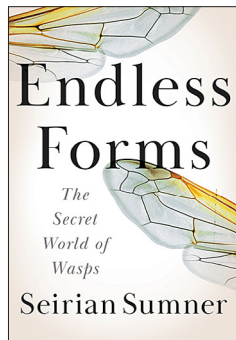


## ENTOMOLOGY

**Endless Forms: the Secret World of Wasps**

By Seirian Sumner. 2022. HarperCollins. 400 pages, 35.99 CAD, Hardcover, 14.99 CAD, E-book.

I have read several wasp books lately (who knew there were so many?), and this one stands out. It's not necessarily better than the others, but it is a good book with a different take on the subject. Although the content of the book is science-based, the tone is that of a storyteller delivering a message that is more consumable by a broader audience.



The classic taxon book (e.g., sharks, hover flies, dinosaurs, wasps) will typically include a few introductory chapters (e.g., evolution, adaptations, relationships to people). Then the bulk of the book will cover taxonomic groups—a family-by-family or species-by-species approach to looking at diversity. Classic books also have a lot of photographs ... rarely a page goes by without one or two pictures. Sumner's book is essentially all text, with two eight-page sections of beautiful pictures. She does not do the taxonomy thing; her book is eight chapters of perspectives on wasps and the entomologists who study them.

Aristotle was the first published entomologist who expounded on honeybees, but he also devoted many lines of his scrolls to wasps. Despite this, he posited that wasps were of no obvious value, especially compared with honeybees. This clear oversight had to be corrected, and Sumner does so in a chapter that describes a fantastical dinner between herself and the philosopher. This chapter is used to explain, in a lyrical fashion, some of the biology that Aristotle missed, including both older (but not as old as him) and modern advances. By doing this, Sumner brings the

non-entomologist reader up to speed as well. The creativity in this chapter alone makes the book an interesting read ... not to say the taxon-by-taxon approach isn't interesting. But Sumner's take is interesting in a different way, and, dare I say, it's refreshing.

Another brilliant chapter covers pollination. Move over bees, because wasps contribute as well (although not likely as much as the true flies [Diptera] do)!

Solitary male wasps are perfect for [pollination], as they have no sooner mated with one female (or attempted to do so with a female wasp mimic orchid) than they're off looking for the next. (p. 326)

Sumner reviews the literature on this and other topics and eloquently simplifies the findings for the non-specialist.

The two eight-page inserts of colour plates represent essentially all the non-text components of the book. The photographs are top quality and show a diversity of wasps in several facets of their lives, such as foraging for nectar, transporting prey, roosting, and ovipositing. My only wish here would be that there were more images.

There are times that diagrams would have been very useful. For example, Sumner uses a paragraph of text to describe the sting (often colloquially called "the stinger") when a diagram of that moderately complex, charismatic feature would have more easily enhanced the understanding of this structure in the reader's mind. There are a number of small errors in the book, such as equating eukaryotes with multicellular organisms (when, actually, eukaryotes also include some single-celled organisms, e.g., amoebas) and describing a newly hatched wasp (which is a larva arising from an egg) when referring to a newly eclosed wasp (which is the transition from pupa to adult). These errors give the knowledgeable

reader mental hiccups, but thankfully there are only a few.

A final, modest criticism I could raise is that of the deceptive title, *Endless Forms*. There are more than 90 families of wasps, with the 100 000+ species truly reflective of the epithet “endless forms”. However, this book dominantly uses examples from only one family, the Vespidae (which includes the familiar yellow

jackets, hornets, and paper wasps). Certainly a few others are mentioned, but too few to justify the title.

Overall, a splendid book!

RANDY LAUFF

Department of Biology  
St. Francis Xavier University  
Antigonish, NS, Canada

©The author. This work is freely available under the Creative Commons Attribution 4.0 International license (CC BY 4.0).