# ADDITIONAL ANTS RECORDED FROM FLORIDA, WITH DESCRIPTIONS OF TWO NEW SUBSPECIES

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In two previous articles (Fla. Ent. 14:1-7, 1930 and Fla. Ent. 17:21-27, 1933) the author has listed 107 forms of ants found to occur in Florida. Recently 10 additional ones have come to his attention, 2 of which are new to science and are therefore described below. It seems desirable to record these new additions and, where possible, to comment on their habits.

## 108. Proceratium croceum (Roger)

Palatka (Wilda S. Ross).

This form nests most commonly in moist, rather well rotted logs and stumps, especially of pine. The colonies are composed of only a few dozen individuals.

# 109. Euponera (Trachymesopus) gilva (Roger)

Palatka (Wilda S. Ross).

Colonies are small, usually containing from a few dozen to about one hundred individuals. Males and winged females are generally produced in May and June.

#### 110. Aphaenogaster (Attemyrma) floridana M. R. Smith

Archbold Biological Station, 10 miles south of Lake Placid (T. C. Schneirla).

A single worker was collected from the surface of the soil in an open sandy area covered with a thin stand of scrub pine and pine needles. The type locality is Gretna, Fla.

## 111. Aphaenogaster (Attomyrma) texana macrospina M. R. Smith

Coral Gables (Robt. E. Gregg); Archbold Biological Station, 10 miles south of Lake Placid (T. C. Schneirla).

#### 112. Pheidole dentigula M. R. Smith

Wakulla Springs (Wilda S. Ross).

The species nests in the soil and also in well rotted stumps. The author has usually found colonies to occur in wooded areas, especially where the soil contained considerable humus.

## 113. Cardiocondyla venustula Wheeler

Hollywood, Florida (D. E. Read). Apparently this is the only record of the occurrence of this species in the United States.

In Puerto Rico this ant nests in the soil, especially in gravelly places such as sea beaches and creek bottoms.

## 114. Solenopsis pergandei Forel

Archbold Biological Station, 10 miles south of Lake Placid (T. C. Schneirla); U. S. Naval Hospital, Pensacola (R. M. Lhamon and F. F. Bibby).

At the Archbold Biological Station this species was taken on several occasions, once as thief ants nesting on the margin of a colony of the new *Formica* described below; here numerous queens and extensive brood were observed. Another time the ants were collected from small crater nests in sandy loam, in open semiboggy ground, near scrub. A third nest was found in loamy soil beneath a shallow layer of moss where the surface of the moss was covered by a 3-inch layer of pine needles. Within a space 6 inches in diameter there were numerous craterlike openings.

115. Strumigenys (Cephaloxys) dietrichi M. R. Smith Crescent City, collection of Theodore Pergande.

## 116. Dorymyrmex pyramicus flavopectus, new subspecies

WORKER.-Length 2.6 mm.

Head, exclusive of mandibles, approximately one and one-sixth times as long as broad, with convex sides, and such well rounded posterior corners as to give the posterior border an almost rounded appearance. Scape slender, curved, approximately one and two-tenths times length of head. Mandible with 7 teeth; the first, second, and fourth teeth larger than the others. Under surface of head with a psammophore. Thorax slender; in profile, the dorsum of promesonotum forming a long, low, even convexity. Mesoepinotal impression weakly developed. Conical elevation approximately one-half basal length of epinotum. Legs long and slender.

Hairs sparse, confined to under surface of head, mandibles, clypeus, frontal carinae, coxae, and dorsal and ventral surfaces of gaster.

Mandibles and clypeus, but especially thorax, yellowish; remainder of body blackish. Legs in some lights not so dark as the head and gaster.

Type Locality.—Archbold Biological Station, 10 miles south of Lake Placid, Fla., collected by T. C. Schneirla, August 24, 1943.

HOLOTYPE.—United States National Museum No. 56764.

The holotype and 12 paratypes were collected by Dr. Schneirla from a low, craterlike nest in open sandy loam near a growth of

pines. The galleries of the nest led through 6 inches of sandy loam into a red sandy layer below. Specimens of this new subspecies were also collected by Dr. Schneirla from a similar nest in a sandy expanse among sparse pines and scrub. An irregular column of workers 3 inches broad was observed traveling from the one-half-inch nest entrance to another crater 3 yards away.

This new subspecies is easily recognized by the slender form of the worker, the distinctive shape of the head, and especially by the striking color markings.

## 117. Formica pallidefulva archboldi, new subspecies

Worker.-Length 6.5 mm.

Head, exclusive of mandibles, approximately one and one-sixth times as long as broad, with rounded posterior corners, and rounded posterior border. Scape flattened, curved, approximately one and one-sixth times length of head. Frontal carinae subparallel, not widely separated from each other. Clypeus sharply carinate, anterior border entire. Frontal area triangular, distinct. Teeth on mandibles variable in number, usually ranging from 7 to 10. Maxillary palpus 6-segmented. In profile, dorsum of promesonotum not strongly convex, the evenness of the line interrupted by the anterior border of the mesonotum, which protrudes slightly above the posterior border of the mesonotum. Basal surface of epinotum merging into the declivity without forming a definite line of demarcation between the two regions. Petiole convex in front, more flattened behind, with rather blunt, almost rounded, transverse, superior border.

Head and thorax, especially the former, with a delicate sculpturing which, in some lights at least, imparts a subopaque appearance to these regions. Mandibles striate-punctate.

Hairs subcrect to erect, sparse on head and thorax, coarse and numerous on gaster. Under surface of head usually with one or more hairs, occasionally without any, superior border of petiole apparently always with a few erect hairs; coxae, trochanters, and especially lower surface of legs with scattered, erect hairs.

Body very dark brown, almost black; gaster, however, darker than either head or thorax.

TYPE LOCALITY.—Archbold Biological Station, 10 miles south of Lake Placid, Fla., collected by T. C. Schneirla, October 7, 1943.

OTHER LOCALITIES.—Florida: Sanford (A. B. Gahan). Georgia: 5 miles south of Brunswick (Wilda S. Ross).

HOLOTYPE.—United States National Museum No. 56765.

Paratypes range from 6-7 mm. in length. The erect hairs on the under surface of the head are absent in about 25 percent of the paratype specimens, but they are constant on the superior border of the petiole in all individuals.

This new subspecies is definitely a variant of pallidefulva Latr. The pilosity of the worker is such that this ant might be confused with pallidefulva schaufussi incerta Emery. The worker can be distinguished from that of incerta, however, by the peculiar subopaque appearance of its body and very dark, almost black color. Although the worker of moki Wheeler also has a subopaque body it can be readily distinguished from that of archboldi by the absence of erect hairs on the thorax, on the under surface of the head, and on the petiole, and by the bronzy luster given off in certain lights by the gaster and posterior portion of the head. Moreover, F. moki is known to occur only in the Western States.

A nest of the new subspecies was found beneath a clump of grass, where it was concentrated in sandy loam and rootlets, 7 inches above the waterline and over a space not more than 1 foot in diameter. The general nesting site was in an open sandy area surrounded by palmettos and bushes but near the edge of a swamp. The colony contained about 1,000 workers, 400 individuals in the brood, and a queen. On several occasions Dr. Schneirla collected foraging workers from low-growing bushes in sandy areas.

This subspecies is named in honor of Richard Archbold, the owner of the Archbold Biological Station, who not only encouraged Dr. Schneirla in a study of the ants of the station but who showed a special interest in the habits of this particular ant.

# THE MOURNING CLOAK BUTTERFLY IN FLORIDA

In 1917, the writer published in the Florida Buggist, Volume I, Number 1, a notice of the discovery on February 25th, of a mourning cloak butterfly, Aglais antiopa. None have been seen since until February of this year when one was taken. This first observation, made about a mile west of the campus of the University, was the farthest south the insect had ever been recorded. This year's, on February 9th, was made on the shores of Newnan's lake about three miles east and a mile south of Gainesville, so this becomes the "furthest south" of any record of this butterfly in Florida. The only other record from Florida is St. Augustine, where, according to the record of Grossbeck's "Lepidoptera of Florida" it is rare. The caterpillar feeds in willows and elms. There are two broods in the northern states how many in Florida we do not know, but it may be of some significance that the only two records we have have both been in February. J. R. Watson