

Plus ça change, plus c'est la même chose: On our quattuordecennial, a good *Methods* paper still is not about my friend the dolphin

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Methods in Ecology & Evolution (MEE) has seen four substantive changes in the 2 years since I took on the executive editorship of the journal. First, the BES policy of term-limits for associate editors and senior editors of the journals ensures their continuing evolution, and so MEE has a new team of senior editors and an editorial board with a healthy mix of rookies and veterans. Second, since January of this year, MEE has been a “gold” open-access journal, and all content published since its launch in 2010 now is either freely available (for papers previously published behind a subscription paywall) or fully open access (with either a CC-BY, CC-BY-NC or CC-BY-NC-ND licence, as the author chooses). To ensure that the author publication charge (APC) for open access does not create a barrier to publishing in the journal, the BES and Wiley provide a limited—but so far sufficient—number of [APC waivers](#) for corresponding authors who are not in countries covered by [Research4Life](#) access agreements, are not in countries or at institutions that have open-access [transformational agreements](#) with Wiley, or do not have publication costs available through their research grants. Third, MEE has joined with other top-tier journals in requiring that the data and code necessary to reproduce the methods and results reported in a manuscript submitted for review be included with the submission and then made publicly available to accompany all published papers (Jenkins et al., 2023). Finally, since July 2023, all papers submitted to MEE and the other BES journals are reviewed “double-anonymous,” where not only are the reviewers unknown to the authors but the authors also are unknown to reviewers. This change was endorsed by the BES Publications Committee based on the clear benefits of double-blind review in reducing many of the biases inherent in the previous, single-blind review process that were revealed by the detailed experimental study by Fox et al. (2023).

These changes strongly support the unchanged core mission of the journal: to promote the development of new methods in ecology and evolution, to publish the best of them, and to facilitate their dissemination and uptake by the research community. In this mission, we have been extraordinarily successful. The methods we publish are widely used by ecologists and evolutionary biologists. Our 2022 Clarivate impact factor (IF) is 6.6 and, despite its known flaws, is a reasonable indicator of citation rate and use of the methods we publish. This IF ranks us 12th among the 169 “ecology” journals included in Clarivate's Journal Citation Reports, is the highest among all BES journals, and is higher than all journals published by the Nordic Society Oikos and the Ecological Society of America (other than *Frontiers in Ecology and the Environment*).

Like all established BES journals, we receive on the order of 1000 submissions each year. More than half of these submissions are “desk-rejected” relatively rapidly (usually within 1 week) by one of the four senior editors. Only a few of these manuscripts are fatally flawed in some way; rather, most are interesting and technically sound. But they either simply are not “Methods” papers or they would fit better as a different type of paper for the journal, in which case authors may be given the option to rework and resubmit (e.g. a manuscript submitted as a full Research Article would be better—and reviewable—if it were reworked as an [Application](#) or a [Practical Tools](#) paper). On the positive side, if you actually submit a “Methods” paper of the most appropriate type, and if it makes it across a senior editor's desk, onto an associate editor's one, and is sent out for external peer review, the odds of acceptance are closer to 50%.

So, what makes for a good submission and what really does not work?

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The best Methods papers, regardless of the article type, are about the methodology itself, not the results of the case study. A good first indicator of a Research Article that is really a Methods paper is that the Introduction identifies a gap in existing methodologies that is independent of an organism or study system. For example, using the identification of the lack of biological realism in MaxEnt species distribution models (SDMs; e.g. Adams et al., 2015; Record et al., 2018) to motivate a new type of SDM is a better lead for a Methods paper than motivating the same model based on the need to better predict the distribution of cetaceans to better manage them as the oceans warm (Becker et al., 2018). In the same vein, new models, statistical methods, and indices should be tested with simulated datasets that explore a large range of the possible parameter spaces and identify error rates. The results of these simulations almost always should appear in the main text: tests of the new methods on a real dataset (i.e. the case study) could go in the main text but could just as easily be placed in Supporting Information (SI).

Our shorter article types—Applications and Practical Tools—should be similarly framed. They should fill an empty niche, not replicate or rehash an existing one. Any new method should make researchers' and practitioners' work easier, but to encourage its uptake and future use, the paper should clearly contrast the new method with those that are already available and make the case for someone to switch. As with the longer Research Articles, case studies for Applications and Practical Tools are always useful but they should not be the central focus of the manuscript.

Reviews and Perspectives set benchmarks for the field and guide methodological advances. These article types are not the place to introduce new methods or models but rather to survey their existing range and identify key areas in need of additional work. Reviews and Perspectives are particularly useful for research areas where the publication of existing methods has been dispersed among many disparate journals and to call attention to methods that are less commonly used by ecologists and evolutionary biologists. A salient difference between Reviews and Perspectives is that the former can draw on a lot of published material whereas the latter cannot.

Always take the time to make your manuscript shorter. Senior editors routinely find an excellent short Application or Practical Tool lurking in an overwritten, rambling Research Article. For example, if a 7000-word Research Article presents a new method that requires no new theoretical development or if simulation is unnecessary even though analytical (closed-form) solutions are unavailable, we will return it for shortening to an Application. Similarly, if a long research article is much more focused on the results of its use to, say, tracking dolphins, but we see that the tracking device potentially is a useful tool for tracking any mammal, we will return it for shortening to a Practical Tool. We would do the same for a new R or Python package that may have been developed for dolphin demographics but could be used equally well for any other marine or aquatic mammal. In either case, the "Results" in the shorter manuscript would be reduced to a brief example (at most a single figure), with details placed in SI.

Finally, there are three common submission types that we rarely review or publish. First, manuscripts that describe existing statistical

methods that are unappreciated by or unknown to ecologists and evolutionary biologists fit better in the *Statistical Reports* section of *Ecology*. Second, manuscripts that use existing methods in clever or unanticipated ways to analyse an interesting set of data or test a particular hypothesis are "results-oriented" and would be better submitted to one of the other BES journals. Third, manuscripts describing "workflows"—organising existing methods into a useful sequence to make one's life easier, analysing an interesting set of data, or creating a package for others to use—are out of scope.

The variation within the types of articles we publish in *MEE* is endless but still bounded. If you think your manuscript might be a good fit but you are not sure, please ask us *before* you submit it. Every year, during the Annual Meeting of the British Ecological Society, the senior editors of all the BES journals participate in "speed review" sessions where we provide feedback to undergraduate and graduate students, postdocs, and senior researchers on their works-in-progress and discuss which journals might be appropriate outlets for their manuscripts. If you cannot make it to the UK in mid-December though, we will always give the same amount of feedback via email. Just send the title, abstract and a brief note about why you think it is appropriate for *MEE* to our [editorial office](#). We are always looking for the next methodological breakthrough and you might have it!

AUTHOR CONTRIBUTION

AME wrote the paper.

CONFLICT OF INTEREST STATEMENT

The author declares no conflicts of interest.

PEER REVIEW

The peer review history for this article is available at <https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/2041-210X.14232>.

DATA AVAILABILITY STATEMENT

No data needed or used in this editorial.

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REFERENCES

- Adams, V. M., Petty, A. M., Douglas, M. M., Buckley, Y. M., Ferdinands, K. B., Okazaki, T., Ko, D. W., & Setterfield, S. A. (2015). Distribution, demography and dispersal model of spatial spread of invasive plant populations with limited data. *Methods in Ecology and Evolution*, 6(7), 782–794. <https://doi.org/10.1111/2041-210X.12392>
- Becker, E. A., Forney, K. A., Redfern, J. V., Barlow, J., Jacox, M. G., Roberts, J. J., & Palacios, D. M. (2018). Predicting cetacean abundance and distribution in a changing climate. *Diversity and Distributions*, 25(4), 626–643. <https://doi.org/10.1111/ddi.12867>
- Fox, C. W., Meyer, J., & Aimé, E. (2023). Double-blind peer review affects reviewer ratings and editor decisions at an ecology journal. *Functional Ecology*, 37(5), 1144–1157. <https://doi.org/10.1111/1365-2435.14259>
- Jenkins, G. B., Beckerman, A. P., Bellard, C., Benítez-López, A., Ellison, A. M., Foote, C. G., Hufton, A. L., Lashley, M. A., Lortie, C. J., Ma, Z.,

Moore, A. J., Narum, S. R., Nilsson, J., O'Boyle, B., Provete, D. B., Razgour, O., Rieseberg, L., Riginos, C., Santini, L., ... Peres-Neto, P. R. (2023). Reproducibility in ecology and evolution: Minimum standards for data and code. *Ecology and Evolution*, 13, e9961. <https://doi.org/10.1002/ece3.9961>

Record, S., Strecker, A., Tuanmu, M.-N., Beaudrot, L., Zarnetske, P., Belmaker, J., & Gerstner, B. (2018). Does scale matter? A systematic review of incorporating biological realism when predicting changes in species distributions. *PLoS One*, 13(4), e0194650. <https://doi.org/10.1371/journal.pone.0194650>