**DESCRIPTION**

*Biological Conservation* is a leading international journal in the discipline of conservation science. The journal publishes articles spanning a diverse range of fields that contribute to the biological, sociological, ethical and economic dimensions of conservation. The primary aim of *Biological Conservation* is the publication of high-quality papers that advance the science and practice of conservation, or which demonstrate the application of conservation principles and policy. *Biological Conservation* invites the submission of research articles, reviews (including systematic reviews and perspectives), short communications, policy perspectives, and letters to the editor dealing with all aspects of conservation science, including theoretical and empirical investigations into the consequences of human actions for the diversity, structure and function of terrestrial, aquatic or marine ecosystems. Such papers may include quantitative assessments of extinction risk, fragmentation effects, spread of invasive organisms, conservation genetics, conservation management, global change effects on biodiversity, landscape or reserve design and management, restoration ecology, or resource economics. We also welcome papers coming from social sciences including those reporting on advances in conservation politics, ethics, policy, human social structure and biodiversity, and political culture among other subjects. *Biological Conservation* covers interdisciplinary topics within conservation biology and also provides practical applications of conservation research for land/resource managers and policy makers. We publish articles and thematic special issues that have a global relevance in terms of the topics or issues addressed, and thus demonstrate applications of conservation science and management beyond the specific system or species studied. Biological Conservation is an affiliate publication of the Society for Conservation Biology (SCB). SCB members can obtain a personal subscription to this journal through the Society.

**AUDIENCE**

Environmentalists, conservationists, botanists, marine scientists, ecologists, biologists, zoologists.

**IMPACT FACTOR**

2018: 4.451 © Clarivate Analytics Journal Citation Reports 2019
ABSTRACTING AND INDEXING

Environmental Periodicals Bibliography
Current Advances in Ecological Sciences
AGRICOLA
Embase
Engineering Village - GEBASE
Current Contents - Agriculture, Biology & Environmental Sciences
Energy Information Abstracts
Biological and Agricultural Index
Science Citation Index
Cambridge Scientific Abstracts
Elsevier BIOBASE
Scopus

EDITORIAL BOARD

Editor-in-Chief:
Vincent Devictor, University of Montpellier, Institute of Evolutionary Science (ISEM, UMR, 5554)

Editors:
Amanda Bates, Memorial University of Newfoundland, St John's, Newfoundland and Labrador, Canada
Richard Corlett, Chinese Academy of Sciences, Menglun, Yunnan, China
Graeme Cumming, James Cook University, Australian Research Council Centre of Excellence for Coral Reef Studies, Townsville, Queensland, Australia
Liba Pejchar, Colorado State University, Fort Collins, Colorado, United States
Lian Pin Koh, The University of Adelaide, Adelaide, Australia
Rafael Loyola, Universidade Federal de Goiás, Goiânia, Goiás, Brazil
Bea Maas, University of Vienna, Wien, Austria
Robin Pakeman, The James Hutton Institute Aberdeen, Aberdeen, United Kingdom
Richard B. Primack, Boston University, Boston, Massachusetts, United States
Tracey Regan, Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water & Planning, Heidelberg, Victoria, Australia
Robin Roth, University of Guelph, Guelph, Ontario, Canada

Book Review Editor:
David Johns, PO Box 725, McMinneville, OR 97218

Editorial Board:
Barry Brook, The University of Adelaide, Adelaide, Australia
Zuzana Burivalova, Princeton University, Princeton, New Jersey, United States
Regis Cereghino, Toulouse 1 University Capitole, Toulouse, France
Jin Chen, Chinese Academy of Sciences (CAS), Xishuangbanna Tropical Botanical Garden, Menglun, Yunnan, China
Enrico Di Minin, University of Helsinki, HELSINKI, Finland
Johan Ekroos, Lund University, Lund, Sweden
Markus Fischer, University of Bern, Bern, Switzerland
Travis Gallo, George Mason University, Fairfax, Virginia, United States
Kevin Gaston, University of Exeter, Environment and Sustainability Inst., Penryn, Cornwall, United Kingdom
Laurent Godet, Université de Nantes, UMR 6554-LETG-Nantes Géolittomer, Nantes, France
Varun R. Goswami, Wildlife Conservation Society India, Bangalore, India
Radim Hédl, Czech Academy of Sciences, Department of Vegetation Ecology, Brno, Czech Republic
Zhigang Jiang, Chinese Academy of Sciences, Beijing, China
Janice Ser Huay Lee, Nanyang Technological University, Singapore, Singapore
Pia Lentini, The University of Melbourne, School of BioSciences, Melbourne, Victoria, Australia
David Lindenmayer, Australian National University, Canberra, Australia
Hong Liu, Florida International University, Miami, Florida, United States
Rob Marrs, University of Liverpool, Liverpool, United Kingdom
Tessa Mazor, University of Queensland, Brisbane, Australia
Abraham Miller-Rushing, National Park Service, Acadia National Park, Bar Harbor, Maine, United States
Peter Moyle, University of California Davis, Davis, California, United States
Javier Nori, National University of Cordoba, Cordoba, Argentina
Daniel Oro, Instituto Mediterráneo de Estudios Avanzados, CSIC- Universidad Illes Balears, Esporles, Spain
Ludmila Rattis, Woods Hole Research Center, Falmouth, Massachusetts, United States
Christian H. Schulze, University of Vienna, Faculty of Life Sciences, Vienna, Austria
Anna Sher, University of Denver, Denver, Colorado, United States
Denis Allan Saunders, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Land and Water, Wembley Western Australia, Australia
Assaf Shwartz, Technion Israel Institute of Technology, Haifa, Israel
Steve Sinclair, Arthur Rylah Institute for Environmental Research, Department of Environment, Land, Water and Planning, Heidelberg, Victoria, Australia
Fernanda Thiesen Brum, Universidade Federal do Paraná (UFPR), Curitiba, Paraná, Brazil
Anne Toomey, Pace University, New York New York, United States
Serge Wich, Liverpool John Moores University, Liverpool, United Kingdom
GUIDE FOR AUTHORS

Your Paper Your Way
We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.
To find out more, please visit the Preparation section below.

INTRODUCTION
Please read all information carefully and follow the instructions in detail when preparing your manuscript.
Manuscripts that are not prepared according to our guidelines will be sent back to authors without review.

Biological Conservation encourages the submission of high-quality manuscripts that advance the science and practice of conservation, or which demonstrate the application of conservation principles and policy. Conservation implications should be clearly emphasized and discussed. Given the broad international readership of the journal, published articles should have global relevance in terms of the topics or issues addressed, and thus demonstrate applications for conservation beyond the specific system or species studied.

Types of paper
Word counts include text, references, figures and tables. Each figure or table should be considered equal to 300 words.

1. Full length articles (Research papers)
Research papers report the results of original research. The material must not have been previously published elsewhere. Full length articles are up to 8,000 words.

2. Review articles
Reviews summarize the status of research in a field of current interest. They may be submitted or invited. Review articles are up to 12,000 words and must include a methods section explaining how the literature for review was selected. We also consider Systematic Reviews, which apply a methodology to synthesize and appraise the scientific evidence on a specific question or hypothesis. More about systematic reviews can be found here: http://www.environmentalevidence.org/information-for-authors.

3. Perspectives:
These articles provide an opportunity for authors to present a novel, distinctive viewpoint on any subject within the journal’s scope. The article should be well grounded in evidence and adequately supported by citations but may focus on a stimulating and thought-provoking line of argument that represents a significant advance in thinking about conservation problems and solutions. Perspectives articles should not exceed 8000 words.

4. Short communications
Short communications highlight both novel research and replication studies that report preliminary findings that are particularly compelling and highly relevant to conservation science and practice. If submitting a replication study, please include in your cover letter the rationale for undertaking the study. Short communications should not exceed 4,000 words.

5. Policy Analysis
These are short commentary pieces on contemporary, internationally relevant conservation or conservation-related policy issues that enable researchers, policy makers, and practitioners to make timely contributions to policy debates and actions. Contributions are based on research, expert analysis, literature review, or practitioner reflections regarding specific policy issues. Pure opinion pieces will not be considered for this paper type. Forum articles should be written in an accessible style and supported by real world examples and/or referenced scientific evidence and should not exceed 4,000 words.
6. Fast-Tracked Papers
Fast-Tracked Papers may be any of the above paper types, but are to be submitted only upon invitation from the editors. These papers will be fast-tracked by having reviewers lined up by the handling editor in advance, and upon publication these papers will be showcased in an ongoing special issue.

7. Book Reviews
Book reviews will be included in the journal on a range of relevant titles that are not more than two years old. These are usually less than 2,000 words. Please submit your requests/ideas to David Johns at johnsd@embarqmail.com.

8. Editorials
Opinion pieces by experts on a topic, usually invited by the Editor. The topic is usually timely and offers important insights into the field.

9. Correspondence
Letters to the Editor (Correspondence) papers are responses to recently published papers. Letters must be short (a maximum 800 words) and include only key references (5 maximum) and one figure if necessary. The content must be constructive, discuss significant issues, and respectful in tone. Provided the editors agree that publication of the letter is warranted, it will generally also receive a response from the authors of the original article, and both letter and response will be published in the same issue.

**Submission checklist**
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:
- E-mail address
- Full postal address

All necessary files have been uploaded:
**Manuscript:**
- Include keywords
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print
**Graphical Abstracts / Highlights files** (where applicable)
**Supplemental files** (where applicable)

Further considerations
- Manuscript has been 'spell checked' and 'grammar checked'
- All references mentioned in the Reference List are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet)
- A competing interests statement is provided, even if the authors have no competing interests to declare
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

**BEFORE YOU BEGIN**

**Ethics in publishing**
Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.
Policy and Ethics
All appropriate ethics and other approvals were obtained for the research. Where appropriate, authors should state that their research protocols have been approved by an authorized animal care or ethics committee, and include a reference to the code of practice adopted for the reported experimentation or methodology. The Editor will take account of animal welfare issues and reserves the right not to publish, especially if the research involves protocols that are inconsistent with commonly accepted norms of animal research.

Conflict of Interest
All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also https://www.elsevier.com/conflictsofinterest.

Editors likewise require reviewers to disclose current or recent association with authors and other special interest in this work.

All sources of financial support for the project should be disclosed. This declaration (with the heading 'Role of the funding source') should be made in a separate section of the text and placed before the References. Authors must described the role of the study sponsor(s), if any, in study design; in the collection, analysis, and interpretation of data; in the writing of the report; and in the decision to submit the paper for publication. (In addition some funding organizations have particular policies to enable their grant recipients to publish open access in Elsevier journals - for more detail on this, please visit our Funding Body Agreements page.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

Changes to authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.
Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.
**Article transfer service**

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. [More information.]

**Copyright**

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' ([see more information](#) on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has [preprinted forms](#) for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' ([more information](#)). Permitted third party reuse of gold open access articles is determined by the author's choice of [user license](#).

**Author rights**

As an author you (or your employer or institution) have certain rights to reuse your work. [More information.]

**Elsevier supports responsible sharing**

Find out how you can [share your research](#) published in Elsevier journals.

**Role of the funding source**

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

**Funding body agreements and policies**

Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the gold open access publication fee. Details of [existing agreements](#) are available online.

**Open access**

This journal offers authors a choice in publishing their research:

**Subscription**

- Articles are made available to subscribers as well as developing countries and patient groups through our [universal access programs](#).
- No open access publication fee payable by authors.
- The Author is entitled to post the [accepted manuscript](#) in their institution's repository and make this public after an embargo period (known as green Open Access). The [published journal article](#) cannot be shared publicly, for example on ResearchGate or Academia.edu, to ensure the sustainability of peer-reviewed research in journal publications. The embargo period for this journal can be found below.

**Gold open access**

- Articles are freely available to both subscribers and the wider public with permitted reuse.
- A gold open access publication fee is payable by authors or on their behalf, e.g. by their research funder or institution.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.
For gold open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

Creative Commons Attribution (CC BY)
Lets others distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include in a collective work (such as an anthology), text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)
For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The gold open access publication fee for this journal is USD 3400, excluding taxes. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.

Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our open access page for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. Find out more.

This journal has an embargo period of 24 months.

Elsevier Researcher Academy
Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop.

Submission
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Referees
Authors are at liberty to suggest the names of up to three potential reviewers (with full contact details). Potential reviewers should not include anyone with whom the authors have collaborated during the research being submitted.

Additional Information
Editorial Process
Publishing space in the journal is limited, such that many manuscripts must be rejected. To expedite the processing of manuscripts, the journal has adopted a two-tier review process. During the first stage of review, the handling editor evaluates the manuscript for appropriateness and scientific content, taking advice where appropriate from members of the editorial board. Criteria for rejection at this stage include: Manuscript lacks a strong conservation focus or theme, or management implications not well-developed. Please note that research on a rare or endangered species or
ecosystem is not sufficient justification to merit publication in Biological Conservation. Published research must also advance the science and practice of conservation biology, and thus have broader application for a wide international audience. **Manuscript subject matter more appropriate for another journal.** Natural history or biodiversity surveys, including site descriptions, are usually better suited for other outlets, such as a regional or taxon-specific journal. Similarly, manuscripts with a primarily behavioral, genetic or ecological focus are more appropriate for journals in those fields. For example, studies reporting on disturbance effects, species interactions (e.g., predator-prey, competitive, or pollinator-host plant interactions), species-habitat relationships, descriptive genetics (e.g., assays of genetic variation within or between populations), or behavioral responses to disturbance will be referred elsewhere if they lack a clear conservation message. Authors are advised to contact an Editor prior to submission if there are any questions regarding the appropriateness of a manuscript for the journal. **Study primarily of local or regional interest.** Biological Conservation is international in scope, and thus research published in the journal should have global relevance, in terms of the topics or issues addressed. **Study poorly designed or executed.** Research lacks spatial or temporal replication, has insufficient sample sizes, or inadequate data analysis. Such obvious indications of poor-quality science will be cause for immediate rejection. **Manuscript poorly written.** Poor writing interferes with the effective communication of science. Authors for whom English is not the first language are advised to consult with a technical language editor before submission. **Conservation research ethics violated.** Research was unnecessarily destructive, was conducted for the express purpose of causing harm/mortality (e.g., simulation of treatment or disturbance effects on survivorship), or violated ethics in the treatment and handling of animals. Where appropriate, authors must provide a statement and supporting documentation that research was approved by the authors’ institutional animal care and use committee(s). Manuscripts that pass this first stage of editorial review are then subjected to a second stage of formal peer review. This involves evaluation of the manuscript by at least two specialists within the field of study, which may include one or more members of the editorial board. Beyond a critical assessment of the scientific content and overall presentation, referees are asked to evaluate the originality, likely impact and global relevance of the research. Referees make a recommendation to the handling editor, but note that it is ultimately the decision of the handling editor as to whether a manuscript is accepted for publication in Biological Conservation.

**Editor-in-Chief**

**Dr. Vincent Devictor**  
UMR CNRS-UM2 5554 cc065,  
Institut des Sciences de l’Evolution de Montpellier,  
Place Eugène Bataillon, 34090 Montpellier,  
France  
Email: vincent.devictor@univ-montp2.fr

**Editors**

**Dr. Amanda Bates,** University of Southampton, England, UK, Email: A.E.Bates@soton.ac.uk

**Dr. Richard Corlett,** Richard Corlett Chinese Academy of Sciences (CAS), Menglun, Yunnan, China,  
Email: corlett@xtbg.org.cn

**Dr. Graeme Cumming,** James Cook University, Townsville, Queensland, Australia, Email: gscumming@gmail.com

**Dr. Liba Pejchar,** Colorado State University, Colorado, USA, Email: Liba.Pejchar@colostate.edu

**Dr. Lian Pin Koh,** University of Adelaide, Adelaide, South Australia, Australia, Email: lianpinkoh@gmail.com

**Dr. Rafael Loyola,** Universidade Federal de Gois, Goinia, Gois, Brazil, Email: rdiasloyola@gmail.com

**Dr. Bea Maas,** University of Vienna, Vienna, Austria, Email: beamaas@gmx.at

**Prof. Robin Pakeman,** The James Hutton Institute, Aberdeen, Scotland, UK, Email: robin.pakeman@hutton.ac.uk
PREPARATION

NEW SUBMISSIONS
Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process.
As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.
Please use correct, continuous line numbering and page numbering throughout the document.

References
There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.

Formatting requirements
There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions.
If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.
Divide the article into clearly defined sections.

Tables and Figures
Please place legends above Tables and below Figures. They should follow the References at the end of the manuscript.

Peer review
This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor’s decision is final. More information on types of peer review.

Double-blind review
This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:
Title page (with author details): This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.
Blinded manuscript (no author details): The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

REVISED SUBMISSIONS
Use of word processing software

Please use correct, continuous line numbering and page numbering throughout the document.

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor’s options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: https://www.elsevier.com/guidepublication). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Please use single spacing throughout the document. Use continuous line numbering throughout the document. Avoid full justification, i.e., do not use a constant right-hand margin. Ensure that each new paragraph is clearly indicated. Number every page of the manuscript, including the title page, references tables, etc. Present tables and figure legends on separate pages at the end of the manuscript. Layout and conventions must conform with those given in this guide to authors.

Journal style has changed over time so do not use old issues as a guide. Number all pages consecutively. Italics are not to be used for expressions of Latin origin, for example, in vivo, et al., per se. Use decimal points (not commas); use a space for thousands (10 000 and above).

Use of word processing software

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Cover letter

Submission of a manuscript must be accompanied by a cover letter that includes the following statements or acknowledgements: The work is all original research carried out by the authors. All authors agree with the contents of the manuscript and its submission to the journal. No part of the research has been published in any form elsewhere, unless it is fully acknowledged in the manuscript. Authors should disclose how the research featured in the manuscript relates to any other manuscript of a similar nature that they have published, in press, submitted or will soon submit to Biological Conservation or elsewhere. The manuscript is not being considered for publication elsewhere while it is being considered for publication in this journal. Any research in the paper not carried out by the authors is fully acknowledged in the manuscript. All sources of funding are acknowledged in the manuscript, and authors have declared any direct financial benefits that could result from publication. All appropriate ethics and other approvals were obtained for the research. Where appropriate, authors should state that their research protocols have been approved by an authorized animal care or ethics committee, and include a reference to the code of practice adopted for the reported experimentation or methodology. The Editor will take account of animal welfare issues and reserves the right not to publish, especially if the research involves protocols that are inconsistent with commonly accepted norms of animal research. Please include a short paragraph that describes the main finding of your paper, and its significance to the field of conservation biology. The authors should state in the cover letter if the paper in any form has previously been submitted to Biological Conservation. In that case the authors should specify the original manuscript number.

Article structure
Subdivision - numbered sections
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Material and methods
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

Theory/calculation
A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

Results
Results should be clear and concise.

Discussion
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Glossary
Please supply, as a separate list, the definitions of field-specific terms used in your article.

Appendices
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Essential title page information
• Title. Concise and informative, yet not overly general. If appropriate, include the species or ecosystem that was the subject of the study, or the location where the study was done. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible
• Author names and affiliations. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors’ affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
• Corresponding author. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.
• Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Highlights
Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view example Highlights on our information site.
Abstract
A concise and factual abstract is required (maximum length of 250 words). The abstract should state briefly the purpose of the research, the methods used, the principal results and major conclusions. Please try to keep each sentence as specific as possible, and avoid such general statements as "The management implications of the results are discussed". An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, they must be cited in full, without reference to the reference list. Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

Graphical abstract
Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site. Authors can make use of Elsevier's Illustration Services to ensure the best presentation of their images and in accordance with all technical requirements.

Stereochemistry abstract
For each important chiral compound you are requested to supply a stereochemistry abstract detailing structure, name, formula and all available stereochemical information for eventual incorporation into a database. An abstract for only one enantiomer per compound is required.

Keywords
Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Abbreviations
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Formatting of funding sources
List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Nomenclature and Units
Follow internationally accepted rules and conventions: use the international system of units (SI) for all scientific and laboratory data. If other quantities are mentioned, give their equivalent in SI.
Common names must be in lower-case except proper nouns. All common names must be followed by a scientific name in parentheses in italics. For example, bottlenose dolphin (*Tursiops aduncus*). Where scientific names are used in preference to common names they should be in italics and the genus should be reduced to the first letter after the first mention. For example, the first mention is given as *Tursiops aduncus* and subsequent mentions are given as *T. aduncus*.

**Math formulae**

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

**Footnotes**

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article.

**Artwork**

**Electronic artwork**

**General points**

- Make sure you use uniform lettering and sizing of your original artwork.
- Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Indicate per figure if it is a single, 1.5 or 2-column fitting image.
- For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
- Please note that individual figure files larger than 10 MB must be provided in separate source files.
A detailed guide on electronic artwork is available.

**You are urged to visit this site; some excerpts from the detailed information are given here.**

**Formats**

Regardless of the application used, when your electronic artwork is finalized, please 'save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- EPS (or PDF): Vector drawings. Embed the font or save the text as 'graphics'.
- TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
- TIFF (or JPG): Bитmapped line drawings: use a minimum of 1000 dpi.
- TIFF (or JPG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

**Please do not:**

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
- Supply files that are too low in resolution.
- Submit graphics that are disproportionately large for the content.

**Color artwork**

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. Further information on the preparation of electronic artwork.

**Figure captions**

Ensure that each illustration has a caption. A caption should comprise a brief title (**not** on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.
Tables
Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

References

Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Reference links
Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference management software
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/biological-conservation
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.
Reference formatting

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples:

Reference style

Text: All citations in the text should refer to:

1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication;
2. Two authors: both authors' names and the year of publication;
3. Three or more authors: first author's name followed by 'et al.' and the year of publication.

Citations may be made directly (or parenthetically). Groups of references can be listed either first alphabetically, then chronologically, or vice versa.

Examples: 'as demonstrated (Allan, 2000a, 2000b, 1999; Allan and Jones, 1999).... Or, as demonstrated (Jones, 1999; Allan, 2000)… Kramer et al. (2010) have recently shown …'

List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.

Examples:

Reference to a journal publication:

Reference to a journal publication with an article number:

Reference to a book:

Reference to a chapter in an edited book:

Reference to a website:

Reference to a dataset:

Video

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Data visualization

Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.
**Supplementary material**

Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

The supplementary material should be cited as an online Appendix to the paper, usually in the Methods. If it contains several tables, images and/or figures, these should be cited as Table A1, Figure A1 and so on.

Authors are strongly encouraged to make the data supporting their paper available to readers through an open-access data repository and/or as an Appendix to the paper. For more details on journal data policy see the paragraphs on Data Depositing and Linking to and depositing data at PANGAEA.

**Data Depositing**

Ideally, data should be freely available online through a specialist data centre that provides a permanent archive (repository) for the dataset, and may integrate the data with other datasets using international standards. Examples include PANGAEA, and GBIF and its major contributors such as OBIS and VertNet. Some Ocean Data Centres may also provide this service. Where such a data centre does not exist, we ask that the data be made freely available online from a permanent archive (repository). Where possible, it should follow international data standards. This may be an institutional repository for its staff. The data should be accompanied by sufficient information (metadata) for the reader to understand its composition and origins, and determine if it is fit for their purpose. In particular, the data should allow the results of the publication to be reproduced. Data being downloadable from departmental or personal websites is not regarded as permanently archived.

**Research data**

This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

**Data linking**

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).
Mendeley Data
This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.

Data in Brief
You have the option of converting any or all parts of your supplementary or additional raw data into one or multiple data articles, a new kind of article that houses and describes your data. Data articles ensure that your data is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You are encouraged to submit your article for Data in Brief as an additional item directly alongside the revised version of your manuscript. If your research article is accepted, your data article will automatically be transferred over to Data in Brief where it will be editorially reviewed and published in the open access data journal, Data in Brief. Please note an open access fee of 600 USD is payable for publication in Data in Brief. Full details can be found on the Data in Brief website. Please use this template to write your Data in Brief.

MethodsX
You have the option of converting relevant protocols and methods into one or multiple MethodsX articles, a new kind of article that describes the details of customized research methods. Many researchers spend a significant amount of time on developing methods to fit their specific needs or setting, but often without getting credit for this part of their work. MethodsX, an open access journal, now publishes this information in order to make it searchable, peer reviewed, citable and reproducible. Authors are encouraged to submit their MethodsX article as an additional item directly alongside the revised version of their manuscript. If your research article is accepted, your methods article will automatically be transferred over to MethodsX where it will be editorially reviewed. Please note an open access fee is payable for publication in MethodsX. Full details can be found on the MethodsX website. Please use this template to prepare your MethodsX article.

Data statement
To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

AFTER ACCEPTANCE

Online proof correction
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors. If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.
We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Offprints
The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via
Elsevier's Webshop. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**AUTHOR INQUIRIES**

Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.