

were in one part of the Reserve, and the only evidence that there might be more was the finding of an alate female a mile away.

Development of brood. Larvae and a few alate pupae were already present when observations began on June 3. Larvae were found all summer until August 16 and pupae until September 18. Adult alates were taken first on June 16, but they must have been in the nest slightly before this for the initial flight occurred on that date. The last flight seen was on September 20, but a few alates were still in the nest on October 1 when observations ceased. There was a steady production of alates all summer and brood was always abundant. Larvae and pupae were kept together in the lower parts of the central thatch or in soil chambers below or to the sides. No worker brood of either species was found.

Population count. On August 16, 1971, the largest colony was dug with the help of three friends, and an attempt was made to collect all the inhabitants. After the digging, thatch and soil were again sorted for possible overlooked brood, and for the next two weeks workers were captured along trails and outposts until there were no more. On the outside, the nest had a cone of thatch 9 inches high in the center and 17×17 inches in diameter. Around this a grassy ring made the total nest area 30×30 inches. Thatch extended down 17 inches beneath ground surface level. The first larvae and pupae were 10 to 14 inches down in the thatch, and more were located deeper in the thatch and in the soil beneath it to about 30 inches. Around the sides, more chambers with brood were present in the soil, beginning at 14 inches. No brood was below 30 inches, although at 35 inches there were still more galleries going down and ending blindly. All of the side chambers were in a diameter of 26 inches.

F. obscuripes workers totaled 4,620, a fairly small population for this species. N. A. Weber (1935) counted 16,481 workers in a nest and said that this was not a complete count. R. L. King (1950) estimated over 50,000 workers in a large colony.

All ten dealate females of *F. talbotae* were in the central thatch and 87% of the winged males and females were there also. The nest contained 593 adult alates of which 263 were females and 330 were males. There were 1,127 pupae and 288 larvae, making a brood total of 1,415. Most of these were in chambers in the soil (78% of the pupae and 80% of the larvae). This distribution may have been influenced by the extremely dry condition of the thatch and upper soil.