ADDITIONAL RECORDS OF BOREUS BRUMALIS (MECOPTERA: BOREIDAE) FROM TENNESSEE

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The first specimen of *Boreus brumalis* for Tennessee was reported by Dr. F. M. Carpenter (1939) and again by A. C. Cole and D. S. Gillespie (1950). Since additional specimens have been found by the writer it would seem of interest to place these on record.

On December 25, 1938, five specimens of *Boreus brumalis* were collected on moss on Cumberland Mountain at LaFollette, Tennessee. These specimens were sent to Dr. F. M. Carpenter who wrote to me on January 4, 1939 (in part) as follows: "Two specimens were sent to me from the Smoky Mountains in Tennessee last year, these constituting the most southern record of the genus, so that your additional specimens are a splendid confirmation of the occurrence of these insects well into Tennessee." One of the first specimens from Tennessee was a *Boreus brumalis* and one a *Boreus nivoriundus*.

Boreus brumalis Fitch. LaFollette, Cumberland Mt., Dec. 25, 1938 — 3 females, 2 males; March 11, 1939 — 5 females, 3 males. Five specimens were sent to Dr. F. M. Carpenter, Museum of Comparative Zoology, Cambridge, Mass.; two specimens to the Ohio State Museum, and six specimens to A. B. Gurney, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, Washington, D. C.

After finding the adult Boreus on moss a search was made in the same locality, among the roots of moss, for the immature stages of this insect. The larvae were found but it is not certain whether these are $B.\ brumalis$ or $B.\ nivoriundus$, since no adults of $B.\ nivoriundus$ were found, they are most likely $B.\ brumalis$. Since the immature stages of Boreus apparently have not been collected before in Tennessee these may be placed on record also.

Boreus sp. larvae. LaFollette, Cumberland Mt., March 11, 1939 — 16 specimens; April 12, 1939 — 5 specimens; April 15, 1939 — 2 specimens. Twenty-one of these were sent to A. B. Gurney, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, Washington, D. C. Two specimens were deposited in the Ohio State Museum. Cedar Creek, Campbell County, July 17, 1942 — 9 specimens. These specimens were collected in moss about the cool entrance to a sinkhole in the woods. They are in the writer's collection.

LITERATURE CITED

Carpenter, F. M. 1939. Records and notes of Nearctic Mecoptera and Raphidiodea. Bull. Brooklyn Ent. Soc., XXXIV: 165.

Cole A. C. and Gillespie, D. S. 1950. Mecoptera records from Tennessee, Jour. Tenn. Acad. Sci., 25 (1): 84.