

Review

Nilsson, A. 1996: Aquatic insects of North Europe. A taxonomic handbook. — Apollo Books, 274 pp. ISBN 87-88757-09-9.

The book has been edited by Anders Nilsson, who has also written several chapters on beetles. In addition to him, the authors include ten well-known specialists. Volume 1, which is now available, contains the orders from Ephemeroptera to Lepidoptera. The last aquatic orders, Odonata and Diptera, will be discussed in Volume 2, to be published later in 1997. Truly aquatic insects can be found in altogether ten different orders. This means that scientists and amateurs of many specialties have faced the problem of identification of these special insects. Moreover, it has been a typical situation with almost every order that you can find a book dealing with the species on the British Isles or in Central Europe. Although many of these handbooks are really good, there is always one big problem: not all of the northern species are included in them. You hence have the laborious task of digging out the missing species from truly various sources. *Aquatic Insects of North Europe* is a book which obviously aims to solve these problems.

After the introduction, there is a list of all orders and families with their Latin, Danish, Norwegian, Swedish, Finnish and English names. The native names have become more important over the past few years, when awareness of nature has increased considerably among administrative people. The need to know the name used in the neighbouring countries has also increased, and this table is enormously helpful in this respect.

Aquatic insects have been presented mostly on the order level by different specialists. The first chapter deals with Ephemeroptera and the last with Lepidoptera. In discussing beetles, smaller groups are taken up at a time, but it is not a disturbing matter, just a question of expertise. Every group is first discussed thoroughly for ecology, morphology, methods, etc. The state of knowledge chapter records the recent changes in faunas and also tells about the gaps in knowledge, thus guiding new researchers to the targets which are worth scientific attention.

And then comes the most useful part of the book — the keys. The keys vary in the level down to which they go. Some present all the Nordic species, while some only present genera or even just families. The choice has been mostly dictated by the fact that nobody knows how to recognize the species in those poorly known groups! At any rate the keys seem to be clear and easy to use, thanks to the large variety of excellent pictures, both habitus ones and detailed figures. The keys have been given for both larvae and adults, which is a further feature increasing remarkably the value of this identification book.

At the end of each chapter, an impressive reference list grouped under the different titles is given, which makes it easier to find the reference the reader needs. Finally, there is also a checklist of all Nordic species, which is valuable for especially newcomers to the field. I would have pre-

ferred having the codes of the different countries in the same position throughout the list. It would have been easier to find the information on certain species and, what is even more important, it would have been more practical to make one's own notes about new records. We should not think that after this book everything is known and no new species are to be expected. On the contrary, I think that this excellent book will inspire many new researchers to get familiar with the world of aquatic insects and thus to make a wave of new records in the fields introduced by this book series.

The marking of synonymies varies between the groups both qualitatively and quantitatively. This is nothing dramatic, but could naturally have been checked to be similar in all lists. The number of synonymies is difficult to assess, because it varies notably and there are cases where a species has had a huge number of names throughout the decades. Personally, I would have expected a more thorough clarification of these names, because it is very important to know what name belongs to what species in certain literature. In the cases where the keys in this book lead up to the species level, there is naturally no further need to go through the old reprints and copies — you have it all between the same covers!

As it was already pointed out, the figures are excellent and make the use of the book very easy. They also take into account elderly readers in that they are fairly large. In fact, some of them may be too large even for the elderly. On the other hand, how much would the publisher have gained by printing smaller habitus pictures of stoneflies? So let us be happy that the publisher has been prosperous enough to give us enjoyable pictures, which have been drawn skillfully.

Some random tests with different keys showed their competence — all my identifications were right (they were checked by specialists!). While there have been more than 30 specialists working on the compilation of this huge work, there should be at least a double number of specialists to test all the keys and facts given there. But as I consider myself almost an average user, the book so far gives a really good impression. I am quite sure that highly specialised experts also find notable help from *Aquatic insects of North Europe*. Because of the changes in our environment, this book should also belong to every laboratory working on water environments. Similarly, students of high schools and universities should use this "Blue Bible". The book can be highly recommended to all amateurs dealing with or dreaming about aquatic insects.

The *Aquatic Insects of North Europe* can be ordered from Apollo Books, Kirkeby Sand 19, DK-5771 Stenstrup, Denmark for the really moderate price of 400 Danish crowns — those who order both volumes at the same time, will get an extra bonus of 100 crowns.

Juhani Itäemies