

Stuart, S., M. Hoffman, J. Chanson, N. Cox, R. Berridge, P. Ramani and B. Young (eds.). 2008. **Threatened Amphibians of the World**. xv + 758 pp; numerous colour photographs; Lynx Edicions, Barcelona, Spain; IUCN, Gland, Switzerland; and Conservation International, Arlington, USA.

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This large volume represents a summary of years of assessments on the status of amphibians worldwide by the Global Amphibian Assessment (GAA). Under GAA, the conservation status of 6000 known species was assessed by over 500 herpetologists. This assessment resulted in 1900 species being considered as threatened; each of these species is treated in some detail in the book.

The book opens with 11 introductory chapters covering 134 pages. The first is an introduction to amphibians, with taxonomy, reproduction, physiology and behaviour. Chapters 2–4 deal with the rationale behind saving amphibians, history and methodology of the GAA and the state of world amphibians. Next there are overviews of amphibians of six geographic realms, and a final chapter on amphibian conservation. Each chapter is followed by a series of brief essays by herpetologists, each less than one page in length, expanding on some aspects of the chapter's subject matter.

The meat of the book lies in the next section, some 550 pages, containing accounts of all threatened species. Ten pages are devoted to extinct species, 460 deal with globally threatened species, and 36 with near threatened species, followed by a 50 page bibliography. Species accounts are grouped four per page, although a small few have more space.



Accounts include a photo (for most but not all species) and a distribution map. The text contains sections on range, population status, habitat and ecology, threats, conservation measures, citations and names of data providers. Accounts are arranged alphabetically by family, and by genus within families, making it easy to find any species (but see paragraph on systematics below).

The accounts are a valuable resource, containing almost all available information about these admittedly poorly known species. Although the individual accounts are brief, they contain citations of all pertinent literature, allowing readers to find more detailed information.

The book ends with 50+ pages of appendices and an index. The appendices cover topics from the criteria used to evaluate the status of amphibians through annotated lists of endangered species, vulnerable species, and species of least concern to a glossary and list of

websites. I found these appendices to be a useful source of summarised information, from which an interested reader can obtain more detailed data. The index contains genus, species and common names, but is not consistently in alphabetical order. For example, under “C”, one finds “ch” after “cy”.

Reading the book can be discouraging. A reader quickly learns that the greatest danger to amphibian populations is human activity, although disease and other stochastic events can also have detrimental effects. Many species have very restricted ranges, making them extremely vulnerable to any disturbance.


This discouragement is somewhat countered by the numerous conservation efforts that are being carried out to the benefit of amphibians. Captive breeding efforts are mentioned in the most detail.

The editors’ application of recent systematic revisions may confuse some readers. The introductory chapters follow recent revisions by Frost *et al.* (2006), Grant *et al.* (2006), and Glaw and Vences (2006), and the phylogenetic tree on page 22 reflects these revisions. However, the species accounts are arranged differently, using an older systematic organisation; e.g. *Allobates* and *Anomaloglossus* are placed in the genus *Colostethus*, which in turn is in the Dendrobatidae. The editors state that their classification of families follows Frost (2004), yet the cryptobatrachid genera *Cryptobatrachus* and *Stefania* are placed in the Leptodactylidae, following Faivovich *et al.* (2005).

The distribution maps and literature are a valuable resource. One difficulty about the latter is that the references for each chapter are listed at the end of the chapter, and are not necessarily included in the Bibliography section, which apparently contains only those references used in the species accounts. A centralized comprehensive bibliography would be more easily searched.

The font used in the book is a small, yet legible sans-serif. It is obvious that some thought went into selecting the smallest possible

readable font. Use of a larger font would have increased the size (and cost) of the book considerably.

In summary, “Threatened Amphibians of the World” is the result of a tremendous effort by the global herpetological community. Participants, and especially the coordinators and fundraisers, deserve our thanks. The book itself is a hugely useful resource, whose value greatly surpasses its few shortcomings. 

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## References

- Faivovich, J., C. F. B. Haddad, P. C. A. Garcia, D. R. Frost, J. A. Campbell, and W. C. Wheeler. 2005. Systematic review of the frog family Hylidae, with special reference to Hylinae: phylogenetic analysis and taxonomic revision. *Bulletin of the American Museum of Natural History* 294: 1–240.
- Frost, D. R. 2004. Amphibian Species of the World: an Online Reference. Version 3.0 (22 August 2004). Electronic Database accessible at <http://research.amnh.org/herpetology/amphibia/index.php>. American Museum of Natural History, New York, USA.
- Frost, D. R., T. Grant, J. Faivovich, R. H. Bain, A. Haas, C. F. B. Haddad, R. O. de Sa, A. Channing, M. Wilkinson, S. C. Donnellan, C. J. Raxworthy, J. A. Campbell, B. L. Blotto, P. Moler, R. C. Drewes, R. A. Nussbaum, J. D. Lynch, D. M. Green, and W. C. Wheeler. 2006. The amphibian tree of life. *Bulletin of the American Museum of Natural History* 297: 1–370.
- Glaw, F. and M. Vences. 2006. Phylogeny and genus-level classification of mantellid frogs (Amphibia, Anura). *Organisms, Diversity and Evolution* 6: 236–253.
- Grant, T., D. R. Frost, J. P. Caldwell, R. Gagliardo, C. F. B. Haddad, P. J. R. Kok, D. B. Means, B. P. Noonan, W. E. Schargel, and W. C. Wheeler. 2006. Phylogenetic systematics of dart-poison frogs and their relatives (Amphibia: Athesphatanura: Dendrobatidae). *Bulletin of the American Museum of Natural History* 299: 1–262.

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