

# Natureza & Conservação

## Brazilian Journal of Nature Conservation

ISSN 1679-0073

www.naturezaconservacao.com.br



FUNDAÇÃO GRUPO BOTICÁRIO  
DE PROTEÇÃO À NATUREZA

### EDITOR IN CHIEF

Jean Paul Metzger  
Universidade de São Paulo, Brazil

### ASSOCIATE EDITORS

Ana Luisa K.M. Albernaz  
Museu Paraense Emílio Goeldi, Brazil

Carlos Eduardo de Viveiros Grelle  
Universidade Federal do Rio de Janeiro,  
Brazil

Claudio B. Valladares-Pádua  
ESCAS/Ipê, Brazil

Cristina Banks-Leite  
Imperial College London, UK

Fernanda Michalski  
Universidade Federal do Amapá, Brazil

Guarino Colli  
Universidade de Brasília, Brazil

Javier Nori  
Universidad Nacional de Córdoba, Argentina

Jayme Prevedello  
Universidade do Estado do Rio de Janeiro, Brazil

José Alexandre Diniz Filho  
Universidade Federal de Goiás, Brazil

Leandro da Silva Duarte  
Universidade Federal do Rio Grande do Sul, Brazil

Luís Mauricio Bini  
Universidade Federal de Goiás, Brazil

Luiz dos Anjos  
Universidade Estadual de Londrina, Brazil

Marcus Cianciaruso  
Universidade Federal de Goiás, Brazil

Maria Alice S. Alves  
Universidade do Estado do Rio de Janeiro, Brazil

Maria Lucia Lorini  
Universidade Federal do Estado do Rio de Janeiro, Brazil

Paulo De Marco Jr  
Universidade Federal de Goiás, Brazil

Pedro H.S. Brancalion  
Universidade de São Paulo, Brazil

Rafael Loyola  
Universidade Federal de Goiás, Brazil

Ricardo Dobrovolski  
Universidade Federal da Bahia, Brazil

Rosane Garcia Collevatti  
Universidade Federal de Goiás, Brazil

Sergio R. Floeter  
Universidade Federal de Santa Catarina, Brazil

Sidinei M. Thomaz  
Universidade Estadual de Maringá, Brazil

### ADVISORY BOARD

Fábio R. Scarano  
Universidade Federal do Rio de Janeiro /  
Conservação Internacional do Brasil, Brazil

Gustavo A.B. da Fonseca  
Global Environment Facility, USA

Leide Yassuco Takahashi  
Fundação Boticário, Brazil

John Du Vall Hay  
Universidade de Brasília, Brazil

Miguel B. Araújo  
Imperial College London, UK  
Universidade de Évora, Portugal

Rogério Parentoni Martins  
Universidade Federal do Ceará, Brazil

Thomas Lewinsohn  
Universidade Estadual de Campinas, Brazil

Valério De Patta Pillar  
Universidade Federal do Rio  
Grande do Sul, Brazil

### ABECO

Av. Carlos Chagas Filho, no 791 – Ilha do Fundão  
21941-904  
Rio de Janeiro, RJ, Brazil  
www.abeco.org.br

"Natureza & Conservação" (Brazilian Journal for Nature Conservation) is a peer-reviewed scientific journal devoted to improving theoretical, methodological and practical aspects of conservation science. Until 2009, Natureza & Conservação was edited by the Fundação "O Boticário de Proteção à Natureza". From 2010 on, it became an official scientific journal of the new Brazilian Association for Ecological Science and Conservation (Associação Brasileira de Ciência Ecológica e Conservação – ABECO), with substantial support from the Boticário Foundation. The main goal of Natureza & Conservação is to communicate new research and conceptual advances in conservation science to different actors of society, including researchers, conservationists, technical officers and decision makers. Scientific papers should focus on new conceptual or methodological developments with practical implications, and case studies will be considered only if referred to more general contexts. Instructions to authors can be found at the following site: [www.naturezaconservacao.com.br](http://www.naturezaconservacao.com.br)

Natureza & Conservação is currently indexed in Web of Science, Periodica, CABI International, Latindex and Hapi.  
© 2016 Associação Brasileira de Ciência Ecológica e Conservação. Published by Elsevier Editora Ltda. All rights reserved.

All rights reserved and protected by law 9.610 - 19/02/98. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system, without permission in writing from ABECO and the Publisher. No responsibility is assumed by Elsevier Editora Ltda or ABECO for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions, or ideas contained in the material herein. Although all advertising material is expected to conform to ethical standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

Cover photo: Pedro H.S. Brancalion.

A 60-year-old restored riparian forest along the Jaguari river, Cosmópolis-SP, Brazil. The species-rich, well-developed vegetation structure has stabilized riverbanks, protected the watercourse against siltation, and provided habitat for wildlife in a very fragmented region dominated by sugarcane fields. Modifications in the Brazilian Forest Code of 1965, which resulted in the enactment of the Native Vegetation Protection Law of 2012, will hamper the recovery of some of these ecosystem services by allowing continuous farming in riparian buffers, without full recovery of native vegetation.



ELSEVIER

RJ: +55-21-39709300  
SP: +22-11-51058555  
Website: [www.elsevier.com.br](http://www.elsevier.com.br)



## ASSOCIAÇÃO BRASILEIRA DE CIÊNCIA ECOLÓGICA E CONSERVAÇÃO

ABECO, the Brazilian Association for Ecological Science and Conservation, was initiated in 2008 to assemble professionals engaged in the production and application of ecological science in Brazil – researchers, academics, and students. ABECO intends to promote the production and public understanding of scientific research of ecology at a high standard, and also to represent professional ecologists, and the knowledge they produce, within Brazilian society as well as internationally.

### **Executive Council (2013-2016)**

#### **President**

Valério de Patta Pilar  
Universidade Federal do Rio Grande do Sul – UFRGS

#### **Secretary**

Eduardo Vélez Martin  
Universidade Federal do Rio Grande do Sul – UFRGS

#### **Vice-President**

Márcia C.M. Marques  
Universidade Federal do Paraná – UFPR

#### **Treasurer**

Rosana Mazzoni Buchas  
Universidade do Estado do Rio de Janeiro – UERJ

Further information in: [www.abeco.org.br](http://www.abeco.org.br)