

a vertical gallery descended into the soil but was followed only a few inches to where it passed under a boulder that could have been removed only with a charge of dynamite. The soil about the nest was so hard that it had been soaked by a recent heavy rain only to a depth of eighteen inches and the walls of the fungus chamber were very dry and dusty.

The colony inhabiting this nest was very large, comprising several hundred workers and being fully four to six times as populous as the largest *septentrionalis* and *turrifex* colonies I have seen. The workers were also more rapid in their movements and feigned death much less readily than our other species of *Trachymyrmex*. The colony was evidently in a hibernating or subdormant condition and contained neither larvæ nor pupæ. I also failed to find any dealated queens, but these may have escaped into the lowermost galleries as soon as the surface boulder was removed. The breeding season of the species probably does not begin till just after the rains in early July. This is indicated by the late appearance of the males and winged females which were taken, evidently while on their nuptial flight, by Schaeffer, on August 24.

All the other colonies of *T. arizonensis* found in the Huachuca Mts. were examined less thoroughly, but all had essentially the same structure at the surface of the soil. The entrances, usually only one or two in number, were always near or just under the edge of some large stone and when this was removed the galleries could be followed along the surface for several inches before they descended to a lower level. In two instances portions of the surface galleries were packed with fungus-garden refuse in a manner that recalled the conditions I have described for *Cyphomyrmex wheeleri* (*loco citato* p. 768). Unfortunately I was unable to reach any of the chambers in these nests and was therefore unable to determine whether the size and conditions described for the single nest excavated with the aid of Mr. Palmerlee, were normal. I believe, however, judging from the character of the soil in which these ants live, that the chambers are commonly under stones and that the fungus-gardens are suspended from the under surfaces of these and not from rootlets as in the other species of *Trachymyrmex* that have been studied.

On warm days the *arizonensis* workers may be seen about the entrances of their nests. They go forth timidly and singly like