UCLA

UCLA Previously Published Works

Title

THE HIDDEN UNIVERSE: ADVENTURES IN BIODIVERSITY

Permalink

https://escholarship.org/uc/item/0980b683

Journal

QUARTERLY REVIEW OF BIOLOGY, 98(3)

ISSN

0033-5770

Authors

Longcore, Travis Antonelli, Alexandre

Publication Date

2023

DOI

10.1086/726478

Copyright Information

This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at https://creativecommons.org/licenses/by-nc-nd/4.0/

Peer reviewed

The Hidden Universe: Adventures in Biodiversity Alexandre Antonelli

The dust cover informs readers that Alexandre Antonelli, director of science at the Royal Botanic Gardens, Kew is "one of the world's most cited scientists," and indeed he is, one of Clarivate's Highly Cited Researchers in 2021 and 2022. Along with that accomplishment, he has fit in a 276-page volume in 2022 for the mass market, with tales from his "adventures in biodiversity." It is organized in four parts – a description of biodiversity from genes to ecosystems, reflection on the values of biodiversity (to humans, to nature, and "for itself"), the threats to biodiversity (habitat loss, exploitation, climate change, and other hazards and dangers), and saving biodiversity (split between structural change and personal behaviors).

Anyone who has taught ecology or biogeography at the university level knows many of the examples and arguments in the book. The book introduces the names and short summaries of work by researchers from around the world who are not already in the biodiversity "canon" – those examples used many times before. The text is moved along by personal stories from Antonelli, which are the most interesting parts for those already familiar with the topic. The book excels as a non-polemical, thorough introduction to biodiversity conservation, with follow-up references suitable for the educated public.

Antonelli covers a wide intellectual territory, with just about every topic, from threats to solutions, getting some treatment, including roads, light pollution, *Batrachochytrium dendrobatidis* and declining amphibians, compositing, the benefits of bicycling, and the need to vote for appropriate political leaders. It is ambitious in scope, motivated by a desire to broaden the coalition of people working to save biodiversity. Indeed, the proceeds of the book are being donated to protect and restore rainforest in Brazil.

There is room for polishing, at least for consistency. Some topics are so simplified that they almost lose their meaning, such as the difference between biogeographic realms and biomes. Primary literature is cited in the further reading, but also Wikipedia and the Samantha Bee television show (on the need to conserve non-charismatic species). In his simplification, Antonelli is too sanguine for my taste on the impacts of industrial-scale wind turbines on birds but accurately points to the need for everyone to reduce energy consumption if nature is to stand a chance.

The book is a good, modern introduction to biodiversity conservation that educates without preaching. For educators, the descriptions of Antonelli's own research experiences and those recounted of his colleagues' work could provide some new breadth to material covered in introductory biogeography

and conservation biology courses and texts that goes beyond the usual canon and its demographics.

Travis Longcore UCLA Institute of the Environment and Sustainability