



# Does an open access journal about vegetation still make sense in 2020?

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## Abstract

The current issue is the first one of the new version of *Plant Sociology*, the international peer-reviewed journal of the "Società Italiana di Scienza della Vegetazione" (SISV). The technical management of the journal has been entrusted to the editorial platform Pensoft, the Editorial Board has been largely reshaped, now including also a dedicated Social media team. *Plant Sociology* is focused on all aspects of vegetation from phytocoenosis to landscape level, through time and space, at different geographic and ecological scales; the journal contributes to spread around the issues related to management and conservation of plant communities and plant diversity. All the articles are freely available in Open Access (OA) with affordable article processing charge (APC). In the present Editorial, we briefly discuss the importance of opening the access to knowledge and data about vegetation. We believe that disseminating plant science might be a precious tool for understanding ecological processes, modelling future trends and supporting decision makers. The introduced technological improvement will hopefully allow a larger visibility and circulation for the papers published on *Plant Sociology*.

## Keywords

open science, phytosociology, plant diversity, plant science

## Introduction

June 2020: the first issue of *Plant Sociology*, the international journal of the "Società Italiana di Scienza della Vegetazione" (SISV), sees the light in its new version. It is an important step for our journal, implying many changes and some challenges.

The first, prominent aspect is that the technical management of the journal has been entrusted to Pensoft, an independent and innovative editorial platform, that will take charge of all aspects regarding production, submission system and online publishing. SISV and the Editorial Board of the journal maintain respectively the ownership and the scientific management, including the entire peer-review process. This big improvement will hopefully

allow a larger visibility and circulation for the papers published on *Plant Sociology*.

The second, equally important point is that, following the journal's policy of the last years, all the articles of *Plant Sociology* are freely available in Open Access (OA) mode. The Editorial Board deeply believes in the importance of open, free and huge dissemination of scientific results. To maintain this possibility, authors are now asked to contribute a very reasonable article processing charge (APC), further reduced for SISV members. It is perhaps worth to say that, being owned by a scientific society, *Plant Sociology* is a non-profit journal and all the requested charges serve to the technical support provided by the publisher.

The whole Editorial Board has been reorganized, now including also a dedicated Social media team, and keeping

some important continuity elements, such as the presence of Edoardo Biondi, now Consultant Editor, who for more than 25 years has worked with incomparable dedication to the management and improvement of the journal.

Besides these crucial points, *Plant Sociology* maintains its long-lasting vocation to focus on all aspects of vegetation from phytocoenosis to landscape level, through time and space, at different geographic and ecological scales, hosting the results of studies centred on plant communities and habitats modelization, interpretation, assessment, mapping, management, conservation and monitoring.

## Open Access evolution and perspectives

Since Swartz (2008) stated that "sharing is a moral imperative", the "open science" topic became more and more central in the scientific community. Reality is that the popularity of sharing tools such as the controversial Sci-Hub, containing more than 47 million pirated research papers (Androcec 2017), or the moderate Research Gate ([www.researchgate.net/](http://www.researchgate.net/)), is evidently increasing all over the world (Bohannon 2016; Himmelstein et al. 2017; Nicholas et al. 2018), representing a serious threat to editorial companies and posing challenging questions to the whole scientific world (Anderson 2018).

Alexandra Elbakyan's Sci-Hub, in the words of Bohannon (2016) "an awe-inspiring act of altruism or a massive criminal enterprise, depending on whom you ask", certainly inspired many authors and editors to take the road of OA.

In Europe, the trend is evident by the large number of scientific journals going open. Initiatives such as the *Declaration of the Budapest Open Access Initiative* (2002, [www.budapestopenaccessinitiative.org](http://www.budapestopenaccessinitiative.org)), the *ECHO Charter* (2002, [https://echo.mpiwg-berlin.mpg.de/policy/oa\\_basics/charter](https://echo.mpiwg-berlin.mpg.de/policy/oa_basics/charter)), the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* (2003, <https://openaccess.mpg.de/Berlin-Declaration>) and many others, provided definitions, addresses and paradigms for promoting and disseminating knowledge at the global scale. A significant push came from the European Research Council (ERC) and its ERC Scientific Council Statement on OA (2006) strongly promoting the availability of research results in open access repositories.

Additionally, international research funding sources are more and more pushing towards open access as the best or even mandatory way to publish results of research and scientific data. For instance, under Horizon 2020, each beneficiary must ensure open access to all peer-reviewed scientific publications relating to its results (Article 29.2 of the Model Grant Agreement; European Commission 2017).

OA is not always a synonym of easy and equal access to publishing, since behind this praiseworthy policy, unaffordable costs sometimes lay behind, as indicated by Van

Noorden (2013), who also demonstrated that OA costs are weakly related to the actual influence of journal and articles.

In a world where scientific publishing developed into an industry, it has been showed that in both Natural and Medical Sciences (NMS) there is still a moderate level of concentration of scientific papers in the hands of a few big publishers, highlighting a relative independence that has been attributed to the strength of scientific societies (Larivière et al. 2015).

As a matter of fact, SISV decided to support (also economically) the OA mode for its official journal, choosing for "gold open access" i.e. making the journal's content freely available for readers on the publisher's website (at the same time, *Plant Sociology* still retains a printed version, only for libraries and official repositories). Similar decisions have been taken, e.g., by the Italian Botanical Society (SBI) with the journal *Italian Botanist*, formerly *Informatore Botanico Italiano* (Peruzzi and Siniscalco 2016), by the Italian Society of Agronomy (SIA) with the *Italian Journal of Agronomy* (Perniola et al. 2020), by the European Association of Science Editors (EASE) with the journal *European Science Editing* (Baždarić 2020), by the International Association for Vegetation Science (IAVS) with the journal *Vegetation Classification and Survey* (Jansen et al. 2020), by the Swiss Entomological Society (SES) with the journal *Alpine Entomology* (Lachat and Baur 2017), by the International Society of Hymenopterists (ISH) with the *Journal of Hymenoptera Research* (Schmidt et al. 2013), by the Societas Europaea Lepidopterologica (SEL) with the *Journal Nota Lepidopterologica* (Rota 2014), and many others.

*Plant Sociology* is included in the Directory of OA Journals (DOAJ, <https://doaj.org>), the independent online archive of high quality, open access, peer-reviewed journals. *Plant Sociology* also supports the open Italian Vegetation Data Base VegItaly (Gigante et al. 2012; Landucci et al. 2012) - a member of the Global Index of Vegetation-Plot Databases (Dengler et al. 2011) - and urges the contributing Authors to store their vegetation data in it. Additionally, the journal is integrated with the Dryad Digital Repository (<https://datadryad.org/stash>) to make data publication simple and easy for authors, sharing the view that biodiversity data should be published, disseminated, shared and re-used (Vision 2010; Chavan and Penev 2011; Smith et al. 2013).

## About the journal

*Plant Sociology* has succeeded *Notiziario della Società Italiana di Fitosociologia* (1964-1989, ISSN 1120-4605) and, later, *Fitosociologia* (1990-2011, ISSN 1125-9078), the historical journals of the SISV. In this large time-span, started 56 years ago, the journal published a total of 819 scientific papers organized in 58 volumes and 102 issues. The name *Plant Sociology* is a tribute to the founder of Phytosociology, Josias Braun-Blanquet (1884-

1980), who used it as title of his major monographic work "Pflanzensoziologie: Grundzüge der Vegetationskunde" (Braun-Blanquet 1928).

*Plant Sociology* is an international, peer-reviewed OA journal. It publishes original research articles dealing with all aspects of vegetation, from plant community to landscape level, including dynamic processes and community ecology. It favours papers focusing on *Plant Sociology* and vegetation survey for developing ecological models, vegetation interpretation, classification and mapping, environmental quality assessment, plant biodiversity management and conservation, EU Annex I habitats interpretation and monitoring, on the ground of rigorous and quantitative measures of physical and biological components.

The journal is open to territorial studies at different geographic scale and accepts contributes dealing with applied research, provided they offer new methodological perspectives and a robust, updated vegetation analysis. The main subject are represented by:

- Phanerogamic and cryptogamic vegetation survey and classification
- Vegetation mapping
- Plant ecology and synecology
- Plant community traits
- Plant community conservation and management
- Syntaxonomy and nomenclature
- Biostatistic analysis and data banks
- Habitat directive
- Alien plant invasions

The types of article hosted by the journal include Research articles, Review articles, Short communications, Editorials, Corrigendum and/or addendum.

Each issue contains contributes for the column "Habitat Records", a specific section of the journal dedicated to providing data and supporting the implementation of the 92/43/EEC "Habitat" Directive in Europe (Gigante et al. 2019). The journal gives space to papers presenting the results of collaborative projects (e.g. Viciani et al. 2020).

Since 2012 *Plant Sociology* is indexed in the international databases Scopus (Source id: 21100211323) and Web of Science (Biological Abstracts, BIOSIS Preview).

*Plant Sociology* represents one of the few editorial spaces open to the publication of original research articles on all aspects of Vegetation Science, contributing to spread around the issues related to management and conservation of plant diversity. Its history has been built over the decades through many challenges successfully faced, thanks to the scrupulous work of the various collaborators who have contributed selflessly to its management.

The current European and global editorial scenario sees the role of large publishers expanding more and more at the expense of small editors and scientific communities. This is certainly one of the reasons that caused a certain drop in the number of articles published in the two annual issues of *Plant Sociology*, together perhaps with a general sense of disillusionment that pushes more and

more young people to move towards publishing giants, that have literally transformed the realm of knowledge in a market. Not that we decided to abandon the field.

The renewal of *Plant Sociology* is a challenge that we have undertaken with conviction, aware of the difficulties and pitfalls that characterize the life of a scientific journal today. Entrusting the technical management of the journal to a professional company aims to improve its dissemination and attractiveness, but also to focus our efforts only on scientific content. The management of the journal has since weighed on a small editorial staff that has taken on all the necessary procedures for the creation of a modern scientific periodical; today this "home made" method is no longer sufficient to guarantee an adequate circulation of our authors' articles in an editorial scene that has deeply changed.

As a result of the recently started partnership with Pensoft and thanks to the high-tech services provided by the scholarly publishing platform ARPHA, the first 2020 papers of are now available on the new website of *Plant Sociology*. All pre-2020 issues and articles remain available on the former website [http://www.scienzadellavegetazione.it/sisv/rivista/rivista\\_elenco.jsp](http://www.scienzadellavegetazione.it/sisv/rivista/rivista_elenco.jsp).

We believe and hope that more authors will want to help support the improvement and growth of *Plant Sociology*, actively collaborating in the relaunch of the journal, choosing it again and again for the publication of the results of their research.

## Conclusive remarks

Going to the question in the title: Does an OA journal about vegetation science still make sense in 2020? Our answer is: Definitely yes. Openly and freely disseminating research and knowledge about plant diversity and living systems should be one of the major targets (if not the most prominent) of human societies. In the present time, a frightening epidemic (Coronavirus disease 2019 or COVID-19) is spreading around in our planet, still reaping victims and undermining from the foundations a development system that for decades has neglected the signals coming from the other components of the living world. The harmful consequences of habitat fragmentation and ecosystems disruption have been too long predicted and proved, demonstrating the negative impacts of humans on natural systems (Corlett et al. 2020). Scientists are already suggesting how much humans can learn from COVID-19, in order to effectively drive new conservation strategy (Ervin 2020; Pearson et al. 2020).

We are not so naïve to believe that humankind will emerge improved from this catastrophe. However, we can rely on knowledge to hope removing/mitigating the impacts of our species on ecosystems. A journal focusing on all aspects of natural, semi-natural and anthropic plant systems, from basic investigation to their modelization, assessment, mapping, management, conservation and monitoring, is certainly a precious tool to detect environmental unbalances, understand processes and out-

line predictive scenarios that support decision makers. In this sense, we believe that more and more OA journals focused on biodiversity should find space in the academic editorial world, because only through deep knowledge of processes and functions of a complex planet, humankind can find a way to survive healthy.

## Bibliography

- Anderson R (2018) Is copyright piracy morally wrong or merely illegal? The Malum Prohibitum/Malum in Se Conundrum. Scholarly Kitchen Blog. <https://scholarlykitchen.sspnet.org/2018/04/30/copyright-piracy-morally-wrong-merely-illegal-malum-prohibitum-malum-se-conundrum/>
- Androcec D (2017) Analysis of Sci-Hub downloads of computer science papers. *Acta Universitatis Sapientiae, Informatica* 9(1): 83–96. <https://doi.org/10.1515/ausi-2017-0006>
- Baždarić K (2020) European Science Editing is in full open access now. *European Science Editing* 46. <https://doi.org/10.3897/ese.2020.e50566>
- Bohannon J (2016) Who's downloading pirated papers? Everyone. *Science* 352(6285): 508–512. <https://doi.org/10.1126/science.352.6285.508>
- Braun-Blanquet J (1928) *Pflanzensoziologie. Grundzüge der Vegetationskunde*. 330 pp. ISBN 978-3-662-02056-2
- Chavan V, Penev L (2011) The data paper: a mechanism to incentivize data publishing in biodiversity science. *BMC Bioinformatics* 12, S2. <https://doi.org/10.1186/1471-2105-12-S15-S2>
- Corlett RT, Primack RB, Devictor V, Maas B, Goswami VR, Bates AE, et al. (2020) Impacts of the coronavirus pandemic on biodiversity conservation. *Biological Conservation* 246: 108571. <https://doi.org/10.1016/j.biocon.2020.108571>
- Dengler J, Jansen F, Glöckler F, Peet RK, De Cáceres M, Chytrý M, et al. (2011) The Global Index of Vegetation-Plot Databases (GIVD): A new resource for vegetation science. *Journal of Vegetation Science* 22: 582–597. <https://doi.org/10.1111/j.1654-1103.2011.01265.x>
- Ervin J (2020) Applying the hard lessons of coronavirus to the biodiversity crisis. United Nations Development Programme. <https://www.undp.org/content/undp/en/home/blog/2020/applying-the-hard-lessons-of-coronavirus-to-the-biodiversity-crisis.html>
- European Commission (2017) H2020 Programme. Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020. Version 3.2 21 March 2017. Directorate-General for Research & Innovation. [https://ec.europa.eu/research/participants/data/ref/h2020/grants\\_manual/hi/oa\\_pilot/h2020-hi-oa-pilot-guide\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf)
- Gigante D, Acosta ATR, Agrillo E, Attorre F, Cambria VM, Casavecchia S, Chiarucci A, Del Vico E, De Sanctis M, Facioni L, Geri F, Guarino R, S Landi, Landucci F, Lucarini D, Panfilì E, Pesaresi S, Prisco I, Rosati L, Spada F, Venanzoni R (2012) VegItaly: Technical features, crucial issues and some solutions. *Plant Sociology* 49(2): 71–79. <https://doi.org/10.7338/pls2012492/05>
- Gigante D, Allegranza M, Angiolini C, Bagella S, Caria MC, Ferretti G, Foggi B, Gennai M, Lastrucci L, Maneli F, Selvaggi A, Tesi G, Viciani D, Zanatta K (2019) New national and regional Annex I Habitat records: #1–#8. *Plant Sociology* 56(1): 31–40. <https://doi.org/10.7338/pls2019561/04>
- Himmelstein DS, Romero AR, McLaughlin SR, Greshake Tzovaras B, Greene C (2017). Sci-Hub provides access to nearly all scholarly literature. *PeerJ*, 5, e3100v2. doi: 10.7287/peerj.preprints.3100v2
- Jansen F, Biurrún I, Dengler J, Willner W (2020) Vegetation classification goes open access. *Vegetation Classification and Survey* 1: 1–6. <https://doi.org/10.3897/VCS/2020/53445>
- Lachat T, Baur H (2017) Alpine Entomology: The journal of the Swiss Entomological Society (SES) goes alpine. *Alpine Entomology* 1: 1–2. <https://doi.org/10.3897/alpento.1.22137>
- Landucci F, Acosta ATR, Agrillo E, Attorre F, Biondi E, Cambria VM, Chiarucci A, Del Vico E, De Sanctis M, Facioni L, Geri F, Gigante D, Guarino R, S Landi, Lucarini D, Panfilì E, Pesaresi S, Prisco I, Rosati L, Spada F, Venanzoni R (2012) VegItaly: The Italian collaborative project for a national vegetation database. *Plant Biosystems* 146(4): 756–763. <https://doi.org/10.1080/11263504.2012.740093>
- Larivière V, Haustein S, Mongeon P (2015) The oligopoly of academic publishers in the digital era. *PLoS ONE* 10(6): e0127502. <https://doi.org/10.1371/journal.pone.0127502>
- Nicholas D, Boukacem-Zeghmouri C, Xu J, Herman E, Clark D, Abrizah A (2018) Sci-Hub: The new and ultimate disruptor? View from the front. *Learned Publishing* 32(2): 147–153. <https://doi.org/10.1002/leap.1206>
- Pearson RM, Sievers M, McClure EC, Turschwell MP, Connolly RM (2020) COVID-19 recovery can benefit biodiversity. *Science* 368 (6493): 838–839. <https://doi.org/10.1126/science.abc1430>
- Peruzzi L, Siniscalco C (2016) From *Bullettino della Società Botanica Italiana* to *Italian Botanist*, passing through *Informatore Botanico Italiano*. A 128 years-long story. *Italian Botanist* 1: 1–4. <https://doi.org/10.3897/italianbotanist.1.8646>
- Perniola M, Roggero PP, Casler MD, Cammarano D, Rinaldi M (2020) Editorial. *Italian Journal of Agronomy* 15(1): 1624: 1. <https://doi.org/10.4081/ija.2020.1624>
- Rota J (2014) *Nota Lepidopterologica* combines tradition and innovation through open access and advanced publishing model. *Nota Lepidopterologica* 37(1): 1–2. <https://doi.org/10.3897/nl.37.8008>
- Schmidt S, Broad G, Stoev P, Mietchen D, Penev L (2013) The move to open access and growth: experience from *Journal of Hymenoptera Research*. *Journal of Hymenoptera Research* 30: 1–6. <https://doi.org/10.3897/jhr.30.4733>
- Smith V, Georgiev T, Stoev P, Biserkov J, Miller J, Livermore L, Baker E, Mietchen D, Couvreur TLP, Mueller G, Dikow T, Helgen KM, Frank J, Agosti D, Roberts D, Penev L (2013) Beyond dead trees: integrating the scientific process in the *Biodiversity Data Journal*. *Biodiversity Data Journal* 1: e99. <https://doi.org/10.3897/BDJ.1.e995>
- Swartz A (2008) *Guerrilla Open Access Manifesto*. <https://pastebin.com/cefxMVAy>
- Van Noorden R (2013) The true cost of science publishing. *Nature* 495: 426–429. <https://doi.org/10.1038/495426a>
- Viciani D, Vidali M, Gigante D, Bolpagni R, Villani M, Acosta ATR, et al. (2020) A first checklist of the alien-dominated vegetation in Italy. *Plant Sociology* 57(1): 29–54. <https://doi.org/10.3897/pls2020571/04>
- Vidal J (2020) Destruction of habitat and loss of biodiversity are creating the perfect conditions for diseases like COVID-19 to emerge. *ENSIA*. <https://ensia.com/features/covid-19-coronavirus-biodiversity-planetary-health-zoonoses/>