

Book Review

The Allure of Fungi

Alison Pouliot. CSIRO Publishing, Clayton South, Vic., Australia, 2018. xi + 268 pp. Price AUD\$ 49.99 (Paperback). ISBN 1486308597.

An efficient strategy to dissuade people from the idea that science is intrinsically difficult and distant from their daily life is to embed scientific content in a personal narrative. One outstanding example is Alison Pouliot's 'The Allure of Fungi', a fascinating journey through the fungal world, the role of fungi in the ecosystem and how they are perceived by humans, framed by a quest to resolve the complex dynamics around these relationships. Drawing on her personal passion for these attractive but elusive organisms, Pouliot's work includes the viewpoint of many fungi lovers (scientists, farmers, forayers, traditional owners). The book looks at what we know about fungi and their importance for terrestrial ecosystems, and contrast that to how western culture, especially the Anglophone world, traditionally perceives them, offering a unique view of the mycological world that transcends ecological value to highlight the cultural meaning of the human–fungus relationship.

While this book is aimed at non-scientists, Pouliot's storytelling does not sacrifice scientific accuracy. Indeed, the author succeeds in condensing clearly the complexity of the cultural and ecological significance of fungi in a way that is easy to understand for non-specialists, yet scientifically developed and organised. The first chapter introduces the reader to the fungal world, from the historical Australian *mycophobia*, to the rediscovery of the value of fungi as key players in ecosystem processes as well as a focus of interest for many passionate mycologists, naturalists and amateurs. Chapter 2 uses the peculiarities of the first fungus named in Australia (the anemone stinkhorn *Aseroë rubra*) to cleverly expose the unique characteristics of the members of the kingdom Fungi (their structure, nutrition, morphology and associations), allowing even the non-expert reader to appreciate the complexity of fungal natural history and evolution. Chapter 3 unravels the diverse habitats where fungi thrive, while Chapter 4 ventures into the specialist fungal lexicon, exploring the relationship between the development of mycological terminology and common perceptions (often misperceptions) around fungi.

Drawing on the author's encounter with a farmer in the Victorian Central Highlands, Chapter 5 examines

Australian public opinion about fungi, where the urgency to manage and preserve the uniqueness of the Australian mycobiome often clashes with the inherent fear and aversion of the Anglophone world to fungi. Chapter 6 and 7 outline distinct approaches in understanding fungi, from the structured methodology of the Linnaean nomenclature adopted by scientists, to the pragmatic knowledge of farmers and Aboriginal people, finishing with the author's very personal sensorial experience with fungal olfaction. Chapter 8 of the book explores the word of forayers and forays, and how geography and cultural background shape the human–fungus relationship in different parts of the world. The author then concludes her journey into the fungal world by reviewing current approaches and strategies for fungal conservation, offering her view on how current policies should reconcile with the social imaginary around fungi.

As clearly stated in the introductory chapter, this book 'is not a manual on how to save the fungus kingdom', rather, Pouliot's work is 'a return to the dirt, to the senses and to fungus–human interactions, as a way to confront these challenges in the hope we might remember that we are part of one ecology'. The organization of the book itself is an homage to the evocative charm of fungi. Each chapter contains a set of colourful pictures organised in thematic sections (e.g. fungal mycelia, spores, caps, etc.) that fully capture the imagination of the reader. Through entertaining anecdotes on encounters with a wide range of fungi amateurs – dedicated mycologists and fungal ecologists, chefs, hikers, farmers, traditional owners – the book engages the reader with fascinating chronicles of the author's fungi-seeking activities, creating a connection between the disparate people who collect and love fungi all over the world.

Ultimately, this book fits within the increasing attention of both the scientific and non-scientific communities paid to the world of fungi. Indeed, just like the recently released Kew's 'State of the World Fungi' (<https://www.kew.org/state-of-the-worlds-fungi>) report that outlined how important fungi are to all life on Earth, Pouliot's work is a timely reminder of the marvels of fungi, and that globally coordinated policies for fungal conservation are essential to ensure they are preserved for future generations.

ELEONORA EGIDI

Hawkesbury Institute for the Environment, Western Sydney University, Sydney, New South Wales, Australia
E-mail: e.egidi@westernsydney.edu.au