

in a locality very near the one in which I studied the nests. Fully to appreciate his description, the reader must bear in mind what I have said about the size of the females of this ant. They, of course, have powerful stings, like the workers, though the males are stingless and have feeble mandibles. Mr. Froggatt's account runs as follows:

"On January 30th, after some very hot, stormy weather, while I was at Chevy Chase, near Armidale, N. S. W., I crossed the paddock and climbed to the top of Mt. Roul, an isolated, flat-topped, basaltic hill, which rises about 300 feet above the surrounding open, cleared country. The summit, about half an acre in extent, is covered with low "black-thorn" bushes (*Busaria spinifera*). I saw no signs of bull-dog ant nests till I reached the summit. Then I was enveloped in a regular cloud of the great winged ants. They were out in thousands and thousands, resting on the rocks and grass. The air was full of them, but they were chiefly flying in great numbers about the bushes where the males were copulating with the females. As soon as a male (and there were apparently hundreds of males to every female) captured a female on a bush, other males surrounded the couple till there was a struggling mass of ants forming a ball as big as one's fist. Then something seemed to give way, the ball would fall to the ground and the ants would scatter. As many as half a dozen of these balls would keep forming on every little bush and this went on throughout the morning. I was a bit frightened at first but the ants took no notice of me, as the males were all so eager in their endeavors to seize the females."

Except for the great size of the participants, this nuptial flight presents an exact picture of occasional flights of some of our common Myrmicine ants, especially of *Myrmica scabrinodis* Nyl. That such enormous swarms of *Myrmecia* as the one described must be of rare occurrence, is evident from the statement of such a keen observer as Mr. Froggatt that he has "never before seen more than a dozen winged bull-dog ants of any species together." I find, however, a brief description by Tepper<sup>1</sup> of what must have been a very similar scene. He describes a nuptial flight of one of the large species of *Myrmecia*

<sup>1</sup>Observations about the Habits of Some South Australian Ants. *Trans. & Proc. Roy. Soc. S. Austr.*, 5, 1882, pp. 24-26, 106-107.