

in the sun had adequate warmth, but a wind kept the plants in almost constant motion. Ants at the "cedar nest" could fly because they were in the sun and because they could climb the cedar trunk to take off, thus avoiding moving plants.

Both males and females could fly from grasses, but females often preferred the more stabile stalks of monarda or goldenrod. Sometimes they climbed rapidly with wings half spread and flew immediately. More often they came up slowly, stopping several times before reaching a plant tip from which they would fly after a brief fluttering of wings.

Females tended to loiter for a longer time than did males and so set up conditions for swarming on a miniature scale. Swarming was considered to exist when males, instead of flying off, flew among the plants, lighting on one stem after another, until they found females with which to mate. This did not take place on all flights. One typical swarm occurred on August 25, 1970, at 78°. When first seen, 10 females were standing on plants and 8 males were flying among them. One male united with a female and then moved off fluttering its wings; 3 others walked rapidly, with a jerking motion, among stems. One found a female and mated for a half minute. Then 2 others were seen mating. Other males and females joined the group. Males flew up and down among the plants, then lit on stems to find females. When females were in excess, they seemed to be waiting until males found them. This was a very low grade swarm but, aside from numbers involved and the fact that it took place over the nest, it was essentially like the ground swarms of *F. obscuripes*, which have been reported from the Reserve (Talbot, 1972), and still more like the small swarms which took place over the nest of *Formica dakotensis* Emery (Talbot, 1971).

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