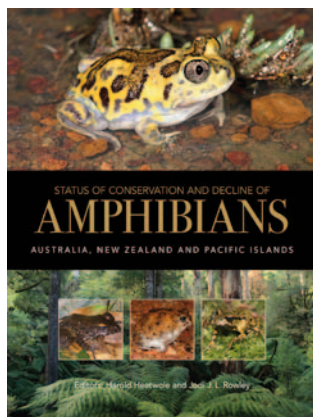


# Status of Conservation and Decline of Amphibians: Australia, New Zealand and Pacific Islands

Editors: Harold Heatwole & Jodi J.L. Rowley  
CSIRO Publishing, ISBN 978-1-4863-0838-5, hardback, pp.248



In Australia, there are 240 known native frog species but as this book notes, 'in the past decade alone, 21 new species, representing 9 % of Australia's known frog fauna have been discovered'. In contrast, New Zealand has only four native frog species. The Pacific Islands have 30 known species and more are expected with further research, for example in the Solomon Islands. On first

glance, this is a medium sized, glossy, hardbacked book where a Shoemaker frog *Neobatrachus sutor* catches the eye on the front cover. It is a collaborative work by twenty-nine authors focusing on informing the reader of the conservation status and decline of frogs in the Eastern Hemisphere. It is separated into fourteen chapters with the plates, which include photographs, charts, graphs and maps are placed altogether between Chapters 12 and 13. Tables are embedded in the text in each of the chapters. The aim of the book is to collate data to help plan future research projects and implement successful conservation programmes.

The book is dedicated to Dr Harold Cogger, a devoted, award winning, herpetologist who "...freely shares his knowledge, expertise and enthusiasm for reptiles and amphibians". Following the Introduction, Harold Cogger gives an overview of data gathering methodology, species richness and range centres, the different frog families, conservation legislation and the creation of Action Plans. The chapters that follow encompass threats in the bioregions of Australia including disease, invasive species, climate change, habitat destruction and fragmentation due to logging and agricultural clearing. Chapter six discusses the current status, decline and how these threats are mitigated in south-eastern mainland Australia and Tasmania. One of the major threats being chytrid fungus *Batrachochytrium dendrobatidis*, the key host reservoir of which is the common eastern froglet *Crinia signifera*. Several options to mitigate chytrid disease are described including captive breeding, habitat management, and the monitoring and control of introduced predators, both aquatic and terrestrial. The authors explain the struggle to implement viable conservation programmes that are both consistent and able to achieve long-term goals. The subsequent six chapters echo this content for other areas of Australia, including a chapter devoted to the impacts of the alien cane toad *Rhinella marina* by Richard Shine. An

objective of the book, as noted in the preface, is to focus on mitigating human attributed threats rather than the 'natural forces beyond the control of mankind'. The last two chapters deal in a similar manner with New Zealand and then the Pacific Islands.

In previous books in the series, photographs are embedded in text (Busack & Heatwole, 2013; Heatwole, & Indraneil, 2014; Heatwole & Wilkinson, 2015) which may appeal more to readers rather than having to search for plates. Nevertheless, the plates are filled with diagrams and charts most of which have colour elements. The photographs are good quality showing life stages and habitats. The maps give a great visual representation aiding further understanding of spatial distribution. Comparisons regarding species-richness can be seen indicating the easterly side of Australia having more richness in the temperate zones (Plate 2.3). There is an impressive wealth of knowledge and incorporated literature used in this collaborative work. Harold Heatwole has been the editor and an author throughout the series showing his dedication to the sharing of this knowledge.

This book can be purchased online from CSIRO for AU\$160 (about £93) but there are a few other retailer options where prices may vary. At this price it is not a book that everyone could afford but is a 'must have' if you are a herpetologist concerned with the conservation of amphibians in this part of the world. There aren't any other books encompassing this amount of collective information on this subject.

## REFERENCES

- Busack, S.D. & Heatwole, H. (eds.). (2013). *Status of Conservation and Decline of Amphibians: Northern Africa*. Basic and Applied Herpetology, Asociacion Herpetologica Espanola, Madrid; 128 Pp.
- Heatwole, H. & Indraneil, D. (eds.). (2014). *Status of Conservation and Decline of Amphibians: Conservation Biology of Amphibians of Asia*. Natural History Publications (Borneo), Kota, Kinabalu; 382 Pp.
- Heatwole, H. & J.W. Wilkinson (eds.). (2015). *Status of Conservation and Decline of Amphibians: Southeastern Europe and Turkey*. Pelagic Publishing, Exeter, UK; 158 Pp.

SUZANNE SIMPSON

Hadlow College, Animal Management Unit, Ashes Lane,  
Tonbridge, Kent TN11 0AL, UK

Email: suziesimpson0@gmail.com

Received: 29 November 2018