

## The Ants of Utah<sup>1</sup>

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The state of Utah possesses a number of diversified habitats as to both topography and vegetation types. It lies entirely within the arid region of the United States, but there are high mountains separated by arid valleys and mesas. Sagebrush (*Artemisia tridentata*) ranges over a large portion of the State at the lower elevations. On the foothills of the mountain ranges is the pinyon-juniper community. Western yellow pine (*Pinus ponderosa*) dominates the plateaus. Above the yellow pine are areas of aspens, and at still higher elevations Engelmann spruce and subalpine fir abound. The alpine belt is reached at elevations of about 10,800 feet. Bordering Great Salt Lake on the west is the saltbush desert shrub region—a vegetation type which is unique in the State.

Rees and Grundmann<sup>2</sup> have published a list of 83 different ants from Utah. Five subfamilies of Formicidae containing a total of 104 different species, subspecies and varieties are now known from the State. The number of forms in each subfamily is as follows: Formicinae, 60; Myrmicinae, 34; Dolichoderinae, 8; Ponerinae, 1; and Dorylinae, 1. In the Formicinae the genus *Formica* alone accounts for 35 forms—more than twice the total number in the subfamily. Best represented in species, subspecies and varieties of Myrmicinae are the genera *Pogonomyrmex*, *Myrmica* and *Leptothorax*, whose forms number more than half the total of those in the subfamily as occurring in Utah. The dominant ants of the State are as follows: *Pogonomyrmex occidentalis*, *Formica rufa obscuripes*, *F. subpolita*, *F. fusca* var. *neorufibarbis*, *F. fusca* var. *subaenescens*, *F. fusca* var. *gelida*, *F. obtusopilosa*, *Lasius niger* var. *neoniger*, *Dorymyrmex pyramicus*, *Solenopsis molesta* var. *validiuscula* and *Monomorium minimum*.

Several forms have been described from the State. These, together with the type locality for each form, are as follows: *Pheidole pilifera artemisia* Cole (30 Mi. S. Provo), *Crematogaster coarctata* var. *mormonum* Emery (East Mill Creek Canyon in Salt Lake Co.), *Aphaenogaster uinta* Wheeler (East Mill Creek Canyon), *Pogonomyrmex occidentalis utahensis* Olsen (Zion National Park), *Myrmica sabuleti americana* Weber (Bryce Canyon), *Leptothorax nitens* Emery (American Fork Canyon in Utah Co.), *Symmyrmica chamberlini* Wheeler (near Salt Lake City), *Formica wheeleri* Creighton and *F. rufa laeviceps* Creighton (Warner Ranger Station in La Sal Mts.).

The ants range from boreal and humid elements to true desert types. In the

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<sup>2</sup> Rees, D. M. and A. W. Grundmann, "A preliminary list of the ants of Utah," *Bull. Univ. of Utah Biol. Ser.*, VI (1940) 1-12.