



REVIEW OF PALAEOBOTANY AND PALYNOLOGY

An International Journal

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

●	Description	p.1
●	Audience	p.1
●	Impact Factor	p.1
●	Abstracting and Indexing	p.2
●	Editorial Board	p.2
●	Guide for Authors	p.4



ISSN: 0034-6667

DESCRIPTION

The *Review of Palaeobotany and Palynology* is an international journal for articles in all fields of **palaeobotany** and **palynology** dealing with all groups, ranging from **marine palynomorphs** to higher **land plants**. Original contributions and comprehensive review papers should appeal to an international audience. Typical topics include but are not restricted to systematics, evolution, palaeobiology, palaeoecology, biostratigraphy, biochronology, palaeoclimatology, paleogeography, taphonomy, palaeoenvironmental reconstructions, vegetation history, and practical applications of palaeobotany and palynology, e.g. in coal and petroleum geology and archaeology. The journal especially encourages the publication of articles in which palaeobotany and palynology are applied for solving fundamental geological and biological problems as well as innovative and interdisciplinary approaches.

Benefits to authors

We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our [author services](#).

Please see our [Guide for Authors](#) for information on article submission. If you require any further information or help, please visit our [Support Center](#)

AUDIENCE

Palaeobotanists, Palynologists.

IMPACT FACTOR

2016: 1.817 © Thomson Reuters Journal Citation Reports 2017

ABSTRACTING AND INDEXING

AESIS
AGI's Bibliography and Index of Geology
AGRICOLA
ASFA2 – Ocean Technology, Policy and Non-Living Resources
Agricultural Engineering Abstracts
BIOSIS
Biological Sciences
Bulletin Signalétique
Elsevier BIOBASE
Current Contents
ESRISAT
Environmental Sciences & Pollution Management
Engineering Village - GEOBASE
GeoRef
OCLC Contents Alert
PASCAL/CNRS
Petroleum Abstracts
Plant Science Database (Elsevier)
PubMed
Water Resources Abstracts
Web of Science
Biological Abstracts
Biological Abstracts
CAB Abstracts
Arts & Humanities Search
Personal Alert
Scopus
Science Citation Index Expanded
Zoological Record
Academic Search (EBSCO)
Current Abstracts (EBSCO)
TOC Premier
Science and Technology Collection

EDITORIAL BOARD

Editors-in-Chief:

José S. Carrion, Universidad de Murcia, Murcia, Spain
Hans Kerp, Westfälische Wilhelms-Universität Münster, Münster, Germany
Mike Stephenson, British Geological Survey, Nottingham, Keyworth, UK

Associate Editor:

Shinya Sugita, Tallinn University, Tallinn, Estonia

Honorary Editor:

Wim Punt, Utrecht University, Utrecht, Netherlands

Editorial Board:

Sergio Archangelsky
Marion Bamford, University of the Witwatersrand, Johannesburg, South Africa
David Batten, University of Manchester, Manchester, UK
Hermann Behling, Georg-August-Universität Göttingen, Göttingen, Germany
Stephen Blackmore, Royal Botanic Gardens Edinburgh, Edinburgh, Scotland, UK
David Cantrill, Royal Botanic Gardens, Melbourne, South Yarra, Victoria, Australia
Owen Davis, University of Arizona, Tucson, Arizona, USA
Anne-Laure Decombeix, CNRS- UMR AMAP, Montpellier, France
William DiMichele, Smithsonian Institution, Washington, District of Columbia, USA
Dianne Edwards, University of Wales, Cardiff, UK
Clinton Foster, Australian Geological Survey, Canberra, Western Australia, Australia
Friis, Swedish Museum of Natural History, Stockholm 50, Sweden

Galtier, Université Montpellier, 34960 Montpellier Cedex 2, France
Rex Harland
Madeline Harley, Royal Botanic Gardens Edinburgh, Kew, Richmond, UK
Christoph Hartkopf-Froeder, Geologischer Dienst Nordrhein-Westfalen, Krefeld, Germany
Ulrike Herzsuh, Alfred Wegener Institute, Potsdam, Germany
Henry Hooghiemstra, Universiteit van Amsterdam, Amsterdam, Netherlands
Andrew Knoll, Harvard University, Cambridge, Massachusetts, USA
Michael Krings, Ludwig-Maximilians-Universität München (LMU), Munich, Germany
Norbert Köhl, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn, Germany
Cheng-Sen Li, Chinese Academy of Sciences (CAS), Beijing, China
Stephen McLoughlin, Swedish Museum of Natural History, Stockholm, Sweden
Florentin Paris, Université de Rennes I, Rennes, France
Thomas Servais, Université des Sciences et Technologies de Lille (Lille I), Villeneuve d'Ascq, France
Wilson A. Taylor, University of Wisconsin at Eau Claire, Eau Claire, Wisconsin, USA
Willy Tinner, Universität Bern, Bern, Switzerland
van Geel, Universiteit van Amsterdam, Amsterdam, Netherlands
Han van Konijnenburg, Utrecht University, Utrecht, Netherlands
Thijs Vandenbroucke, Ghent University, Ghent, Belgium
Charles Wellman, University of Sheffield, Sheffield, England, UK
Cathy L. Whitlock, Montana State University, Bozeman, Montana, USA
Debra Willard, U.S. Geological Survey (USGS), Reston, Virginia, USA
Natalia Zavialova, Paleontological Institute of RAS, Moscow, Russian Federation
Yan Zhao, Chinese Academy of Sciences (CAS), Beijing, China
Zhi-Yan Zhou, Chinese Academy of Sciences (CAS), Nanjing, China
Karin Zonneveld, Universität Bremen, Bremen, Germany

GUIDE FOR AUTHORS

INTRODUCTION

The Review of Palaeobotany and Palynology is an international journal for articles in all fields of palaeobotany and palynology dealing with all groups, ranging from marine palynomorphs to higher land plants. Original contributions and comprehensive review papers should appeal to an international audience. Typical topics include but are not restricted to systematics, evolution, palaeobiology, palaeoecology, biostratigraphy, biochronology, palaeoclimatology, paleogeography, taphonomy, palaeoenvironmental reconstructions, vegetation history, and practical applications of palaeobotany and palynology, e.g. in coal and petroleum geology and archaeology. The journal especially encourages the publication of articles in which palaeobotany and palynology are applied for solving fundamental geological and biological problems as well as innovative and interdisciplinary approaches.

Types of article

Original research papers, discussion papers, short communications, review papers.

NB: please do not resubmit rejected papers unless invited to do so at the time of rejection. If you are resubmitting a previously rejected paper, you must address suggestions made during any previous peer review process.

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](#).

Human and animal rights

If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with [The Code of Ethics of the World Medical Association](#) (Declaration of Helsinki) for experiments involving humans; [Uniform Requirements for manuscripts submitted to](#)

Biomedical journals. Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the [ARRIVE guidelines](#) and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, [EU Directive 2010/63/EU for animal experiments](#), or the National Institutes of Health guide for the care and use of Laboratory animals (NIH Publications No. 8023, revised 1978) and the authors should clearly indicate in the manuscript that such guidelines have been followed.

Declaration of interest

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. [More information.](#)

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 or as part of a published lecture or academic thesis or as an electronic preprint, see '[Multiple, redundant or concurrent publication](#)' section of our ethics policy 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 [CrossCheck](#).

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.

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 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 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 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.

Open access

- Articles are freely available to both subscribers and the wider public with permitted reuse.
- An 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 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 open access publication fee for this journal is **USD 3300**, excluding taxes. Learn more about Elsevier's pricing policy: <http://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 [green 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 Publishing Campus

The Elsevier Publishing Campus (www.publishingcampus.com) is an online platform offering free lectures, interactive training and professional advice to support you in publishing your research. The College of Skills training offers modules on how to prepare, write and structure your article and explains how editors will look at your paper when it is submitted for publication. Use these resources, and more, to ensure that your submission will be the best that you can make it.

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

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 source files to a single PDF file of the article, which is used in the peer-review process. Please note that even though manuscript source files are converted to PDF files at submission for the review process, these source files are needed for further processing after acceptance. All correspondence, including notification of the Editor's decision and requests for revision, takes place by e-mail removing the need for a paper trail.

In the case of Special Issues, manuscripts should be submitted to the Guest Editor(s). Authors should ensure that they submit manuscripts and meet any additional requirements in line with deadlines set by the Guest Editor(s) to ensure that the entire Special Issue can be published in a timely fashion.

Submit your article

Please submit your article via <https://www.evise.com/profile/api/navigate/PALBO>

PREPARATION

Peer review

This journal operates a single 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.](#)

Use of wordprocessing software

Manuscripts must be in double-spaced format with wide margins, and lines numbered consecutively from the beginning of the manuscript. A font size of 12 pt, and left justification of the text are required. It is important that the file be saved in the native format of the wordprocessor 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 wordprocessor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. Do not embed "graphically designed" equations or tables, but prepare these using the wordprocessor's facility. 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: <http://www.elsevier.com/guidepublication>). Do not import the figures into the text file but, instead, indicate their approximate locations directly in the electronic text and on the manuscript. See also the section on Electronic illustrations.

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

Manuscript Length:

Authors should confine the text to no more than 25-30 printed pages, with a total manuscript length (including figures and tables) of 45-50 pages. Longer contributions can also be considered but authors should first contact the responsible editor. Synonymy lists should be included only when strictly necessary, in case of taxonomic revisions. Measurements and comparisons can often better be presented in the form tables. Larger datasets - including taxonomic annotations - can be printed in smaller type size as an appendix. Very large datasets cannot be printed but can be made available electronically as supplementary information on the journal's website.

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.

Experimental

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. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. 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. This responsibility includes answering any future queries about Methodology and Materials. **Ensure that the e-mail address is given and that contact details are 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.

Abstract

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. 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, then cite the author(s) and year(s). 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.

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.

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. Consult the most recent American Geological Institute GeoRef Thesaurus for keywords.

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

Botanical nomenclature must be in accordance with the latest edition of the *International Code of Nomenclature* for algae, fungi and plants (Melbourne Code), the Vienna Code (McNeill et al., 2012) that can be accessed [on-line](#). The rules and recommendations of the Melbourne Code apply to all organisms traditionally treated as plants, whether fossil or non-fossil, including all palynomorphs with the exception of chitinozoa and scolecodonts which are covered by the *International Code of Zoological Nomenclature* (ICZN, 4th edition), which can also be accessed on-line.

Stratigraphic nomenclature must be in accordance with the guidelines of the International Stratigraphic Guide [Salvador, 1994; Murphy & Salvador, 1999; see also the website of the International Commission on Stratigraphy (ICS)]. Use informal phrases such as 'latest Devonian' (for time) and 'uppermost Toarcian' (for rock), and not ungrammatical terms such as 'end Devonian' and 'top Toarcian'. The fossil names forming part of a biostratigraphic unit (biozone) name are in italics, e.g., the *Callialasporites dampieri* Biozone; the *dampieri* Biozone; the *Retitriletes austroclavitudites* Subbiozone; or the *austroclavitudites* Subbiozone. Make a clear distinction between biozones and chronozones. When discussing geochronology, use an upper case initial letter for all formal subdivisions of eon, era, period, epoch, age, chron, and subchron, e.g., Early Silurian and Middle Ordovician. Only chronostratigraphic divisions with internationally ratified boundary stratotypes have formal status (see the IUGS journal *Episodes*, and the International Stratigraphic Chart on the ICS website). In all other instances, lower case initial letters should be used. In chronozones, fossil species names have a capital initial letter, and are written in Roman font, e.g. the Lamberti Chronozone. The usage of lower, middle, and upper in relation to lithostratigraphic units is generally informal and the initial letters are not capitalised, e.g. the lower Speeton Clay Formation. Fossils forming part of a lithostratigraphic unit name have an initial capital letter and are written in Roman font (e.g. Plenius Marls).

Radiocarbon ages If several radiocarbon ages are used as the basis of the chronological framework, the dates (with standard deviation) and relevant additional information (e.g. depth, dated material, $\delta^{13}\text{C}$, lab number, calibrated ages, see e.g. Stuiver & Polach 1977) should be given in a table. In the text it should also be clearly stated whether the ages are expressed as conventional (conventional 14C years BP) or calibrated radiocarbon years (cal. BP, in both cases BP referring to AD 1950). Moreover, calibrated dates should be reported using the latest available international calibration curve (explicitly state which INTCAL version was used) and the calibration software (and its version number) must be stated when reporting calibrated ages. The author(s) should use one consistent chronological framework, i.e. mixing of conventional and calibrated ages in text and figures should be avoided. Moreover, calibrated radiocarbon ages should be given in cal. years BP rather than in years BC. For historical dates the notion "AD" can be used (e.g. AD 1250).

International Code of Zoological Nomenclature, 1999. International Code of Zoological Nomenclature. Fourth Edition. The International Trust for Zoological Nomenclature, c/o The Natural History Museum, London. McNeill, J., Barrie, F.R., Burdet, H.M., Demoulin, V., Hawksworth, D.L., Marhold, K., Nicolson, D.H., Prado, J., Silva, P.C., Skog, J.E., Wierseman, J.H., Turland, N.J. (Eds.) 2006. International Code of Botanical Nomenclature (Vienna Code), adopted by the Seventeenth International Botanical Congress, Vienna, Austria, July 2005. A.R.A. Gantner Verlag K.G., Liechtenstein. Murphy, M.A., Salvador, A., 1999, International Commission of Stratigraphic Classification - International Commission on Stratigraphy: International Stratigraphic Guide - An abridged version. *Episodes*, 22(4), 255-271. Salvador, A., 1994. International Stratigraphic Guide - A Guide to Stratigraphic Classification, Terminology, and Procedure. 2nd Ed., IUGS, GSA, Boulder. Stuiver, M., Polach H.A. 1977. Discussion, Reporting of 14C data. *Radiocarbon*, 19(3), 355-363.

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 can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork

Electronic artwork

A detailed guide on electronic artwork is available on our website:

<http://www.elsevier.com/artworkinstructions>

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 finalised, 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: Vector drawings. Embed the font or save the text as "graphics".

TIFF: color or grayscale photographs (halftones): always use a minimum of 300 dpi.

TIFF: Bitmapped line drawings: use a minimum of 1000 dpi.

TIFF: Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.
DOC, XLS or PPT: If your electronic artwork is created in any of these Microsoft Office applications please supply "as is".

Please do not:

- Supply embedded graphics in your wordprocessor (spreadsheet, presentation) document;
- Supply files that are optimised for screen use (like 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.

Illustrations

Illustrations should accompany the manuscript, but should not be included within the text. All illustrations are to have a caption. Artwork should be submitted in digital format(see) for details.

Plates

Photographs should be mounted on digital plates (portrait format; not landscape format, except for half-page plates). Plates should be numbered using Roman numbers (I, II, III, IV etc.), consecutively in the order to which they are referred to. Each individual photograph on a plate should be clearly marked with an Arabic number (1, 2, 3, 4, etc.). Use a clear, sans serif typeface (e.g. Arial) between 9 point and 12 point type size, preferably on a contrasting, white background; do not use bold typefaces. Individual illustrations on a Plate are referred to in the text as Plate IV, 2, Plate XII, 3 etc. If necessary use arrows and/or letters to indicate special features; refer to these arrows and letters in the plate captions. Plates should be 18.4 cm wide, not less and not more and should have a maximum height of 23.7cm. Individual photographs on a plate should be separated by horizontal and/or vertical lines of equal thickness, not less than 1.5 mm and not more than 2 mm thick. Each photograph should have a scale bar being not more than 1.5 mm thick. Authors are requested to use the entire page, rather than making several half-page sized plates. Palynomorphs should be illustrated at an adequate magnification, clearly showing all essential features. Individual spores, pollen grains and other palynomorphs should not be cut out along their periphery.

Figures

Figures should be one column (8.9 cm) or two columns (18.4 cm) wide.

Photographs in the running text: If necessary, individual photographs (e.g., of outcrops) can be printed in the text and are then called Figures (capitalized).

Line drawings: All lettering, graph lines and points on graphs should be sufficiently large and bold to permit reproduction when the diagram has been reduced to a size suitable for inclusion in the journal. Please include latitude ($^{\circ}$ N or $^{\circ}$ S) and longitude ($^{\circ}$ W or $^{\circ}$ E), a North arrow, and a scale in kilometres on maps and if necessary an index map showing the geographical location of the area studied. Graphs must have all axes and lines clearly labelled, including units of measurement. Use a clear, sans serif typeface (e.g. Arial). General titles of illustrations should appear in the figure caption, not in the figure itself. Do not use any type of shading on computer-generated illustrations.

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.](#)

Tables

1. Authors should take note of the limitations set by the size and layout of the journal. A table should not exceed the printed area of the page. If this appears impossible, reversing columns and rows will often make the impossible possible.
2. Large tables should be avoided. Foldouts can only be accepted in exceptional cases. If many data are to be presented, an attempt should be made to divide these over two or more tables. Instead of printing, extensive tables can be made available electronically as supplementary information on the journals website.
3. Tables should be compiled on separate sheets and must be numbered according to their sequence in the text. The text must include references to all tables.
4. Each table must have a brief and self-explanatory title. Column headings should be brief, but sufficiently explanatory. Units of measurement should be given in parentheses. Vertical lines must not be used to separate columns - leave extra space between the columns instead.
5. Explanations that are necessary to the understanding of the table should be given as footnotes at the bottom of the table. A footnote should be indicated by a lower-case letter.

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.

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](#) and [Zotero](#), as well as [EndNote](#). Using the word processor 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.

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/review-of-palaeobotany-and-palynology>

When preparing your manuscript, you will then be able to select this style using the Mendeley plugins for Microsoft Word or LibreOffice.

Reference style

1. All references cited in the text are to be listed at the end of the paper. The manuscript should be carefully checked to ensure that the spellings of authors' names and publication years are exactly the same in the text as in the reference list. Do not type author's and editor's names in capitals.
2. In the text refer to the author's name (without initials) and year of publication, followed - if necessary - by a short reference to appropriate pages. Examples: "Because Peterson (1994) has shown that...". "This is in agreement with results obtained later (Kramer, 1996, pp. 12-16)".
3. If reference is made in the text to publications written by more than two authors the name of the first author should be used, followed by "et al.". This indication, however, should never be used in the list of references. In this list names of authors and all co-authors must be given in full.
4. References in the text should be arranged chronologically. The list of references should be arranged alphabetically by authors' names, and chronologically per author. If an author's name in the list is also mentioned with co-authors, the following order should be used: Publications of the single author, arranged according to publication year - publications of the same author with one co-author, arranged according to publication year - publications of the author with more than one co-author, arranged according to publication year.

The following system should be used for arranging references:

a. Journal papers: Names and initials of all authors, year. Title of paper. Journal name (given in full or abbreviated using the International List of Periodical Title Word Abbreviations), volume number (issue number): first and last page numbers of the paper.

Example:

Elbaz-Poulichet, F., Guan, D.M., Martin, J.M., 1991. Trace metal behaviour in a highly stratified Mediterranean estuary: the Krka (Yugoslavia). *Mar. Chem.* 32, 211-224.

b. Monographs: Names and initials of all authors, year. Title of the monograph. Publisher, location of publisher.

Example:

Zhdanov, M.S., Keller, G.V., 1994. *The Geoelectrical Methods in Geophysical Exploration*. Elsevier, Amsterdam.

c. Edited volume papers: Names and initials of all authors, year. Title of paper. Names and initials of the volume editors, title of the edited volume. Publisher, location of publisher, first and last page numbers of the paper.

Example:

Thomas, E., 1992. Middle Eocene-late Oligocene bathyal benthic foraminifera (Weddell Sea): faunal changes and implications for ocean circulation. In: Prothero, D.R., Berggren, W.A. (Eds.), *Eocene-Oligocene Climatic and Biotic Evolution*. Princeton Univ. Press, Princeton, NJ, pp. 245-271.

d. Conference proceedings papers: Names and initials of all authors, year. Title of paper. Name of the conference. Publisher, location of publisher, first and last page numbers of the paper.

Example:

Smith, M.W., 1988. The significance of climatic change for the permafrost environment. *Final Proc. Int. Conf. Permafrost*. Tapir, Trondheim, Norway, pp. 18-23.

e. Unpublished theses, reports, etc.: Names and initials of all authors, year. Title of item. All other relevant information needed to identify the item (e.g., technical report, Ph.D. thesis, institute, etc.).

Example:

Moustakas, N., 1990. Relationships of morphological and physicochemical properties of Vertisols under Greek climate conditions. Ph.D. Thesis, Agricultural Univ. Athens, Greece.

f. Datasets

Example:

[dataset] Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T., 2015. Mortality data for Japanese oak wilt disease and surrounding forest compositions. Mendeley Data, v1. <http://dx.doi.org/10.17632/xwj98nb39r.1>.

5. In the case of publications in any language other than English, the original title is to be retained. Titles of publications in non-Latin alphabets should be transliterated, and a note such as '(in Russian)' or '(in Japanese, with English Abstr.)' should be added at the end of the reference.

Journal abbreviations source

Bibliographic guide for Editors and Authors, by Am. Chem. Soc., Engineering Index Inc.

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 files in one of our recommended file formats with a preferred maximum size of 150 MB in total. Any single file should not exceed 50 MB. 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.

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.

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 500 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](#).

ARTICLE ENRICHMENTS

AudioSlides

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. [More information and examples are available](#). Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

Google Maps and KML files

KML (Keyhole Markup Language) files (optional): You can enrich your online articles by providing KML or KMZ files which will be visualized using Google maps. The KML or KMZ files can be uploaded in our online submission system. KML is an XML schema for expressing geographic annotation and

visualization within Internet-based Earth browsers. Elsevier will generate Google Maps from the submitted KML files and include these in the article when published online. Submitted KML files will also be available for downloading from your online article on ScienceDirect. [More information](#).

Interactive plots

This journal enables you to show an Interactive Plot with your article by simply submitting a data file. [Full instructions](#).

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 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](#).

© Copyright 2014 Elsevier | <http://www.elsevier.com>