## ENTOMOLOGY

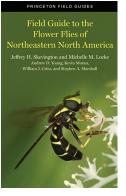
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## Field Guide to the Flower Flies of Northeastern North America

By Jeffrey H. Skevington, Michelle M. Locke, Andrew D. Young, Kevin Moran, William J. Crins, and Stephen A. Marshall. 2019. Princeton University Press. 512 pages, 3000 images, and 414 maps, 27.95 USD, Flexibound Paper.

This is a beautiful book, big enough to include multiple photographs of all the known, and until recently, a few unknown flower flies, yet small enough to be carried into the field in a largish pocket or small satchel.

The general introduction describes the book's layout and how to use it most efficiently. Techniques on observing and trapping these flies and how to rec-



ord your data are also included. Identification pointers, including a reference to an online Key to the Genera of Nearctic Syrphidae (Miranda *et al.* 2013), give the reader a good start to determining the species. The book ends with a thorough glossary and several very useful diagrams illustrating much used anatomy.

Prior to the species accounts is a two-page spread illustrating the differences among the four subfamilies of flower flies. Having never attempted to key out one of these flies to species before, I used this twopage spread, largely with success. One then goes to the colour-coded section of the book for the appropriate subfamily to find their insect. And herein lies the one issue I have with this guide. Because there is no further key to identify the species, the reader may have to flip through quite a number of pages before finding their fly. The online Key to the Genera of Nearctic Syrphidae, co-authored by four of the six authors of this book as well as two others, should be downloaded and used in conjunction with the guide to identify your specimen to species.

The species accounts are well done. There are two per double-page spread, with text on the left and images on the right, allowing for rapid flipping while you're trying to find your fly. There is always a dorsal view and lateral view, sometimes more than one if the species is dimorphic. Other salient features, such as wing venation, facial structure, or leg characteristics are also shown, as needed, and nicely magnified. All the photographs are at least adequate, but most are crisp, often beautiful shots.

The text includes a size range, but the silhouette of the fly presented with each species gives a more rapid indication of size. An interesting series of icons that I've not seen before tells the reader if the insect can typically be identified by the unaided eye (surprisingly many), a hand lens or, ultimately, if a microscope will be needed. A map showing records, and usually a range estimate as well, does not restrict itself to the geographic scope of this book, but includes all of North America. The text includes flight times, abundance, and identification tips; I couldn't think of anything else that a field guide should have.

Overall, this is a very nice book that, in conjunction with the online key, will do its job quite well.

## Literature Cited

Miranda, G.F.G., A.D. Young, M.M. Locke, S.A. Marshall, J.H. Skevington, and F.C. Thompson. 2013. Key to the Genera of Nearctic Syrphidae. Canadian Journal of Arthropod Identification 23: 23 August 2013. https://doi.org/10.3752/cjai.2013.23

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