

## Enhancing scientific publishing in the field of silviculture

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Scientific publishing is a crucial way to communicate research, as well as being a means of demonstrating individual merit and institutional potential in science. Scientific journal editors are the main gatekeepers in such processes. As Editor-in-chief and Vice-Editor-in-chief of *Annals of Silvicultural Research* (ASR, indexed on Scopus and ranked second quartile under “Forestry” subject category in the Scopus database) we are proud to maintain high standards for our readers and to respond quickly to authors and to new developments in forestry. At the same time, we must ensure an independent support for the publication of creative and carefully executed articles under an open access framework.

At the beginning of each year, we routinely inspect the most cited ASR articles from the Scopus database. The evaluated papers point to the various topics that are attracting the most research interest and attention in the broad field of forestry, and it is curious to see a mix of very new papers and others that have been published since more than a decade (e.g. from forest-based bioeconomy to forest fire prevention, from geospatial forest information tools to high nature value farmland).

We find this work useful as it allows us to get into the mindset of our readers. Some general guidelines about mastering the art of scientific publication in forestry also arise from this exercise. Researchers face the challenge of presenting their results and drawing attention to their scientific findings. Of course, it goes without saying that authors write scientific papers precisely because they have something substantial and interesting to disclose to the research community and/or stakeholders. On the other hand, optimizing the structure of a scientific paper always requires a certain degree of specific skill and competence: a well-composed document clearly stands out, earning the prompt attention of readers.

Basically, an author should write her/his article with the broad forestry readership in mind, not just the readers of the (narrow) community of her/his specific science subject. The key step is to organize the data in a carefully articulated pattern, which will lead to an interesting and compelling scientific story. The style of language should also follow this policy by being clear and as simple as possible.

The story begins with an attractive yet simple title that grabs the attention of readers who may not be familiar

with the specific topic. Shorter titles often have more impact. While it is critical to be scientifically accurate, creativity can be introduced: the curiosity generated by the title makes a significant difference on the impact of a scientific paper; an article can likely be skipped if its title listed in the journal index or in a bibliometric database fails to draw the attention of potential readers. The available evidence suggests that the presence of a colon (:) in article titles correlates positively with the number of citations (Jacques and Sebire 2010): in other words, titles with a specific and accurate description of the manuscript content are more likely to be read and quoted.

Another critical aspect is to propose an abstract easy to be understood and appreciated. Make sure that the key findings emerging from the article appear clearly in the abstract: this is essential to entice the potential readership to go through the full text. To this end, we may suggest that once you have written the abstract, you pass it on to your colleagues to see if they can appreciate the significant new advance emerging from your work.

In the introduction authors must fully describe the meaning of their work and how it relates to the current state of knowledge. The last sentence of the introduction usually contains the purpose of the paper, often effectively presented in the form of research question(s). The content of the following sections, concerning materials, methods and results, must be shaped in a direct, clear and informative way: distinctively, it is very effective to include artistically attractive schemes and color graphics that appeal to a general readership since figures are the heart of science communication. The authors then discuss the obtained results, taking care to focus on the main theme of the work; few unanswered questions can be discussed with a limited referencing, and the inherent limitations of the study and their impact on the validity of the main messages should also be mentioned. Finally, the conclusions highlight the answers to the research question(s) posed in the introduction, succinctly outlining the new findings and, eventually, the main points for future research.

These above are suggestions distilled from examining the most cited ASR articles. We would add that scientific papers do not necessarily have to be written in a rigid and conservative format, provided that the language style is always plain, simple and as jargon-free as possible. For example, presentation of findings is usually done using a

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passive voice, and personal pronouns are avoided, whereas we think personal pronouns and the active voice can be used more freely in sentences, creating a more personal and engaging narrative.

A final consideration concerns the object of the articles published on ASR. We note with a certain regret that there is not enough mention of silvicultural practices: just less than 25% of the most cited ASR articles refer directly to such topics. We are aware that complete and extensive silvicultural experiments are complex to undertake and maintain due to significant cost and time constraints, and that often the effort produced is not adequately rewarded in terms of scientific evaluation. For this reason, ASR also publishes case studies and dataset papers which can be a resource in this respect, and which can also be useful in supporting comprehensive meta-analyses.

The worldwide evidence of the publication of very few scientific articles on silvicultural topics was the main reason for establishing ASR as an international open access journal when it replaced the former *Annals* of the Italian Institute of Forestry Research, whose history dates back to more than 90 years ago (Fabbio 2013, Corona 2017). The peculiar concern for an effective promotion of scientific publications on silvicultural practices will be one of the focal points of our role as Editor-in-chief and Vice-Editor-in-chief of ASR in the years to come.

## References

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