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## **BOOK REVIEW**

BLOODSUCKING FLIES AND OTHER NUISANCE AR-THROPODS OF NEW YORK STATE by Hugo Jamnback. 1969. New York State Museum and Science Service Memoir 19: x + 90 pp., illus. \$2.00. May be obtained from the New York Museum and Science Service, State Education Building, Albany, New York 12224.

As pointed out by Donald L. Collins in the Preface to this paper, the New York State Museum has a long tradition of interest in arthropods that attack man. A number of papers have resulted from this interest and these will still be used for identification. However, Jamnback's present study will largely replace these as a source of readily available, clearly presented, biological and distributional information.

The publication is divided into three major sections. The first section covers the bloodsucking species and includes Culicidae, Simuliidae, Culicoides, Tabanidae, Symphoromyia, Stomoxys, Ixodidae and Trombiculidae. The second section on non-bloodsucking pest species includes Tricoptera, Ephemeroptera, Chironomidae and Chaoboridae. The third section on control runs the gamut from simple avoidance of pest species (it had never occurred to me that a good way to avoid blackflies was to stay home) through non-insecticidal methods of control to specific recommendations for the use of certain pesticides.

All the bloodsucking groups are supplemented by an annotated list of the species found in New York. The annotations, although brief, carry a lot of information. A slight inconsistency is the exclusion of non-bloodsucking species from some groups and their inclusion in other groups.

"The legal aspects of control in New York" supplemented by an appendix, "Rules and regulations governing the use of chemicals for the control and climination of aquatic insects," brings together much information on an important and rather delicate subject. Control officers and commercial pesticide applicators will find this portion very valuable. I did not find any reference to "Protected Insects" under the New York Fish and Game Law which apparently makes it illegal for a trout fisherman to slap a blackfly which bites him; perhaps Jamnback feels the less said about this, the better.

Documentation is excellent and the list of references extensive. Typographical errors seem to have been kept to a near minimum. The New York State Museum and Science Service has well supported in this publication a tradition going back to Asa Fitch only two years short of 100 years ago. Jamnback's study with its attractive slick magazine type format, seems to have something for everyone interested in outdoor arthropod pests of people.

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