SWARMING CHIRONOMIDÆ

BY J. P. BILL

One evening during the spring grass fire season, the writer happened to notice some suspicious streamers of what appeared to be smoke. They proved to be above a large elm tree several hundred feet away, where they caught the quartering light of the setting sun. The children soon found others. In fact, all around us, against the sky, could be seen these columns, slightly swaying in the breeze, and all apparently tenuously anchored to tree tops. The nearest one, over a young elm sapling in our own yard, was close enough to determine the smoke to be columns of myriads of insects.

An aerial net lashed to an apple picker was barely long enough to sweep through this column, which proved to consist of Chironomids. These were identified later by Mr. C. W. Johnson of the Boston Society of Natural History (with whom specimens were left, and to whom my thanks are due) as being *Chironomus modestus* Say, *Cricotopus trifasciatus* Panzer, and *Chironomus nigricans* Johannsen, the latter predominating in the collections, of which three were made on different days.

For the next few days, in travelling about the region of Wayland, these columns were seen at sunset, and were observed by others. One sunset was accompanied by a fitful westerly wind. While the columns were temporarily dispersed, the insects quickly flew back to their position, which they maintained even in the height of the gusts.

Toward the end of approximately a week, during which these columns were seen in the evening, large numbers of them started to appear in the writer's study, where a valved screen frame, backed by a light, is in nightly use to attract insects. Their disappearance at light was coincident with that of the columns.

Whether this phenomenon is one of a modified swarming instinct or nuptial flight is not known to the writer, but its persistence and peculiarity is thought worthy of note. These observations were made during the first week in May, 1931.