

June 1968

Geron Calvus (Diptera: Bombyliidae), a Parasite of Solenobia Walshella (Lepidoptera: Psychidae) in Michigan

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Recommended Citation

Donahue, Julian P. (1968) "Geron Calvus (Diptera: Bombyliidae), a Parasite of Solenobia Walshella (Lepidoptera: Psychidae) in Michigan," *The Great Lakes Entomologist*: Vol. 1 : Iss. 8 , Article 5.
Available at: <http://scholar.valpo.edu/tgle/vol1/iss8/5>

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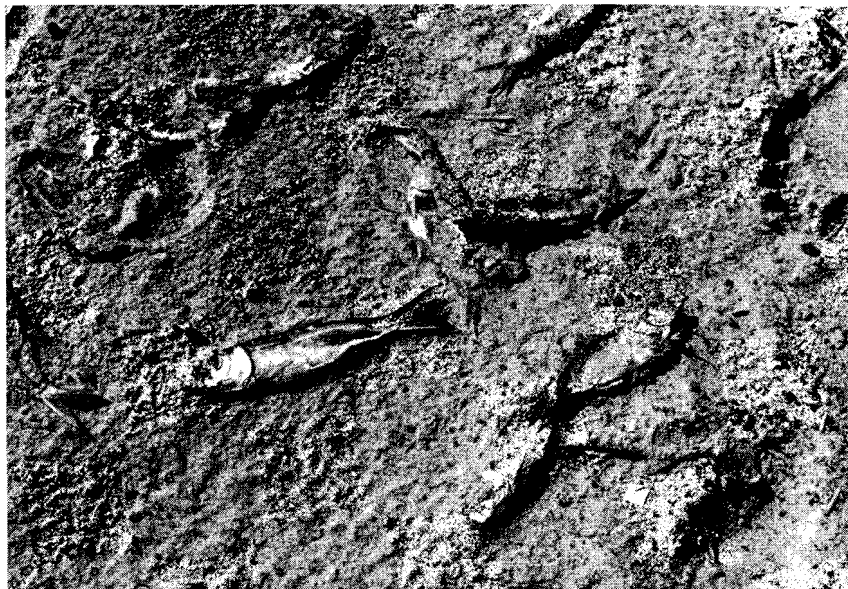


Fig. 1. Dead and decomposing alewives on a Lake Michigan beach in 1967.

The blowfly situation worsened early in the afternoon when adults began to eclose from puparia in the sand. Thousands of flies emerged and walked across the sand toward the upper beach. They climbed vertical or near-vertical surfaces when available and rested there until their wings dried. Some took advantage of the sides of depressions in the sand for this, but most crawled to the upper beach and climbed blades of beach grass; at peak emergence some grass clumps harbored 40-50 flies at one time. Adults also climbed "vertical" surfaces of sunbathers lying on the sand. This was not appreciated, and the flies soon caused an exodus of intolerant individuals.

Most of the hardier visitors were finally driven off the beach by mid-afternoon when the combination of the fetid odor of alewives, the dead maggots, and migrating flies finally became too much to bear. The only one enjoying the entire situation was an ardent entomologist, who by late afternoon was almost alone—except for a few curiosity seekers who couldn't quite imagine what he was doing there with his camera and net!



**GERON CALVUS (DIPTERA: BOMBYLIIDAE), A PARASITE
OF SOLENOBIA WALSHELLA (LEPIDOPTERA: PSYCHIDAE)
IN MICHIGAN**

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Very little is known of the biology of bee-flies in the genus *Geron*; the few available records show that the larvae are parasitic on Lepidoptera larvae. Mik (1896) noted that *Geron gibbosus* Meigen had been reared from larvae of the pyralid *Nephotyryx sublineatella* Strg. and the psychid *Fumaria crassiorella* (Bruand) in Europe, while Maxwell-Lefroy and Howlett (1909) recorded the tortricid *Laspeyresia jaculatrix* Meyrick as a host of *Geron argentifrons* Bru. in India. The present paper appears to be the first report on the biology of any North American *Geron*.

A single male *Geron (Empidogeron) calvus* Loew emerged in the laboratory on 27 May 1966 from a larval-pupal case of *Solenobia walshella* Clemens collected under the bark of a red oak stump on 26 April 1966 in Clinton County, Michigan (T5N, R1W, NW1/4 Sec. 24). Upon emergence, about three-fourths of the fly pupa was exerted from the case of the host, exactly as normally occurs upon emergence of the host moth.

This rarely-collected fly, the only representative of its subgenus in eastern North America, has been recorded from New York, New Hampshire, Massachusetts, New Jersey, and Pennsylvania (Painter, 1932; Painter & Painter, 1965). *Solenobia walshella*, likewise an eastern species, has been recorded as far west as Illinois (Davis, 1964), Michigan (Donahue, 1966), and Minnesota (Stehr, pers. comm.). The population of *Solenobia* in British Columbia, a large sample from which yielded no parasites, may be referable to another species (Leech & Sugden, 1967).

ACKNOWLEDGMENT

I wish to thank Dr. Reginald H. Painter, of the Department of Entomology, Kansas State University, for identifying the *Geron*, which is deposited in his collection.

LITERATURE CITED

- Davis, Donald R. 1964. Bagworm moths of the western hemisphere. U.S. National Museum, Bull. 244.
- Donahue, Julian P. 1966. 1966 collecting prospects excellent. Newsletter Mich. Entomol. Soc. 11(2):12.
- Leech, H.B. and B. A. Sugden. 1967. *Solenobia triquetrella* Hubner, a flightless parthenogenetic moth, in British Columbia (Lepidoptera: Psychidae). J. Entomol. Soc. Brit. Columb. 64: 56-59.
- Maxwell-Lefroy, H. and F. M. Howlett. 1909. Indian Insect Life. London.
- Mik, J. 1896. Dipterologische miscellen (2 serie). VII. Wien. Entomol. Zeit. 15:106-114.
- Painter, Reginald H. 1932. A monographic study of the genus *Geron* Meigen as it occurs in the United States (Diptera: Bombyliidae). Amer. Entomol. Soc., Trans. 58: 139-167.
- Painter, Reginald H. and Elizabeth M. Painter. 1965. Bombyliidae in Stone, Alan, et. al., A Catalog of the Diptera of America North of Mexico. U.S. Dept. Agric. Agric. Handbook 276.