

Natural History and Ecology of Suriname

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BOOK REVIEW

NATURAL HISTORY AND ECOLOGY OF SURINAME.

Bart de Dijn (ed.). 2018. LM Publishers 480 pp.
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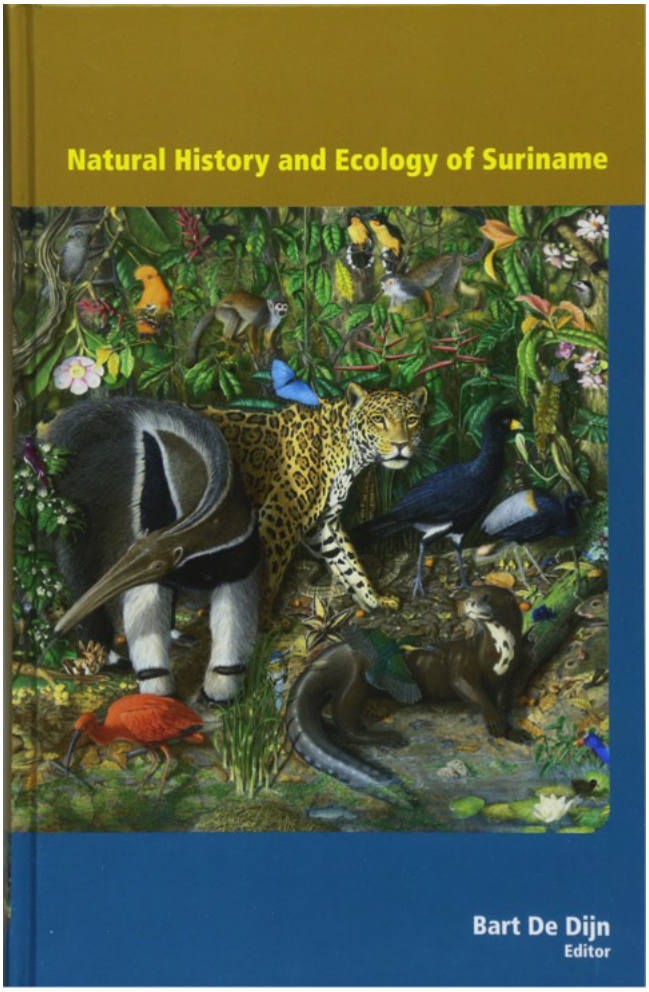
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A melting-pot of diversity in the Guiana Shield

This book pays tribute to the rich literature that results from a long history of colonization of Suriname by Europeans, along with many expeditions by zoologists and botanists, mainly Dutch explorers, but also English naturalists during the short period of occupation, then more international ones during the 70s-80s. That is why Suriname has always been an irreplaceable source of knowledge for students interested in the Natural History and Ecology in the Guiana Shield. Starting a career in the 80s-90s, a young tropical forest ecologist in the Guianas could hardly ignore the profusion of essential books, and peer-reviewed articles describing the Nature of Suriname. Four decades later, Bart de Dijn and other authors and contributors compiled and assembled the most basic knowledge in order to prepare the new generation of students in the neotropics to initiate novels escapade in the rainforests and along the clear-water rivers of Suriname, hopefully also beyond frontiers with French Guiana, Guyana and Amapa.

The editor is an entomologist, and an environmental consultant, an expert of the environment in Suriname where he has lived for nearly three decades. He graduated as Licentiate in Sciences, group Zoology, specializing in Systematics and Ecology at Ghent University, Belgium. Between 1990 and 2001, he held a position of lecturer and researcher at Anton De Kom University of Suriname (AdEK) and was until 2005 director of the Foundation for Nature Conservation in Suriname, mostly known as STINASU (Stichting Natuurbehoud Suriname). In 2000, we were together in Guyana with few other scientists without frontiers, he convinced me to cross the Maroni river border between the two former twin European-colonized territories. Having chaired the annual meeting of the ATBC, joint



with our Society for Tropical Ecology, in June 2008 in Paramaribo, it's a great pleasure to welcome such a volume, a decade later.

The book is organized as a textbook, with three major parts of unequal size, volume, and content. The first part

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introduces readers to the history of the country since the late 16th century until the new millennium, and provides essential elements of geology, climatology, biogeography and ecology to better understand how diverse and peculiar the country for naturalists is. Suriname indeed offers a rich variety of closed and open landscapes from the littoral and coastal plains with swamps and mangroves to the interior, including savannas and freshwater environments, outstanding granitic Inselbergs or Mountain outcrop, and other upland-plateau ecosystems. The second part comprises six lecturing chapters starting with a scholarly general introduction followed by one-page species account illustrating the six chapters on plants (50), insects and few other arthropods (30), freshwater fishes (32), Amphibians and Reptiles (35), Birds (30) and Mammals (30).

The chapters are authored by scientists based in Suriname for most of them, and international biologists and taxonomists with good acquaintance with biodiversity in the Guiana Shield contributed to additional species accounts. The top five (out of 11) institutional locations of authors and contributors are from Suriname (the host), the Netherland, French Guiana, USA, and Brazil, mirroring the network of interactions existing in the Region within the rest of the world. To end, a third part outlines the use, threat and future challenges for conservation in Suriname environment which, alike other countries in the Guiana Shield, is not free from an escalade of anthropogenic pressures, especially rampant mining and logging, and human-made hydroelectric dams along the main rivers.

Each species is introduced with a short notice, and illustrated with colored figures completing their description, distribution, uses and relative species. Together, this selection of 201 species "bio" depicts the charismatic biodiversity of Suriname – these are the "seeds" to be messaged to scholars in Suriname, but not only. Indeed, Suriname is a slice of the former vast land of the Guiana Shield and of the Amazonian Basin that was first inhabited, and preserved by indigenous people, later cut by the European colonizers, and many of the book content also hold for other neighbouring countries. Not all groups are treated with the same effort. Certainly, it would be impossible to present the hundreds or thousands of bird, fishes and plant species, respectively, not to think to millions of insects. Therefore, Bart de Dijn, and other authors and contributors selected the most emblematic and charismatic species of Suriname, those students may first encounter, eventually when entering the forest, by river or by land. It is also rather impossible to limit the study and description of the environment and biodiversity in Suriname to its unique national frontiers. The book organization and content testify that this knowledge lies on work done by many researchers from around the planet, and across borders within the Guiana Shield. Likewise, the book edited and authored by Bart de Dijn et al. compiled what is relevant in the literature and is a worth source of information to start a carrier in Naturel History and ecology, a book I wished I had in my hand 36 years ago!

The book can thus be considered as an introduction to the biodiversity of the Guiana Shield, from the viewpoint of scientists in Suriname. More experienced scholars will already have on their shelves filled with various books about the tropical forests of the Guiana Shield (Hammond 2005), including volumes on lianas (Hoffman and Ruysschaert 2017), palms (de Granville and Gayot 2014), orchids (Szalechetko 2017) and timber trees (Bhikhi 2016), on the historical biogeography of neotropical freshwater fishes (Albert and Reis 2011), and field guides to freshwater fishes (Mol 2012), Amphibians (Ouboter and Jairam 2012), birds (Spaans et al. 2018) and mammals (Emmons and Feer 1990), to name only a few. As an expert of animal-plant interactions in the Guiana Shield, I've found a number of mistakes and errors in the species account of my favorite study plant or animal species that would have required some more editions before printing. The fault is mine, since I should have accepted the invitation of Bart de Dijn to contribute to a book that I wished was accessible to non-English readers, maybe with a translation and local edition for each slices of the Guiana Shield.

LITERATURE CITED

Albert JS, Reis RE (eds) (2011) Historical Biogeography of Neotropical Freshwater Fishes, 1 edn. University of California Press

Bhikhi C (2016) Timber Trees of Suriname. An Identification Guide

de Granville J-J, Gayot M (2014) Guide des palmiers de Guyane. Office National des Forêt, Paris

Emmons LH, Feer F (1990) Neotropical rainforest mammals. The University of Chicago Press, Chicago

Hammond DS (ed) (2005) Tropical forests of the Guiana shield: ancient forests in a modern world. CABI International, Wallington, UK

Hoffman B, Ruysschaert S (2017) Lianas of the Guianas. A Guide to Woody Climbers in the Tropical Forests of Guyana, Suriname and French Guiana. LM Publishers, Volendam, The Netherlands

Mol JHA (2012) The Freshwater Fishes of Suriname. E. J. Brill, Leiden, The Netherlands

Ouboter PE, Jairam R (2012) Amphibians of Suriname. E J Brill, Leiden, The Netherlands

Spaans AL, Otte H Ottema OH, Ribot JHJM (2018) Field Guide to the Birds of Suriname. E J Brill, Leiden, The Netherlands

Szalechetko DL (ed) (2017) Orchids of the Guianas (Guyana, Suriname, French Guiana). Volume 1. Koeltz Scientific Books