frontiers of biogeography
the scientific magazine of the International Biogeography Society
volume 3, issue 3 - November 2011
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 is available online at the IBS website: http://www.biogeography.org/html/fb.html

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, letters to the editor, book reviews, research updates, interviews, and articles on how to teach, disseminate and/or apply biogeographical knowledge. Letters to the editor and symposium proceedings may include novel analyses of original datasets (see editorial instructions). Manuscripts should be submitted to frontiersofbiogeography@gmail.com. Editorial enquiries should be made to the Editor-in-Chief at ibs@mncn.csic.es.

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 (CCANND) 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

editor-in-chief:
Joaquin Hortá – Museo Nacional de Ciencias Naturales (CSIC), Spain and Universidade Federal de Goiás, Brazil

associate editors:
Antje Ahrends – Royal Botanic Garden Edinburgh, UK
Jan Beck – University of Basel, Switzerland
Jessica Blois – University of Wisconsin, Madison, USA
Chris Burridge – University of Tasmania, Australia
Marcus V. Clanciarujo – Universidade Federal de Goiás, Brazil
Markus Eichhorn – University of Nottingham, UK
Roy Erkens – Universiteit Utrecht, The Netherlands
Camilla Flīggaard – Aarhus University, Denmark
Dan Gavin – University of Oregon, USA
Matthew J. Heard – Brown University, USA
David G. Jenkins – University of Central Florida, Orlando, USA
Frank A. La Sorte – Cornell lab of Ornithology, USA
Richard Ladle – Universidade Federal de Alagoas, Brazil and Oxford University, UK
Richard Pearson – American Museum of Natural History, USA
Thiago F. Rangel – Universidade Federal de Goiás, Brazil
Willem Renema – NCB Naturalis, The Netherlands
Núria Roura-Pascual – Universitat de Girona and Centre Tecnologic Forestal de Catalunya, Spain
Spyros Stenthourakis – University of Patras, Greece

deputy editors-in-chief:
Michael N Dawson – University of California, Merced, USA
Richard Field – University of Nottingham, UK

editorial assistant:
Lauren Schiebelhut – University of California, Merced, USA

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 – Universidade Federal de Alagoas, Brazil and Oxford University, UK
Mark V. Lomolino – State University of New York, USA

IBS V. P. for Public Affairs & Communications

International Biogeography Society officers 2011-2012

President: Lawrence R. Heaney
President Elect: Rosemary Gillespie
VP for Conferences: Daniel Gavin
VP for Public Affairs & Communications: Michael N Dawson
VP for Development & Awards: George Stevens
Secretary: Richard Field
Treasurer: Lois F. Alexander
Director-at-large: Catherine Graham
Director-at-large: Kathy Willis
Student-at-large: Ana M. C. Santos
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

Upcoming meeting host (ex officio): Kenneth Feeley
Past Graduate student representative (ex officio): Matthew Heard

cover: Flowering red buglosses (Echium wildpretii, also named tajinastes rojos in Spanish) in front of Mount Teide (Tenerife, Canary Islands). Photograph by Ana M. C. Santos.