

Editorial

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Leave no one behind: challenges and opportunities for equity and diversity for marine journals in the 21st century

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In 2020, the Journal of the Marine Biological Association (JMBA) celebrated its 100th volume. A key paper in this volume was a history of the JMBA by Dando & Southward (2020), which was an update of a paper previously published by Spooner *et al.* (1987). The Dando & Southward paper was useful in elucidating the changes in JMBA production from the establishment of the journal in 1887 alongside changes in the wider publishing and scientific landscape. For example, there was only a single issue a year until 1953 when it was decided to increase to three issues as a result of ‘the post-war expansion of marine research’ (Spooner *et al.*, 1987; Mitchell, 2020). The increase also reflected a growth in science generally (Bornmann *et al.*, 2021) and in the concomitant increase in the number of journals published (Peder Olesen & von Ins, 2010). The pace of change has not let up and it could be argued that the last few years have seen the greatest changes in journal production with rapid online publishing now the norm and scientific outputs no longer confined to the literature but reported on social media, blogs and other platforms. Changes are not just technological but also reflect paradigmatic shifts in thinking on a number of issues related to science. These changes include: an increased focus on Open Science (Friesike *et al.*, 2015; Burgelman *et al.*, 2019); the need to better define research impact as articulated in the San Francisco Declaration on Research Assessment (DORA, 2022); a greater focus on sustainable publishing models as exemplified by the SDG Publishers Compact (UN, 2022a, 2022b), and the advent of Plan S as a driver of Open Access (OA) publishing (ESF, 2022). The JMBA is therefore having to continually evolve in response to the changes in the wider landscape – the fact that this volume is the first to be online only reflects not only changes in usage but also the Marine Biological Association’s commitment to sustainability.

This is not to say, however, that all the new developments related to scientific publishing are accepted as being universally positive and without challenges in implementation. Along with many other journals, the JMBA has signed a transformative agreement as part of the transition to Open Access, making the JMBA compliant with funder mandates for Open Access publishing. Open Access publishing is seen as fundamental to removing barriers to knowledge exchange and supporting a democratization of science (Holbrook, 2019).

There are, however, some important things to note concerning the challenges and opportunities ahead. Firstly, the United Nations has outlined the principle of ‘Leave no one behind’, which is described as ‘the central, transformative promise of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs)’ and commits to ‘reduce the inequalities and vulnerabilities that leave people behind and undermine the potential of individuals and of humanity as a whole’ (UN, 2022a, 2022b). If Open Access reduces barriers in terms of access to information there is also evidence that the high costs associated with OA for authors creates barriers for other segments of the scientific community, particularly scientists from the Global South (Smith *et al.*, 2021; Kwon, 2022). This is a major issue for many marine journals who want to work with and support the international community and increase the diversity of thought and representation in their discipline/subject area.

Secondly, many learned society journals such as the JMBA exist to promote a specific discipline and be an inclusive voice for those who work within the discipline not only on a global scale but across a range of individuals from Early Career Researchers (ECRs) to retirees and those working outside of institutes with dedicated OA funding pots. It is also possible therefore that Open Access publishing ‘creates inequity and makes publishing inaccessible to many marginalized researchers’ (Fox *et al.*, 2021).

Reconciling freedom of access to information whilst enhancing diversity and ensuring equality and fairness in publishing and scientific engagement is a thorny challenge with no obvious answers. As the JMBA looks forward to the next 100 volumes we are committed to working with publishers, other societies, our JMBA Editorial team and the wider community to address this challenge and find novel solutions to ensure the JMBA supports the ‘leave no one behind’ principle. The result will be more equity, more diversity and better science – something well worth striving for.

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