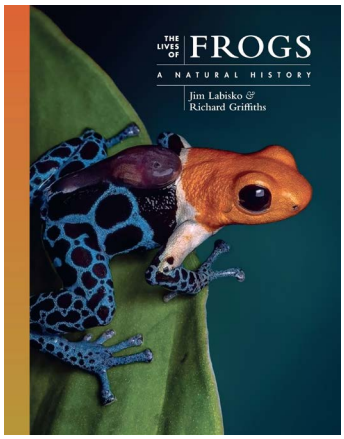
The Herpetological Bulletin 174, 2025: 47–48
BOOK REVIEW

https://doi.org/10.33256/hb174.4748

The Lives of Frogs: A Natural History

Jim Labisko & Richard Griffiths
Princeton University Press, 2025
978-0-691-25501-9, 288 pp.



'The Lives of Frogs', part of 'The Lives of the Natural World' series from Princeton University Press, was written to celebrate the fascinating lives and diversity of frogs, and it's ten chapters do just that. Frogs are found on every continent except for Antarctica, and it is not surprising that within the Foreword, the narrative begins in the idyllic Valée de Mai Nature Reserve in the Seychelles, a site that is very close to the hearts of the authors who have been studying the tiny sooglossid frogs that occur there. In fact, it is clear from the start that much of the contents of this tome are derived from decades of firsthand experience studying, conserving and appreciating frogs.

The Introduction starts by answering the age-old question; what is the difference between a frog and a toad? The authors also delve into the etymology of words that amphibian lovers probably use quite often but have never paused to think about. And this sets the tone for the rest of the book where the authors impart a wealth of knowledge and clearly communicate science in accessible language. While they do not shy away from scientific terminology, terms are always masterfully explained in a manner that enlightens the reader. In this way, the authors lead the reader on a journey which succinctly explores and explains concepts such as evolutionary trade-offs, population dynamics and speciation.

Each of the ten, richly illustrated chapters provides the reader with an introduction to the major themes and include several double-paged species profiles to highlight a suite of expertly selected species which perfectly exemplify some of the concepts previously introduced in the chapter. Many of the frogs highlighted are charismatic species with which most nature enthusiasts will likely be familiar such as the red-eyed treefrog *Agalychnis callidryas*, Surinam toad *Pipa pipa* and strawberry poison frog *Oophaga pumilio*. However, we are also introduced to species that many will have likely never heard of before such as the mutable rainfrog *Pristimantis mutabilis*, Izecksohn's Brazilian treefrog *Xenohyla truncata* and marbled snout-burrower *Hemisus marmoratus*. Each of these profiles provides a thoroughly researched account of the species, often with some pretty mind-blowing facts. For example, did you know that the northern burrowing frog *Neobatrachus aquilonius* forms a watertight cocoon of up to 229 layers of shed skin to protect it from the harshest droughts? Or even that the female common frogs *Rana temporaria* can reject the advances of unwelcome males by rotating their bodies, imitating the call of a male and even pretending to be dead! These nuggets of information have added to my lifelong appreciation of amphibians and reminded me that despite being an active amphibian researcher there is still so much to learn about these fascinating creatures.

'The Making of Modern Survivors' covers the rise of tetrapod vertebrates and the relatively recent explosion of neobatrachid frog diversity. Labisko and Griffiths demonstrate how frogs survived the meteorite which wiped out the dinosaurs and exploited new opportunities, moving into the trees after forests recovered at the beginning of the Paleogene. The authors go on to use examples from recent scientific literature, including their own research, to illustrate how frogs ended up being where they are today.

'Life on Land and in Water' explores the challenges frogs face living in different habitats and further explains how they have overcome these challenges, e.g. by some frogs emitting ultrasonic calls in noisy stream habitats and how some aquatic frogs living in permanent waterbodies have a lateral line system. 'Communication and Reproduction' explains how frogs communicate, why they call and how they hear and goes on to cover visual communication and frog weaponry - the images showing an African bullfrog *Pyxicephalus adspersus* biting a Wellington boot were a real treat. 'Eggs, Tadpoles and Parenting' astounds the reader with the diversity of reproductive strategies, modes, larval morphology and the extraordinary lengths that frogs go to in order to ensure their offspring survive. 'Getting Around' discusses how frogs move and navigate and also touches on invasive species such as the green frogs (genus *Pelophylax*) in the UK. 'Food and Feeding' not only covers the mechanics of feeding, it also delves into foraging strategies and diets. Although most frogs are generalist predators, the authors once again introduce us to some quirky specialist frogs such as the genus *Paracassina* which are mollusc specialists. 'Defenses Against Predators and Pathogens' is a fascinating read which explains evolutionary trade-offs and highlights the importance of antimicrobial peptides to frogs and also to humans. The penultimate chapter 'Ups and Downs of Frog Populations' covers topics such as survival strategies, dispersal and some of the latest methods to study amphibian populations, this lays some important groundwork for the final chapter, 'Frogs in the Future'.

Personally, I found 'Frogs in the Future' the highlight of this book. Whilst most books discussing the bleak issue of global amphibian declines simply provide a summary of the threats and a load of depressing statistics, Labisko and Griffiths go on to discuss the importance of raising the profile of frogs, how we can improve the protection offered to frogs and their habitats and a summary of how conservation initiatives have benefited some amphibian species as well as some of the hurdles these initiatives face. They also demonstrate how some of the latest advances in science and technology are being used to better understand and protect frogs. This chapter is written with authority and is based on decades of hands-on experience in the field of frog conservation. Whilst reading I couldn't help but reminisce about my days as a student when I had the pleasure of attending Richard Griffiths's MSc lectures and leaving inspired and ready to save frogs.

'The Lives of Frogs' has a very useful glossary and signposts the reader to some very useful resources such as other books, scientific papers, useful websites and weblinks for relevant societies and organisations, empowering the reader to learn more or even become involved in frog research and conservation.

'The Lives of Frogs' clearly conveys the obvious passion that the authors have for frogs, and it is infectious. It is jampacked with a mind-boggling number of startling facts. It is also highly educational, drawing upon a wealth of scientific data and engaging case studies that explain why frogs have adopted the forms, strategies and behaviours that they have. I would challenge anyone to read this book and not be in awe of frogs. All in all, this is a succinct, beautifully illustrated and well researched book and a must have for all batrachophiles. Equally, it deserves a place on the shelf of anyone with an interest in or appreciation of wildlife.

BENJAMIN TAPLEY
Zoological Society of London, Regent's Park, London, NW1 4RY
E-mail: Ben.Tapley@zsl.org