

*Callow.* Freshly eclosed individuals that are light reddish brown in color; no body deposits, body surface fully shining.

*Shiny.* Fully colored (blackish brown), but with few or no deposits, so that the entire body surface is shining.

*Partially encrusted.* Crust patchily distributed over the dorsal body surface, leaving other patches shining.

*Fully encrusted.* Dorsal and lateral surface of entire body covered by a crust resembling a fine dark brown soil or mud deposit, which is broken by irregular cracks, evidently held together at least in part by dense pilosity, and can be easily scraped off with sharp forceps.

Table I. — Spatial distribution of "castes" in the nest: mean ( $\pm$  s.d.) number of workers in various locations during 5 snapshot counts taken at 30-min intervals.

Tabelle I. — Räumliche Verteilung der Kasten im Nest. Mittelwerte von 5 "Schnappschuss"-Zählungen (im Abstand von 30 Minuten) werden gegeben.

Activity	Callow	Shiny	Partially encrusted	Fully encrusted
Close to queen	0	2 $\pm$ 2.3	2.2 $\pm$ 1.6	4.8 $\pm$ 2.6
Sitting away from brood	0.8 $\pm$ 1.1	2 $\pm$ 1.6	1.2 $\pm$ 1.6	7.4 $\pm$ 3.1
Sitting with larvae	0.4 $\pm$ 0.7	5.8 $\pm$ 0.8	4.6 $\pm$ 1.1	1.4 $\pm$ 1.1
Sitting with pupae	0.6 $\pm$ 0.5	3.4 $\pm$ 2.9	4.8 $\pm$ 1.3	2.4 $\pm$ 1.7
Walking in nest chamber	0	1.2 $\pm$ 1.3	3.2 $\pm$ 2.4	5 $\pm$ 2.0
Walking in foraging chamber	0	0	0	1.4 $\pm$ 1.1

There were striking differences in the physical location of these stages and the roles they performed (see *tables I, II*). In general, only the fully encrusted, hence older workers hunted in the foraging chambers, where they captured and retrieved prey. Inside the nest the shiny and partially encrusted (younger) workers took over the prey objects and brought them to the larvae, sometimes stinging the prey again. The younger workers often fed on the bodies of the prey simultaneously with the larvae, while the older ones typically dined alone well away from the brood. Furthermore, as shown in the tables, the younger workers were the primary brood attendants. Finally, in all three observed instances of adult carrying during colony emigration, the transporter was a fully encrusted worker. The proportions of workers of the several stages in the two colonies were as follows: in the first, 3 callow, 9 shiny, 11 partially encrusted, 21 fully encrusted; in the second, none callow, 14 shiny, 10 partially encrusted, 20 fully encrusted.

This temporal division of labor was accompanied by striking changes in ovarian development. We dissected 6 shiny and 6 fully encrusted workers from one colony, and found that the workers possess two ovarioles. Each of the shiny individuals had a single, mostly or completely full-sized egg in