

The Publication Game in the Aquatic Sciences– an Editor in Chief’s Perspective

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The editorial in the last issue was evocative and thought provoking (Steinberg, 2024). Consequently, it is appropriate to include an Editor in Chief’s perspective on the manuscripts that are received and considered for publication. It is realized that the publication process is stressful for the authors, but success is euphoric. Authors strive to publish in top class refereed international journals with success contributing to career security and advancement. The utopian desire of editors is to publish well-written manuscripts describing excellent work that will be well received by the readership and contribute to the all-important journal metrics. In short, we live in a period dominated by impact factors, and the number of citations, article downloads and reads. There may be contractual obligations with the publisher regarding the number of articles to be accepted and published within a defined period. In short, there is pressure on editors and authors. So, what is the reality of the situation. To dispel one myth, not all submissions lead to publications. It is not unusual that only a small minority of the submissions are actually published.

The first stage of the process is that the author(s) carries out a piece of work that is considered to be worthy of publication. Then, a decision needs to be made about which journal to approach. In our subject area of aquaculture, you would be surprised by the number of submissions that bare little or no relationship to the subject of the journal. Indeed, aquaculture may not even be mentioned in the text. This raises the question about why have the authors submitted their work to an aquaculture journal? Our message is to choose an appropriate journal for the work otherwise the submission will not progress any further. However, if the manuscript is considered to have merit, then the editors may suggest resubmission to another more appropriate journal. It should be emphasized that international journals are only interested in work of relevance to multiple countries, i.e. of international relevance. Work only of local interest is unlikely to be accepted by an international journal. Once chosen, the format of the journal needs to be followed otherwise rejection will occur. You would be surprised at the number of times that manuscripts do not follow the Instructions for Authors. These manuscripts do not progress any further, and are returned to the authors. As many journals publish in English, it is important that the manuscript is linguistically and grammatically correct [in English]. Otherwise, the editor is likely to recommend that the authors consult with somebody fluent in English before the manuscript will be considered any further.

A major reason for rejection is plagiarism [including self-plagiarism, i.e. when the author uses text that has already been published]; this is highlighted by software that is used by most if not all publishers to detect similarity levels with other work in the data base. High levels of similarity to other work will lead to an automatic rejection. These quality checks will weed out a good number of manuscripts that are returned to the authors. If the manuscript has survived so far then it may be scrutinized further by editors for content

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and style, and then sent to referees.

At this point, it is prudent to consider research and review articles. The former needs to contain new information that advances knowledge of the subject. We do not welcome manuscripts that essentially reiterate what is already known without adding a substantive amount of new information. Nicely written manuscripts representing a well-rounded piece of original research are so much better and will receive greater support from the editor than the infuriating habit of subdividing the work to maximize the number of publications.

A common mistake with review articles is that they summarize the literature without detailing the strengths and weaknesses of publications, and the knowledge gaps that need to be addressed. It is not unusual for review manuscripts to resemble the introductions from student theses rather than carefully constructed arguments suited for publication in scientific journals.

This raises the question about how journals ensure the quality of submitted manuscripts? The short answer is a reliance on referees, who mostly perform the task for little or no reward. However, it is a personal expectation that those who submit manuscripts to a journal should be prepared to review for the same journal. Who are these referees and how are they chosen? Apart from members of editorial boards and individuals known and respected by editors, reliance is placed on the use of software to identify and suggest potential referees. In addition, the authors may be allowed to suggest referees, subject to certain constraints. Conversely, authors may request that certain individuals are not appointed as referees. Software may indicate potential conflicts of interest, and reveal the background of the suggested referees, including field of interest, number of publications and citations, and reviewing history, i.e. the number of invitations, acceptances, and delivery rate, and the time frame. Editors realize that potential referees are already likely to be overworked, and it may take dozens of invitations to secure the minimum number of acceptances. With some manuscripts, the required number of referees are obtained, and excellent reviews are furnished within a comparatively short period of time. The other extreme is that the response by the referees is tardy in terms of timeliness and the quality of the review. In some cases, none of the invitations are accepted leading to yet more searching. Alas, not all acceptances result in the delivery of completed referee reports despite reminders [and pleading!]. This delays the publication process as more referees will need to be sought and appointed. If all goes according to plan, at some point, the requisite number of referee reports will have been received, and the editor will scrutinize the responses to make a decision on the acceptability (or otherwise) of the manuscript. The editor will look for comments concerning the use of adequate numbers of replicate experiments, and the use of appropriate controls. Are the data adequate quantitatively and qualitatively? Is there any indication of poor work? If there is a consensus of opinion by the referees then the decision is relatively straightforward. However, it is not so unusual that referees will have opposing views, which the editor needs to resolve, and may need the opinions of yet more referees before reaching a decision, and informing the author about whether the manuscript will be rejected, accepted or more likely in need of revision. In many cases, the author will be requested to revise the manuscript within a specified timeframe. A common mistake particularly among novice authors is to rush into making revisions, and to ignore many of the suggestions to improve their manuscript. Some comments will be more important than others – ignore them at your peril! Revised manuscripts may be reviewed again, with the editor taking the final decision about acceptability. It is unlikely that editors will have expertise in all areas covered by the journal. Therefore, the views of referees are important in making an informed decision about the quality of the manuscript and the work that it describes. It is a sad fact that the majority of manuscripts will be rejected for one or more of the reasons described above. Many of the rejected manuscripts will be improved by the authors [including the addition of more data and/or a major re-write] and resubmitted or sent to other journals.

If all goes well, only high-quality articles will be published in refereed journals, and knowledge will be extended. Are such utopian dreams realized? Well, the reality is often very different. Despite the good intentions of journals and their editors, some articles of dubious standard survive scrutiny, and are published. In some cases, manuscripts may present only the best, most convincing data; the rest are overlooked because they do not fit the narrative presented by the author. Most of us will have encountered publications that state “representative/typical data show.....” whereas the reality is different, i.e. the best data are included, and the rest are ignored. Multiple articles [= paper mills], often in different journals, may focus on a common theme, and as a group provide limited new knowledge. The best articles will be remembered, and their content used by other scientists. The worst articles may be questioned in Opinions or Letter to the Editor sections of journals. Punitive action may be taken against the minority of authors who falsify their data or attempt to duplicate their articles in two or more journals. These cases of misconduct are treated seriously, and will be investigated by the journal/publisher. It goes without saying that journals will retract these papers. The other articles, which are neither the best nor the worst, are apt to be largely forgotten with time.

Could we do any better – what developments may we see in the future? We may anticipate that Artificial Intelligence (AI) will significantly revolutionize the publication process, particularly involving the evaluation stage, although there is concern that AI could be used to write manuscripts (Khalifa and Albadaawy, 2024)! Clearly, while embracing the transformative potential of AI, it is necessary to maintain a dynamic balance between the immutable values of academic rigor and ethical research (Glumbe et al., 2024). Looking at the history of scientific publishing, we have progressed from an entirely manual system [i.e. involving submission of multiple hard copies including photographs to a journal office followed by the dispatch of the manuscript to referees chosen from the personal knowledge of the editor, who makes the decision about acceptability or otherwise] to a fairly automated Internet-based process. Now, we are at the mercy of software developers, who may or may not involve editors in the development process. Paper has been replaced by computer files. What will be the next step? An electronic system that will receive and assess manuscripts, maybe with the use of referees, and make decisions without the need for direct human intervention? Will referees continue to be used in the future or will there be a reliance on AI? Could the role of the [human] scientific editor be coming to an end? There are clearly interesting times ahead for the publication process. In the meantime, we will continue to strive towards publishing high quality work. The current system is not perfect, but has evolved, and is sufficiently robust to identify problem manuscripts. The initial quality control inspections reject manuscripts because of irrelevance to the journal, poor use of language, disregard to the Instructions for Authors and plagiarism/similarity to other published work. Editors identify obvious issues with the data, such as lack of controls or replicates. All this happens before the manuscript is sent to referees, who are often highly critical. Most published manuscripts will have been revised as a result of critical comments by referees and editors.

The developments in the publication process have been met with a veritable explosion in the number of manuscripts submitted to journals posing tremendous pressure on the editors to deal with them in a timely manner for the benefit of authors and journals alike. Many submissions will be culled during the initial quality checks. The rest need to be assessed in terms of the content. This is the principle role of the editors and referees. However, for the system to work effectively, referees need to provide fair, impartial comment. We do not need false praise from “friends” or antagonistic comments from competitors. The reports guide the editor to make informed judgements. Could the process be improved? Well, we are certainly open to suggestions! There are clearly interesting times ahead.

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