

Book Review

Malkmus, R. (2004): *Amphibians and Reptiles of Portugal, Madeira and the Azores-Archipelago*. A.R.G. Gantner Verlag K. G., Rugell, Germany. 448 pages. ISBN N 3-94144-89-8 (hardcover). Price 85.60 euros.

Almost two years after the first announcement of the publisher, the long-awaited book of Rudolf Malkmus appeared to fill an important gap in the literature on the distribution of European herpetofauna. This attractive book, the first on the reptiles and amphibians of Portugal in English aims to portray "the current distribution range of the amphibians and reptiles inhabiting the territory of Portugal" while simultaneously emphasising "the context between recent distribution patterns and their historical, ecological and anthropogenic condition". It should be remarked that the author had previously published another monograph on the Portuguese amphibians and reptiles in German (Malkmus, 1995). Nevertheless, the new book is far from being a simple updated translation but presents a completely new treatment of text, cartography and illustrations. The result benefits from the accumulation of almost 30 years of field experience of the author providing a stunning collection of distribution data (mostly by the author), quality photographs, original ecological observation on the different species and relevant bibliography. It is generally well written, although there are a few examples of clumsy language (e.g. "hurled specimen", p. 117).

The introductory chapter, spreading through the opening hundred pages (!), merits special attention for relevant information on the different environmental factors determining species distribution (geography, geology, climate, vegetation and habitats). Especially useful are the original maps and others coming from the "grey literature", that are often hard to locate. It is completed by beautiful images of the various habitats of Portugal. Notes on classification, evolutionary history of Iberian herpetofauna and sites with fossils are also reported.

The bulk of the book, over 250 pages, deals with species accounts on distribution, systematics, natural history, habitat and conservation. In contrast with the previous Atlases (Crespo & Oliveira, 1989; Malkmus, 1995; Godinho et al., 1999), observation are given not only as 10*10 km UTM squares but if more recent than 1975 as 5*5 km. While not including considerable amount of new records in comparison with the previous book, these easily interpretable maps are an excellent and accurate compendium of previously published data. Species descriptions are generally excellent with extensive reference to the literature. A GIS treatment of these data probably awaits a more specialised publication.

Some minor inconsistencies can be found in the uncritical exclusion or inclusion of conflictive observations. For instance, the well-known isolate of *Rana iberica* in São Pedro de Moel (Paulo and Vicente, 1989) is not reported whereas a dubious citation of "*Iberolacerta*" *monticola cantabrica* in

Montesinho based only on collection specimens (Antunes et al., 2001) is assumed to be reliable. Similarly, two pages on *Gallotia galloti*, which as the author admits does not seem to be a breeding population on Madeira (Jesus et al., 2002) seem unnecessary since other similar cases just merit a few lines. Probably, the only weak point of the references is the genetic literature, where several key papers (e.g. Paulo et al., 2001; Godinho et al., 2003 for *Lacerta schreiberi*) are not included. Similarly the *Tarentola* found on the Selvagens islands based on DNA evidence is regarded as a subspecies of *T. boettgeri* (Carranza et al., 2000). The author notes this, but still refers to it as *T. bischoffi*. However, while such points are debatable the author does acknowledge these alternative points of view. One or two important new papers have also been published presumably after the book went to press. These include a genetic analysis of *Lacerta (Teira) dugesii* that confirms the distinctiveness of the populations from the Desertas islands (Brehm et al., 2003), and an analysis of *Tarentola mauritanica* that indicates this species might be introduced not just in Madeira, but to all continental Portugal (Harris et al., 2004).

The author concludes with an informative section on threats and conservation. Since he started field work in 1976, Rudolf Malkmus has had the dubious "privilege" of being witness to the consequences of an irresponsible management of nature in Portugal. The author's worrying statement that "a high percentage of the habitat destruction has been financed with EU funds" is accurate; macroprojects such as Alqueva (concluded) and Baixo Sabor (planned) river dams are especially damaging. Thus, while the book will undoubtedly delight herpetologists with an interest in this region of Europe, hopefully this message will also reach all politicians and decision makers involved.

D. James Harris and Miguel A. Carretero
Centro de Investigação em Biodiversidade e
Recursos Genéticos (CIBIO),
Campus Agrário de Vairão, 4485-661 Vairão,
Portugal

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