

ceased, though red ants could be seen down in the galleries of the *fusca* nest. There was a rain in the night; however, it did not close the nest openings. At 7:30 the next morning everything was quiet at the raided nest. By 9:15 several reds, which had stayed overnight were seen at the main *fusca* opening and a few had just started toward the home nest with pupae. At about the same time a group of a dozen left the home nest and started along the old trail. Morning activities had begun at both ends of the line. By 9:20 pupae were being carried in a constant stream and an equal number of ants were traveling each way along the quiet, moderately-populated trail. This file lacked the numbers, compactness, speed, and excitement which marked the one just after the nest had been discovered. It also differed from the exploratory column in that it was narrower and the ants kept a steady pace, not moving off to the sides or stopping to investigate crannies. At 12:00 the noon lull occurred and the afternoon line did not begin again until 3:45. That afternoon almost no pupae were taken although the reds were still very much in possession of the captured nest, moving in and out of its galleries. Next morning (8-10-39) there was still a weak column connecting the *sanguinea* and the captured nests, but no pupae were being brought home.

When the line was visited at 3:15, it was obvious that exploratory maneuvers were again in progress. Numerous groups of ants were leaving the home nest in flurries, following the old trail to within four feet of the raided *fusca* nest where they swerved to the east and spread out into a typical broad exploratory formation four feet wide. Between 4:30 and 5:00, this broad front advanced six feet across the grass; by 5:50 the column was retreating without having found a nest. Next morning (8-11-39) activities were just beginning at 9:20 when typical groups of three to six ants were leaving the nest at intervals. The line was thin all morning and swung to the east of the previous day's exploration, and it dwindled to nothing by 11:55. No observations were made until 5:20 when it was found that the *sanguineas* had again located a nest not far from the other. Once again activities were at their height; blacks were pouring out and *sanguineas* were carrying off pupae.

The raiding of these nests has been given in detail because it is typical of the activities which went on day after day at the Dock Nest and at Skipper's Nest. Activities on the trail varied according to whether the ants were exploring, had just discovered a nest to loot, or were carrying on routine plundering. Length of noon lulls and duration of raids into the evening depended on the activities in progress. Unsuccessful raids tended to stop earlier. Most *fusca* nests were found to be thoroughly concealed by twigs, stones, or grass, and had to be unplugged before the reds could enter. This was the period of the greatest massing of ants, the most thickly populated columns, and the greatest seeming excitement. Once the reds could descend into the nest galleries blacks came pouring out with little evidence of resistance. Some were dragged out by legs, antennae, or mandibles by red workers and then were released; many more simply walked off. Some were mauled by one, two or three reds pulling at them; but they were usually