Introduction

This book is meant to be a basic field guide and reference about the butterflies (excluding the skippers) of the Great Lakes region. It has been compiled from many different sources, which are given in the references section and the acknowledgments.

Names: The systematics of even our best known butterfly species may be in a state of flux. We have chosen a system based largely on that published by The Butterflies of Canada.

Maps: The distribution maps in this book are meant to be general guides. The information on them is compiled from a number of different professional resources, listed in the references section and the acknowledgments. Some professionals may prefer the use of dots to denote the exact area of capture of specific specimens. This method is highly desirable but has several drawbacks. Typically, people collect where species have already been captured, thereby limiting new exploration (there are relatively few lepidopterists, professional or otherwise, and it is not possible for them to canvass the entire Great Lakes region). In addition, many specimens captured within a relatively small geographic area end up looking like a blob on a distribution map, and this may not reflect the entire distribution of the species. Instead, it reflects where the collectors have been. We decided to give a more generalized distribution because it is important for people to look for the Karner Blue, for example, not so much in a specific location but wherever its larval host plant actually grows. In that way, we have discovered several new populations of this butterfly in the last year alone. Maps can throw you off. It is better to understand the biology of the butterfly in question and look for it during the appropriate season within an appropriate habitat than to limit yourself to those locations where it has already been recorded.

Each species description is subdivided into the following five categories:

Adult Description: Each adult description is a complete description, not just a description of the "key" characteristics. We wanted to give a more thorough rendition of the description of each butterfly. Admittedly, some people may find this to be too much information. However, novices

should find these descriptions more useful and perhaps more prosaic than descriptions given in other guides.

Confusing Species: In this section, we give detailed descriptions of butterflies that may be confused with the species being described. It is difficult to determine how much information is necessary in this regard, because a novice may find, for example, that "every blue butterfly looks alike." Certainly, this is true in some regard, but a careful reading of the key characteristics and the complete species description should serve to separate most look-alike species. Be aware, however, that even the experts can be fooled and that classification of species is continuously changing, even as this book goes to press. In ten years or so, completely new species may be discovered within what we now classify as a single species. Be aware, also, that butterflies seem to know the difference even when we do not.

Adult Food Sources: Adult food sources range widely within many species, even within the Great Lakes region. It is important to document new adult food sources, but you can be certain that butterflies in a pinch will use whatever sources are available, including some very unusual resources. The listing for adult food sources is therefore by no means complete.

Adult Habitat, Behavior, and Ecology: Adults of a single species often exhibit stereotypical behavior. They may enjoy generally similar habitats, and their ecology may be relatively the same throughout their distribution. However, it is more likely that there is considerable variation in all of these categories, and it is important to document these differences within regions of distribution. We have much to learn, and everyone can contribute. A foolish person would claim to know everything about even our most common and well-studied butterflies. We truly have a long way to go.

Life History: Although most of the life histories of our butterflies appear to have been worked out, many are incomplete, and some are virtually unknown. Life histories may also vary somewhat depending on the location of the population of a given species of butterfly.

Larval Host Plants: This area of vital importance to the lives of butterflies is often the most poorly known. Butterflies are known to switch host plants or to use host plants previously unrecorded. Do not assume that host plants are well known for all species of butterflies. They are not, and there is a great need to document this stage of their life history in much more elaborate detail.