

representing another colony, was encountered between 200 and 300 meters from the cave entrance. This spot was reached only after passing five major twists in the cave and was in apparently total darkness. It was the final outpost of the guacharo nests. Here there were no other ant species; in fact, none of the other three found at the first site ventured beyond the lighted portion of the cave. The arthropod fauna was sparse in species and biomass and consisted wholly of blind, white entomobryids, campodeids, isopods, and snails.

Just past the second site the cave ceiling dipped to within less than a meter of the stream surface, and the passage continued tortuously for another twenty meters or so. Beyond, the cave opened into a final oblong chamber before dipping beneath the stream surface. In this terminal room there were no guacharos; only bats had left a sprinkling of guano on the floor. A careful search revealed no *Ercbomyrma* workers in the terminal chamber.

The nest at the first site, near the cave entrance, was located and excavated. It was enclosed entirely within a large, smooth shale slab partly buried in the cave soil and covered with a thin layer of dense clay. The rock was soft, naturally fractured, and could easily be broken apart with a steel trowel. Columns of workers were observed traveling from the guano piles to two entrance holes twelve centimeters apart on the upper edge of the rock. The holes were each about two millimeters in diameter, and each was surrounded by low, inconspicuous piles of excavated clay. The nest, located only a few centimeters below the surface, consisted of several flat, irregular cavities between five and ten centimeters wide and several millimeters in height. Probably the great majority of workers and all of the other adult castes were collected, both alive and preserved in alcohol. The sample, censused the following day, had the following composition: 547 minor workers, 1 soldier, 10 dealate queens, 10 males. Also present was a large quantity of brood, in all stages of development, including one male pupa. It was estimated that the entire worker population, including that part left foraging or missed in the nest, was not less than 600 and not greater than 1000.

Previous to the excavation, the foraging workers were observed briefly. Workers were found up to $1\frac{1}{2}$ meters from the nest entrances, but the great majority was within a meter's radius. Most were hunting singly or moving in loose files through guacharo guano, just as Urich had found them forty years earlier. Workers returning to the nest converged in two separate files, which, judging from the precision