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A PRELIMINARY LIST OF THE ANTS OF UTAH

(Hymenoptera; Formicidae)

By

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University of Utah

The following list of the ants of Utah was prepared from specimens and data now in the Biology Department of the University of Utah. This list is by no means complete, yet it is representative of practically all parts of the state. A few specimens in the collection date back to 1902, and all of these specimens and numerous other specimens in the collection were identified by Professor W. M. Wheeler. Since 1937 the authors have made collections in all parts of the state in an effort to obtain material for this paper. In addition, Mr. Grundmann has made intensive collections and a study of the ants of Salt Lake County as thesis material for a Master's Degree.

The known ants of Utah to date comprise 90 named species, subspecies and varieties. The collection localities range from the Warm Temperate to the Sub-Arctic zone and occupy diversified habitats from dry barren sand dune areas to the moist shady Sub-Alpine meadows.

The authors are deeply indebted to Dr. A. C. Cole, Jr., of the University of Tennessee, for his kindness in identifying material and in verifying identifications. Records of formicidae from Utah, as published by Professor W. M. Wheeler and others, have been freely used in preparing this preliminary list.

In addition to the species recorded here, *Eciton coecum* Latreille, *Eciton (Acamatus) melsheimeiri* Haldeman, and *Eciton (Acamatus) harrisi* Haldeman are reported by Wheeler as occurring in Utah; but this is a mistake due to assuming that Fort Gates, from where the species are recorded by Haldeman in Stansbury's report, is in Utah, whereas it is in Texas.

A LIST OF THE ANTS OF UTAH

Subfamily Myrmicinae

Genus MONOMORIUM Mayr

Monomorium minimum Buckley

Utah: Blanding, April 28, 1928 (A. M. Woodbury); American Fork, April 11, 1931 (Rees-Moffett); Salt Lake City, April 4, 1932 (J. A. Rowe); Salt Lake County, 1937-39 (Grundmann and Rees); Swasey Springs, Millard County, May 16, 1938 (Rees).

Genus SOLENOPSIS Fabricus

Solenopsis molesta var. **validiuscula** Emery

Utah: Salt Lake City, April and May, 1931 (J. A. Rowe); Salt Lake County, 1937-38, numerous specimens (Grundmann); Leeds, April 4, 1939 (J. Vasquez); Salt Lake City, May 2, 1939 (Rees); La Sal Creek, La Sal Mts., June 9, 1939 (Rees).

Genus PHEIDOLE Westwood

Pheidole californica Mayr

Utah: Salt Lake City, 1902 (R. V. Chamberlin); Salt Lake City, April 11, 1939 (Grundmann).

Pheidole pilifera subsp. **artemisia** Cole

Utah: Provo, May 13, 1932 (A. C. Cole).¹

Genus CREMASTOGASTER Lund

Cremastogaster lineolata near **cerasi** Fitch

Utah: Salt Lake County, 1937-39, numerous specimens (Grundmann); Swasey Springs, Millard Co., May 16, 1938 (Rees).

Cremastogaster lineolata subsp. **coarctata** var. **mormonum** Emery

Utah: Salt Lake City and East Millcreek Canyon, Salt Lake County, 1902 (R. V. Chamberlin).¹⁰

Genus APHAENOGASTER Mayr

Aphaenogaster subteranea subsp. **occidentalis** Emery

Utah: Little Willow Creek Canyon, Salt Lake Co., July 22, 1902 (R. V. Chamberlin); Salt Lake City, September 11, 1928 (W. J. Gertsch); Salt Lake County, 1937-39, numerous specimens (Grundmann and Rees).

Aphaenogaster uinta Wheeler

Utah: East Millcreek Canyon, Salt Lake County, 1902, type specimen (R. V. Chamberlin); Salt Lake City and vicinity, 1937-39 (Grundmann).

Genus POGONOMYRMEX Mayr

Pogonomyrmex barbatus var. **molefaciens** Buckley

Utah: St. George (V. M. Tanner).⁶

Pogonomyrmex barbatus var. **fuscatus** Emery

Utah: Goulding Mountain, July 11, 1937 (R. Shaw).

Pogonomyrmex barbatus var. **marfensis** Wheeler

Utah: Green River, May 5, 1933 (J. A. Rowe).

Pogonomyrmex barbatus subsp. **rugosus** Emery

Utah: Hurricane, April 7, 1938 (Grundmann); St. George, August 26, 1939 (Rees).

Pogonomyrmex occidentalis Cresson

Utah: Salt Lake County, July 22, 1902 (R. V. Chamberlin); Lehi (W. A. Hooker); Sandy, Kaysville (E. H. Klambach)⁶; Brigham City (Grace Olsen)⁶; Tooele, Grantsville, Snowville, Ogden, Kanab, Zion National Park (A. C. Cole)⁶; Grantsville (R. C. Shannon)⁶; Beaver, May 7, 1932 (J. A. Rowe); Salt Lake and Summit Counties, 1937-39 (Grundmann and Rees); Millard County, May 8, 1938 (Rees); Leeds, April 18, 1939 (J. Vasquez); La Sal, La Sal Junction, Wales, Brush Creek, St. George, 1939 (Rees).

Pogonomyrmex occidentalis var. **utahensis** Creighton

Utah: Zion National Park, July 18, 1932 (W. S. Creighton)⁸; Kanab, June 14, St. George, June 16 and August 26, 1939 (Rees).

Pogonomyrmex californicus Buckley

Utah: St. George (V. M. Tanner)⁶; Hurricane, June 15, 1939 (Rees).

Genus **MYRMICA** Latreille**Myrmica mutica** Emery

Utah: Salt Lake City, 1902 (R. V. Chamberlin); Salt Lake City, Woods Cross, Springville, Salem, 1937-39 (Grundmann).

Myrmica rubra subsp. **brevinodis** Emery

Utah: Salt Lake City (C. Emery).⁹

Myrmica rubra subsp. **brevinodis** var. **sulcinodoides** Emery

Utah: Salt Lake City (C. Emery).⁹

Myrmica scabrinodis subsp. **lobocornis** var. **fracticornis** Emery

Utah: Salt Lake County, 1902 (R. V. Chamberlin); Salt Lake County, 1937-39, numerous specimens (Grundmann); Summit County, Soapstone Canyon, Uinta Mts., November 9, 1938 (Grundmann); Wales, Sanpete County, July 18, 1939 (Rees); Henry's Fork Basin, Summit County, August 12, 1939 (Rees).

Myrmica scabrinodis subsp. **brevinodis** Emery

Utah: Big Cottonwood Canyon, Salt Lake County, October 11, 1938 (Grundmann).

Myrmica scabrinodis subsp. **sulcinodoides** Nylander

Utah: River Heights, Cache County, July 16, 1935 (C. F. Smith).⁵

Myrmica sabuleti Meinert subsp. **americana** Weber

Utah: Bryce Canyon (Neal Weber).⁷

Genus LEPTOTHORAX Mayr

Leptothorax acervorum Mayr subsp. **canadensis** Provancher

Utah: Salt Lake County, 1902 (R. V. Chamberlin); 1937-1939, numerous specimens (Grundmann).

Leptothorax acervorum Mayr subsp. **canadensis** var. **yankee** Emery

Utah: 1903, Ac. Nat. Sci. Phila.⁸

Leptothorax nevadensis Wheeler

Utah: Blacksmith Fork Canyon, June 9, 1935 (Smith-Rowe).⁵

Leptothorax nitens Emery

Utah: American Fork Canyon, Utah County, type locality (T. H. Pergande).⁹

Genus SYMMYRMICA Wheeler

Symmyrmica chamberlini Wheeler

Utah: Salt Lake City, August, 1902, type specimens (R. V. Chamberlin).

Subfamily Dolichoderinae

Genus LIOMETOPUM Mayr

Liometopum apiculatum subsp. **lucuosum** Wheeler

Utah: Gunnison Butte, Green River, May 7, 1932 (J. A. Rowe); Myton, April 24, 1938 (H. Gold); Moab, June 7, and Hatch Wash. near La Sal, June 10, 1939 (Rees).

Genus DORYMYRMEX Mayr

Dorymyrmex pyramicus Roger

Utah: St. George, April 7, 1938, Salt Lake County, 1937-39 (Grundmann); Kanab, June 14, Hurricane, June 15, and St. George, June 16, 1939 (Rees).

Genus TAPINOMA Foerster

Tapinoma sessile Say

Utah: South Fork of Raft River, Box Elder County, September 7, 1932 (Rees); Salt Lake County, 1937-38 (Grundmann); Leeds, May 4, 1939 (J. Vasquez).

Genus IRIDOMYRMEX Mayr

Iridomyrmex analis Andre

Utah: Salt Lake County, May 29, 1938, and September 6, 1938 (Grundmann).

Iridomyrmex pruinosus Roger

Utah: John's Canyon, San Juan County, May 2, 1935 (B. E. Rees); Hurricane, May 7, 1938, and Salt Lake County, 1937-38 (Grundmann).

Iridomyrmex pruinosus analis Andre

Utah: Pelican Point, Utah County, and Salt Lake County, 1938 (Grundmann).

Subfamily Campanotinae

Genus LASIUS Fabricius

Lasius niger var. **neoniger** Emery

Utah: American Fork Canyon, July 4, 1938 (K. Whitelock); Salt Lake County, 1938-39, numerous specimens (Grundmann).

Lasius niger var. **americanus** Emery

Utah: Salt Lake County, 1938 (Grundmann); Millard County, May 18, 1938 (Rees).

Lasius niger subsp. **alienus** Foerster var. **americanus** Emery

Utah: Salt Lake County, July 22, 1902 (R. V. Chamberlin); Salt Lake County, 1938 (Grundmann).

Lasius niger var. **sitkaensis** Pergande

Utah: Utah County, 1932 (J. A. Rowe); Salt Lake County, 1938-39, numerous specimens (Grundmann); La Sal, June 9, 1939 (Rees).

Lasius flavus var. **nearcticus** Wheeler

Utah: Bluff, May 11, 1933 (J. A. Rowe); Butterfield Canyon, Salt Lake County, September 3, 1938 (Grundmann); La Sal Mountains, June 9, 1939 (Rees).

Lasius umbratus subumbratus Viereck

Utah: Salt Lake County, July 22, 1902 (R. V. Chamberlin); May 2, 1939 (Grundmann).

Lasius umbratus mixtus var. **aphidicola** Walsh

Utah: Little Willow Creek Canyon, Salt Lake County, July 22, 1902 (R. V. Chamberlin).

Lasius (Acanthomyops) interjectus Mayr

Utah: Cedar City (R. V. Chamberlin).

Lasius (Acanthomyops) claviger Roger

Utah: Lake Blanche, Wasatch Mountains, Salt Lake County, August 22, 1938 (Grundmann).

Lasius (Acanthomyops) latipes Walsh

Utah: Salt Lake County, 1902, and Monticello, April 15, 1928 (R. V. Chamberlin).

Genus FORMICA Linne

Formica sanguinea subnuda Emery

Utah: Palisade Park, Ashley National Forest, August 9, 1939 (Rees); Henry's Fork Basin, August 10, 1939 (Rees); Soapstone Canyon, Uinta Mountains, Summit County, August 25, 1939 (Grundmann).

Formica sanguinea var. puberula Emery

Utah: Stockton (T. Spaulding)¹²; La Sal Mountains (W. S. Creighton)²; Wales, Sanpete County, July 27, 1939 (Rees).

Formica manni

Utah: Leeds, May 4, 1939 (J. Vasquez).

Formica near manni

Utah: Wasatch Mountains, Salt Lake County, 1937-38 (Grundmann); Leeds, May 4, 1939 (J. Vasquez).

Formica perpilosa Wheeler

Utah: Hurricane, April 7, 1938, Stansbury Island, Great Salt Lake, July 19, 1938, Salt Lake City, April 11, 1939 (Grundmann); Hurricane, June 15, 1939 (Rees).

Formica rufa aggerans Wheeler

Utah: Lehi (W. A. Hooker)¹¹; Swasey Springs, Millard County, May 16, 1938, Green Lake, Daggett County, August 8, 1939, and Wales, Sanpete County, July 16, 1939 (Rees).

Formica rufa subsp. obscuripes Forel

Utah: Salt Lake County, 1937-39, numerous specimens (Grundmann).

Formica integroides Emery

Utah: Swasey Springs, Millard County, May 15, 1938 (Rees).

Formica truncicola subsp. integroides Emery

Utah: Logan Canyon, June 9, 1935 (T. O. Thatcher).⁵

Formica truncicola subsp. integroides var. coloradoensis Wheeler

Utah: Daniel's Canyon, August 16, 1935 (Knowlton)²; Swasey Springs, Millard County, May 16, 1938 (Rees).

Formica truncicola subsp. integroides var. haemorrhoidalis Emery

Utah: Bryce Canyon, 1931 (J. A. Rowe).

Formica truncicola subsp. obscuriventris Mayr

Utah: Salt Lake County, 1938-39, numerous specimens (Grundmann).

Formica truncicola subsp. obscuriventris var. aggerans Wheeler

Utah: Promontory Point, Great Salt Lake (A. Whetmore).¹²

Formica foreliana Wheeler

Utah: Uinta Mountains, Summit County, October 8, 1938 (Grundmann).

Formica ciliata Mayr

Utah: Blanding, April 17, 1928 (A. M. Woodbury).

Formica comata Wheeler

Utah: Millcreek Canyon, Salt Lake County, October 31, 1937 (Grundmann).

Formica crinoventris Wheeler

Utah: Boulten, September 12, 1935 (G. F. Knowlton).⁵

Formica oreas Wheeler

Utah: Blacksmith Fork, September 7, 1932 (Smith-Rowe)⁵; Boxelder County, September 7, 1932 (Rees); Duck Creek, Cedar Mountains, August 6, 1935 (A. M. Woodbury).

Formica oreas var. **comptula** Wheeler

Utah: St. George, April 25, 1935, and Cornish, June 16, 1935 (G. F. Knowlton)⁵; Wolf Creek, Summit County, August 7, 1939 (Rees).

Formica fusca Linne

Utah: Ferron, 1928 (J. A. Rowe); Uinta Mountains, Summit County, October 8, 1938 (Grundmann); La Sal Creek, La Sal Mountains, June 9, and Kanab Canyon, June 14, 1939 (Rees).

Formica microgyna rasilis Wheeler

Utah: Salt Lake County, 1902 (R. V. Chamberlin)¹¹; La Sal Mountains (W. S. Creighton).¹¹

Formica fusca var. **argentea** Wheeler

Utah: Salt Lake County, 1902 (R. V. Chamberlin); Monticello, April 17, 1928 (R. V. Chamberlin); Boxelder County, April, 1932, American Fork, April 25, 1934 (Rees); Salt Lake County, 1937-38 (Grundmann); Sheep Creek, Ashley National Forest, August 8, 1939 (Rees).

Formica fusca var. **subaenescens** Emery

Utah: Salt Lake County, 1902 (R. V. Chamberlin), 1931 (J. A. Rowe), April 16, 1931 (Rees), 1937-39, numerous specimens (Grundmann); Henry's Fork Basin, Summit County, and Green Lake, Daggett County, August, 1939 (Rees).

Formica fusca var. **gelida** Wheeler

Utah: Salt Lake County, 1938-39 (Grundmann).

Formica fusca var. **neorufibarbis** Emery

Utah: Salt Lake County, April 10, 1931 (Rees); Salt Lake County, 1937-39, numerous specimens, Woods Cross, November 7, 1937, Wellsville, September 5, 1938, and Soapstone Canyon, Uinta Mountains, October 8, 1938 (Grundmann); Ephraim, July 12, 1939 (Rees); Parley's Canyon, Salt Lake County, August 13, 1939 (Rees).

Formica rufibarbis var. **gnava** BuckleyUtah: Lehi, (W. A. Hooker).¹¹**Formica cinerea** MayrUtah: Wasatch, September 1, 1937 (Knowlton-Harmston).⁵**Formica cinerea** **altipetens** WheelerUtah: Warner Ranger Station, La Sal Mountains (W. S. Creighton)²; Henry's Fork Basin, Summit County, August 13, 1939 (Rees).**Formica cinerea** var. **neocinerea** Wheeler

Utah: Wellsville, September 5, 1938 (Grundmann).

Formica subpolita Mayr

Utah: Hurricane, April 7, 1938, and Salt Lake County, November 7, 1938 (Grundmann); Swasey Springs, Millard County, May 19, 1939 (Rees).

Formica subpolita var. **camponiticeps** Wheeler

Utah: Moab, 1928 (R. V. Chamberlin); Salt Lake County, 1938-39 (Grundmann); Swasey Springs, Millard County, May 18, 1939 (Rees).

Formica wheeleri CreightonUtah: Warner Ranger Station, La Sal Mountains (W. S. Creighton), type locality.⁶**Formica neogagates** EmeryUtah: Promontory Point (A. Whetmore)¹²; Gunnison Butte, Green River, May 7, 1932 (J. A. Rowe); Salt Lake County, numerous specimens, 1938-39 (Grundmann).**Formica neogagates** subsp. **lasioides** var. **vetula** (Wheeler)Utah: Gunnison Butte, Green River, May 7, 1932 (J. A. Rowe); La Sal Mountains, Warner Ranger Station (W. S. Creighton)²; Salt Lake County, October 29, 1938 (Grundmann); Ferron Reservoir, Emery County, July 11, 1939 (Rees).**Formica pallidefulva nitidiventris** Emery

Utah: Parley's Canyon, Salt Lake County, May 11, 1938 (Grundmann).

Formica (Neofornica) moki WheelerUtah: Milford (J. C. Bradley)¹²; Blanding, April 17, 1928 (A. M. Woodbury); Bluff, April 17, 1928 (R. V. Chamberlin).Genus **POLYERGUS** Latreille**Polyergus rufescens** Latr. subsp. **breviceps** Emery

Utah: Richfield, 1933 (J. A. Rowe); Chester, Sanpete County, July 14, 1939 (Rees).

Genus MYRMECOCYSTUS Wesmael

Myrmecocystus melliger subsp. **mendax** Wheeler

Utah: Wellsville, September 5, 1938 (Grundmann).

Myrmecocystus mexicanus var. **horti-deorum** McCook

Utah: Bluff (A. M. Woodbury); between Bluff and Blanding, April 17, 1928 (R. V. Chamberlin); Gunnison Butte, Green River, May 7, 1932 (J. A. Rowe).

Genus CAMPONOTUS Mayr

Camponotus laevigatus Smith

Utah: Beaver Canyon (C. Shaeffer).¹²

Camponotus maculatus var. **vicinus** Mayr

Utah: Moab, 1928 (R. V. Chamberlin); American Fork, April 11, 1931 (Rees-Moffett); Ferron, June 6, 1932 (J. A. Rowe); Swasey Springs, Millard County, May 15, 1938 (Rees); Salt Lake County, 1938-39, numerous specimens (Grundmann); La Sal Creek, La Sal Mts., June 9, 1939 (Rees).

Camponotus maculatus subsp. **sansabeanus** Buckley

Utah: Parowan, April 6, 1938, and Salt Lake County, September 9, 1938, and April 8, 1939 (Grundmann).

Camponotus maculatus subsp. **sansabeanus** var. **torrefactus** Wheeler

Utah: East Millcreek Canyon, July 22, 1902 (R. V. Chamberlin), co-type; Oris, 1928 (Chamberlin); Salt Lake City, 1931 (J. A. Rowe); Salt Lake County, 1938-39, numerous specimens (Grundmann).

Camponotus herculeanus var. **whymeri** Forel

Utah: Salt Lake County, 1938-39, numerous specimens (Grundmann); Henry's Fork, Summit County, August 11, 1939 (Rees).

Camponotus herculeanus var. **modoc** Wheeler

Utah: Salt Lake County, 1938-39, numerous specimens (Grundmann); Ferron Reservoir, Emery County, July 11, and Palisade Forest Park, Daggett County, August 8, 1939 (Rees).

Camponotus herculeanus subsp. **ligniperda** var. **noveboracensis** Fitch

Utah: Salt Lake County, 1937-39, numerous specimens (Grundmann).

Camponotus caryae var. **decipiens** Emery

Utah: East Millcreek Canyon, July 22, 1902 (R. V. Chamberlin).

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