Ground Beetles of Connecticut (Coleoptera: Carabidae, excluding Cicindelini): An Annotated Checklist

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The Carabidae (“ground beetles”) are one of the largest families of beetles, and the largest family in the suborder Adephaga. In this field-guide-sized book, William Krinsky and Michael Oliver treat this diverse group for the state of Connecticut, providing information on the presence of 362 carabid species (9 of which are reported as new records for the state). Their work makes the carabids by far the best known beetle family for the state of Connecticut. They did not, however, include the Connecticut species of the carabid genus Cicindela. Nevertheless, the group is an enormous one; and these authors tackled a large job, despite the small size of Connecticut.

The cover bears a nice photograph of nine of the more eye-catching species found in the state (two of which aren’t native). The authors should be forgiven the charge of falsely advertising the beauty of carabids with this cover because it at least demonstrates, counter to my own prejudices, that not all carabids are dull in appearance.

The introduction provides a brief overview of the family, including aspects of morphology bearing on identification, biology, habitat diversity, and the value of carabid species as indicators of environmental change. In fact, this book is full of valuable conservation information.

The authors make clear, when possible, both the current abundance of the species listed and, if known, their past abundances—thus providing information on apparent declines of species (including increases of invasive species). As evidence of ecosystem change, they point out that despite considerable effort, 51 carabid species have not been found in Connecticut since 1950. Also included is a useful review of publications on the beetle faunas of various regions of northeastern North America. A few errors from the literature are noted, as well as several useful methods to collect specimens so that identifications can be checked if desired.

Three species are presented on every pair of pages, with a distribution map just opposite the species’ text. This juxtaposition of text and map adds greatly to the usability of the book and, in fact, makes it a pleasure to use compared with similar guide-style books in which maps are grouped together in a section separate from the text. For each species, the higher classification down to tribe is provided at the bottom of every page, which helps in browsing. Also easing navigation, the genus name is repeated with the map for each species, and each species is listed alphabetically by its epithet within its genus. Information on the species’ distribution in North America is provided also. All the genera are briefly described at their first appearance in the list, including natural history information, species counts, and other useful data.

True bionomic information, i.e., natural history—ecological information for each species, is sparse. Most of the text considered “bionomic” information is composed of anecdotal collecting notes indicating microhabitats in which specimens were found (e.g., “under beach wrack,” “along sand bar,” “sifting leaves,” “under particle board,” and my favorite, “bit collector’s wrist, farm lane, hot evening,” etc.). Some might consider this information trivial, but others, especially those who are just starting a study involving carabids, may find it quite helpful (although I don’t recommend holding one’s wrist out while walking on farm lanes during hot evenings as a reliable method to collect Clivina impressifrons).

A very useful feature of this book, absent from most checklists, is the presence of color plates, with at least one color illustration for each of the 71 genera. A minor criticism is that there are no scale bars to indicate size, nor are there page numbers listed with the species names for cross-referencing, but this detracts little from their obvious usefulness. The images are of pinned specimens rather than live adults, but they have wisely been subjected to Photoshop to have a uniform background. Most are adequate and quite useful illustrations of the dorsal habitus, in focus and properly exposed; although a few, particularly the smaller specimens, and especially the image of Polyderis laevis, are less so. However, the importance of these illustrations cannot be understated—I am sure many users of this guide, especially those in northeastern North America, will find these to be some of the only photographs available anywhere for carabids of their region.

The book remains a checklist, however, and readers should not expect to be able to use this book alone for carabid identification work (although it can certainly help in that endeavor, especially to the level of genus).

Workers in regions close to (or, of course, in) Connecticut will find this book useful in any attempt to study their own similar carabid faunas. In addition, the illustrations and genus-level information may be useful to anybody working with carabids, regardless of their...
region, because many of the included genera are widespread or even cosmopolitan. The format of the book is a vast improvement over the checklists of yesteryear and can act as a template for workers in other regions to improve their own efforts. To conclude, I recommend this book highly and hope that more large families of beetles will receive similar attention to bridge the gap between the primary taxonomic literature and the non-taxonomist users who wish to appreciate their local biodiversity.

References Cited


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The family Carabidae among the beetles is one of the largest in the world, with approximately 33,905 described species thus far, including Cicindelini (Bousquet 2012), with 2,635 species-group taxa reported from North America north of Mexico by Bousquet and Larochelle (1993). Although they clearly stated that it was not to be considered a state list, the annotated catalogue of the Maine Forest Service (MFS) collection by Dearborn and Donahue (1993) was apparently the first systematic list of the carabid fauna of Maine and included some 145 species that could be found in the state collection (including Cicindelidae, which they listed as a separate.