

Editorial: Ten years of *Methods in Ecology and Evolution*

The start of 2020 marks the end of the first decade of *Methods in Ecology and Evolution* and the beginning of its second. When we launched the journal in 2010, we did so because of feedback from the community that there was a need for a journal that promoted the publication of new methods. In Issue 1, the launch issue, we published an editorial to summarise the aims and ambitions for the journal. The need for the new journal was outlined, as well as some of our objectives and strategies for developing it. We noted much of the recent progress in ecology and evolutionary biology had been enabled or driven by methodological developments in statistics, computing, molecular and genetic techniques. Given this, it seemed a logical development to propose a journal that concentrated on methodological development. A decade later is a good time to review whether we have fulfilled that need.

In outlining the rationale for the (then) new journal, our editorial had three main sections, ‘*Why do we need a new journal?*’, ‘*What is the scope of the journal?*’ and ‘*Supporting users*’. Now seems a suitable point in time to briefly review our progress under these headings.

Did we need a new journal?

In 2010 there was no existing journal that specialised in publishing methods papers in ecology or evolutionary biology. Although new methods were published in a range of established journals, there was no single home for these papers. Our objective was to create a focal point for such papers across a wide range of ecological and evolutionary sub-disciplines.

According to the numbers, the we have been really successful: in total we have published nearly 1000 papers in our first decade, with over 5000 papers having been submitted in that time. We hoped that authors would submit their papers for *MEE* in preference to other journals because *MEE* would support the development and presentation of new methods in a number of ways, and this would appeal to both authors and readers.

Indeed, looking at these numbers, we think that we can make the argument that, not only have we achieved this, but indeed the existence of *MEE* has stimulated authors to develop methods and publish papers that otherwise would not have been written. It seems unlikely that we have harvested 1000 papers that would otherwise simply have been published elsewhere, the numbers would appear to be just too large. If true, this is an achievement that goes beyond our original aim, which was around increasing the visibility of methods and giving them a focus.

The scope of the journal

By design, *MEE* publishes across the disciplines of ecology and evolutionary biology. Given the nature of these fields, and their heavy reliance on analytical methods, there was a likelihood that the journal would publish a high proportion of statistical methods. We indeed publish a lot of these, however we have tried hard to ensure that the scope of the journal is maintained to be as broad as possible in terms of the diversity of techniques and range of sub-disciplines.

In terms of coverage of sub disciplines, the scope of the journal is extremely wide. We routinely publish across ecology and evolution, including subdisciplines of statistical ecology, genetics, population & community ecology, phylogenetics, and conservation amongst others. What has been particularly gratifying is that we have seen the emergence of interesting areas of new methodological development over the past decade. Notable examples include the emergence of environmental DNA (eDNA) methods, and the growing development of monitoring technology, leading to transformative changes in the field of movement ecology.

In order to enhance the diversity of new methods being published, we introduced a section of the journal '*Practical tools*' specifically to highlight the development of new field and lab methods. We have now published a variety of papers under this heading, along with many previous practical techniques.

One area in which we can improve in the next decade, however, is in terms of our evolutionary content. We have published a range of papers in this area, however this could be increased. Looking forward, we will be looking to increase the representation of papers in evolutionary ecology and molecular ecology.

Supporting users

We stated in 2010 that “*a prime aim of the journal will be to maximise the uptake of techniques by the community*”. We aimed to do this by making methods accessible and supporting authors to make their methods visible and usable. Recently, in 2018, we published an editorial outlining how we would do this with regard to publication of code. This editorial highlighted four principles that we would attempt to adhere to: (1) *Quality*: through being published in *Methods in Ecology and Evolution*, readers and users should have confidence that peer review has been used to ensure that there is evidence of high standards of code preparation; (2) *Usability*: code needs to be usable, so that readers are able to implement methods readily; (3) *Accessibility*: we require a version of record: this should be the exact version of the code described in the journal and able to replicate all results presented; (4) *Functionality* needs to be novel and add to what is already available. By keeping to these principles, we aim to ensure that methods are robust, novel and accessible to users. Readers can have confidence that an analytical method published in *Methods in Ecology and Evolution* will be robust and supported by high quality code.

Although these four principles were initially developed for the publication of code, the same arguably applies for all methods that we publish. Rigorous peer review is the bedrock of our publication process that ensures quality. In promoting methods, we emphasise usability, accessibility and functionality through, for example, blog posts, the use of videos, podcasts and social media. The reason for having a journal that publishes methods is that we can ensure that methods are adopted by the community. The journal encourages authors to do this and provides

a number of tools that enable this to be achieved.

Looking forward

Methods in Ecology and Evolution is the product of the hard work of authors, referees, associate editors, the editorial team and the British Ecological Society. We really thank everyone involved for all of the support in the past decade – the journal has embedded itself as part of the wider ecological community, hopefully improving the standard of ecological science at the same time as benefitting from the efforts of the community.

The first 10 years of *Methods in Ecology and Evolution* has been successful beyond our initial hopes. During 2020 we will be looking to mark this success in several ways: we will be highlighting the content of the past decade as well as showcasing the journal at conferences and workshops. This is all with the aim of securing the basis for the next successful decade.

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