Bulletin 10

of the European Dry Grassland Group

Introduction

Welcome to the first Bulletin issue of 2011. This year brings several positive developments for our organization. We have invited Stephen J. Venn to cooperate in the EDGG Executive Committee as a representative of zoology. The number of EDGG members now exceeds 600 and we intend to develop some basic rules and formal democracy (statutes and elections) within our organization. We introduce you to the EDGG candidates for the IAVS Council elections. The 8th European Dry Grassland Meeting is in preparation and you still can register until 31 March. In August, the 3rd international EDGG research expedition will take place in Bulgaria, you are welcome to join it. The topic of one longer contribution in this issue focuses on the role and fate of donkeys in dry grassland ecosystems. The details of all these events and topics can be found inside this Bulletin issue. We wish you a beautiful growing season in 2011 and we are looking forward to meeting you at some of our forthcoming events.

Monika Janišová & members of EDGG Executive Committee

Content

Left: Saxifraga tridactylites in the Tematínske vrchy Mts. Photo: M. Janišová.

March 2011

EDGG homepage: http://www.edgg.org

European Dry Grassland Group

The European Dry Grassland Group (EDGG) is a network of dry grassland researchers and conservationists in Europe. EDGG is a Working Group of the International Association for Vegetation Science (IAVS). EDGG is supported by the Floristisch-soziologische Arbeitsgemeinschaft.

The basic aims of the EDGG are:

- ♠ To compile and to distribute information on research and conservation in dry grasslands beyond national borders;
- ♠ to stimulate active cooperation among dry grassland scientists (exchanging data, common data standards, joint projects).

To achieve its aims, EDGG provides seven facilities for the information exchange among dry grassland researchers and conservationists:

- ♠ **the Bulletin of the EDGG** (published quarterly);
- ♠ **the EDGG homepage** (www.edgg.org);
- ♠ e-mails via our **mailing list** on urgent issues;
- ♠ **the European Dry Grassland Meetings**, organized annually in different places throughout Europe.
- ♠ **EDGG research expeditions** to sample baseline data of underrepresented regions of Europe
- ♠ **EDGG vegetation databases**
- ♠ **Special Features** on dry grassland-related topics in various peer-reviewed journals

The EDGG covers all aspects related to dry grasslands, in particular: plants - animals - fungi - microbia - soils - taxonomy - phylogeography - ecophysiology - population biology - species' interactions - vegetation ecology - syntaxonomy - landscape ecology - biodiversity - land use history - agriculture - nature conservation - restoration - environmental legislation - environmental education.

Responsibilities of Executive Committee members:

Jürgen Dengler
dengler@botanik.uni-hamburg.de**:** membership administration, book review editor, contacts to other organisations.

Monika Janišová
monika.janisova@savba.sk**:** editorship of the EDGG Bulletin.

Solvita Rūsiņa
rusina@lu.lv**:** editorship of the EDGG homepage.

Michael Vrahnakis mvrahnak@teilar.gr**:** co-editorship of the EDGG homepage, Med-DG subgroup.

Stephen Venn
Stephen.Venn@Helsinki.Fi**:** development of networking and cooperation with zoologists and conservation biologists.

Everybody can join EDGG without any fee or other obligation. To become a member of the European dry grassland Group or its subordinate units write an e-mail to Jürgen Dengler including your complete address and specifying which of the groups you want to join. The detailed information you can find at: http://www.edgg.org/about_us.htm.

Membership development

The positive development of our membership figures has continued over the last few months (Fig. 1). As of 5 March 2011, the EDGG had 621 members from 49 countries. The largest number of members are from Germany (189), followed by Greece and Slovakia (each 29), Spain (28) as well as Italy, Poland and Romania (each 27).

The membership figures of the four regional subgroups are as follows:

- ♠ German Arbeitsgruppe Trockenrasen: 191;
- ♠ Working Group on Dry Grasslands in the Nordic and Baltic Region: 75;
- ♠ Southeast European Dry Grassland Group (SEEDGG): 166;
- ♠ Mediterranean Dry Grasslands (Med-DG): 147.

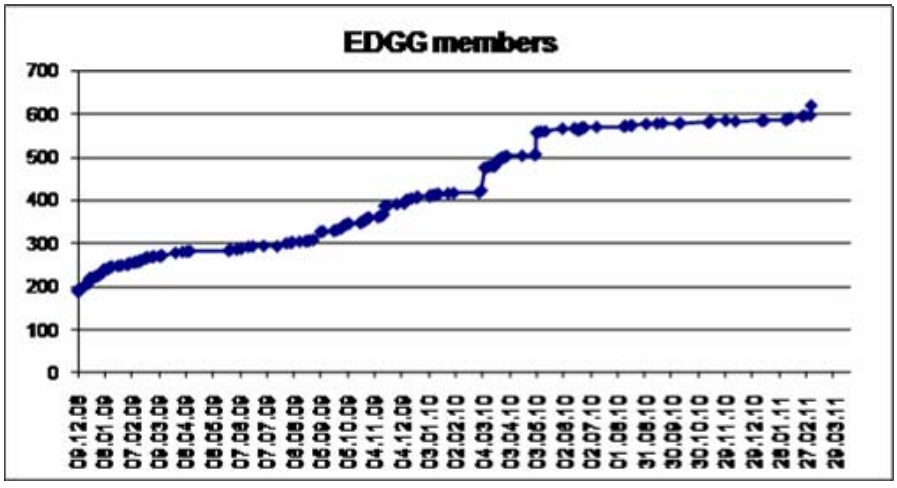

Fig. 1: EDGG Membership development over time.

Stephen Venn - new member of the EDGG Executive Committee

Responsibilities within EDGG:

Still under discussion but will include the further development of networking and cooperation with entomologists and scientists working with other animal taxa and the connection to the European chapter of the Society for Conservation Biology (SCB).

Contact:

Deptartment of Biosciences, Faculty of Biological and Environmental Sciences, P.O. Box. 65 (Viikinkaari 1), 00014 University of Helsinki, Finland. Phone: +358 (0)9 1915791, Fax: +358 (0) 9 19157788
E-mail: Stephen.Venn@Helsinki.Fi

Research interests:

Urban ecology, conservation biology, carabid beetles, dry meadow ecosystems, management of meadows for the enhancement of biodiversity.

Links:

http://www.helsinki.fi/urbanecologyresearch/members/venn.htm

WANTED: Executive Committee member

Having just added a fifth member to the Executive Committee (EC; "chair") with the zoologist and urban ecologist Stephen Venn, we are still open to adding one or two more members who are interested in serving EDGG by taking on tasks within the EC or developing new services for our members. In order to reflect the geographic and topical breadth of EDGG better, we would particularly be interested in candidates that meet the following criteria:

- ♠ From Western Europe (i.e. Ireland, UK, France, Spain, Portugal, potentially Belgium or Netherlands) (because this part of Europe is completely unrepresented within the present EC).
- ♠ Preferably zoologist, mycologist or/and active in the science-policy interface (to represent these topics better within EDGG and provide connections to the respective organisations)
- ♠ Preferably female (to ensure gender balance)
- ♠ Experience with homepages and other web-based services would be an advantage

While fulfilling some of these points would be useful, none of them is essential. Most important for the appointment of an additional chair is that she/he is competent and willing to make a substantial contribution to the development of EDGG. If YOU feel inclined to do so, please send us an informal application (to all five present chairs), with a brief description of yourself (your background, your present projects and your research interests) and your vision for EDGG and what you wish to contribute to its development.

In preparation: EDGG statutes and elections

After 2.5 years of rapid development without any formal structures, it seems time to establish some basic rules and formal democracy within EDGG – and this is also required by our mother organisation, the IAVS. We, the chairs, have therefore decided:

- ♠ to develop statutes that will soon be sent to you members first for discussion and then for voting;
- ♠ to replace the self-appointed & co-opted Executive Committee at the Uman' meeting with one elected by the EDGG members for a certain term of duty. Therefore, all present chairs will resign at Uman' but stand for the forthcoming election. We strongly encourage the nomination of additional candidates beyond the present chairs.

EDGG candidates for the IAVS Council elections

As an official Working Group of the International Association for Vegetation Science (IAVS) – actually we are the biggest IAVS subgroup – EDGG aims to actively contribute to the development of our mother organisation. Therefore, the EDGG chairs have nominated 15 particularly active and enthusiastic EDGG members who are also IAVS members from a wide spectrum of different countries as candidates for the forthcoming elections of the IAVS Council. The Council will be elected by all IAVS members via an online ballot in March/April 2011. It will consist of 40 members and be the main governing body of IAVS for the next four years, which among others elects the Executive Committee of the organisation, decides where the money of the organisation is spent (e.g. into subgroup activities or scholarships for young scientists), appoints the chief editors of the IAVS journals (Journal of Vegetation Science and Applied Vegetation Science) and discusses the future development of IAVS.

Below you find short biosketches of the 15 colleagues nominated by EDGG for the IAVS Council elections. They will be listed among the approx. 80 candidates from around the world who run for a Council seat. The full list with all candidates together with instructions for election process will be sent to all IAVS members soon. If you are an IAVS member, we would like to encourage making use of your voting right and giving your totally 40 votes to candidates that you deem particularly suitable, taking into account the 15 EDGG nominees.

If you are a vegetation scientist but not yet member of the IAVS, please consider joining our mother organisation, which comes with a lot of benefits (see http://www.iavs.org/MembershipBenefits.aspx). Membership fee is moderate for normal members (20 € per year), low for student members (10 € per year), while colleagues from low-income countries (presently all eastern European countries except Czech Republic and Slovenia are considered as such) could even apply for free membership. Just send a short e-mail to admind@iavs.org, applying for free membership because of your low-income situation and giving an outline in 2-3 sentences what your primary research activities are. If your institution does not have access to JVS/AVS you could additionally apply for free journal access.

Iva I. Apostolova, Bulgaria
E-mail: iva.apostolova@gmail.com
I am associate professor in the Institute of Biodiversity and Ecosystem Research at the Bulgarian Academy of Sciences. My scientific interests are vegetation classification, ecology of grasslands, vegetation dynamics, diversity of habitat types. My current research is focused on Bulgarian vegetation with special attention to establishment and development national vegetation database and classification. I am a member of IAVS since 1999 and participate in the subgroups European Vegetation Survey (EVS) and European Dry Grassland Group (EDGG). I am chair of the South-East European Dry Grassland Group (SEEDGG) established in 2010 as a subgroup of EDGG.

Sándor Bartha, Hungary
E-mail: sanyi@botanika.hu
URL: http://www.obki.hu/staff/BarthaS
I am a senior scientist at the Institute of Ecology and Botany of the Hungarian Academy of Science in Vácrátót (Hungary). I am mainly interested in assembly rules in dry grasslands and old fields. I had some opportunity to do field works in U.S. LTER sites (including oldfields, tall- and shortgrass prairie, and semidesert grasslands). I am particularly interested in studies where simulation modeling is connected with the analyses of field data for testing theories. I am an Associate Editor for JVS since 2007 and member of the European Dry Grassland Group. I would like to help maintaining the broad spectrum of research fields within IAVS and to promote cross-site comparative field-studies.

Andraž Čarni, Slovenia
E-mail: carni@zrc-sazu.si
Andraž Čarni. I am a scientific councilor at the Institute of Biology, Scientific Research Center of the Slovenian Academy of Sciences and Arts and part time lecturer of botany and vegetation ecology at Universities of Ljubljana, Maribor and Nova Gorica. I was involved in organization of scientific activities, as: first editor of journal Hacquetia, president of Eastern-alpine and Dinaric Society for Vegetation Ecology. I have been member of

IAVS since 1992. My scientific interest is vegetation science: biodiversity, macro-ecology, vegetation-environment relationship and landscape changes. The priority of my work in IAVS is that we should serve to members and to attack other researches dealing with vegetation science.

Jürgen Dengler, Germany
E-mail: dengler@botanik.uni-hamburg.de
URL: http://www.biologie.uni-hamburg.de/bzf/fbha063/fbha063_e.htm
I am senior research associate and lecturer at the University of Hamburg with main interests in biodiversity patterns, macroecology, vegetation classification, conservation ecology, methodological issues of vegetation science, and ecoinformatics. I study vascular plants, bryophytes, and lichens in Palaearctic dry grasslands, tall-herb/ruderal communities and various African ecosystems. I am active in the IAVS groups European Dry Grassland Group (EDGG as a chair), European Vegetation Survey (EVS), Ecoinformatics, and Nomenclature Commission (NC), I initiated the Global Index of Vegetation-Plot Databases (GIVD), and I regularly serve as reviewer for more than 20 journals. I wish to involve young scientists from around the world in IAVS activities.

Monika Janišová, Slovakia
e-mail: monika.janisova@savba.sk
URL: http://ibot.sav.sk/usr/Monika/
I am a researcher at the Institute of Botany, Slovak Academy of Sciences. My research interests include several fields of vegetation science focussing on grassland ecosystems (classification, biodiversity, management models, secondary succession) and population biology of grasses and rare species. I have been a member of IAVS since 1993. I am active in the IAVS groups European Vegetation Survey and European Dry Grassland Group where I work as one of the chairs and managing editor of Bulletin of the EDGG. I co-organized the European Dry Grassland Meeting in 2010. Within IAVS, I hope to help in promotion of international co-operation.

Kathrin Kiehl, Germany
E-mail: k.kiehl@hs-osnabrueck.de
URL: http://www.al.hs-osnabrueck.de/25652.html
I am professor at the University of Applied Sciences Osnabrück, Germany. I became IAVS member in 1994 and I was member of the organizing committee of the 44th IAVS conference in Freising, Germany. Currently, I am active in the IAVS group "European Dry Grassland Group" (EDGG). My main research fields are in restoration ecology, plant population ecology and applied vegetation ecology, covering a wide spectrum of different ecosystem types e.g. dry and wet grasslands, agricultural ecosystems, salt marshes, and floodplain forests. My goal is to motivate young scientists to become IAVS members and to promote cooperations with other ecological societies.

Anna Kuzemko, Ukraine
E-mail: anya_meadow@mail.ru
I am senior scientist and head of the Herbaceous Plants Department at the National Dendrological Park 'Sofiyvka' of the NAS of Ukraine. I am a member of IAVS since 2011. My scientific interests are grassland vegetation classification, ecology, dynamics, management, and conservation. I am a member of IAVS subgroups European Vegetation Survey and European Dry Grassland Group. I serve as a member of the Steering Committee of the South-East European Dry Grassland Group. I hope to help IAVS to involve of scientists from the countries of the former USSR and South-East Europe in activity IAVS and its working groups.

Alireza Naqinezhad, Iran
E-mail: a.naqinezhad@umz.ac.ir
URL: http://www.umz.ac.ir/en/dynamic/dynamic.asp?Userid=128
I am working as an assistant professor and lecturer at the University of Mazandaran, North Iran. My main interests are vegetation classification (grasslands, forests, and mountain wetlands), conservation of plant biodiversity, especially grassland and steppic areas, and methodological questions in vegetation science. I am also interested to inter-relationship between vegetation data and environmental variables using classification and ordination methods. I am an active member of the European Dry Grassland Group (EDGG) and have participated in conferences and expeditions of this IAVS subgroup. I hope to help IAVS to collect ideas from all vegetation scientists from Middle East and Central Asia.

Solvita Rūsiņa, Latvia
E-mail: rusina@lu.lv
I am lecturer at the University of Latvia, and postdoctoral researcher at the Institute of Biology, Laboratory of Geobotany. My interests are semi-natural grassland vegetation ecology, classification, geography, and spatio-temporal dynamics at landscape scale. I am involved in the establishment of the national vegetation database. I am a member of the editorial board of the local scientific journal "Vegetation of Latvia". I am one of the chairs of the European Dry Grassland Group (EDGG) and an editor of its homepage. I am a member of the IAVS since 2000. I would try to help increase visibility of IAVS.

Alexey Sorokin, Russia
E-mail: an-sorokin@yandex.ru
I am senior scientist at the Institute of Ecology of the Volga River Basin of Russian Academy of Sciences. My main interests include classification, ecology, and dynamic of vegetation (plant communities of the Lower Volga Valley, coastal vegetation of Russia) as well as mathematical methods in vegetation science with focus on ecoinformatics and vegetation expert systems. I am a member of the European Dry Grassland Group (EDGG) within the IAVS and serve as member of the Steering Committee of the South-East European Dry Grassland Group (SEEDGG) of the EDGG. I hope to involve young scientists from Russia in IAVS activities.

Ioannis Tsiripidis, Greece
E-mail: tsiripid@bio.auth.gr
URL: http://www.bio.auth.gr/?q=en/users/tsiripidisi
I am Assistant Professor at the School of Biology of the Aristotle University of Thessaloniki, Greece. My research interests concern forest, riparian and ultramafic grassland vegetation, as well as conservation of vascular plant diversity. I am also interested in vegetation data analysis issues. I am a member the IAVS groups European Vegetation Survey (EVS) and European Dry Grassland Group (EDGG). I was member of the national organizing committee of the 2009 IAVS conference in Crete (Greece).

Emin Uğurlu, Turkey
E-mail : ugurlu@yahoo.com, emin.ugurlu@bayar.edu.tr
URL: http://www2.bayar.edu.tr/biyoloji/
I am assistant professor at the Celal Bayar University in Manisa. I am mainly interested in vegetation classification, systematics of the vascular plants, biodiversity patterns, and dry grasslands of Turkey and Europe. I am member of the European Dry Grassland Group (EDGG) within IAVS and its Mediterranean Dry Grassland Subgroup (Med-DG). I am trying to establish a national vegetation database of Turkey. I have been involved in the development of a vegetation typology of California when I was a visiting scientist with Michael Barbour at the University of California in Davis from March 2006 to February 2007.

Michael S. Vrahnakis, Greece
E-mail: mvrahnak@teilar.gr
URL: http://www.teilar.gr/person_en.php?pid=50
I am assistant professor at the School of Forestry and Management of Natural Environment of the Technological Educational Institute of Larissa, and I run the Laboratory of Rangeland Science. My main interests are quantification of biodiversity, rangeland ecology and management, management of Natura 2000 habitat types. I am one of the four chairs of the European Dry Grassland Group (EDGG) and responsible for the Mediterranean branch (namely Mediterranean Dry Grassland Subgroup, Med-DG). Currently, I am the General Secretary of the Hellenic Rangeland and Pasture Association (HERPAS). I wish IAVS to offer a scientific point of vegetation' view to the society.

Camilla Wellstein, Germany
E-mail: camilla.wellstein@uni-bayreuth.de
URL: http://www.biogeo.uni-bayreuth.de/biogeo/en/mitarbeiter/mit/mitarbeiter_detail.php?id_obj=67652
I am currently postdoctoral researcher at Bayreuth University, Germany, pursuing science and research management for an interdisciplinary research consortium on the impact of climate change on ecosystems (FORKAST). I am investigating functional aspects of plants and vegetation patterns in temperate, Mediterranean and high mountain regions using approaches from biogeography to molecular ecology. I am member of the editorial board of AGEE. I joined IAVS in 2005 and have been participating in the IAVS-groups European Dry Grassland Group and European Vegetation Survey. Besides promoting vegetation science, my work for IAVS will concentrate on the development of IAVS-propositions towards other scientific disciplines.

Wolfgang Willner, Austria
E-mail: wolfgang.willner@vinca.at
URL: http://www.vinca.at/
I am lecturer at the University of Vienna, Austria, and managing director of the private research institute VINCA. My main interests are the biogeography, ecology, and classification of Central European forests and grasslands as well as methodological issues of vegetation classification. I manage the Austrian Vegetation Database which contains at present about 40.000 plots. I am active member of the IAVS working groups European Vegetation Survey (EVS), European Dry Grassland Group (EDGG), and Nomenclature Commission (NC), and I will organise the 21st EVS workshop in 2012. I would like to foster the dialogue between different traditions of vegetation classification.

Gryllus campestris, Uckermark, Germany. Photo: J. Dengler, 2010 (JD101616).

The 8th European Dry Grassland Meeting

13-17 June 2011

National Dendrological Park 'Sofiyivka', National Academy of Sciences of Ukraine

Uman', Ukraine

Second circular

Main topic:

Dry Grassland of Europe: biodiversity, classification, conservation and management

Subtopics:

A) Large-scale investigations of dry grasslands: biodiversity and classification

B) Dry grasslands in agricultural landscapes: their functions, changes and management

Organizers: European Dry Grassland Group (EDGG) and National Dendrological Park 'Sofiyiv-ka' of the NAS of Ukraine, M.G. Kholodny Institute of Botany of the NAS of Ukraine

Supporting organisations and institutions: International Association for Vegetation Science (IAVS), Floristisch-Soziologische Arbeitsgemeinschaft (FlorSoz), O.V. Fomin Botanical Garden of the Taras Shevchenko Kiev National University, Kherson State University, Biosphere Reserve 'Askania-Nova', National Nature Park 'Buz'ky Gard'

Venue and travel information

Location: The National Dendrological Park "Sofiyivka" is an outstanding masterpiece of landscape art created in the late 18th / early 19th century and scientific research institution of the National Academy of Sciences of Ukraine. It is located in the old city of Uman', a famous tourist centre with a population of about 90 thousand people and developed infrastructure. The city is located at the intersection of the St. Petersburg – Odessa and Lviv – Dnipropetrovsk highways, 202 km from the capital of Ukraine, Kyiv, and is easily reached by car or bus.

Venue: Conference Hall of the National Dendrological Park 'Sofiyvka' of the National Academy of Sciences of Ukraine, 12a Kyivska Str., Uman', Ukraine, 20300.

From Kiev: by minibus from parking near Central railway station or by bus from Central Bus Station.

From Odessa: by bus from Central Bus Station.

From Vinnitsa: by bus from Central Bus Station.

By car: From Central Europe: Route Uzhhorod (or L'viv) – Ternopol – Khmeltiskyy – Vinnitsa – Uman (motorway E50); From North Europe: route Kyiv – Uman – Odessa (motorway E95). All motorways in Ukraine are toll-free.

Programme

Date: Monday 13 June 2011 — Friday 17 June 2011.

13 and 14 June: Oral and poster presentations, EDGG General Assembly, Grassland party.
15 June: Excursion to National Nature park 'Buz'ky Gard' (South Bug valley, rocky vegetation).
16 June: Excursion to National Nature park 'Oleshkivsky Sands' (psammophyte vegetation).
17 June: Excursion to Biosphere Reserve 'Askania-Nova' (steppe vegetation).
For details on the excursions, see Bulletin No. 8 (pp. 5-6) and the conference homepage.

Language: English

Contributions: Both oral and poster presentations are invited

Publications: All participants will receive a book of abstracts, which will also be published online on the EDGG homepage. As in previous years, there will be Special Features (SFs) with selected contributions from the conference in international, peer-reviewed journals, guest-edited by EDGG members. From the conference in Uman' there will be one SF in *Tuexenia*, mainly focused on subtopic A (Large-scale investigations of dry grasslands). A second SF for subtopic B (Dry grasslands in agricultural landscapes) is planned in a journal listed in the Web of Science, possibly *Agriculture, Ecosystems and Environment*.

Fees: The conference fee of 50 € covers refreshments during the conference breaks and the Grassland party as well as the workshop package with program. Preliminary price of full board (breakfast, lunch and dinner) is 15 €. Additional fee will be paid for excursions (preliminary 20 Euro each) which will be used for transport and refreshment.

A limited number of participants will be supported (reduction of registration fee).

Payment: The conference fee, excursion fee, accommodation (in Uman' and Kherson) and board will be paid at the registration desk.

Registration and abstract upload, detailed travel information:

Online: www.edgg.org/edgg_meeting_2011.html

Deadline for registration and abstract submission is 31 March 2011

Contact to the team of organizers:

Anna A. Kuzemko, Coordinator, National Dendrological Park "Sofiyvka" NAS of Ukraine, 12a Kyivska Str., Uman', Ukraine, 20300, anya_meadow@mail.ru

Sergei L. Mosyakin, Director, M.G. Kholodny Institute of Botany NAS of Ukraine, 2 Tereschenkivska Str., Kyiv, Ukraine, 01601, inst@botany.kiev.ua

Alexander E. Khodosovtsev, Head of Botany Department, Kherson State University,27, 40 rokiv Zhovtnya Str., Kherson, Ukraine 73000, khodosovtsev@ksu.ks.ua

3rd EDGG Research Expedition in Bulgaria

August 2011

General information and application

The Southeast European Dry Grassland Group (SEEDGG) within EDGG is organizing its third international research expedition in Bulgaria from 14–24 August 2011. The expedition is organized by Vegetation and Habitats research group of Institute of Biodiversity and Ecosystem Research (Bulgarian Academy of Sciences) and Jürgen Dengler (University of Hamburg, Germany).

Apart from the seven members of the organizers group and a bus driver, there are 12 more places for EDGG members to join this expedition. Please send your applications as soon as possible, but **not later than 15 May 2011**, to one of the contact persons:
Kiril Vassilev: kiril5914@abv.bg
Jürgen Dengler: dengler@botanik.uni-hamburg.de

Information about the study area

Bulgaria is a small country (about 11,000 km^2), but is quite diverse in terms of natural and semi-natural vegetation. In order to offer a range of different vegetation types, we selected two target areas to be surveyed. These target areas are located on both sides of the Balkan Mt. and comprise species-rich vegetation, beautiful landscape, and opportunity to see some national traditions.

Vrachnanski Balkan Nature Park

The first locality is situated within the boundaries of the Vrachanski Balkan Nature Park, which is the second largest nature park in Bulgaria. It is situated in the western part of the Balkan Range and covers a well shaped massif with a maximum altitude of 1482 m a.s.l. The site with an area of 28,845 ha was declared a Natural Park (IUCN category V) in 1989. The climate is temperate continental. The average annual precipitation varies from 700 mm in the lower parts up to 1200 mm in the higher parts of the mountain. The average temperature in January ranges from –1.5 °C to –4 °C, and in July it is 16.5 ° C. The most characteristic feature of the Park is its karst terrain, which occupies vast areas. The broken ground, steep calcareous cliffs, some reaching up to 80 m in height, pot-holes, karst fields and screes form a characteristic landscape.

A significant floristic and vegetation diversity can be observed within the Park boundaries. So far, approximately 980 vascular plants have been recorded (Borisova & Donchev 2003). According to Velchev (1971) and

Meshinev & Apostolova (2007) the vegetation and habitats of the park territory show a remarkable diversity, including the following higher syntaxa: *Bruckenthalion spiculifoliae, Carpinion betuli, Carpinion orientalis, Cirsio-Brachypodion, Crysopogoni-Danthonion calycinae, Cynosurion, Cephalanthero-Fagion, Festucion valesiacae, Magno-Potamogetonion, Paliuro-Carpinion orientalis, Quercion confertae, Quercion pubescenti-petraeae, Seslerio-Festucion xanthinae, Syringo-Carpinion orientalis, Thlaspietea rotundifolii.* The herbaceous communities are secondary and have evolved on the places where broadleaved deciduous forests had been clear-cut in the past. On the highest part of the ridge there are *Festuca rubra-Agrostis capillaris* and *Sesleria latifolia* communities as well as stands dominated by *Lerchenfeldia flexuosa*, *Brachypodium pinnatum* and *Nardus stricta*. The beech forests are relatively well preserved and little affected by human impacts.

Sredna Gora Mts.

The second locality includes a part of the southern slopes of Balkan Range, the hills of Sredna Gora Mts. and the bottomland between them. The altitude is between 500 and 1200 m a.s.l. The climate is temperate continental. The average annual precipitation is between 600 mm and 800 mm depending on the altitude. The average temperature in January ranges from –1.5 °C to 0.0 °C, and in July from 22–24 °C. There is no drought period in the year. The area is mainly popular for its historical value and the large number of architectural monuments. Koprivshtitsa is one of the characteristic Bulgarian towns, still preserving the atmosphere of the Bulgarian National Revival period of the 19th century. It is also known as in important place of the national resistance against the Ottoman occupation in 1876.

Despite the numerous tourists who visit the area, the landscape is well preserved and offers a great diversity of habitats and species. Woodlands of the associations *Asperulo-Fagetum* and *Galio-Carpinetum* are dominant in the region as well as *Quercus dalechampii* forests (Bondev 1991). Grasslands at lower altitudes are mainly represented by the alliances *Cynosurion* and *Festucion valesiacae*. Traditionally, these grasslands are used mostly as pastures and rarely as meadows. The grasslands at higher altitude mainly belong to the class *Calluno-Ulicetea* , with dominance of *Nardus stricta*, *Lerchenfeldia flexuosa* and *Agrostis capillaris*. The region is not well studied in terms of vegetation diversity.

Study aims and sampling design

The aim of the survey is to sample various grassland types (mainly the dry grasslands of the class *Festuco-Brometea*) both in terms of biodiversity patterns and for use in large-scale consistent vegetation classifications. We will use more or less the same sampling approach as developed by Dengler (2009) and used by the two preceding SEEDGG Research Expeditions (Dengler et al. 2009, Dengler et al. 2010). Basically, we will use a nested-plot design with areas ranging from 0.0001 m² to 100 m², and we will include not only vascular plants but also bryophytes, lichens, and soil parameters in our sampling.

We are looking forward to participants from many different countries and from any academic level, be it BSc. student or Professor. Particularly welcome are colleagues with good species knowledge of vascular plants, bryophytes, and/or lichens. While our basic aim is to sample a comprehensive joint dataset according to the approach outlined, it is also possible to cater for EDGG members with other interests. In 2010 in Ukraine, for example, one colleague was sampling seeds of dry grasslands species for a botanical garden and another was collecting beetles on the same sites where we carried out the plant diversity analyses.

Our aim is to use the jointly sampled data for various publications. We intend to publish a common paper on the regional diversity patterns and their dependence on scale, soil, and land use in an ISI journal with all participants as co-authors. Further, our data will likely be used in two major publications, Vassilev et al. (in prep.) on the classification of the class *Festuco-Brometea* in Bulgaria and eastern Serbia and Dengler et al. (in prep.) on a comparative study of scale-dependent diversity patterns in European dry grasslands. Finally, the data sampled will be entered and made available in the Bulgarian Vegetation Database (EU-BG-001 according to the Global Index of Vegetation-Plot Databases, GIVD, Dengler et al. 2011).

The organizers are convinced that the joint expedition will offer opportunity to share knowledge and to encourage fruitful discussions.

Program and costs

Preliminary program

14.08 Arrival in Sofia and traveling to Ledenika hut (about 2.5 hours);

15.08 – 18.08 Field work in the area of Vratsa Mt. (about 45 min travelling daily);

19.08 Travelling from Ledenika hut to Koprivshtitsa (about 3.5 hours) and guided tour in the historical town;

20.08 – 23.08 Field work in the valley between the Balkan Mts. and Sredna Gora Mts. (about 1.5 hours travelling daily)

24.08 Traveling from Koprivshtitsa to Sofia (about 2 hours)

The plateau of Vrachanska Mts. Photo: H. Pedashenko.

Species-rich grasslands. Photo: H. Pedashenko.

Organisation and costs

The expedition will start in Sofia, on 14 August and end again in Sofia on 24 August. The participants should arrange the transport to Sofia individually. All the travelling from Sofia and back will take place in a van with 20 seats. During the field trips the participants will be split to different teams and will be transported to their working areas separately, and the van will collect them again in the evenings. The organizers have arranged accommodation places in both target areas (Ledenika hut above the town of Vratsa and a 19^{-th} century house in Koprivshtitsa). The group will spend five nights in each of the two locations. Meals are available in Ledenika hut and could be arranged in advance. The house in Koprivshtitsa has a fitted kitchen and dining room where all participants could prepare food on their own. There are several shops in the town which are easily accessible on foot (about 5 min walk).

The overall costs (travelling, accommodation and meals) will be approximately 250 Euros per person. We have applied for a grant by the German NGO FAN(B) and we also will ask our mother organisation IAVS for some support, so that we are optimistic that in the end we will be able to reduce the participation fees significantly below this amount, and we even might be able to offer free participation for colleagues with low income (participants from low-income countries as well as students etc.). Feel free to contact Jürgen Dengler for details later in the year.

Sesleria latifolia community. Photo: H. Pedashenko..

Linum flavum. Photo: H. Pedashenko.

References

Bondev I. (2001): The vegetation of Bulgaria, Map 1:600000 with explanatory text. St. Kliment Ohridski University Press, Sofia.

Borisova D. & Donchev K. (2003): Studies in the Natural Park Vrachanski Balkan, Book one. Floristic studies (in Bulgarian).

Dengler J. (2009): A flexible multi-scale approach for standardised recording of plant species richness patterns. – Ecol. Indic. 9: 1169–1178, Amsterdam.

Dengler J., Ruprecht E., Szabó A., Turtureanu D., Beldean M., Uğurlu E., Pedashenko H., Dolnik C. & Jones A. (2009): EDGG cooperation on syntaxonomy and biodiversity of Festuco-Brometea communities in Transylvania (Romania): report and preliminary results. – Bull. Eur. Dry Grassl. Group 4: 13–19, Hamburg.

Dengler J., Kuzemko A. & Yavorska, O. (2010): Impressions from the EDGG Research Expedition 2010 to Central Podilia (Ukraine). – Bull. Eur. Dry Grassl. Group 8: 15–16, Hamburg.

Dengler J., Jansen F., Glöckler F., Peet R. K., De Cáceres M., Chytrý M., Ewald J., Oldeland J., Finckh M., Lopez-Gonzalez G., Mucina L., Rodwell J. S., Schaminée J. H. J. & Spencer, N. (2011): The Global Index of Vegetation-Plot Databases (GIVD): a new resource for vegetation science. – J. Veg. Sci. 22. DOI: 10.1111/j.1654-1103.2011.01265.x.

Velchev V. (1971): The vegetation of Vrachanska Mt. BAS, Sofia.

Meshinev T. & Apostolova I. (2007): The plant communities as a basic component of the ecosystems in the Natural Park Vrachanski Balkan. – Report included in the Management plan for the Park, approved in 2010 by the Ministry of Environments and Water.

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The donkey – a friend of grassland resources that patiently faces … extinction

Donkeys (Equus asinus L.) have played a significant role in the financial and cultural development of continental and insular Europe and elsewhere. They were major users of grasslands in the past, especially in the extensified breeding systems of the Mediterranean. Their contribution to the evolution of agriculture, livestock husbandry and forestry was decisive up to the appearance of machinery, when their population, and accordingly their impacts on grasslands, started to decline at a dramatic rate. Nevertheless, the donkey is still often met in popular stories and tales, thus reflecting its persistence in common thought. The present article attempts to refresh scientific interest for these beloved animals by describing the present condition of their populations, and to highlight the urgent scientific need for a more systematic study of the donkey's needs.

Knowing someone already … known

The donkey (*Equus asinus* L.) is a domestic animal that belongs to the order Perissodactyla (Figure 1). It symbolizes humbleness and submission, which are reflected in the holy story of Jesus' entrance in Jerusalem. However, during Jesus' time donkeys were not negligible at all, since their existence and use in various occupations was an indication of social prosperity. Going back centuries, donkeys are found fairly often and without justification to be associated with ignorance, audacity, malformation, and lechery, especially in the myths of Aesop and the stories of Nastradin Hodsha (or Nasretin Hoca). In other cases, however, they are linked with significant appreciation by their owners, being a symbol of preponderance for kings and gods in eastern civilizations (Figure 2). Despite the cases relating the donkey with the lack or possession of knowledge, it is considered a fellow traveler of man and it is often used to depict human relations and behaviors.

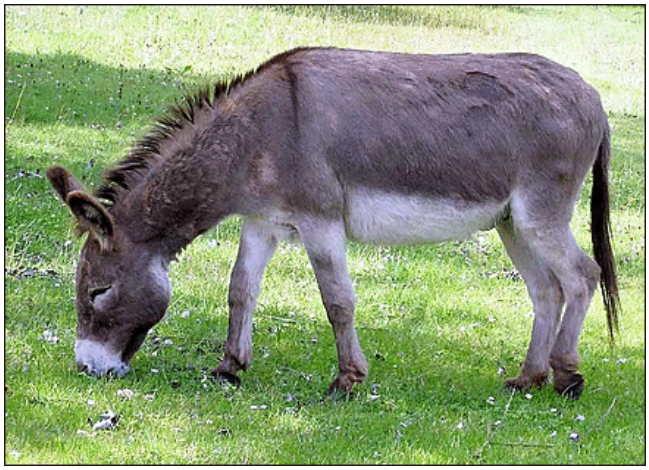

Figure 1. *Donkey (Equus asinus L.) (Internet source).*

It is believed that the donkey originates from Africa, and early evidence shows that Egyptians had domesticated by around 3000 B.C. Since then, its use has expanded to the known world; firstly to inhabitants of Mesopotamia and the Sumerians, and from there to Ionia of Minor Asia, Minoan Crete and all over Greece. Later, the Romans were introduced to donkeys by the Greeks.

Figure 2. *Nastradin Hodsha (or Nasretin Hoca) riding a donkey (unknown Internet source).*

During pre-Hellenic times (before 4000 BC) the donkey was the dominant species among domestic animals, especially in the area of Arkadia (Peloponnesus, Greece). *Typhoon*, a mythical frightful monster, had a donkey-like head, and the gods like *Bacchus* (*Dionysus*) and *Hephaestus* (*Vulcan*) are depicted riding donkeys. The donkey was the holy animal for *Hestia* and *Priapus*, implied by many pictures on ancient angiographies and coins that are excavated from several parts of the Mediterranean. The use of donkey milk for skin beauty and refreshment has been known since ancient times. Queen Cleopatra in her excursions was accompanied by hundreds of donkeys to provide her with their valuable milk for her famous baths.

Compared to horses, the donkey tolerates heavier workloads and is more resilient to heat, disease, hunger and thirst. It is extremely modest, patient and lives longer than a horse (up to 50 years). Despite its low demands for water quantities, it demands water of high quality (at least clear water); it often refuses to drink water from a receptacle previously used by other animals (even donkeys).

Population data and the need to preserve the donkey

The FAO (2007) estimates that the global donkey population is approx. 41 million, with Asia & Pacific holding the majority (37.6%) (Table 1). The FAO also reports that the breed diversity of donkeys is minimal (approx. 3%) compared to other domesticated animals. 185 breeds have been registered with Europe having 51 and North America only 5; however, these figures need further examination since many Asian breeds have not been registered yet.

Table 1. Population sizes and number of donkey breeds (FAO 2007).

Region	Breeds	Population (%)
Africa	26	26.9
Asian & Pacific	32	37.6
Europe (Caucasus incl.)	51	3.7
Latin America	24	19.9
Near & Middle East	47	11.8
North America	5	0.1
World	185	100 (41 million heads)

According to the FAO (2000), 20% of the world's farm animal recorded breeds are prone to extinction, while 10% have already become extinct over the last 50 years. Extinct breeds from Europe and North America represent 18% of the total number of breeds (Table 2).

Focusing on donkey breeds in Europe, at least four breeds are already extinct (Kugler *et al*. 2008) (Table 3). Accordingly, the donkey population has dramatically declined. For example in Greece, from approx. 127,000 ind. recorded in 1990 there were only 46,000 in 2003. It is estimated that the size is even lower nowadays (approx. 15,000), with an annual decline rate of 6.1% (Figure 3).

Table 2. Percentages of domestic breeds recorded in each class of risk category for world's continents (FAO 2000).

Region	Not at risk (%)	At risk (%)	Extinct (%)	Unknown (%)
Europe	31	40	18	11
North America	20	29	18	33
South & Central America	41	19	8	32
Africa	49	12	5	34
Asia & Pacific	49	12	5	34
Middle East	42	7	4	47
World	39	20	10	32

Table 3. Risk status of European donkey breeds (FAO 2000).

Risk status	1995	2000
Unknown[1]	6	9
Critical	7	5
Critical-maintained	0	0
Endangered	0	5
Endangered-maintained	0	1
Not at risk	3	3
Extinct	0	4
Total	16	27

[1]FAO's classification criteria of the degree of the status of a breed: **Extinct**: no sires and/or mares for breeding remaining, **Critical**: mares ≤ 100; sires ≤ 5, **Endangered**: mares ≤ 1000; sires ≤ 20, **Not at risk**: mares > 1000; sires > 20

The abandonment of traditional agrosilvopastoral practices and genetic erosion are among the most important threats for the breeds of domestic animals. *With regards to Europe, the causes* (of population decline) *are: (1) the selection of only a few, highly-productive breeds, a phenomenon that in recent years has caused some concern not only amongst market operators, but also in the guiding principles of the recent trends in the European Common Agricultural Policy (CAP); (2) the substitution of animal labour with machines; (3) the growing trend of farmland abandonment that has afflicted many marginal areas in the interior, where the majority of the populations of local breeds are concentrated* (Cicia *et al*. 2003).

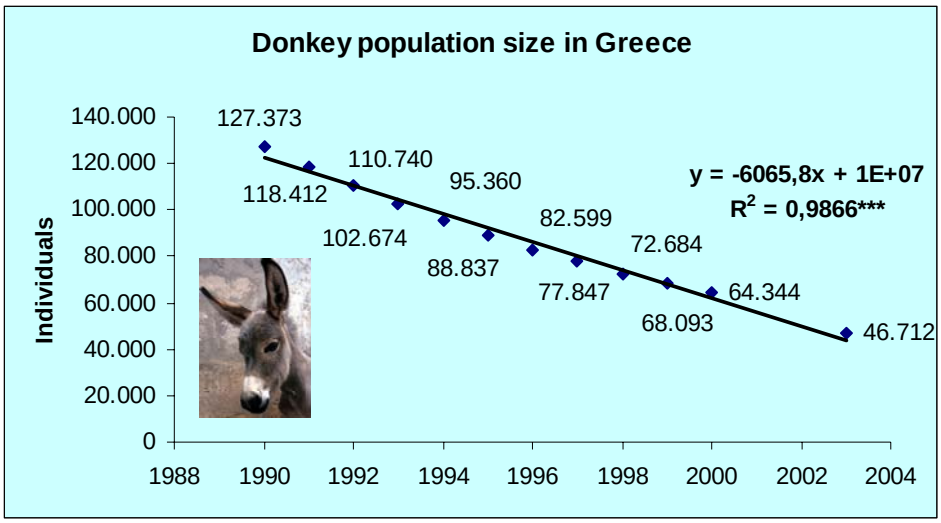

Figure 3. Donkey population size of Greece (Vrahnakis, unpublished).

The existing data demonstrates the urgent need to take measures to avoid further donkey population decline in Europe and elsewhere. Apart from the economic support of donkey breeding activity (please read Cicia *et al*. 2003 for some skeptical consideration of this type of support) donkeys suffer from our ignorance! For example, it is now well-known that donkey farms can be profitable!

According to the Monitoring Institute for Rare Breeds and Seeds in Europe (http://www.monitoring.eu.com/) the need for action should be realized on the following levels (Kugler *et al*. 2004): a) supporting activities for the public to realize that the donkey is an important species; b) awareness raising in the scientific community to shed light to its biological needs, welfare, health, nutrition, veterinary care and management, and mostly on differentiation of breeds; and c) systematic monitoring on a national level since the figures concerning its population size are not always reliable.

But most importantly "…*a transboundary conservation policy is needed to keep the donkey as part of the European living cultural heritage*" (Kugler *et al*. 2004).

References

Cicia G., E. D'Ercole & D. Marino (2003): Costs and benefits of preserving farm animal genetic resources from extinction: CVM and Bio-economic model for valuing a conservation program for the Italian Pentro horse. *Ecological Economics*, 45:445-459.

Kugler W., H.-P. Grunenfelder & E. Broxham (2008): Donkey Breeds in Europe: Inventory, Description, Need for Action, Conservation. Report 2007/2008. Monitoring Institute for Rare Breeds and Seeds in Europe, SAVE foundation, 62 pp.

FAO (2000): World Watch List for Domestic Animal Diversity, third ed. FAO, Rome.

FAO (2007): The State of the World's Animal Genetic Resources for Food and Agriculture, Rome, 524 pp.

A poem by Kostas Varnalis (a Greek poet (1883-1974) (translation found in http://dinsomniac.blogspot.com/ with some corrections):

The ballad of Mr. Mentios*

I can't bend my knees, my feet are hurting me,
I'm walking with difficultly through a bad life
working all day for somebody else,
masters and servants were both beating me up
and they were letting me starve.

Up village and down village, going up and down,
with heat and rain I was working myself to death
Twenty-year-old donkey I carried every stone
and I built the village's church.

Go victim, go naive, go eternal symbol!
If you wake up, the world will turn upside-down at once.
The world will turn upside-down at once.

And with the ox, that we didn't fit well as a pair,
I was ploughing the master's acres of land.
And during war I was carrying machine-guns
so that people get killed for master's food.
For master's food.

Go victim, go naive ...

Look, the others are on the move, the world has turned red,
another sun has risen in another sea, in another earth.

Go victim, go naive ...

* Mr. Mentios is a popular Greek nickname for donkeys.

Michael Vrahnakis, Karditsa, Greece, mvrahnak@teilar.gr

Forthcoming events

20th Workshop of European Vegetation Survey

6–9 April 2011, Roma, Italy

Contact and details: staff@evsitalia.eu, www.evsitalia.eu

Dune management in the Netherlands 2011: study tour

9–13 May 2011, Bernburg, Germany

Contact: Charlotte Durkin, dunes@hope.ac.uk

Details: http://www.hope.ac.uk/coast/occasional-papers.html

Regional workshop SALVERE project on Ecological Restoration

18–20 May 2011, Bernburg, Germany

Details: www.offenlandinfo.de

34th Symposium of Eastern Alpine and Dinaric Society for Vegetation Ecology

24–20 May 2011, Camerino, Italy

Contact: **Alessandra Vitanzi**
eadsve-secretary@unicam.it

Deadline for the registration: 31 March 2011.

Dry grassland diversity in Poland

2–4 June 2011, Lublin, Poland

Contact: Anna Cwener (murawy2011@wp.pl), Piotr Chmielewski (pchmielewski4@wp.pl)

Deadline for the registration: 31 December 2010

8th European Dry Grassland Meeting

13–17 June 2011, Uman, Ukraine

Contact: Anna Kuzemko (anya_meadow@mail.ru)

Details: see Bulletin of the EDGG 8, pp. 3–6, Bulletin of the EDGG 10 (this issue), pp. 7-10.

Old Surrey Downs Project Summer Conference

14–15 June 2011, England

Contact: alec.baxterbrown@surreycc.gov.uk

Details: www.oldsurreydowns.org.uk

54th Symposium of International Association for Vegetation Science

20–26 June 2011, Lyon, France

Details: http://iavs2011.univ-lyon1.fr/en

3rd SEEDGG research expedition

14–24 August 2011, Bulgaria

Contacts: Iva Apostolova: iva@bio.bas.bg, Jürgen Dengler: dengler@botanik.uni-hamburg.de

Details: see this Bulletin issue, pp. 10–12

8th World Congress of International Association for Landscape Ecology

18–23 August 2011, Beijing, China

Details: www.iale2011.org/index.asp

4th World Conference on Ecological Restoration

21–25 August 2011, Merida, Mexico

Details: www.ser2011.org/en/

41st Annual Conference of the Ecological Society of Germany, Austria and Switzerland (GfÖ)

Topic: "Ecological functions, patterns, processes"

5-9 September 2011, Oldenburg, Germany

Details: http://www.gfoe-2011.de/

Annual Meeting of the British Ecological Society

12–14 September 2011, Sheffield, UK

12th Congress of European Ecological Federation

25–29 September 2011, Ávila, Spain

Details: www.eefcongress2011.eu/

Forum

The Forum section offers the possibility to our members for posing small requests or initiating discussions that might be interesting to other members as well.

Bryophyte and lichen of the year 2011

Every year since 2004 and 2005, respectively, the BLAM (Bryologisch-lichenologische Arbeitsgemeinschaft für Mitteleuropa e. V. = Bryological and Lichenological Association for Central Europe), elected a lichen of the year and a bryophyte of the year. The aim of this nomination is "to attract the attention of the public to these small and, in many cases, endangered organisms" (see http://www.blam-hp.eu/home_en.html).

For the year 2011, two typical species of dry grasslands have been chosen, the moss *Abietinella abietina* (= *Thuidium abietinum*) and the lichen Fulgensia fulgens (see further details at http://www.blam-hp.eu/mofledJ11.html; in German only). *Abietinella abietina* (Fig. 1) is typical for a wide range of calcareous dry grasslands, both xeric and meso-xeric mainly from the class *Festuco-Brometea*, but can also be found in some *Koelerio-Corynephoretea* communities on base-rich sands. *Fulgensia fulgens* (Fig. 2), by contrast, in central and northern Europe is restricted to the most xeric dry grasslands on shallow limestones (mostly order *Alysso-Sedetalia*, *Koelerio-Corynephoretea*, but also *Xero-Bromion*, *Festuco-Brometea*), but is more widespread in various open-structured communities above limestone in the Mediterranean region. The nomination of two dry grassland species by BLAM emphasizes that cryptogams play a crucial role in nearly all types of dry grasslands and that they should be taken into account when conducting studies into to diversity or classification of these communities as well as when developing conservation and restoration schemes for this habitat type.

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Fig. 1: Abietinella abietina in a basiphilous grassland of Central Podilia, Ukraine, encountered during the EDGG Research Expedition in Ukraine 2010 (Photo: J. Dengler, JD103512)

Fig. 2: Fulgensia fulgens in a Mediterranean dry grassland in the Gargano National Park, Italy, encountered during the EVS post-symposium excursion 2009 (Photo: J. Dengler, JD090644).

Internships in Jürgen Dengler's group

Asking exciting research questions, developing adequate sampling designs, applying state-of-the-art statistics and writing-up results in a way that they have good chances to be accepted in journals of the Web of Science, are major challenges for young scientists throughout the world. However, learning these fundamental "research techniques" is particularly important for PhD students and young Postdocs from countries where such things are not traditionally and competently told at universities.

The Section **"Biodiversity, Evolution and Ecology of Plants" at the Biocentre Klein Flottbek, University of Hamburg**, **Germany** has quite some experience and good success in providing such supervision and a productive atmosphere (including a weekly Paper-Writing Seminar) to young scientists from abroad. We welcome applications from foreign colleagues (http://www.biologie.uni-hamburg.de/bzf/syst/biodiv_studinfo_eng.htm). While most of the scientists in our Section are focussing on vegetation, biodiversity, global change, and sustainable land use in African countries, I am also open to any studies dealing with **western Palaearctic dry grasslands** (ecology, biodiversity, classification, conservation, restoration), as well as analyses of any study system in the context of **large-scale vegetation classification**, **scale-dependent biodiversity patterns**, **macroecology**, and **ecoinformatics**.

Presently, I am co-supervising three EDGG members from abroad (Romania, Iran, Morocco), whose stay in Hamburg is financed by scholarships (several months to two years). I am looking forward to welcome further EDGG members as visiting scientists. It is both possible to come to Hamburg with own data or to analyse and prepare for publication one of my many unpublished dry grassland datasets, but normally it will be a mixture of both. If you are interested, please contact me directly to discuss possibilities.

There are different options for scholarships to cover the costs of a stay in Hamburg, most importantly scholarships of your home university or home country, but also scholarships by DAAD (German Academic Exchange Service), DBU (German Environmental Foundation) or the ERASMUS programme of the European Union. Note that you need to organise the scholarship for your stay yourselves! However, while we/I cannot provide a scholarship for you, we can help you in drafting an application that has a good chance of being accepted. Be aware that most of the available scholarship programmes require that the applications are submitted months before the planned internship.

Detailed information about the Section can be found at: http://www.biologie.uni-hamburg.de/bzf/syst/syst_eng.htm.

Detailed information about J. Dengler (inlcuding full publication list) can be found at: http://www.biologie.uni-hamburg.de/bzf/fbha063/fbha063_e.htm.

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Request for information to support a UK grassland monitoring project ("MILESTONES OF PROGRESS")

Natural England, the Department for Food, Environment & Rural Affairs (DEFRA) and the Countryside Council for Wales (CCW) have commissioned the Centre for Agri-Environmental Research (CAER) at the University of Reading and the Centre for Ecology & Hydrology (CEH) to develop a simple and rapid methodology to assess the progress and timescale of restored or re-created grassland swards towards a target high value grassland using floristic, structural and potentially soil-based attributes. This method would primarily be used for assessing the progress of restored or created grasslands established through agri-environment scheme (AES) agreements. It would be used by AES advisers to make rapid field assessments.

A part of the project involves a critical review of the literature and an evaluation of existing rapid monitoring methodologies. It is assumed that such methodologies, including those for existing high value grasslands, must have been developed in other European countries but that these rarely get published in the peer-review literature. It would be very useful for the project if it were possible to obtain details of other methods used in Europe. If any EDGG members are able to supply details of any grassland rapid monitoring methods used in their respective countries, we would be very grateful. Any assistance would be acknowledged.

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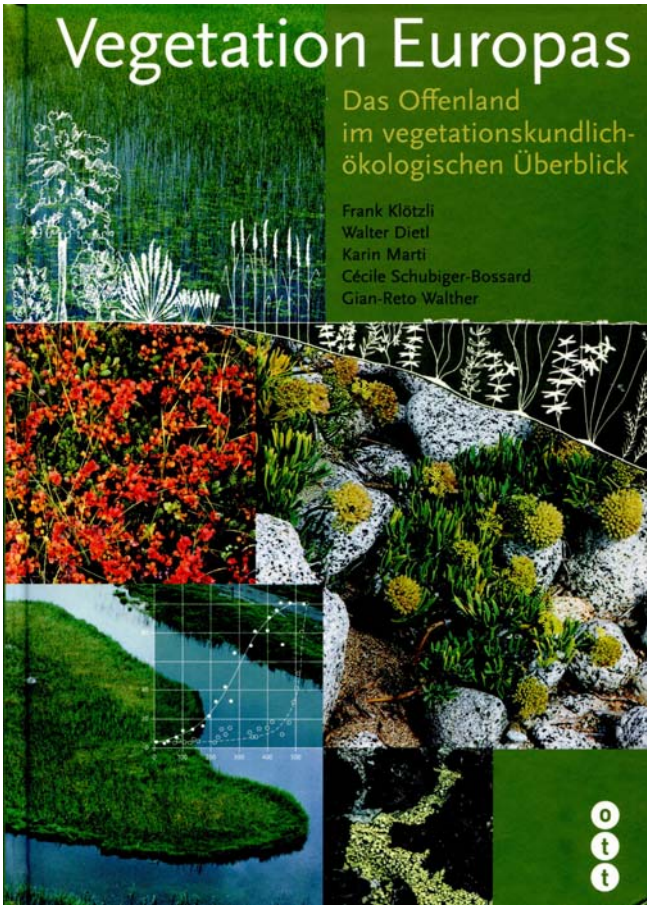
Book reviews

Klötzli F., Dietl W., Marti K., Schubiger-Bossard C. & Walther G.-R. (2010): Vegetation Europas. Das Offenland im vegetationskundlich-ökologischen Überblick unter besonderer berücksichtigung der Schweiz. – 1190 pp. + CD-ROM, Ott, Bern. ISBN 978-3-7225-0098-0. Price: 165.00 €.

More than one thousand pages, big size (30 cm × 22 cm), and nearly 4 kg of weight make this book an impressive and expensive opus. The main title "Vegetation of Europe" is a bold claim as I know only of Ozenda (1994) who attempted a similar overview (but far less comprehensive and detailed), while Rodwell et al. (2002) gave an overview of the high-rank syntaxa and Bohn et al. (2003) of the units of the potential natural vegetation of the continent. However, the authors themselves already qualify their claim by a first subtitle on the cover ("The open landscapes in a vegetation-ecological overview", i.e. forests are not treated) and even further by a second subtitle, which only appears in small letters within the book ("…with special consideration of Switzerland"). Despite these qualifications and the fact that the book is written in German, it might be a highly valuable resource for dry grassland researchers throughout Europe as not less than seven out of 13 main chapters deal with vegetation types that fall under the focus of the EDGG in the widest sense. This is why we exceptionally review a non-English language book here.



The first chapter of the book, a 50-page Introduction, consists of two parts, (i) an introduction to the geography of Europe, and (ii) an introduction to the phytosociological methods. Part (i) provides a concise overview to the most relevant aspects for present-day vegetation, namely landscape history, climate, and soils. Part (ii) should provide the methodological background that underlies the main part of the book with the descriptions of the phytosociological units. However, the chapter author F. Klötzli did not achieve this aim as he completely ignores the many methodological contributions to modern phytosociology from the past 20 years (e.g. by authors such as Bergmeier, Botta-Dukát, Bruelheide, Chytrý, Tichý, Willner), and instead refers mainly to his own works and well-known but outdated textbooks of phytosociology.

In the following main part of the book (chapters 1–10; 1040 pp.), the plant communities of non-forested sites in Europe are described, arranged according to what the authors consider the most relevant ecological factors. For example, there are chapters for plant communities characterised by a surplus of water (chapter 1), lack of water (chapter 2), nutrient-poor situations (chapter 3), extreme summer drought (chapter 7), or heavy metals (chapter 10). This grouping is not always convincing, as e.g. *Calthion* and *Filipendulion* are considered as nutrient-poor communities and therefore treated in chapter 3.

Each of the main chapters is subdivided into one or two levels of subchapters, in which then the plant communities are described, often using the sections "General vegetation-ecological characterisation", "Sociology", "Agricultural significance", and "Ecological significance". The chapters are illustrated by many nice colour photographs from different European regions, illustrating that that the authors have seen quite a variety of European vegetation types. However, the selection is not always convincing, for example, when the two photographs illustrating coastal dunes of Denmark (p. 891) actually show a reed bed community and a pebble beach or when the only three photos of the class *Polygono-Poetea annuae* all show only communities with species of the genus *Eragrostis* (p. 331). For some vegetation types (those with sward-like structure, chapters written by W. Dietl), ecograms for soil reaction vs. nutrient supply and water supply vs. mean annual temperature as well as maps of the European distribution and diversity of these syntaxa (mostly at alliance level) are provided. These representations are useful and would have en-

hanced the description of the other vegetation types, too, but the underlying data basis and methodology are not fully disclosed. Only in few cases, the authors try to provide a European synthesis of a main vegetation type before they start the more detailed descriptions. These continent-wide overviews are mostly copied from other works (e.g. mire types, pp. 104–105; *Festuco-Brometea* orders, p. 135; dune types, p. 886), and the authors did not make a serious attempt to match the classification and terminology of the subsequent regional descriptions with these continental classifications. The regional descriptions, which make up for a substantial part of the book, at the same time are its weakest part as they just present page-long lists of syntaxon and species names, sometimes accompanied by reproduction of long local or regional synthetic tables, but with hardly any ecological context and no attempt to unify the classification and nomenclature of the plant communities. Sometimes, the authors just copied the overviews from the source without fitting them to their system; for example, on pp. 224–226 in the chapter on heathlands a synoptic table from Romahn (1998) is reproduced that contains only five *Calluno-Ulicetea* communities, but seven *Koelerio-Corynephoretea* communities and one *Artemisietea vulgaris* community.

The presentation of dry grasslands is not easy to follow in the book as the descriptions of *Festuco-Brometea* and *Koelerio-Coryphoretea* communities are scattered through many different chapters, mainly those on drought-adapted communities (chapter 2), nutrient-poor communities (chapter 3), rock and wall communities (chapter 6), and dune communities (chapter 8). For example, the famous alvar grasslands of the hemiboreal zone are mentioned with photographs on p. 149 and on p. 655, but both times not citing any of the numerous modern studies of ecology and sociology of these communities, nor providing a syntaxonomic treatment. On p. 141, there are two photographs, where the authors claim that they were showing the *Xero-Bromion*, but the dense and high-grown stands dominated by *Arrhenatherum elatius* and *Salvia pratensis* certainly do not belong to this alliance. While the authors generally attempted to treat all classes of non-forested vegetation of Europe, the confused assignment of classes to chapters obviously led to some omissions, for example, could I nowhere find the slightest hint on the class *Trifolio-Geranietea sanguinei*.

The last two chapters deal with "Vegetation of Europe in global comparison" (chapter 11) and "Recent changes in central- and western European vegetation" (chapter 12). While these chapters are interesting and well-written, they do not fit well into the framework of the book as they focus on forest vegetation (climax vegetation, tree lines, laurophyllisation of forests), while the rest of the book deals with the non-forested vegetation.

The book terminates with a 50-page reference list, which at first view appears impressive. However, at the second view it becomes obvious the selection of references was not driven by the aim to cover the most relevant publications but determined by what the authors had at hand by chance. I could hardly believe not to find a single reference of Chytrý and co-workers despite this working group in Brno being the methodologically leading and among the most productive in terms of modern phytosociology during the last two decades. Also many recent large-scale overviews based on huge databases are missing (e.g. Berg et al. 2001, 2004, Chytrý 2007, 2009, Dengler et al. 2006, 2007, Janišová 2007, Schaminée et al. 1995, 1998). Finally, the opus also contains a CD ROM with additional data and many vegetation tables. Unlike most of the tables in the printed version, the tables there are combining relevés from many different source, i.e. they could indeed serve as a first step towards a European synthesis of certain higher syntaxa. Unfortunately, both the presentation (no percentage constancies, no determination of diagnostic species, no clear criteria for sorting species and columns) and the documentation are so insufficient, this data compilation, which certainly was based on an enormous time effort, could not really be used as basis of future more detailed studies.

In conclusion, the value of this big opus is reduced by many shortcomings, the most serious of which are:

Instead of developing a consistent synthesis, the authors largely relied on "copy-pasting" inconsistent treatments from numerous regional studies.

A uniform syntaxonomy (at least at the higher ranks) would have been needed to place the findings of the many regional studies into a uniform context. For this purpose, the authors could have relied on and extended the syntaxonomic overview of Rodwell et al. (2002).

The authors largely ignored any modern methodological approaches in phytosociology of the past two decades as well as the regulations of the International Code of Phytosociological Nomenclature (Weber et al. 2000).

Strongly biased literature selection.

Such a voluminous book would have needed an index at least of the syntaxon names, but preferably also of ecological terms, geographical names and species names to allow an effective use, in particular as the assignment of syntaxa to chapters is not at all straight-forward.

Thus, I have sadly to conclude that the authors largely failed to meet the high expectations they themselves raised with their "all-comprehensive" title. While there are two much more consistent and convincing syntheses of European vegetation at a subcontinental scale (Dierßen & Dierßen 1996, Ellenberg & Leuschner 2010), the time is probably not yet ripe to achieve an overview of similar quality at continental scale.

References

Berg C., Dengler J. & Abdank A. (2001) [Eds.]: Die Pflanzengesellschaften Mecklenburg-Vorpommerns und ihre Gefährdung – Tabellenband. – 341 pp., Weissdorn, Jena.

Berg C., Dengler J., Abdank & A., Isermann M. (2004) [Eds.]: Die Pflanzengesellschaften Mecklenburg-Vorpommerns und ihre Gefährdung – Textband. – 606 pp., Weissdorn, Jena.

Bohn U., Gollub G., Hettwer C., Neuhäuslová Z., Schlüter H. & Weber, H. (2003) [Eds.]: Karte der natürlichen Vegetation Europas – Maßstab 1 : 2 500 000 – Erläuterungstext. – 655 pp., 13 maps, CD-ROM, Bundesamt für Naturschutz, Bonn.

Chytrý M. (2007) [Ed.]: Vegetation of the Czech Republic – 1. Grassland and heathland vegetation [in Czech, with English summary]. – 526 pp., Academia, Praha.

Chytrý M. (2009) [Ed.]: Vegetation of the Czech Republic – 2. Ruderal, weed, rock and scree vegetation [in Czech, with English summary]. – 520 pp., Academia, Praha.

Dengler J., Eisenberg M. & Schröder, J. (2006): Die grundwasserfernen Saumgesellschaften Nordostniedersachsens im europäischen Kontext – Teil I: Säume magerer Standorte (*Trifolio-Geranietea sanguinei*). – Tuexenia 26: 51–93 + 9 tables, Göttingen.

Dengler J., Eisenberg M. & Schröder, J. (2007): Die grundwasserfernen Saumgesellschaften Nordostniedersachsens im europäischen Kontext – Teil II: Säume nährstoffreicher Standorte (*Artemisietea vulgaris*) und vergleichende Betrachtung der Saumgesellschaften insgesamt. – Tuexenia 27: 91–136 + 6 tables, Göttingen.

Dierßen K. & Dierßen B. (1996): Vegetation Nordeuropas. – 838 pp., Ulmer, Stuttgart.

Ellenberg H. & Leuschner C. (2010): Vegetation Mitteleuropas mit den Alpen in ökologischer, dynamischer und historischer Sicht. 6th ed. – UTB 8104: XXII + 1333 pp., Ulmer, Stuttgart.

Janišová M. (2007) [Ed.]: Grassland vegetation of Slovak Republic – electronic expert system for identification of syntaxa [in Slovak, with English summary]. – 263 pp., CD-ROM, Botanický ústav SAV, Bratislava.

Ozenda P. (1994): Végétation du continent européen. – XIII + 271 pp., Delachaux et Niestlé, Lausanne.

Rodwell J. S., Schaminée J. H. J., Mucina L., Pignatti S., Dring J. & Moss D. (2002): The Diversity of European Vegetation – An overview of phytosociological alliances and their relationships to EUNIS habitats. – Rapp. EC-LNV 2002/054: 168 pp., National Reference Centre for Agriculture, Nature and Fisheries, Wageningen.

Romahn K. S. (1998): Die Vegetation der Kremper und Nordoer Heide – Vegetationskundliche Untersuchungen auf einem Standortübungsplatz der Bundeswehr. – Mitt. Arbeitsgem. Geobot. Schleswig-Holstein Hamb. 54: 92 pp. + supplement, Kiel.

Schaminée J. H. J., Weeda E. J. & Westhoff, V. (1995) [Eds.]: De Vegetatie von Nederland – Deel 2. Plantengemeenschappen van wateren, moerassen en natte heiden [in Dutch]. – 296 pp., Opulus, Uppsala.

Schaminée J. H. J., Weeda E. J. & Westhoff, V. (1998) [Eds.]: De Vegetatie von Nederland – Deel 4. Plantengemeenschappen van de kust en van binnenlandse pioniermilieus [in Dutch]. – 346 pp., Opulus, Uppsala.

Weber H. E., Moravec J. & Theurillat, J.-P. (2000): International Code of Phytosociological Nomenclature. 3rd edition. – J. Veg. Sci. 11: 739–768, Uppsala.

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Coronella austriaca, Slovakia. Photo: J. Dengler, 2010 (JD102085).

Ritchie M. E. (2010): Scale, heterogeneity, and the structure of ecological communities (Levin S. A. & Horn H. S. [Eds.]: Monographs in Population Biology 45). – 229 pp., Princeton University Press, Princeton. Paperback: ISBN: 978-0-691-09070-2. Price: 35.00 USD.

The starting point of the book is the fact that one of the major ecological principles, that of competitive exclusion, seems to be contradicted by extremely species rich communities such as tropical rain forests or temperate dry grasslands, where the co-existing species seemingly use the same resources. The author tries to solve this paradox by considering the fractal nature of nature, in particular the fractal dimensionality of habitat and resource distribution. Specifically, he asks "how do species with different traits exploit biotic and environmental heterogeneity, how does this exploitation change with scale, and how does this allow coexistence?"

The book is organised in nine chapters, of which the first presents the "big questions" of community ecology for which the author wants to provide a synthesizing answer. Chapter 2 introduces the reader to the basic principles of fractal geometry. The next three chapters are about scaling relationships for resource use and how this leads to the typical size structure within ecological guilds. In chapter 6, the author explores the predictions of his model regarding biodiversity patterns, such as species-area relationships, richness-productivity relationships, or rank-abundance curves. Then, in chapter 7, we learn about new perspectives on biodiversity conservation when landscapes are seen as fractals. The final two chapters provide a "test" of the model and an outlook.

In conclusion, this book provides new perspectives and insights for (mainly theoretical) community ecologists. However, the complex mathematical notions throughout the book will make the content difficult to access for many readers.

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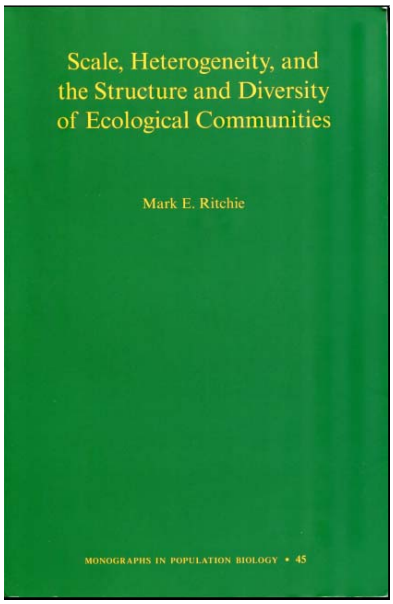

Argiope bruennichi, female, Bavaria, Germany. Photo: J. Dengler, 2009 (JD093834).

Stevens D. P., Smith S. L. N., Blackstock T. H., Bosanquet S. D. S. & Stevens, J. P. (2010): Grasslands of Wales – A survey of lowland species-rich grasslands 1987–2004. – XIV + 387 pp., University of Wales Press, Cardiff.. ISBN 978-0-7083-2255-0. Price: 70.00 GBP.

Wales is a grassland state par excellence, with approx. two-thirds of its territory being covered by this formation. However, already from 1932 to 1984 97% of the unimproved grasslands in England and Wales have been lost, most of them being converted into "semi-improved" or (mostly) even species-poor "improved" grasslands.

This book reports on the findings of the Lowland Grassland Survey of Wales (LGSW), carried out 1987–2004. Experienced field botanists sampled not less than 10,484 quadrats distributed through the 1,070 valuable grassland sites of the lowlands (below 470 m a.s.l.). With a few exceptions, the quadrats were all 4 m² in size, and not only vascular plants but also bryophytes and lichens were recorded. All quadrats were classified according to the National Vegetation Classification (NVC; Rodwell 1992), with a few additional community types distinguished for Wales. The mean plant species richness (rooted presence) per 4 m² was 25, with a range of 2–64.

After three introductory chapters (42 pp.), the main part of the book (218 pp.) describes the 154 vegetation (sub) types distinguished, arranged into the chapters "Mesotrophic grasslands", "Calcareous grasslands", "Acid grasslands", "Marshy grasslands", and "Flushes and heaths". The descriptions comprise numerous excellent colour photographs, detailed gridded distribution maps (with indication of total size of a type per grid cell), vegetation tables, and an informative description. The synoptic tables combine for the NVC communities and their sub-communities constancy classes and cover ranges of the occurring species except the rarest. For each vegetation type, also the mean minimum and maximum plot richness and the distribution over different land-use categories are given.

For ecologists and conservationists from other parts of Europe particularly the final chapters 9–14 (102 pp.) are relevant as they comprise general analyses of the data. They range from "Vegetation analyses", via "Patch characteristics", "Environment-vegetation relationships", "Soil-vegetation relationships", "Uncommon plants", to "Conservation". Here one finds, for example, detailed standardised ecograms of the main community types and a statistical analysis of which community types typically co-occur on patches.

This book summarizes the knowledge of the grassland vegetation of Wales in a comprehensive and standardised manner, both for community types and for sites, that to my knowledge is unparalleled in any other European region. Thus it is a highly valuable resource (and benchmark) also for grassland researchers and conservationists elsewhere. I only see very few points where the presentation could have been improved, mainly concerning the vegetation tables. Here the use of percentage constancies instead of constancy classes would have been more informative, and a joint synoptic table of all major vegetation types would have helped the reader to understand the classification and assign a new relevé to the system. It is to be hoped that the beautiful layout and a style also attractive to non-specialists will help to promote the conservation of the remaining patches of high nature value grasslands in this part of the UK.

Reference

Rodwell J. S. (1992) [Ed.]: British Plant Communities Volume 3. Grasslands and montane communities. – 540 pp., Cambridge Univ. Pr., Cambridge.

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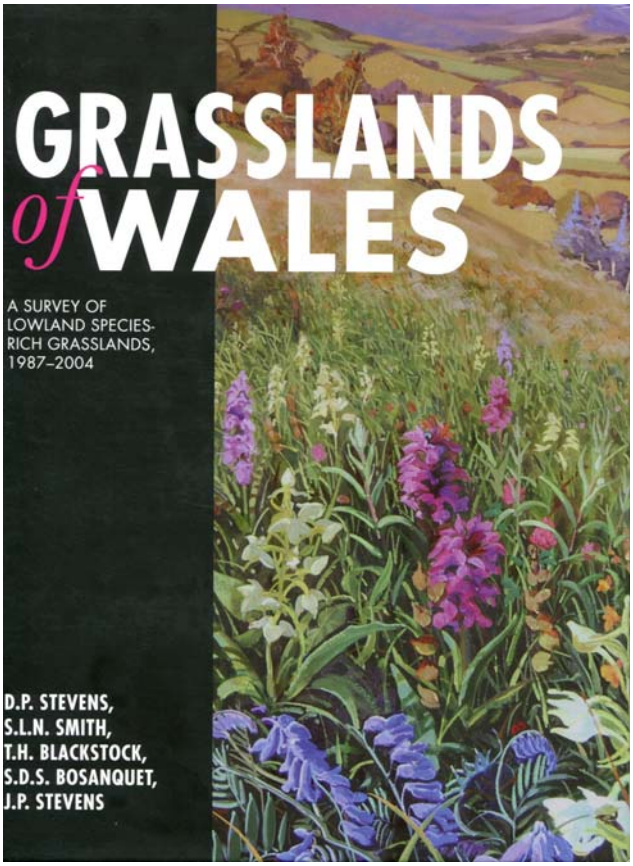

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Dengler J., Jansen F., Glöckler F., Peet R. K., De Cáceres M., Chytrý M., Ewald J., Oldeland J., Finckh M., Lopez-Gonzalez G., Mucina L., Rodwell J. S., Schaminée J. H. J., Spencer N. (2011, in press): The Global Index of Vegetation-Plot Databases (GIVD): a new resource for vegetation science. *J. Veg. Sci.* 22. DOI: 10.1111/j.1654-1103.2011.01265.x.

Guarino R. & Pignatti S. (2010): *Diversitas* and biodiversity: the roots of a twenty-first century myth. Rend. Fis. Acc. Lincei. DOI 10.1007/s12210-010-0104-2

Janišová M. & Dúbravková D. (2010): Formalized classification of rocky Pannonian grasslands and dealpine Sesleria-dominated grasslands in Slovakia using a hierarchical expert system. Phytocoenologia 40/4: 267-291.

Ketner-Oostra R., Sparrius L. B. & Sýkora K. V. (2010): Development of lichen-rich communities. In: J. Fanta & H. Siepel (eds.) Inland drift sand landscapes, Part III: Ecosystem succession. KNNV publishing. Zeist, the Netherlands. pp. 236-254.

Seifan M., Tielborger K., Schloz-Murer, D: & Seifan T. (2010): Contribution of molehill disturbances to grassland community composition along a productivity gradient. Acta Oecologica 36: 569-577.

Török P., Vida E., Deák B., Lengyel Sz., Tóthmérész B. (2011): Grassland restoration on former croplands in Europe: an assessment of applicability of techniques and costs. Biodiversity & Conservation, doi: 10.1007/s10531-011-9992-4.

Wellstein C. & Kuss P. (2011) Diversity and frequency of clonal traits along natural and land-use gradients in grasslands of the Swiss Alps, Folia Geobotanica. DOI:10.1007/s12224-010-9075-4.

Manninen S., Forss S. & Venn S. (2010): Management mitigates the impact of urbanization on meadow vegetation Urban Ecosystems 13(4): 461-481.

Saarikivi J., Idström L., Venn S., Niemelä J. & Kotze D. (2010): Carabid beetle assemblages associated with urban golf courses in the greater Helsinki area European Journal of Entomology 107(4): 553–561.

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Podarcis muralis, Romania. Photo: J. Dengler.

Spring in Gargano National Park, Italy. Photo: J. Dengler

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