

the environmental conditions are extreme enough to tax the hardiest xerophiles. This is shown by the fact that few of them can survive in these areas. Competition for food in such areas is severe and considerable advantage must derive from a type of nest that no predator could enter except through a fixed and easily guarded opening.

As soon as the nests of *clydei* were found, observations were begun on its foraging activities. The observations were made in late March and early April. At that time the ants were foraging mainly in the period between 9:00 A. M. and 1:00 P. M. The nests were in shade until 8:30 A. M. but there was a thirty minute period after the sunlight reached them when no foragers emerged. About 1:00 P. M. foragers ceased to emerge from the nest but during the next hour or so many foragers returned to it. Observations made after dark showed nothing that could be regarded as foraging, although minors could be brought out of the nest if the entrance was sufficiently illuminated. It appears that all the foraging is done by the minors. The majors leave the nest only to assist the minors in dealing with some large item of food when this has been brought close to the nest entrance. While the minors obviously follow scent trails they do not forage in columns for the foragers are well separated. Except for one minor, who brought in the withered anther of a flower, all material brought to the nest during the period of observation consisted of arthropods or their disarticulated remains. Much of this was too fragmentary for identification but on several occasions entire arthropods were brought in. There were two dead spiders, two dead majors of *Ph. grallipes*, one dead fly, one dead geometrid larva and one living termite nymph. No seeds were ever brought in, although there were a number of plants in the area which had gone to seed. On the basis of these observations it may be concluded that *clydei* is not a harvester but carnivorous. But, like many xerophiles, it appears to be an opportunist where food is concerned. Since the only way to get the ants out of the nest was to bait them out and since I wished to set up artificial nests, I spent considerable time at first looking for suitable insect bait. Later I discovered that sugar cookies or cheese crackers worked just as well. On one occasion a bit of sugar cookie about the size of a quarter was inadvertently left at the entrance of one of the nests at the conclusion of the observations. The following day there was no trace of it and the members of the colony which had acquired this prize were so full or so busy with their bits of cookie that they did not begin foraging again until the next day.

As already noted the major of *clydei* has a secondary role in foraging activities. When entire arthropods are brought in by the minors