

Dry grasslands: species interactions and distribution Editorial to the Special Feature with contributions from the 6th European Dry Grassland Meeting 2009 in Halle (Saale)

– Ute Jandt, Thomas Becker, Jürgen Dengler and Monika Janišová –

Abstract

In our contribution, we report on the 6th European Dry Grassland Meeting held from 31 August to 1 September 2009 in Halle (Saale), Germany. The meeting was attended by 40 participants, who gave 15 oral and 17 poster presentations. The rapid positive development of the *European Dry Grassland Group* (EDGG), the organiser of this conference, is mentioned: the inclusion of the EDGG in the *International Association for Vegetation Science* (IAVS) as a working group, the establishment of two new subgroups focussing on Mediterranean and South-East European dry grasslands, respectively, and the organisation of the first EDGG research expedition in 2010 belong to the most important events. In the last part of our contribution, we give a short introduction to the six articles of this Special Feature. Two of them deal with phytosociological classification of semi-natural grassland communities, one with vegetation-environment relationships. Two papers are concerned with conservational topics, one focussing on the population structure of endangered *Pulsatilla patens*, the other dealing with conservation of xeric grasslands in Transylvania. The last paper examines temporal changes in calcareous grasslands with regard to species diversity.

Zusammenfassung: Trockenrasen: Arteninteraktionen und -verbreitung – Vorwort zum Sonderteil mit Beiträgen von der 6. Europäischen Trockenrasentagung 2009 in Halle (Saale)

In diesem Beitrag berichten wir über die 6. Europäische Trockenrasentagung vom 31. August bis zum 1. September 2009 in Halle (Saale). Das Treffen wurde von 40 Teilnehmern besucht; es gab 15 Vorträge und 17 Poster. Die *European Dry Grassland Group* (EDGG) als Organisatorin der Tagung hat sich seit ihrer Gründung sehr positiv entwickelt. So wurde sie jüngst als Arbeitsgruppe in die *International Association for Vegetation Science* (IAVS) aufgenommen, es wurden zwei neue EDGG-Regionalgruppen für mediterrane und südosteuropäische Trockenrasen eingerichtet und eine EDGG-Forschungsexpedition im Juli 2010 in die Ukraine befindet sich in Vorbereitung. Im letzten Teil unseres Beitrags geben wir eine kurze Einführung in die sechs Artikel des Sonderteils. Zwei der Artikel behandeln die Klassifikation halbnatürlicher Rasengesellschaften, einer die Beziehungen zwischen Standortbedingungen und Artenzusammensetzung in diesen. Zwei weitere Beiträge zielen auf Naturschutzaspekte ab – der eine auf die Populationsstruktur der gefährdeten Art *Pulsatilla patens*, der andere auf Trockenrasen in Siebenbürgen. Der sechste Beitrag analysiert zeitliche Veränderungen der Artendiversität von Kalktrockenrasen.

Keywords: conference report, conservation, *European Dry Grassland Group*, phytosociology, vegetation classification, vegetation database.

1. European Dry Grassland Meeting in Halle (Salle) 2009

The sixth European Dry Grassland Meeting was held from 31 August to 3 September at the Institute of Biology/Geobotany and Botanical Garden of the Martin-Luther University in Halle (Saale). It was organised by Ute Jandt and Monika Partzsch on behalf of the *European Dry Grassland Group* (EDGG) and its German subgroup *Arbeitsgruppe Trockenrasen*. The Halle meeting further continued the positive development of the working group in the previous years. While the number of participants was similar to that of the meetings in 2007 and 2008, the number of contributions as well as the number of countries represented increased. With colleagues from Bulgaria, the Czech Republic, Germany, Italy, Latvia, Poland, Slovakia, Sweden, and the United Kingdom, it was quite an international conference.

1.1. Scientific programme

A total of 15 talks, arranged in four sessions over the 1 ½ days of conference, and 17 posters, presented in two guided poster sessions, gave rise to vivid discussions during the meeting. The topics ranged from population biology and phytogeography of dry grassland species through regional studies on dry grassland and related vegetation types, diversity patterns, pollination ecology, and simulation studies to conservation issues. Also the geographical scope was extremely wide and even exceeded the number of nationalities represented among the participants (Bulgaria, Czech Republic, France, Germany, Italy, Kazakhstan, Mongolia, Poland, Romania, Slovakia, Sweden, Switzerland, plus several supranational studies).

Additionally, the local organisers provided the possibility of guided tours through the nice Botanical Garden, in which the institute is situated, and through the city of Halle. A joint dinner in a Mexican restaurant on Monday evening and a get-together with barbecue in a greenhouse of the Botanical Garden completed the programme and provided plenty of opportunity for discussion and planning of new cooperations.

1.2. General Assembly of the EDGG

The General Assembly on Tuesday evening started with a short report by each of the three chairs of EDGG at that time on their activities and on the development of EDGG. Jürgen Dengler (responsible for membership administration and contact with other organisations) reported on the very positive development EDGG underwent during its first year of existence. Starting with 191 members from 24 countries by the end of 2008, when the



Fig. 1: Helge Bruelheide (left) and Rudolf Schubert (right) explain the vegetation of the porphyry outcrops near Halle on the first excursion of the meeting (Photo: M. Janišová, 2009-09-02).

Abb. 1: Helge Bruelheide (links) und Rudolf Schubert (rechts) erklären die Vegetation der Porphyrkuppen bei Halle auf der ersten Exkursion der Tagung (Foto: M. Janišová, 02.09.2009).

German *Arbeitsgruppe Trockenrasen* and the *Working Group on Dry Grasslands in the Nordic and Baltic Region* joined to form the EDDG, our scientific network has experienced a high popularity since, particularly in eastern and southeastern Europe. On 1 September 2009, EDGG had 308 members from 35 countries. Solvita Rūsiņa (managing editor of the EDGG homepage; <http://www.edgg.org>) briefly reported on the functionalities of the homepage and invited the members to contribute to it, both with materials and with technical help. Monika Janišová (managing editor of the EDGG Bulletin) gave an overview on the idea of the Bulletin and invited contributions.

We talked about suggestions, wishes, and offers for venues of the European Dry Grassland Meetings from 2010 onwards. The presentation by Monika Janišová introduced the venue of the next meeting planned for Smolenice (Slovakia). Then, we discussed the invitation of our member Anna Kuzemko from the Ukrainian Academy of Sciences to host the 2011 meeting in the National Dendrological Park “Sofiyivka” in Uman’, about 200 km from Kiev. Anna had prepared a short PowerPoint presentation to introduce the venue, her institute, and potential destinations for excursions. Her proposal found unanimous support by all members present, and thus we decided to accept her kind offer.

Further, we discussed the offer of the president of the International Association for Vegetation Science (IAVS), Robert K. Peet, to make EDGG an official working group of this society. Such a closer connection between both organisations could be of mutual benefit. In particular, IAVS offered to consider giving small grants to EDGG activities (such as participation of members from low-income countries in European Dry Grassland Meetings). On the other hand, the status of being an official IAVS working group would involve only minor duties on part of the EDGG, such as preparing an annual report to the IAVS Advisory Council. After a discussion considering pros and cons of such a step, the General Assem-



Fig. 2: Michael Jeschke, Christian Dolnik, Ute Jandt, J. W. Bammert, Monika Partzsch, and Christian Storm (from left to right) identify bryophytes, lichens, and other critical plants on a porphyry outcrop near Halle on the first excursion of the meeting (Photo: J. Dengler, JD093699, 2009-09-02).

Abb. 2: Michael Jeschke, Christian Dolnik, Ute Jandt, J. W. Bammert, Monika Partzsch, und Christian Storm (von links nach rechts) bestimmen Moose, Flechten und andere kritische Pflanzen auf einer Porphyrykuppe bei Halle während der ersten Exkursion der Tagung (Foto: J. Dengler, JD093699, 02.09.2009).



Fig. 3: Ute Jandt (left) and Monika Partzsch (centre) explain the forest-edge vegetation of the nature reserve Neue Göhle in the Unstrut valley during the second excursion of the meeting (Photo: J. Dengler, JD093743, 2009-09-03).

Abb. 3: Ute Jandt (links) and Monika Partzsch (Mitte) erläutern die Saumvegetation im NSG Neue Göhle im Unstruttal während der zweiten Exkursion der Tagung (Foto: J. Dengler, JD093743, 03.09.2009).

bly voted 17 : 0 in favour of accepting it, but allowed for additional votes of those members not present in Halle via e-mail ballot until 30 September 2009 (which then also were unanimously positive).

1.3. Excursions

The destinations of the first excursion on Wednesday were porphyry outcrops in the surroundings of Halle. Led by Monika Partzsch, Ute Jandt, Helge Bruelheide, and Rudolf Schubert, we enjoyed these particular landscape features with their astonishing small-scale β -diversity in sunny and warm late summer weather (Figs. 1, 2). Lunch was held as a picnic on a farm, which uses various breeds of sheep and goats as well as greater rheas (*Rhea americana*) for dry grassland restoration.

The second, optional excursion on Thursday, again under the guidance of Monika Partzsch, led to the Unstrut valley southwest of Halle. In weather alternating between sun and heavy rain, we visited several nature reserves with stands of *Dictamnus albus* (burning bush) in forest-edge communities as well as dry and semi-dry basiphilous grasslands (Fig. 3). The nice excursion was complemented with an Italian-style, open-air picnic with bread, cheese, olives, and local wines.

2. News from the European Dry Grassland Group (EDGG)

In autumn 2009, the EDGG became an official IAVS Working Group, following the vote of the General Assembly in Halle. Presently (22 April 2010), EDGG has 504 members from 42 countries, including most of the European plus some extra-European countries. EDGG is governed by an Executive Committee consisting of now four members (Jürgen Dengler, Germany; Monika Janišová, Slovakia; Solvita Rūsiņa, Latvia; Michael Vrahnakis, Greece) and has no membership fees. Presently, four regional subgroups have organised themselves within EDGG: the German *Arbeitsgruppe Trockenrasen* (187 members; chairs: Ute Jandt &

Jürgen Dengler, see below for e-mail addresses), the *Working Group on Dry Grasslands in the Nordic and Baltic Region* (67 members; chair: Jürgen Dengler), the *Working Group on Mediterranean Dry Grasslands* (Med-DG; 88 members; chair: Michael S. Vrahnakis, e-mail: mvrahnak@teilar.gr), and the *South-East European Dry Grassland Group* (SEEDGG; 134 members; chair: Iva Apostolova, e-mail: iva@bio.bas.bg).

EDGG is a network of dry grassland researchers and conservationists, covering all dry grassland-related aspects from vegetation science via botany, mycology, zoology, soil science, and landscape ecology to conservation, restoration, and agriculture. The basic aims of EDGG are:

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

For this purpose, EDGG provides seven basic facilities:

- European Dry Grassland Meetings, international scientific conferences organised annually in different places throughout Europe (see <http://www.edgg.org/events.htm>)
- EDGG research expeditions to sample baseline data of grasslands in little-known regions
- EDGG vegetation databases
- Special Features from European Dry Grassland Meetings, published in various peer-reviewed journals (including *Tuexenia*)
- EDGG Bulletin (ISSN 1868-2456), the quarterly electronic journal of the EDGG, with reports, announcements, and scientific articles (see <http://www.edgg.org/publications.htm>)
- EDGG homepage (<http://www.edgg.org>)
- EDGG mailing list for announcement of urgent issues.

The next EDGG events are:

- 7th European Dry Grassland Meeting in Smolenice, Slovakia, 28 May – 1 June 2010
- EDGG research expedition to Central Podilia, Ukraine, 10–25 July 2010
- 8th European Dry Grassland Meeting in Uman', Ukraine, 13–17 June 2011.

If you wish to join EDGG or its subgroups, just send an e-mail to the membership administrator, Jürgen Dengler (see below).

3. Introduction to the Special Feature

The following Special Feature consists of six supra-regionally relevant papers based on oral and poster contributions to the meeting in Halle (Saale) in 2009. Further contributions will follow in a similar Special Feature in the next volume of *Tuexenia*.

All selected contributions deal with dry grasslands in the eastern part of Europe. The papers by DÚBRAVKOVÁ et al. (2010) and JANIŠOVÁ et al. (2010a) focus on the phytosociological classification of grassland communities. The former presents new relevé data from the border area of the Czech Republic, Slovakia, Hungary, and Austria within the framework of a recent supranational classification, whereas the latter tests how well the formalised national classification of grasslands in Slovakia can be applied to a specific region within this country. JANIŠOVÁ et al. (2010b) analyse vegetation-environment relationships with ordination techniques for the same dataset as JANIŠOVÁ et al. (2010a). The other three articles deal with conservation issues. JUSKIEWICZ-SWACZYNA (2010) examines habitat requirements and population characteristics of the Europe-wide rare Natura 2000 species *Pulsatilla patens* in sandy grasslands of Poland. RUSIŃA & KIEHL (2010) present a study on the effect of long-term abandonment on species richness and species composition of calcareous dry grasslands of Latvia. Finally, conservation and management of dry grasslands in Transylvania, Romania, are the topic in JONES et al. (2010).

This Special Feature is the fourth Dry Grassland Special Feature in *Tuexenia*, guest-edited by members of the *Arbeitsgruppe Trockenrasen* and the EDGG, after DENGLER & JANDT

(2005), BÜLTMANN et al. (2006), and DOLNIK et al. (2009); all former articles are freely available at http://www.edgg.org/edgg_publications.htm. In the past, the contributions of these Special Features have been particularly well received. For example, a bibliometric analysis carried with the *Web of Science* (accessed 2010-02-12) showed that among the ten *Tuexenia* articles with the highest citation rate per year in ISI journals, three were from Dry Grassland Special Features (DENGLER 2005, KIEHL & JESCHKE 2005, DENGLER et al. 2006). We hope that you will find the current compilation to be equally interesting and wish you a pleasant reading.

Acknowledgements

First of all, we wish to thank Monika Partzsch and the many helpers from the Institute of Biology/ Geobotany and Botanical Garden for organising such an excellent conference. Further, we thank the *Floristisch-Soziologische Arbeitsgemeinschaft e.V.* and the city of Halle for financial support. Finally, we are grateful to the referees (see list in the editorial of the whole *Tuexenia* volume), who spent a lot of time in ensuring a high scientific and formal quality of the articles, and to Aiko Huckauf, Kiel, for editing the English language usage.

References

- BÜLTMANN, H., HASSE, T., DÖRSING, M., JANDT, U., BECKER, T. & DENGLER, J. (2006): Trockenrasen auf unterschiedlichen Betrachtungsebenen – Zweite Jahrestagung der AG Trockenrasen vom 26.–28.08.05 in Münster. – *Tuexenia* 26: 389–390. Göttingen.
- DENGLER, J. (2005): Zwischen Estland und Portugal – Gemeinsamkeiten und Unterschiede der Phyto-diversitätsmuster europäischer Trockenrasen. – *Tuexenia* 25: 387–405. Göttingen.
- & JANDT, U. (2005): Arbeitsgruppe „Trockenrasen“ gegründet – Bericht von der ersten Jahrestagung unter dem Motto „Trockenrasen als Biodiversitätshotspots“. – *Tuexenia* 25: 375–378. Göttingen.
- , LÖBEL, S. & BOCH, S. (2006): Dry grassland communities of shallow, skeletal soils (*Sedo-Scleranthenea*) in northern Europe. – *Tuexenia* 26: 159–190 + 6 tables. Göttingen.
- DOLNIK, C., DENGLER, J., JANDT, U. & KIEHL, K. (2009): Dry Grasslands in a Changing Environment – Special Feature with contributions from the 5th Dry Grassland Meeting 2008 in Kiel. – *Tuexenia* 29: 331–337. Göttingen.
- DÚBRAVKOVÁ, D., HEGEDŮŠOVÁ, K., JANIŠOVÁ, M., ŠKODOVÁ, I. (2010): New vegetation data of dry grasslands in the Western Carpathians and the northern Pannonian Basin. – *Tuexenia* 30: 357–374 + 1 table. Göttingen.
- JANIŠOVÁ, M., UHLIAROVÁ, E. & RUŽIČKOVÁ, H. (2010a): Expert system-based classification of semi-natural grasslands in submontane and montane regions of central Slovakia. – *Tuexenia* 30: 375–422 + 4 tables. Göttingen.
- , HLÁSNY, T. & TURISOVÁ, I. (2010b): Vegetation-environment relationships in grassland communities of central Slovakia. – *Tuexenia* 30: 423–443. Göttingen.
- JONES, A., AKEROYD, J., BELDEAN, M., TURTUREANU, D. (2010): Characterization and conservation of xeric grasslands in the Târnava Mare area of Transylvania (Romania). – *Tuexenia* 30: 445–456. Göttingen.
- JUŚKIEWICZ-SWACZYNA, B. (2010): Population structure of *Pulsatilla patens* in relation to the habitat quality. – *Tuexenia* 30: 457–466. Göttingen.
- KIEHL, K. & JESCHKE, M. (2005): Erfassung und Bewertung der Phyto-diversität ursprünglicher und neu angelegter Kalkmagerrasen der nördlichen Münchner Schotterebene. – *Tuexenia* 25: 445–461. Göttingen.
- RUSINA, S., KIEHL, K. (2010): Long-term changes in species diversity in abandoned calcareous grasslands in Latvia. – *Tuexenia* 30: 467–486. Göttingen.

Ute Jandt
Geobotany and Botanical Garden, Institute of Biology
Martin-Luther University Halle-Wittenberg
Am Kirchtor 1
06108 Halle (Saale), GERMANY
ute.jandt@botanik.uni-halle.de

Thomas Becker

1. Plant Ecology, Department of Biology, University of Marburg
Karl-von-Frisch-Str. 8
35043 Marburg, GERMANY
2. Ecology and Ecosystem Research
Albrecht-von-Haller-Institut for Plant Sciences, University of Göttingen
Untere Karspüle 2
37073 Göttingen, GERMANY
tbecker@gwdg.de

Jürgen Dengler

Biodiversity, Evolution and Ecology of Plants
Biocentre Klein Flottbek and Botanical Garden, University of Hamburg
Ohnhorststr. 18
22609 Hamburg, GERMANY
dengler@botanik.uni-hamburg.de

Monika Janišová

1. Institute of Botany, Slovak Academy of Sciences
Ďumbierska 1
974 11 Banská Bystrica, SLOVAKIA
monika.janisova@savba.sk
2. Faculty of Natural Sciences, Matej Bel University
Tajovského 40
974 01 Banská Bystrica, SLOVAKIA