ANTS OF THE *FORMICA FUSCA* GROUP IN FLORIDA

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ABSTRACT

Formica subsericea Say has been found in a single locality in northern Florida, extending the eastern edge of the range of the *F. fusca* group 300 km southward. This disjunct population is unusual because of its association with a typically Floridian, hence Neotropical ant fauna.

The ants of the genus *Formica,* including particularly the numerous species of the *fusca* group, are among the most abundant insects of temperate North America and Eurasia. They are also classic Holarctic elements: in the eastern United States they diminish rapidly in abundance as one proceeds southward onto the southeastern coastal plain and passes into the outliers of the Neotropical ant fauna. *F. subsericea* Say is the most widespread American member of the *fusca* group and ranges the farthest south in the east. Its range is roughly coextensive with the temperate deciduous forest biome, including the transition zones to the boreal forest and western prairie. Records have been obtained from the Lac St-Jean area in Québec, at 49° North, south to the piedmont (Francoeur 1973). The previously southernmost collection was from Homewood, Scott County, Mississippi, in the east-central part of the state. Farther east, a few records have been obtained from northern Georgia.

In April 1973, Mr. D. Bruce Means and Wilson discovered a local, isolated population of *F. subsericea* near Torreya State Park in Liberty County, Florida. Males were recovered by Mr. Means from nests on 4 July of the same year. The record is sufficiently significant, and the environment of the locality of enough interest, to deserve this special note. The population is located 10.4 km due north of Bristol, along the east side of a road 400 m north of Sweetwater Creek. The habitat is a rich, mixed hardwood forest unusual for its occurrence on a white-sand ridge instead of the wet bottomland on which most of this vegetation grows in northern Florida. Mr. Means (*in litt.*) has noted that the overstory trees consist almost exclusively of *Magnolia grandiflora, Quercus hemisphaerica, Carya pallida,* and *C. tomentosa,* while the understory trees are principally *Ilex opaca, Symplocos tinctoria, Osmanthus americanus,* and *Vaccinium arboreum.* Other ants present were typical Floridian Neotropical elements: *Odontomachus ruginodus* Wheeler, *Solenopsis pergandei* Forel, and *Camponotus floridanus* (Buckley). In April, adult workers and brood, consisting mostly of pupae, were found scattered beneath leaf litter and in shallow cavities in the soil. Some workers were observed foraging over the ground in the early afternoon.

In the continuous, northern part of its range, *F. subsericea* occurs in rather open deciduous woodland of various compositions, including oak-chestnut, oak-hickory, and locust, in pine and occasionally other coniferous woods, and

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in open mixed deciduous-coniferous stands. Nests are constructed in soil of various types, and usually beneath stones or leaf litter but evidently never in dead wood. In Québec the species also constructs low mounds of soil and covers them with dead leaves, twigs, and other vegetal debris.

The Florida population is evidently strongly disjunct from the remainder of the species. The nearest previous collection comes from 300 km due north in Georgia. Its discovery raises 2 questions of ecological interest. First, what circumstance permits this northern species to coexist at one locality with what is essentially an alien ant fauna? And, second, do additional boreal or otherwise unusual elements occur in the same forest? It is hoped that additional field work will provide at least partial answers.

ACKNOWLEDGEMENTS

We are grateful to Mr. D. B. Means, whose expert knowledge of the northern Florida habitats facilitated the discovery of the *F. subsericea* population. The study was a side product of research supported by a National Science Foundation Grant.

LITERATURE CITED

Francoeur, A. 1973. Révision taxonomique des espèces néarctiques du groupe *fusca,* genre *Formica* (Formicidae, Hymenoptera). Ann. Soc. Ent. Québec, Mémoire No. 3:316 p.

NOTICE OF ANNUAL MEETING

The 1974 annual meeting of The Florida Entomological Society will be held in Orlando, Florida at the Sheraton Olympic Villas on 4-6 September. The Chairman of the Program Committee is Dr. R. M. Baranowski, AREC, 18905 S. W. 280 St., Homestead, Fla. 33030. The Chairman of the Local Arrangements Committee is Mr. A. G. Selhime, USDA, 2120 Camden Road, Orlando, Fla. 32803.