

Report from the 14th Eurasian Grassland Conference

4-11 July 2017

in Riga, Latvia and western Lithuania



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The 14th Eurasian Grassland Conference (EGC) “Semi-natural grasslands across borders” was held in Riga, Latvia and Western Lithuania, 4-11th July 2017. In addition to the main programme, there were four optional events: a pre-conference workshop on R program for beginners (led by associated professor Didzis Elferts from the University of Latvia) and three excursions before, during and after the conference.

The conference took place in the newly built Academic Center for Natural Sciences of the University of Latvia (opened in September, 2015) and was attended by 92 participants from 19 countries. Thanks to the EDGG's mother organization IAVS, several participants were supported with travel grants. The Dean prof. Zaiga Krišjāne of the Faculty of Geography and Earth Sciences (hosts of the event), and the Director General of the Nature Conservation Agency Juris Jātnieks welcomed all the participants at the opening ceremony.

The main focus of the EGC was to place emphasis on cases in which grassland ecosystems are shared between man-made and natural geographical, political and ecological borders. Recent research results were presented by linking them to practical management and policy that contribute to sustainability of natural and semi-natural grasslands. These topics were highlighted by two keynote speakers: Aveliina Helm from the University of Tartu, Estonia, and Irina Herzon from the University of Helsinki, Finland.

In her keynote lecture entitled *In Hands of Farmers and Society: Fate of the Semi-Natural Grasslands in the Boreal Region*, Irina Herzon summarised the established impacts of EU policy on semi-natural grasslands. She gave an excellent overview of the most recent policy developments of relevance, including the reform of the Common Agricultural Policy in 2013. Irina presented the extinction vortex model – a self-reinforcing circle leading to extinction of semi-natural

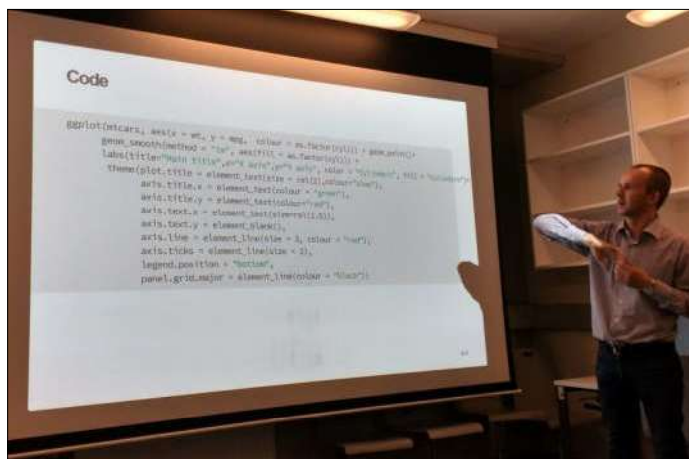
grasslands in the region and highlighted the possible solutions to overcome this process. Conservation policy needs to perceive semi-natural grasslands as socio-ecological systems. Facilitating recoupling semi-natural grassland ecosystems with a new kind of social system is needed to preserve these ecosystems.

Aveliina Helm summarised the findings of her research group at the Institute of Ecology and Earth Sciences (University of Tartu) on the development and maintenance of species diversity of grasslands habitats in Europe, especially focusing on landscape-scale patterns and the existence of time-lags in species response to habitat changes. Aveliina highlighted results of the research from ten separate regions in central and northern Europe to identify regions where an extinction debt has already been paid and where it still remains to be settled. The lecture provided also an excellent overview of the activities carried out during the project “LIFE to Alvars” of EC LIFE+ Nature programme. The project aims to restore 2500 hectares of overgrown calcareous alvar grasslands in Estonia. Aveliina discussed the possible effects of landscape-scale restoration activities in maintaining grassland species diversity and related ecosystem services.

In total, there were 23 oral and 20 poster presentations (Rüsiņa 2017a, http://www.edgg.org/pdf/EGCabstracts/2017/Book_of_Abstracts_14EGC.pdf). We would like to congratulate the winners of the Young Investigator Prizes for outstanding talks or posters by researchers under the age of 35: Philipp Kirschner, Kristina Plenk and Alina Baranova for best oral presentation, and Iwona Dembiczy, Kristina Plenk and Yulia Rozenblit for best poster presentation. Please use this link to download some of the talks and posters: <http://www.edgg.org/pdf/EGC2017/contributions.rar>.



During the conference presentations. Photo: Solvita Rūsiņa.



Didzis Elferts holds a workshop "Introduction to the ggplot2 graphical system". Photo: Didem Ambarlı.



Keynote lecturer Aveliina Helm. Photo: Solvita Rūsiņa.



Keynote lecturer Irina Herzon. Photo: Solvita Rūsiņa.



Poster session. Photo: Solvita Rūsiņa.



Winners of the Young Investigator Prizes. Photo: Solvita Rūsiņa.

Three excursions were organized during the conference. Two excursion guides were prepared for this purpose: one for the post-conference excursion (Rašomavičius et al. 2017, the link: http://www.edgg.org/pdf/EGCabstracts/2017/Post_Conference_Excursion_small.pdf) and another for the pre- and mid-conference excursions composed of a collection of scientific articles (Rūsiņa 2017b, <http://www.edgg.org/pdf/EGCabstracts/2017/MidexcursionEGC2017.pdf>). The latter includes articles related to semi-natural grasslands in Latvia and provides a deeper insight into some of the most diverse Natura 2000 sites in terms of semi-natural grassland flora, vegetation and fauna. The aim of the book was to introduce the readers to the biodiversity, management and restoration of semi-natural grasslands in the Natura 2000 sites included in the conference field excursions. The sites' geographical locations, species composition, semi-natural grassland diversity, landscape history, cultural heritage, and contemporary grassland management solutions were included. The intention was to present not only the basic information and lists of selected plant species, but also to show the results of vegetation monitoring and to evaluate the restoration efficiency. The book highlighted both the best practice and problems related to semi-natural grassland management and restoration.

Participants of the pre-conference excursion visited the Eastern Baltic semi-natural grasslands of the Daugava River

Valley. Plant communities include the classes *Koelerio-Coryneporetea* (*Koelerion glaucae*), *Festuco-Brometea* (*Filipendulo-Helictotrichion*), *Molinio-Arrhenatheretea* (*Calthion*, *Arrhenatherion*, *Cynosurion*), and hygrophilous tall herb communities of the *Convolvuletalia sepium* along the river banks. A specific plant community with *Allium schoenoprasum* was a challenging discussion subject for phytosociologists. Rare plant species included *Centaurea rhenana*, *Helichrysum arenarium*, *Gentiana cruciata*, *Jovibarba globifera*, *Allium schoenoprasum*, etc. We visited a recently restored site which was overgrown by pines. The second day was devoted to the Dviete River Valley (tributary of the Daugava) with extensive floodplain grasslands (*Calthion*, *Magnocaricion*) grazed by semi-wild horses and supporting the rare species *Iris sibirica*, *Gladiolus imbricatus*, *Viola persicifolia* and *Cnidium dubium*.

Participants of the mid-conference excursion visited The Abava River Valley, which is a pearl of calcareous dry grassland diversity in Latvia. Plant communities include the classes *Koelerio-Coryneporetea* (*Armerion elongatae*), *Festuco-Brometea* (*Filipendulo-Helictotrichion*), *Juniperus communis* stands on calcareous grasslands, and calcareous fens (*Caricion davallianae*). Rare plant species include the dry grassland species *Astragalus danicus*, *Carex ornithopoda*, *Gymnadenia conopsea*, *Viola collina* and *Sesleria caerulea*, as well as the fen species *Carex davalliana*, *Schoenus ferrugineus*, *Pinguicula vulgaris*, *Primula farinosa* and *Crepis praemorsa*.



Participants of the mid-conference excursion. Photo: Solvita Rūsiņa.

Pre-conference excursion



*Dry pine forest of the class *Pyrolo-Pinetea sylvestris*. Photo: Solvita Rūsiņa.*



*Grassland community with *Allium schoenophrasum* in the floodplain of the Daugava River. Photo: Solvita Rūsiņa.*



At the Dviete Valley Information Centre "Gulbji". Photo: Solvita Rūsiņa.



Cattle in the Dviete floodplain grasslands. Photo: Solvita Rūsiņa.



Insect night after the first excursion day. Photo: Solvita Rūsiņa.



*A locality with abundant *Dactylorhiza* spp. in the Dienvidsusēja River floodplain. Photo: Solvita Rūsiņa.*

Mid-conference excursion



Gladiolus imbricatus in the Lielupe river floodplain grassland. Photo: Solvita Rūsiņa.



Overcoming the fences. Photo: Solvita Rūsiņa.



An unusual landscape for Latvia – vineyard of the local varieties of grapes. Photo: Solvita Rūsiņa.



Sandy grassland of the alliance *Armerion elongatae* with *Thymus serpyllum*, *Jasione montana*, *Botrychium lunaria*. Photo: Solvita Rūsiņa.



Grassland party. Photo: Solvita Rūsiņa.



Grassland party. Photo: Didem Ambarlı.

Post-conference excursion



Dead pine trees in the area of cormorant colony. Photo: Solvita Rūsiņa.



Enjoying the waters of the Baltic Sea. Photo: Solvita Rūsiņa.



Crossing the Curonian Lagoon. Photo: Solvita Rūsiņa.



The oldest water-pumping station in the Uostadvaris. Photo: Solvita Rūsiņa.



Inland dune in the Nemunas Delta. Photo: Solvita Rūsiņa.



Lithuanian-Russian Federation border. Photo: Solvita Rūsiņa.

The grassland party of the EDGG took place in Šlokenbeka manor ensemble – a rare sample of a medieval fortified manor in the Baltic States that has survived to the present day.

The Post-conference excursion took place on the Curonian Spit and the Nemunas River Valley in western Lithuania. Participants observed the diversity of the coastal sand vegetation (*Ammophiletea*, *Koelerio-Coryneporetea*) including sandy beaches, coastal foredune ridges, sea sand plain/palves, and the Great Dune Ridge, with shifting and fixed dunes and populations of *Linaria loeselli* – an endemic species to the eastern Baltic coast. The Nemunas – the largest Lithuanian river floodplains - offered the diversity of the floodplain vegetation including swamp and fen vegetation (*Phragmito-Magnocaricetea*), managed grasslands of different floodplain ecological belts (*Molinio-Arrhenatheretea*, *Festuco-Brometea*) and dry grasslands of riverine dunes (*Koelerio-Coryneporetea*).

We, the organizers, wish to thank everyone who helped us with suggestions and advice, and all the participants who were willing to share their ideas and to attend the conference. We gratefully acknowledge the contributions of several sponsors who made the organization of this conference possible. Finally, we thank the University of Latvia, Latvian Botanical Society, and the Nature Research Centre, Lithuania for hosting this event.

References

- Rašomavičius, V., Dikšaitė, L., Sendžikaitė, J., Matulevičiūtė, D., Uogintas, D., Petrulaitis, L. & Augutis, D. 2017. *Semi-natural grasslands across borders. Post-conference excursion 9–11 July 2017, Western Lithuania*. Vilnius, LT. http://www.edgg.org/pdf/EGCabstracts/2017/Post_Conference_Excursion_small.pdf
- Rūsiņa S. (ed.) 2017a. *14th Eurasian Grassland Conference Semi-natural Grasslands Across Borders. Book of Abstracts. 4-11 July 2017, Riga (Latvia) and Western Lithuania*. University of Latvia, Riga, LV. http://www.edgg.org/pdf/EGCabstracts/2017/Book_of_Abstracts_14EGC.pdf
- Rūsiņa, S. (ed.) 2017b. *Outstanding semi-natural grassland sites in Latvia: biodiversity, management, restoration*. University of Latvia, Riga, LV. <http://www.edgg.org/pdf/EGCabstracts/2017/MidexcursionEGC2017.pdf>

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Participants of the post-conference excursion. Photo: Solvita Rūsiņa.

Reports from IAVS grantees

Valentina Borodulina, Moscow, Russia

My name is Valentina Borodulina and now I am a PhD student of Lomonosov Moscow State University (Biological Faculty; Department of Geobotany). The conference in Riga was my second EDGG conference (my first one was in Sighisoara, Romania). I am grateful to EDGG for the opportunity to participate in such conferences. It is a great experience for me: the experience of communication and the experience in preparing and presenting my own work to foreign colleagues. During the conference in Riga, I was able to communicate with scientists from other countries and to find common topics for discussion. The conference EGC 2017 seemed to be the perfect place to present our new results on classification of herbaceous vegetation in NW Russia where semi-natural grasslands play an important role. Herbaceous vegetation of NW Russia is poorly studied that is why it is very tempting for us to communicate with scientists from neighboring countries to compare our classification schemes. Besides, it was interesting to find comparison in ecological features of syntaxa revealed in NW Russia with the similar in Latvia. During the conference, I was able to get feedback on my study and recommendations for further researches. In addition, I learnt more about research on abandoned grasslands in other countries and exchanged policies on management, conservation and restoration with foreign scientists.

Another point was that I knew more from other young investigators about different study programs and the chance to exchange experience of using modern methods in dealing with data with other scientists.

In addition, during the conference we had wonderful excursions, where we saw a variety of Latvian grasslands. Unfortunately, I could not attend all the excursions, but those, which I have visited, were great. I want to thank the organizers for the wonderful conference!



***Gymnadenia conopsea* from the mid-conference excursion. Photo: Valentina Borodulina.**



***Gladiolus imbricatus* from the mid-conference excursion. Photo: Anikó Csecserits.**

Anikó Csecserits, Vácrátót, Hungary

First and foremost I would like to express my thanks for the IAVS and EDGG for the grant, which made me possible to participate on the 14th EGC in Riga, Latvia. It was a great experience for me! I looked forward very much for the conference of EDGG in Riga, as I know well, that EDGG conference used to be interesting, well-organized and beside still very familiar and friendly. And I was never before in any Baltic state.

There were many interesting presentations and posters about the present state and use of grasslands, about the problems of regulations and conservations, from which I liked very much those dealing with the phytogeography of grasslands. Moreover it was interesting to see, how different definitions exist for the "semi-natural", "permanent" or "extensive" grasslands. I think, there should be made some unification regarding these terms, as they occur in the regulations of different countries. In addition it was interesting to see how important is everywhere the local adaptation and tradition in the management of grasslands. I think, we should take care, document and keep it for the future. The other important and nice part of the EDGG conference are always the social events: field trips and grassland parties. In this case everything was excellent (there were even a beautiful and huge rainbow above the Daugava river- who organize this :)? I liked the experience during the field trips, how the species common in southern grasslands became rare or even endangered in the North e.g. *Scabiosa ochroleuca* or *Koeleria cristata*. The Latvian and Lithuanian landscape are beautiful and still well preserved. It was impressive, how many people are deeply involved in nature. From the many places we visited during the pre-, mid- and post-conference tours, I enjoyed the best the sea-shore at Curonian Spit. There was only one problem, that we had to leave it.

Thank you again very much! I hope, I could go back in the Baltic once again!

Nina Polchaninova, Kharkiv, Ukraine

I am very thankful to the IAVS grant committee for the opportunity to participate in the 14th EDGG conference. Riga met us with heavy rain, but then the principle organizers arranged somehow for good weather, thus we could enjoy sunny days during the mid- and post conference excursions. I was glad to see familiar faces and meet new colleagues. Zoologists are still in the minority at our meetings, but I really appreciate my communications with the botanists and other specialists because only our joint efforts will be successful in grassland conservation.

From the presentations, I learned a lot on the changes of traditional land use and their impact on grassland ecosystems in various European countries. We are facing similar problems, so I can apply the gained knowledge when developing management plans for the local conservation areas. Mid- and post conference excursions shown us a variety of grasslands in Latvia and Lithuania. Most of all I was stuck by the sand dunes on Curonian spit. They were so different from all the sandy habitats I had already seen and studied!

The conference was perfectly organized. For the participants, all went in one go, but I do understand that was the result of the hard work of the conference team.

Kateryna Norenko, Kyiv, Ukraine

The conference itself was very useful for me, its topic "Semi natural grasslands across borders" fully reflects my research interest, as I'm studying ecology and biology of an invasive species in semi-natural grasslands and wooded grasslands and its impact on vegetation.

In the sessions, the presentations of the most interest were those, which are related to ecosystem restoration, as I'm convinced that having applied side of science is essential to combat pressure of unfavorable factors that are so usual in modern conditions. I like such applied direction of meetings and I'd love to have more like this in the future. I liked how the poster session was organized, everybody had time to present his/her poster, and that was definitely better than "doing circles" and wondering from one poster to another without organized procedure. I didn't participate in the post-conference excursion, but the mid-conference excursion was great.

Attached you can also find some pictures.

Many thanks for the organization, it was a big pleasure to participate!



Mid-conference excursion and participants from Ukraine. Photo: Nina Polchaninova.



Epipactis palustris from the mid-conference excursion. Photo: Kateryna Norenko.

EDGG General Assembly 2017

The General Assembly (GA) of the EDGG was held in Riga, Latvia, on 8th July, at the end of the 14th Eurasian Grassland Conference (EGC). This GA was not a Qualified GA, as it did not fulfil the criteria of being attended by at least 40 members from at least 10 different countries, with no country being represented by more than a third of those present (EDGG bylaw §5.4). This meant that we could present information and hold discussion but not make binding decisions. The Executive committee was represented by Didem Ambarlı, Monika Janišová, Anna Kuzemko, Péter Török, Mike Vrahnakis and Stephen Venn.

The Secretary-General opened the GA at 5:00 p.m. The first topic was the results of the 2017 EC election, in which there were eight candidates, of which seven were elected. Péter Török presented an overview of the EDGG finances, which showed a balance of €1159. Stephen Venn presented an overview of the membership development prepared by Idoia Biurrun, which showed that we have 1231 members from 67 countries as of May 2017. The greatest numbers are from Germany (278) and Greece (133). The report on the Eurasian Grassland Conferences (EGCs) was provided by Didem Ambarlı. A presentation was given by Sabina Burrascano on the proposed EGC 15, to be held on 5-8th June 2018 in Sulmona, in Central Italy and organized by Sapienza University of Rome, Italian Botanical Society and National Park Majella. A comprehensive report on the Field Workshops was provided by Jürgen Dengler and Idoia Biurrun. This covered previous workshops, the 2017 FW from Central Italy and the proposed 11th FW for summer 2018 in the Inner Valleys of Austria, which was presented in more detail by Martin Magnes. There is also a proposal for a FW in Armenia in 2019, to be organized by Alla Aleksanyan. Péter Török presented the status of EDGG publications, including material provided by Jürgen Dengler.

In addition to the various SIs and SFs, this included the Global grassland management book, edited by V. Squires, for which Jürgen is editing a section on Palaearctic grasslands, to which several EDGG members have contributed. Didem Ambarlı presented the status of the EDGG homepage, which is maintained and updated, though we are initiating a project to reorganize it and will apply to the IAVS to support this project. Anna Kuzemko presented a review of the EDGG Bulletin. We produce four editions of the bulletin p.a. The format has changed somewhat during the previous year, and Anna has taken the role of Editor-in-Chief from Monika Janišová. The EDGG also has a Facebook group <https://www.facebook.com/groups/938367279561202/> that currently has 155 followers. The Policy Committee report, given by Mike Vrahnakis, informed us that 363 people have now signed the Smolenice Declaration of 2010. Other policy initiatives have been appeals to the Ukrainian government about afforestation of steppe sites in 2011 and disturbance to the Tarutyinski protected area in 2016. Monika Janišová provided a report of our current collaboration with IAVS, which includes support for travel grants to attend the EGC. The IAVS will hold its 60th annual symposium on the topic of “Natural Ecosystems as Benchmarks for Vegetation Science” at Montana State University on 23rd-27th July 2018. There were no additional matters raised for discussion at the GA. At the end of the meeting, the EC expressed its gratitude to the organizers of the conference and awarded the prizes for the best young scientist poster and oral presentations.

Stephen Venn, Secretary-General, Helsinki, Finland,
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Participants of the EGC 2017 post-conference excursion, grey dunes at the Curonian Spit, Western Lithuania. Photo: A. Kuzemko.