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# STUDIES OF NEW MEXICO ANTS. IV. THE GENERA MYRMICA, MANICA, APHAENOGASTER, AND NOVOMESSOR (HYMENOPTERA: FORMICIDAE)<sup>1</sup>

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Genus MYRMICA Latreille

*Myrmica lobicornis fracticornis* Emery. During the summer of 1951 I made numerous collections of large series of what I had thought would prove to represent both *M. lobicornis fracticornis* and *M. lobicornis lobifrons* Pergande. Further study showed that all of these collections from various parts of the state could represent a single variable form. Additional collecting was indicated and this was achieved during the summer of 1952. Collections were made of large series of all castes from every nest of *Myrmica* which was found. From studies of this large mass of material together with collections made in other parts of the United States I have arrived at the conclusion that the names *fracticornis* and *lobifrons* represent the same extensive population. Weber (1948) synonymized *M. lobicornis lobifrons* Pergande with *M. lobifrons fracticornis* Emery and later Creighton (1950) isolated them from each other. My data substantiate the opinion of Weber. I propose therefore that the name *M. lobicornis lobifrons* Pergande again be relegated to synonymy and that the name *M. lobicornis fracticornis* Emery represent, by priority, this population.

Let me back my position by a few points in brief explanation. There seems to be a considerable amount of both intra- and inter-variability of colonies. In numerous instances the antennal laminae of the workers, both within and between nests, show variation from a spoon-shaped or saucer-shaped encircling flange to a small, transverse, hooked structure. Such holds true also with antennal and epinotal characteristics of the male. In extreme northern New Mexico where I had expected to pick up more or less typical *fracticornis* I took samples from many colonies which might well have been called either *fracticornis* or *lobifrons* and conversely where I should have collected *lobifrons* I amassed large series which for the most part could be identified under either name. Furthermore, I was unable to make any valid distinctions between types of nesting sites or between habits. Neither could I differentiate on the basis of elevation. As a matter of fact I was unable to find colonies represented below an elevation of 6,050 feet.

The categorical status of the population may well be a matter for speculation, because in some respects it does not behave like a subspecies. That this population might actually be an integral part of another population or other populations of *Myrmica* and that further synonymy may be established ultimately I readily acknowledge. At the present time however I have insufficient data with which to propose more extensive lumping. I prefer therefore to consider the vast population as a subspecies.

Wherever I collected this form I found its colonies to be fairly abundant to very abundant. Numerous collections were made at each of the following localities: Sapello Canyon, Beulah, 8,000 ft.; Dailey Canyon, Beulah, 8,000 ft.; Raton Pass, 6,400 ft., 7,100 ft., 7,400 ft.; Cimarron Canyon, 7,100 ft., 7,300 ft., 7,450 ft., 8,000 ft.; 5 mi. E. of Eagle Nest, 8,600 ft.; 11 mi. N. of Eagle Nest, 9,000 ft.; 15 mi. N. of Eagle Nest, 9,550 ft.; Taos, 7,350 ft.; Ute Park, 7,300 ft., 7,450 ft., 7,600 ft.; Tesuque Canyon, near Santa Fe,

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