Pushmataha, Woods. *Smith*: Comanche: Wichita Nat. For.; Grady: Chickasha; McCurtain: Idabel. *GCW/JW*: Comanche; Wichita Mt. Wildlife Refuge.

TRIBE SOLENOPSISINI

Genus *Monomorium* Mayr

- minimum* (Buckley). Alfalfa, Beckham, Caddo, Canadian, Carter, Choctaw, Cleveland, Comanche, Custer, Delaware, Grady, Grant, Greer, Harmon, Harper, Hughes, Jackson, Kay, Kingfisher, Latimer, Le Flore, Logan, McCurtain, McIntosh, Noble, Nowata, Osage, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Roger Mills, Sequoyah, Texas, Washita. *Smith*:

Alfalfa: Cherokee; Carter: Ardmore; Choctaw: Hugo; Comanche: Lawton, Wichita Nat. For.; Cleveland: Norman; Custer: Clinton; Grady: Chickasha; Jackson: Altus; McCurtain: Idabel; Pittsburg: McAlester. *GCW/JW*: Murray: Arbuckle Mts., Sulphur.
pharaonis (Linnaeus). Hughes, Pawnee, Payne, Pontotoc, Tulsa.

Genus *Solenopsis* Westwood

molesta (Say). Alfalfa, Canadian, Choctaw, Craig, Grady, Kingfisher, Latimer, McCurtain, Payne, Pottawatomie, Sequoyah. *Smith*: Grady: Chickasha. *GCW/JW*: Le Flore: Poteau; Murray: Arbuckle Mts.

texana Emery. Canadian, Grady, Noble, Pawnee, Payne. *GCW/JW*: Le Flore: Poteau.

xyloxi McCook. Alfalfa, Blaine, Bryan, Caddo, Canadian, Carter, Choctaw, Cimarron, Comanche, Cotton, Custer, Garvin, Grady, Grant, Greer, Harper, Johnston, Kingfisher, Kiowa, Latimer, Le Flore, McCurtain, Marshall, Pontotoc, Pushmataha, Texas, Tillman, Washita, Woods, Woodward. *Smith*: Bryan: Durant; Caddo: Anadarko; Carter: Ardmore; Choctaw: Hugo; Comanche: Wichita Nat. For.; Custer: Clinton; Garvin: Lindsay; Grady: Chickasha; Jackson: Snyder; Kiowa: Hobart; McCurtain: Idabel, Valiant; Marshall: Madill; Tillman: Frederick.

TRIBE PHEIDOLOGETINI

Genus *Oligomyrmex* Mayr

longii (Wheeler). Comanche: [D. R. Smith 1979: "Okla. (Ft. Sill)"].

TRIBE MYRMECININI

Genus *Myrmecina* Curtis

americana Emery. Latimer, Noble, Pawnee, Payne.

TRIBE LEPTOTHORACINI

Genus *Leptothorax* Mayr

curvispinosus Mayr. D. R. Smith 1979.

pergandei Emery. Comanche, Grady, Harmon, McLain, Osage, Pawnee, Pushmataha. *Smith*: Comanche: Wichita Nat. For.; Grady: Chickasha.

schaumi Roger. Caddo, Comanche, Grady, Harmon, Jefferson, Kay, Latimer, Noble, Osage, Payne, Pawnee.

texanus Wheeler. Comanche, Harmon, Latimer. *Smith*: Comanche: Wichitas Nat. For.

TRIBE DACETINI

Genus *Smithistruma* Brown

ornata (Mayr). D. R. Smith 1979.

Genus *Strumigenys* F. Smith

louisianae Roger. *CJ*: McCurtain: Broken Bow.

TRIBE ATTINI

Genus *Trachymyrmex* Forel

septentrionalis (McCook). Beckham, Comanche, Cotton, Dewey, Ellis, Harmon, Johnston, Latimer, McCurtain, Noble, Pawnee, Payne, Pontotoc, Roger Mills. *Smith*: Comanche: Wichita Nat. For.

SUBFAMILY DOLICHODERINAE

Genus *Dolichoderus* Lund

mariae Forel. Major.

pustulatus Mayr. Cleveland, Noble, Pawnee. *Smith*: Cleveland: Norman.

Genus *Conomyrma* Forel

flava (McCook). *Smith*: Bryan: Durant; Comanche: Wichita Nat. For.; Custer: Clinton; Garvin: Lindsay; Grady: Chickasha; Jackson: Altus; McCurtain: Idabel; Marshall: Madill. *GCW/JW*: Le Flore: Poteau; Murray: Sulphur; Muskogee: Muskogee. Bryan. *CJ*: Colbert.

insana (Buckley) (= *Dorymyrmex pyramicus*). Alfalfa, Atoka, Beaver, Beckham, Blaine, Bryan, Caddo, Canadian, Carter, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Cotton, Custer, Dewey, Ellis, Garvin, Grady, Greer, Harmon, Harper, Hughes, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, McClain, McCurtain, McIntosh, Murray, Noble, Osage, Pawnee, Payne, Pontotoc, Pottawatomie, Pushmataha, Roger Mills, Tillman, Texas, Washita, Woodward. *Smith*: Bryan: Durant; Comanche: Wichita Nat. For.; Custer: Clinton; Tillman: Frederick. *GCW/JW*: Murray; Turner Falls in Arbuckle Mts., Sulphur; Muskogee: Muskogee.

Genus *Forelius* Emery

foetidus (Buckley). Blaine, Cleveland, Comanche, Cotton, Grady, Harmon, Kay, Kingfisher, Logan, McLain, McCurtain, Noble, Osage, Pawnee, Payne, Pittsburg, Washita. *Smith*: Carter: Ardmore; Coal: Coalgate; Comanche: Wichita Nat. For.; Custer: Clinton; Jackson: Altus; Marshall: Madill; Tillman: Frederick. *GCW/JW*: Murray: Arbuckle Mts.

pruinus (Roger). Adair, Alfalfa, Beaver, Beckham, Blaine, Caddo, Canadian, Carter, Choctaw, Cimarron, Cleveland, Coal, Comanche, Craig, Delaware, Dewey, Ellis, Garfield, Grady, Grant, Greer, Harmon, Harper, Hughes, Jackson, Johnston, Kay, Kingfisher, Kiowa, Latimer, Le Flore, Logan, McClain, McCurtain, McIntosh, Major, Mayes, Noble, Nowata, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, Roger Mills, Sequoyah, Texas, Tillman, Washington, Washita, Woods, Woodward. *Smith*: Comanche: Wichita Nat. For. *GCW/JW*: Le Flore: Poteau; Murray: Sulphur; Muskogee: Greenleaf St. Pk.; Osage: Foraker. *CJ*: Atoka: 2 mi N Atoka; Bryan: Colbert.

Genus *Tapinoma* Foerster

sessile (Say). Adair, Cleveland, Kay, McCurtain, Oklahoma, Payne, Sequoyah, Woods, Woodward.

SUBFAMILY FORMICINAE

TRIBE FORMICINI

Genus *Acanthomyops* Mayr

claviger (Roger). Cleveland, Noble, Pawnee, Payne.

interjectus (Mayr). Adair, Comanche, Jefferson, Latimer, Noble, Pawnee, Woods. *Smith*: Comanche: Wichita Nat. For.

latipes (Walsh). *Smith*: Comanche: Wichita Nat. For.

Genus *Formica* Linnaeus

pallidefulva Latreille. Comanche, Kay, McClain, Noble, Osage, Pawnee, Payne. *CJ*: McIntosh: 2 mi E Checotah; Pittsburg: 5 mi N McAlester; Sequoyah: Sallisaw.

perpilosa Wheeler. Beaver, Beckham, Cimarron, Ellis, Harper, Roger Mills, Woodward. *Smith*: Cimarron: Kenton.

schaufussi dolosa Wheeler. Beckham, Comanche, Harmon, Jackson, Latimer. *Smith*: Comanche: Wichita Nat. For.

Genus *Lasius* Fabricius

alienus (Foerster). Noble, Osage, Payne.

neoniger Emery. Beckham, Caddo, Canadian, Cherokee, Cimarron, Cleveland, Comanche, Cotton, Grady, Greer, Hughes, Jefferson, McClain, Major, Payne, Pittsburg, Sequoyah, Texas, Washita, Woods. *Smith*: Comanche: Wichita Nat. For.; Grady: Chickasha; Hughes: Holdenville. *CJ*: Pittsburg: 5 mi N McAlester.

Genus *Myrmecocystus* Wesmæl

melliger Forel. Beckham, Comanche, Ellis, Roger Mills, Washita.

mimicus Wheeler. D. R. Smith 1979: "w. Okla."

romainei Cole. D. R. Smith 1979: "w. Okla."

TRIBE BRACHYMYRMECINI

Genus *Brachymyrmex* Mayr

depilis Emery. Cleveland.

Genus *Paratrechina* Motschulsky

bruesi (Wheeler). D. R. Smith 1979.

longicornis (Latreille). Pittsburg.

melanderi (Wheeler). Adair, Grady, Harper, Kay, Kingfisher, Latimer, Noble, Osage, Pawnee, Payne.
GCW/JW: Le Flore: Poteau; Muskogee: Greenleaf St. Pk.

Genus *Prenolepis* Mayr

imparis (Say). Caddo, Cleveland, Comanche, Dewey, Kay, Latimer, McLain, Noble, Osage, Pawnee, Payne, Washita.

TRIBE CAMPONOTINI

Genus *Camponotus* Mayr

Subgenus *Camponotus* Mayr

americanus Mayr. Adair, Carter, Comanche, Jackson, Kay, Latimer, Payne, Sequoyah. *Smith*: Carter: Ardmore; Comanche: Wichita Nat. For.; Sequoyah: Sallisaw. GCW/JW: Le Flore: Poteau; Muskogee: Greenleaf St. Pk.

pennsylvanicus (DeGeer). Adair, Alfalfa, Atoka, Bryan, Caddo, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Delaware, Ellis, Haskell, Jackson, Johnston, Kay, Latimer, Lincoln, Le Flore, McCurtain, McIntosh, Mayes, Muskogee, Noble, Osage, Ottawa, Pawnee, Payne, Pittsburg, Pontotoc, Wagoner, Woodward. *Smith*: Alfalfa: Cherokee; Bryan: Durant; Choctaw: Grant, Hugo; Cleveland: Norman; Comanche: Wichita Nat. For.; Delaware: Jay; Kay: Ponca City; McCurtain: Idabel; Ottawa: Wyandotte; Payne: Stillwater.

Subgenus *Myrmentoma* Forel

discolor (Buckley). Adair, Choctaw, Cleveland, Coal, Comanche, Johnston, Kay, Lincoln, McCurtain, Noble, Osage, Pawnee, Payne, Pontotoc. *Smith*: Cleveland: Norman; Pontotoc: Ada.

nearcticus Emery. Comanche, Jefferson, Latimer.

decipiens Emery (= *rasilis*). Blaine, Comanche, Dewey, Grady, Kay, Kingfisher, Latimer, Logan, McClain, Payne, Pontotoc, Roger Mills, Woodward. *Smith*: Comanche: Wichita Nat. For.

Subgenus *Tanaemyrmex* Ashmead

castaneus (Latreille). Choctaw, Latimer, Le Flore, McCurtain, Pushmataha.

sansabeanus (Buckley). GCW/JW: Murray: Arbuckle Mts.

semitestaceus Emery (= *maccooki*). Cimarron, Comanche. *Smith*: Comanche: Wichita Nat. For.

vicinus Mayr. Cimarron, Ottawa, Roger Mills. *Smith*: Cimarron: Kenton; Ottawa: Wyandotte.

Genus *Colobopsis* Mayr

impressus Roger. Okmulgee, Pawnee, Pontotoc. *Smith*: Okmulgee: Okmulgee.

mississippiensis M. R. Smith. Cleveland, Noble, Osage, Pawnee, Payne, Pontotoc.

pylartes Wheeler. Cleveland, Noble, Pawnee.

LITERATURE CITED

Blair, W. F., and T. H. Hubbell. 1938. The biotic districts of Oklahoma. *Am. Midl. Nat.* 20:425-454.

Odum, E. P. 1971. *Fundamentals of Ecology*, 3rd ed. W. B. Saunders Co., Philadelphia.

Smith, D. R. 1979. Superfamily Formicoidea. Pp. 1323-1467 in *Catalog of Hymenoptera in America North of Mexico*, Vol. 2 (K. V. Krombein et al., eds.). Smithsonian Institution Press, Washington, DC.

Smith, M. R. 1935. A list of the ants of Oklahoma. *Entomol. News* 46:235-264.

Taylor, R. W. 1967. A monographic revision of the ant genus *Ponera* Latreille. *Pac. Insects Monogr.* No. 13.

- Wheeler, G. C., and E. W. Wheeler. 1934. New forms of *Aphaenogaster treatae* Forel from the southern states. *Psyche* 41:6-12.
- Wheeler, G. C., and J. Wheeler. 1985. A simplified conspectus of the Formicidae. *Trans. Am. Entomol. Soc.* 111:255-264.
- Young, J., and D. E. Howell. 1964. *Ants of Oklahoma*. Okla. Agric. Exp. Stn. Misc. Publ. No. 71.

Received: 9 October 1989. Accepted: 13 November 1989.