

An update on recent developments at JEB

Max Reuter

Research Department of Genetics, Evolution and Environment, University College London,
Gower Street, London WC1E 6BT

m.reuter@ucl.ac.uk

I have been Editor-in-Chief of the *Journal of Evolutionary Biology* (JEB) since August 2021, when I took over from Wolf Blanckenhorn. Having found my feet over the past months, I feel that it is time to provide you, the JEB readership, with an update on my vision and plans for the journal and some of the initiatives that I have been working on, together with JEB's Managing Editor Nicola (Nicki) Cook and the JEB editorial board.

Overall, I see my mission as solidifying and growing the journal's reputation as an attractive outlet for quality research in evolutionary biology. We are starting from a good position, JEB is seen as a solid journal and we have a history of publishing important contributions to the field. Furthermore, there is a growing recognition among evolutionary biologists that publishing in society journals like JEB is the right thing to do, keeping funds within the community. But we are operating in an environment of growing competition—from new society journals, from commercial outfits that offer more glamour, but also from innovative and exciting new approaches to free and open scientific publishing. As a consequence, JEB and many other traditional journals in the field have seen a decline in submissions and published papers over recent years that we need to counter.

My main focus of attention as Editor-in-Chief will therefore be to maintain and further grow the quality and long-term impact of articles published in JEB. This is paramount, as it underlies the reputation of our journal and the relevance of our published work for the evolutionary research community. Growing the quality and impact of JEB's output is a lofty goal, and there isn't an easy way of achieving it—certainly not quickly. But with the day-to-day help of Nicki and the support of the ESEB steering committee, we have been and are working on a range of initiatives that we believe will benefit the journal. Some of these reflect recommendations made by the JEB Advisory Group, a panel convened by ESEB that reported back last year, others are devised internally. I describe the most important changes and initiatives below.

The most fundamental change at JEB concerns the structure of the editorial board, the guarantor of quality peer review. JEB's board has long consisted of a group of Deciding Editors, who handle submissions by soliciting reviews and taking independent decisions. This was complemented by a Reviewing Board, a group of approximately eighty reviewers associated with the journal. Deciding Editors could rely on members of this Board for peer review, alongside external reviewers selected for individual papers. The Reviewing Board was created to speed up the review process and served this purpose well over the years. Many of the Board's members had a long and loyal association with JEB and all provided an excellent service to our authorship (and several went on to become deciding editors). But, however dedicated the members of a limited Board, the growing diversity and technical sophistication in evolutionary biology means that quality peer review is best provided by a larger pool of external reviewers, selected specifically to suit the topic of individual papers. Accordingly, JEB's Reviewing Board was disbanded at the end of 2021, and our peer review now relies exclusively on external reviewers.

While this has been an important first step, our re-organisation will continue in the lead-up to 2023. At the beginning of that year, we will switch from the current board of Deciding Editors to the more traditional structure of a small group of Handling Editors (who triage manuscripts and take final decisions), supported by a larger board of Associate Editors (who invite reviews and recommend decisions). This structure combines the advantages of consistency, through the Handling Editors who handle many submissions, and fine-grained, specialist expertise, through the Associate Editors who deal with few manuscripts and invite specialist reviewers. In addition, the resulting increased size of the board will broaden JEB's reach into the community and allow us to make the journal more diverse and inclusive.

We will be calling for applications to the different editorial roles in the near future. If you are interested in these opportunities, follow the Twitter accounts of [JEB](#) or [ESEB](#) and keep an eye on our [blog](#). You are also welcome to get in touch with myself or the JEB or ESEB offices, and of course talk to us at the upcoming ESEB conference.

Another change at JEB is focussed on the transparency and reproducibility of research published in journal, and the long-term impact of our work. Like many other journals, JEB has for some time required that the raw data associated with our articles be deposited in relevant public repositories. However, a [systematic inspection](#) of such repositories conducted by the *American Naturalist* has shown that, while files are deposited, the archives are not always as useful as they could be. In fact, only a small proportion of repositories provided complete data and the meta-information critical to the reusability of the archive and the long-term impact of the published work. These issues are not limited to the *American Naturalist* and need to be addressed across the field. To do so, the JEB blog now provides extensive [guidance](#)—written as a collaborative project across journals—to help authors prepare their archives. Furthermore, and more importantly, we have joined a select group of pioneering journals led by the *American Naturalist* that include data repositories in their peer review process. Our freshly recruited Data Editor, Sebastian Lequime from the University of Groningen, will assess and provide feedback on archives associated with accepted articles and assist authors in making their data archives as useful and reusable as possible. We hope that that our authorship will appreciate this support as a way to provide longevity and additional value to their work.

While some of the changes described above will help to increase the quality and transparency of research published in JEB, others are designed to raise the number of high-quality submissions we receive. Submissions are important, as they provide the raw material for our publications and are a prerequisite for a stringent selection process. But the quantity of published material also matters. This is particularly true in a publishing landscape that moves from a subscription-based to an Open Access system funded via Article Processing Charges (APCs). Passionate arguments are raging in the scientific community around this and other developments in the publishing world, and we share the preference for free access as well as concerns about hurdles to publication. But as stewards of a journal and a society, we can only abandon ourselves to our ideological preferences to a point. Instead, we need to face the fact that JEB generates the vast majority of the income for its parent society, and hence underpins virtually everything that ESEB does in terms of scientific, societal and educational activities. The transition to Open Access thus poses a challenge, because unlike the subscriptions model—a lucrative hang-over from the past—APCs provide much lower revenue per article and tie our revenue to the volume of output.

Increasing submissions is essential to addressing this challenge without compromising the quality of the work we publish. One way of achieving this organically is by raising our visibility. Anybody following JEB on Twitter or looking at our blog will have observed a growth in content over the past year or so. Similarly, we are keen to strengthen our links to the evolution community, and the ESEB membership in particular, and you will see a more

prominent presence of JEB at the upcoming ESEB conference. But we are also active in inviting submissions in a more targeted way. Thus, our Commissioning Editor Luke Holman is active in soliciting Reviews and Special Issues for JEB. Many of these are associated with ESEB-funded activities, such as [Progress Meetings](#) or [Special Topic Networks](#), and symposia at the biannual ESEB conference and provide an important connection between the journal, the society and its membership. But we also welcome proposals outside these initiatives and are happy to be approached with projects at any stage.

Conscious that methods in evolutionary biology have become increasingly complex and diverse, we have just introduced a new Methods article type. Our Methods articles will benefit authors developing new approaches, be it wet lab, statistical or computational, by providing a visible and citable record of their contribution to technical advances in the field. But more importantly, publishing new methodologies will help accelerate research by making new tools accessible, and stimulate discussion of best practice. Our inaugural article by Daniel Berner and Valentin Amrhein (2022) is an excellent example of the latter, arguing in favour of parameter estimation as opposed to hypothesis testing in statistical analysis.

It is my hope that the above initiatives will help to maintain and develop JEB as a premier journal in evolutionary biology. The current and future success of the journal is mainly thanks to you, our reader- and author-ship and all those who give their time to review. Together with the entire JEB team, I would like to thank you all and hope that you will continue to support your society journal.

References

Berner D and Amrhein V (2022) Why and how we should join the shift from significance testing to estimation. *Journal of Evolutionary Biology* 35(6):777–787.
<https://doi.org/10.1111/jeb.14009>