OHIO ROBBER FLIES IV

(DIPTERA: ASILIDAE)

STANLEY W. BROMLEY,

Bartlett Tree Research Laboratories, Stamford, Conn.

With the passing years a number of new Asilid records for the State of Ohio have accrued. My "Preliminary Annotated List of the Robber Flies of Ohio" was published November 1, 1931, by the Ohio State Archaeological and Historical Society. This publication listed a total of 65 species of this group of flies for Ohio. Subsequently "Additions to the Ohio List of Robber Flies," published in the Ohio Journal of Science, vol. 33, no. 3, May, 1933, listed 5 more; "Additions to the Ohio List of Robber Flies II," Ohio Journal of Science, vol. 34, no. 3, May, 1934, listed 4 more and "Additions to the Ohio List of Robber Flies III," Ohio Journal of Science, vol. 36, no. 3, May, 1936, listed 3 more, making a total of 77 species as of 1936.

Since then, 13 more species, the specimens now incorporated in the Ohio State Museum collection (Dr. E. S. Thomas in charge) or in the Ohio State University collection in the Botany and Zoology Building (Dr. Josef Knull in charge) have been added.

- 78. Dioctria baumhaueri Meigen. Columbus, Franklin County, June 27, 1937, collected by C. L. Ward. This is our only introduced Asilid—a common European species first found in this country at Boston, Massachusetts, in 1916 by C. W. Johnson.
- 79. Cyrtopogon laphriformis Curran. Hocking County, Ohio, May 23. D. J. and J. N. Knull. A beautiful grayish species with orange pile on the abdomen.
- Laphria ithypyga McAtee. Seven males, two females, Lancaster, June 15-27, 1943 and 1944.
 R. M. Goslin.
 - Of the same size and appearance as *index* McAtee, but differs in the structure of the male genitalia.
- Asilus maneei Hine. Mound City, August 10, 1941, R. M. Goslin, E. S. Thomas and S. W. Bromley. Eleven specimens collected.
 - A small blackish-gray species usually found resting on tree trunks.
- 82. Leptogaster tenuipes Loew. Two females, July 22, 1944, Alum Creek, Columbus. R. M. Goslin.
- 83. Leptogaster virgatus Coquillett. Ross County, Colerain Township, June 21, 1936. R. M. Goslin.
- 84. Ceraturgus dimidiatus Macquart. Three males, two females, Wooster, Wayne County, June 15, 1937. Dale Jenkins and D. J. Borror. A male East Union, Wayne County, same date.
 - Holmesville, Holmes County, 2 males, 2 females, June 15-20, 1937. R. T. Everly.
- 85. Bombomima posticata Say. Hocking County, "Neotoma," May 24, 1936. E. S. Thomas. Same locality, June 6, 1936. D. W. Jenkins.
- 86. Cerotainia albipilosa Curran. Athens, July 20. W. C. Stehr. I doubt if this is specifically distinct from C. macrocera Say.
- Leptogaster favillaceus Loew. Newark, June 17, 1931. R. M. Goslin. Colerain, Ross County, June 13, 1937. R. M. Goslin.
- 88. Leptogaster eudicranus Loew. Delaware County, July 4. D. J. & J. N. Knull.
- 89. Asilus virginicus Banks. "Neotoma," Hocking County, June 6, 1937. E. S. Thomas.
- Asilus erythocnemius Hine. Columbus, University Farm, August 5, 1943. Howard W. Smith.

Another individual of the excessively rare *Dasylechia atrox* Williston was taken on the O. S. U. Campus in Columbus flying around inside the class room in the Botany and Zoology Building on July 5, 1942, by R. W. Strandtmann.

Certain Asilids kill honey-bees and are known as "Bee-Killers." Twelve species have been taken with honey-bee prey in Ohio, but in no case were the flies sufficiently numerous to cause economic losses to apiarists.

	Bee-killers	Number of honey-bee prey
1.	Promachus vertebratus Say	2 8
2.	Mallophora orcina Wied	21
3.	Diogmites discolor Loew	
4.	Promachus bastardii Macq	15
5.	Diogmites umbrinus Loew	9
6.	Bombomima thoracica Fabr	
7.	Promachus hinei Bromley	8
8.	Proctacanthus milbertii Macq	4
9.	Proctacanthus hinei Bromley	
10.	Proctacanthus duryi Hine	4
11.	Promachus rufipes Fabr	1
12.	Erax aestuans L	1

Three species in the environs of Columbus were seen killing the honey-bee. These were *Bombomima thoracica* Fabr. found along the sunny edges of woods, orchards and around bee hives in May and June; *Diogmites discolor* Loew around rank herbage, flower gardens, edges of fields and woods, and in apiaries during July and August; and *Promachus vertebratus* Say which occurs in clover fields, and iron-weed swales and pastures during August and early September.

Bombomima thoracica Fabr. is a remarkable mimic of a female bumblebee and is the insect to which many bee-keepers refer when speaking of the "bumble-bee" that catches honey bees.

In the Hocking Hills, 25 or 30 miles to the Southeast of Columbus, two other bee-killers, in addition to the three above mentioned, are common. These are *Diogmites umbrinus* Loew and *Promachus bastardi* Macquart. Both frequently haunt apiaries.

In the Cincinnati area, in addition to the five preceding species, there are three more, important bee-killers: *Mallophora orcina* Wied., the notorious "Southern Bee-killer," occurring in flower gardens, Joe-Pye weed swales, and around apiaries; *Proctacanthus milbertii* Macquart, the so-called "Missouri Bee-killer," which actually feeds largely on grasshoppers and butterflies in old sandy Andropogon and goldenrod fields, only occasionally taking honey-bees; and *Promachus hinei* Bromley, a large powerful robber fly frequently seen alighting on fence posts or barbed wire along cultivated fields in low ground, swales, among moist or rank herbage, or in low open woodlands in alluvial somewhat sandy soil.

The large red *Proctacanthus hinei* Bromley is found in sandy areas along Lake Erie and the Ohio River, while the smaller tan-colored *Proctacanthus duryi* Hine occurs in similar situations along the Ohio River. Both are Bee-killers.

The two remaining species, each with a single honeybee record are worthy of comment. *Promachus rufipes* Fabr., the so-called "Bee Panther," common in the South Atlantic coastal region, is rare in Ohio and confined to the Southeastern part of the State, while *Erax aestuans* L. is a very common summer Asilid throughout most of the State. *E. aestuans* feeds largely on small Diptera, being particularly fond of house and stable flies, and its capture of honey-bees is a rare occurrence.