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***Applied Vegetation Science* in 2016: the leading journal promoting the application of vegetation science**

Alessandro Chiarucci, Milan Chytrý, Valério D. Pillar & Meelis Pärtel

Chiarucci, A. (corresponding author, alessandro.chiarucci@unibo.it)¹,

Chytrý, M. (chytry@sci.muni.cz)²,

Pillar, V.D. (vpillar@ufrgs.br)³,

Pärtel, M. (meelis.partel@ut.ee)⁴

¹Department of Biological, Geological & Environmental Sciences, University of Bologna, I-40126 Bologna, Italy;

²Department of Botany and Zoology, Masaryk University, Kotlářská 2, CZ-61137 Brno, Czech Republic;

³Department of Ecology, Federal University of Rio Grande do Sul, Porto Alegre, RS 91540-000, Brazil;

⁴Institute of Ecology and Earth Sciences, University of Tartu, 40 Lai St., EE-51005 Tartu, Estonia

***Applied Vegetation Science* in 2016**

Vegetation Science is currently a modern, process-based science, with both basic and applied topics, and has moved far beyond the phase of a descriptive discipline. In recent decades, Vegetation Science has demonstrated a growing capacity to be a modern science with the capacity to explain the theoretical basis of mechanisms controlling the co-existence of species in plant communities ([Wilson 2011](#)). After strengthening as a real science and not a ‘yeti science’ ([Wilson 1991](#)), vegetation science has demonstrated its suitability to solve applied issues, such as ecological monitoring, management and conservation. This is also recognized by the last released Journal Citation Reports, which assigned to *Applied Vegetation Science* an Impact Factors of 2.548, confirming the generally increasing trend observed in the past 10 yrs. In 2016, *Applied Vegetation Science* publishes its 19th volume, approaching the conclusion of its second decade of life and becoming an adult sister (or brother, if you prefer) of the *Journal of Vegetation Science*, which celebrated its silver jubilee in 2014 (Pärtel et al. 2014). This makes the family of periodicals published by the International Association for Vegetation Science a major reference for both theoretical and applied studies focusing on the essential component of terrestrial ecosystems, vegetation.

Editors' Award for 2015

Selecting the paper to assign the Editors' Award is an annual challenge for the Chief Editors of *Applied Vegetation Science*, because of the growing number of high-quality papers and the variety of topics and methodologies. The selection for 2015 was also rather difficult and, at end of a rather long discussion, we decided to select the paper of Černý et al. (2015). This paper is an excellent example of a modern vegetation survey study including a large original database of vegetation plots analysed with up-to-date analytical methods to achieve the first comprehensive typology of the forest plant communities in the whole Korean Peninsula. In addition to a synthetic paper on Taiwan forest vegetation published in *Applied Vegetation Science* recently (Li et al. 2013), this paper represents one of the first examples of such study in East Asia. Being focused on a forest survey, the paper is certainly more descriptive than purely applied, but the synthetic approach and the broad scale represent a good foundation for management or conservation strategies of the forests in the Korean Peninsula. Other papers published in the AVS Special Feature on Temperate forests in continental East Asia also indicate the increase in high-quality vegetation studies in China ([Liu et al. 2015](#)).

Others papers entered into the list of ‘finalists’ for the Editors' Award also deserve to be mentioned for their merits. Among them, the paper of [Meyer et al. \(2015\)](#) is an excellent example of applied vegetation science, providing a quantitative assessment of ecosystem changes. In Europe, agricultural habitats have become an essential part of nature. Much of the biodiversity is supported by traditional agriculture within cultural landscapes, and intensification of agriculture is threatening many species. [Meyer et al. \(2015\)](#) assessed the biodiversity loss in ten agricultural areas in central Germany over the last 50 yrs, in terms of plant community types that were recorded in the 1950s and 1960s but are no longer present. Despite the intrinsic limitations of such studies, such as those connected with the determination of the exact geographic position of historical phytosociological relevés, this article shows the potential of using data from traditional descriptive vegetation science to investigate long-term changes, which would be impossible to detect with other approaches.

Another selected paper was that of [Johnson et al. \(2015\)](#), in which knowledge and methods of present

vegetation science are applied as a tool for investigating urban development and supporting urban planning. Despite being focused only on some residential lots in the city of Baltimore, this paper clearly demonstrates the potential use of vegetation science in applied topics such as urban development and management, showing how the variation in legacies of land use affects plant communities more than the contemporary environment.

Among the articles we compared for the Editors' Award we also want to mention the long-term study on grazing exclusion by van Rooyen et al. (2015). This article is based on a data set that covers 40 yrs of regular monitoring in the Goegap Nature Reserve, Namaqualand, South Africa. Basic features of plant communities, such as vegetation cover, species composition, life-form composition, species diversity and range condition, were assessed annually along two transects (with a few missing years) starting in 1974, in order to understand the effects of rainfall and grazing. The use of such a long and coherent data set makes this paper an important addition to the ongoing discussions in rangeland ecology.

Future challenges

Despite *Applied Vegetation Science* now being recognized as a major reference in applied vegetation ecology, the growing competition among scientific journals requires continuous attention to emerging new trends in applied ecology. The Chief Editors, Associate Editors and Editorial Board members are happy to accept this challenge and to keep the journal as the reference point for publishing the best papers in applied vegetation science and to be considered the best publication option for any applied research focusing on plant communities.

John Bastow Wilson, our former Editor whose leading role was crucial for the development of the *Journal of Vegetation Science* and *Applied Vegetation Science*, passed away in 2015 (Rapson 2015). We all miss his contributions. However, the path he indicated for the editorial work of the journals remains so solid and clear in our minds that we shall all do our best to maintain the level already achieved by *Applied Vegetation Science*, and possibly to increase the journal's prestige among plant community ecologists worldwide. The present positive reputation of *Applied Vegetation Science* makes the selection of submitted papers rather hard, but this is a plus for those authors who see their papers published in the journal.

Present-day science and all human beings are facing new millennial problems, from global change to food production, and most of these problems are directly or indirectly related to natural and semi-natural plant communities. Topics such as survey, management, monitoring and conservation of plant communities are all included in this new emerging set of problems, all of which demand sound and evidence-based solutions. We encourage all vegetation scientists to submit their best papers focused on such topics to *Applied Vegetation Science*.

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