In the Service of the Authors, Science and Scientific Community

Journal of Vegetation Science, the first official journal of the IAVS, was established in 1990 and continues to publish high-quality papers on all aspects of vegetation science. ***Applied Vegetation Science*** was established in 1998 to encourage publication of papers with a more applied approach to vegetation science.

Who are the people that take care of our manuscripts after they are submitted to international journals, evaluating, improving and polishing them until they are ready for publication? How do they manage to do this never-ending job along with working on their own publications? What is the magic source of energy and knowledge they utilize? With these questions in mind, **we interviewed the Chief Editors of the IAVS journals**, *Journal of Vegetation Science* and *Applied Vegetation Science*.

Milan Chytrý

Masaryk University, Brno, Czech Republic

Why did you become a Chief Editor?
I got an offer to become an Associate Editor of *Folia Geobotanica* when I was very young, shortly after defending my PhD. Now, more than 20 years later, I can hardly understand why Tomáš Herben, then Chief Editor of *Folia*, trusted me and took the risk of involving an unexperienced young man. I had always liked scientific literature and I felt working as an Associate Editor might be a good experience, therefore I accepted. I learned a lot in *Folia*, partly from Tomáš, who naturally acted as a sort of editorial mentor, and especially from my own work on manuscripts and communication with their authors. It was a good lesson when sometimes I identified obvious errors in the work of other people and immediately realized that I was doing the same type of errors in my own work but was not aware of them. After 13 years in *Folia*, I felt I had been there for too long and it was time to retire. This was noticed by Bastow Wilson (then the Chair of Chief Editors of the IAVS journals), who offered me the role of an Associate Editor of the *Journal of Vegetation Science* in 2006 (after I had served on this journal's Editorial Board and as a reviewer for a couple of years). JVS had always been one of the main sources of my scientific inspiration, therefore I was happy to accept this offer although my original intention after 13 years in *Folia* was to take a few years of rest from editorial work. When Sandra Díaz retired as a Chief Editor of the IAVS journals in 2010, I was nominated and elected by the IAVS Council as her replacement.

What's the best thing about being a journal editor?
A good thing is that you have to read a lot of papers from your broader field, including those that are not directly related to your own research and that you would most probably never read. Moreover, you cannot just simply read them, you also have to think about them critically, you have to understand to what extent they are novel and why they are interesting. This helps you a lot to understand the current trends in your field, including those that are far beyond your own research interests. Editorial work is enriching your knowledge and at the same time you are doing a service for your scientific community.

Milan Chytrý, drinking tea at the camp fire during field work in northwestern Siberia, with a mosquito net temporarily pulled up.

How would you characterize a good reviewer?
A good reviewer is critical and helpful at the same time. She is able to see both whether the study is technically well performed and whether it advances

science, which are two different qualities that do not need to be correlated. If she identifies a flaw, she is able to explain clearly why it is a flaw and offer realistic alternatives for the improvement of the study. Also, a good reviewer does not try to force the author to accept her own specific views on the subject matter; she respects plurality of opinions, but at the same time she is able to recognize the borderline between opinions that are scientifically sound and those that are not. All this requires a lot of experience. Just as a scientist needs talent and several years in the field to mature, a reviewer needs the same to become really good.

How many manuscripts do you usually read per week and how do you find time to do so?
I am acting as a Receiving Editor of *Applied Vegetation Science*, which means I am doing preliminary evaluation of all the manuscripts submitted to this journal, deciding whether they are within the journal scope and whether they are of sufficient interest to our readers. If they are and if I don't detect any serious problems in the scientific content or the style of presentation, I assign them to one of our Associate Editor whose expertise is close to the topic of the submitted paper. Alternatively, I prepare the decision letter explaining why the paper is not suitable for the journal. If the decision is negative, the authors appreciate that it is told to them quickly, so that they do not lose time and can submit the paper elsewhere. Therefore I am trying to process newly submitted manuscripts as soon as possible after I receive them from the Editorial Office, usually on the same day. I am also doing final check of all the accepted manuscripts before they are sent to production. Currently AVS receives about 15–20 new submissions per month, therefore I cannot read all of them in detail – that's the task of the Associate Editors and reviewers. Nevertheless I spend some time working for the journals nearly every day. Editorial work has been a part of my everyday life for many years, and believe me or not, I like it and find it very interesting.

How do you relax from science?
Fortunately vegetation science is by no means monotonous work. We are frequently shifting between the office work at a computer, fieldwork, reading literature, plant identification, lectures, seminars and field trips with students, conferences, workshops and other kinds of meetings. Because of this diversity, our work is actually not so tiring. But when my wife and I want to relax, we often make a family trip to nature. She is a botanist too, so we relax by plant hunting, which is more fun than science (though science is also fun). Our sons do not seem to share this opinion, asserting that we are crazy. Maybe they are right.

Which of your own papers do you like most and why?
Usually the last ones, when they are still fresh.

Which publication (paper or book) affected your personal scientific development in a positive way?
Hard to say, they were so many! If I were to mention just a few, then it would be perhaps Heinz Ellenberg's book *Vegetation Mitteleuropas mit den Alpen* (*Vegetation Ecology of Central Europe*), which I consider as a sort of bible of vegetation science in my region, Central Europe. I was also strongly influenced by the major European national vegetation survey monographs from the 1990s, *British Plant Communities*, *Die Pflanzengesellschaften Österreichs* and *De Vegetatie van Nederland*, which stimulated my own future work on the national vegetation monograph of the Czech Republic. Last but not least, I was strongly influenced by *Journal of Vegetation Science*, which was the only western plant ecological journal that our rather devastated Department at Masaryk University in Brno received after the fall of communism in Czechoslovakia, in the early 1990s, when I started my PhD study there. During those hard times we received it for free, thanks to generous support from Eddy van der Maarel and IAVS, and by reading this journal I started to learn how high-quality scientific work in plant community ecology should look. As an editor, I am now trying to return to this journal the knowledge that the journal gave to me.

Admiring diversity of dry grasslands during the excursion at the European Vegetation Survey meeting in Slovenia in 2014.

Meelis Pärtel

University of Tartu, Estonia

Why did you become a Chief Editor?
During my Master studies at Uppsala University, I was supervised by Eddy van der Maarel, the first Chief Editor of the *Journal of Vegetation Science*. This was exactly when the journal was launched and Eddy explained to his graduate students how to run a scientific journal. It looked very interesting and I imagined it would be nice to work within such a complicated system. Shortly after my post-doc, I was invited to become an Editorial Board member at the *Journal of Vegetation Science*. Editorial Board members are "house referees" who know the journal's standards and policies well and are expected to provide high quality referee reports. Bastow Wilson, Chair of Editors at that time, sent me a large manual describing how the process works through all stages. I enjoyed this work quite a lot. After my three-year term as Editorial Board member, I was invited to become an Associate Editor for JVS. I enjoyed this work even more. Now I was able to communicate both with authors and referees. At some editorial meetings it was mentioned that I had the highest editing load among editors. I did not feel it. I rarely declined to edit a manuscript since I knew that this is an important job. If the topic was not too familiar, I invited more referees. I acted as Associate Editor for five years. During an IAVS meeting, Bastow once asked if I could act as temporary Chief Editor since a former Chief Editor had to leave due to other obligations. I then saw quite closely how journals actually function and how much communication and planning it requires. Soon IAVS Council officially named me as a Chief Editor. When Bastow retired in 2013, I was elected by fellow Chief Editors as the new Chair of Editors.

What's the best thing about being a journal editor?
The best thing is to see how good submitted manuscripts benefit from editing to finally get published. This means that I can follow directly how scientific ideas mature, how they are received by colleagues, and how all this advances the science. Personally it is the greatest pleasure to work with so many interesting and talented colleagues.

How would you characterize a good reviewer?
A good referee should be constructive. It is important to outline not only main shortcomings but also strengths. Good referees should understand that the author might have a different perspective than they do. A good referee is polite, pointing out problems in the manuscript and not criticizing the author personally.

How many manuscripts do you usually read per week and how do you find time to do so?
Currently I work as Chair of the Editors and this means more work with people than directly with manuscripts. My task is to coordinate the work of editors and communicate with IAVS and Wiley, our publisher. I continuously follow the flow of manuscripts and general publishing trends in science. I receive an e-mail copy of each submission and each editorial decision. Thus, I'm reading several titles and abstracts each day. Often other editors ask my opinion of a manuscript. On average, I work for the *Journal of Vegetation Science* and *Applied Vegetation Science* 1-2 hours per day. Finding time is challenging. First I flag all e-mails which need some action. Then I often write "JVS/AVS work" to my calendar to book time, as I do for my own research: reserved time for analyses, reading and writing. Otherwise it is too easy to fill the day with different meetings or replies to e-mails.

Meelis Pärtel giving a presentation in the ceremony hall of the University of Tartu.

How do you relax from science?
My family is the key player, especially my three children, aged between 4 and 14, who are effective in providing an escape from science (although not relaxation in a strict sense). I live in a old farm house in the countryside. A local farmer cuts hay from my grassland but I take care of the garden, mend buildings, or just take walks and bike rides. During the evening I try to read novels. Currently I mostly read children's books to my youngest daughter.

Which of your own papers do you like most and why?
This is a difficult question. Nevertheless, I'll mention a few papers which have had more impact both on my own research but hopefully on others as well. The first might be a paper in Oikos in 1996 where we tried to find species pools for different vegetation types in Estonia. We found that local diversity is largely determined by species pool size. Another paper is

Collecting *Urtica cannabina* for the herbarium in Mongolia.

During the fieldwork in Russian grasslands.

my first which can be classified as macroecology of biodiversity. It appeared in Ecology in 2002. I wanted to know if there is a signal of evolutionary history in species diversity relationships. I collected case-studies on plant richness-soil pH relationships. It took some time and required heavy use of interlibrary loans (we did not have electronic access to journals, as we do now). I regressed plant richness-soil pH relationship against latitude and found positive relationships in temperate and boreal zones and negative relationships in the tropics. It supported the idea that a local biodiversity relationship can be shaped by evolutionary history at the regional scale. A paper addressing the importance of vegetation history appeared in Ecology Letters in 2006. There we demonstrated the existence of extinction debt in semi-natural grassland communities, since contemporary richness was related to site area and connectivity 70 years ago, but not with current landscape features. I would also like to mention a conceptual paper which appeared in Trends in Ecology and Evolution in 2011. There we defined dark diversity – the set of species which are currently absent from your study site but which likely can be there – in other words, the absent portion of site-specific species pool. When suggesting this term we aimed to make the species pool concept more practical, having a site-specific perspective. Finally I should mention a short paper which appeared in the *Journal of Vegetation Science* in 2012. Together with colleagues we looked for world records of plant species richness. We found highest known richness number at different samples scale, ranging from 1 mm^2 and to 1 ha. All the world's records formed a straight line on a log-log scale and contained, interestingly enough, just two habitat types: temperate grasslands at smaller scales and tropical rainforests at larger scales. Enough for now; my current works are very interesting to me as well but need yet to prove themselves.

Which publication (paper or book) affected your personal scientific development in a positive way?

The most influential publications were certainly those which I read as a young PhD student. I would mention two. The first is a conceptual paper published my PhD supervisor Martin Zobel in Oikos in 1992, titled "Plant species coexistence: the role of historical, evolutionary and ecological factors". I found this paper independently when it was published. We had not discussed these topics before with Martin since my thesis was planned to address grassland restoration. As soon as I had read another conceptual paper by Ove Eriksson, in Oikos in 1993, "The species-pool hypothesis and plant community diversity", I felt that this is exactly the topic I wanted to develop. Both papers were theoretical and even a bit skeptical that these hypotheses can ever be tested. I wanted to prove that there are ways to develop the species pool concept by estimating species pool sizes. Actually we need to estimate dark diversity since observed diversity can be measured, this is the topic I'm currently still working on.

Alessandro Chiarucci

University of Bologna, Italy

Why did you become a Chief Editor?

I still remember my first experience with the *Journal of Vegetation Science*, in the period before starting my PhD at the University of Siena. Stefano, another student in the Department, presented this new, very modern, journal to me. We discussed at length the editorial of the first issue by Eddy van der Maarel and the policy of launching this new journal after the glorious history of the previous IAVS official journal, Vegetatio. In the same year, we both attended the IAVS meeting in Eger, Hungary, but our poster was too basic for the *Journal of Vegetation Science*, so we did not submit it. However, a few years later, I attended the International Symposium on Community Ecology and Conservation Biology, held in Bern in August 1994. Later in that year, I submitted a paper to the *Journal of Vegetation Science*, for the symposium proceedings. The editor, commenting my paper, stated that he was able to see "some more than the run-of-the-mill stuff" I presented and provided a lot of comments to improve my paper. The editor, who was Bastow, then accepted the paper. Later, he invited me to review some papers and then to enter into the Editorial Board. In 2002, Bastow asked me to become an Associate Editor, because of my heavy contribution to review papers. This was unexpected to me and I tried to work as hard as possible. A few years later, in 2006, Peter White retired as Chief Editor, and Bastow invited me to become Chief Editor and proposed my name to the Governing Board of IAVS. I was really honoured and even surprised at such recognition. From that moment, I have tried to contribute to the growth of what vegetation scientists across the planet consider "the Journal".

What's the best thing about being a journal editor?

Being a journal editor takes a lot of time and sometimes this is subtracted from your own research. Despite

Alessandro Chiarucci near plants of Echium wildpretii subsp. trichosiphon (Svent.) Bramwell (Boraginaceae), near of Roque de Los Muchachos, Caldera de Taburiente National Park, La Palma, Canary Island

this, it is really appealing to see the processes by which manuscripts grow and become published. Often it is possible to recognise a good manuscript from the very beginning, but I really like the effort it takes to be critical and search for problems as well as for potential values in a submitted manuscript. It is very stimulating.

How would you characterize a good reviewer?
Science is a product of human beings and, as such, it is not perfect. Similarly, referees are not perfect and do not hold the truth when commenting on or criticising a paper. However, science is one of the best products of humans and good papers could hardly exist without good reviewers. The best reviewers are those who are able to see if a paper could have value, despite its limitations and provide comments to strengthen it. Of course, good referees can also identify fraud or other negative aspects of a paper.

How many manuscripts do you usually read per week and how do you find time to do so?
Valério and I manage the papers at a very early stage and this is why I have a very big load of papers to read every second month. In the month that I act as receiving editor, I have many papers to read, more than one per day on average, so I have to read them rather quickly. It is usually easy to identify very good papers to pass to the Coordinating Editors and very weak or out of scope, papers to be immediately rejected. More attention has to be given to the grey papers, those which are not excellent nor really weak or out of scope. These papers need to be carefully read and they may be about half of the total, so some three-five papers per week. The final check of papers is another reading process, which takes some time, and this amounts to about 100 papers per year, shared by me and Valério.

How do you relax from science?
I really like science and do not really need to relax from it. When I am at home or on holidays I read scientific books, so going not that far from my job. However, I also like to work in the garden which is mentally relaxing to me. I also like swimming and biking when I have time.

Which of your own papers do you like most and why?
I have always tried to write nice papers, so the most modern ones should be the best ones. However, when I read or work on my CV, I realise that I am linked to the papers I did in the early stages of my career. They were not the best papers, but they were those that contributed to my personal growth. After publication, I found that I have to work to make the methods or the approach better and this has contributed so much to my personal scientific formation. I have many papers that were important to me, but I would mention a paper in Folia Geobotanica in 2007, in the writing of which I had to discuss all the fundamental issues I had learnt in my formation and to reflect on what a plant community really is.

Which publication (paper or book) affected your personal scientific development in a positive way?
Many papers were important to me and they changed in the different periods. In the early periods of my activity I was attracted by multivariate methods and I studied a lot of papers by János Podani, Laco Mucina, Eddy van der Maarel, László Orlóci, and Enrico Feoli. Regarding books, I really liked the English version of "Plant Sociology" by Braun-Blanquet. Despite my critical approach to the sampling methods used by phytosociologists, I found the original book of the father of phytosociology very modern for its period. I really liked many papers by Mike Palmer, who is one of the person most appreciated by me among present vegetation scientist, together with J. Bastow Wilson. Then, if we wish to refer to very specific papers which contributed to my ideas, I would mention two papers out of traditional vegetation science, one published in 1994 by Colwell and Coddington in the Philosophical Transactions of the Royal Society of London ("Estimating terrestrial biodiversity through extrapolation"), and one published in 2001 by Gotelli and Colwell in Ecology Letters ("Quantifying biodiversity: procedures and pitfalls in the measurement and comparison of species richness"). I am always attracted by methods and these papers stimulated my research a lot.

Valério Pillar and Alessandro Chiarruci discussing during the IAVS Council Meeting

Valério Pillar

Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Why did you become a Chief Editor?
My first contact with the *Journal of Vegetation Science* (JVS) was when Eddy van der Maarel visited László Orlóci during my PhD studies in London, Canada, to discuss the foundation of the new journal. Since 1990, I have acted as reviewer for JVS; as well for *Applied Vegetation Science* since its launching. I joined the Editorial Board in 2000, and in 2003 became an Associate Editor for JVS. With the retirement of Bastow Wilson in 2013, I was appointed one of the Chief Editors for both journals. For me the IAVS journals have been inspiring and one of the first choices for the publication of most of my own and my students' work on plant community ecology. I was happy to contribute as much as possible to the journals by accepting referee and editor assignments. As a Chief Editor, the level of involvement increased a lot, as expected, but the tasks are scientifically exciting and personally rewarding.

What's the best thing about being a journal editor?
You have to quickly read a manuscript with an eye on the potential interest of the questions, and whether it fits into our scope and minimal standards regarding the sampling/experimental design, as well as the coherence and quality of the analysis and presentation. Often we have to exchange opinions with other editors about a specific manuscript or about journal policy, which is essential to maintain consistency as much as possible in our decisions.

How would you characterize a good reviewer?
A good reviewer should not only be capable of identifying the qualities and possible flaws and inconsistencies in a manuscript, but also whether it is framed in a way to attract the interest of the readers. He/she should also distinguish the problems that can be solved in a revision from those that could not and would justify the plain rejection of the manuscript. Sometimes the questions and the data have potential and with some effort the authors may be able to improve the analysis and presentation in a revision, for which a good reviewer should help with suggestions. Of course, this implies that the reviewer should also be willing to review the manuscript again if necessary.

Field excursion to the grassland ecosystems of the Jarau hill, Rio Grande do Sul state, southern Brazil, 30°11'3.99"S, 56°30'55.43"W. The whole rocky formation, forming a circle, resulted from the impact of a meteorite.

How many manuscripts do you usually read per week and how do you find time to do so?
I have been acting as Receiving Editor for JVS together with Alessandro Chiarucci. We shift our roles every second month. Also, we often ask for second opinions from each other and from the other editors. JVS is receiving an average of 35 new manuscripts every month, but the temporal distribution is not evenly distributed. Thus, it is a relentless task reading new manuscripts, assigning them to an Associate Editor, or deciding on immediate rejection. Also, when a manuscript is eventually accepted, the Receiving Editor is in charge of making the final checks before the Editorial Office sends it to production, which may require some exchange with the Associate Editor that coordinated the review process. I usually work on these tasks at home at night or early in the morning. Sometimes other duties and travel may prevent me dealing with the journal tasks every day, which will quickly generate a backlog.

How do you relax from science?
Family, friends, cooking, housekeeping, politics, and photography take me away from scientific tasks. But for me it is difficult to temporally separate science from other interests; most often they intermingle. When traveling, even with a scientific purpose, I usually relax by photography. Computer programming is also relaxing, though it is part of science.

Which of your own papers do you like most and why?
I highlight the series of papers with the framework for trait-based and phylogenetic analysis of community data, the papers on permutation and bootstrap methods in multivariate data analysis, and the ones on the paleoecology, conservation and management of non-forest ecosystems in Brazil. More recently I have enjoyed working on questions related to the linking of biodiversity to ecosystem functioning and stability.

Which publication (paper or book) affected your personal scientific development in a positive way?
I mention the authors that were the most influential ones during my early learning as a MSc and PhD student on plant community ecology: Warming, Clements, Gleason, Braun-Blanquet, David Goodall, Eddy van der Maarel, László Orlóci, Enrico Feoli and János Podani.

Valério Pillar (upper row, third from the left) in a group of participants of the IAVS Post-symposium excursion to Slovakia, 2015, near the Poľský hrebeň Saddle in the Vysoké Tatry Mts.