Licking larvae (behavior number 16)

Larvae are constantly groomed by the workers. There appears to be a slight preference for the head region and it is possible that some secretion is exuded by the larvae (see " grazing larvae " below).

" Rescuing " egg from larva (behavior number 18)

A worker was seen pulling an egg away from a larva in a colony that had not been fed for three days. This was a rare occurrence and on no other occasions, not even under conditions of semi-starvation, was any form of cannibalism observed.

Carrying larvae to food (behaviour number 15)

The *Aneuretus larvae* are not able to crawl unaided to food, as reported in the primitive genera *Nothomyrmecia* (Taylor, 1978), *Amblyopone* (Haskins, 1928 ; Traniello, 1982) and *Myrmecia* (Haskins and Haskins, 1950). However, they feed directly upon fresh insect (*Drosophila*) fragments. The workers carry the larvae directly to the prey or offer them small fragments.

Assisting pupation and eclosion (behavior number 20)

Worker assistance in pupation and eclosion is considered an advanced trait (Wilson, 1971). Prior to pupation, the larva is thoroughly licked : one worker holds the larva in place while approximately four other workers groom it. Next, the larva is covered with soil particles which serve as anchor points for silk, thus aiding it in spinning its cocoon. An unusual feature is the use of eggs and small larvae for banking a spinning larva. Whether this was accidental, that is, whether the eggs and small larvae stuck to the spinning larvae due to their adhesiveness, or whether this is a novel use of brood, is unclear. Moreover, the larvae pupate clumped together in groups of two or three. This may also facilitate anchorage for spinning. After about four hours, when the cocoons are complete, workers remove the debris, separate the pupae, and carry them to a certain area of the nest where they remain until eclosion.

As the pupae near eclosion, the fully metamorphosed and lightly pigmented adult is visible through the transparent covering. Workers aggregate around the eclosing individual and make vigorous antennal contact. Soon, small incisions in the cocoon are made, and workers extract the callow adult. The pupal skin is then removed. As in formicines, callows are extremely pale, soft and immobile, and more than a day is required for these callows to be capable of performing tasks in