

EDITORIAL

20 years of *Vadose Zone Journal*

This year marks the 20-year anniversary of *Vadose Zone Journal* and we are currently publishing Volume 20 of the journal. In fall 2002, the inaugural issue of *Vadose Zone Journal* was published. The journal was established by Rien van Genuchten based on the recognition of the increasing importance of the vadose zone and the need for a multi- and interdisciplinary outlet of research related to the vadose zone. The vadose zone (i.e., the zone between the soil surface and the groundwater), and the associated near-surface atmosphere, including the biosphere, have long been the research focus of soil scientists, hydrologists, geochemists, geophysicists, biologists, environmental scientists, and engineers, but the research was published in various disciplinary journals. *Vadose Zone Journal* provided a common outlet for all these research activities, including interdisciplinary and, more recently, transdisciplinary research.

A unique aspect of *Vadose Zone Journal* is that the journal is open for both disciplinary and inter- and transdisciplinary research and, at the same time, accommodates both fundamental and applied research. Common to all these categories, however, is the journal's scientific rigor and focus on hypothesis driven research, aiming at advancing the understanding of vadose zone processes.

To make research more easily accessible to the scientific community, *Vadose Zone Journal* has often published special sections on emerging topics, where multiple articles with a common theme are collected and synthesized by guest editors. This type of article collection is now common to many other journals as well. Very successful are also the category of "Update" papers, brief reviews on important research topics. The journal also implemented a paper category "Reproducible Research," designed to allow authors to publish data and metadata, along with a brief description of the data.

Another important feature of the journal is that we categorize papers into focus topics, like hydrogeophysics, evapotranspiration, preferential flow, hydrological observatories, permafrost and cold vadose zone, remote sensing, soil hydraulic properties, soil sensors, and rhizosphere processes, which allows readers to quickly find relevant papers on a given topic.

Vadose Zone Journal was, since its inception, a visionary journal. Not only because of its multi- and interdisciplinary nature, but also because it was one of the first journals at that time that was published in an entirely electronic format. Abandoning a physical journal hardcopy 20 years ago was a radical step, but today we see more and more journals that are only published electronically, and electronic publication is now the norm for new journals.

Vadose Zone Journal was led by Rien van Genuchten as a single Editor in the first few years, and as the journal grew, the editor position was expanded to include an Editor and three Co-editors. Under the leadership of the successive Editors, Jan Hopmans, Dani Or, Michael Young, and Harry Vereecken, the journal continued to blossom and grow in reputation as one of the prime journals in vadose zone research.

In 2018, *Vadose Zone Journal* again made an avant-garde move by changing from the subscription format to open access only. Open access makes the published articles available to everyone to read for free, but comes with the additional costs of article publication charges (APC) to be paid by the authors themselves. *Vadose Zone Journal* articles are now published under Gold Open Access with two licensing options: CC-BY and CC BY-NC-ND. This change has come along with the Plan S Initiative, which requires scientists and researchers who benefit from state-funded research organizations and institutions to publish their work in open repositories or in journals that are available to all by 2021.

Another milestone occurred in 2020, when *Vadose Zone Journal* and its publisher, the Soil Science Society of America, entered a partnership with Wiley, who took over typesetting and journal production. As a nonprofit and a professional society journal, *Vadose Zone Journal* relies on the support not only of the society members, but also of the wider scientific community, particularly in the current competitive market of open access journals and the conglomeration of large number of scientific journals by few large commercial publishers.

New aspects of *Vadose Zone Journal* include a podcast hosted by Abby Morrison, where recent ASA-CSSA-SSSA articles are discussed with authors in a personal setting, and

video summaries of articles, initiated by Associate Editor Naf-tali Lazarovitch, where authors present their paper in form of a short video presentation. These multimedia forms of scientific communication are available on the journal website, and they enhance the traditional journal format.

A hallmark of *Vadose Zone Journal* is its strong editorial board, with dedicated associate editors who handle the review process of the individual papers. *Vadose Zone Journal* has a rigorous review process, which is reflected in the journal's reputation. The journal lives from its authors, reviewers, and associate editors, all of which contribute their time, effort, and expertise to make the journal a prime journal in vadose zone research. We extend a special thank you to our authors, reviewers, associate editors, and the staff in the editorial office at headquarters in Madison, WI, all of whom contributed and contribute to the excellence of the journal.

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