Journal of Tropical Ecology

Editor

Ian Turner, Winchelsea, UK

Journal of Tropical Ecology publishes papers in the important and now established field of the ecology of tropical regions, either arising from original research (experimental or descriptive) or forming significant reviews. First published in 1985, Journal of Tropical Ecology has become a major international ecological journal. With clear, stimulating and readable reports of recent research findings, the journal provides a platform for the dissemination of information on all aspects of tropical communities and ecosystems

Price information

is available at: http://journals.cambridge.org/tro

Free email alerts

Keep up-to-date with new material – sign up at http://journals.cambridge.org/tro-alerts



Journal of Tropical Ecology is available online at:

is available online at: http://journals.cambridge.org/tro

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/tro



Environmental Conservation

International Journal of Interdisciplinary Environmental Science

Published for the Foundation for Environmental Conservation

Editor

Nicholas V. C. Polunin, University of Newcastle, UK

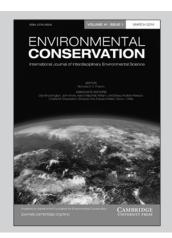
Environmental Conservation is one of the longeststanding, most highly-cited of the interdisciplinary environmental science journals. It includes research papers, reports, comments, subject reviews, and book reviews addressing environmental policy, practice, and natural and social science of environmental concern at the global level, informed by rigorous local level case studies. The journal's scope is very broad, including issues in human institutions, ecosystem change, resource utilisation, terrestrial biomes, aquatic systems, and coastal and land use management. Environmental Conservation is essential reading for all environmentalists, managers, consultants, agency workers and scientists wishing to keep abreast of current developments in environmental science. Selected papers are made freely available online as part of **EC Perspectives**.

Price information

is available at: http://journals.cambridge.org/enc

Free email alerts

Keep up-to-date with new material – sign up at http://journals.cambridge.org/enc-alerts



Environmental Conservation

is available online at: http://journals.cambridge.org/enc

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

Phone +1 (845) 353 7500

in New York:

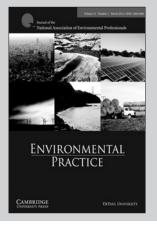
Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/enc



Environmental Practice

Published for the National Association of Environmental Professionals



Editor

Tim Stretton, Saint Mary's University, Canada

Environmental Practice provides a multidisciplinary forum for authoritative discussion and analysis of issues of wide interest to the international community of environmental professionals, with the intent of developing innovative solutions to environmental problems for public policy implementation, professional practice, or both. Peerreviewed original research papers, environmental reviews, and commentaries, along with news articles and points of view, link findings in science and technology with issues of public policy, health, environmental quality, law, political economy, management, and the appropriate standards for expertise.

Environmental Practice

is available online at: http://journals.cambridge.org/enp

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

Free email alerts

Keep up-to-date with new material – sign up at

journals.cambridge.org/register

For free online content visit: http://journals.cambridge.org/enp



CAMBRIDGE

JOURNALS

Journal of the Marine Biological Association of the United Kingdom

Published for the Marine Biological Association of the United Kingdom

Executive Editor

Dr. P. R. Dando, The Marine Biological Association of the UK, Plymouth, UK **Editor-in-Chief**

Michale Thorndyke, Royal Swedish Academy of Sciences, Sweden

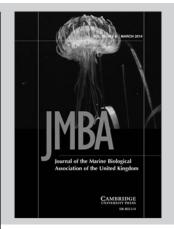
JMBA is an international journal, publishing original research on all aspects of marine biology. It includes pioneering work on major issues concerning marine organisms and their environment. Subjects covered include: ecological surveys and population studies of marine communities; physiology and experimental biology; taxonomy, morphology and life history of marine animals and plants; and chemical and physical oceanographic work.



is available at: http://journals.cambridge.org/mbi

Free email alerts

Keep up-to-date with new material — sign up at http://journals.cambridge.org/mbi-alerts



Journal of the Marine Biological Association of the United Kingdom

is available online at: http://journals.cambridge.org/mbi

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/mbi



Antarctic Science

Published on behalf of Antarctic Science Ltd, Cambridge

Editors

Laurie Padman, Earth & Space Research, Corvallis, USA Walker O. Smith, Virginia Institute of Marine Sciences, USA Alan P. M. Vaughan, British Antarctic Survey, Cambridge, UK David W. H. Walton, British Antarctic Survey, Cambridge, UK

Antarctic Science provides a truly international forum for the broad spread of studies that increasingly characterize scientific research in the Antarctic. The journal attracts papers from all countries currently undertaking Antarctic research. Whilst emphasising interdisciplinary work, the journal publishes papers from environmental management to biodiversity, from volcanoes to icebergs, and from oceanography to the upper atmosphere. No other journal covers such a wide range of Antarctic scientific studies.

Price information

is available at: http://journals.cambridge.org/ans

Free email alerts

Keep up-to-date with new material — sign up at http://journals.cambridge.org/ans-alerts



Antarctic Science

is available online at: http://journals.cambridge.org/ans

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/ans



Curing 'the bends'



CAMBRIDGE

JOURNALS

Oryx

The International Journal of Conservation
Published for Fauna & Flora International

Editor

Martin Fisher, Fauna & Flora International, UK

Oryx -- The International Journal of Conservation is a quarterly peer-reviewed journal of biodiversity conservation, conservation policy and sustainable use, and the interaction of these subjects with social, economic and political issues. The journal has a particular interest in material that has the potential to improve conservation management and practice, supports the publishing and communication aspirations of conservation researchers and practitioners worldwide and helps build capacity for conservation. Besides articles and short communications, Oryx regularly publishes reviews, forum sections and letters, and every issue includes comprehensive reporting of international conservation news.

Price information

is available at: http://journals.cambridge.org/orx

Free email alerts

Keep up-to-date with new material — sign up at http://journals.cambridge.org/orx-alerts



Orvx

is available online at: http://journals.cambridge.org/orx

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions_newyork@cambridge.org

For free online content visit: http://journals.cambridge.org/orx



Instructions for Contributors

Bird Conservation International publishes papers and communications on subjects relevant to the conservation of birds, with a general preference for those addressing international or high national priorities.

Submission of manuscripts. Electronic versions of papers should be submitted online at

http://journals.cambridge.org/BCI or, in exceptional circumstances, via email to bcieditor@bto.org. Please follow the guidelines in the Instructions for Authors.

Proofs. The corresponding author will receive, by email, page proofs for checking which they are required to return within three days of receipt. Textual changes in proof cannot normally be countenanced and the publisher reserves the right to charge authors for excessive correction of non-typographical errors.

Offprints. A .pdf proof of the published article will be emailed to the first author unless otherwise requested; printed copies may be purchased if ordered at proof stage on the form provided.

Copyright. Authors of articles published in the journal assign copyright to BirdLife International (with certain rights reserved) and a copyright assignment form will be sent to the author for signature on acceptance of a paper.

Printed in the UK by Bell & Bain

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Bird Conservation International

Contents

Diana V. Solovyeva, Peigi Liu, Alexey I. Antonov, Andrey A. Averin, Vladimir V. Pronkevich,	
Valery P. Shokhrin, Sergey L. Vartanyan and Peter A. Cranswick	393
Abundance and distribution of wintering Scaly-sided Mergansers Mergus squamatus in China:	
where are the missing birds?	
Mark Barter, Xuliang Zhuang, Xin Wang, Lei Cao, Jinyu Lei, Diana Solovyeva and Anthony D. Fox	406
Female tidal mudflat crabs represent a critical food resource for migratory Red-crowned Cranes in the Yellow River Delta, China	
Donglai Li, Yuging Ding, Ying Yuan, Huw Lloyd and Zhengwang Zhang	416
Rapid decline of the largest remaining population of Bengal Florican <i>Houbaropsis bengalensis</i> and recommendations for its conservation	
C. E. Packman, D. A. Showler, N. J. Collar, Son Virak, S. P. Mahood, M. Handschuh, T. D. Evans, Hong Chamnan and P. M. Dolman	429
Crop vegetation structure is more important than crop type in determining where Lesser Kestrels forage Carlos Rodríguez, Luis Tapia, Emanuel Ribeiro and Javier Bustamante	438
The range, abundance and habitat of Hinde's Babbler <i>Turdoides hindei</i> : fine-scale changes in abundance during 2000–2011 reflect temporal variation in scrub cover Phil Shaw, Peter Njoroge, Vincent Otieno and Edson Mlamba	453
Breeding to non-breeding population ratio and breeding performance of the globally Endangered Lear's Macaw Anodorhynchus leari: conservation and monitoring implications Erica C. Pacífico, Eduardo A. Barbosa, Thiago Filadelfo, Kleber G. Oliveira, Luís F. Silveira and José L. Tella	466
Defining the key wintering habitats in the Sahel for declining African-Eurasian migrants using expert assessment	
Philip W. Atkinson, William M. Adams, Joost Brouwer, Graeme Buchanan, Robert A. Cheke, Will Cresswell, Chris M. Hewson, Mark F. Hulme, Adam Manvell, Danaë K. Sheehan, Robert D. S. Small, William J. Sutherland and Juliet A. Vickery	477
An analysis of monthly home range size in the critically endangered California Condor <i>Gymnogyps</i>	
californianus	
James W. Rivers, J. Matthew Johnson, Susan M. Haig, Carl. J. Schwarz, L. Joseph Burnett, Joseph Brandt, Daniel George and Jesse Grantham	492
Terrestrial bird population trends on Aguiguan (Goat Island), Mariana Islands	
Fred Amidon, Richard J. Camp, Ann P. Marshall, Thane K. Pratt, Laura Williams, Paul Radley and Justine B. Cruz	505
Seasonal abundance and breeding habitat occupancy of the Orinoco Goose (<i>Neochen jubata</i>) in western Brazilian Amazonia	
Whaldener Endo Torhigen Haugassen and Carlos A. Peres	512

