BOOK REVIEW

Checklist of the Lepidoptera of the British Isles. Compiled and edited by David J. L. Agassiz, Stella D. Beavan and Robert J. Heckford. *Handbooks for the Identification of British Insects* [lacking volume number] iv, 206 pp. Royal Entomological Society and Field Studies Council, 2013. Price: £25.00

The initial print run (400 copies) of this publication sold out in under a week, certainly revealing a miscalculation by the publisher, but more importantly demonstrating eager demand for a most welcome and useful work. A new checklist of Lepidoptera of the British Isles was needed particularly acutely: in addition to the steady trickle of new discoveries made annually by the flourishing and active community of British lepidopterists since the last formally published British Isles list (that of Bradlev in 2000), there has been a better integration of nomenclature and taxonomic opinion across Europe as a whole, culminating in a massive change in the higher classification of Lepidoptera published in 2011. This last has come about as a result of intense collaborative research by scientists in many countries, using both novel (molecular genetics) and traditional techniques. Like it or not, the new classification and its accompanying nomenclature is regarded as robust and needs to be followed – at least until such a time as it is inevitably replaced by one with even better scientific credentials, for our approach to the classification of the natural world is arguably too optimistic ever to be really 'right' so much as 'current' and, in a statistical and objective sense, 'supported'. Indeed, this process of revision has already begun, as the controversial 2011 relegation of the traditional gelechioid groups Depressariidae, Ethmiidae and Parametriotidae as subfamilies of the Elachistidae has largely been abandoned, these taxa now usually again being accorded full family status – and this is followed here. While it will probably be greeted with widespread relief whatever the background, it is unfortunate that this reversion has been made without explanation or justification, as the Introduction strongly suggests that the checklist follows the system adopted by Fauna Europaea, which in these respects still follows the 2011 classification. Incidentally, a more minor tinkering with the classification of Yponomeutoidea stems from a recent study that is referenced, and that is right and proper. Despite a little roughness in passage, the main and most welcome thing is that, with this checklist, British entomologists now have an easy path to compliance with what many would otherwise find to be more irksome recent developments.

A checklist occupies a rather poorly defined intermediate position between a mere label list and a full catalogue, and the compilers will never please everybody in the position they choose along that continuum. The principle aim here was to reconcile the literature used in the British Isles 'in major works' since 1850 at species level, and this painstaking job has been done well. It is of course a tempting pastime to scour the list for minor errors and failures, but – especially as there seems to be very few (I did not notice any, though it would be miraculous in a work of this magnitude if there were none, and of course the words 'in major works' will excuse a few omissions) – it would be unseemly to be a nit-picking smarty-pants now, especially as I had not volunteered my services to help check and proof-read the list at a time when that kind of criticism would have been more useful. Instead, as the list is being maintained and updated electronically, it would be helpful for users to raise queries or report errors to the authors, as indeed they do request.

A new feature is the recognition of various parts of the British Isles as different recording areas: England (including the Isle of Man), Scotland, Wales, Ireland (the whole island) and the Channel Islands, with an additional category of being supposedly extinct, indicated as appropriate against each species. One might have asked for a separate entry for the Isle of Man (in view of its formal status outside the United Kingdom, let alone England, and more importantly because it has its own faunal and nature conservation concerns), but dividing the records in this way otherwise reflects current needs well. It also admirably trumps the question that vexes so many, of how to deal with Channel Islands residents not so far known from elsewhere in the British Isles. Another good move is the dividing off of adventive species, and questionable records, into separate lists as respectively Appendices A and B (identified as such via the main index, in which they are included).

In addition to some family-group names, groupings and other concepts that may be unfamiliar, the new checklist has several features that, while certainly to be welcomed as improvements for the long term, may take a bit of getting used to. The most obvious is a complete renumbering system to replace that devised in 1979: now each family recognised is numbered sequentially (from 1-74), with the included species in each given a 3-digit sequential number following the family number (and a point), starting each time with .001. The intention is that new additions will be accommodated by extending the 3-digit sequence by a further digit; and indeed the species in Appendix A have each been given a 4-digit number. The new scheme was devised in part to facilitate digital data handling, and the species numbers used in lists between 1979 and 2000 and followed until now are completely abandoned, as their sequence has become wholly useless in representing a greatly eclipsed classification – although for each species in its new classification (and hence against its new number) the number from the 1979/2000 sequence is also listed (although of course now in an even more shattered sequence than had already started to come about). This reference to the old system will be a useful temporary aid for recorders and others used to the old species numbers, but the new sequence is a great step forward in many respects: undoubtedly there will be some grumbles while the transition is imposed – but imposed it will be, so it is another thing to try to adapt to gracefully.

On the whole the authors have taken sensible decisions in other ways, too, though some may not be popular and at first sight may look too defensive - in particular the complete dumping of generic synonymy may not be welcomed, but in fact it seems optimal on the grounds that much of what had previously been listed is actually incorrect, because the type species of two (or more) genera placed as synonyms in earlier lists were often not in fact congeneric, even according to the contemporaneous – let alone modern – classification. To try to incorporate strict (rather than misconceived) generic synonymy in the face of a still fast-evolving generic classification would have courted too short a shelf-life, and the wise advice in the introduction to the present list is, essentially, do not discard your Kloet & Hincks 1972 (and indeed Bradley 2000), or alternatively go to a regularly updated website (referenced in the Introduction), if you want to look for names and details not in the current list or trace previous interpretations. Talking of shelf-life, a good demonstration that checklists inevitably quickly go a little bit out of date came before most of us had even got our copies, as in the very next issue of the Entomologist's Record the welcome rediscovery in England was separately announced for two species listed in the checklist as supposedly extinct (45.024 Oxyptilus pilosellae (Zeller) and 49.118 Aethes margarotana (Duponchel) ... see how the family numbers (45 and 49) might become helpful). It is particularly difficult to achieve consensus on the best treatment of subspecific names, as they do have a formal status in nomenclature and generally speaking taxa so identified might be strong candidates for eventual recognition as full species (these niceties sometimes being very subjective, if not arbitrary). In the Introduction the authors express their reluctance to get into subspecific issues, but inevitably they have had to – I think on the whole successfully, via the notes (given for a variety of other reasons, too) for indicated species that follow taxonomic opinion published elsewhere; which of course in itself might or might not be accepted by all.

One thing that European lepidopterists in general seem to have freed themselves from is the ICZN *Code* in respect of Articles 31.2, 34.2 and 48 which stipulate that (where appropriate) endings of species-group names must be changed when transferred between generic names of different gender, and this recent tradition is continued here (perhaps enviably so for many of us involved in other groups whose practitioners have not rebelled). So too is the provision of vernacular names, but mercifully not more widely so than are already in existence, and an index to them is included.

All in all the content of this list is admirable and, although quite demanding for some activities of the British lepidopterist community, there are considerable benefits in its new approaches. Even if the changes, especially in following the classification, now expected of us are considerable, they could have been a good deal worse (for example if the ICZN *Code* was obeyed in full), so it is to be hoped that the checklist will be as warmly embraced, and indeed its compilers and various helpers thanked and congratulated, as seems to me to be warranted.

However, I do have some gripes concerning its production. The book conforms to the current series of the Royal Entomology Society's Handbooks for the Identification of British Insects – of which it is a part, though lacking a part or volume number. Thus it is generous in its spatial layout, and consequently very large - I can understand the arguments for a large typeface and an uncluttered appearance in the key-work *Handbooks*, but this is a reference work of a different kind, probably to be used most often beside a keyboard, or with pen and paper in hand, with much flickering between pages, and possibly alongside another book, notebook or sheaf of paper. So $29.5 \times 21 \times 1.1$ cm as against the $22.5 \times 15 \times 0.9$ cm of the 1972 Kloet & Hincks, especially with the rather higher nomenclatural inclusion of the latter (though neither English names nor divisions of the distributional record), seems a lot bigger and mostly not really necessary. Further, like the current Handbooks, the present version is printed on thick, somewhat glossy paper with a shiny card cover - again, I can understand the need for durability, but the weight (805 g) is massively more than the old Kloet & Hinks (255 g). Even the similarly sized 2000 Bradley list was only 400 g, and much less unwieldy. With my increasingly arthritic hands, and judicious use of spectacles and a table lamp, I quickly discovered that I would have far preferred a smaller, lighter, and less slippery volume even while just writing this review – and I suspect that even those among us with better hands and worse eyes than mine might come to agree.