

and the type of vegetation may be quite diverse, but conditions must be such that large logs are kept thoroughly and constantly moist, and the logs must be in an advanced state of decay.

### Nest Conditions

One of the aggravating things about collecting *Proceratium* is the fact that frequently a single individual is found, and then no amount of hunting will reveal the nest. In only 16 cases were nests actually found. One such, containing an unusually large colony of 60 workers, 73 males, 1 dealate female, and larvae and pupae, was collected on Pelee Island under rather typical conditions. The large white oak log, lying near the top of a small, completely vegetated white oak dune just back of the sand plain on the south spit of the island, was overgrown with wild grapes and poison ivy and was partially shaded by young trees. It was red and soft enough to be broken easily with the fingers in most places, although it retained its shape throughout. The ants were in an unusually soft part in the upper half of the log. They had small galleries following the annual rings of the wood. The workers were almost the color of the wood, and, since they moved slowly or remained curled up motionless, they were hard to see. The black, active males were quite conspicuous. In the same log were nests of *Ponera coarctata pennsylvanica* Buckley, *Myrmecina graminicola americana* Emery, *Strumigenys pergandei* Emery, *Aphaenogaster fulva aquia picea* Emery and *Camponotus herculeanus pennsylvanicus* De Geer.

Nests seem to be most frequently located in the soft wood which is just stiff enough to retain its shape but which is near an area of loose granular decay. Usually the nest is a small cavity 2.5 to 3 mm. long and .5 to 1 mm. wide with one or more slender galleries leading out from it and extending between the slightly harder circles of spring growth of the annual rings. Colonies are usually small; perhaps the one which contained 28 workers may be considered average.

Larvae and pupae were found from the beginning of the collecting season (July) until its end (September); so no data were gathered as to when they are first produced in the spring or whether they wintered over. Pupa cases are delicate enough that the pupae may be seen within them. They are white and only slightly elongated, not yellow and long as are those of the other two local *Ponerinae*, *Ponera coarctata pennsylvanica*, and *Stigmatomma pallipes*. They are about 1 mm. wide and 2.5 mm. long. Callows, newly emerged, are a very light straw color. Males and winged females probably emerge near the first of August (our earliest record for collecting them is 8-7-31). They are still in the nest in early September. Workers are entirely hypogaeic and have never been found in the light.

### Associated Ants

Other ants, such as *Ponera coarctata pennsylvanica*, *Myrmecina graminicola americana*, *Stenammina brevicorne* Mayr, and *Strumigenys pergandei* or *pulchella* Emery, are frequently found associated with *Proceratium silaceum*. The colonies are never actually living together