Thiesmeier, B. & U. Schulte (2010): Der Bergmolch – im Flachland wie im Hochgebirge zu Hause. – Bielefeld (Laurenti-Verlag: Beiheft 13 der Zeitschrift für Feldherpetologie, 159 (+ 1) pp., numerous diagrams and b/w photographs, ISBN 978-3-933066-42-8.

This is another little volume that provides a comprehensive, richly illustrated and easy to read monograph of a single species that forms part of our native herpetofauna. It informs the reader in detail on the appearance, variability, distribution, natural habitats, predators, reproduction, and conservation status of this widely distributed species. All these subjects are further subdivided under separate headers and leave hardly any question unanswered, or better to say, there is hardly any research result on this species that would not be mentioned. It is a remarkable feat of the authors that they have managed to portray all the different subjects listed above with the same thoroughness and competence, a fact that gives evidence of their having researched the existing literature in an excellent manner.

Amongst the native newts, the Alpine or mountain newt (*Mesotriton alpestris*) is remarkable in a number of ways. On the one hand, it poses few ecological demands and is able to not only reproduce in very small bodies of water, such as water-filled ruts and tyre tracks, in exceptional cases, but this type of spawning site even ranks second in frequency, e.g. in the Rhineland. On the other hand, it is the species of newt in which the phenomenon of neoteny is most often noted, i.e., the ability to remain at a gill-breathing larval stage, skip the metamorphosis to a lung-breather, and become sexually mature and reproduce at a larval stage. This ability, which is even obligatory in certain populations of Alpine newt on the Balkans, is much more rarely observed in the other three species of native newts.

Another, rather not so nice particular of the Alpine newts is that its scientific name appears to be less stable than those of the other newts. This problem of nomenclatural instability, which is unfortunately promoted in the present booklet, is something I would like to subject to a brief critical review here. Four years ago, modern genetic analyses showed that the aquatic newts of Europe and Asia minor, which used to be grouped in a genus known as *Triton* and *Molge* in earlier years and then remained stable in the genus *Triturus* for a long time, did not form a homogeneous phylogenetic group, but comprised various evolutionary clades, whose nearest relatives were to be found in genera outside of *Triturus*. This meant that *Triturus* was evidently paraphyletic and therefore needed to be dissolved. So far so good: The crested newt with its related forms was the only one to remain in *Triturus*, while the other species of *Triturus* had to be re-allocated to the oldest available generic taxa directly referring to them in accordance with the rule of priority. As a consequence, *Lissotriton* was revalidated for the common and palmate newts, and *Mesotriton* and *Ommatotriton* for the Alpine and banded newts, respectively. The desired conformity of phylogenetic knowledge with nomenclature was restored in the quest to create a natural system of the animal kingdom. The new names began to establish themselves once more, and major works appearing after 2004, which can be looked up in the bibliography of the present booklet, used *Mesotriton* for the Alpine newt in their titles. But: although the new generic name *Mesotriton* was now establishing itself, it had only been introduced in 1928, and it emerged recently that there was indeed a much older generic name for the Alpine newt that had been completely overlooked and never used. It originated from 1801 and was based on a marginally descriptive illustration of a larva dating back to 1768: *Ichthyosaura,* which is a rather confusing name for an amphibian. According to the rule of priority of the International Code for Zoological Nomenclature, *Mesotriton* ought to be formally replaced with *Ichthyosaura,* but this would not bring any gain to the knowledge of the phylogenetic position of the Alpine newt in the system. However, the Code – much like our constitutional law – has a preamble that states clearly that its mission and goal are to further the stability and universality of name-giving, while the priority rule would merely be a tool to serve this purpose. This means that stability is more important than priority, for which reason non-taxonomists in particular are strongly advised against uncritically accepting each and every suggested name change, especially if it is, as is the case here, just founded on a formality and not on heuristic grounds. Although Thiesmeier & Schulte state (on page 10) that it is as yet uncertain which name would establish itself in the end, they then side with *Ichthyosaura* in that they continue to use it exclusively throughout the further course of the booklet.

Even though this excursion into the rules of zoological nomenclature may have turned a little lengthy, it was a matter of particular importance to this reviewer. Two other points of taxonomic and nomenclatural relevance must also be mentioned here in brief:

1. The form of Alpine newt described from southern Italy, *inexpectatus,* is not considered valid and even presumed to be based on released specimens. Its discoverer, Dubois, on the other hand, recently (2009) suggested that it might represent a separate species.

2. The carefully edited text of the booklet contains hardly any typing errors. These are always entirely excusable, if they do not affect scientific names. If they do, they represent different combinations of letters and therefore different names in the sense of the Code. Thus, they turn into what is known as "erroneous synonyms" that unnecessarily burden the synonymy lists of the affected taxa. Here, there are three such instances: *Lanus* (instead of *Lanius*) *excubitor*, *Rana aravlis* (instead of *arvalis*) and *Triturus alopestris* (instead of *alpestris*).

All in all, and as was already said above, there is little else that could be criticized. Every chapter is heralded by a quotation from a prominent herpetologist, which fits its contents rather well in most cases. Preceding the chapter "Distribution", there is a quote from the great Robert Mertens (1894-1975), who stated in a paper published in 1925 that, based on Wolterstorff, he doubted the occurrence of Alpine newts in Spain; these were only recorded from there by Wolterstorff in 1932. Using a later quotation from Mertens would have made it unnecessary to point out his apparent misevaluation. With its unpretentious, but still very attractive cover, this 13th extra number ("Beiheft") of the "Zeitschrift für Feldherpetologie", which is published by the senior author, is a highly recommended source for everybody who seeks to inform himself in a comprehensive manner about one of our native amphibian species.

Wolfgang Böhme

Tilbury, C. (2010): Chameleons of Africa. An Atlas, including the chameleons of Europe, the Middle East and Asia. – Frankfurt Contributions to Natural History, vol. 37. Frankfurt am Main (Edition Chimaira), 831 pp., 803 colour plates including some distribution maps for genera, 97 coloured species distribution maps. ISSN 1613-2327, ISBN 978-3-89973-451-5.

This voluminous book provides an excellent overview of the non-Madagascan chameleons. Colin Tilbury is certainly one of the most famous and meritious students of African chameleons. He travelled a lot, driven by his ambition to find and photograph as many species as possible in their natural habitats. This also led him to the discovery of several species which had so far been unknown to science, among them, next to some pygmy ground chameleons, spectacular creatures such as *Trioceros balebicornutus*, a two-horned species from the Bale Mts., Ethiopia, or the single-horned species *T. conirostratus* from southern Sudan and *T. marsabitensis* from northern Kenya. The title of the book is a cool understatement because this volume is much more than an atlas; rather it is a true handbook, summarizing all currently existing information on each species and even subspecies. It gives local names (if any), notes on the type material and synonymy/chresonymy lists, explains the etymology of the scientific names, provides a detailed description including sexual dimorphism, hemipenis, colouration, and key distinguishing features. It discusses taxonomic problems, distribution ranges and natural history data including the conservation status of the individual taxa. Finally, specific references are given at the end of each taxon chapter. This wide range of information has been compiled for all of the ca. 100 species covered by this book, which illustrates also the great progress on chameleonid taxonomic research during the past few decades; and all this without including Madagascar where our taxonomic and overall knowledge about chameleons has also been considerably increased in the same timespan.

The overall, general knowledge about chameleons has also been extensively included in this handbook and forms the basis of the numerous introductory chapters. Subjects ranging from chameleon-typical adaptations like their unique vision, locomotion and the protrusible tongue are dealt with in the same concise, informative manner as, for example, ethnozoological subjects (myths and legends) and natural history issues.

Every topic, also in these general, introductory chapters, is illustrated with colour photographs that are as splendid as those in the systematic parts.

I found and find it extremely difficult, if not impossible, to spot errors or flaws in this voluminous work, which has been compiled and prepared with greatest carefulness. One minor detail is that *Chamaeleo africanus* is also known from Mauritania, which is not indicated in the map. It must, however, be mentioned that the progress of African chameleon research did of course not stop with the appearance of this work in 2010. For instance, *Kinyongia uthmoelleri artytor* and *Trioceros hanangensis* have been described from Tanzania, and *Trioceros perreti* has been extracted from the synonymy of *T. wiedersheimi,* and *T. serratus* elevated to species rank. On the other hand, *T. eisentrauti* has been downgraded to subspecies rank of *T. quadricornis*; *Rieppeleon* turned out to have its closest relative on the Seychelles (now *Archaius tigris*), and all this happened only in the same year of 2010 when the present work was published. These examples show how rapidly the development of chameleon taxonomy in Africa proceeds and will certainly continue to do so in the next years.

Colin Tilbury's handbook (not atlas) on African chameleons is a milestone in the literature on these fascinating lizards. Despite new results that are to be expected in the future, it will remain a major reference for many years to come; as a reference which does not only convince by its well-founded text, the carefully prepared coloured dot maps (it is of course also an atlas), but also its nice head drawings and the outstanding photography, which makes it not only an intellectual but also an aesthetic delight to read.

Wolfgang Böhme

Largen, M. & S. Spawls (2010): The amphibians and reptiles of Ethiopia and Eritrea. – Frankfurter Beiträge zur Naturkunde 38, Edition Chimaira, Frankfurt am Main, Germany, 693 pp., ISBN 978-3-89973-466-9.

I should start by saying that I have been waiting enthusiastically for several months for this book to be published. And in fact, when I had the book in my hands at long last, I was immediately impressed with this 693 page, extremely heavy guide to the amphibians and reptiles of one of the most poorly known areas of Africa. The book provides accounts/descriptions for nearly all species (see taxonomic comment below) occurring in these two countries. For each taxon, a short description, distribution map, comments on habitat and ecology, and – for most species – an impressive photograph is provided. Even for very rare and underrepresented species, like, e.g., *Agama hartmanni*, the authors provide a species account with nearly all available information. Moreover, the book also includes species keys and an introduction dealing with the zoogeography and habitat structure of the two countries.

In their preface, the authors state that the book is designed to make the beautiful amphibian and reptile fauna of Eritrea and Ethiopia more easily accessible to the interested public. As the authors point out, the fact that information on many species is lacking or incomplete is not due to their incompetence – a clear understatement – but because, as mentioned above, many species of the region have never been studied, and the authors provide an important summary of the information known to date. And, unlike other reports from Ethiopia or Eritrea, it is obvious that the authors know the countries very well and have spent considerable time there in the field. However, for my part, I would like to add to the conservation chapter that also some of the agamid lizards should probably be classified as vulnerable, as, e.g., *Xenagama* species are affected by the international pet trade and are endemic to the Horn of Africa. Moreover, being xeric species, climate change may have a more severe impact on their habitats.

Unfortunately, the authors somehow devalue their own efforts by using a 20-year old and now outdated taxonomy. I feel that taxonomic changes introduced in recent years should be acknowledged and used, provided they are generally accepted. A short section in the introduction deals with the relative significance of scientific names and common names; it is obvious that the two authors disagree on this point, since one of the authors used up-to-date taxonomy in other publications. I also feel that in a field guide, the full scientific name (including authors' names and year of publication) should be given; this is lacking in the species accounts, although a list of these names is provided at the end.

Many important and groundbreaking recent taxonomic works were neglected in this book. The authors claim that the new classification will have little significance upon fieldwork, but this is a poor excuse; herpetologists and conservationists do need to know which species they are dealing with. For example, within the amphibian study by Frost et al. (2006), which is still under debate, some reallocations are questionable, but the split between *Bufo* and *Amietophrynus* is supported and broadly accepted. Therefore, all *Bufo* species mentioned in the book should be referred to the genus *Amietophrynus,* with the exception of *B. pentoni* and *B. dodsoni,* now placed in the genus *Poyntonophrynus*. Similarly, the taxonomy of the genus *Uromastyx* is not "confused" anymore, as Wilms et al. (2009) published a phylogeny of all species and placed the easternmost species in the resurrected genus *Saara*.

Many papers on African Agaminae have been completely overlooked. It was demonstrated that *Agama agama* is not present in Ethiopia or Eritrea, being almost certainly restricted to Central Africa (Leaché et al. 2009, Wagner et al. 2009a). Actually, the species account of *Agama agama* in this book actually refers to two distinct species: *Agama finchi* (illustrated in Fig. 147) and *Agama lionotus* (Fig. 148). Böhme et al. (2005) described *A. finchi* from western Kenya and separated the East African agamas from the *Agama agama* complex. This point of view has been proven later by Leaché et al. (2009) and Wagner et al. (2009b). Consequently, the distribution map actually shows the ranges of two species in the area, and the western localities should be referred to *A. finchi*, whereas the southern localities refer to *A. lionotus*.

Chamaeleo africanus does not occur in Ethiopia or Eritrea, and the species described and figured (Fig. 171) is instead referable to *Chamaeleo calcaricarens*. It has been convincingly demonstrated by Macey et al. (2008) that *C. calcaricarens* and *C. africanus* are not conspecific and moreover the same picture is correctly used in Tilbury's (2010) 'Chameleons of Africa' published at the same time by the same publisher.

The authors accept the split of the chameleon genus *Rhampholeon* and correctly describe *Rieppeleon kerstinii* as present in Ethiopia. However, they do not recognize the scincid genus *Trachylepis* (species referred to "*Mabuya*" in the book), the genus *Mochlus* (species referred to *Lygosoma* in the book; see Wagner et al. 2009c) or *Afroablepharus* (species referred to *Panaspis* in the book; see Schmitz et al. 2005), even though the re-allocations of these genera have been accepted by most herpetologists. Moreover, the splitting of the Gekkonidae into several families (e.g., Gamble et al. 2008) is neither recognised, nor mentioned. The authors use the name *Lacerta vivipara* in the introduction to the Lacertidae, but this taxon has been referred to as *Zootoca vivipara* for more than a decade now.

Notwithstanding these taxonomic weaknesses, I am quite very happy to have this book as it represents the best overview and review of the information available about the amphibians and reptiles of this area of northeast Africa to date.

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