

the colony. The legs and antennae of the newly eclosed callows which are initially folded in pupal posture, are stretched out and the young are groomed profusely. This is in sharp contrast to adult eclosion in the primitive ponerine genus *Amblyopone*, in which the young insect gnaws its way out of the cocoon unaided, and is able to assume active colonial duties almost immediately afterwards (Haskins, 1928 ; Traniello, 1978). Studies on *Myrmecia* reveal an intermediate situation : eclosion is partly aided but can occur unaided as well ; the callows are not immediately active, but require only several hours to gain competence (Haskins and Haskins, 1950). Thus, with respect to eclosion, *Aneuretus* behavior is similar to that of the advanced ants.

On rare occasions, however, immature forms are seen lying naked on the nest floor. These probably result from premature removal of the cocoon, similar to that reported in *Myrmecia* by Haskins (1950).

Grazing of larvae (behavior number 35)

This behavior was observed only on one occasion, in a colony that had been starved for three days. The queen was seen licking liquid material from the region of the larval mouthparts, similar to the behavior reported by Wilson (1974) in *Leptothorax curvispinosus*. The queen's mandibles remained closed, while the glossa was moved over the larval mouthparts. Thus, the larva did not seem to be regurgitating to the queen as observed in *Amblyopone pallipes* (personal observations). The nature of the liquid collected from the larva by the queen is uncertain, but is presumably labial gland secretion (Wilson, 1974). It is possible that the same is true of *Aneuretus*. As already noted, the grooming workers also show some preference for the head regions of the larvae. Whether they are simply grooming the larvae or receiving nutrition is not clear.

Analysis of repertory size and completeness

During the 53.6 hours of observation, a total of 4,105 acts of 35 categories were recorded. The frequency data (number of acts observed per category) for each caste and subcaste were fitted to a lognormal Poisson distribution which was found to fit the data much better than a negative binomial distribution. The sample coverage, defined as P_i where P_i is the probability of performance of each observed act i , was also calculated. In major workers and queens, the abundance of rare acts was an obvious indication of repertory incompleteness. Results are presented in *table II*.

The number of behavioral acts in the minor worker repertory was estimated to be 32, with a 95 % confidence interval of (29,34). This