







#### **Content**

Eurasian Dry	Grassland	1-2
Group		

#### 13<sup>th</sup> Eurasian Grassland 3-6 Conference. Second circular

#### Report of the All-Ukrainian scientific and theoretical conference

#### Interview with Jürgen 9-14 Dengler

*Forum* 15-16

Book Review 17-19

Recent publications of 20 our member

Status of the EDGG 21 SI 2016

Forthcoming events 22

Tulipa gesneriana in Kujuk-Tuk Island, Azovo-Syvashskyy National Na-

At the top:

Photo: Mykyta Peregrym

ture Park, Ukraine

### Dear members of the Eurasian Dry Grassland Group,

We are pleased to present to you the new issue of the EDGG Bulletin, now with a new format and design. The main items in this Bulletin are the Second Call of the EDGG Conference in Romania, the report of All-Ukrainian conference "Classification of vegetation and habitats of Ukraine as a scientific background for biodiversity conservation" which was held on 14<sup>th</sup>-15<sup>th</sup> March 2016 in Kiev, a forum paper on a widespread invasive species in Europethe common milkweed (*Asclepias syriaca*), two book reviews, recent publication of our members and information about forthcoming events. The key material of this issue is an interview with the founder of our group and one of the most active of its members, Jürgen Dengler, which was recorded during the stay of several EDGG members in Bayreuth in September 2015

On the eve of an active field season we wish you pleasant reading and we hope that in 2016 EDGG will give you a lot of pleasant events for us to report in the Bulletin.

Anna Kuzemko & the Editorial Board

### Eurasian Dry Grassland Group (EDGG)

The **Eurasian Dry Grassland Group** (**EDGG**) is a network of researchers and conservationists interested in Palearctic natural and semi-natural grasslands. It is an official subgroup of IAVS (http://www.iavs.org) but one can join our group without being IAVS member. We live from the activities of our members. Everybody can join EDGG without any fee or other obligation.

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.

To become a member of the Eurasian Dry Grassland Group or its subordinate units, please, send an e-mail to Idoia Biurrun, including your name and complete address, and specify any of the groups you wish to join. More detailed inform a t i o n c a n b e f o u n d a t: http://www.edgg.org/about us.htm

As of 14 April 2016 the EDGG had 1131 members from 64 countries all over the world. While we are well-represented in most European countries, few European countries are still not or hardly covered by members. Moreover, the extra-European part of the Palaearctic realm (which according to our Bylaws is the geographic scope of EDGG!) is still grossly underrepresented.

## EDGG Subgroups

#### The basic aims of the EDGG are:

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

To achieve its aims, EDGG provides seven instruments for the information exchange among 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 Eurasian Grassland Conference - organized annually at different locations throughout Europe;
- EDGG research expeditions and field workshops to sample b a s e l i n e d a t a o f underrepresented regions of Europe;
- EDGG vegetation databases;
- Special Features on dry grassland-related topics in various peer-reviewed journals.

EDGG members are automatically assigned to the Regional Subgroup of the region in which they reside. If you additionally wish to join the Topical Subgroup Grassland Conservation and Restoration just send an e-mail to the Membership Administrator (idoia.biurrun@ehu.es or Stephen.Venn@Helsinki.Fi).

Arbeitsgruppe Trockenrasen (Germany) (contact: Thomas Becker - beckerth@unitrier.de), Ute Jandt - jandt@botanik.unihalle.de): 239 members

Working Group on Dry Grasslands in the Nordic and Baltic Region (contact: Jürgen Dengler - juergen.dengler@unibayreuth.de): 93 members

**South-East European Dry Grasslands** (SEEDGG) (contact: Iva Apostolova - iva@bio.bas.bg): 280 members

Mediterranean Dry Grasslands (Med-DG) (contact: Michael Vrahnakis - mvrahnak@teilar.gr): 309 members

**Topical Subgroup Grassland Conservation and Restoration** (contact: Péter Török - molinia@gmail.com): 70 members



Tulipa gesneriana. Photo: Mykyta Peregrym

# EDGG Executive Committee and responsibilities of its members

**Didem Ambarlı:** Editor-in-Chief of homepage, Deputy Conferences Coordinator, didem.ambarli@gmail.com

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Michael Vrahnakis: Conferences Coordinator, Policy Officer, Deputy Contact Officer to other organizations, mvrahnak@teilar.gr

### **EGC 2016**

13<sup>th</sup> Eurasian Grassland Conference (formerly the European Dry Grassland Meeting) in Sighișoara, Romania, 20-24 September 2016

## Management and Conservation of Semi-Natural Grasslands: from Theory to Practice

Second Call











We invite you to register and submit abstracts for talks and poster via the website

Registration deadline 31 May 2016 The local organising committee is pleased to announce that the 2016 Eurasian Grassland Conference will take place from 20 – 24 September 2016 in the historic town of Sighişoara in central Romania. This is the 13<sup>th</sup> annual meeting of the EDGG, which aims to promote exchange and collaboration between those interested in all aspects of grassland research and conservation across Eurasia. The conference is intended to bring together latest research, and to link this to practical management and policy contributing to the sustainability of semi-natural grasslands.

The conference will include the following sessions:

- $\bullet$  Semi-natural grasslands and environmental policy and socio-economy
- Landscape scale processes and historical evolution of semi-natural grasslands
- $\bullet$  Ecology and biodiversity of semi-natural grasslands
- Management, conservation and restoration of semi-natural grasslands

as well as two optional pre-conference workshops and two field trips in local biodiversity hotspots. All other topics related to semi-natural grasslands are also welcome. A special issue of an ISI listed journal related to the conference is planned, to which all contributors to the conference will be invited to submit papers.

## Preliminary Programme <u>Tuesday 20th September</u> - Registration and optional technical workshops

Parallel optional technical workshops (14.30 - 18.30)

• Scientific writing workshop (Tutor: Prof. Jürgen Dengler)

Policy workshop (organized by EFNCP):
 "Reflecting ecology in policy: as simple as possible but no simpler"

<u>Wednesday, 21st September</u> - Talks and Posters **Keynote talk:** Prof. Jörn Fischer, Leuphana University of Lüneburg

Integration by Place, Case and Process: Transdisciplinary Sustainability Science in Transylvania

**Session I:** Semi-natural grasslands and environmental policy and socio-economics/

**Session II:** Landscape scale processes and historical evolution of semi-natural grasslands

Evening tour in Sighişoara

## <u>Thursday, 22nd September</u> - Mid Conference Excursion

High Nature Value grasslands in the hilly Târnava Mare landscape near Sighișoara (continental biogeographical region).

Grassland party in village of Viscri.

#### <u>Friday, 23rd September</u> - Talks and Posters **Keynote talk:** László Rákosy, Babeş-Bolyai Uni-

versity, Cluj-Napoca

**Session III:** Ecology and biodiversity of seminatural grasslands

**Session IV:** Management, conservation and restoration of semi-natural grasslands

**General Assembly** of the EDGG including Young Investigator Prizes (YIPs)

#### <u>Saturday, 24th September</u> – Optional Post-Conference Excursion

Mountain hay meadows in the Miercurea Ciuc (Csíkszereda) area including optional grassland-related activities such as meadow scything.



The town of Sighişoara



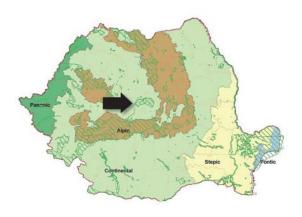
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Colchicum autumnalis

#### Workshops

For the first time, the EDGG will organize technical workshops during its conference. Both technical workshops are optional and places will be limited to 20. You can apply to participate in the workshops during online registration: if the workshop is already full, you will be placed on a waiting list and informed if further places become available. The two workshops will run in parallel on Tuesday afternoon 14.30-18.30, including a coffee break.



Location of Tarnava Mare area in central Romania, with biogeoraphical regions marked

#### Scientific writing

This workshop will be run by Dr. Jürgen Dengler (University of Bayreuth, Germany), and will focus on writing clear, precise and engaging scientific texts in English for publication in high impact factor international journals.

#### Reflecting ecology in policy

This workshop will be facilitated by experts in agri-environmental policy. The objective is to jointly analyse several biodiversity-related measures in the Common Agricultural Policy to assess whether they correspond to available scientific knowledge, and debate how policies can be simple (i.e. applicable to real farming conditions) but ecologically meaningful. Results-based agrienvironment schemes will be presented as one of the most recent developments in targeted conservation measures.

Selected participants will be asked to bring an example of an agri-environment (or other RDP) measure from the country/region in which they work for analysis and debate during the workshop. We therefore invite you to suggest a suitable measure during (or after) the online registration that you could present at the workshop.

Tutors: Jabier Ruiz Mirazo (European Forum on Nature Conservation and Pastoralism, EFNCP), Caitriona Maher (EFNCP) and Clunie Keenleyside (Institute for European Environmental Policy, IEEP).

#### Description of the area

The town of Sighişoara is renowned as a UNESCO World Heritage site, but it is also at the edge of the Sighişoara- Târnava Mare Natura 2000 area. This Site of Community Interest contains large areas of the priority habitat types 6210\* Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) with important orchid sites, and 6240\* Sub-pannonic steppic grasslands.

Târnava Mare SCI lies within the Saxon Villages, a region famous for its historic fortified churches. The landscape is hilly rather than mountainous but shares many features with the adjacent Carpathian Mountains. Much of this countryside is remote, with scattered villages supporting traditional farming communities that have preserved farmland biodiversity and patterns of rural life mostly lost elsewhere in Europe.

Marl and sandy sediments dominate the geology, giving rise to rolling hills and steep-sided valleys, with unstable slopes that slump and erode. As well as the extensive grasslands, with unenclosed arable land in the valleys, the region retains substantial stands of ancient deciduous woodland and wood pasture. The farming practices of the Saxon farmers, who originally arrived in the 12<sup>th</sup> century from Flanders and Luxembourg, and management subsequent to the departure of most Saxon farmers to Germany in the 1990s, have diversified the vegetation in space and time, with episodes of succession from sometime arable fields to grassland and then to scrub and woods, producing ecological heterogeneity, edge effects and gradients.

The countryside of the Saxon Villages has some 1200 species of flowering plants, a third of the Romanian total, and about the same number of Lepidoptera; also brown bears and wolves, large carnivores usually associated with the mountains and, for example, two birds of major international conservation interest, Lesser-spotted Eagle (Aquila pomarina) and Corncrake (Crex crex).

The long history and continuation of traditional, non-intensive management – mixed farming, little or no fertilizer input and low livestock densities has allowed biodiversity to survive, especially in hay-meadows on the higher or steeper slopes, in one of the most extensive tracts left in Europe of High Nature Value (HNV) permanent grassland. This is no rural museum but a living landscape, and the pastures and meadows remain the motor of the rural economy, vielding meat, milk and cheese, and a range of products such as honey, wild fruits for jam, and medicinal plants. The diversity of grasses and forbs in the sward, including orchids and especially 20-30 or more leguminous species, provides quality feed for farm animals and several of the plant species are crop relatives. Especially species-rich are areas of









Village of Viscri (Deutschveisskirch), grassland party location, and its famous white church

dry steppic grassland on south-facing slopes and hummocks, and damp grassland in some valley bottoms with relict montane plant communities. A characteristic topographical feature is groups of steep-sided hummocks or movile, with 'gamma' diversity between and within hummocks often varying over just a few metres including steppic, Mediterranean, mesic grassland, woodland-edge or even montane floristic elements. Many of the species, for example several orchids, Prunus tenella and Salvia nutans, are Red-listed in Romania, and four (Adenophora lilifolia, Crambe tataria, Echium maculatum and Iris aphylla) are listed on Annex II of the EU Habitats Directive. Cephalaria radiata, which should still be flowering in September, and Salvia transsylvanica are endemic to Transylvania. This farmed landscape is fragile and the vegetation and biodiversity are under threat from both agricultural intensification and land abandonment. The work of conservationists in the region has had to focus not only on scientific research but also the need to address the needs of farming families and communities at a time of profound economic and social change, building on their past achievements while employing innovative techniques and solutions to sustain the ancient links between landscape and livelihood.

Fundatia ADEPT has published several documents on the area.

#### Further reading

The Historic Countryside of the Saxon Villages of Southeast Transylvania by John Akeroyd will be available for purchase at the conference, or if wanted beforehand by mail order please contact Nat Page (nat@fundatia-adept.org).

Guides to indicator dry grassland flower and butterfly species may be downloaded from the ADEPT website, at <a href="https://www.fundatia-adept.org/?content=publications">www.fundatia-adept.org/?content=publications</a>.

A full list of relevant publications will be made available at the conference.

#### **Field excursions**

The mid-Conference field excursion will visit a selection of sites in the Târnava Mare landscape, with an emphasis on the pastures and positive and negative aspects of sheep-grazing. The sites visited will include a cluster of topographically impressive and floristically rich movile near Apold, just south of Sighisoara, and a traditional sheepfold or stâna on hills near Viscri to demonstrate aspects of pastoral farming and practical management of pastures and adjacent hay-meadows. Plants will still be in flower, notably long-flowering species such as *Prunella* spp. and *Scabiosa ochroleuca*, lilac sheets of *Colchicum autumnale* in mesic grassland, and *Aster amellus*, *Carlina acaulis* and *Gentianopsis ciliata* in drier grassland. There will be a chance to visit one or more fortified churches and we shall all join in a traditional village meal at the end of the excursion.

The post-Conference field excursion will visit the Mercurea Ciuc (Csikszereda) farmed land-scape in the Hungarian-speaking area to the east, the emphasis here being on species-rich mountain hay-meadows that are still the main-stay of the highland rural economy. This excursion will demonstrate another type of subsistence farming, and will also be an opportunity to observe traditional upland farming and even to participate in scything!

#### Travel tips

Sighişoara can be reached by train or by car, and is within reach of four international airports: Bucharest (4 hours by car from Sighişoara), Cluj (3 hours), Sibiu (2 hours) or Târgu Mureş (1 hour).

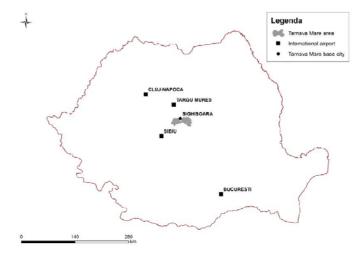
#### Useful links:

https://wizzair.com/en-GB/FlightSearch - Wizz Air flies to Targu Mures, Sibiu, Cluj and Bucharest

https://www.blueairweb.com/first-page - Blue Air flies to Bucharest, Sibiu and Cluj

http://www.cfrcalatori.ro - Romanian railway website

http://www.bahn.de/p\_en/view/index.shtml - Most trains are also searchable on the German railway website, which has a better English interface.



#### Registration

We invite you to register and submit abstracts for talks and poster

via the website www.edgg.org/conference\_2016.html

#### Deadline for early registration 31 May 2016

The basic registration fee for early registration (until 31 May 2016) is

- €90 for student IAVS members\*
- €110 for students (including PhD students) who are not IAVS members\*
- €120 for other IAVS members\*
- €140 for non-students and non-IAVS members.

**NOTE:** after 31 May 2016, the registration fee will increase by  $\epsilon$ 30 for each category

\* please submit evidence of IAVS membership and/or your enrolment at a university by emailing confirmation of matriculation to liliana@fundatia-adept.org

#### Basic registration fee includes

- · Welcome drinks and an buffet of local produce on Tuesday evening
- Access to the conference on Wednesday and Friday
- · Lunch and coffee breaks on Wednesday and Friday
- Fieldtrip in the surroundings of Sighisoara with lunch at a shepherd's hut and Grassland Party on Thursday

## Basic registration fee does NOT include the following items, which can be booked separately

- Travel to Sighisoara
- Accommodation
- Pre-conference workshops
- The post-conference excursion
- · Evening meal on Wednesday and Friday

#### **Optional extras**

- Pre-conference workshops on Tuesday afternoon (14.30-18.30), including a coffee break. The two workshops will run in parallel, and places are limited to 20 for each workshop. Once these places have been filled, participants will be placed on a waiting list and informed if further placed become available
  - €30 for the science policy workshop
  - €30 for the scientific writing workshop
- Post-conference field trip to the mountain hay meadows in the Miercurea Ciuc (Csíkszereda) area, including lunch and refreshments: €30
- Wednesday evening meal (including a welcome drink) at Central Park Hotel restaurant http://www.hotelcentralpark.ro/restaurant: €20
- Friday evening meal (including a welcome drink) at Hotel Sighisoara restaurant http://sighisoarahotels.ro/?page\_id=624 on Friday: €20
- Accommodation: We have reserved a number of rooms in several local
  hotels at special conference rates. If you would like to book a room,
  please select this option during the registration process. Breakfast is
  included in the price. Please note that there is a limited number of
  rooms available in each hotel. We will get back to you and confirm
  your booking once we receive your registration form.

#### Recommended hotels:

- Hotel Centre Park: single €50 Euro/room/night, double €60 Euro/room/night
- Hotel Rex Sighisoara single €30 Euro/room/night, double €35 Euro/room/night
- Casa Saseasca single €25 Euro/room/night, double €30 Euro/room/night

#### **Cancellation and repayment:**

- 100% - for cancellations sent in writing until 1 June, - 80% for cancellations sent in writing until 1 September, - no refund for cancellations after 1 September.

To qualify for early registration, payment should be made by bank transfer at the latest by 31 May: you will be provided with the bank details during the online registration process and on your online invoice (after

successful login) under <a href="www.edgg.org/conference\_2016.html">www.edgg.org/conference\_2016.html</a>. We are unfortunately not able to accept payment of the registration fee at the conference: this must be paid in advance by bank transfer. A registration is

considered definite, once the payment is done and the proof of payment is sent to liliana@fundatia-adept.org.

#### Fees and grants

We hope to offer a limited number of travel grants. To qualify, active participation at the conference (oral presentation or poster) is required and priority will be given to young scientists with financial constraints. Grants can be applied during registration, including a short motivation letter. Applicants for IAVS travel grants must be IAVS members.

#### **Young Investigator Prizes**

As in previous years, prizes will be awarded to young scientists for excellent presentation of their research (orally or in poster form). For these purposes, young scientists (less than 35 years old) will be asked during registration if they wish to participate in the contest.

#### Visas

In case you need a visa, please contact Nat Page (address given below).

#### **Contacts**

#### Main contact for all questions:

Liliana Gherghiceanu (Fundatia ADEPT coordinator): liliana@fundatia-adept.org

#### **EDGG Executive Committee**

Mike Vrahnakis (EGC coordinator): mvrahnak@teilar.gr Didem Ambarli (EGC coordinator): didem.ambarli@gmail.com

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#### **Organisers**

The Eurasian Dry Grassland Group (EDGG) was established in August 2008 as the European Dry Grassland Group. Recently it expanded its ecological and geographical scope to cover all types of semi-natural grasslands of the whole Palearctic realm. The EDGG is an official group of the International Association for Vegetation Science (IAVS, <a href="www.iavs.org">www.iavs.org</a>). Its basic aims are to compile and to distribute information on research and conservation of natural and semi-natural grasslands beyond national borders, and to stimulate active cooperation among scientists, practitioners and all who work with or are interested in grasslands.

**Fundația ADEPT**: ADEPT's objective is support and preservation of the High Nature Value landscapes of Romania, and of the small-scale farming communities that have created them. ADEPT works to improve design and implementation of EU and national support measures for these farmed land-scapes and farming systems, helps farmers gain access to support and improve markets for their products. ADEPT trains farmers, farmer associations, producer groups and tourist associations to support development of sustainable sources of income. ADEPT won the top EU prize for communicating the CAP to farmers, at the CAP@50 competition in Brussels, 2012 and 2013, as well as the top EU Natura 2000 prize for the European project bringing most benefits to local communities in a protected area.

Babes-Bolyai University, Faculty of Biology and Geology, Cluj-Napoca: BBU is the oldest, the largest, and in many ways, the most prestigious university in Romania. Its approximately 40,000 students learn either in Romanian, Hungarian, German or English. The linguistic and cultural diversity are defining elements of BBU, which distinguishes not only among Romanian universities, but also within the European context. BBU has 21 faculties. The Faculty of Biology and Geology has 10 B.Sc. and 11 M.Sc. programs. It has an excellent Botanical Garden with a Botanical Museum and a Herbarium, and a Zoological Museum with a Vivarium as well.

#### **Supporters**

International Association for Vegetation Science (IAVS) European Forum for Nature Conservation and Pastoralism (EFNCP)

Floristisch-soziologische Arbeitsgemeinschaft (FlorSoz) John Wiley & Sons, Inc.

# Classification of vegetation and habitats of Ukraine as a scientific background for biodiversity conservation

report of the All-Ukrainian scientific and theoretical conference

A scientific-theoretical conference on "Classification of vegetation and habitats of Ukraine as a scientific basis for biodiversity conservation" was held on 14<sup>th</sup>-15<sup>th</sup> March 2016. It was organized by the M.G. Kholodny Institute of Botany of the Ukrainian NAS (Department of Geobotany and Ecology) and the Ukrainian Botanical Society (section of Geobotany and Ecology). The conference was attended by 50 scientists, including 7 doctors habilitated and 30 PhDs representing various scientific, educational institutions and organizations from different regions of Ukraine.

The need for the conference arose from the fact that in the last decade in the context of biodiversity conservation, desertification, climate change assessment and development of pan-European ecological networks, the demand for ecological and biological research increases.

The conference addresses the topics:

- Classification of the vegetation of Ukraine in the context of the large-scale vegetation classification of Europe (EuroVegCheckList) and the Prodrome of the vegetation of Ukraine.
- Development of the National phytosociological database of Ukraine (UkrVeg) as the basis of the vegetation and habitat classification of Ukraine and its incorporation into the European Vegetation Archive (EVA) and Global Index of Vegetation-Plot Database (GIVD).
- Habitats of Ukraine, their classification and priority areas of research.
- The use of vegetation and habitat classifications of Ukraine for the functioning of the ecological network and biodiversity conservation, as well as counteracting the influence of the negative effects of environmental

changes.

On the first day of the conference, all the presentations were related to classification of the Ukrainian vegetation. Some of them dealt with general issues of vegetation classification, in particular "Modern achievements and objectives of the classification of vegetation and habitats of Ukraine" (Didukh Ya.P.), "Prodrome of vegetation of Ukraine with regard to integration in classification of European vegetation" (Dubyna D.V., Dziuba T.P.), "Periodic system of syntaxonomy proposed solution to the problem of naturalness of classification (Vorobyov Ye.O.). Some presentations presented analyses of the current state of the study of some classes of vegetation in Ukraine — Festuco-Brometea (Vynokurov D.S.), Scheuchzerio-Caricetea and Oxycocco-Sphagnetea (Onyshchenko V.A) and coastal vegetation (Dubyna D.V., Dziuba T.P.). The classification of the vegetation of certain areas and objects, such as the accumulative system of the Spit-Island

Tuzla, which is now annexed by Russia and its vegetation destroyed due to the construction of the bridge from the Russian Federation to the territory of the Crimean peninsula (Kolomiychuk V.P., Sokolova (Shyshkalova) T.O., Yermolayeva O.Yu.), forest vegetation of the "Holosiyivskyy" National Nature Park in Kiev (Priadko O.I., Datsiuk V.V., Arap R.Ya.), synanthropic vegetation of the Skhidnytsua town in Lviv region (Pashkievych N.A.), abandoned fields of the South-Western Opillya (Oliynyk M.P.), were also discussed. A separate section concerned the problem of the development of a national phytosociological database of Ukraine, including the role of phytosociological databases in modern botany (Yemelyanova S.M.) and the problems that inhibit the development of a national database in Ukraine (Kuzemko A.A.). Also some existing databases, including the Database of halophytic and littoral vegetation of Ukraine (Dziuba T.P.) and Database of Bukovina vegetation (Corney I.I., Tokaryuk A.I., Budzhak V.V.), were characterized and a new method of cluster analysis for the classification of vegetation - DRSA (Goncharenko I.V.) was presented.

On the second day of the conference, there was discussion of the problems and perspectives of habitat classification. Within a framework of two sessions, the following reports were presented: "Principles of habitats classification in Ukraine and problems of its adaptation to the EUNIS classification" (Ya.P. Didukh), "The use of vegetation and habitat classifications in the national parks of Ukraine" (Liubinska L.H., Odukalets I.O.), "Using of thermodynamic parameters for classification of ecosystems of the Ukrainian Polissya (Khomyak I.V.), "Peculiarities of forming of marginal habitats in the Crimean Mountains" (Mala Yu.I., Fitsailo T.V., Pashkievych N.A.), "Habitat classification of the Slobozhan-



The conference participants. Photo: Petro Podorvanov



Yakiv Didukh. Photo: Petro Podorvanov



Tatiana Dziuba and Dmytro Dubyna. Photo: Petro Podorvanov



Sergei Mosyakin. Photo: Petro Podorvanov



Yakiv Didukh, Anna Kuzemko and Svitlana Iemelianova. Photo: Petro Podorvanov



Igor Goncharenko. Photo: Petro Podorvanov

skyy National Nature park" (Bezrodnova O.V.), "Xeric steppe and cretophylous habitats of the Krasna River basin" (Chusova O.O.), "Meadow habitats of the Sluch River valley" (Olshevska I.A.), "Analysis of representation of the habitats of Resolution 4 of the Berne Convention in areas nominated as the Emerald Network of Ukraine" (Onyshchenko V.A.), "Biotopical shallow structure and management of the Dnieper reservoirs" (Zub L.M.), Methodological aspects of categories of the phytosociology and ecosystemology in the context of modern biosozology" (Kagalo O.O.), "Classification of communities of abandoned fields and definition of the stages of restoration on research in the «Streltsivska Steppe»" (Borovyk L.P.), Protection status of the light oak forests in northeast of Ukraine" (Panchenko S.M.) and "Rare communities of the Left-Bank Forest-Steppe of Ukraine"

On the basis of these presentations and subsequent discussion, it was concluded that geobotanists of Ukraine still have many unresolved issues, including:

- development of National phytosociological database of Ukraine (UkrVeg), which would represent all classes of vegetation;
- the topical issue of unification of key concepts, terms and definitions;
- lack of participation in international and national projects;
- the declining numbers of geobotanists in leading universities of some regions of Ukraine.

In conclusion, recommendations were proposed for further areas of activity and development of geobotany in Ukraine:

 to promote a deeper, comprehensive study of the vegetation of Ukraine, to intensify international cooperation in order to im-

- prove the development of the classification of vegetation that enables the use of modern assessment methods of  $\alpha$ -,  $\beta$  and  $\gamma$ -diversity and promotes the convergence of geobotany with the landscape studies, geography, floristic and ecosystem studies;
- to initiate an innovative project for the establishment of a national phytosociological database of Ukraine(UkrVet) and to find sources of funding of the project.
- to perform a detailed analysis of the relevés of the Ukrainian vegetation in digital and analogue formats from the archives of scientific institutions, private archives, literature sources, manuscripts, theses, etc.
- to pay attention to the need for the development of a classification of communities and habitats based on cryptogam plants;
- to complete the development of a habitat classification of Ukraine and on its basis to prepare a "Red list of habitats of Ukraine" as part of the "Red Book of Ukraine.
- to provide more extensive use of vegetation and habitat classifications for practical purposes in the development of protected areas, of ecological networks, mapping etc.

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Paeonia tenuifolia at the steppe grasslands of the Donetsk Upland. Photo: Mykyta Peregrym

## Interview

## I wish that we keep the diversity of grasslands

During the stay of several EDGG members in Bayreuth in September 2015, an interview was recorded with a founder of this organisation, Jürgen Dengler. Questions were asked by Monika Janišová (MJ), Anna Kuzemko (AK) and Kiril Vassilev (KV).



Jürgen Dengler, EDGG Filed Workshop in Navarra, June 2014. Photo: Monika Janišová

MJ: Jürgen, you are one of the first three members of the EDGG, a very important person during the development of this organisation, a very well-known person, at least within the EDGG membership. Could you tell us something about the idea to establish the EDGG and your former vision of its role?

JD: Actually, we have to go one step further back, and that is the German Arbeitsgruppe Trockenrasen. It was where everything started, I think in the year 2004. Then, Ute Jandt and I came up with the idea that we want to classify the dry grasslands of Germany and we set up a working group. And then we had our first conference in Lüneburg in 2004, attended by rather small group of dry grassland specialists from Germany, with some nice presentations, and we already started already to make special features, one in Tuexenia and one in the Kieler Notizen zur Pflanzenkunde. After the experience with this meeting, we thought that we should continue with annual meetings, and this idea developed very nicely, while the idea to classify German dry grasslands, you know, has still not been accomplished. Just few days ago I've got an e-mail from Professor Dierschke showing his disappointment that still, after so many years and despite the Eurasian Dry Grassland Group so flourishing, we did not manage in Germany to produce anything about country-wide classification of dry grasslands. It was supposed to be published in the

Synopsis der Pflanzengesellschaften von Deutschland. So, that was the original idea. And then we had a couple of conferences in Germany of the Arbeitsgruppe Trockenrasen, which was a basically a national working group, initially not connected to the IAVS, but already in the second year we had attendees from abroad. And every

year they became more. I also initiated the database of the Nordic and Baltic dry grasslands, because I had couple of Diplom students working on dry grasslands on Öland in Sweden and on Saaremaa in Estonia. I was also quite interested in that topic, and there were hardly any data available, so we established this database. And then we decided that the conference in Kiel 2008 should be the joint conference of these two working groups and be held in English. During this conference we realised that probably in the long run we have too few people in Germany to keep such group running and on the other hand there are so many other interested people in different places in Europe, so we decided to put the working group on a "higher level", the European level at that time. We were lucky that

"...we decided that the conference in Kiel 2008 should be the joint conference of these two working groups and be held in English. During this conference we realised that probably in the long run we have too few people in Germany to keep such group running and on the other hand there are so many other interested people in different places in Europe, so we decided to put the working group on a "higher level", the European level at that time"

during this conference there was a broad majority of participants who supported this idea to make it an international organisation. Solvita Rusina was there and we had some e-mail exchange with you and could gain you during the conference to be the third steering committee member together with us. That was the start. The next conference was still in Germany, in Halle, but the subsequent one was the first outside Germany.

MJ: The primary aim of classification of dry grassland vegetation is not the only aim of the recent EDGG, there are many other aims the organisation fulfils. What is in your opinion the most important aim of the recent EDGG?

JD: Well, from my point of view, that is clearly bringing people from different countries together, to exchange ideas and also communicate about methods, and to help people in different countries who might be not advanced in the methodologies.

MJ: And what is the most important achievement of the EDGG during its 8-year history?

"...I would really like to keep it a vivid international scientific organisation, I would appreciate if we manage to get more zoologists involved, or specialists for other groups than vascular plants, also to those get researchers from the natural steppe areas in central Asia more involved in our group."

JD: Well, we don't have really many joint publications yet, but I think, bring together more than one thousand people to a such active scientific life is a great achievement that was not planned in this way originally but I am very happy about it. I think we are the biggest and more or less most active working group in IAVS and very active beyond IAVS as we also have good zoologists.

MJ: Yes, we have more than one thousand members but very small proportion of these members are really active. Can you try to estimate which fraction of these people really take part in these activities?

JD: We had conferences with about 150 participants, that

would already be 15% of the membership.

MJ: So maybe about one quarter of members are active. Is it enough in such a huge organisation?

JD: Yes, it is not an idea of any scientific organisation, at least in my understanding, that all members have to be very active. It is also great if some people only use our media. I think very many of our members are just happy to receive every three months our splendid Bulletin. That is already an achievement if people really like it and also take information from that, and see what is published by other members on the topic. I think it is not important that everyone really attends our conference, we cannot expect that, because there are so many conferences by so many organisations every year and also many people particularly from Eastern and now also from Southern Europe have problems with getting funding to attend conferences. We also cannot organize conferences that are much bigger that 150 people.

MJ: Supposing the EDGG develops successfully, what would you like to see in the future, what is the role of the future EDGG and what could be achieved together?

JD: I would really like to keep it a vivid international scientific organisation, I would appreciate if we manage to get more zoologists involved, or specialists for other groups than vascular plants, and also to get those researchers from the natural steppe areas in central Asia more involved in our group. The other point is that we should now try to get also some really important scientific outputs like broad-scale classification schemes. And for the future I could also imagine, and I have this in my mind since years, that we should publish jointly a book about grasslands or dry grasslands of the Palaearctic with all the information brought together in one place.

MJ: I see that you mainly see the future aims in the scientific outputs, but do you also see that some applied scientific knowledge



During IAVS Congress in Australia, July 2014. Photo: Monika Janisova

would be important?

JD: I think we also made some important steps in this direction. The *Smolenice Grassland Declaration* was an early achievement, and now that we are much bigger and much more influential group, I think, we could work more on the policy level, e.g. together with the European Federation for Nature Conservation and Pastoralism, whose member we are. I am not a good person for that, but I find it important and I could imagine that e.g. a book on the best practices in management and conservation of different grassland types would be valuable. We should work in all these directions.

AK: Jürgen, how many countries have you visited in your life?

JD: Do you mean as an EDGG representative or in general?

AK: In general.

JD: Well, I can tell you that in Europe there are only very few countries where I have not been: Iceland, Albania, Kazakhstan, the Caucasus countries and then some very tiny countries, like Andorra and Monaco, San Marino, Malta and Luxembourg. Outside Europe I visited Turkey, three countries in Africa, three countries in South America, Australia and South Korea.

AK: Which country is the most attractive for your next visit, for example as a destination of the next field workshop?

JD: Caucasus, Anatolia, and, yes, I really would like to study the steppic grasslands of the inner alpine dry valleys, resampling what Braun-Blanquet documented in his famous book 1961 because these grasslands are so nice, so diverse and so little understood.

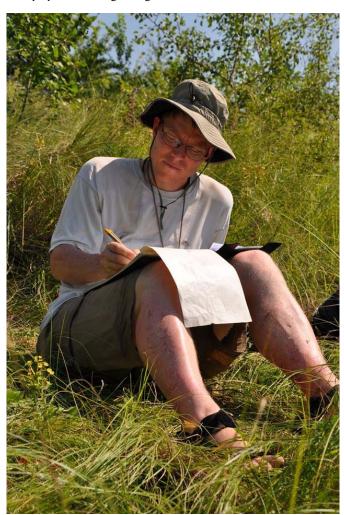
MJ: Could you tell us three properties which an ideal participant of the EDGG field workshop should have?

JD: Well, the most important is good mood, so you should not get into bad mood if the weather is not so good, if we return to the accommodation only at ten o'clock in the night, or such things. Then, he really should be willing to actively contribute, help with the sampling, share the aim of the field workshop, and not just using the

field workshops as a way of doing tourism somewhere. To have some knowledge is good, on plants and on methodology, and he should be willing to share it with the others.

AK: Which of the seven EDGG expeditions you took part in was the most interesting and which was the most difficult for you?

JD: I found the one in Khakassia, South Siberia, most interesting for myself because that was the first time we really have been in natural steppes. By contrast, in Ukraine we were at the margin of natural steppes or in the forest steppe zone, and I did not have the impression that it is so much different from Central Europe. But in Khakassia that was really something else. It was clear, except on some north-facing slopes, that steppe is the natural vegetation, it was for me quite impressive and it widened my view as a grassland researcher. The other particularly fascinating expedition was the first one in Transylvania, where I started this all. It was not an EDGG event at that time, but just a private cooperation between me, Eszter Ruprecht and Anna Szabó from Cluj, because Eszter had been at the conference in Kiel and she presented so fantastic photographs and showed us *Stipa pulcherrima* growing to the horizon and told us that this was



During EDGG Expedition in Ukraine, July 2010. Photo: Olena Javorska

a degraded habitat. This was certainly a place I would like to see. And then we were there and the very first plot we made was this world-record plot. It is really ridiculous, the very first day and we spent, I think, six hours on it. And this landscape in Transylvania with the huge semi-natural grasslands, the old cultural landscapes, it was also very nice. But it also was a kind of stressful field workshop in Transylvania and similarly in Ukraine because the weather was really, really hot there and we worked very long. The temperature was about 35 °C and we worked on south-facing slopes. Even if you make two hours of siesta in the shadow during the hottest part of the day, it still is demanding.

AK: Yes, I remember one day in Ukraine, it was about 40 °C.

JD: On the other hand it was such a fantastic landscape in Transylvania, not only the dry grasslands. And it flowered so nicely. It was rather late in the year but the previous months were rather wet so many plants were flowering, it was nice. And then, the third workshop was the one in Sicily. I have very good memories to that because we had so nice food. Of course, in general, Italian food is nice but, for example, several times we had eaten in "agroturismos" where they had basic traditional food often made with local vegetables, sometimes even from wild plants, and of course combined with nice wine. Basically all the workshops were nice, we were a good team, I could not differentiate between them. It always was a great pleasure to be together with these people, and many of them became "addicted" to these workshops and come again and again.

MJ: Both you and Zygmunt during his interview talked so nicely about field workshops. Are you not afraid that at some moment you will have problem with too many applicants?

JD: I don't think so. This is a very specific type of people who are joining the field workshops. So not every of our members would like to do that, and many are not able to spend so much time for such a sampling. It is a lot of fun, but it is also hard work. Many people do not like that, so I am not afraid. We rather had some problems to get enough people for the workshops.

MJ: Is it possible that if there are too many applicants, EDGG will organize several workshops per year?

JD: Theoretically it is possible but I don't think that we really have the capacities for that right now. And I also do not see that we will have so many applicants.

MJ: It is going to be changed after this Bulletin is published 
① Now, I have another question. You work at the university for a very long time, and I wonder if you realized that there is some change in the attitude of young people to natural sciences, whether there is enough interest among young people for natural sciences and whether the young people have the same level of knowledge as, let's say, 20 years ago.

"...This is a very specific type of people who are joining the field workshops. So not every of our members would like to do that, and many are not able to spend so much time for such a sampling. It is a lot of fun, but it is also hard work."

"... Nowadays there are still few students really interested in outdoor biology wholeorganism biology, but the majority of those studying Biology want to have a job in the lab, everything very clean everything, no need to go out, to get dirty and things like that. In many big universities ecology or the wholeorganism biology have been abandoned replaced by only molecular biology."

JD: I think there are really big changes. In the generation when I was student, ecology was still a subject at most German universities: nearly every university had several chairs of ecology: plant ecology, animal ecology, etc. Many, many students of my age focussed on ecology and field biology, and they were good field zoologists, field botanists, ... Nowadays there are still few students really interested in outdoor biology or wholeorganism biology, but the majority of those studying Biology want to have a job in the lab, everything very clean everything, no need to go out, to get dirty and things like that. In many big universities ecology or the whole-organism biology have been abandoned or replaced by only molecular biology. And even here in Bayreuth where we are one of the strongest universities in Germany in terms of ecology, I would say at least two thirds of the Biology Bachelor students are not at all interested to do biology outside

the lab, they are really focussed at going in the lab and working with cells or genes.

MJ: Maybe you could make a direct comparison because you studied in Bayreuth and now you are teaching at the same university in Bayreuth. Was the percentage of students studying natural sciences interested in field biology higher in the past?

JD: Yes, it was much higher. On the other hand, students nowadays have many capabilities and interests that are also important and that we did not have at my time. Nowadays students are able to do very good presentations often much better than professors, they are able to do very fancy statistics, which we were not at all at my time, and, I would say, they are also much more international now. Already at the student age they are participating in exchanges, Erasmus programs, summer schools and so on, something that was very rare before. I never did it, I started all my international activities basically after the PhD.

MJ: And if you compare the offer from the side of the teachers? Do they offer now more than before? I mean more subjects, more field courses, etc.

JD: No, I think the offer is much smaller, and even if there are ecologists or systematicians at the universities, they typically have much narrower knowledge than in the past.

MJ: When you decided to become botanist or how do you call yourself, botanist or plant ecologist?

JD: I would call myself an ecologist. Now, I am working more with plants than with animals but I would not say that I am restricted to

plants. If you look here in the library, there are about as many books on animals as on plants. When I was at school I was more interested in animals, mainly amphibians and reptiles. It was just at the age of 16, when I became involved in the program of mapping the flora of my home town very intensively.

MJ: Did you have somebody who inspired you to become ecologist, who trained you in distinguishing plants and animals and showed you how to do the science?

JD: The first who inspired me was actually not my biology teacher but my Latin teacher at the Gymnasium, who was also biology teacher but not mine. And he was one of the old school, he was about sixty but he had really good knowledge and at the same time he was the President of the local branch of a conservation NGO. When he realized that I am very interested in this topic, he connected me somehow to this NGO (at that time it was called *Deutscher Bund für Vogelschutz*). I've got involved in the youth branch of this NGO and I organized a mapping project for amphibians and reptiles with this organisation, and so on.

MJ: Which scientist was the most important in your professional life?

JD: This is rather clear: Klaus Dierßen, the supervisor of my Diplom thesis and also of my PhD thesis, Professor of Geobotany at the University of Kiel at that time, now retired. He has such an incredible



During EDGG Meeting in Ukraine, June 2011. Photo: Galina Sivko



Pulsatilla vulgaris—painting by Jürgen Dengler

knowledge of at least the flora of Europe, including all the cryptogams, such a good knowledge in the field, such understanding how ecosystems and plant communities work, so I really learned many, many things from him. I also learned from him to work very thoroughly in the field and not to overlook things. He always encouraged me to continue and he was open to my ideas and he never forced his ideas to other people, he gave his opinion and directed me somehow but gave me very broad freedom. I was much inspired by him and without him I would probably not be the scientist I am now.

KV: What are you planning to do in science during the next 15 years?

JD: That's a very difficult question. You know that the situation for non-professors in Germany is really hard: continuous search for new positions with a short term contract, very unpredictable. But I am optimistic!

MJ: How many books you have at home?

JD: We can just make an estimate: maybe 3,000, would be a guess.

MJ: And how many pots with flowers?

JD: Few ② . I am not a good gardener, not at all, because I am always traveling, so I gave up to have animals as in the past, and the plants have a horrible life with me, but somehow they survive.

MJ: So, much less than books?

JD: Yes, maybe thirty pots or not even that, no, twenty.

MJ: What kind of music do you like?

JD: I very much like jazz, more the modern jazz, but, very different styles, I am also member of the Jazz club in Bayreuth, and there was also one in Lüneburg, and they have concerts every two or three weeks in the winter term, and for members they are free, so I am really often attending them. And the other music I am listening much is various types of classical music. Also all the different epoques, from the barock to rather modern classics.

MJ: Do you play also some instrument?

JD: I played in the past trumpet, but I was never good, so I gave up. I think I am not talented in that.

MJ: In your flat you have a lot of paintings, which you painted by yourself. Did you have some special period in your life when you were devoted to painting, or you do it permanently?

JD: No, recently, I cannot find any time for that. In the past, I did it frequently, nowadays the only art I am doing in a wider sense is photography. That is not so time-consuming.

MJ: Yes, you always make a lot of pictures during our events, maybe more than all other people. You are always busy with one camera, two cameras and several lenses on the back and I suppose you bring hundreds or thousands of pictures from each event. And you make some selections for the presentations, as you just showed us. Do you plan to publish some of these nice photos in the future, maybe in the planned book of the EDGG?

JD: Yes, of course, it would be nice. Many of them are published in the EDGG Bulletin anyway. I am really happy that I can contribute something to nice appearance of our Bulletin. For example, in *Tuexenia* and other publications that allow colour photos I am always happy to contribute some photos, because they are very helpful to illustrate vegetation types, instead of only having vegetation tables.

MJ: Can you advise our readers how to store huge files and numbers of photos? And another question is whether you often come back to the older photos or you just store and store and never come back to them?

JD: That is now much easier in digital time. In the past, I had also a collection of maybe 30,000 slides, and in the beginning when I started to do that I started also to do a database to be able to find something, but I never had time to manage this database for slides and when I searched for something it was always very time-consuming.

MJ: Do you sometimes come back to these slides?

JD: Currently not; I am hoping to get them digitized. I bought a device for digitizing five or six years ago but never had time to do that, but maybe now at the institute my technical assistant can do that. We are planning to do that. Would be worthwhile because there are very important pictures from places where I have been, but also there are many more important and more

interesting things than digitizing of slides ②. Well, with the digital slides it is much easier. I do not have the time to manage them perfectly, but one has not to do everything at once. So, you can also step by step add information and I have them in a program called Lightroom, which on the one hand is a good tool to improve the quality, but also has a database function to label your photos with different key-

"... students nowadays have many capabilities and interests that are also important and that we did not have at my Nowadays time. students are able to do v e r ygood often presentations much better than professors, thev able to do very fancy statistics, which were not at all at my time, and, I would say, they are also much more international now."

words, and not give the photos the name. My photos do not have names, just numbers, but they have multiple keywords, so you JD: I would say, Claude Monet. I like the impressionists very can access them with combination of keywords and that's basi- much, how they capture these different colours and reflections cally very nice. I also like to illustrate my own lectures with some and you get the picture only from the distance. There are also of the good own photographs.

MJ: I like that you are able to share your photos.

JD: Yes, often people are disappointed because I am not able to share them immediately one or two days after the event, because JD: Most of the housework I really hate. Washing dishes, wash-I have to process them, but those who are patient will always get ing cloths and ironing, cleaning, I do not like. But I like cooking my photos and I am really open to share them. I am happy when the photos are used.

MJ: What is your favourite food?

JD: I like very much Käsespätzle, this is southern-German handmade pasta with cheese and onions and with a big salad.

MJ: Who is you favourite painter and why?

very nice other impressionists.

MJ: What is your favourite housework? Which one is relaxing for

and baking. At least something ②.

MJ: Do you have some other message for our readers? What would you like to wish them?

JD: I wish that we keep the diversity of grasslands. And now I have question to you: Which kind of photos would you like to see?

"...I am really happy that I can contribute something nice appearance of our Bulletin. For example, in Tuexenia and other publications that allow colour photos I always happy contribute some photos, because they are very helpful to illustrate vegetation types, instead only having vegetation tables."













The beauty of nature through the lens of Jürgen Dengler

Forum

# Common milkweed (Asclepias syriaca) in sandy areas - a neutral species or a noxious invader?

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#### Abstract

To explore the effect of milkweed on native sandy flora and to identify the most sensitive species groups we performed a trait-based analysis in late-successional sandy old-fields in Central-Hungary. We detected a negative effect of milkweed on the cover of native species of sandy vegetation. This effect was the most pronounced on the species with low specific leaf area, low seed weight and low clonal spreading ability (i.e. species with low competitive ability). Our results suggest that the management of common milkweed is essential to ensure the persistence of native species in these landscapes.

Keywords: clonal spreading; competition; functional traits; invasion; old-field; seed mass; specific leaf area; succession

Common milkweed (Asclepias syriaca) is a widespread invasive species in Europe, and it usually persists in disturbed habitats (Török et al. 2003, Botta-Dukát 2008). However, papers addressing its effects on the diversity and composition of native flora are rather scarce (but see Szitár et al. 2014). Szitár et al. (2014) concluded that milkweed has only a neutral effect on the species richness and cover of natural grassland species in succession after the burning and removal of pine plantations in sandy areas. These findings may suggest that the invasion of common milkweed does not threaten the native flora of sandy vegetation. Common milkweed is a fastgrowing competitor with effective clonal spreading and seed dispersal ability, broad leaves and effective chemical defence against herbivory (Agrawal 2004). These traits are characteristics of a 'super species' that presume a high risk of invasion associated with a decrease in the diversity of native plants (Goodwin et al. 2001; Pyšek et al. 2012).

To resolve this contradiction, we endeavoured to test the effects of common milkweed on the native sandy flora and re-consider the former assumption on its effects. We tested the effect of common milkweed on native sandy flora in late successional sandy former fields characterised by previous ploughing (disturbance which facilitated the invasion of common milkweed), and also characterised by the occurrence of native plant species. We tested the following hypotheses: (i) The cover of native species of sandy flora decreased with increasing milkweed cover. (ii) Species with low specific leaf area (SLA), height, seed-mass and clonal spreading ability (i.e. low

competitive ability) are more likely to be suppressed by common milkweed, compared with species of high competitive ability.

The cover of vascular plants was recorded in seven, late successional former fields, all of which had been abandoned more than 22 years previously. We sampled 12 plots per field, including plots with low to high common milkweed cover and control plots without common milkweed. For the trait-based analyses we used leaf-height-



Fig 1. Flowering specimen of common milkweed (Asclepias syrica) Photo: Balázs Deák

seed traits and clonal spreading ability. Linear mixed effect models (milkweed cover category was a fixed factor and former field site was a random factor) were used to explore the effects of common milkweed on dependent variables (species richness, percentage cover data and community weighted means of traits).

Even though we detected no effect of milkweed on total species richness, we did reveal its negative effect on the cover of native grassland species. The negative effect of milkweed was most pronounced in the case of the cover of species with low competitive ability (species characterised by low SLA, low seed mass and low clonal spreading ability).

Our results suggest that common milkweed is an invasive species which is harmful to indigenous vegetation. Therefore, the invasion of common milkweed delay the establishment of native grassland species and arrest the succession in an unwanted stage. For the protection of sandy flora, management of common milkweed is essential to ensure the persistence of native species in these land-scapes. For more details please check our recent paper published in Applied Vegetation Science (Kelemen et al. 2016).



Fig. 3. Common milkweed stand in a sandy former field. Photo: András Kelemen

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Fig 2. Dense flowering stand of common milkweed. Photo: Balázs Deák

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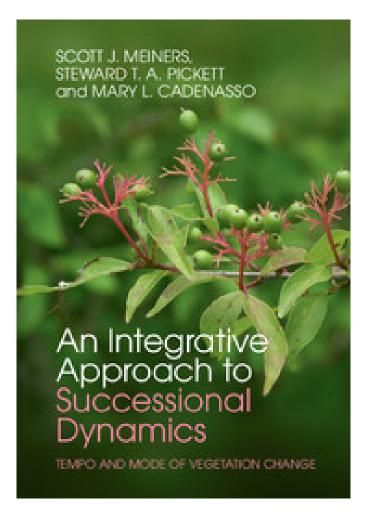
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Fig. 4. Common milkweed stand in the studied sandy area. Photo: András Kelemen

## **Book Review**

Bulletin of the Eurasian Grassland Group 30 (2016): 17-18



Meiners S. J., Pickett S. T. A., Cadenasso M. L. (2015): An Integrative Approach to Successional Dynamics - Tempo and Mode of Vegetation Change - 303 pp. Cambridge University Press, ISBN: 978-0-521-11642-8, Hardcover: 99.00 \$, E-book: 79.00 \$.

Species-rich traditionally managed landscapes in Europe and elsewhere are facing a high loss of species and large-scale degradation nowadays (Sutcliffe et al. 2015). These negative changes, largely caused by changes in the intensity of agricultural land-use, such as intensification or abandonment (Valkó et al. 2012). For the conservation of biodiversity in such agriculture-driven landscapes, high quality natural habitats are of outstanding importance (i.e. dry and mesic grasslands, Dengler et al. 2014). Understanding spatial and temporal species dynamics in natural and ruderal habitats is crucial for sustaining landscape-scale biodiversity, and this knowledge also helps to identify cost effective ways of habitat restoration, by considering the findings of theoretical plant ecology and by linking spontaneous processes with practical restoration (Walker et al. 2007). The study of vegetation succession has a long tradition in ecology; for example, Rejmánek & van Katwyk (2004) listed altogether 1511 studies for the period 1901-1990 dealing with various aspects of old-field succession. However, a unified framework and an integrative approach of succession dynamics is still lacking, and that is where the present book is very timely and valuable.

The book contains an introductory chapter in which important goals, concepts and definitions are introduced that are essential for understanding the subsequent sections. After this introductory chapter, there are 14 chapters organised into four distinct parts. In the first section, chapters 2-4, most of the important information on the conceptual background of successional theory are provided, with a strong link to the history of successional theory. A short historical overview is provided of the Buell-Small Succession Study (BSS). The second section, comprising chapters 5-8, is rather an extended research report where important successional theories are introduced and tested on the basis of datasets provided by the BSS. The chapters of this section focus on 'patterns', in the sense of Watt (1947), detected in the course of succession, including species and population dynamics, and their drivers. This section is followed by an integrative section (chapters 9-12), in which the patterns detected in the second part are synthesized and the focus is shifted to 'processes', including convergence/divergence in successional pathways, community assembly, functional approach of heterogeneity and community dynamics. In the last, rather short section, the authors highlight how the results obtained in successional studies can be integrated into habitat management and restoration, and provide guidelines for further research.

In conclusion, this book highlights the importance of studying patterns and processes in succession in an integrative way with consid-

Here we present recently published books that might be relevant for grassland scientists and conservationists, both specific grassland titles and faunas, floras or general books on ecology and conservation biology. If you (as an author, editor or publisher) would like to propose a certain title for review, or if you (as an EDGG member) would like to write a certain review (or reviews in general), please contact the Book Review Editor, Anna Kuzemko (anya\_mendow@ina) or her deputy Peter Török (molinia@gnath.com).

eration also of multiple-scales. It provides a comprehensive overview of the Buell-Small Succession Study, with direct links to ecological theory. I think that the book is a very useful guide to the understanding of some rather complex successional theories and provides essential reading especially for early-career plant ecologists and students. For lecturers, it provides a very useful case study repository for plant succession theory lectures.

Dengler, J., Janišová, M., Török, P., Wellstein, C. (2014): Biodiversity of Palaearctic grasslands: a synthesis. Agriculture, Ecosystems & Environment 182: 1-14.

Rejmánek, M., van Katwyk, K. P. (2004): Old-field succession: A bibliographic review (1901–1991). [http://botanika.bf.jcu.cz/suspa/pdf/BiblioOF.pdf]

Sutcliffe, L. M. E., Batáry, P., Kormann, U., Báldi, A., Dicks, L. V., Herzon, I., Kleijn, D., Tryjanowski, P., Apostolova, I., Arlettaz, R., Aunins, A., Aviron, A., Baležentiene, L., Čierna-Plassmann, M., Fischer, C., Gabrielová, J., Halada, L., Hartel, T., Helm, A., Hristov, I., Jelaska, S.D.; Kaligarič, M., Kamp, J., Klimek, S. Koorberg, P., Kovács-Hostyánszki, A., Kuemmerle, T., Leuschner,

C., Lindborg, R., Loos, J., Maccherini, S., Marja, R., Máthé, O., Proença, V., Rey-Benayas, J., Sans, F.X., Seifert, C., Stalenga, J., Timaeus, J., Török, P., van Swaay, C., Viik, E., Tscharntke, T. (2015): Harnessing the biodiversity value of Central and Eastern European farmland. Diversity and Distributions 21: 722-730.

Valkó, O., Török, P., Matus, G., Tóthmérész, B.(2012): Is regular mowing the most appropriate and cost-effective management maintaining diversity and biomass of target forbs in mountain hay meadows? Flora 207:303-309.

Walker L. R., Walker J. & del Moral R. (2007): Forging a new alliance between succession and restoration. In Walker L.R., Walker J. & Hobbs R.J. (eds.): Linking restoration and ecological succession. Springer Verlag, New York, pp. 1-19.

Watt, A. (1947): Pattern and process in the plant community. Journal of Ecology 35: 1-22.

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Hyacinthella pallasiana at the Donetsk Upland, Ukraine. Photo: Mykyta Peregrym

## **Book Review**

Bulletin of the Eurasian Grassland Group 30 (2016): 19



Peter Poschlod: Geschichte der Kulturlandschaft. Entstehungsursachen und Steuerungsfaktoren der Entwicklung der Kulturlandschaft, Lebensraumund Artenvielfalt in Mitteleuropa. - Ulmer, Stuttgart, 2015, 320 pp., 199 figures, 38 tables, ISBN 978-3-8001-7983-1. Price of hard copy: € 39.90.

Have you ever looked at a landscape with some of the following questions in your mind: How did this land look a hundred years ago? What happened on this piece of land during the last few generations? Does each square meter of this country remember events, which were not recorded in historical records? What does the recent landscape picture reveal about the mysterious events of the past?

These and similar questions frequently come to my mind. I study grasslands and the mutual relations of human history and grassland evolution are crucial in this research field, especially with regard to semi-natural grasslands. Therefore, I was happy that I could attend a three-day seminar by Peter Poschlod (University of Regensburg, Germany) and some of his students at the Botanical Institute of the Hungarian Academy of Sciences, Vácrátót, in April 2013. The seminar introduced the land-use and vegetation history of central-European grasslands from vegetation scientific, ethno-ecological and nature conservational aspects. Already at that time, Peter Poschlod announced a forthcoming book on a similar topic and this book eventually appeared in 2015. I immediately grasped for it and read it

carefully from the beginning to the end without a single moment of boredom.

Peter Poschlod is known among biologists as a specialist on the evolution of the European landscape and its vegetation. Together with his students, he published numerous scientific books and papers in the field of vegetation science and conservation biology. In his latest book, the knowledge obtained through several decades of intensive research is presented in a coherent form and summarized. Moreover, the borders of the discipline of botany are crossed in the direction of many other disciplines, such as archeology, history, ethnology and zoology, citing a total of 1589 references to related literature.

In the first part of the book, the origin of the cultural landscape is explained, which is strongly related to the transition from a nomadic society to sedentism, domestication of plants and animals, and the development of early forms of agriculture. This occurred in SW Asia, in the region of the fertile crescent (including the contemporary countries of Turkey, Syria, Lebanon, Israel, Jordan and Iraq, or their parts), about 12 000 years ago. Most currently important agricultural crops and livestock have their origin in these specific regions, which became domesticated in the period between 9 000 and 4 000 years BC. Neolithic agriculture gradually spread throughout the whole of Europe. Readers can follow this process asking the following questions: How was the landscape in which the neolithic people settled? How did the nomadic and the sedentary tribes meet and how were the first settlements created? What were the consequences of the neolithic farmers' activities for the central European landscape?

The second part of the book is divided into four main chapters, each devoted to one group of factors significantly controlling the development of the cultural landscape in central Europe: 1) climate; 2) diseases and wars; 3) enlightenment and technical progress; and 4) spiritual movements, regulations and law.

Human beings are the main actors in this book. They struggle for life and food in a world full of danger and enemies during the early periods. Later they developed into skilled societies by means of advanced technologies. Humans have been masters in the creation of cultural landscapes and their activities have contributed to the development of its unique biodiversity. Certainly, each historical period supports particular organisms and ecosystems and, in turn, inhibits other ones. In the long run, the landscape developments of the last century have not been positive at all. The heavy toll of subjugation and violation of natural systems has to be payed for and it is reflected mainly in the severe loss of biodiversity. In central Europe, you can hardly find a spot, which has not been affected by human activities. This book is important to help understand all the contexts and all the consequences. In addition, it also represents an absorbing story on the history and strength of human beings. I am really happy to have had the opportunity to read this book. I hope, it will be translated into many languages to become accessible for a wider range of readers. I can recommend this book to biologists, ecologists, nature conservationists, farmers, geographers, politicians, landowners and officials, and to all people who perceive the surrounding landscape and its beauty. I believe that if people knew the landscape better, they would care for it better.

#### Monika Janišová,

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## Recent publications of our members

- Bátori, Z., Körmöczi, L., Zalatnai, M., Erdős, L., Ódor, P., Tölgyesi, Cs., Margóczi, K., Cseh, V., Török, P. (2016): River dikes in agricultural landscapes: the importance of secondary habitats in maintaining landscape-scale diversity. Wetlands 36: 251-264
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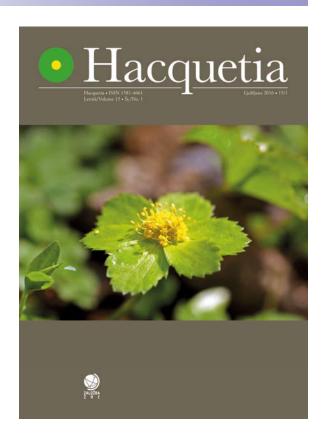
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## EDGG Special Features

#### Status of the Hacquetia SI 2016

The preparation of our third EDGG Special Issue in Hacquetia 2016/2, the international journal of the biological branch of the Slovenian Academy of Sciences and scheduled for publication in June 2016 on the topic of Ecology and Conservation of Steppes and Semi -Natural Grasslands, is in progress. A total of 11 proposed papers were invited and the manuscripts are now in various stages of the review process. Two of these, one by the authors Valdimir Ronkin and Galina Savchenko and entitled Flora and vegetation of dry grasslands of Northeastern Ukraine, and problems of diversity conservation, and one by Elena Belonovskaya, Raisa Gracheva, Ilya Shorkunov and Vera Vinogradova entitled Grasslands of intermontane basins of Central Caucasus: land-use legacies and present-day state, have been accepted, and the remainder are still under review. These papers can be cited as accepted in 2016, for more information, please contact the corresponding authors Vladimir Ronkin ronkinvl@discover-ua.com and Elena Belonovskaya belena53@mail.ru, respectively. Of course it is our objective that, with the input of the team of referees and editors, we will succeed in generating manuscripts worthy of publication from all of these papers. We would encourage authors with material for manuscripts they might wish to contribute to future EDGG Special Issues to begin developing these in anticipation of the announcement of future publications at the 13th Eurasian Grassland Conference in Sighisoara, Romania, in September this year.

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Astragalus sareptanus at the Donetsk Upland, Ukraine. Photo: Mykyta Peregrym

## Forthcoming events



Tulipa gesneriana. Photo: Mykyta Peregrym



Tulipa hypanica. Photo: Mykyta Peregrym

## Special Meeting of International Biogeography Society (IBS)

5-6 May 2016, Beijing, China

Meeting homepage:

http://www.biogeography.org/html/Meetings/index html

**4th International Conference** "Rare Plants and Fungi of Ukraine and Adjacent Areas: Implementing Conservation Strategies"

#### 16-20 May, 2016, Kyiv, Ukraine

The conference will be hosted by O.V. Fomin Botanical Garden of Taras Shevchenko National University of Kyiv

e-mail: redbookconference@i.ua

#### Conference "Management of extensive grasslands in mountain areas"

29 -31 May 2016, Lunca de Jos, Valea lui Boros, Transylvania, Romania

How to preserve species-rich grassland and traditional farming systems?

Extensively managed grasslands are among the most biodiverse systems in Europe, but are threatened by abandonment, intensification, land-use change and poorly designed policies.

In this workshop, we invite scientists, farmers, conservationists and policymakers to discuss how to develop the "best" advice for management and conservation of biodiverse grasslands, and how to support nature-friendly farming systems which are profitable and socially sustainable in the modern context.

Registration is now open at http://poganyhavas.hu/menu.php?menu=projekte k&lang=en

Contact: Barbara Knowles barbara.knowles@yahoo.co.uk

## 59th Symposium of the International Association for Vegetation Science (IAVS)

Conservation of Plant Communities: From Environmental Drivers to Ecosystem Services 12–17 June 2016, Pirenópolis, Brazil

The venue is in the central region of Brazil, in a Cerrado (savanna) landscape.

Conference homepage: http://iavs2016.org/59th-Annual-Symposium/Home.aspx

#### 9th EDGG Field Workshop

Biodiversity patterns of dry grasslands at the meeting point of Central Europe and the Balkans 2–9 July Serbia, 2016

More information in EDGG Bulletin #29

#### **International Haymaking Camp**

7 - 14 August 2016, Ghimes, Transylvania
Make friends, have fun, learn new skills and help to
preserve valuable mountain hay meadows and their
plant, wildlife and traditions in one of the last largescale medieval landscapes of Europe: the eastern Carpathians of Romania. This is a great opportunity for nature lovers and those interested in traditional culture and
sustainable living to learn about the connections between nature and farming by doing physical work
alongside local people and participating in the art and
science of hay making and related skills.

Registration is now open at <a href="http://www.treasuresoftransylvania.org/haymead-ow-biodiversity/hay-making-festival">http://www.treasuresoftransylvania.org/haymead-ow-biodiversity/hay-making-festival</a>

Contact: Barbara Knowles barbara.knowles@yahoo.co.uk

## 46th Annual Meeting of the Ecological Society for Germany, Austria and Switzerland (GfÖ)

150 years of ecology - lessons for the future 5-9 September 2016, Marburg, Germany Meeting homepage: http://www.gfoe-2016.de/

#### 13th Eurasian Grassland Conference

Management and Conservation of Semi-natural Grasslands: from Theory to Practice 20-24 September 2016, Sighişoara, Romania The meeting will be hosted by Fundația ADEPT and Babes-Bolyai University

More information on pages 3-6

#### 26th European Vegetation Survey Meeting

13-16 September 2017, Bilbao, Spain

The meeting will be hosted by University of the Basque Country (Javier Loidi and colleagues). The meeting webpage is not yet available.

## 60th Symposium of the International Association for

#### Vegetation Science (IAVS)

20-25 June 2017, Palermo, Italy The meeting webpage is not yet available.

#### 27th European Vegetation Survey Meeting

spring 2018, Wrocław, Poland

The meeting will be hosted by University of Wrocław

(Zygmunt Kącki and colleagues).

## 61th Symposium of the International Association for Vegetation Science (IAVS)

23-27 July 2018, Bozeman (Montana), U.S.A. The meeting webpage is not yet available.

## **Bulletin of the EDGG,** official organ of the Eurasian Dry Grassland Group (EDGG) **ISSN 1868-2456**

The e CPG Grassland

Jürgen research and conservation

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Important dates: The deadline for Bulletin 31 is 31 May 2016

Bulletin 31 to appear: June 2016 Bulletin 32 to appear: September 2016 IAVS

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Iris pumila in the Black-Sea Region, Ukraine. Photo: Mykyta Peregrym