Nota lepid. 15 (3/4) : 271-275 ; 30.IV.1993 ISSN 0342-7536

Book reviews — Buchbesprechungen — Analyses

A natural history of the butterflies and moths of Shropshire. Adrian M. Riley. [viii] + 205 pp., 32 coloured plates, 17 text figures, incl. maps, 21.7 x 15.2 cm, paperback. Swan Hill Press, Shrewsbury, 1991. ISBN 1-85310-249-0. Price : £10.95.

This is a further British county list designed to promote the local recording of Lepidoptera. The county of Shropshire is situated west of the English Midlands on the Welsh border and is about the size of the province of Friesland in the Netherlands or the departement of Haut-Rhin in France. The best known places within the county are probably Shrewsbury (birthplace of Charles Darwin) and Ironbridge (birthplace of the Industrial Revolution). The habitat types are very varied, ranging from upland heaths and woodlands to limestone ridges and ancient mixed woodland. A total of 624 species of macrolepidoptera (56 butterflies) and 639 microlepidoptera have so far been recorded. However, the county of Shropshire has apparently been plagued by that all too prevalent affliction — a dearth of field lepidopterists. It is therefore to be expected that many more species, especially microlepidoptera, could yet be found. Such a list is therefore essential to inform potential recorders which species are known, which need to be re-discovered and which areas are under-recorded.

The short introductory chapters include information on the geography of the county (illustrated by 10 colour photographs), past and present recording and current conservation projects. For all species of macrolepidoptera the status up to 1908 (Victoria County History list) and subsequently is given. This is followed by the flight period within the county, the larval foodplants (denoted by an asterisk if confirmed from the county) and period of larval stage, and additional notes. The microlepidoptera are listed in Appendix I, with all known records being given, but with no further information. A full list of recorders is given, followed by a gazetteer of localities, bibliography, list of societies and indexes of scientific and English names.

The butterflies are of course rather better known and in 1985 a butterfly recording project was started by the Shropshire Biological Records Centre, although only one site is covered by the national butterfly transect recording scheme. Five species are considered highly endangered (*L. sinapis, A. adippe, C. minimus, P. argus* and *C. tullia*) and conservation work is being undertaken to prevent their disappearance from the county. Tetrad (2 × 2 km) maps are given for 34 species.

It is a pity that there is no list of species which have not been recorded in the last twenty years or so. However, one colour plate depicts 18 species

(reduced in size, but with no scale) which may now be extinct. These are *Phyllodesma ilicifolia* L., *Endromis versicolora* L., *Cyclophora annulata* Schulze, *Euphyia unangulata* Haw., *Semiothisa notata* L., *Hemaris tityus* L., *H. fuciformis* L., *Clostera pigra* Hufn., *Orgyia recens* Hb., *Atolmis rubricollis* L., *Eugnorisma depuncta* L., *Standfussiana lucernea* L., *Xylena exsoleta* L., *Jodia croceago* D. & S., *Craniophora ligustri* D. & S., *Cryphia muralis* Forst., *Apamea sublustris* Esp. and *Apamea pabulatricula* Brahm.

Twenty colour plates depict Shropshire butterflies in nature. A number of these plates are of very poor quality and could easily have been dispensed with. For instance, plate 30, which was also used on the front cover of the book, depicts a pale female *Pyronia tithonus*, a common butterfly in the county, in rather poor condition. If the money had to be spent, then better quality photographs of some of the very rare or under-recorded moths might have better fired the imagination of younger lepidopterists.

For a local list, more detail of the distribution of species within the county could have been expected ; for a large number of species the status is simply given as common throughout the county in suitable habitats. There is little attempt to compare the Lepidoptera of Shropshire with those of neighbouring counties, presumably due to the incomplete picture provided by the records. However, Shropshire lepidopterists are clearly heading in the right direction, as indicated by the initiative in producing tetrad distribution maps and the publication of this book.

Steven Whitebread

The scientific names of the British Lepidoptera — their history and meaning. A. Maitland Emmet. 288 pp., 8 monochrome plates, 23.4 × 15.6 cm, paperback. Harley Books, Colchester, England, 1991. ISBN 0-946589-35-6. Price : £25 (£50 hardback).

Lt. Col. A. Maitland Emmet studied classics at Oxford University and taught Greek, Latin and English at an Oxford school for most of his working life. He is also the leading amateur microlepidopterist in Britain and therefore ideally suited to write a book on the history and meaning of the scientific names of the British Lepidoptera.

The main body of the work, which is dedicated to the late 'Teddy' Pelham-Clinton, 10th Duke of Newcastle, is a systematic list of the British Lepidoptera, giving for each genus and species the derivation of the name in an interesting and informative manner. For names derived from Greek, the word is given in Greek characters, followed by its transliteration in Roman letters. Rules are provided at the beginning of the work to enable one to latinize these Greek words.

The author is quite right when he states that this is a book for the curious, and as lepidopterists tend to be curious by nature, they will find this book

fascinating. Most will already know of the marital aspects of catocaline names, but there are many other examples of the rampant imagination of 18th and 19th century lepidopterists. Modern lepidopterists on the other hand appear to have been less imaginative, although there are of course exceptions, e.g. *Monochroa moyses* Uffen, 1991.

Equally interesting and perhaps more useful is the introductory chapter 'A history of the scientific nomenclature of Lepidoptera', including sections on the names before Linnaeus, Linnean names and the scientific names of insects as used today. Appendixes are provided giving lists of people commemorated in the names of Lepidoptera (354), geographical names (37), unresolved names (35) and apparent errors (354) in Macleod's work *Key to the names of the British butterflies and moths* (1959).

Two statements cannot pass without comment. Following Kloet & Hincks (1972), Emmet treats generic names as genderless, rendering it unnecessary for the adjectival specific names to agree with the gender, even though this contravenes I.C.Z.N. Article 30. The reason given being (p.36) "... most modern taxonomists have 'small Latin and less Greek' and in consequence are unable to operate the rule." This is not a very good argument and I doubt whether it is the opinion of the author. It would not be difficult for taxonomists to learn to operate the rule. If the gender agreement is correct in standard check lists, then everybody will be able to use it correctly. To learn to use the rule may even take less time than to look up all the original descriptions to discover how the name was first spelled. In fact, apart from the English, most other Europeans are used to gender agreement in their own modern languages. On the other hand, one could also argue that once the original spellings are listed in a check list, they will also be known and would be used correctly, even if moved later to a genus of different gender. If a valid reason need be sought for changing the present rule then it would be that non-taxonomists such as ecologists and conservationists would not have to be classics scholars to use the scientific names of their objects of study correctly.

On p. 39 Emmet states "... continental taxonomists are readier than their English counterparts to jump to conclusions and introduce *nomina dubia* into the nomenclature." I would suggest that British workers are statistically less likely to introduce any new name into the nomenclature. There are simply many more taxonomists (of many different nationalities and leanings) on the Continent than in Britain. There are considerably more species in the rest of Europe than in Britain and many groups are still poorly known, with new species being continually discovered. There is therefore more scope for 'Continental' taxonomists. In Britain, however, the fewer species give fewer taxonomical problems with the result that the British now spend more time studying distribution, biology and ecology, at which they are experts. It would seem that the British take a lot of persuasion to accept any change in the nomenclature if it comes from the Continent. For instance, one name, *Coleophora betulella* Heinemann & Wocke, 1877, has just been accepted as a synonym of *C. ibipennella* sensu Stainton, 1858, 70 years after Sich

demonstrated this synonymy (EMMET, A.M., *Entomologist's Gaz.* 44 : 31-35, 1993) !

Steven WHITEBREAD

The Lepidoptera : form, function and diversity. Malcolm J. SCOBLE. xi + 404 pp., 4 colour plates, 321 text figures, 25.1 × 17.8 cm, hardback. Oxford University Press, Oxford & The Natural History Museum, London, England, 1992. ISBN 0-19-854031-0. Price : £45.

This is the first general text book devoted entirely to the Lepidoptera to have been published in English for many years and is a welcome addition to the repertoire of modern lepidopterological literature. It has, however, been written along similar lines to that of *Moths of Australia* by I.F.B. COMMON (for review, see *Nota lepid.* 14(3) : 292, 1991), but the present book only partly overlaps with the Australian work, as it places more emphasis on the form and function aspects and covers the Lepidoptera of the whole world.

The text is split into three parts. The first comprises five chapters, accenting form and function : the adult head, adult thorax, adult abdomen, immature stages, and hearing, sound and scent. The short part two covers the environmental and ecological importance of Lepidoptera. The diversity of form and function within the Lepidoptera is treated systematically in part 3. An introductory chapter includes a short essay on the classification of the Lepidoptera. The superfamilies and families are treated in four convenient, but not monophyletic, groups : 'Primitive Lepidoptera', 'Early Heteroneura', 'Lower Ditrysia' and 'Higher Ditrysia'. The treatment of each family follows the same pattern : description of the adult (with reference to at least one black and white photograph), description of the immature stages and biology. In addition, there are usually sections on subfamily classification and phylogenetic relationships.

The author describes the volume as a selective summary. Nevertheless, within the framework given by the title, the work is fairly comprehensive. If the reader wishes to go deeper into a particular subject, he is referred to the pertinent literature in the 768-strong list of references.

Due to the similarity with the Australian work, one cannot help comparing the two. Clearly, with respect to general morphology the present work is in a class of its own and will be an essential work of reference for lepidopterists and students of entomology. The systematic part can also be recommended, but the Australian work contains considerably more detail for the families that occur on that continent, i.e. 64% of the world fauna. The present book gives no figures to illustrate the typical characters of each family. Keys to superfamilies or families would have been useful, but are absent in both works, presumably because the classification of Lepidoptera at the family level is still a matter of much debate. Indeed, considerable differences are found in the two systematic lists : COMMON recognises 38 superfamilies and 119 families, whereas SCOBLE recognises 41 superfamilies, but only 107 families.

The black and white, and colour figures in the Australian book are superb. Unfortunately, the plates in the present work cannot be so described. The specimens have not been well chosen ; several are poorly set, lack antennae or have incomplete fringes. The photographs themselves are also sometimes of poor quality. Examples of these criticisms can be found for instance in fig. 195, depicting *Antispila pfefferella* [sic] and fig. 201, supposedly depicting *Stigmella aurella*, but appears to be an *Ectoedemia* sp. A little more care in the selection of these specimens would have greatly improved the appearance of the book. An obvious mistake can be found in the colour plates where fig. 9 of plate 1 is clearly not a specimen of *Strymonidia w-album*. Oddly, examples of both eggs, larvae and adults are illustrated on the colour plates, but no pupae !

Steven WHITEBREAD