

indicated, for the debris there, but for the Collembola which lived about the refuse. Under a large, flat stone in maple woods was found a fine colony of *S. pergandei* in the center of a large *F. fusca* var. *subserica* Say colony the galleries of which surrounded the *pergandei* nest on all sides and below. Workers were observed in the galleries of about 28 additional nests of *Aphænogaster fulva* Roger under stones. Four or 5 *pergandei* workers could often be seen creeping away from the superficial galleries when a stone covering one of these nests was overturned. One such *fulva-pergandei* association was of special interest because of its similarity to the colony in the midst of the *F. subserica* nest described above. The *pergandei* were nesting in a shallow, nearly circular, earthen chamber about 3 cm. in diameter, immediately under a large, flat stone covering a colony of *A. fulva*. Large, flattened chambers and galleries of the *fulva* surrounded the *pergandei* nest for at least 8 cm. on all sides. The walls of the chamber separating the *Strumigenys* from the *Aphænogaster* were about $\frac{1}{2}$ cm. thick. With one exception we have always found *S. pergandei* in the soil, that one exception being in the log mentioned below under *S. dietrichi* M. R. Smith.

Some further notes from observations of this species are recorded here. The developmental periods are approximately: egg, 15 to 16 days; larval stage, about 42 days; pupal stage, about 18 days. On 3 occasions workers were seen to bring alternately left and right forelegs to the vertex of the head, rubbing the tarsi forward and placing them on the ground. Whether this was a cleaning operation or a means of transferring some substance to the substratum, or has some other significance is not known. The ant did not clean the tarsus after rubbing the head, nor did it rub any other part of its body. Workers of different colonies fight viciously when brought together. On the other hand, a colony will adopt the brood of another colony, even of a different species of the subgenus.

***Strumigenys (Cephaloxys) ornata* Mayr**

Two workers were found near the kitchen midden of a colony of *Aphænogaster fulva* subsp. *aquia* (Buckley) which was nesting under a large stone in a rather moist