frontiers of biogeography
the scientific magazine of the International Biogeography Society
volume 8, issue 4 - december 2016
ISSN 1948-6596

frontiers of biogeography is published by the International Biogeography Society (IBS), an international and interdisciplinary society contributing to the advancement of all studies of the geography of nature.


frontiers of biogeography aims to be a forum for biogeographers and a way to disseminate research in biogeography to the general public; our scope includes opinions, perspectives, and reviews, symposia proceedings, research updates, interviews, and articles on how to teach, disseminate and/or apply biogeographical knowledge. Research letters and symposium proceedings may include novel analyses of original datasets (see editorial instructions). Manuscripts should be submitted via eScholarship at http://escholarship.org/uc/fb. Editorial enquiries should be made to frontiersofbiogeography@gmail.com, unless stated otherwise.

frontiers of biogeography uses a publication agreement based on the Creative Commons scheme to ensure that the authors retain full intellectual property (IP) rights on their work, and that this is freely available for any non-commercial use. Under this agreement, the IBS retains only the copyright of the journal compilation under a Creative Commons Attribution Non-Commercial No Derivatives (CCANCN) license. The authors have full IP over their texts under an universal Creative Commons Attribute License (CCAL), being able to distribute their work (including the original PDFs) actively from the day of publication, and passively from one year after (see the full license information at the end of the issue).


editorial board

default editor-in-chief:
Joaquin Hortal – Museo Nacional de Ciencias Naturales (CSIC), Spain

associate editors:
Jan Beck – University of Colorado Boulder, Museum of Natural History, USA
Jessica Blois – University of California at Merced, USA
Chris Burridge – University of Tasmania, Australia
Marcus V. Cianciaruso – Universidade Federal de Goiás, Brazil
Markus Eichhorn – University of Nottingham, UK
Roy H. J. Erkens – Maastricht University, The Netherlands
Suzanne Fritz – Biodiversity and Climate Research Centre (BfK-F) Seckenberg, Germany
Daniel Gavin – University of Oregon, USA
Michelle Greve – University of Pretoria, South Africa
Matthew J. Heard – Winthrop University (South Carolina), USA
Xiaolei Huang – Institute of Zoology, Chinese Academy of Sciences (China)
David G. Jenkins – University of Central Florida, Orlando, USA
Frank A. La Sorte – Cornell Lab of Ornithology, USA
Richard Ladle – Universidad Federal de Alagoas, Brazil and Oxford University, UK
Willem Renema – NCB Naturalis, The Netherlands

deputy editors-in-chief:
Michael N Dawson – University of California, Merced, USA
Richard Field – University of Nottingham, UK
Núria Roura-Pascual – Universitat de Girona, Spain
Spyros Sfenthourakis – University of Cyprus, Cyprus
Christophe Thébaud – Université Paul Sabatier, France
Marten Winter – German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Germany

editorial assistants:
Lauren Schiebelhut – University of California, Merced, USA
Joseph Bailey – University of Nottingham, UK

advisory board:
Miguel B. Araújo – Museo Nacional de Ciencias Naturales (CSIC), Spain and Universidade de Évora, Portugal
Lawrence R. Heaney – Field Museum of Natural History, Chicago, USA
David G. Jenkins – University of Central Florida, Orlando, USA
Richard Ladle – Universidad Federal de Alagoas, Brazil and Oxford University, UK
Mark V. Lomolino – State University of New York, USA

International Biogeography Society officers 2015-2016

President: Carsten Rahbek
President Elect: Dov Sax
VP for Conferences: Pedro Peres-Neto
VP for Public Affairs & Communications: Jacquelyn Gill
VP for Development & Awards: George Stevens
Secretary: Richard Field
Treasurer: Lois F. Alexander
Director-at-large: Kostas Triantis
Director-at-large: David Nogués-Bravo
Student-at-large: Fabriocio Villalobos

First Past President: James H. Brown
Second Past President: Mark V. Lomolino
Third Past President: Brett R. Riddle
Fourth Past President: Vicki Funk
Fifth Past President: Robert J. Whittaker
Sixth Past President: Lawrence R. Heaney
Seventh Past President: Rosemary Gillespie

Upcoming meeting host (ex officio): Ricardo Dobrovolski
Past Graduate student representative (ex officio): Leticia Ochoa-Ochoa