

SWARMING OF ENTOMOBRYA UNOSTRIGATA (INSECTA:COLLEMBOLA)
IN SOUTH HOLLAND, COOK COUNTY, ILLINOIS

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ABSTRACT

A swarm of Entomobrya unostrigata Stach is reported from the town of South Holland, Cook County, Illinois. The swarm is the first recorded for this species and the second of such an event in the state.

Swarms, outbreaks or mass emergences of Collembola are well known to students of the order and these events have been reported from several parts of the world. In the United States, Wray (1945) recorded a swarm of Hypogastrura armata (Nicolet) in North Carolina. Park (1949) wrote about a large aggregation of Hypogastrura bengtssoni (Axelson) in the campus of Northwestern University in Illinois. Paclt (1956) reviewed the subject on a world basis.

On July 9, 1976, Mr. Harry Paarlberg of Lansing, Illinois, contacted Dr. Roscoe Randell of the Extension Entomology division of the Illinois Natural History Survey for advice regarding the outbreak of a species of springtail in the town of South Holland. Subsequently, Mr. Paarlberg submitted a series of specimens which Dr. Kenneth A. Christiansen kindly identified as Entomobrya unostrigata Stach, a member of the family Entomobryidae.

On July 16 the author and Dr. Randell visited South Holland in order to study the swarm, collect specimens and talk to the residents of the area. The residents noted the abundance of springtails for the 1st time on July 9. They informed us that by the 12th the population was so heavy that sidewalks, parking lots, lawns, etc., over an area of 2 square blocks were well covered by the insects. Several houses and a church were heavily infested and much insecticide was applied on the area. By the 16th the population was on the decrease.

According to residents, the springtails were abundant after 4 p.m. and were absent in early morning and early afternoon. No observations were made during the night.

This swarm is worthy of notice because it is only the 2nd record of such an event in Illinois and the 1st for this species. In addition, the

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emergence occurred at a time when no rains were reported in the area and relative humidities were low (however, populations could have built up during more favorable conditions). It may also be noted that this is the 1st record of E. unostriigata from Illinois. According to records kept by Dr. Christiansen, this is only the 3rd time that the species has been collected east of the Mississippi river. Previous records are (in chronological order) from California, Colorado, Utah, New Mexico, Arizona, Texas, Kentucky and Maryland.

Several specimens from this swarm are deposited in Dr. Christiansen's collection and others are in the collection of the Illinois Natural History Survey.

LITERATURE CITED

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