A Message from the Editor

The New IAVS Logo

General Assembly Report

Working Groups’ Annual Reports

Survival of endemic species in megadiverse campos rupestres and on oceanic islands in Brazil

Report from the 25th European Vegetation Survey Meeting

Photo Memories
I participated in the 59th Annual Symposium of the IAVS in Pirenopolis, Brazil, and I was really happy to be there. Not only because I managed to get a photo of myself with *Paepalanthus* (who would resist getting their photo taken with such a magic plant), but mainly because I met so many wonderful people, learned a lot about the Brazilian ecosystems and had opportunity to see and experience Cerrado and Atlantic rainforests for the first time in my life. Both these ecosystems are too diverse to be true! During the excursions, it was not easy to pay attention to new species at almost every step, note their names, take their pictures and simultaneously listen to the ecological interpretations and keep up with the group moving towards its next destination. It was a rather hard job. But the rewards were high including surprises almost every minute and bright smiles on the faces of my companions.

The two main impressions that I brought from Latin America are as follows. First, I came to realize how difficult it is to study these complex and species-rich ecosystems. The local experts need much enthusiasm just to approach the site, speaking nothing of collecting plant material, determining species (including new species that are not yet described), and then synthesising this information to understand ecosystem functioning. Second, I became aware of the seriousness of the ongoing threats to these ecosystems. I was surprised by the extent of human impact in Atlantic rainforests and scared by the development plans that will profoundly reduce both the extent and functioning of the Brazilian Cerrado. Both ecosystems are among the most threatened and over-exploited in the world and despite their uniqueness only a small proportion of their range is under legal protection. Is it really a destiny of all botanists in the world to bear record to the dissapearing richness and beauty of this planet?

We will return to Brazil in several Bulletin contributions of this and the next issues. I hope you will enjoy reading and thinking back on the past moments and experiences.

Monika Janišová
*Editor of IAVS Bulletin*
The New IAVS Logo

We offer an explanation of the symbol designed to represent our association, which was approved in the IAVS Council meeting on June 13th 2016 at Pirenópolis (Brazil). This new logo was created by two professional designers (pictured below, right) of the University of the Basque Country (Spain), who intended it to represent the nature and the aims of our association and of Vegetation Science on a worldwide scale.

- The sphere suggests eternity, continuity, no start and no end. As a symbol, the sphere could represent the endless effort in the research.
- Movement. The logo suggests movement, a spinning movement of the sphere. This is intentional because it represents the dynamics of vegetation and of ecosystems as well as the ever-advancing nature of Vegetation Science. It represents an active world with dynamic processes operating in the vegetation/ecosystems and a dynamic science involved in its study. Science is trying to be always ahead of the rest, it is in a sort of race in which it is keeping a step ahead the rest of society.
- The sphere spins anti-clockwise, as the Earth does and the leaves are also indicating the parallels, facilitating the identification of the sphere with the Earth.
- Leaves. The five leaves are all different, transmitting the idea of the five vegetated continents and of biodiversity. They build a spherical contour representing the globe. The green color and the leaves represent vegetation.
- The negative image, i.e., the white space between the green leaves, is also important. Such white spaces are the negative of the green leaves and, for instance, the second and third white parallels have also a leaf contour. This is important for the double meaning it entails. They are the so-called "captivating figures", "fascinating brands" of "hypnotic figures" which are recorded in the memory (pregnant semantic). The visual perception of what is drawn and also of what is not drawn is equally important. They are a sort of visible hollow, which through their contours also contribute to the meaning.
- The logo has dimensionality, similar to vegetation. It is not a flat figure. Rather it represents a multidimensional entity, such as do vegetation and ecosystems.
- The typography of the initials is a very special one: it has been taken from the Trajan Column in Rome. It suggests elegance, seriousness, science and it is very legible in small sizes. An appropriate kerning between the letters has been applied.
- The logo has a high visibility and legibility (typography) in all media: paper, screens, mobile devices, social networks, etc.
- The logo performs a high graphic efficiency and symbolic power, being easy to recognize and identify.

Elena González Miranda        Tania Quindós González

Javier Loidi

University of the Basque Country
Structure

Corporate Colors

Complementary Colors
General Assembly Report

Minutes

IAVS General Assembly, Pirenópolis, Brazil 2016
Time: Friday, June 17, 16:00 – 17:15
Location: Luciano Peixoto Convention Center

The General Assembly was opened by President Martin Diekmann, who presented the following:

1. Membership Report
As of May 2016 IAVS has 650 members from 63 countries; details for the top 20 countries are shown in the table below. Germany and the United States still have the most members.

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of members</th>
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<tr>
<td>Germany</td>
<td>94</td>
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<td>United States</td>
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<td>Brazil</td>
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<td>France</td>
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<td>United Kingdom</td>
<td>18</td>
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</tbody>
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2. Council Business
Highlights of Council business will be printed in the IAVS Bulletin 2016/3; the complete minutes of the 2016 meeting of Council will be made available on the IAVS website. Highlights of the year include:

- IAVS income is stable; total income for 2015 was ~€200,000 and ending cash was ~€376,000.
- In 2016 IAVS is projected to have a largely balanced income/expenses
- In 2017 there will be considerable financial support for people to attend the annual symposium and IAVS working group meetings
- New IAVS logo

Council voted to adopt a new logo for IAVS that was designed by Elena González Miranda and Tania Quindós González (University of the Basque Country, Spain).

Members were encouraged to join IAVS Working Groups (European Vegetation Survey, Eurasian Dry Grassland Group, Ecoinformatics, Group for Phytosociological Nomenclature, Circumboreal Vegetation Map and Vegetation Classification).
Regional Sections (North America) and the new Young Scientists Section (pictured above at the symposium).

3. Publications (presented by Peter Minchin)
The journals are doing well. The 2015 impact factors were released in June. The impact factor for JVS is 3.151 and for AVS 2.308; both of these statistics are a slight decline and the Chief Editors are working with Wiley, the publisher, to understand the reason. Licensing went up 14%. We have a new editor for the IAVS Bulletin – Monika Janišová – who has markedly increased the interest level of the content. Finally, IAVS can now get DOIs for all its publications.

The full report from the Publications Officer is published with the Council Minutes.

4. Future Meetings
The 2017 symposium will be held in Palermo, Italy. The 2018 symposium will be held in Bozeman, Montana, USA. In either 2019 or 2020 the symposium will be held in Vladivostok, Russia.

4.1. Palermo, Italy, 2017 (presented by Riccardo Guarino)
The symposium will be held June 20–24 (Tuesday-Saturday). The theme will be “Vegetation patterns in natural and cultural landscapes”. The pre-symposium excursion will be from June 11–18 (Sunday-Sunday). The focus will be on coastal landscapes of Sicily: Along the Sicilian coast, from Capo San Vito (NW Sicily) to Capo Passero (SE Sicily), including two days on the Island of Marettimo (max 30 participants). The post-symposium excursion will be from June 25–July 1 (Sunday-Sunday) and will visit the Sicilian Mountains (for well-trained hikers): Etna, Nebrodi, Madonie (max 30 participants). This will include a transect from the sea to the top of Mt. Etna.

The symposium venue will be the Palermo Botanical Garden (pictured below left).

Riccardo showed us many beautiful photographs to entice us to come to Palermo. He also described the biogeography, climate, geology, vegetation and other aspects such as travel options, cultural history, the local food. The website is scheduled to be up by October 2016.

4.2. Bozeman, Montana, USA, 2018 (presented by Peter Minchin)
The symposium will be held 22–27 July, 2018. It will be held in a convention center with capacity for 500+ people. The venue can be readily reached by connections to Bozeman-Yellowstone international airport. There are plenty of hotel rooms as well as student dormitories for budget accommodation. The tentative symposium theme will be “Intact
Native Ecosystems as Benchmarks for Vegetation Science”. Mid-symposium excursion ideas include the Gallatin Mountains, Yellowstone National Park, Three Forks and Beartrap Canyon, Fairy Lake and Bridger Mountains and Custer National Forest and Beartooth Pass. The two pre-symposium excursions will be 3–4 days and visit the Greater Yellowstone Ecosystems (running in opposite directions). The two post-symposium excursions will be 4–5 days and will go to Glacier National Park, the Canadian Rockies and Northern Idaho. Again we were shown amazing photographs of the natural landscapes to entice us! Pictures on previous page right.

4.3. Vladivostok, Russia, 2019 or 2020 (presented by Pavel Krestov)
The symposium will be held in either 2019 or 2020, depending on whether any proposals from Europe are forthcoming for 2019. The venue will be FEFU, the Far Eastern Federal University. There are ready flight connections from major Russian and Asian cities, including Moscow, Tokyo and Bangkok. Again we were tempted by photographs of the interesting landscapes and vegetation and look forward to learning more details at the 2017 symposium. Photos below.

5. IAVS Awards (presented by Susan Wiser)
Announcement of Student awards for 2016

Young scientist Poster Award:
First Prize
Nathalia Bonani: How is fire affecting the germination of legume species? The study of Cerrado and forest species

Honorable Mention
Anaclara Guido: Invasive species removal: assessing community impact and recovery from invasion

Joosep Sarapuu: Cut evolution in cut forests? Changes in phylogenetic structure of tropical rain forests due to ecological release of leaf-cutting ants

Young scientist Oral Presentation Award:
First Prize
Anina Coetzee: The importance of Proteaceae species richness in providing nectar resources

Michele Dechoum: Factors controlling grassland occupancy by shrubs in montane systems in Southern Brazil

Honorable Mention
Elizabeth Gorgone Barbosa: Can fire be used as a management tool to control invasive grasses in Cerrado?

1. Items Raised by the Participants
No items were raised.

2. Thanks and Gifts to the Organizers
President Diekmann thanked the keynote speakers and the participants. There were 175 participants representing 31 countries. 42% of the participants were from Brazil. His photos highlighted the wonderful venue (pictured on the next page).

He then thanked the symposium organisers including John Du Vall Hay, Valério De Patta Pillar, Alessandra Fidelis, Vania Regina Pivello, those of the Secretariate including Diana Hay and Stefan Bradham and all others in the LOC helping to organize the symposium and excursions.

The General Assembly was adjourned by President Diekmann at 17:15.

Council Minutes
Council minutes were emailed to all current members in October, 2016. Additionally, the minutes are posted on the IAVS website:

http://iavs.org/Governance/Council.aspx
Sagui monkey in front of the hotel (above) and the conference venue in Pirenopolis (below)
Working Groups’ Annual Reports

Young Scientists Section

Steering Committee: Michael Lee, Alessandra Fidelis, Kyle Palmquist, Angela Pannek, Thomas Starnes

The IAVS Young Scientists Section sponsored a very successful social event at the symposium in Brno with over 50 people attending. Additionally we held a meeting during one of the lunch breaks where we discussed the direction of the group, with about 25 people. People seemed most interested these activities:

1. Improving our skills at writing manuscript reviews
2. Sharing research activities throughout the year via Skype calls
3. Collaborating within the group more broadly
4. Creating a list of people willing to read over manuscripts for non-native speakers of English to improve readability of the papers.

To address point 1, we encouraged those interested to sign up with Michael Palmer, editor of the FORUM sections of AVS and JVS. Michael was amazed by the enthusiastic response from the group, and this response led to the idea for a workshop on “how to write an effective manuscript review in vegetation science,” to be held Thursday afternoon in Pirenópolis, led by Michael.

We also asked people to share their research online via Skype calls, and while we held one successful presentation from Thomas Starnes about his work in Madagascar, there were a number of difficulties with the Skype approach. Each person who wishes to join calls must be added as a contact for whoever initiates the call, and initiation of the call seems best done from a central location, probably Europe for our calls. Some people expressed frustration at attempting to join but being unable to do so. Also, when more than 6-8 people joined the call, the video portion was disabled. We attempted to find a replacement to Skype for video conferencing, but could not find a good alternative. As this type of collaboration may be widely appreciated by the larger IAVS, perhaps IAVS would consider purchasing an institutional license to a good video conferencing software program, which would be free for any member to download and join calls.

We developed a list of all IAVS Young Scientists and a map of their current place of work. These were posted to our Young Scientists website:

https://iavsyoungscientists.wordpress.com/who-we-are/

Finally, there was not much interest or requests for reviewing papers for readability from non-native English speakers. We may try to see if there is still interest for this in the section, or promote it more strongly as an option for the Young Scientists.
The 25th Meeting of the European Vegetation Survey (EVS) took place in Rome, Italy, on 6–9 April 2016. The meeting venue was the Auditorium of the Accademia dei Lincei in the Roman district of Trastevere, a place that has hosted several previous EVS meetings. The organizers were mainly colleagues from the Department of Environmental Biology of La Sapienza University of Rome and other Italian institutions, in particular Emiliano Agrillo, Fabio Attorre, Laura Casella and Francesco Spada.

The scientific sessions of the meeting, held on three full days of 6–8 April, comprised a total of 67 talks, including invited talks by Sandro Pignatti and Francesco Spada, and 72 posters. The presentations focused on habitat typology and conservation, diversity of vegetation types, vegetation history, vegetation dynamics and methods of vegetation survey and analysis. The meeting was followed by a social dinner in Casa Internazionale delle Donne in Trastevere and by one-day field excursion on 9 April, guided by Francesco Spada, to the lowland forest in the State Nature Reserve Tenuta di Castelporziano in the coastal area south of Rome.

The meeting was attended by 215 participants and 21 accompanying persons from 34 countries, which made it the largest meeting in the history of EVS. The most represented countries were Italy (53 participants), Germany (13), Czech Republic (12), Hungary (12), Slovakia (12), Russia (11) and Poland (10). In addition to Europeans there were also participants from Australia, China, Egypt, Saudi Arabia and the USA. Nine participants from Egypt, Portugal, the Republic of Macedonia, Russia and Ukraine were supported by IAVS travel grants to a total amount of 5,000 EUR.

The term of the EVS Steering Committee elected in 2012 expired in 2016. Following the EVS Bylaws, the election of the new Steering Committee took place at the EVS Business Meeting in Rome on 7 April 2016, organized by the Election Committee consisting of Emiliano Agrillo, Monika Janišová and Borja Jiménez-Alfaro. Of 11 candidates from 9 European countries, most votes were given to Milan Chytrý, John Rodwell, Andraž Čarni, Joop Schaminée and Fabio Attorre, who constituted the new Steering Committee. The Steering Committee elected Milan Chytrý as the EVS Secretary and appointed Emiliano Agrillo as an ex officio EVS Membership Administrator.

The activities of the European Vegetation Survey group between the annual meetings in Rennes (May 2015) and Rome (April 2016) included:

1. After several years of extensive work of a team of 32 vegetation ecologists from 16 countries led by Ladislav Mucina, the final revision of the European Vegetation Checklist was prepared and the paper was accepted for publication in the journal Applied Vegetation Science in May 2016.

2. The European Vegetation Archive (EVA) has been growing continuously and increasingly used in research. In April 2016 it contained 65 databases with more than 1.2 million vegetation plots. By that time EVA data were provided to 34 projects (in addition to 5 pilot projects that started before the establishment of the EVA data request mechanism). An EVA report paper was published in early 2016 in Applied Vegetation Science.

3. An EVS team led by Joop Schaminée, working under contract from the European Environment Agency (EEA), prepared a review of the EUNIS grassland habitat classification and provided species constancy tables for these habitats extracted from vegetation-plot databases. At the same time maps and extensive lists of diagnostic, constant and dominant species were prepared for scrub, heathland and tundra habitats.

4. Many EVS members participated in a three-year project of the Red List of European Habitats, funded by the European Commission DG Environment and led John Janssen and John Rodwell. This project, which is due to be finished in June 2016, demonstrated the ability of European Vegetation Survey to assist policy makers with providing scientific information in a standardized format on the European scale, based on a combination of expert knowledge, literature and field data.

5. There are two Special Features on European vegetation types edited by the EVS members in preparation in scientific journals. The Virtual Special Feature “Towards consistent classification of European grasslands” in Applied Vegetation Science is edited by Jürgen Dengler, Erwin Bergmeier, Wolfgang Willner and Milan Chytrý, and a Special Feature on saline vegetation in Phytocoenologia is edited by Erwin Bergmeier and Joop Schaminée.

Milan Chytrý
Members and Organisation of the EDGG
Since the last report in 2015, the number of EDGG members slightly increased and reached 1,136 members from 64 countries as of 18 May 2015. Membership in EDGG is still free of charge and can be activated by sending an e-mail to Idoia Biurrun (idoia.biurrun@ehu.es). So far the membership administration has been maintained separately from IAVS, creating double work and inconsistencies, but following a recent offer, first steps of integration of our membership database into the framework of the IAVS membership administration have been taken.

EDGG Events
The 13th Eurasian Grassland Conference (EGC) will take place in Sighişoara, Romania on 20–24 September 2016 (https://egc2016.namupro.de/). The main topic of the conference is the Management and Conservation of Semi-Natural Grasslands: from Theory to Practice. The conference is co-organized by Fundatia ADEPT (http://www.fundatia-adept.org/) and Babeș-Bolyai University, Faculty of Biology and Geology, Cluj-Napoca (http://www.ubbcluj.ro/en/despre/). For the first time, EDGG is planning to hold a series of technical workshops during the days of the conference in Sighişoara. The 14th Eurasian Grassland Conference is planned in summer 2017 in Latvia, hosted by Solvita Rusina and colleagues (University of Latvia, Riga).

The 9th EDGG Field Workshop will take place in Serbia during 2–9 July 2016. This event, devoted to collaborative sampling of high-quality biodiversity data in Palaearctic grasslands, is organised by Zora Dajić Stevanović, Ivan Šoštarić, Svetlana Aćić (University of Belgrade, Faculty of Agriculture) and Mirjana Krstivojević Ćuk (University of Novi Sad, Faculty of Sciences, Biology and Ecology Department) in cooperation with Jürgen Dengler (EDGG Executive Committee, University of Bayreuth & German Centre for Integrative Biodiversity Research) and Idoia Biurrun (EDGG Executive Committee, University of the Basque Country). The demand for participation was particularly high this year, with 24 participants from 11 countries. In spring 2016, two research papers with data from the Field Workshops 2010 in Ukraine (Kuzemko et al.) and 2013 in South Siberia (Polyakova et al.) could be published in the journal “Biodiversity and Conservation”. The 10th EDGG Field Workshop will take place in summer 2017 in the Abruzzo National Park in Central Italy, hosted by Goffredo Filibeck and colleagues (University of Tuscia, Viterbo).

Changes of the Bylaws
In the context of the elections to our new Executive Committee in spring 2015, we realised that several aspects of the original Bylaws are no longer optimal for our group that gained so much in membership, geographic/topical coverage and activities since its foundation. Therefore, the old and the new Executive Committee as well as the EDGG General Assembly in Mainz discussed in total six changes. According to the regulations the more technical changes were implemented with ¾ majority of the Executive Committee members, while for the two of fundamental importance (name of the organisation, name of our conferences) the whole membership could vote in July. In the end all proposed changes were approved by the required majority and the whole package of changes was later approved by the IAVS Council at the IAVS Symposium in Brno.

You find a complete new version of our Bylaws on our homepage at http://www.edgg.org/pdf/BylawsEDGG.pdf.

Publication Activities of the EDGG
EDGG has published five issues of its own electronic journal, the Bulletin of the Eurasian Dry Grassland Group within the reported period (Issues 27-31, all issues are freely available from http://www.edgg.org/publications.htm). Further, EDGG continued its long-standing tradition of Special Issues/Features in international journals over the past year. Currently, five such Special Issues/Features are in production, some close to completion:

- Traditional Dry Grassland Special Feature in Tuessenia 2016 (Chair: Thomas Becker) to be published approx. June 2016
- Third EDGG Special Issue in Hacquetia 2016 (Chairs: Orsolya Válkó & Steven Venn) to be published approx. June 2016
- Virtual Special Feature (jointly with EDGG) “Classification of European grasslands” in Applied Vegetation Science (Editors: Jürgen Dengler, Erwin Bergmeier, Milan Chytrý & Wolfgang Willner) to be completed approx. December 2016
- Special Issue “Classification of Palaearctic grasslands” in Phytocoenologia (Editors: Monika Janišová, Jürgen Dengler & Wolfgang Willner) to be published in December 2016.
In conjunction with the EGC-2016 in Romania, a new SF in Tuexenia and a new SI in Hacquetia are planned for 2017. Furthermore, EDGG aims at organising the Palaearctic chapters in a currently emerging global book on grassland conservation and management.

Other EDGG Media
The EDGG homepage (www.edgg.org) during the report period was only maintained at a basic level because we were waiting for the long-promised possibility to transfer it to the IAVS server and structure rather to organise a re-launch ourselves on another server. Now that IAVS has offered this option we are currently clarifying whether this meets our need and, if so, plan the steps of transition.

In order to enhance the rapid dissemination of information to our members about EDGG activities, as well as in order to attract new members, a discussion on various topics related to grasslands research and conservation has been established in the EDGG Facebook group. It can be visited at https://www.facebook.com/groups/938367279561202/.

Facebook page editors: Anna Kuzemko (anya_meadow@i.ua) and Stephen Venn (stephen.venn@helsinki.fi).

Financial Issues
Main financial support of EDGG occurs via IAVS. In 2016, IAVS provides an annual baseline support (500€), will provide travel grants for the EDGG Field Workshop in Serbia (2,100 € for five participants) and the Eurasian Grassland Conference in Romania (2,900 €; grantees not yet selected) and a honorarium (1,500 €) to one EDGG representative to attend the annual IAVS Symposium in Pirenópolis, Brazil. All support is greatly acknowledged.

In spring 2016 also an IAVS project jointly granted to EDGG and EVS in 2014 (1,500 €) was completed. The money was used to cover travel expenses of Kiril Vassilev, Bulgarian Academy of Sciences to advance three collaborative vegetation plot databases in SE Europe, who partner with the European Vegetation Archive (EVA) and the global plot database sPlot: Balkan Vegetation Database, Balkan Dry Grassland Vegetation Database and Romanian Grassland Database. With this money thousands of additional relevés from this underrepresented region of Europe could be mobilized for these public databases.

With one of the Special Issues last year (Hacquetia) EDGG achieved some income from the German Research Foundation (DFG). This money is now successively used to cover costs of linguistic editing of non-native authors in the EDGG S.F.s/S.I.s. For Tuexenia, the respective costs are covered by a grant from FlorSoz.

We cordially invite you to join EDGG, its events and activities!

Péter Török

Group for Phytosociological Nomenclature

State of the Art
• Membership (as of 2016.04.07): 72 (ca. 73.7% from Europe)
• Steering Committee: Jean-Paul (chair), Daniela (secretary), Andraz, Federico, Helga, Laco, Wolfgang
• Committee for the Changes and the Conservation of Names (CCCN)
• Committee for the Registration and the Typification of Names (CRTN)
• Committee for the Website and the Online Database (CWDB)

Activities since the business meeting in Brno (21.7.2015):
Steering Committee
• Mainly occupied in the preparation of the 4th edition of ICPN:
  - already 3 meetings in Rome, 2 after Brno (November 2015 and April 2016) and work by email;
  - close to have reviewed half of the Articles, in particular what is an effective publication, validity and invalidity of names, types;
  - it is intended to finish the review by the end of the year;
• Is going to prepare proposals about the main changes that we would like to introduce in the ICPN to be published in the Nomenclature section in Phytocoenologia.

CCCN
• In April 2015, there was a ballot about 3 nomenclatural proposals (n. 1, 16 and 18; Willner & al. 2011, Phytocoenologia 41: 59-70). They all have been accepted and it is intended to publish them as an Appendix in ed. 4 of ICPN.
• The nomenclature section in Phytocoenologia is operational. Publication of the guidelines for the proposals (Willner & al. 2015, Phytocoenologia 45: 183-184); publication about the names of some classes (Carpino-Fagetea, Querco-Fagetea, Quercetea ilicis,
Quercetea robori-sessiliflorae, Vaccinio-Piceetea (Willner & al. 2015, Phytocoenologia 45: 175-181); proposal 20: to conserve the name Aceretalia pseudoplatani Moor 1976 against the name Tilietalia Moor 1973 (Willner 2015, Phytocoenologia 45: 185-186).

Registration of Names
An online database (PhytoS, using django as web front end) for the registration of names and types is currently under development. It has been programmed by Andreas Gattringer at the University of Vienna. This important activity would need now to undergo a process of tests to correct possible bugs and to make adjustments. Therefore, the Committee is warmly inviting volunteers to test the process of data upload and to give their feedbacks (see below for details). The Nomenclatural DB PhytoS can be accessed at https://phytos.vinca.at; for support, please contact Wolfgang Willner (wolfgang.willner@univie.ac.at).

Website
The GPN website will be hosted on the new IAVS server, currently under re-organization but the development has not started yet.

IAVS North American Section

The main activity of the IAVS North American Section during 2015-2016 has been to begin the process of organizing the IAVS 2018 annual symposium, which is scheduled for July 22-27 at Montana State University in Bozeman, Montana, USA. We are delighted that IAVS Council selected Bozeman, Montana as the location for the 2018 symposium and we aim to organize an excellent meeting, with a strong scientific program and an exciting array of field trips.

In support of the 2018 symposium we have convened a Local Organizing Committee consisting of:

- Dr. David W. Roberts, Montana State University (co-chair)
- Dr. Peter R. Minchin, Southern Illinois University Edwardsville (co-chair)
- Dr. Stephen V. Cooper IV, Montana Natural Heritage (retired)
- Mr. Kent Houston, US Forest Service (retired)

We have secured a contract with Montana State University Conference Services for use of university facilities and to manage the local arrangements (food, lodging, and transportation).

We have contacted and secured participation from a number of excursion leaders:

- Dr. Scott Franklin, Northern Colorado University
- Dr. Matt Lavin, Montana State University
- Mr. Peter Lesica, self-employed
- Mr. Jeff DiBenedetto, US Forest Service (retired)
- Dr. George P. Jones, Wyoming Natural Heritage

We anticipate three pre-symposium excursions at present, two through the Greater Yellowstone Ecosystem, and one to mixed grass prairies in Montana, and two more post-symposium excursions to western Montana, northern Idaho, and perhaps Alberta, Canada. We have made preliminary contacts with local Chambers of Commerce to organize lodging for the field trips and will be scouting out exact locations this summer.

We have not yet declared a formal theme for the meeting, but have tentatively identified “Intact Native Ecosystems as Benchmarks for Vegetation Ecology” as a working title. We anticipate a number of special sessions associated with the meeting, including perhaps a revitalization of the Theory and Methods Working Group, as well as hosting the recently created Vegetation Classification Working Group.

Peter Minchin
Survival of endemic species in megadiverse campos rupestres and on oceanic islands in Brazil

During the 59th Symposium of IAVS in Pirenópolis, Brazil, I met a botanist with a very strange name - Ruy José Válka Alves. Although his affiliation is the Laboratory of Island and Mountain Floristics and Biogeography, National Museum of the Federal University in Rio de Janeiro, Brazil, he was able to speak Czech with me. After several minutes of talking I found his personal story and his scientific interests to be so interesting, that I asked him to introduce himself to a wider community of vegetation scientists through an interview in the IAVS Bulletin. Here is his response to some of my questions and the message he would like to share with the IAVS members.

Monika Janišová (MJ): Hello Ruy. You were born in the Czech Republic, but you studied in Rio de Janeiro and most of your scientific career is also bound to this city. How did this happen? I also wonder, why have you decided to be a botanist and who or what affected most your development as a scientist?

Ruy Alves (RA): Hello Monika. It was an honour meeting you at my first IAVS symposium. I have been interested in all natural sciences since my early childhood, and my parents always stimulated these interests by taking me to museums and giving me books. I was born in Znojmo, Moravia, in 1965 and lived in Prague up to the age of 15. My father is Brazilian so I have both nationalities. I graduated as a biologist in Rio de Janeiro and ultimately defended my PhD in Geobotany at the Botanical Institute of the Czech Academy of Sciences, working with the vegetation of a small mountain range with campo rupestre in Minas Gerais, Brazil. In the mid 1980s I began doing field work with the late Prof. Johann Becker from the Entomology Department of the Rio National Museum. He was a true universal naturalist and further inspired my interests. I have worked at the National Museum since 1996 and am currently Full Professor and the herbarium curator. Of course there were many other colleagues who influenced my development and current work, and I have collaborators from many countries and continents. A short answer to who or what influenced me as a scientist is curiosity!

MJ: You cooperate with many Brazilian as well as Czech vegetation scientists during the preparation of scientific publications. Do you see some differences between Brazilian and the Czech botany? I mean for example in favourite topics, style of work, basic approaches or techniques, access to the studied ecosystems, etc.

RA: Thanks to the recent electronic revolution, botany has become a more cooperative science on the global scale. We are able to solve taxonomic questions almost instantaneously, whereas 20 years ago it took months or even years to communicate through regular mail. For instance, we knew that one of our most recent taxonomic novelties from Trindade Island in the South Atlantic, Sporobolus nesiotioides, was a new species on the day it was collected because a specialist evaluated our photos using e-mail. I do perceive some differences in botanical practice. The less diverse flora and long winters give European botanists more time to read literature and develop theoretical work. On the other hand, in the Neotropics, vegetation is always available and we have barely described half of the megadiverse flora: currently we know 35,000 vascular plant species...
from Brazil. We still need to do a lot of field work. Over the last decade almost every field expedition of my lab brought back at least one vascular plant species new to science. I have two full boxes of future types and almost no time to do the actual taxonomic work. In terms of vegetation studies, you can imagine that Brazil, with so many species still being described, is using coarse physiognomic classification. The entire framework of associations, based on relevés, diagnostic species, well studied soil types, etc., as used in Europe, is an almost impossible task in Brazil. And at the current rate of destruction of native vegetation, it would be an almost paleobotanical practice. Vast areas of Cerrado, Pantanal and other formations are currently being transformed into agricultural land, mountains are being ground into iron ore and cement (photo above and below).

MJ: Which are your favourite topics in botany?

RA: I like to think of myself as a naturalist. That is why we chose a broad title for the Laboratory. My interests in vegetation science totals over 1,000 vegetation relevés to date, mainly from the campos rupestres. I have permanent campo rupestre plots.
monitoring vegetation changes since 1989. We are monitoring growth rates of several species of *Vellozia*, some individuals of which turned out to be over 1000 years old. Ironically we could not publish the growth rate monitoring data yet because one of the species of *Vellozia* turned out to be new, so we had to describe it first. My geobotanical training brought a new species of *Philcoxia* (*Plantaginaceae*) currently being published. Analysing satellite images, we pinpointed what seemed to be the right habitat for this sand-dwelling carnivorous genus in Goiás state. And when we arrived at the coordinates, we found a small population which turned out to be a new species.

**MJ:** Which ecosystems have you studied and which of them do you consider to be the most interesting?

**RA:** The mountaintop vegetation of Brazil is by far the most compelling to me. Small mountaintops on quartzite, called campo rupestre, often have over 1000 species of vascular plants, and easily 20% of those are narrow endemics. Even though campo rupestre occupies less than 1% of the area of Cerrado, about 1/3 of the 12,500 vascular plant species are restricted to those quartzite mountaintops. When the bedrock is sandstone instead of quartzite, the floras are a bit less rich, say 800 species per mountain, and on igneous bedrocks there would typically be over 500 species. The poorest, but still very interesting in terms of narrow endemism are the limestone and iron ore outcrops, very common in Minas Gerais, Bahia and Goiás. However, the latter are under extreme pressure from mining operations. And then there is a peculiar and unique forest on Trindade Island, dominated by the tree fern *Cyathea copelandii*.

**MJ:** Your project on regeneration of vegetation on Trindade Island in the Atlantic was very successful. You cooperate with the Brazilian Navy. Could you tell us this story in more details, e.g. how has this interesting cooperation started, how has it developed and what is the main success of your project?

**RA:** Even though I am a plant taxonomist and geobotanist, the main success of my career so far has been the vegetation recovery of Trindade Island, South Atlantic, as a response to the eradication of feral goats. When I arrived there in 1994, most of the Island looked like Mars: red dirt, no vegetation. Eight hundred goats roamed the Island freely and kept vegetation from regenerating. This goat population were the survivors of the first pair introduced to the Island by the famous astronomer Edmund Halley in 1700. Together with Becker, we wrote a report to the Brazilian Navy, which administrated Trindade, predicting that the Island would eventually run out of fresh water if nothing were done with the goats. It took the Navy 11 years of hunting, many months of sniper work, but finally the last goat was felled in 2005. By that time vegetation regeneration was visible all over, and water returned to several streams which had been dry for centuries.

**MJ:** I suppose that many of your publications focus on endemic species. What do you consider to be the main challenge for future studies on endemism?

**RA:** In fact we have published several rediscoveries of narrowly endemic species, mainly of vascular plants but also two land snails, which had been considered extinct. In a way these are more exciting to me than species new to science! The main challenge for studies of endemism on Brazilian
mountaintops is currently bureaucracy. We are required to have several licenses on the federal, state and municipal levels, we are obliged to file endless reports and even to disclose our results before they are published. The other challenge in Brazil is the effect of global warming on montane vegetation. Brazilian mountains are relatively low. The summit endemic species have nowhere to climb as a response to the warming climate. Alternatives aimed at ex-situ conservation must be sought in higher latitudes to emulate the altitudes. And each Neotropical mountain is unique: we compiled 15 montane floras from eastern Brazil which gave us a list of 16,500 species. The highest Sørensen similarity between two neighbouring mountains was 0.2! Our mountains are virtually islands.

MJ: How did you like the IAVS Symposium in Pirenópolis? Was it useful for you as a home-country participant?

RA: As a geobotanist I felt at home at my first IAVS meeting. It was intense and I left Pirenópolis inspired, with contacts with several new collaborators from across the globe, and many new ideas.
The 25th Meeting of the European Vegetation Survey (EVS) was held on 6 – 9 April, 2016 in Rome, at the “Accademia dei Lincei”, founded in 1603 by Federico Cesi, an impassioned researcher of natural sciences, especially botany. The name “Lincei”, refers to the exceptional visual acuity attributed to the lynx in nature. The meeting was organized by EVS members from Sapienza University of Rome (Department of Environmental Biology) coordinated by Fabio Attorre, Emiliano Agrillo, Laura Casella (from the Italian Institute for Environmental Protection and Research - ISPRA) and the Italian Botanical Society (SBI).

The total number of participants was 215, one of the largest ever EVS meetings, with 34 countries represented, including Egypt, Australia, USA, China and Saudi Arabia. The scientific sessions of the meeting comprised 65 talks in 9 sessions, 72 posters presented in 3 sessions and 2 invited lectures (Prof. Sandro Pignatti, “400 Years Biodiversity” and Prof. Francesco Spada, “Anecdotal Geobotany Revisited”).

The main topics of the meeting were: present day phytocoenology and the legacy of the past; habitat typology and conservation (i.e., EUNIS, Natura 2000 and Habitat Red List); diversity of vegetation types; vegetation dynamics and methods of vegetation survey and analysis.

The workshop also offered numerous opportunities to present regional studies, different approaches on vegetation classification (forests, dry grasslands, aquatic vegetation) and vegetation plot database activities. Moreover some individual presentations reported progress in national vegetation survey programmes. This year during the EVS meeting, the meetings of the Vegetation Classification Working Group and the Group for Phytosociological Nomenclature were hosted, and spontaneous round tables were conducted about several thematic topics (e.g., comparison of national experiences regarding problems concerning the interpretation of the Habitat types of Annex I of the Habitat Directive and the repercussions on their conservation within the member countries).

Excursion

A full-day visit to the Presidential Estate and Residence in Castelporziano was conducted. The field excursion was guided by Francesco Spada and additional support was provided by Emiliano Agrillo, Fabio Attorre, Laura Casella, Marco Massimi, Marta Gaia Sperandii, Anna Testi. “Tenuta di Castelporziano” is the Estate and Residence of the President of The Italian Republic. It has status of National Nature Reserve and belongs to the European Network Natura 2000. Formerly a Royal Hunting Park, this 5800 ha area is located south of Rome. It stretches from the southern suburbs as far

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EVS welcome Fabio Attorre and Milan Chytrý

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Sandro Pignatti

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as the Tyrrhenian shoreline and represents the last extant example of an earlier forested landscape of the Roman “Campagna” before the sprawl of urban areas during the second part of the 20th century. It offers a 12 km long transect through quite well preserved woodland sites, from the sand dunes of the seashore to inland. Coastal stands of evergreen broadleaved Mediterranean forest and maquis, deciduous planar mixed forests and stands of temperate hygrophilous forests in periodically flooded depressions, are scattered along a well-preserved zonal sequence. Large pasturelands and impressive plantations of Mediterranean pines (Pinus pinea), document a long history of the traditional human impact. As the last extant fragment of the former landscape of the Roman Campagna, it exhibits spectacular examples of the zonal, extrazonal and azonal forest communities at these latitudes in peninsular Italy. The last two centuries of management as a hunting domain for the local aristocracy provided a relatively low degree of deforestation for cultivation and pastoralism, in comparison to adjacent districts. Thereafter, up to modern times, the area was mainly exploited by forest pastoralists. The extant large forest stands, despite a long history of exploitation by selective cutting (coppice), grazing and patchy clear-cutting for temporary cultivation of cereals, which heavily affected the vertical and spatial structure of the woodland, still exhibit a high species richness, suggesting high resilience and persistence of an aboriginal species pool.

The territory is relatively flat and spans a planar morphology shaped by marine sand deposits from Pliocene to Holocene in age. A more diverse morphology with tabular, rolling hills dissected by stream valleys, characterizes the northwesternmost part of the area, at the edge of the deposits of the Pleistocene eruptions of the Albano Volcano.

The region’s botanical interest relies upon the extraordinary diversity of the local flora and vegetation, concentrated in a small area where relict stands and altitudinal disjunctions, caused by conditions of local high water table, due to the planar morphology, are displayed within a Mediterranean macroclimatic envelope.

Where the sand dunes are locally well preserved, the classic topographical zonation of halophytic and psammophytic plant communities of the Mediterranean seashore is displayed along the topographical gradient of the Holocene sand dunes. Close to the sand dunes, the biome of the broadleaved evergreen Mediterranean forest is zonal, as it is all along the Tyrrhenian coast independently of the soil. It is represented by a sequence of woody communities of increasing height due to the disturbance of the marine aerosol. A first fringe of pigmy forest dominated by Juniperus macrocarpa develops both on inland dune slacks as well as at the top of the consolidated dunes. Slightly more inland, the stands are dominated by J. phoenicea which develops a more persistent canopy. The populations of this species are likely to represent a local late successional stage. In this highly dynamic belt, exposed to wind and aerosol, which affect the growth of closer stands of woodland, a steady displacement of this mode of species aggregation occurs.
Locally more or less transient scrub communities (garrigue) dominated by Cistaceae and Rosmarinus develop at the transition between the consolidated dunes and the woodland. Remnants of a more thermophilic thicket of angiosperm treelets, analogue to the Olea and Ceratonia aggregations recorded along the coast south of this area, can be seen in the individuals of Chamerops humilis scattered in more open sites. A dense thicket of low, bent and twisted individuals of Q. ilex develops upstream of the first consolidated dunes. Its physiognomy changes along with the distance from the sea shore, first achieving the vertical structure of a real broadleaved evergreen Mediterranean sclerophyllous forest behind the dunes. Smaller polycormic trees (Arbutus unedo, Phillyrea latifolia, Erica arborea, Rhamnus alaternus, Myrtus communis, Pistacia lentiscus) are either successional or concentrated in openings where also swags of lianas (Smilax aspera, Hedera helix and Clematis flammula) often occur. Daphne gnidium apparently coexists in stands where individuals of Q. suber enter the canopy. Carex distachya, Cyclamen repandum, and Rubia peregrina are the most common species in the scanty and poor flora of the forest floor.

Old growth stands of this evergreen forest grow on the ruins of the settlements of Via Severiana, running along the ridge of a fossil, levelled dune. This suggests interesting inferences on the time span of a succession leading to a close-to-climax forest canopy. In periodically inundated hollows fringed by Scirpus holoschoenus and Juncus inflexus, stands of Populus canescens and Fraxinus angustifolia subsp. oxycarpa are clustered. A mixed deciduous-evergreen planar forest dominates the landscape on the inland tablelands. Its structure is due to the co-dominance of Quercus frainetto and Q. cerris in the late successional canopy, the former apparently favoured by the planar morphology in which layers of clay in the volcanic deposits provide moderate waterlogging. Carpinus orientalis usually builds a continuous lower layer of partially clonal origin. On drier patches, Q. suber and more seldom Q. ilex reach the canopy, along with an understorey of evergreen treelets. This aggregation can be suggested as the earlier dominant forest cover in the Roman Campagna before the deforestation of historical times.

Emiliano Agrillo
Fabio Attorre
Laura Casella
EVS Social Dinner (above) and EVS participants (below).
EVS breaks during the sessions

Holocene sand dunes with classic topographical zonation of halo- and psammophytic plant communities of the Mediterranean seashore

Garden in the Presidential Estate and Residence in Castelporziano
EVS excursion trek, in a mixed deciduous-evergreen planar forest. Its structure is due to the co-dominance of Quercus frainetto and Q. cerris in the late successional canopy and the understorey layer dominated by Carpinus orientalis (above). Site periodically inundated fringed by Scirpus holoschoenus and Juncus inflexus, stands of Fraxinus angustifolia subsp. oxycarpa and Quercus robur are clustered (below).
Medicago marina L. (left)  
*Silene canescens* Ten. (right)  
*Juniperus oxycedrus* L. subsp. *macrocarpa* (Sibth. & Sm.) Neilr. (below)
Two views on the marsh fields (veredas) with buriti palm (Mauritia flexuosa) in the Chapada Imperial, Brazil, the destination of a one-day pre-symposium excursion to the Cerrado ecosystem.
Mud and poisonous animals were our company during the pre-symposium excursion to Atlantic rainforests of Sao Paolo state. The “dirty” mangrove in the Praia do Estaleiro surroundings was not easy to pass, and only the bravest of us kept smiling (above). As the snake was small and alone, several of us ran the hazard of taking its photo (below).
A Yellow-rumped cacique (*Cacicus cela*), one of many beautifully coloured bird species of the Brazilian forest (above) and Rufous-collared sparrow (*Zonotrichia capensis*) (below)