

EGC 2017

14th Eurasian Grassland Conference
in Riga, Latvia and Western Lithuania, 4-11 July 2017

Semi-natural grasslands across borders

Third Call



Third Call This is the 14th annual conference of the EDGG, the organization which aims to promote exchange and collaboration between those interested in all aspects of semi-natural and natural grassland research and conservation across the Palaearctic realm. The conference is intended to present the latest research, and to link this to practical management and policy contributing to the sustainability of semi-natural and natural grasslands. Emphasis will be placed on cases in which grassland ecosystems are shared between man-made and natural geographical borders. The conference will include the following sessions:

- Ecological, biogeographical and phytosociological boundaries
- Grasslands on borders: environmental and agricultural policies
- Overcoming the marginality of semi-natural grasslands in agricultural landscapes
- Networking and best practices for grassland conservation

All other topics related to semi-natural and 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. In addition to two session days, there will be four optional events: a preconference workshop on R program for beginners and three excursions before, during and after the conference.

We invite you to register and submit abstracts for talks and poster via the website www.edgg.org/conference_2017.html.

Registration deadline **Extended to 10 May 2017**

Important dates

Early Bird registration deadline **extended to 30 April**

Late registration deadline **extended to 10 May**

Abstract submission deadline – **extended to 10 May** (travel grant applicants to 30 April)

Travel grant application deadline **extended to 30 April**

Information about travel grants – 15 May

Acceptance of abstracts

and type of presentation – 20 May

Preliminary Programme

4-5 July	Pre-conference excursion (optional, max 40 participants)
4 July 08:00	Departure from Riga to Eastern Latvia (The Daugava River Valley)
5 July 21:00	Return to Riga
5 July	Technical workshops (optional, max 17 participants, min 5 participants) University of Latvia, 1 Jelgavas Street, Riga (participation only in the first day of pre-conference excursion and early return to Riga on 5 th July will be possible)
09:00-13:00	Introduction to R for statistical analysis
14:00-18:00	Introduction to ggplot2 graphical system (program R)
6 July	Talks and Posters – Sessions I and II (University of Latvia, 1 Jelgavas Street, Riga)
08:30-09:30	Registration
09:30	Opening ceremony
09:45	Invited speaker (keynote lecture)
10:45-18:30	Talks and posters
7 July	Mid-conference excursion
08:00	Departure from Riga to Western Latvia (Sabile town, The Abava River Valley) - Grassland party in Sabile
22:00	Return to Riga
8 July	Talks and posters – Sessions III and IV (University of Latvia, 1 Jelgavas Street, Riga)
09:00-10:00	Invited speaker (keynote lecture)
10:00-18:30	Talks and posters
19:00-21:00	EDGG General Assembly
9-11 July	Post-conference excursion (optional, max 40 participants)
9 July 08:00	Departure from Riga to Lithuania (Curonian Spit)
10 July	Excursion at Nemunas Delta
11 July 08:00	Departure to Riga (arrival at the Riga Airport at approx. 12:30)



Fig 1. *Koelerion glaucae* vegetation on the terrace slope of the Daugava River valley. Photo: S.Rusina.

Fees and Registration

	Early Bird registration – until 30 April 2017	Late registration – from 1st May 2017
Student IAVS members *	110 €	140 €
Students (including PhD students) who are not IAVS members *	120 €	150 €
Other IAVS members *	140 €	170 €
Non-students and non-IAVS members	150 €	180 €

* Please submit evidence of IAVS membership and/or your enrolment at a University by emailing confirmation of matricula-

- Pre-conference field trip to the Daugava River Valley, including accommodation, lunch, dinner and refreshments—**110 €**
- Post-conference field trip to the Curonian Spit and the Nemunas Delta in Lithuania including accommodation, lunch, dinner and refreshments—**180 €**.

Cancellation and repayment:

- 100% - for cancellations until 1st of May,
- 80% - for cancellations until 1st of June,
- no refund for cancellations after 1st of June.
- Unfortunately we must charge 25 Euro in case of refund to cover the bank commission fee.

Payments should be made by bank transfer by **20 May** at the latest for early bird registration and by **10 June** for late registration. You will be provided with the bank details during the registration process and on your online invoice (after successful login).

We are not able to accept payment of the registration fee at the conference: this must be paid in advance by bank transfer.

Financial support

Thanks to the EDGG's mother organization IAVS, we can support a number of participants with travel grants. Travel grants will be awarded according to the IAVS criteria, based on income level and country of origin. They will preferentially be given to early-career and other financially constrained scientists. The support usually covers only part of the participant's costs, according to the number of successful applications. To qualify for a travel grant, active participation at the conference (oral presentation or poster) is required. After the conference, grantees are asked to provide a short report of the event as well as some photos that can be used in the EDGG

Basic registration fee provides full participation in the conference including registration and conference materials, admission to the conference, lunch and coffee breaks on Thursday, 6th July, and Saturday 8th July.

The basic registration fee does NOT include the following, which can be booked separately:

- Participation in the workshop Introduction to R for statistical analysis (half day, limited to 17 people) — **30 €**
- Participation in the workshop Introduction to ggplot2 graphical system (program R) (half day, limited to 17 people) — **30 €**
- Mid-conference excursion to the Abava River Valley incl. Grassland Party—**50 €**

bulletins. Travel grants can be applied for during registration until **30 April**, including a short motivation letter. Applicants for IAVS travel grants must be IAVS members for the year 2017. Information about travel grants will be given at the latest by **15 May**.

Field excursions

The Eastern Baltics lie in the mixed broad-leaved and coniferous forest zone and are divided between two phytogeographical provinces: the western regions belonging to the Central European, and the eastern to East European province. The Baltic botanists L. Laasimer and A. Rasins have argued for the establishment of an independent Baltic province. A substantial oceanity belt crosses the eastern coast of the Baltic Sea, and continentality rises rather quickly to the east in this area. Three excursions will be offered to the participants (Fig. 1.).

Practical advice

In Latvia, July is the warmest month of the year. The average air temperature is around +19°C, with exceptional temperatures as low as 7°C and as high as 32°C having been recorded in previous years. The weather can be quite variable during the day from heavy rain to sunshine. The average amount of rain recorded during July in Latvia is 10 mm and you would typically have 16 rainy days. Rainwear is recommended for the excursions. Please take care of your health insurance during the conference. Be aware that ticks occur in areas we will visit. There is a risk of tick-born encephalitis and Lyme disease throughout the country. Travellers should avoid tick bites by wearing long sleeves and pants, preferably tucked-in. Use insect repellent on exposed skin, socks and outer clothing. Travellers should check their skin regularly for ticks and remove them as early as possible. The organizers will bring tick removers. There are also tick-born encephalitis vaccines. Consult a physician at least five months in advance before traveling, because the usual schedule is to have three injections of vaccine. Please note that these vaccines do not protect against all tick-born infections.

Pre-conference excursion (optional, max 40 participants)

We will see 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 hygrophylous tall herb communities of the Galio-Urticetea along the river banks. Rare plant species include *Centaurea rhena*, *Dianthus arenarius* subsp. *borussicus*, *Helichrysum arenarium*, *Gentiana cruciata*, *Jovibarba globifera* *Allium schoenoprasum*

etc. We will visit several sites including a recently restored site which was overgrown by pines. The second day will be devoted to the Dviete River Valley (tributary of the Daugava) with extensive floodplain grasslands (*Calthion*, *Magnocari-cion*) grazed by semi-wild horses and supporting the rare species *Iris sibirica*, *Gladiolus imbricatus*, *Viola persicifolia*, and *Cnidium dubium*. The area near Daugavpils town is also known as an important cultural center for the Orthodox Old-Believers of Eastern Latvia. Old-believers separated from the official Russian Orthodox Church after 1666, as a protest against church reforms introduced by Patriarch Nikon of Moscow in the mid-17th century. Participants will have the opportunity to visit the Naujene local history museum's outdoor branch – Old-believer's house. Accommodation will be at a camping site situated near the Daugava River in a dry grassland area in cottages, each with four beds. Basic common shower and toilet facilities are available (note, that no private bathrooms are available). For those who would like to participate also in one or both of the R program workshops, participation only in the first day of the excursion will be possible, with an early return to Riga on 5th July.

Mid conference excursion

The Abava River Valley is a pearl of dry calcareous grassland diversity in Latvia. Plant communities include the classes *Koelerio-Coryneporetea* (*Plantagini-Festucion*), *Festuco-Brometea* (*Filipendulo-Helictotrichion*), and *Juniperus communis* stands on calcareous grasslands (Fig. 7.–8.). We will also see broad-leaved forests (*Quercus-Fagetea*) and calcareous



Fig.2. Excursion sites.



Fig.3. Restoration of dry semi-natural grassland near Old-Believers' village "Slutiški". Photo: S. Rusina.



Fig.4. Xerophytic grassland with *Koeleria glauca* and high lichen diversity. Photo: S. Rusina.



Fig.5. Semi-dry *Filipendulo-Helictotrichion* grasslands with *Stachys*



Fig.6. Old-Believers' village "Slutiški". Photo: S. Rusina.



Fig.7 and 8. Dry grasslands near the Old-Believers' village "Slutiški". Photo: S. Rusina.



Fig.9 and 10. The Dviete flood-plain grasslands. Photo: S. Rusina.



Fig.9. Camping site. Photos: www.piedaugavas.lv



Fig.10-12. Camping site. Photos: www.piedaugavas.lv

fens (*Caricion davallianae*). Rare plant species include the dry grassland species *Astragalus danicus*, *Carex ornithopoda*, *Gymnadenia conopsea*, *Viola collina*, *Sesleria caerulea*, and the fen species *Carex davalliana*, *Schoenus ferrugineus*, *Pinguicula vulgaris*, *Primula farinosa*, *Crepis praemorsa*.

The grassland party of the EDGG will take place in the traditional town of Sabile, late in the evening.

Post-conference excursion - Lithuania (optional, max 40 participants)

Two sites will be visited in Lithuania – the Curonian Spit and the Nemunas River Valley.

For those who would like to participate in the post-conference excursion, personal data will be required after registration, because a visit to the EU borderland with the Russian Federation is included. While staying in the border-



Fig.13. *Juniperus communis* stand in semi-dry grassland of *Filipendulo-Helictotrichion*. Photo: S. Rusina.



Fig.14. The Abava River Valley. Photo: S. Rusina.



Fig.15. Complex of shifting and grey dunes. Photo: V.Rašomavičius.



Fig.16. The Curonian Spit. Photo: <http://whc.unesco.org/en/list/994>

land, participants should have a valid passport and visa (if applicable) with them.

The Curonian Spit is a unique and vulnerable sandy and wooded cultural landscape on a coastal spit, which features small Curonian lagoon settlements. The sand dune peninsula, 98 km long and 0.4-4 km wide, shared by Lithuania and the Russian Federation, is included in the UNESCO World Heritage List (2000). The diversity of the coastal sand vegetation (*Ammophiletea*, *Koelerio-Corynephoretea*) include sandy beaches, coastal foredune ridge, sea sand plain/palve, and the Great Dune Ridge, with shifting and fixed dunes and populations of *Linaria loeselli* – an endemic species to the eastern Baltic coast.

Nemunas is the largest Lithuanian river. It is noted for spectacular floods during the spring thaw. The flooded area on the right bank can stretch for up to 300 km². Meadows and pastures, annually fertilized with alluvium, along with a variety of wetlands, comprise the dominant vegetation type in the region. The delta is internationally important as a resting and feeding place for migratory birds, also as a habitat of the

Aquatic warbler (*Acrocephalus paludicola*) – a globally endangered bird species. The diversity of the floodplain vegetation includes swamp and fen vegetation (*Phragmito-Magnocaricetea*), managed grasslands of different floodplain ecological belts (*Molinio-Arrhenatheretea*, *Festuco-Brometea*) and dry grasslands of riverine dunes (*Koelerio-Corynephoretea*).

Keynote Lectures

14th EGC is pleased to welcome two keynote speakers.

In Hands of Farmers and Society: Fate of the Semi-Natural Grasslands in the Boreal Region

Dr. Irina Herzon, University of Helsinki

The plight of semi-natural grasslands in the EU is well documented. In the boreal regions, these habitat types are particularly vulnerable to rapid overgrowing and thus their continuous survival is entirely in the hands of land managers. Markets, policy, wider societal changes and culture have a decisive role in the use of biological resources within agricultural landscapes. Here, I summarize the established impacts



Fig.17. Flooded area of the Nemunas Delta. Photo: V.Rašomavičius.



Fig.18. Wetland of the Nemunas Delta. Photo: V.Rašomavičius.

of EU policy on semi-natural grasslands. I will proceed with an overview of the most recent policy developments of relevance, including the reform of the Common Agricultural Policy in 2013 with its “greening” elements, and discuss if we can expect it to contribute to conservation. We will then look at the evidence behind the pros and cons of the key strategies for grassland conservation: the preservation strategy, highlighting public values of the grasslands outside their production value, and transformation strategy that aims at strengthening and rediscovering the economic potential of semi-natural grasslands. I will illustrate these with some implementation examples from the boreal region. Finally, I will outline tentative directions for future research in grassland conservation and policy.



About the Keynote Speaker

Irina Herzon is an adjunct professor at the Department of Agricultural Sciences at the University of Helsinki. Her research focus is in applied ecology, with an emphasis on conservation in farmland as a multidisciplinary issue. Her aspiration as a teacher is to make conservation of biological resources part of the mainstream agricultural education. Outside academia, Dr Herzon volunteers as an advisor to BirdLife Finland on agriculture and has

been involved in developing and evaluating Finnish agro-environmental policy. She serves on the Board of the European Forum on Nature Conservation and Pastoralism. Since 2011, her family co-owns a large organic farm, which is the largest manager of coastal meadows in the region and is active in awareness raising.

Semi-natural grasslands in Estonia: importance, ecology and conservation efforts

Dr. Aveliina Helm, University of Tartu

Semi-natural grasslands are the most diverse ecosystems in Europe, harbouring a large number of plant species and associated animal species. Grassland biodiversity is linked with the provision of a number of ecosystem services in agricultural landscapes, including pollination and biological pest control. During the past century, these unique, highly-valued habitats have undergone remarkable changes in environmental conditions and their landscape-scale spatial configuration throughout Europe. In Estonia, semi-natural grasslands have been lost from 90% of their historical area. Decreased habitat area and reduced connectivity between the remaining grassland patches, have substantial influence on the persistence of grassland-specific biodiversity and related ecosystem services. In my talk, I will provide an overview of the multi-trophic diversity of dry calcareous grassland ecosystems in Estonia and analyse the effects of habitat loss and isolation on the diversity and composition of several species groups, including agriculturally important pollinators, predators and parasitoid insects. I'll discuss the delayed responses of species diversity to changes in habitat spatial configuration, explore the susceptibility of species with different life-history traits and habitat specificity to landscape changes, and analyse the effect of dispersal on maintaining and restoring grassland biodiversity.

In Estonia, mitigation measures against grassland loss include subsidized habitat management schemes and support for habitat restoration. In 2014, an ambitious grassland restoration project “LIFE to Alvars” was launched in Estonia, with the help of EC LIFE+ Nature programme and the Estonian state. The project aims to restore 2500 hectares of overgrown calcareous alvar grasslands by 2019. I'll provide an overview of the activities carried out during the project and discuss the possible effects of landscape-scale restoration activities in

maintaining the grassland species diversity and related ecosystem services.

About the Keynote Speaker

Dr. Aveliina Helm is a senior researcher at the Institute of Ecology and Earth Sciences, University of Tartu, Estonia. She has studied the development and maintenance of the species diversity of dry calcareous grasslands habitats in Europe, especially focusing on landscape-scale patterns and the existence of time-lags in species responses to habitat changes. Aveliina Helm is a scientific advisor to the large-scale grassland restoration project "LIFE to Alvars", through which 2500 hectares of dry calcareous alvar grasslands will be restored in Estonia by 2019.



Workshops

Introduction to R for statistical analysis (5 July, 9:00-13:00) (max 17 participants, min 5 participants)

The workshop is devoted to scientists and practitioners with no or minimal knowledge of the program (language) R, who want to learn how to use the program and how to do basic statistical analyses in R. The workshop will consist of an introduction to R and IDE program RStudio, then codes for basic statistical tests will be shown (sample comparisons, correlation and regression analysis, ANOVA, glm). Participants will be given practical tasks to check progress during the workshop.

Introduction to the ggplot2 graphical system (program R) (5 July, 14:00-18:00) (max 17 participants, min 5 participants)

ggplot2 is one of the graphical systems available in the program R for making high quality graphics. ggplot2 graphics are made layer by layer, providing users with possibilities to get different combinations of data representations and to customize the final look. Nowadays there are lot of implementations of the ggplot2 system for representation of the results of different fields/analyses, for example, clustering, ordination, etc. The workshop will give an introduction to ggplot2 graphics – howto build your first plot, how to modify the data representation and how to modify the final look of your plot to get the desired results. Participants should have some prior knowledge of R and advisable also IDE program RStudio.

About the Tutor

Didzis Elferts obtained his PhD in ecology (dendroecology) from the University of Latvia and he is an associate professor of biometry and head of the Botany and Ecology Department at the Faculty of Biology of the University of Latvia. His main scientific interests are dendroclimatology and dendroecology, and he is co-author of many scientific publications in different fields, involved as author responsible for data analysis and graphical representation. Didzis Elferts is a passionate user of the program R with almost 10 years' experience.



Venue and Accommodation

Conference Venue

The conference will be held at the Academic Centre for Natural Sciences of the University of Latvia, situated in the heart of Riga - the capital of Latvia, with about 700 000 inhabitants. A heritage of 800 year old Gothic churches, built by the founders of Riga, medieval buildings in the Old Town, exquisite Art Nouveau, as well as wooden buildings, make Riga a true pearl of architecture.

Accommodation

Accommodation should be booked independently by each participant (except for student dormitories, see next section). The hotels in Riga are expected to be very busy over the con-

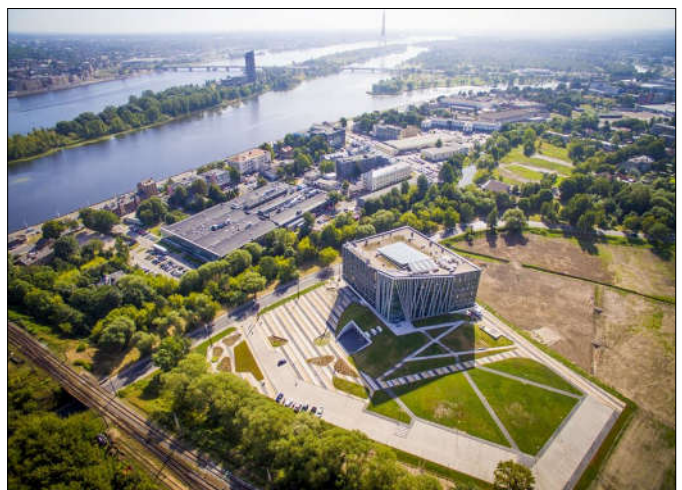


Fig.19. Conference venue in Riga. Photo: Toms Grinbergs, Media and Marketing Centre of the University of Latvia
http://foto.lu.lv/arhiivs/2016/i_sep/



Fig.20-23. Conference venue in Riga. Photo: Toms Grīnbergs, Media and Marketing Centre of the University of Latvia
http://foto.lu.lv/arhiivs/2016/i_sep/



Fig.24. Location of the conference venue in Riga.

ference dates. The organizers therefore **strongly** recommend that you make your hotel reservation as early as possible to secure your room.

<http://www.latvia.travel/en/page/accommodation>

Accommodation is not included in the basic registration fee, but we have reserved a limited number of rooms at student dormitories for economy travelers. This option can be selected during the registration process and added to your invoice. Student dormitories offer triple rooms for 7 EUR/person per night. Basic kitchen equipment (stove, micro-waves, fridges) and dining-room on each floor's household area (no pans, pots, dishes included) is available, shared shower/WC for all tenants of each floor, NO breakfast included. Direct public transport connects dormitories and the conference venue. This option is possible only for the whole stay period (payment should be done also for nights, so you will not stay in a dormitory (e.g. pre-conference excursion).

Traveling

Riga is well connected both by plane <http://www.riga-airport.com/en> and busses <http://www.autoosta.lv/?lang=en>. Traveling from Riga's airport to the city center takes 30 mins by public transport <https://www.rigassatiksme.lv/en/>.

Visas

In case you need an invitation, please contact Lauma Gustina (lauma.gustina@lu.lv). For those who would like to participate in the post-conference excursion, personal data will be asked by organizers, because a visit to the EU borderland with the Russian Federation is included in the itinerary.

Useful information

Travelling to Latvia, visas, customs procedures: <http://www.pmlp.gov.lv/en/>; <http://www.latvia.travel/en/article/travelling-latvia-visas-customs-procedures>

Tourist information: <http://www.latvia.travel/en/article/discover-latvia>; <http://www.latvia.travel/en/city/riga-8>

Organizers

- The Eurasian Dry Grassland Group (EDGG) (www.edgg.org) 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 working group of the International Association for Vegetation Science (IAVS, www.iavs.org). Its basic aims are to compile and to distribute information on research in and conservation of natural and semi-natural grasslands beyond national borders, and to stimulate active cooperation between scientists, practitioners and all who work with or are interested in grasslands.

- The University of Latvia (<http://www.lu.lv/eng/>) has 15,000 students, 13 faculties and more than 20 research institutes. The University offers more than 130 state-accredited academic and professional study programmes. Research is conducted in over 50 scientific fields, which represent four main areas of inquiry: the humanities, sciences, social sciences and education sciences. The University pays great attention to the development of international collaboration. At present the University of Latvia has signed more than 500 agreements with 326 institutions in 31 European countries within the ERASMUS programme.
- The Latvian Botanical society's (LBS) roots go back as far as 1952, but as an NGO, it was officially registered in 1994. The LBS unites most active botanists from different generations and nowadays the society has 130 members. The LBS have taken an active part in the organization of field trips - excursions of the Baltic botanists that took place in Lithuania, Latvia and Estonia. Annually, the LBS arranges excursions and meetings where the most important botanical findings are presented. Every year the LBS votes for the *plant of the year*, which is one of nature's symbols, for which botanists would like to attract public attention to the protection status and/or distribution. It could be a very rare plant but sometimes a common species with interesting ecology. The LBS also implements plant species monitoring, especially for species of EU importance.
- The Nature Research Centre, Lithuania (NRC), was established in 2009 by merging the Institute of Botany, and the Institute of Ecology of Vilnius University and the Institute of Geology and Geography. The NRC pursues and coordinates long-term scientific research in various fields of biotic and abiotic nature and ensures the competence of Lithuania on the international stage. The NRC takes an active role in the development and implementation of a conceptual framework for the protection of the living environment and its sustainable development. (http://www.gamtostyrimai.lt/en/about_us/information_about_the_research_centre)

Supporters

- International Association for Vegetation Science (IAVS, www.iavs.org): its original precursor was the International Phytosociological Society (IPS), which was founded in 1939. IAVS is a worldwide union of scientists and others interested in theoretical and practical studies of all aspects of vegetation. The main goals of the IAVS are to facilitate personal contacts among vegetation scientists all over the world and to promote research in all aspects of vegetation science and its applications.
- John Wiley & Sons, Inc. (<http://eu.wiley.com/WileyCDA/>) was founded in 1807. It aspires to be a valued and respected provider of products and services that make im-

portant contributions to advances in knowledge and understanding, a role that is essential to progress in a healthy and prosperous society. Wiley's mission is to provide must-have content and services to professionals, scientists, educators, students, lifelong learners, and consumers worldwide.

- Floristisch-soziologische Arbeitsgemeinschaft (FlorSoz) (<http://www.tuexenia.de/>) is a German speaking association of specialists and enthusiasts interested in the floristic structure of spontaneous vegetation, phytosociology and vegetation ecology. The association is a non-profit organization and will be pleased to welcome everyone who is interested.

Contacts

Contact persons

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Local Organising Committee

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Registration, invitations etc.

Lauma Gustiņa / University of Latvia, lauma.gustina@lu.lv

Pre-conference excursion

Solvita Rūsiņa / University of Latvia, coordinator, rusina@lu.lv

Post-conference excursion

Valerijus Rašomavičius / Nature Research Centre, Lithuania, valerijus.rasomavicius@botanika.lt



Fig 25. Dry calcareous grassland (habitat type 6210) in the Abava River Valley. Photo: S.Rusina.