

GENERAL DESCRIPTION

Estuaries and Coasts is the journal of the Coastal and Estuarine Research Federation (CERF). Begun in 1977 as Chesapeake Science, the journal has gradually expanded its scope and circulation. Today, the journal publishes scholarly manuscripts on estuarine and near coastal ecosystems at the interface between the land and the sea where there are tidal fluctuations or sea water is diluted by fresh water. The interface is broadly defined to include estuaries and nearshore coastal waters including lagoons, wetlands, tidal fresh water, shores and beaches, but not the continental shelf. The journal covers research on physical, chemical, geological or biological processes, as well as applications to management of estuaries and coasts. The journal publishes original research findings, reviews and perspectives, techniques, comments, and management applications. *Estuaries and Coasts* will consider properly carried out studies that present inconclusive findings or document a failed replication of previously published work. Submissions that are primarily descriptive, strongly place-based, or only report on development of models or new methods without detailing their applications fall outside the scope of the journal.

All types of articles published in *Estuaries and Coasts* are peer reviewed by at least two reviewers prior to publication. Manuscripts may be reviewed by peers with statistical expertise to ensure that data have been analyzed appropriately. Authors should not use an arbitrary rejection rate. Instead, describe trends and report the actual p-values and sample sizes, see Smith (2020, <https://doi.org/10.1007/s12237-019-00679-y>). Authors should avoid the phrase “statistically significant,” “ $p < 0.05$,” or “*” and replace this with values that represent the trend and the actual p-value and sample size. Additional advice on the appropriate use and interpretation of p-values can be found here: <https://www.nature.com/collections/qghhqm>.

English Language

Manuscripts must be submitted in English. The Editors encourage submissions from all countries. Authors whose primary language is not English, should consider employing professional editing services to assist preparation of manuscripts. Information is provided for authors who would like to publish an article with Springer <https://www.springer.com/gp/authors-editors/journal-author>.

Revisions

When submitting a revised manuscript from an earlier submission to *Estuaries and Coasts* you must also submit a letter detailing how the revision responds to each reviewer and editor comment and designating lines in the revised manuscript where edits are made.

TYPES OF ARTICLES

- **Original Reports** of research results follow the structure of Title and Author Information, Abstract, Introduction (highlighting research questions and hypotheses), Methods, Results, Discussion, Acknowledgements, and References. Tables and figure legends follow the main text.
- **Management Applications** papers demonstrate the application of estuarine and coastal research results (analogous to Original Reports) to address contemporary estuarine and coastal management, socioeconomic, and policy issues. The underlying science is expected to be at the level of Original Reports but illustrations and case studies of how it can be used to address real-world problems are the focus. Authors of prospective Management Application submissions may consider contacting the Co-Editors-in-Chief to assess whether their manuscript meets this scope.
- **Notes**, shorter reports of research results, follow the same structure as original reports of research and management applications.
- **Technical Communications** are commentaries on a report previously published in *Estuaries and Coasts* or elsewhere on a topic of interest to our readers. The author whose work is being discussed is given an opportunity to reply to the Technical Communication.
- **Perspectives in Estuarine and Coastal Science** are short papers (maximum 8 printed pages) intended to stimulate discussion of emerging areas of estuarine and coastal research. A maximum of one such paper is published per journal issue. These papers are solicited by the ESCO Reviews Editor, the Co-Editors-in-

Chief or proposed to one of the Co-Editors-in-Chief through pre-submission inquiries by prospective authors. The Perspectives papers are published with free promotional access to the online version.

- **Review Articles** are either proposed to, or commissioned by, the Reviews Editor. Prospective authors should contact the ESCO Reviews Editor through the editorial office (estuariesandcoasts@erf.org) before preparing a review manuscript.
- **The H. T. Odum Synthesis Essay** is solicited by the Co-Editors-in-Chief and Reviews Editor on an annual basis to provide synthesis and review for an emerging topic of importance to estuarine and coastal science.

MANUSCRIPT SUBMISSION

Submission

Submission Letter

The letter of submission shall explicitly confirm or describe the following:

- The work described has not been published before, and that it is not under consideration for publication anywhere else. Theses and dissertations are not considered publications, but the letter should describe the use of these original sources.
- Its publication has been approved by all coauthors (if any), and by the responsible authorities (tacitly or explicitly) if required by the organization where the work was performed. Contribution of the author and each coauthor must be described.
- Use of figures, tables, or text passages that have already been published elsewhere will be accompanied by permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.
- Authors whose primary language is not English, will either employ professional editing services to assist preparation of manuscripts or will engage a scientific colleague (preferably co-author) who is proficient in the English language. Information is provided for authors who would like to publish an article with Springer <https://www.springer.com/gp/authors-editors/journal-author>.
- Acknowledgement that the author(s) understand that the review process will include plagiarism detection to assess the similarity of submitted manuscripts to existing publications. The Editors-in-Chief and Associate Editors retain the right to reject without review any submission that shows significant overlap with databases of published, web page and other scholarly materials.
- Confirmation that the author(s) guarantee that the manuscript has been prepared according to the ESCO Aims and Scope (https://www.springer.com/environment/journal/12237?detailsPage=pltcj_3453944#) and the Instructions for Authors (http://www.springer.com/cda/content/document/cda_downloaddocument/Estuaries+and+Coasts+IFA+January+2019.pdf?SGWID=0-0-45-1649820-p173750713).

Online Submission

Please follow the hyperlink "Submit online" on the right and upload all your manuscript files following the instructions given on the screen.

Title Page

The title page should include:

- The name(s) of the author(s)
- A concise and informative title
- The affiliation(s) and address(es) of the author(s)
- The e-mail address, telephone and fax numbers of the corresponding author

Abstract

Please provide an abstract of 150 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references. The abstract should begin with motivation, questions or hypotheses, a summary of the results and end with significance of findings.

Keywords

Please provide 4 to 6 keywords that can be used for indexing purposes.

Text

Text Formatting

Manuscripts should be submitted in Word.

- Use a normal, plain font (e.g., 12-point Times Roman) for text.
- Use double-spaced lines.
- Use italics for emphasis.
- Use the automatic page numbering function to number the pages.
- Do not use field functions.
- Use tab stops or other commands for indents, not the space bar.
- Use the table function, not spreadsheets, to make tables.
- Use the equation editor or MathType for equations.
- Save your file in docx format (Word 2007 or higher) or doc format (older Word versions). Manuscripts with mathematical content can also be submitted in LaTeX.
- LaTeX macro package (zip, 182 kB)
- Authors are required to include line numbering in their text file; the line numbering should be continuous on all pages.

Headings

Please use no more than three levels of displayed headings.

Abbreviations

Abbreviations should be defined at first mention and used consistently thereafter.

Footnotes

Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.

Footnotes to the text are numbered consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data). Footnotes to the title or the authors of the article are not given reference symbols.

Always use footnotes instead of endnotes.

Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

References

Citation

Cite references in the text by name and year in parentheses. Some examples:

- Negotiation research spans many disciplines (Thompson 1990).
- This result was later contradicted by Becker and Seligman (1996).
- This effect has been widely studied (Abbott 1991; Barakat et al. 1995; Kelso and Smith 1998; Medvec et al. 1999).

Reference list

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes or endnotes as a substitute for a reference list.

Reference list entries should be alphabetized by the last names of the first author of each work.

- Journal article

Alber, J., D. C. O'Connell, and S. Kowal. 2002. Personal perspective in TV interviews. *Pragmatics* 12: 257–271.

- Article by DOI

Suleiman, C., D.C. O'Connell, and S. Kowal. 2002. If you and I, if we, in this later day, lose that sacred fire: Perspective in political interviews. *Journal of Psycholinguistic Research*. doi: 10.1023/A:1015592129296

- Book

Cameron, D. 1985. *Feminism and linguistic theory*. New York: St. Martin's Press.

- Book chapter

Cameron, D. 1997. Theoretical debates in feminist linguistics: Questions of sex and gender. In *Gender and discourse*, ed. R. Wodak, 99-119. London: Sage Publications.

- Online document

Frisch, M. 2007. Does a low-entropy constraint prevent us from influencing the past? PhilSci archive.

<http://philsci-archive.pitt.edu/archive/00003390>. Accessed 26 June 2007.

Journal names and book titles should be italicized.

Tables

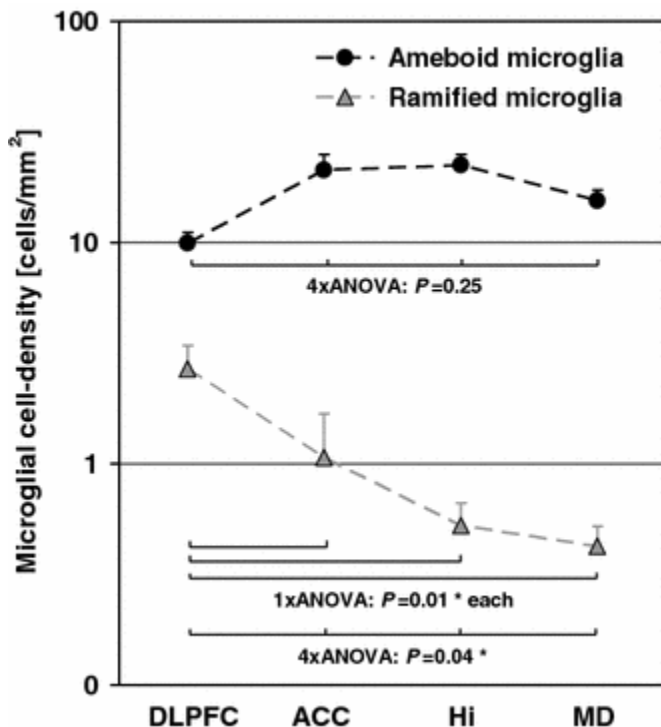
- All tables are to be numbered using Arabic numerals.
- Tables should always be cited in text in consecutive numerical order.
- For each table, please supply a table caption (title) explaining the components of the table.
- Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.
- Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.

Artwork and Illustrations Guidelines

Electronic Figure Submission

- Supply all figures electronically.
- Indicate what graphics program was used to create the artwork.
- For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. MSOffice files are also acceptable.
- Vector graphics containing fonts must have the fonts embedded in the files.
- Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.

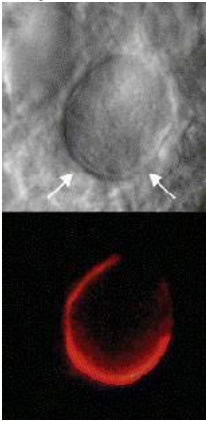
Line Art



- Definition: Black and white graphic with no shading.
- Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
- All lines should be at least 0.1 mm (0.3 pt) wide.

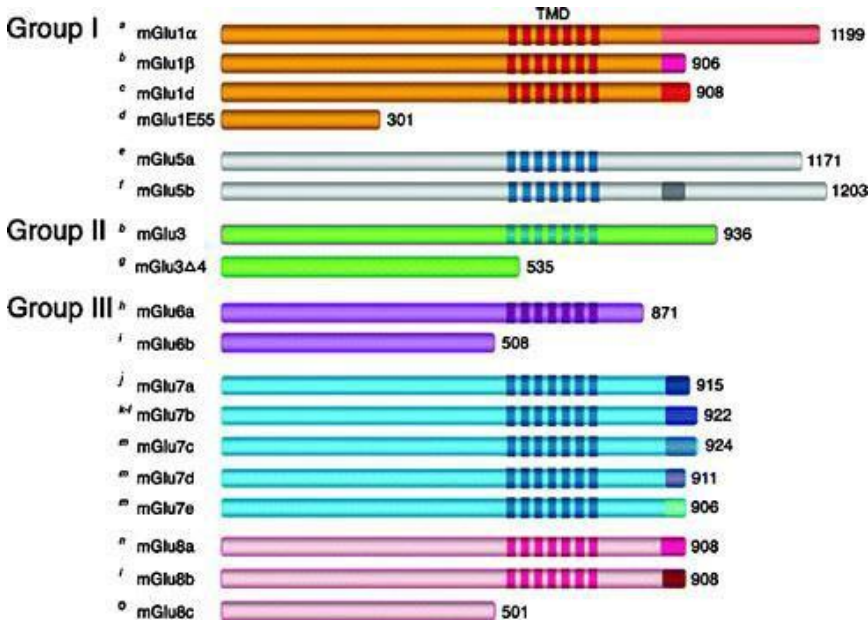
- Scanned line drawings and line drawings in bitmap format should have a minimum resolution of 1200 dpi.
- Vector graphics containing fonts must have the fonts embedded in the files.

Halftone Art



- Definition: Photographs, drawings, or paintings with fine shading, etc.
- If any magnification is used in the photographs, indicate this by using scale bars within the figures themselves.
- Halftones should have a minimum resolution of 300 dpi.

Combination Art



- Definition: a combination of halftone and line art, e.g., halftones containing line drawing, extensive lettering, color diagrams, etc.
- Combination artwork should have a minimum resolution of 600 dpi.

Color Art

- Color art is free of charge for online publication.
- If black and white will be shown in the print version, make sure that the main information will still be visible. Many colors are not distinguishable from one another when converted to black and white. A simple way to check this is to make a xerographic copy to see if the necessary distinctions between the different colors are still apparent.
- If the figures will be printed in black and white, do not refer to color in the captions.
- Color illustrations should be submitted as RGB (8 bits per channel).

Figure Lettering

- To add lettering, it is best to use Helvetica or Arial (sans serif fonts).
- Keep lettering consistently sized throughout your final-sized artwork, usually about 2–3 mm (8–12 pt).

- Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.
- Avoid effects such as shading, outline letters, etc.
- Do not include titles or captions within your illustrations.

Figure Numbering

- All figures are to be numbered using Arabic numerals.
- Figures should always be cited in text in consecutive numerical order.
- Figure parts should be denoted by lowercase letters (a, b, c, etc.).
- If an appendix appears in your article and it contains one or more figures, continue the consecutive numbering of the main text. Do not number the appendix figures,

"A1, A2, A3, etc." Figures in online appendices (Electronic Supplementary Material) should, however, be numbered separately.

Figure Captions

- Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, not in the figure file.
- Figure captions begin with the term Fig. in bold type, followed by the figure number, also in bold type.
- No punctuation is to be included after the number, nor is any punctuation to be placed at the end of the caption.
- Identify all elements found in the figure in the figure caption; and use boxes, circles, etc., as coordinate points in graphs.
- Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

Figure Placement and Size

- Figures should be submitted separately from the text.
- When preparing your figures, size figures to fit in the column width.
- For most journals the figures should be 39 mm, 84 mm, 129 mm, or 174 mm wide and not higher than 234 mm.
- For books and book-sized journals, the figures should be 80 mm or 122 mm wide and not higher than 198 mm.

Permissions

If you include figures that have already been published elsewhere, you must obtain permission from the copyright owner(s) for both the print and online format. Please be aware that some publishers do not grant electronic rights for free and that Springer will not be able to refund any costs that may have occurred to receive these permissions. In such cases, material from other sources should be used.

Accessibility

In order to give people of all abilities and disabilities access to the content of your figures, please make sure that

- All figures have descriptive captions (blind users could then use a text-to-speech software or a text-to-Braille hardware)
- Patterns are used instead of or in addition to colors for conveying information (colorblind users would then be able to distinguish the visual elements)
- Any figure lettering has a contrast ratio of at least 4.5:1

Electronic Supplementary Material

Springer accepts electronic multimedia files (animations, movies, audio, etc.) and other supplementary files to be published online along with an article or a book chapter. This feature can add dimension to the author's article, as certain information cannot be printed or is more convenient in electronic form.

Before submitting research datasets as electronic supplementary material, authors should read the journal's Research data policy. We encourage research data to be archived in data repositories wherever possible.

Submission

- Supply all supplementary material in standard file formats.
- Please include in each file the following information: article title, journal name, author names; affiliation and e-mail address of the corresponding author.
- To accommodate user downloads, please keep in mind that larger-sized files may require very long download times and that some users may experience other problems during downloading.

Audio, Video, and Animations

- Aspect ratio: 16:9 or 4:3
- Maximum file size: 25 GB
- Minimum video duration: 1 sec

Supported file formats: avi, wmv, mp4, mov, m2p, mp2, mpg, mpeg, flv, mxf, mts, m4v, 3gp Text and Presentations

- Submit your material in PDF format; .doc, .docx, or .ppt files are not suitable for long-term viability.
- A collection of figures may also be combined in a PDF file.

Spreadsheets

- Spreadsheets should be converted to PDF if no interaction with the data is intended.
- If the readers should be encouraged to make their own calculations, spreadsheets should be submitted as .xls or .xlsx files (MS Excel).

Specialized Formats

- Specialized format such as .pdb (chemical), .wrl (VRML), .nb (Mathematica notebook), and .tex can also be supplied.

Collecting Multiple Files

- It is possible to collect multiple files in a .zip or .gz file.

Numbering

- If supplying any supplementary material, the text must make specific mention of the material as a citation, similar to that of figures and tables.
- Refer to the supplementary files as "Online Resource." For example: "... as shown in the animation (Online Resource 3)" or "... additional data are given in Online Resource4."
- Name the files consecutively, e.g. "ESM_3.mpg," "ESM_4.pdf."

Captions

- For each supplementary material, please supply a concise caption describing the content of the file.

Processing of supplementary files

- Electronic supplementary material will be published as received from the author without any conversion, editing, or reformatting.

Accessibility

In order to give people of all abilities and disabilities access to the content of your supplementary files, please make sure that

- The manuscript contains a descriptive caption for each supplementary material
- Video files do not contain anything that flashes more than three times per second (so that users prone to seizures caused by such effects are not put at risk)

AFTER ACCEPTANCE

Upon acceptance of your article you will receive a link to the special Author Query Application at Springer's web page where you can sign the Copyright Transfer Statement online and indicate whether you wish to order OpenChoice, offprints, or printing of figures in color.

Once the Author Query Application has been completed, your article will be processed and you will receive the proofs.

Copyright Transfer

Authors will be asked to transfer copyright of the article to the Publisher (or grant the Publisher exclusive publication and dissemination rights). This will ensure the widest possible protection and dissemination of information under copyright laws.

- Creative Commons Attribution-NonCommercial 4.0 International License

Offprints

Offprints can be ordered by the corresponding author.

Color illustrations

Online publication of color illustrations is free of charge. For color in the print version, authors will be expected to make a contribution towards the extra costs.

Proof reading

The purpose of the proof is to check for typesetting or conversion errors and the completeness and accuracy of the text, tables and figures. Substantial changes in content, e.g., new results, corrected values, title and authorship, are not allowed without the approval of the Editor.

After online publication, further changes can only be made in the form of an Erratum, which will be hyperlinked to the article.

Online First

The article will be published online after receipt of the corrected proofs. This is the official first publication citable with the DOI. After release of the printed version, the paper can also be cited by issue and page numbers.

OPEN CHOICE

In addition to the normal publication process (whereby an article is submitted to the journal and access to that article is granted to customers who have purchased a subscription), Springer provides an alternative publishing option: Springer Open Choice. A Springer Open Choice article receives all the benefits of a regular subscription-based article, but in addition is made available publicly through Springer's online platform SpringerLink.

- Open Choice

Copyright and license term – CC BY

Open Choice articles do not require transfer of copyright as the copyright remains with the author. In opting for open access, the author(s) agree to publish the article under the Creative Commons Attribution License.

- Find more about the license agreement

RESEARCH DATA POLICY

The journal encourages authors, where possible and applicable, to deposit data that support the findings of their research in a public repository. Authors and editors who do not have a preferred repository should consult Springer Nature's list of repositories and research data policy.

- List of Repositories
- Research Data Policy

General repositories - for all types of research data - such as figshare and Dryad may also be used.

Datasets that are assigned digital object identifiers (DOIs) by a data repository may be cited in the reference list. Data citations should include the minimum information recommended by DataCite: authors, title, publisher (repository name), and identifier.

- DataCite

Springer Nature provides a research data policy support service for authors and editors, which can be contacted at researchdata@springernature.com. This service provides advice on research data policy compliance and on finding research data repositories. It is independent of journal, book and conference proceedings editorial offices and does not advise on specific manuscripts.

- Helpdesk

ETHICAL RESPONSIBILITIES OF AUTHORS

Coastal and Estuarine Research Federation Ethics

As a publication of the Coastal and Estuarine Research Federation (CERF), this journal follows the Code of Ethics for CERF, which can be found [here at the CERF website](#). In particular, CERF Ethics defines authorship as an individual who has made a substantial contribution to the manuscript in at least two of the following ways:

- Conceiving the ideas and design of the experiment
- Participating in the active execution of the study
- Analyzing and interpreting the data
- Writing the manuscript

Committee on Publication Ethics

This journal is committed to upholding the integrity of the scientific record. As a member of the Committee on Publication Ethics (COPE) the journal will follow the COPE guidelines on how to deal with potential acts of misconduct.

Authors should refrain from misrepresenting research results which could damage the trust in the journal, the professionalism of scientific authorship, and ultimately the entire scientific endeavor. Maintaining integrity of the research and its presentation can be achieved by following the rules of good scientific practice, which include:

- The manuscript has not been submitted to more than one journal for simultaneous consideration.
- The manuscript has not been published previously (partly or in full), unless the new work concerns an expansion of previous work (please provide transparency on the re-use of material to avoid the hint of text-recycling, i.e., “self-plagiarism”).
- A single study is not split up into several parts to increase the quantity of submissions and submitted to various journals or to one journal over time (e.g., “salami-publishing”).
- No data have been fabricated or manipulated (including images) to support your conclusions
- No data, text, or theories by others are presented as if they were the author’s own (“plagiarism”). Proper acknowledgements to other works must be given (this includes material that is closely copied (near verbatim), summarized and/or paraphrased), quotation marks are used for verbatim copying of material, and permissions are secured for material that is copyrighted.

Important note: *the journal uses software to screen for plagiarism.*

- Consent to submit has been received explicitly from all co-authors, as well as from the responsible authorities - tacitly or explicitly - at the institute/organization where the work has been carried out, **before** the work is submitted.
- Authors whose names appear on the submission have contributed substantially to the design, execution, or writing of the scientific work and therefore share collective responsibility and accountability for the results.

In addition:

- Changes in authorship, or in the order of authors, are not accepted **after** the acceptance for publication of a manuscript.
- Requesting to add or delete authors at revision stage, proof stage, or after publication is a serious matter and may be considered when justifiably warranted. Justification for changes in authorship must be compelling and may be considered only after receipt of written approval from all authors and a convincing, detailed explanation about the role/deletion of the new/deleted author. In case of changes at revision stage, a letter must accompany the revised manuscript. In case of changes after acceptance for publication, the request and documentation must be sent via the Publisher to the Editor-in-Chief. In all cases, further documentation may be required to support your request. The decision on accepting the change rests with the Editor-in-Chief of the journal and may be turned down. Therefore authors are strongly advised to ensure the correct author group, corresponding author, and order of authors at submission.
- Upon request authors should be prepared to send relevant documentation or data in order to verify the validity of the results. This could be in the form of raw data, samples, records, etc.

If there is a suspicion of misconduct, the journal will carry out an investigation following the COPE guidelines. If, after investigation, the allegation seems to raise valid concerns, the accused author will be contacted and given an opportunity to address the issue. If misconduct has been established beyond reasonable doubt, this may result in the

Editor-in-Chief’s implementation of the following measures, including, but not limited to:

- If the article is still under consideration, it may be rejected and returned to the author.

- If the article has already been published online, depending on the nature and severity of the infraction, either an erratum will be placed with the article or in severe cases complete retraction of the article will occur. The reason must be given in the published erratum or retraction note.
- The author's institution may be informed.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Authors must disclose all relationships or interests that could have direct or potential influence or impart bias on the work. Although an author may not feel there is any conflict, disclosure of relationships and interests provides a more complete and transparent process, leading to an accurate and objective assessment of the work. Awareness of a real or perceived conflicts of interest is a perspective to which the readers are entitled. This is not meant to imply that a financial relationship with an organization that sponsored the research or compensation received for consultancy work is inappropriate. Examples of potential conflicts of interests **that are directly or indirectly related to the research** may include but are not limited to the following:

- Research grants from funding agencies (please give the research funder and the grant number)
- Honoraria for speaking at symposia
- Financial support for attending symposia
- Financial support for educational programs
- Employment or consultation
- Support from a project sponsor
- Position on advisory board or board of directors or other type of management relationships
- Multiple affiliations
- Financial relationships, for example equity ownership or investment interest
- Intellectual property rights (e.g. patents, copyrights and royalties from such rights)
- Holdings of spouse and/or children that may have financial interest in the work

In addition, interests that go beyond financial interests and compensation (non-financial interests) that may be important to readers should be disclosed. These may include but are not limited to personal relationships or competing interests directly or indirectly tied to this research, or professional interests or personal beliefs that may influence your research.

The corresponding author collects the conflict of interest disclosure forms from all authors. In author collaborations where formal agreements for representation allow it, it is sufficient for the corresponding author to sign the disclosure form on behalf of all authors. Examples of forms can be found [here](#):

The corresponding author will include a summary statement in the text of the manuscript in a separate section before the reference list, which reflects what is recorded in the potential conflict of interest disclosure form(s).

See below examples of disclosures:

Funding: This study was funded by X (grant number X).

Conflict of Interest: Author A has received research grants from Company A. Author B has received a speaker honorarium from Company X and owns stock in Company Y. Author C is a member of committee Z.

If no conflict exists, the authors should state:

Conflict of Interest: The authors declare that they have no conflict of interest.

ENGLISH LANGUAGE SUPPORT

For editors and reviewers to accurately assess the work presented in your manuscript you need to ensure the English language is of sufficient quality to be understood. If you need help with writing in English you should consider:

- Asking a colleague who is a native English speaker to review your manuscript for clarity.
- Visiting the English language tutorial which covers the common mistakes when writing in English.
- Using a professional language editing service where editors will improve the English to ensure that your meaning is clear and identify problems that require your review. Two such services are provided by our affiliates Nature Research Editing Service and American Journal Experts.
- English language tutorial
- Nature Research Editing Service
- American Journal Experts

Please note that the use of a language editing service is not a requirement for publication in this journal and does not imply or guarantee that the article will be selected for peer review or accepted.

If your manuscript is accepted it will be checked by our copyeditors for spelling and formal style before publication.



<http://www.springer.com/journal/12237>

Estuaries and Coasts

Journal of the Coastal and Estuarine Research
Federation

Co-Editor-in-Chief: Montagna, P.; Simenstad, C.

ISSN: 1559-2723 (print version)

ISSN: 1559-2731 (electronic version)

Journal no. 12237



<http://www.springer.com/journal/12237>

Estuaries and Coasts

Journal of the Coastal and Estuarine Research
Federation

Co-Editor-in-Chief: Montagna, P.; Simenstad, C.

ISSN: 1559-2723 (print version)

ISSN: 1559-2731 (electronic version)

Journal no. 12237