BOOK REVIEW

Ireland Red List No. 2 – Non-Marine Molluscs by A. Byrne, E.A. Moorkens, R. Anderson, I.J. Killeen & E.C. Regan. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin 2009. ISSN 2009–2016 50p A4 comb bound. Available for free download from www.npws.ie.

It is good to see non-marine molluscs being given such prominence by the Irish Government's National Parks and Wildlife Service – Ireland Red List 1 dealt with water beetles, while Red List 3 deals with terrestrial mammals. The Red Lists are a new initiative and use the 2003 *Guidelines for Application of IUCN Red List Criteria at Regional Levels.*

The starting point of this project was the creation and population of the Irish Non-Marine Molluscan Database. Data already held by the Conchological Society of Great Britain and Ireland was made available and amalgamated with the local data sources. Records from Northern Ireland and held by the CEDaR database were also made available. The Red List is therefore underpinned by tens of thousands of records taken by hundreds of recorders. The 150 mollusc species regarded as native in Ireland were all evaluated and a preliminary list of species of 'Least Concern' formed of species known to be widespread and not significantly declining, as well as those known to be expanding their range. This was then checked and adjusted by regional experts. This left 80 species which were then evaluated during a Red List workshop held in April 2009 in Dublin. The outcome is as follows: two species considered to be extinct in Ireland, five critically endangered, fourteen endangered, twenty six vulnerable, six near threatened, and the rest of least concern or data deficient. Thus 47 out of 150 native species (almost 30%) have a threat status. All of this activity was funded by the Northern Ireland Environment Agency, the Heritage Council, the National Parks and Wildlife Service and the National Biodiversity Data Centre in County Waterford.

The IUCN criteria are concerned with threat rather than rarity per se, and the main criterion used was A2 (a continuing observed or estimated population decline). The year 1980 was chosen as the point from which to assess decline. The decline assessment was based on the percentage decline in number of 10 km records between pre-1980 and post-1980 taking into account the difference in total number of 10 km square records between the two time periods. The final decision, however, was made using expert opinion as well as the data available, for example, whether a lack of records was related to lack of recording effort or an absence of the animals from searched sites. This is a very interesting approach, and a controversial one. Interestingly a very similar approach was suggested for soldier beetles by the reviewer (Alexander KNA 1999 The changing status of British Cantharidae *Coleopterist* **8** (1): 17–19) and this was soundly condemned (Bratton J 2000 Response to 'The changing status of British Cantharidae' *Coleopterist* **9** (1): 45–6). The key objection was that the dot map data is not sufficiently scientifically rigorous. It is encouraging that others are also now making the best of the very noisy distributional data available to us. Given that this is the only data available then it makes sense to find ways and means of using it in as meaningful a way as possible. Scientifically rigorous data will probably never be available for all of these species and yet progress in conservation needs to be made. The IUCN Red List criteria allow for 'observed, estimated, inferred, or suspected' population reduction and so it is perfectly valid to apply expert opinion to noisy datasets.

An important feature of the published Red List is the provision of the two date class dot maps for each of the 47 species with threat status plus the near threatened species, and so the publication also acts as a local distributional atlas for these threatened species. A short caption then comments on the distribution pattern across Ireland (and Europe where especially relevant), the main broad habitat associations, the extent of the documented decline, and the probable causes for that decline. Amongst the more striking declines are *Helicella itala* which has almost disappeared from much of inland Ireland through extensive and widespread damage to its semi-natural grassland habitat. *Pupilla muscorum* has been similarly

affected. The largest declines in recorded distribution are *Merdigera obscura* (75%) and *Spermodea lamellata* (73%), while it is estimated that at least 90% of the remaining Irish populations of *Margaritifera margaritifera* have such depleted water quality and river bed conditions that they will probably never breed successfully again. It is to be hoped that all of this data and evidence for severe declines will have an impact on the key decision makers.

The publication finishes with a checklist of the Irish species and a useful review of non-marine Red Lists across Europe. The latter includes a summary table of the European species statuses for all of the species on the Irish checklist, and with a full citation list. Keeping with the same species already mentioned, *Helicella itala* and *M. margaritifera* both feature across many European countries.

My only criticism is a very minor one – the use of the common name 'tree snail' for *Balea perversa* after the recent split. This name clearly relates to *B. heydeni* rather than *B. perversa*, which is noted as especially associated with old limestone or lime-mortared walls in Ireland. The authors should have proposed an alternative name, maybe rock spire snail?

This publication will be of considerable value to conservation professionals in Ireland and will also be of interest to local naturalists. Hopefully it will provide new impetus to the recording of these threatened species and the development of a greater appreciation of their habitat associations locally, as well of course promotion of sensitive conservation action. One might hope that it will also put to shame the UK Government's Joint Nature Conservation Committee's recent announcement that it will no longer be commissioning species status reviews.

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