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# PALAEARCTIC GRASSLANDS

Journal of the Eurasian Dry Grassland Group

## *Table of Contents*



**Palaearctic Grasslands**
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***Palaearctic Grasslands***, formerly published under the names *Bulletin of the European Dry Grassland Group* (Issues 1–26) and *Bulletin of the Eurasian Dry Grassland Group* (Issues 27–36), is the journal of the Eurasian Dry Grassland Group (EDGG). It appears in three issues per year. *Palaearctic Grasslands* publishes news and announcements of EDGG, its projects, related organisations and its members. It also serves as an outlet for scientific articles and photo contributions.

***Palaearctic Grasslands*** is freely available at https://edgg.org/publications/pg-journal and new issues are announced to all EDGG members. 

Submissions following the Author Guidelines are welcome by the deadlines of the three issues: 31 January, 30 April and 31 October.

**Scientific articles** (Research Articles, Reviews, Forum Articles, Scientific Reports) should be submitted to the Receiving Editor Jürgen Dengler (dr.juergen.dengler@gmail.com) and will then undergo peer review, so publication in a certain issue cannot be guaranteed.

**All other text contributions** (News, Announcements, Short Contributions, Book Reviews, Glimpses of a Grassland, Forthcoming Events) should be submitted to Idoia Biurrun (idoia.biurrun@ehu.es).

**Photo contributions** (photos for general illustrative purposes with captions; Photo Stories) and contributions to the section **"Recent Publications of our Members"** should be submitted to Rocco Labadessa (rocco.labadessa@gmail.com).

**Contributions to Photo Competitions** should be submitted to Edy Fantinato (edy.fantinato@unive.it).

***Palaearctic Grasslands*** is published by EDGG c/o Prof. Dr. Jürgen Dengler, Plant Ecology, BayCEER, University of Bayreuth, Universitätsstr. 30, 85447 Bayreuth, Germany.

***Palaearctic Grasslands*** on Google Scholar, vegsciblog.org

## *Editorial Board*



**On front cover page: *Lotus tetragonolobus* in Sicily, Italy. Photo: J. Dengler.**

# *Editorial*

Dear readers,

As the winter season is nearing its end, Palaearctic grasslands are looking forward to showing the early signals of spring.

With the first issue of the year, we are particularly excited to unveil upcoming activities and initiatives, such as the full announcements of the two EDGG Field Workshops 2025, in the Western Alps and the Baltic region, and the 20th Eurasian Grassland Conference in Oulu, Finland. You will find interesting findings from our Field Workshop 2024 in the south-western inner-alpine valleys in France and Italy, including a Scientific Report and a Photo Story. We present a report on our 17th Special Feature and a new call for contributions to *Tuexenia*. Do not miss the opportunity to contribute with your grassland-related studies to the next EDGG-edited Special Feature in *Tuexenia*. Finally, we are happy to announce the three winning shots of the last Photo Competition, while we welcome more contributions to the next competition dedicated to "Mass flowering in grasslands".

We wish all of you a good opening of the new season and a pleasant reading during spring days.

With warm wishes,
***Rocco Labadessa***

**Great Bustard (*Otis tarda*) in Hortobágy, Hungary. Photo: L. Godó.**

# *News*

## Call for nominations for the EDGG Executive Committee in the period 2025–2027

According to the EDGG Bylaws, the **elections of the new EDGG Executive Committee** are due this year. The aim is to have a diverse and effective Executive Committee, representing people from different regions throughout the Palaearctic, with different expertise, age and gender. Some of the current Executive Committee members plan to stand again for the election, but **we particularly seek female candidates, candidates from outside Europe and people interested in such activities as social media, website and conference coordination**. **We therefore invite members to nominate EDGG members until 31 March 2025** via the Google Form. Self-nominations are not only allowed, but particularly welcome!

After the nomination period is closed, all nominees, provided they are EDGG members, will be asked to confirm that they are willing to stand for the election and, if so, to provide a short biosketch and motivation statement, and preferably also a photo and a link to a website or publication profile. The election will subsequently take place online over a period of at least two weeks. Each member will have up to seven votes. Regularly, the EDGG Executive Committee shall consist of the seven members who received the highest number of votes, but the number might be higher in cases of ties on the seventh place or if none of the extra-European candidates are among the seven persons with the highest number of votes. The results will then be announced to all members and the new Executive Committee, as well as the responsibilities of its members, will be presented in the next issue of Palaearctic Grasslands.

***The current EDGG Executive Committee***

***Pulsatilla grandis*, South Moravia, Czech Republic. Photo: D. Borovyk.**

# Call for photos for *Palaearctic Grasslands*

As usual, we are looking forward to receiving your contributions to the Photo Story section, as well as your photographs for general illustrative purposes.

Submissions for the **Photo Story** section are always welcome. Photo Story is an open space where members can submit their own photo collection on a specific grassland-related topic of their choice. High-quality photos should be provided together with their captions (at least species names or landscape description), a brief text and possibly other graphical elements (like a map or a drawing). The selection of photos should fit within 4-15 (-20) pages and the contributors should propose a preliminary layout (in PDF or MS Word format), which will be finally typeset by the Editors. As an example, you can look at the Photo Stories published in previous issues. As with scientific articles, Photo Stories undergo a review process with an emphasis on the quality of the photographs. There is no guarantee that they will be accepted without changes, and late submissions may be published in a subsequent issue.

We would also like to encourage you to contribute to the **Global Vegetation Project** with your vegetation photographs. Please take a look at the project website for an overview of the global map and the data entry form.

If you want to contribute to Photo Stories, or if you simply want to help us with enriching this aspect of the journal, please submit your photos together with the required information to Rocco (rocco.labadessa@gmail.com).

Deadline for photo submissions is **30 April 2025**.

***Rocco Labadessa***, Bari, Italy
rocco.labadessa@gmail.com

# Call for Photo Competition "*Mass flowering in grasslands*"

During mass flowering, grasslands come to life and turn into breathtaking carpets of color as countless flowers bloom in unison. These spectacular displays not only beautify the landscape, but also support a vibrant web of creatures, from pollinators buzzing among the flowers to grazing animals attracted by the abundance. Whether it's a vast, flower-strewn grassland, the details of a single bloom, or the interaction of flora and fauna in these fleeting moments, we invite you to capture the beauty and ecological significance of mass flowering in grasslands. Can you capture the magic of these synchronized floral spectacles through your lens?
You are invited to send up to three high-quality photographs within the competition theme (full size JPEG or TIFF images, at least 300 dpi) together with captions giving a short title or description and information on the subject (species name, date, place name). The Photo Jury (see imprint) will select the best photographs. The three best shots will be awarded with full space in the next issue, and we reserve the right to use other submitted materials for illustrative purposes in other parts of the issue. If you want to take part in the competition, please submit your photos together with the required information to Edy (edy.fantinato@unive.it ) by **30 April 2025**.

***Edy Fantinato***, Venice, Italy
edy.fantinato@unive.it

**Green on green, *Hemistola chrysoprasaria* on *Centaurea jacea*, Ivano-Frankivsk region, Ukraine. Photo: A. Kuzemko.**

## *EDGG Event*

DOI: 10.21570/EDGG.PG.63.4-11

# 20th EDGG Field Workshop: Dry Grasslands of the Maritime and Ligurian Alps (Italy), 28 May – 6 June 2025 Second Call

### Introduction

The 20th EDGG Field Workshop will take place in the southwesternmost part of the Alps, covering the **Italian Maritime and Cottian Alps** (Valle Maira, Valle Stura, Valle Gesso) and the **Ligurian Alps** (Valle Tanaro). This workshop continues the series of EDGG Field Workshops dedicated to the dry grasslands of the Alpine Arc, following successful expeditions in:

- 11th Field Workshop in 2018, Austria, Eastern Alps (Magnes et al. 2021)
- 12th Field Workshop in 2019, Switzerland, Central Alps (Bergauer et al. 2022)
- 17th Field Workshop in 2023, NE Italy & Switzerland, Southeastern Alps (Angelini et al. 2024)
- 18th Field Workshop in 2024, Italy & France, Southwestern Alps (Klopsch et al. 2025; Terracina et al. 2025)
- 19th Field Workshop in 2024, Switzerland, Ticino Region (Dengler et al. 2024)

This year's workshop aims to finalize this series, complementing the already comprehensive dataset with data from this unique region, where Mediterranean and Temperate influences converge, shaping a diverse mosaic of dry grassland communities and presenting several grassland types, absent in other areas of the Alps.

**Figure 1. View of the Maira valley; in the foreground, rocky slopes with *Stipa pennata* aggr. and *Genista cinerea*. Photo: P. Rosso.**

## Study area

The 20th Field Workshop will focus on sampling the most southwestern part of the Alps, specifically in the Italian Maritime and Cottian Alps (Maira and Grana Valley, Stura Valley, Gesso Valley) and the Ligurian Alps (Tanaro Valley) (Figs. 1, 2). These valleys vary in size, ranging from 359 km² (Gesso Valley) to 739 km² (Maira Valley), with annual temperatures between -4 °C and 13 °C, and annual precipitation (both rain and snow) from 726 mm to 1790 mm (Fig. 3). The highest altitude in these areas reaches 3,314 m a.s.l. at the Chambeyron Group, in the upper part of the Maira Valley and on the border with France. Other relevant mountains belong to the Argentera massif, in the Gesso Valley, above 3,200 m a.s.l.

Situated in the most southwestern part of the Alps, the Maritime and Ligurian Alps are home to the most thermophilic refuge areas, leading to exceptional plant diversity and a high rate of endemic species. Their lower latitude and proximity to the Mediterranean Sea contribute to the presence of numerous Mediterranean species, some of which survived the glaciation periods, while others colonized the region afterward (Figs. 4, 5). The high endemicity rate is also due to the high geological diversity. Gneiss and granite are dominant in the higher Maritime Alps and lower Cottian Alps, while the higher peaks of the Ligurian and Cottian Alps and the lower parts of the Maritime Alps have carbonatic rocks, mostly limestone and calc-schists. Also, ultramafic rocks can be frequently found in the Cottian Alps.

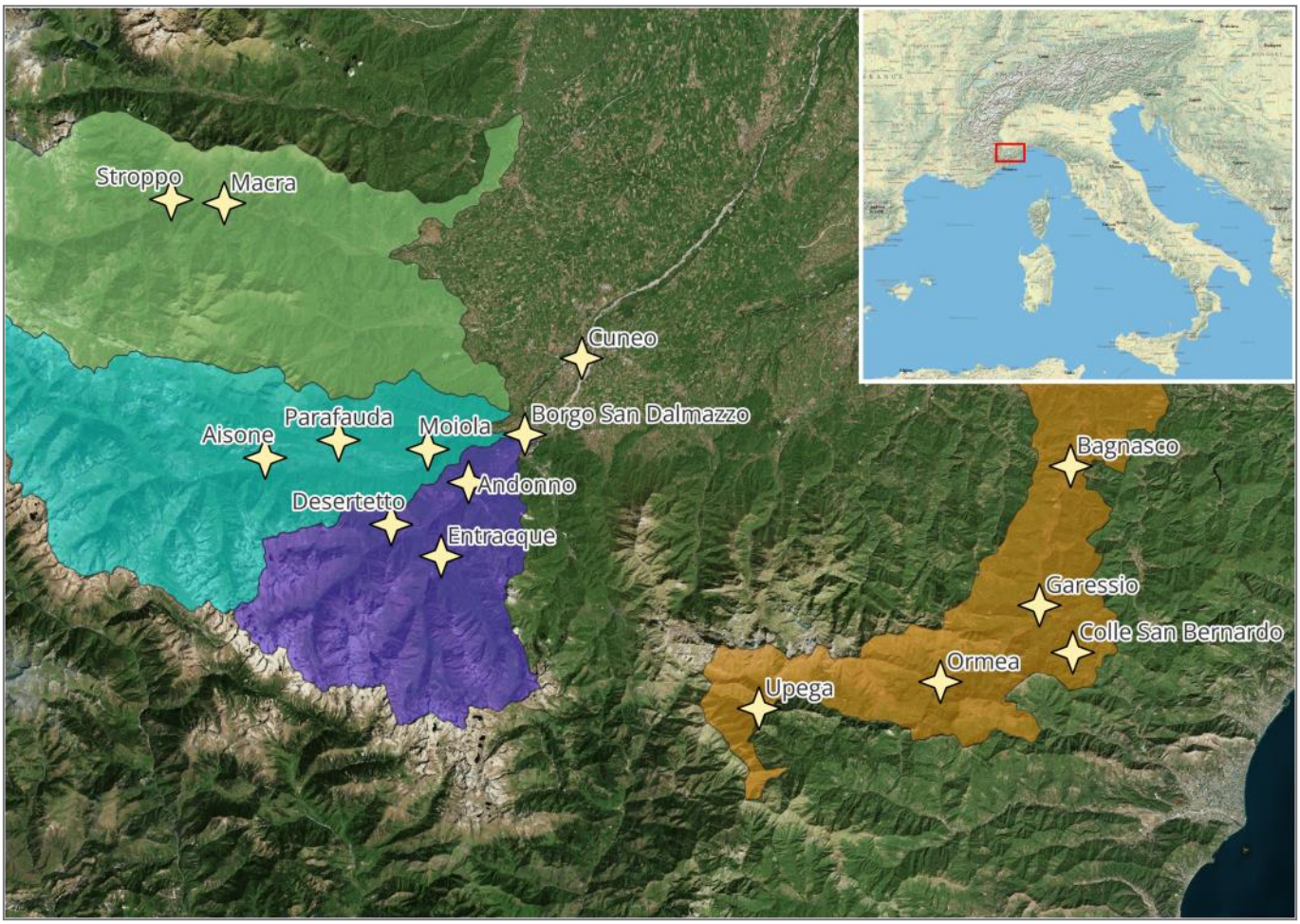


**Figure 2. Map with approximate locations of the 20th EDGG Field Workshop in Italy (28 May – 6 June 2025).**

Relevant endemic species that could be found in dry grasslands are: *Brassica repanda, Campanula bertolae, Erysimum burnatii, Euphorbia valliniana, Galeopsis reuteri, Gentiana ligustica, Jovibarba allionii, Knautia mollis* and *Potentilla valderia.*

The workshop will focus on sampling dry grasslands and sub-Mediterranean scrub communities in various habitats, predominantly on limestone but also on dry siliceous substrates. The sampling sites will include mesoxeric and xeric grasslands dominated by *Bromopsis erecta* and *Stipa pennata* aggr. (habitat 6210*), sub-Mediterranean scrub with *Genista cinerea* (potentially habitat 5330), and screes with *Achnatherum calamagrostis* (habitat 8130).

Given that phytosociological studies in the Italian Maritime Alps are outdated, one of the workshop's objectives is to revise some complex transitional units traditionally placed in the classes Festuco-*Brometea, Thlaspietea rotundifolii, Sedo-Scleranthetea*, and *Festuco-Ononidetea*.

## Short itinerary of the Field Workshop

Approximate sampling locations are shown in Fig. 2.

**Day 1: 28 May**

Meeting at Fermi Torino Metro station at 13:00 and transportation to our accommodation in Ormea (CN). Joint sampling with introduction of the EDGG Biodiversity Plots sampling methodology (Colle San Bernardo).

**Day 2: 29 May**

Sampling in Middle Tanaro Valley (Ormea, Garessio, Bagnasco).

**Day 3: 30 May**

Sampling in Higher Tanaro Valley (Upega). Moving to the second accommodation in Borgo San Dalmazzo.

**Day 4: 31 May**

Sampling in Lower Gesso Valley (Desertetto, Saben, Andonno).

**Day 5: 1 June**

Higher Gesso Valley (Entracque).

**Day 6: 2 June**

Higher Stura Valley.

**Day 7: 3 June**

Lower Stura Valley and Grana Valley.

**Day 8: 4 June**

Higher Maira Valley.

**Day 9: 5 June**

Lower Maira Valley.

**Day 10: 6 June**

The workshop will finish at 10:00 in Cuneo or 12:00 in Torino. Optional: Half-day sampling riparian grasslands in Cuneo.

## Support information

The workshop will be supported by the Department of Agricultural, Forest and Food Sciences (DISAFA) of the University of Turin and the Alpi Marittime Protected Areas, which manages two parks, eight reserves, and twenty Natura 2000 sites across the southwestern Italian Alps, spanning from the Maira Valley to the Tanaro Valley. The Alpi Marittime Protected Areas also manage two botanical stations hosting more than 500 spontaneous plant species, 93 of which are considered extremely rare for the Ligurian and Maritime Alps.

## Technical information

### Accommodation and travelling

We will stay at two different accommodations throughout the Field Workshop: Albergo Italia in Ormea (CN) and Hotel Primula, Beguda (Borgo San Dalmazzo, CN).

For transportation, we will use a 9-seat minibus and private cars.

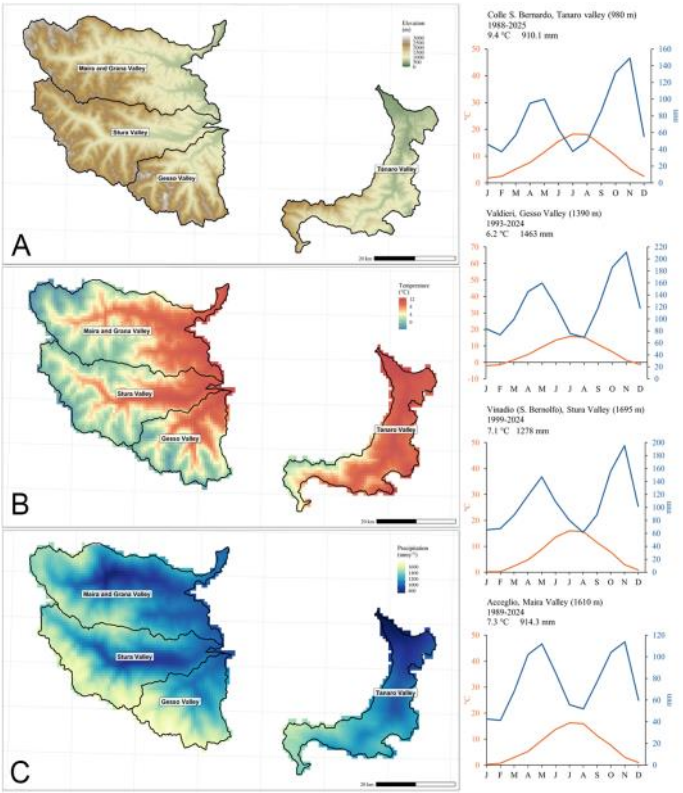


**Figure 3. Left: Elevation (A), mean annual temperature (B), and annual precipitation (C) of the selected valleys. Elevation obtained from the Digital Elevation Model (DEM) provided by Tinitaly (Tarquini et al. 2023) with a spatial resolution of 10 m. Annual precipitation and mean annual temperature obtained from the CHELSA dataset (https://chelsa-climate.org) with a temporal coverage from 1981 to 2010 and spatial resolution of 1 km. Right: Climate diagrams of the Maira Valley (Acceglio), Stura Valley (Vinadio), Gesso Valley (Valdieri) and Tanaro Valley (Colle S. Bernardo). Data are from ARPA Piemonte meteorological stations.**

### Travel information

The Field Workshop will begin in Torino, Italy, at 13:00 on 28 May 2025. The exact meeting location will be provided to registered participants closer to the start of the event. The workshop will end at Cuneo (at 10:00) or Torino (12:00) on 6 June 2025. On the last day, we also plan optional sampling of riparian dry grasslands near Cuneo.

### Fees

The fees cover all costs of meals, travel, and accommodation, starting at 13:00 on 28 June and ending at 10:00 (Cuneo) or 12:00 (Torino) on 6 July. The fees for full participation are as follows:

- 650 EUR for students (including PhD students) who are IAVS members

- 750 EUR for postdocs, senior scientists, or other regularly employed persons who are IAVS members
- 750 EUR for students (including PhD students) who are not IAVS members
- 850 EUR for postdocs, senior scientists, or other regularly employed persons who are not IAVS members

Payment must be made directly into the bank account before the start of the Field Workshop. By request, it is possible to pay in cash on the first day of participation (for people who do not have access to money transfer). Bank account details will be provided to registered participants upon confirmation of participation. The fees include a small buffer, so if costs are lower than expected, some refund may be possible. In the event of cancellation, we will refund the fees to the extent that the cancellation results in a cost reduction.

**How to apply**

To apply to participate, please submit a motivation letter (about 200 words) to the Field Workshop coordinators, Denys Vynokurov (denys.vynokurov@gmail.com) and Jürgen Dengler (dr.juergen.dengler@gmail.com), with the subject line "EDGG Field Workshop".

In the letter, explain why you are interested in participating and how you plan to contribute to the success of the workshop, both during and after the event. We expect all participants to contribute equally to sampling, plant determination, sample processing, data postprocessing, and related tasks. In general, only EDGG members can participate in EDGG Field Workshops. However, non-members can freely join the organization.

The application deadline is **21 March 2025 (Friday, 24:00)**. Confirmation of participation and feedback on travel grant applications will be provided no later than 15 April 2025. If the number of applications exceeds the number of available places, participants will be selected based on the motivation letters and the competences they offer.

In the case of oversubscription, we may offer participation in the second Field Workshop (Archipelago Sea, Finland, 28 June – 6 July 2025), if places are still available. Please indicate in your registration whether you would be willing to participate in the second workshop instead, in this case.

Preference will be given to those who are able to identify bryophytes and lichens or analyze the collected soils. For those who have already participated in at least three EDGG Field Workshops, the motivation letter is not required.

**Figure 4. *Anthyllis montana* is typical for rocky grasslands on calcareous substrates (Tanaro valley). Photo: P. Rosso.**

Along with your motivation letter, please include the following information in your application email:

- Name
- Age
- Professional status (e.g., PhD student, postdoc, professor, unemployed)
- Affiliation
- Address
- Mobile phone number (for contact purposes, e.g., if you get lost in the field)
- Dietary requirements (no/vegetarian/other: please specify)
- Willingness to join EDGG (if you are not already a member)
- Travel grant application (Yes/No)
- Willingness to transfer to the second Field Workshop (Archipelago Sea, Finland) in case of oversubscription.

Experts in other taxonomic groups, such as grasshoppers, leafhoppers, spiders, butterflies, fungi, or soil metagenomics, are also welcome to apply if they are willing and able to carry out sampling that allows for joint analysis with vegetation diversity data. Such applicants are asked to discuss the potential sampling design with the Field Workshop coordinators, Denys Vynokurov and Jürgen Dengler, prior to applying.

**Travel grants**

A limited number of travel grants (approximately 1750 EUR in total) will be available, provided by our parent organization, IAVS, exclusively for IAVS members in 2025. Priority for travel grants will be given to the following groups:

a) Students and applicants from low-income countries

b) Active participants of previous Field Workshops

c) Individuals who have agreed to organize future Field Workshops or contribute additional expertise, such as soil analysis, or the sampling and identification of taxonomic groups other than vascular plants.

**Figure 5. *Linum appressum* is typical for dry grasslands (Macra, Maira valley). Photo: P. Rosso.**

The final decision on grant allocation will depend on the combination of these factors. The amount awarded to each grantee is not fixed; it will be based on the available funds, the demonstrated need of the applicant, and their relevance to the success of the Field Workshop. Due to the limited funds, travel grants will most likely cover only part of the registration fee. In exceptional cases, they may also cover travel expenses to attend the event.

IAVS grantees are required to actively contribute to the success of the Field Workshop, both during and after the event. Post-Field Workshop tasks typically include data entry, sample analysis, and the identification of plant specimens. Failure to fulfill these responsibilities may result in ineligibility for future travel grants for EDGG events.

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**Local organizers:**

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***Denys Vynokurov***, denys.vynokurov@gmail.com

## *EDGG Event*

DOI: 10.21570/EDGG.PG.63.12-18

# 21st EDGG Field Workshop: Diversity of grasslands and open habitats in the Archipelago Sea (Finland), 28 June – 6 July 2025 Second Call

### Introduction

The 21st EDGG Field Workshop will be the first ever held in Northern Europe. We will use the standardized, high-quality vegetation-plot sampling of EDGG (Dengler et al. 2016) to record vegetation composition, structural and environmental parameters across various open habitats in the Finnish Archipelago. Sampling will include standard 10-m² plots as well as nested-plot series (ranging from 1 cm² to 100 or 1000 m², "EDGG Biodiversity Plots") for vascular plants, bryophytes and lichens, with the possibility of incorporating additional taxonomic groups (e.g., insects or other invertebrates).

In addition to collecting grassland data from a region that is new for EDGG, our main goal is to contribute to the establishment of a long-term monitoring system for open habitats in the Finnish Archipelago, in collaboration with local organizers. This effort will create a valuable reference for tracking environmental changes and understanding habitat evolution over time. The collected data will be contributed to the GrassPlot database (Dengler et al. 2018) and serve as the basis for one or several scientific publications, as has been done in previous EDGG Field Workshops (for example, the recent ones: Bergauer et al. 2022; Cancellieri et al. 2024; Guarino et al. 2024; Khodosovtsev et al. 2024; Vynokurov et al. 2024).

This Field Workshop is organized prior to the European Grassland Conference (EGC), which will take place immediately afterwards in Oulu, Finland, from 7–10 July 2025. This timing allows participants to combine the fieldwork with scientific discussions and networking at the conference.

### Study area

The Field Workshop will take place at the Archipelago Sea in southwestern Finland. The Archipelago Sea is one of the world's largest archipelagos by island count, forming a unique mosaic of water and islands. It is a biosphere reserve, and area for tens of Natura2000 sites (Skärgårdshavets Biosfärområde – Saaristomeren biosfäärialue). The southern part of the archipelago is a National park. Its marine areas are divided into three distinct zones based on environmental conditions:

- **Inner Archipelago**: Typically consists of large, forested islands separated by narrow straits, although wide bays and some bare islets also occur.
- **Intermediate Archipelago**: Features islands that are relatively close together, facilitating species dispersal due to short distances and sheltered conditions.
- **Outer Archipelago**: Dominated by the sea, with smaller islands surrounded by larger expanses of water. These habitats are exposed to wind, waves, saltwater spray, ice erosion, and strong sunlight, resulting in predominantly open and semi-open conditions with few forests.

**Figure 1. Heathland on Örö Island. Photo: M. Mussaari.**

The mineral soil areas of the islands in the Archipelago Sea have gradually risen from the sea over the past 1,000 years. All large islands with sufficiently nutrient-rich soil have been inhabited and used for agriculture from the Middle Ages until the 20th century. On these islands, land was converted into meadows as soon as it emerged due to land uplift. Beyond medieval settlements, a period of tenant farming and a population boom 100–200 years ago further expanded human activity, creating traditional landscapes on smaller islands in the outer archipelago. Additionally, the fishing culture has influenced vegetation patterns, particularly around fishing huts. Today, the grassland network of the Archipelago Sea is one of the most ecologically significant in Finland (Raatikainen et al. 2017). Traditionally used for grazing or mowing, grasslands are nowadays at different stages of succession, depending on when grazing ceased or was reintroduced.

The most prominent open habitats in the Archipelago Sea include the following types:

**Heaths**: Occur in archipelago and coastal areas, where traditional cattle farming – with regular burning and grazing – has played a crucial role in their formation and maintenance (Fig. 1). Heaths are classified into three types: dwarf shrub heaths, small grass heaths, and grass heaths. Typical species include *Empetrum nigrum, Calluna vulgaris, Vaccinium myrtillus*, and *Vaccinium vitis-idaea*. These communities develop on various nutrient-poor soils, including rocky, gravelly, sandy, and moraine substrates, as well as thin mineral soils.

**Calcareous thermophilous meadows**: Found on calcium-rich soils, often on rocky slopes or valley edges, these meadows are highly species-diverse (Fig. 2). Characteristic species include *Briza media, Origanum vulgare, Filipendula vulgaris, Silene nutans*, and indicator mosses such as *Homalothecium lutescens*. This habitat type is rare and considered critically endangered due to a dramatic decline in area over recent decades.

**Acidic herb-rich dry meadows**: Occurring on non-calcareous, nutrient-poor soils, these small patches are dominated by low herbaceous plants rather than grasses. Typically found on sunny slopes or near large stones in pasture areas, representative species include *Campanula rotundifolia, Pilosella officinarum, Dianthus deltoides,* and *Galium verum*. These meadows are rare and highly sensitive to encroachment and eutrophication.

**Mesic meadows**: These species-rich habitats develop on mineral soils with intermediate moisture levels (Fig. 3). Historically maintained by grazing or mowing, mesic meadows support a diverse range of herbaceous species and contribute significantly to biodiversity. They typically form on unmodified soils and may represent former forest clearings or drained swamps.

**Figure 2. Dry grasslands on Berghamn Island. Photo: M. Mussaari.**

**Wooded meadows**. Wooded meadows are areas with regularly mown natural herbaceous vegetation and scattered trees and shrubs (Fig. 4). In the Finnish Archipelago, they were historically formed and maintained due to their importance for fodder production in the region's harsh conditions. Fodder was collected not only from the meadows but also from the trees, making these habitat complexes particularly valuable for traditional agriculture. These meadows typically developed in the most productive areas, often on calcareous soils, and are highly diverse in the Finnish context. Characteristic species include *Primula veris, Melampyrum cristatum, Geranium sanguineum, Filipendula vulgaris*, and *Dactylorhiza sambucina*.

In addition to the grassland types described above, there are other, less frequent habitat types scattered across the islands, often occupying small areas. These include rocky outcrops, wet grasslands and fens, as well as brackish salt marshes. If suitable sites are available, these habitats may also be included in our sampling. The diverse environmental conditions and long history of both natural processes (such as land uplift and marine exposure) and human land use in the Finnish Archipelago have created a rich mosaic of open habitats. This landscape provides an excellent setting for long-term ecological monitoring and research into the factors shaping these unique vegetation communities.

**Our sampling sites**

- *Örö* and *Hiittinen*. Esker islands in the outer archipelago. Örö is a former military island, while Hiittinen is still an inhabited village island. These islands feature heathlands, dry grasslands, shore meadows, and rocky areas, primarily on acidic soils.
- *Seili*. An island with a deep history, having served as a leprosy and mental hospital before becoming a research site for forestry. Today, it is a conservation area with a research station. The island has meadows, former fields, dry grasslands, and shore meadows, primarily on acidic soils.
- *Berghamn Village*: *Boskär* and *Berghamn*. A group of rocky islands in the outer archipelago with a history of land management spanning over 40 years (Figs. 5, 6). This area contains diverse grasslands and one of Finland's rare well-managed wooded meadows. Historically, the villagers of Berghamn collected fodder from surrounding islands. The soils here are calcareous.

**Figure 3. Mesic meadow on Seili Island. Photo: M. Mussaari.**

## Short itinerary of the Field Workshop

The approximate sampling locations are shown on Fig. 4.

**Day 1. 28 June**

Meeting in Turku at 9:00. Travelling to Kemiö, sampling on Kemiö, and onward transfer to Kasnäs. Taxi-boat to Örö Island. Accommodation at Örö.

**Day 2. 29 June**

Sampling on Örö Island, with guides from ELY-center and Metsähallitus. Accommodation at Örö.

**Day 3. 30 June**

Morning sampling on Örö Island. Possible sampling at Hiittinen with a smaller group. Travel back to Turku via ferry and bus. Accommodation in Turku.

**Day 4. 1 July**

Travel to Nauvo and ferry to Seili Island. Sampling on Seili Island with guides from ELY-center. Accommodation at the Archipelago Research Institute.

**Day 5. 2 July**

Sampling on Seili. Accommodation at the Archipelago Research Institute.

**Day 6. 3 July**

Transportation via taxi-boat to Berghamn. Sampling at Berghamn and Boskär. Accommodation at Berghamn (Fig. 5).

**Day 7. 4 July**

Sampling at Berghamn and Boskär. Accommodation at Berghamn.

**Day 8. 5 July**

Boat transportation to Houtskar and Korppoo, sampling there. Return to Turku in the evening. Accommodation in Turku.

**Day 9. 6 July**

Sampling of meadow vegetation near Turku (optional).

## Technical information

**Accommodation and travelling**

We will stay at five different locations during the Field Workshop. To keep the costs down and make the event more accessible, we have chosen basic accommodation options, including huts. As a result, several nights will require the use of sleeping bags, and we kindly ask participants to bring their own. The accommodation includes:

**Figure 4. Wooded meadow on Boskär Island. Photo: M. Mussaari.**

2 nights at Örö (some participants will stay at the Örö Upseeritoimisto Hostel, while others will share 6-person accommodation in the renovated huts).

- 1 night in Turku (Hesehotelli Turku bus station).
- 2 nights at Seili (Archipelago Research Institute).
- 2 nights at Berghamn in huts.
- 1 night in Turku (Meri-Karina).

For transportation on the mainland, we will use a rented 9-seat minibus and private cars. Longer-distance transportation between islands will be provided by taxi-boats, while shorter-distance transport will be by public transport.

**Travel information**

The Field Workshop will begin in Turku, Finland, where participants will meet at 09:00 on 28 June. The exact meeting location will be provided to registered participants closer to the start of the event. The workshop will conclude on 6 July in Turku, at Hotel Meri-Karina (the final night's accommodation) at 09:00. On this day, we plan to sample meadows near Turku, traveling by public transport. Participation in this final day is optional, and all interested participants are welcome to join.

**Fees**

The fees cover all costs for meals, travel, and accommodation, starting at 09:00 on 28 June and ending at 09:00 on 6 July. The fees for full participation are as follows:

- 770 EUR for students (including PhD students) who are IAVS members
- 870 EUR for postdocs, senior scientists, or other regularly employed persons who are IAVS members
- 870 EUR for students (including PhD students) who are not IAVS members
- 950 EUR for postdocs, senior scientists, or other regularly employed persons who are not IAVS members

Payment must be made directly into the bank account before the start of the Field Workshop. By request, it is possible to pay in cash on the first day of participation (for people who do not have access to money transfer). Bank account details will be provided to registered participants upon confirmation of participation. The fees include a small buffer, so if costs are lower than expected, some refund may be possible. In the event of cancellation, we will refund the fees to the extent that the cancellation results in a cost reduction.

**Figure 5. Grasslands and our accommodation (the hut) at Berghamn, with the surrounding landscape. Photo: M. Mussaari.**

**How to apply**

To apply for participation, please submit a motivation letter (about 200 words) to the Field Workshop coordinators, Denys Vynokurov (denys.vynokurov@gmail.com) and Jürgen Dengler (dr.juergen.dengler@gmail.com), with the subject line "EDGG Field Workshop". In the letter, explain why you are interested in participating and how you plan to contribute to the success of the workshop, both during and after the event. We expect all participants to contribute equally to sampling, plant determination, sample processing, data postprocessing, and related tasks. In general, only EDGG members can participate in EDGG Field Workshops. However, non-members who apply will be considered for free membership in the EDGG.

The application deadline is **21 March 2025 (Friday, 24:00).** Confirmation of participation and the results of travel grant applications will be provided no later than 15 April 2025. If the number of applications exceeds available places, participants will be selected on the basis of their motivation and the competences they offer.

In the case of oversubscription, we may offer an option of participation in the first Field Workshop (Maritime and Ligurian Alps, Italy, 28 May – 5 June 2025), if places are still available. Please indicate in your registration whether you would be interested to participate in the second workshop instead, in this case.

Preference will be given to those who are able to identify bryophytes and lichens or analyze the collected soils.

For those who have already participated in at least three EDGG Field Workshops, the motivation letter is not required. Along with your motivation letter, please include the following information in your application email:

- Name
- Age
- Professional status (e.g., PhD student, postdoc, professor, unemployed)
- Affiliation
- Address
- Mobile phone number (for contact purposes, e.g., if you get lost in the field)
- Dietary requirements (no/vegetarian/other: please specify)
- Request to join EDGG (if you are not already a member)
- Travel grant application (Yes/No)
- Willingness to participate in the second Field Workshop (Maritime and Ligurian Alps, Italy, 28 May – 5 June 2025) in case of oversubscription.

Experts in other taxonomic groups, such as grasshoppers, leafhoppers, spiders, butterflies, fungi, or soil metagenomics, are also welcome to apply if they are willing and able to carry out sampling that allows for joint analysis with vegetation diversity data. Such applicants are asked to discuss the potential sampling design with the Field Workshop coordinators, Denys Vynokurov and Jürgen Dengler, prior to applying.

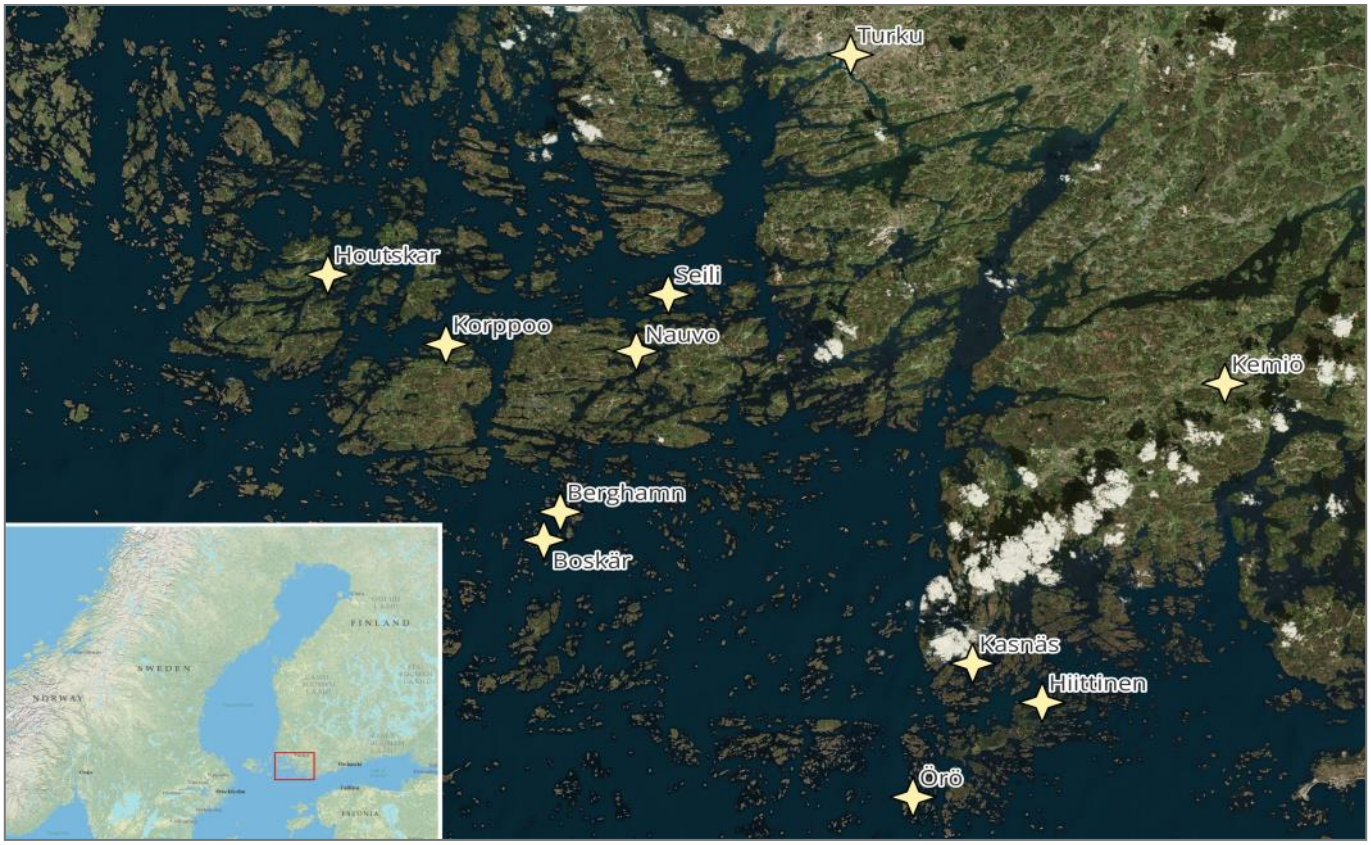


**Figure 6. Map with approximate locations of the 21st EDGG Field Workshop in Finland (28 June – 6 July 2025).**

### Travel grants

A limited number of travel grants (approximately 1750 EUR in total) will be available, provided by our parent organization, IAVS, exclusively for IAVS members in 2025. Priority for travel grants will be given to the following groups: a) Students and applicants from low-income countries b) Active participants of previous Field Workshops c) Individuals who have agreed to organize future Field Workshops or contribute additional expertise, such as soil analysis, or the sampling and identification of taxonomic groups other than vascular plants.

The final decision on grant allocation will depend on the combination of these factors. The amount awarded to each grantee is not fixed; it will be based on the available funds, the demonstrated need of the applicant, and their relevance to the success of the Field Workshop. Due to the limited funds, travel grants will most likely cover only part of the registration fee. In exceptional cases, they may also cover travel expenses to attend the event.

IAVS grantees are required to actively contribute to the success of the Field Workshop, both during and after the event. Post-Field Workshop tasks typically include data entry, sample analysis, and the identification of plant specimens. Failure to fulfill these responsibilities may result in ineligibility for future travel grants for EDGG events.

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**Figure 7. Grassland management at Berghamn. Photo: M. Mussaari.**

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***EDGG Event***

Perinnemaisemayhdistys ry
Kulturmarksföreningen rf

# 20th Eurasian Grassland Conference
# Broadening the horizons of grassland science for the Anthropocene
# Oulu, Finland, 7-10th July 2025
# First call

Semi-natural grasslands have developed into valuable biodiverse habitats, mainly as a consequence of anthropogenic activity, such as extensive agriculture. In that respect, they are inextricably linked to the Anthropocene period. In Finland, as in much or the Palaearctic Region, the amount of semi-natural grassland habitat (meadow) peaked during the early 19th century. By the late 1800s, a large-scale transition was already underway, with grasslands being converted into fields for the production of arable crops. Nowadays, only small remnants remain of formerly extensive grasslands, and several grassland types, as well as many of the plant and insect species associated with them, are categorized as highly endangered. Today these habitats are completely dependent on conservation work by Parks and Wildlife Finland, regional Centres for Economic Development, Transport and the Environment (ELY Centres) and a number of NGOs.

For the historical 20th Eurasian Grassland Conference, we wanted to bring participants to a location that will be novel and exotic for the majority of EDGG members. To fulfil that goal, we are happy to offer you the opportunity to attend the first EGC conference in the Nordic region, even taking you to within a stone's throw of the Arctic Circle. The venue for the conference will be Oulu University, where we will be hosted by the Biodiverse Anthropocenes programme, led my Professor Marko Mutanen. The programme of the event will include all of the familiar elements, such as diverse workshops in which you can learn new skills, an ice-breaker event, Grassland Party, charity auction, and a diverse range of inspiring plenary presentations from internationally acknowledged experts.


**Map of Finland and neighbouring countries showing the location of Oulu and Hailuoto (Wikipedia).**


**Map of the Oulanka National Park, the main venue for the post conference excursion (© Parks and Wildlife Finland).**

Finally, the traditional post-conference excursion will take us to the northeast of Finland, to the dramatic landscapes of the Oulanka National Park. Being so close to the Arctic Circle in early July means that you will experience the Midnight sun. Above the arctic circle, the sun does not go below the horizon during mid-summer. In Oulu, it does briefly disappear but it never really gets dark and this can be difficult to get used to and may make it difficult for you to get to sleep at night.

## Registration

We aim to open registration for the conference in early April. Please refer to the conference web-site for all the latest information about the conference. As per previous years, there will be favourable rates for students and IAVS members. There will also be an early-bird option for those who wish to take advantage of favourable rates for participation in the conference. For any queries regarding the conference, please contact stephen.venn@biol.uni.lodz.pl.

## Venue

The city of Oulu (Swedish: Uleåborg) is located at the mouth of the Oulu River to the Bay of Bothnia of the Baltic Sea. It has a population of 216,000 people (2021). It was established by the Swedish King Karl IX in 1605. The city is located at 65°01'N, 25°28'E. The city centre was destroyed in a fire in 1822, after which the architect Johan Carl Ludvig Engel prepared a new city plan in the Empire style, of which several buildings remain, such as the City Hall. The city is cycle friendly and is recognisable from the Market square policeman statue, which was designed by the sculptor, Kaarlo Mikkonen.

The University of Oulu was founded in 1958. Currently the university has a staff of 3,400 and a population of 13,500 students (statistics for 2021). The conference will take place at the Linnanmaa Campus, where the Botanical Gardens and University Library are also located. Oulu is also renowned as a major technology hub, with a modern Technology Park located adjacent to the Airport.

**The city is crossed by a river of the same name, Oulujoki. Photo: M. Peregrym.**

**The town hall is one of the architectural gems of the city of Oulu. The botanical garden will provide the venue for some activities during the conference. Photo: M. Peregrym.**

### Accommodation

Reasonably priced accommodation will be available on the university campus. There is a diverse range of hotel accommodation available within easy reach of the Linnanmaa Campus of the university. Further details and recommendations regarding accommodation will be published soon on the conference web-page.

### Travel

Oulu has an international airport located approximately 20 km from the Linnamaa Campus. It is served by a number of international connections and there are also around 10 flights per day from Helsinki-Vantaa airport. Within Finland, trains are a good option, though the distance from Helsinki, for instance, is 600 km, which takes 9.5 h by train. Flixbus has been operating a route between Krakow and Oulu since 2024, which means economical and low-carbon connections with many parts of Europe. We encourage all participants to favour low-carbon options for their travel. For most visitors, there are few viable options to air travel, but it can be an option to divide the journey into sections, and choosing a combination of flights and overland travel. There are a number of websites that help to plan overland travel.

### Themes of the scientific programme

The main theme of the conference will be "**Broadening the Horizons of Grassland Science for the Anthropocene**". This includes both biogeographical and ecological horizons. The programme will include presentations from regions and grassland systems that will hopefully be unfamiliar to many of you. We hope to receive many submissions that challenge our current perceptions and boundaries of grassland science, as well as the later advances in familiar disciplines. The topics of the conference sessions are still under discussion, but they will include sessions on Boreal Grasslands, Grassland Ecology, Citizen Science and Genomics. In addition to the more scientific sessions, we will also include sessions on practical aspects of grassland management and conservation, aimed at stakeholders, conservation organizations and other relevant organizations.

| | |
|---|---|
| 6th July | Workshops, Icebreaker event |
| 7th July | Registration, Opening ceremony, Day 1 of scientific programme |
| 8th July | Day 2 of scientific programme |
| 9th July | Mid-conference excursion to Hailuoto, Grassland Party |
| 10th July | Day 3 of scientific programme, General Assembly of EDGG, Prizes, Closing ceremony |
| 11-13th July | Post-conference excursion to Oulanka National Park |

### Plenary presentations

Three plenary speakers have already been confirmed and we hope to provide details of two more shortly.

**Shanker R. Barsila**, Agriculture and Forestry University, Bharatpur, Nepal

**Sara Cousins**, Stockholm University, Sweden

**Sally-Ann Spence**, Oxford University Museum of Natural History

**Oulu is a bicycle-friendly city. This is a parking lot near the University. And the statue is the Market Square Policeman.**

### Mid-conference excursion

The mid-conference excursion will take us to the island of Hailuoto, which lies in the Gulf of Bothnia at a distance of 53 km from the city of Oulu. The island has an area of 205 km$^2$ and a population of 922 (in 2024). The whole region of Ostrobothnia is relatively flat and low-lying, and the land is still rising from post-glacial rebound, so that the land is continuously rising above the sea-level and expanding. The island of Hailuoto includes some notable wetlands, including Kirkkosalmi, which is renowned as a valuable birding sites. The island has been permanently settled since the 12$^{th}$ century. Landmarks of Hailuoto include the Marjaniemi Lighthouse and the Keskiniemi Pooki.

The soil of Hailuoto is mainly sandy and clay-sandstone. The highest point of the island, at 31 m a.s.l., is situated on a 15 km long esker ridge that runs across the island, which also has some parabolic dunes. The most diverse habitats on Hailuoto are coastal meadows and dry heath forests, some of which are dominated by lichens.

Transportation to Hailuoto will be via coach and a ferry connection to the island itself. At the end of the afternoon, transportation will be provided to the venue of the Grassland Party. Further details about that will be provided in the Second Call.

**The Marjaniemi Lighthouse and the Keskiniemi Pooki. Photo: M. Peregrym.**

**Sandy shore on Hailuoto. Photo: M. Peregrym.**

### Post-conference excursion

The post-conference excursion will take us to the Oulanka National Park, which is located near the town of Kuusamo, in Kainuu, NE Finland. We will stay at Oulu University's Oulanka Research Station and visit a diverse range of grassland habitats, as well as bog meadows, which are peat-bogs that have been managed for hay production. In the evening, there will be an opportunity to enjoy a relaxing sauna and a refreshing dip in the river. There will also be an opportunity to visit the nearby Visitors Centre of the park. The National Park is located along the Oulanka and Kitka river valleys, and it is well-known for the Bear's Round (Karhunkierros) hiking trail, which will take us to sites along the river. There will also be a possibility of canoeing to some of the sites.

The landscape here is dramatically different from that in the Oulu region, being rugged and rocky, with dramatic hills and canyons. The river valleys are partly sandy, and there are a variety of wet and dry riparian flood meadows along the meandering rivers. The river valleys are typically bounded by rocky outcrops, which can rise to as much as 380 m a.s.l. There are a number of dramatic canyons and rapids along the River Oulanka in particular. In addition to wet and dry riparian flood meadows, there are also bog meadows and mineral meadows. The area is also renowned for it's orchids, including the Venus's slipper (*Calypso bulbosa*) and the Lady's Slipper (*Cypripedium calceolus*). The meadows of this region are generally dominated by globeflower (*Trollius europaeus*). Other typical plant species include *Dianthus superbus, Silene tatarica, Erigeron acris* subsp. *decoloratus,* and *Elymus alaskanus*, as well as various species of moonwort (Ophioglossaceae).

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***Mykyta Peregrym***, mykyta.peregrym@oulu.fi

**The Kiutaköngäs canyon and rapids are located close to the Oulanka Research station and National Park Visitor's Centre. Photo: S. Venn**

**A meandering stretch of the Oulanka river, downstream from the research station with overgrown meadow habitat. Photo: S. Venn.**

**A managed riparian flood meadow at Isoniemi, upstream along the Oulanka river from the research station, with globeflowers (*Trollius europaeus*) just coming into bloom, and a hay barn in the background. Photo: S. Venn.**

## *EDGG Publication*

DOI: 10.21570/EDGG.PG.63.24-25

# 17th EDGG Special Feature in *Tuexenia* published

Members of the Eurasian Dry Grassland Group (EDGG) and its predecessor organizations have been publishing Grassland Special Features in Tuexenia since 2005. The present Special Feature was included in volume 44 of *Tuexenia* (Heinken & Becker 2024). It was edited by Steffen Boch, Thomas Becker, Balázs Deák, Kristin Ludewig, and Jürgen Dengler. It contained an editorial as well as five research articles highlighting different aspects of grassland research and written by 46 authors from eight countries, corresponding to the broad diversity of topics and members in EDGG.

In the editorial (Boch et al. 2024), we briefly reviewed the last 20 years of EDGG, which was founded as (German) *Arbeitsgruppe Trockenrasen* in 2004 (Dengler & Jandt 2005). In all except for three years, EDGG (and its predecessors) managed to publish a Grassland Special Feature. Specifically, the editorial summarizes the EDGG activities of the years 2023 and 2024, including some photos from important events.

Riedel et al. (2024) compared cover-based and biomass-based methods for assessing plant abundance in plots from Swiss grasslands, aiming to address issues in resurvey studies with mixed sampling methods. The authors resurveyed 40 historic grassland plots of 0.09 m² using two methods: cover estimates and the originally conducted survey method of biomass harvesting. With the biomass-based species determination, an average of 0.9 more species (4.6%) were found per plot compared to cover-based sampling. In cover-based surveys some species were overlooked, especially graminoids. Fractional cover was well related to fractional biomass with an allometric (power-law) function, with an exponent of 0.6. The derived function allows reliable conversions between biomass and cover in temperate European grasslands. The authors suggest developing similar functions for other ecosystems to facilitate data standardization.

Schindler et al. (2024) investigated the effects of sprinkler irrigation on semi-natural grasslands in Valais (Switzerland). This irrigation method is increasingly applied in inner alpine dry valleys, replacing traditional irrigation methods by water channels. The authors conducted a resurvey of sprinkler-irrigated permanent plots that were established in 1988, complemented by newly established pairs of irrigated and unirrigated plots in the same area. After over 30 years of sprinkler irrigation species richness as well as rare and specialist species had declined in the resurveyed plots. Within the plot pairs, irrigated plots showed different habitat conditions (indicated by means of ecological indicator values) and had much lower species richness than the unirrigated plots. The authors highlighted the need for further studies investigating the long-term risks to grassland biodiversity by sprinkler irrigation.

Marcenó et al. (2024) studied the grassland vegetation in the highest elevations of the Madonie Mountains in northern Sicily, namely the *Plantaginion cupanii*, *Cerastio-Astragalion nebrodensis*, and *Armerion nebrodensis* alliances. By extending the classification of oromediterranean grasslands, the authors described two new associations: the *Androsaco breistrofferi-Potentilletum calabrae* and the *Helianthemo tomentosi-Festucetum crassifoliae*, which occupy the highest elevations. While the *Androsaco breistrofferi-Potentilletum calabrae* can be found in sinkholes (karst dolines) with long-lasting snow cover and extended water availability, the *Helianthemo tomentosi-Festucetum crassifoliae* withstands fluctuations in temperature and water availability on windy ridges.

Willner et al. (2024) revised the dry grasslands of the Eastern Alps syntaxonomically. The authors conclude that the highest division should be between the xeric dry grasslands of the orders *Festucetalia valesiacae* and *Stipo-Festucetalia pallentis* and the meso-xeric dry grasslands of the order *Brachypodietalia*. As diagnostic species of the *Festucetalia valesiacae* and *Stipo-Festucetalia pallentis*, obtained from analyses in eastern Central Europe, were strongly mixed in the investigated stands in the Alps, the authors could not identify orders within the xeric dry grasslands. Therefore, the syntaxonomic position of the three clearly supported alliances *Stipo-Poion xerophilae* (incl. *Diplachnion serotinae*), *Seslerio-Festucion pallentis* and *Festucion valesiacae* remains unclear. This indicates the need for further research on the higher levels of the syntaxonomic system of the xeric dry grasslands of the entire Alps.

Borovyk et al. (2024) reported vascular plant species richness records in the steppe zone of Ukraine, using various data sources. While most of the small-scale records (up to 0.1 m²) were found in mesic grasslands in southern Ukraine with a high abundance of annual grasses and forbs, most of the records at larger scales were found in the northern forb-rich and forb-grass steppes. Mean species richness decreased from northern forb-rich steppes to southern desert steppes at larger scales (1 to 100 m²), while small-scale richness showed little variation between the different steppe subzones. Most records were found in protected areas with a long history of traditional land use. The authors conclude that species-rich grasslands in the steppe zone are influenced by local topography, landscape heterogeneity, and low-intensity management.

The study highlights the importance of protecting steppe grasslands as global biodiversity hotspots, especially in the light of land-use changes and the ongoing war in Ukraine.

*Tuexenia* is a diamond open access journal and thus publication is free of charge for authors. All articles are freely available from the *Tuexenia* webpage. We are glad that, after two years of interruption due to a lack of manuscripts, we could resume the success story of EDGG Special Features in *Tuexenia* in 2024. We would like to thank those three guest editors who are not continuing in 2025, Thomas Becker, Balasz Deák and Kristin Ludewig, for their services to EDGG and *Tuexenia*, which extended in the case of the first two over many years. At the same time, we have initiated work for the next EDGG Special Feature in *Tuexenia* 45 (2025) and thus call for contributions (see this issue, p. 26).

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**Steppe-like grassland with *Adonis vernalis* in Valais, Switzerland. Photo: J. Dengler.**

## *EDGG Publication*

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# Call for Contributions: EDGG Special Feature in *Tuexenia* 45 (2025)

The **EDGG Special Features in *Tuexenia*** have a long tradition since 2005. *Tuexenia* is a diamond open access journal, i.e. with no fees for readers or authors. *Tuexenia* is indexed in the Web of Science Core Edition and by the Scopus database with a Journal Impact Factor of 1.1 and a CiteScore of 2.8.

For many years, EDGG has managed to publish a Special Feature in *Tuexenia* every year. The articles edited by EDGG were often among the top-cited articles of *Tuexenia*. After two years without a Special Feature in *Tuexenia* (2022 and 2023), due to a lack of article submissions, in 2024 the 17th EDGG Special Feature in *Tuexenia* has been published (Boch et al. 2024; see this issue on p. 24). In 2025, we hope to have a comprehensive Special Feature again. To reflect the intended geographical and topical diversity, the new Special Feature will be edited by Iwona Dembicz (Poland), Jürgen Dengler (Switzerland), Sonja Škornik (Slovenia), and Riccardo Guarino (Italy), chaired by Steffen Boch (Switzerland).

We would like to welcome **manuscripts on grassland-related topics, including: species taxonomy and biology, ecology, biodiversity, syntaxonomy, conservation and management of any type of grassland vegetation**. Submissions should be focused on vegetation or plant-related aspects, though interdisciplinary approaches incorporating zoological or pedological subjects are encouraged. While formerly *Tuexenia* was focussed on Central Europe and later on the nemoral biome in Europe, it has now broadened its scope, as reflected by its subtitle "**A European Journal of Vegetation Science**". Thus, beyond contributions from grasslands in the *nemoral biome*, we particularly welcome also grassland studies from the **arctic, boreal, steppic and mediterranean biomes**.

Papers will undergo regular peer review led by one of the EDGG Guest Editors. After acceptance, papers will be published online first (with a DOI) and then in the next printed issue of *Tuexenia*. **You can thus submit at any time**.

However, for better planning, we would be happy to receive the announcement of your manuscript along with a working title, list of authors and targeted submission date. If you are considering a submission, please send this information to Steffen Boch **by the end of March 2025**. For having a good chance of inclusion into the **Special Feature of 2025**, we recommend submitting your manuscript following the *Tuexenia* author guidelines, by email to Steffen Boch **not later than June 2025**. Papers that are not accepted in time for the publication in the Special Feature of one year, will automatically be included in the following Special Feature.

### Reference

Boch, S., Becker, T., Deák, B., Ludewig, K. & Dengler, J. 2024. Editorial to the 17th EDGG Special Feature in Tuexenia. *Tuexenia* 44: 215–224. doi.org/10.14471/2024.44.012

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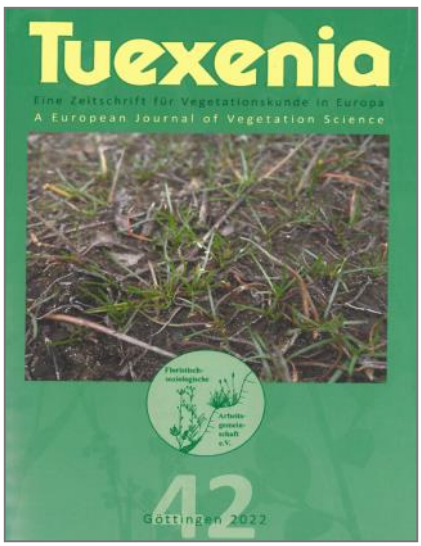



DOI: 10.21570/EDGG.PG.63.27-35 *Research Article*

# The GrassPlot dataset EU-R sampled during the 18th EDGG Field Workshop 2024 in the south-western inner-alpine valleys in France and Italy

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**Abstract**: The 18th Field Workshop of the Eurasian Dry Grassland Group (EDGG) was conducted from 1 to 11 June 2024 in the inner-alpine valleys of the south-western Alps in France and Italy. The Field Workshop was a continuation of a series of Field Workshops in the inner-alpine valleys, using the standardised EDGG sampling methodology. The focus of the workshop was to survey the diversity of *Festuco-Brometea* and *Sedo-Sclerantethea* communities in the region including vascular plants, bryophytes, and lichens to fill data gaps for an up-to-date syntaxonomic classification of the inner-alpine dry grassland vegetation. The sampling campaign resulted in an extensive dataset, containing 241 10-$m^2$ plots with 86 of them nested in 43 EDGG Biodiversity plots (nested plots of 0.0001 to 100 (-1000) $m^2$). The dataset will be included in the GrassPlot database as dataset EU-R. The sampled plots were distributed across seven valleys in 36 municipalities and along an elevation gradient from 413 to 1860 m a.s.l. with a mean elevation of 1040 m a.s.l. As a first analysis, the mean vascular plant species richness at 10 $m^2$ was 33.3 without significant differences between the valleys and ranged between 9 to 63. These values resemble those reported from previous Field Workshops in the inner-alpine valleys but are consistently lower compared to other *Festuco-Brometea* communities outside the Alps. We propose that the dataset presented in this report will contribute to explaining this pattern and to update the syntaxonomic classification of the dry grasslands of the European Alps.

**Keywords**: Alps; biodiversity; dry grassland; *Festuco-Brometea*; France; GrassPlot, inner-alpine dry valley; Italy; *Sedo-Scleranthetea*; species richness, syntaxonomy; vegetation-plot database.

**Nomenclature**: Euro+Med (2025) for vascular plants; Mucina et al. (2016) for syntaxa.

**Abbreviations:** BP = Biodiversity plot; EDGG = Eurasian Dry Grassland Group; EU-DEM = European Digital Elevation Model; FR = France; IT = Italy.

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## Introduction

Since 2009, the Eurasian Dry Grassland Group (EDGG) has been organising annual Field Workshops to collect data and analyse plant diversity across the Palaearctic biogeographic realm with a special focus on under-represented regions and vegetation types (Dengler et al. 2016a). The aim of the workshops is to record biodiversity and vegetation composition following a standardised, multi-scale (0.0001-100 (-1000) m² nested plots) and multi-taxon (vascular plants, bryophytes, lichens, optional invertebrates) methodology, that has been developed within EDGG and improved over the years (Dengler et al. 2016b, Dengler et al. 2021). In 2017, GrassPlot, an EDGG-affiliated database, was launched to gather biodiversity data from the Field Workshops and other grassland surveys using one or multiple of the standard plot sizes applied in the EDGG methodology (Dengler et al. 2018; Biurrun et al. 2019). Since its establishment, the database has been used in numerous published studies and ongoing projects (Biurrun et al. 2021; Dembicz et al. 2021).

The annual EDGG Field Workshops continue to contribute to the database from regions and grassland habitats with scarce data coverage. Here we describe the dataset EU-R sampled during the 18th EDGG Field Workshop in June 2024 in the inner-alpine valleys of the south-western Alps and present some preliminary results. This Scientific Report thus should always be cited when the dataset EU-R is retrieved from GrassPlot and used in scientific papers.

In 2018, the EDGG started sampling biodiversity data of the dry grasslands in the inner valleys of the European Alps, following locations that J. Braun-Blanquet had visited for his seminal work on inner-alpine xerothermic vegetation (Braun-Blanquet 1961). Previous successful Field Workshops covered dry inner-alpine valleys in Austria (2018; Magnes et al. 2021), Switzerland (2019; Bergauer et al. 2022) and Italy/Switzerland (2023; Angelini et al. 2024).

While originally this Field Workshop was planned to be the last of the series dedicated to inner-alpine valleys, EDGG meanwhile has decided to cover additionally some valley systems of the European Alps that were not included in the seminal work of Braun-Blanquet (1961). The series already continued in late summer 2024, with the 19th Field Workshop in Ticino, southern Switzerland (Dengler et al. 2024), and the sampling will be continued in the form of a Master thesis in 2025. Moreover, in summer 2025, the 20th Field Workshop is planned in the Maritime and Ligurian Alps of Italy (Vynokurov et al. 2024b). When completed, the data from these six Field Workshops combined will allow a full-scale analysis of biodiversity patterns, syntaxonomy and vegetation changes in the inner-alpine valleys, based on standardised high-quality data.

## Study area

The 18th Field Workshop took place from 1 to 11 June 2024 and focussed on the dry valleys of the south-western Alps in France and Italy (Figure 1). For more details, see Terracina et al. (2025), who provide a detailed summary of the Field Workshop including a plethora of photographs from the field activities. Low summer precipitation and warm air blown from the Mediterranean Sea create a climatic gradient in the study region of increasing Mediterranean influ-

ence from the inner to the outer parts of the valleys. Therefore, sub-Mediterranean and temperate subalpine vegetation is found in the valleys in proximity. In many places, succession of woody vegetation into previous semi-natural grasslands was visible as a result of large-scale abandonment of pastoral land-use practices, which is recognised as a large-scale threat to open habitats and their associated biodiversity in the Alps (Nota et al. 2021; Tasser et al. 2024).

To match the sampling of the three previous EDGG Field Workshops in the inner-alpine dry valleys, the aim of this expedition was to cover the full diversity of *Festuco-Brometea* (meso-xeric, xeric, and rocky grasslands) and *Sedo-Scleranthetea* (rocky outcrops) communities present in the region (Figure 2). While the classes *Festuco-Brometea* and *Sedo-Scleranthetea* were in the focus, we also collected a few plots of specific stands of other open habitats within the scope of GrassPlot (Dengler et al. 2018), namely a mesic grassland (class *Molinio-Arrhenatheretea*) and a halophytic community (class *Juncetea maritimi*).

The Field Workshop covered three valley systems and was co-organised by local expert groups from the three regions together with EDGG (Figure 1).

The first valley system was the Susa Valley, Italy, an 80 km long glacial valley stretching in a west-east direction from the French border towards the city of Torino. Sampling locations for three sampling days were selected by the organising team from the University of Torino in the lower, middle, and upper parts of the valley with some additional plots in the parallel Maurienne Valley, France. Climatic conditions, particularly daytime temperatures, in the southern and northern slopes of Susa Valley and Maurienne Valley vary substantially. Both valleys have a relatively dry climate and annual precipitation ranging between 600-900 mm. Due to these conditions, abundant and diverse (semi-natural) dry grasslands are present in the region.

The second valley system were the valleys of Durance and Queyras in France, stretching in a north-south direction. There, local experts from the French National Alpine Botanical Conservatory joined the research expedition and selected potential sampling plots. Durance is the southernmost

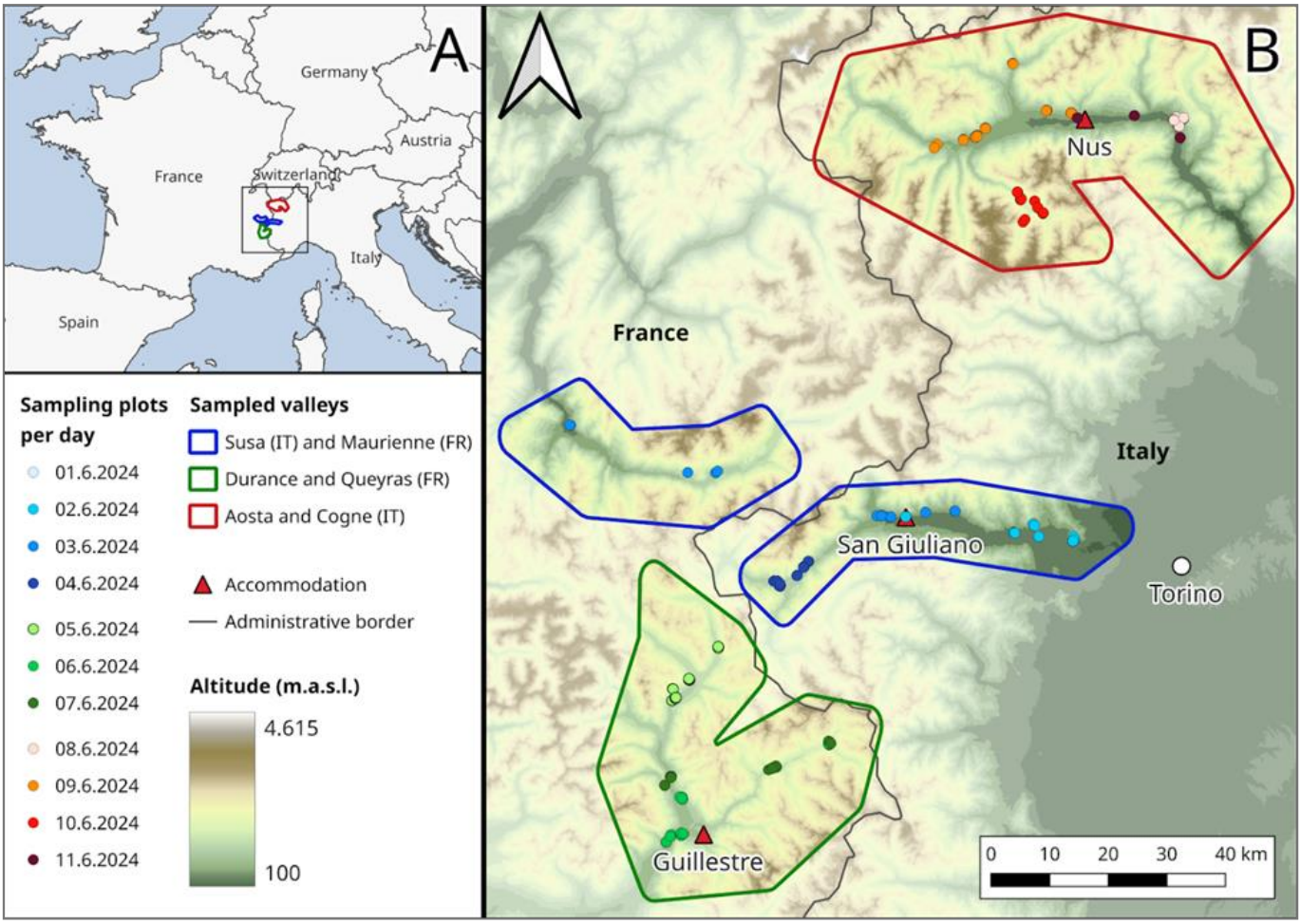


**Figure 1. Location of the study areas (A) within Europe and (B) within the south-western Alps. The Field Workshop focused on three main valley systems (Susa, Durance/Queyras, Aosta/Cogne/Valpelline) with some supplementary sites in the Maurienne Valley. Each point represents one 10-m$^2$ plot. But note that they are often so close to each other that not all are visible. The background map is based on a digital elevation model (Data source: www.opentopodata.org).**

inner-alpine dry valley, with annual precipitation ranging between 800-900 mm and strongly influenced by Mediterranean climate in the southern part, while Queyras is a tributary valley to Durance on higher elevation. Grasslands found in the region range from steppe-like *Stipa-communities* to meso-xeric *Brachypodietalia pinnati* communities.

Finally, the third valley system was the Aosta Valley, Italy, a west-east directed valley north of Torino. The climate in the Aosta Valley is drier than in the two other valley systems with annual precipitation ranging between 460 and 630 mm due to a barrier effect of the surrounding massifs of Gran Paradiso and Mont Blanc. Like the Susa Valley, southern and northern slopes in the Aosta Valley exhibit contrasting climatic conditions that support distinct communities ranging from Mediterranean to steppe-like grasslands. The tributary valleys of Cogne and Valpelline are at higher altitude than the main valley, but with a similar dry climate. In these three valleys, four more sampling days, supported by the Biodiversity Service and Scientific Research of the Gran Paradiso National Park, concluded the Field Workshop.

## Overview of the sampling and state of the data

The 18th Field Workshop was the most productive since the establishment of these expeditions in 2009 in terms of plots sampled. In total, 241 plots of 10 $m^2$ plot size were sampled (Table 1). Of them, 86 plots were nested in 43 Biodiversity Plots, 41 with the largest plot of 100 m² and two with the largest plot of 1000 m². Every Biodiversity Plot included two 10 m² plots in two opposite corners, each with nested plots of 0.0001, 0.001, 0.01, 0.1, and 1 m².

The number of surveyed plots was evenly distributed between the three major valley systems. Most plots were located in the larger valleys of Susa, Durance and Aosta and fewer were surveyed in the valleys of Maurienne, Queyras, Cogne and Valpelline (Figure 1 and Table 1). The elevation of the sampling plots ranged from 413 to 1860 m a.s.l. (± 7 m, data extracted from Digital Elevation Model EU-DEM) with a mean elevation of 1040 m a.s.l. (Figure 3). Sampling locations in the valleys of Susa, Aosta and Maurienne were concentrated below 1000 m a.s.l., and above 1000 m a.s.l. in the valleys of Durance, Queyras, Cogne and Valpelline. The plots were distributed over 36 municipalities in France

**Figure 2. Examples of the main vegetation types surveyed in the Field Workshop (with tentative syntaxonomic placements in brackets): top left: rocky outcrop communities (*Sedo-Scleranthetea*), top right: xeric rocky grasslands (*Festuco-Brometea*: *Stipo-Poion xerophilae* or *Diplachnion serotinae*), bottom left: xeric non-rocky grasslands (*Festuco-Brometea: Festucion valesiacae*), bottom right: meso-xeric grasslands (*Festuco-Brometea*: *Brachypodietalia pinnati*). Photos: J. Dengler.**

and Italy, belonging to the provinces of Aosta and Torino in Italy and the departments of Hautes-Alpes and Savoie in France (Appendix 1). The municipalities with the highest number of 10-m² plots in Italy were Cogne (n = 30), Oulx (n = 27) and Saint-Vincent (n = 20). In France, the highest number of 10-m² plots were surveyed in the municipalities of Château-Ville-Vieille (n = 16), Saint-Martin-de-Queyrières (n = 15), Saint-Crépin (n = 15), and Saint-Clément-sur-Durance (n = 13).

Currently, the digitisation of the field data is ongoing, and the entries are being checked for accuracy and completeness. The identification of collected lichen (by Helmut Mayrhofer), bryophyte (by Iryna Rabyk), and vascular plant species (*Festuca spp*. [by Thomas Wilhalm] and *Thymus spp*. [by Fabrizio Bartolucci]) is ongoing. Moreover, the results of the analysis of the collected soils are awaited. Once everything is ready, the data will be included in GrassPlot as dataset EU-R.

**Table 1. Summary of sampled plots in each valley and across all sites. In the Susa Valley, two of the Biodiversity Plots (BP) were additionally sampled up to 1000 $m^2$.**

| Valley (country) | 10-$m^2$ plots (nested in BP) | Biodiversity Plots (BP) |
|---|---|---|
| Durance (FR) | 64 (20) | 10 |
| Queyras (FR) | 18 (8) | 4 |
| Susa (IT) | 71 (30) | 15 (2 x 1000 $m^2$) |
| Maurienne (FR) | 7 (2) | 1 |
| Aosta (IT) | 56 (16) | 8 |
| Cogne (IT) | 22 (8) | 4 |
| Valpelline (IT) | 3 (2) | 1 |
| **SUM** | **241 (86)** | **43** |

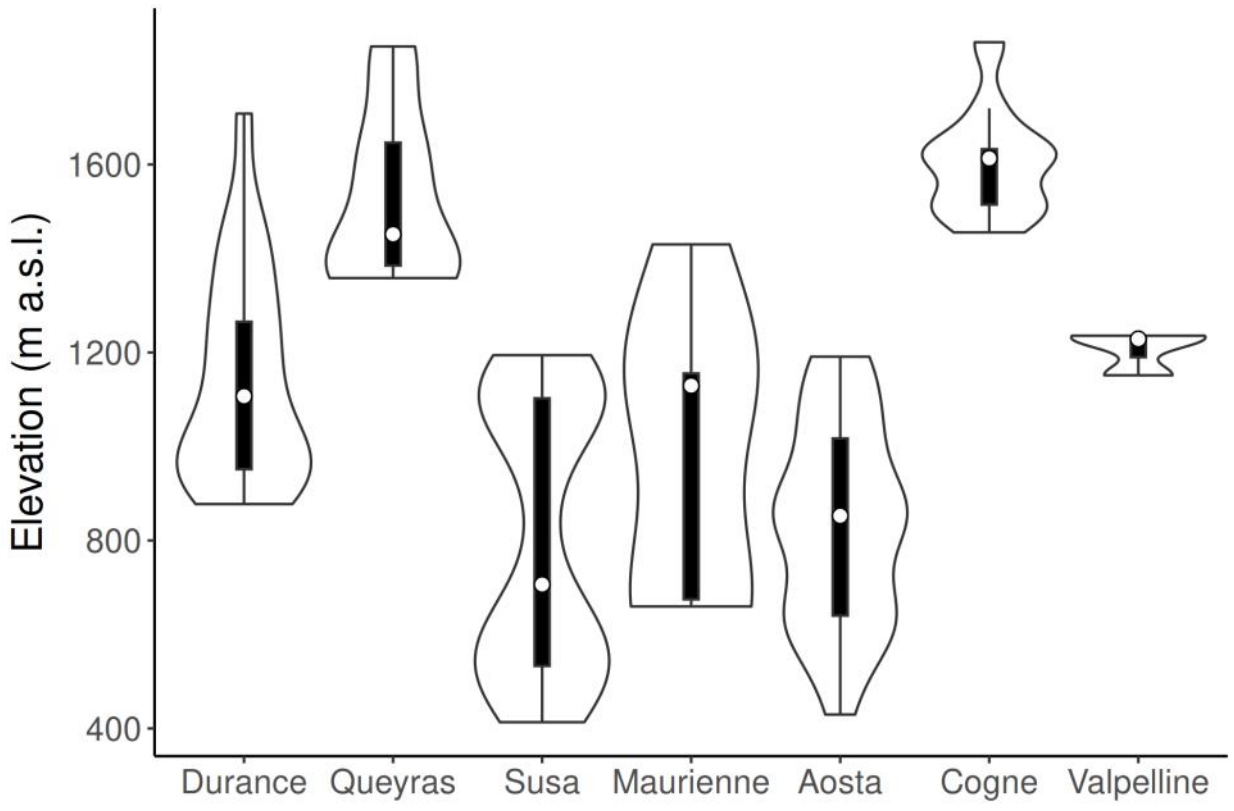


**Figure 3. Elevation distribution of all sampling plots covered during the 18th Field Workshop with violin plots complemented by boxplots in the centre indicating the elevation distribution in each valley. Elevation data were extracted from GPS points and the digital elevation model EU-DEM with a precision of ± 7 m.**

### First results and their interpretation

While for comprehensive results we must wait for the completion of the dataset, it is already clear that three annual vascular plant species, not observed in the Aosta Valley for over a century, have been rediscovered during our expedition: *Bupleurum baldense, Hypochaeris glabra*, and *Trifolium dubium* (Guarino et al. 2024). Moreover, the annual grass *Brachypodium distachyon* was recorded for the first time in the Piedmont Region, specifically in the Susa Valley (Guarino et al. 2024).

Preliminary results from the species lists revealed that the mean species richness of vascular plants across all 10-$m^2$ plots across the *Festuco-Brometea* and *Sedo-Scleranthetea* communities was 33.3 ± 8.9 (mean ± SD). Variation of mean species richness between the sampled valleys was low and not significant (ranges from 30.6 ± 8.1 in Queyras to 34.9 ± 10.2 in Susa, ANOVA: F = 0.9, $p$ = 0.49; Figure 4). The highest species richness was recorded in one plot in the municipality of Oulx in the Susa Valley with 63 vascular plant species in 10 $m^2$ (meso-xeric grassland) and the lowest in one plot in the municipality of Saint-Crépin in the Durance Valley with 9 species in 10 $m^2$ (rocky grassland). The plots in the halophytic community were excluded from this analysis and had on average 9.3 vascular plant species in 10 $m^2$ (n = 3). These values are in the range of vascular plant species richness values reported from previous Field Workshops of the inner-alpine valleys in Austria (mean: 34.2, range 16-71; Magnes et al. 2021) and Switzerland (mean: 29.3, range 7-55; Bergauer et al. 2022). Similarly, a previous sampling in the Cogne Valley using the EDGG methodology yielded 19–35 species in 10 $m^2$ (Wiesner et al. 2015). All these values are substantially lower than in *Festuco-Brometea* stands in other regions, such as Transylvania (mean: 49.7; Dengler et al. 2016a), Navarre (mean: 48.0; García-Mijangos et al. 2021), the Apennines (47.0; Cancellieri et al. 2024) or Armenia (46.8; Vynokurov et al. 2024a). This unexpected pattern previously highlighted and discussed by Bergauer et al. (2022), has been confirmed by the current dataset, thus calling for a good explanation.

Already during the Field Workshop, the syntaxonomic assignment of the studied communities gave rise to intensive discussions among the experts with broad-scale overview. In the absence of an updated numerical classification based on a representative dataset, the local experts still mostly adhere to the pre-computer typology of Braun-Blanquet (1961). However, it became clear that there is more diversity in the data than was captured in this seminal work, and

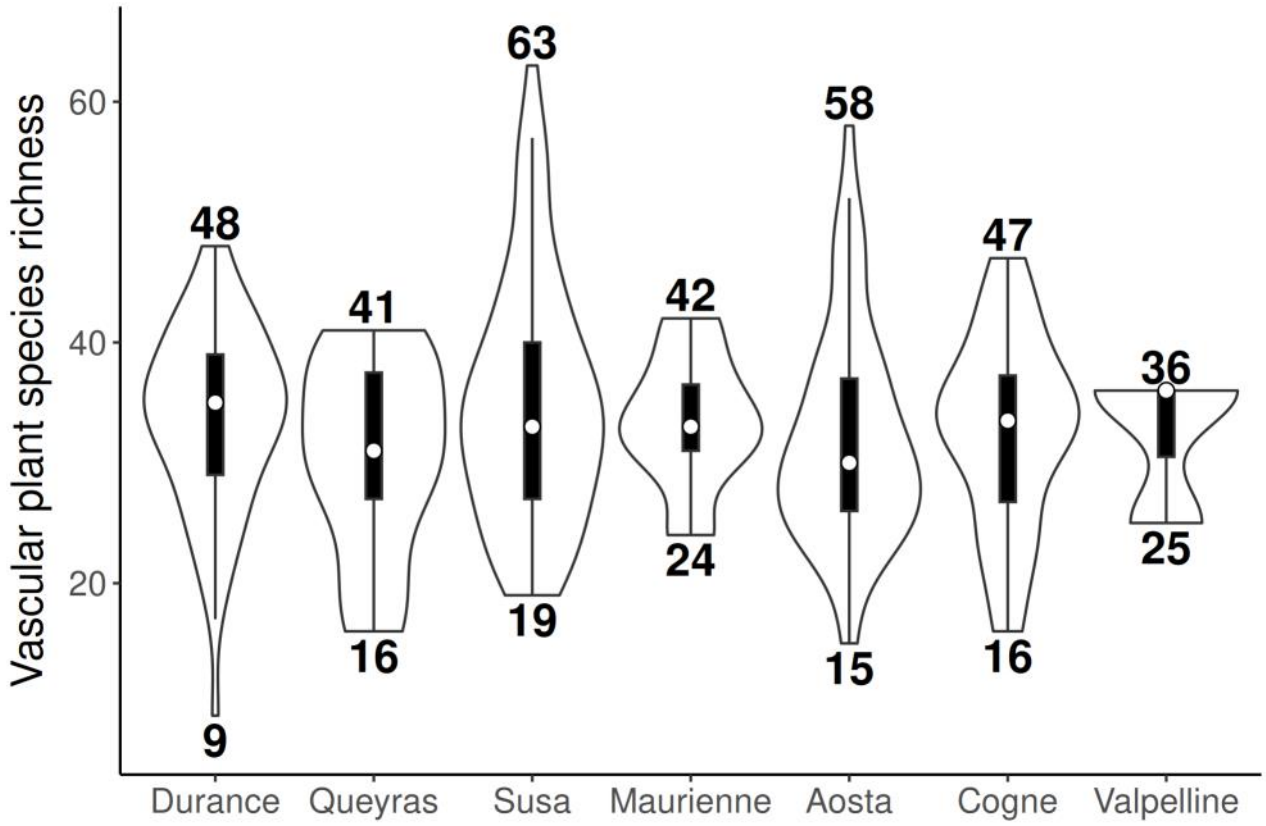


**Figure 4. Vascular plant species richness in 10-$m^2$ plots compared across the seven valleys sampled during the Field Workshop. Violin plots complemented by boxplots in the centre indicate the distribution of species richness in each valley (values above and below the violin plot represent the maximum and minimum species richness, respectively). The mean species richness did not differ significantly between the valleys (ANOVA, $p$ = 0.49).**

syntaxonomy in Europe has developed much since then. Here we can only highlight a few issues that will have to be addressed in the planned comprehensive syntaxonomic analysis of all dry grasslands and rocky outcrop communities in the valleys of the European Alps (building on some first current attempts by Dengler et al. 2019; Magnes et al. 2021 and Willner et al. 2024). In the following, we use the syntaxon names accepted in Mucina et al. (2016), acknowledging that after the revision there might be substantial changes.

For the meso-xeric stands (*Brachypodietalia pinnati*, Dengler & Willner 2023), it needs to be clarified whether they should be assigned to the subatlantic *Bromion erecti*, to the subcontinental *Cirsio-Brachypodion pinnati* or to a new alliance to be described for the inner-alpine valleys. For the xeric stands, we found a differentiation into those on rocky sites and those on non-rocky sites, often with deeper soils and/or on ex-arable fields. This floristic differentiation is visible in the field, but it has not been reflected on higher syntaxonomic levels in the inner-alpine valleys so far, while in Europe at large, such stands are even placed in two different orders, *Stipo pulcherrimae-Festucetalia pallentis* and *Festucetalia valesiacae* (Willner et al. 2017). As in the Swiss canton of Valais, the non-rocky type in the SW Alps (often developed on former arable fields) corresponds closely to the alliance *Festucion valesiacae* (*Festucetalia valesiacae*) (Dengler et al. 2019), not usually recognized in syntaxonomic overviews of the region. The rocky types of the study region show a strong sub-Mediterranean influence, so their placement in the order *Stipo pulcherrimae-Festucetalia pallentis* is questionable (even more so in the order *Festucetalia valesiacae*). Among the rocky types, the stands at the outer, less continental parts of the valleys, showed resemblances to the alliance *Diplachnion serotinae*, while those in the inner parts corresponded rather to the *Stipo-Poion xerophilae*. These exciting questions will require solid broad-scale syntheses across the entire Alps and beyond, and we are confident that our high-quality dataset can substantially contribute to a convincing solution.

## Conclusions and outlook

With 241 new 10-$m^2$ plots, this dataset contributes substantially to the datasets collected during the three preceding EDGG Field Workshops in inner-alpine valleys (Austria 2018: 67 – Magnes et al. 2021), Switzerland (2019: 142 – Dengler et al. 2020) and SE Alps (2023: 160 – Angelini et al. 2024). Together with the data from the conducted and planned Field Workshops in Ticino, Switzerland (Dengler et al. 2024), and in the Maritime Alps, Italy (Vynokurov et al. 2024b), respectively, these data will constitute a unique high-quality dataset of the dry grassland communities of almost the entire Alps, reaching geographically even beyond Braun-Blanquet (1961). This dataset will allow addressing the patterns and drivers of vascular plant, bryophyte and lichen diversity across spatial scales surpassing the scope of Bergauer et al. (2022) and thus will contribute to an understanding why the inner-alpine dry grasslands are poorer in species than dry grasslands elsewhere in Europe. Moreover, this international dataset will also enable to establish a data-driven classification scheme that is consistent across the Alps and fits into the European classification system (Mucina et al. 2016 and online updates). Finally, the data will also be a valuable contribution to the GrassPlot database (Dengler et al. 2018; Biurrun et al. 2019), facilitating analyses across the entire Palaearctic.

## Author contributions

All authors contributed to field sampling and the compilation of the dataset. D.V. and J.D. are coordinating the EDGG Field Workshops and co-organised the 18th Field Workshop together with M.L., G.N., G.M., S.A. and A.M. The article was planned by D.V., J.D., C.K. and N.T. and drafted by C.K. and N.T. while J.D. contributed the preliminary thoughts on syntaxonomy. All authors edited and approved the manuscript.

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**Appendix 1. Distribution of the sampling plots among administrative units (municipality, province/department, country) and dates, separated for regular 10-m$^2$ plots (Normal plots) and nested-plot series ("Biodiversity Plots") and ordered according to sampling date.**

| Municipality | Country | Valley | Province (IT) / Department (FR) | Normal plots | Biodiversity Plots | Date |
|---|---|---|---|---|---|---|
| Susa | Italy | Susa | Torino | 9 | 1 | 1./2./3.6.24 |
| Condove | Italy | Susa | Torino | 6 | 1 | 2.6.24 |
| Almese | Italy | Susa | Torino | 5 | 1 | 2.6.24 |
| Villar Dora | Italy | Susa | Torino | 4 | 1 | 2.6.24 |
| Caselette | Italy | Susa | Torino | 2 | 1 | 2.6.24 |
| Caprie | Italy | Susa | Torino | 2 | 1 | 2.6.24 |
| Giaglione | Italy | Susa | Torino | 10 | 1 | 3.6.24 |
| Bruzolo | Italy | Susa | Torino | 2 | 1 | 3.6.24 |
| Bussoleno | Italy | Susa | Torino | 2 | 1 | 3.6.24 |
| La Tour-en-Maurienne | France | Maurienne | Savoie | 3 | 1 | 3.6.24 |
| Villarodin-Bourget | France | Maurienne | Savoie | 3 | 0 | 3.6.24 |
| Saint-André | France | Maurienne | Savoie | 1 | 0 | 3.6.24 |
| Oulx | Italy | Susa | Torino | 19 | 4 | 4.6.24 |
| Salbertrand | Italy | Susa | Torino | 10 | 2 | 4.6.24 |
| Saint-Martin-de-Queyrières | France | Durance | Hautes-Alpes | 11 | 2 | 5.6.24 |
| Puy-Saint-Pierre | France | Durance | Hautes-Alpes | 6 | 1 | 5.6.24 |
| Val-des-Prés | France | Durance | Hautes-Alpes | 4 | 0 | 5.6.24 |
| Puy-Saint-André | France | Durance | Hautes-Alpes | 3 | 1 | 5.6.24 |
| Saint-Clément-sur-Durance | France | Durance | Hautes-Alpes | 11 | 1 | 6.6.24 |
| Saint-Crépin | France | Durance | Hautes-Alpes | 11 | 2 | 6.6.24 |
| Risoul | France | Durance | Hautes-Alpes | 5 | 0 | 6.6.24 |
| Réotier | France | Durance | Hautes-Alpes | 2 | 0 | 6.6.24 |
| Abriès-Ristolas | France | Queyras | Hautes-Alpes | 8 | 1 | 6./7.6.24 |
| Château-Ville-Vieille | France | Queyras | Hautes-Alpes | 10 | 3 | 7.6.24 |
| La Roche-de-Rame | France | Durance | Hautes-Alpes | 7 | 1 | 7.6.24 |
| Champcella | France | Durance | Hautes-Alpes | 4 | 2 | 7.6.24 |
| Saint-Vincent | Italy | Aosta | Aosta | 14 | 3 | 8.6.24 |
| Montjovet | Italy | Aosta | Aosta | 9 | 0 | 8./11.6.24 |
| Saint-Pierre | Italy | Aosta | Aosta | 11 | 2 | 9.6.24 |
| Sarre | Italy | Aosta | Aosta | 6 | 1 | 9.6.24 |
| Doues | Italy | Valpelline | Aosta | 2 | 1 | 9.6.24 |
| Valpelline | Italy | Valpelline | Aosta | 1 | 0 | 9.6.24 |
| Arvier | Italy | Aosta | Aosta | 2 | 0 | 9.6.24 |
| Quart | Italy | Aosta | Aosta | 12 | 2 | 9./11.6.24 |
| Cogne | Italy | Cogne | Aosta | 22 | 4 | 10.6.24 |
| Saint-Denis | Italy | Aosta | Aosta | 2 | 0 | 11.6.24 |

# *Photo Competition*

## Best Shots on "The changing seasons in the grasslands"

Here are the three winners of the EDGG Photo Competition dedicated to "The changing seasons in the grasslands".
The Jury for the Photo Competition was composed of Anna Kuzemko, Rocco Labadessa, Jim Martin and Jalil Noroozi.

**1st place:**

**April's First Rainbows. In April, rainbows appear both in the sky and on the rocky meadows of Allah Bair (Hill of God), where *Iris pumila* blooms in a vivid display. Dobrogea, Romania, April 2024.**

***Roxana Nicoară***, Bucharest, Romania, roxanaion85@gmail.com

**Reviews from the Jury:**

*"The colourful spring display of Iris pumila is captured beautifully in this photograph."*

*"I like the composition of this photo with the focus on the distant iris flowers and the blurring of the foreground. The beauty of these colourful Iris flowers contrasts with the arable land in the background, showing how small the patches of nature are in the urbanized landscape."*

*"These colorful Iris flowers unfold all the marvel and excitement of the arrival of spring."*

**2nd place:**

**A praying mantis (*Mantis religiosa*) female in a rocky grassland on Miocene limestones near the village of Huta Roza-niecka in the Roztocze upland in SE Poland. It was taken on a summer sunset.**

***Piotr Chmielewski***, Zamość, Poland, pchmielewski4@wp.pl

**Reviews from the Jury:**

*"The mantis silhouette standing on the sunset wonderfully depicts grassland life in the warm summer days, with a bitter-sweet feeling of changing season."*

*"I would choose nr. 1 because of the technic and the beauty."*

**3rd place:**

***Hyacinthella*'s gentle return. *Hyacinthella leucophaea* spring meadows in Dobrogea, April 2022, Romania.**

***Roxana Nicoară***, Bucharest, Romania, roxanaion85@gmail.com

**Reviews from the Jury:**

*"The delicate nature of spring flowers is expressed through this image"*

*"The flowers and leaves of Hyacinthella are very delicate and fragile when they break through the dry grass in spring, creating a visual picture of nature awakening after hibernation. The photo shows this very well."*

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***Photo Story***

# Grassland diversity of the inner-alpine dry valleys in the South-Western Alps: Impressions from the 18th EDGG Field Workshop (1 to 11 June 2024)

Photos and text by Noa Terracina[1], Christian Klopsch[2,3], Jürgen Dengler[4], Idoia Biurrun[5], Dariia Borovyk[6,7], Itziar García-Mijangos[5], Anna Hirna[8], Monika Janišová[9], Martin Magnes[10], Olena Miskova[11], Robin Nikolei[12], Iryna Rabyk[9], Nadiia Skobel[13,14], Oksana Tyshchenko[15], Wolfgang Willner[16] & Denys Vynokurov[1,6]

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In June 2024, the 18th EDGG Field Workshop took place on the trail of J. Braun-Blanquet's work on xerothermic vegetation classification in the south-western Alps in France (FR) and Italy (IT). Three different valley systems were visited: the Susa(IT)/Maurienne(FR), the Aosta(IT)/Cogne(IT) and the Durance(FR)/Queyras(FR). It was full of beautiful and heartily shared moments, and on the following pages, we will give some impressions. Each day of the expedition is shortly presented and enriched with photographs that illustrate the work and joy of collective sampling efforts in the scenery of the inner-alpine valleys and their vegetation.

In total, 22 participants joined either partly or for the whole Field Workshop originating from seven countries (Austria, France, Germany, Italy, Slovakia, Spain, Ukraine) and working in eleven countries (Austria, Czech Republic, France, Germany, Iceland, Italy, Poland, Slovakia, Spain, Switzerland, Ukraine). They were hosted and supported by three local organising committees in the three valley systems, altogether comprising 15 local experts. Most participants were botanists specialised in vascular plants, however, also one bryologist and one arachnologist complemented the expedition. Everyone in the group contributed with the species knowledge from their home countries and with the great support of the local organising teams, the group was able to cover the diversity of the surveyed region. Every day, the group was split into 2-3 independent sampling teams. After long sampling days, climbing on the slopes like goats beneath the elements, the evenings were dedicated to species identification, juggling between the different regional flora identification books. Taken together, this Field Workshop was one of the largest and the most productive ones to date!

**Further Reading:**

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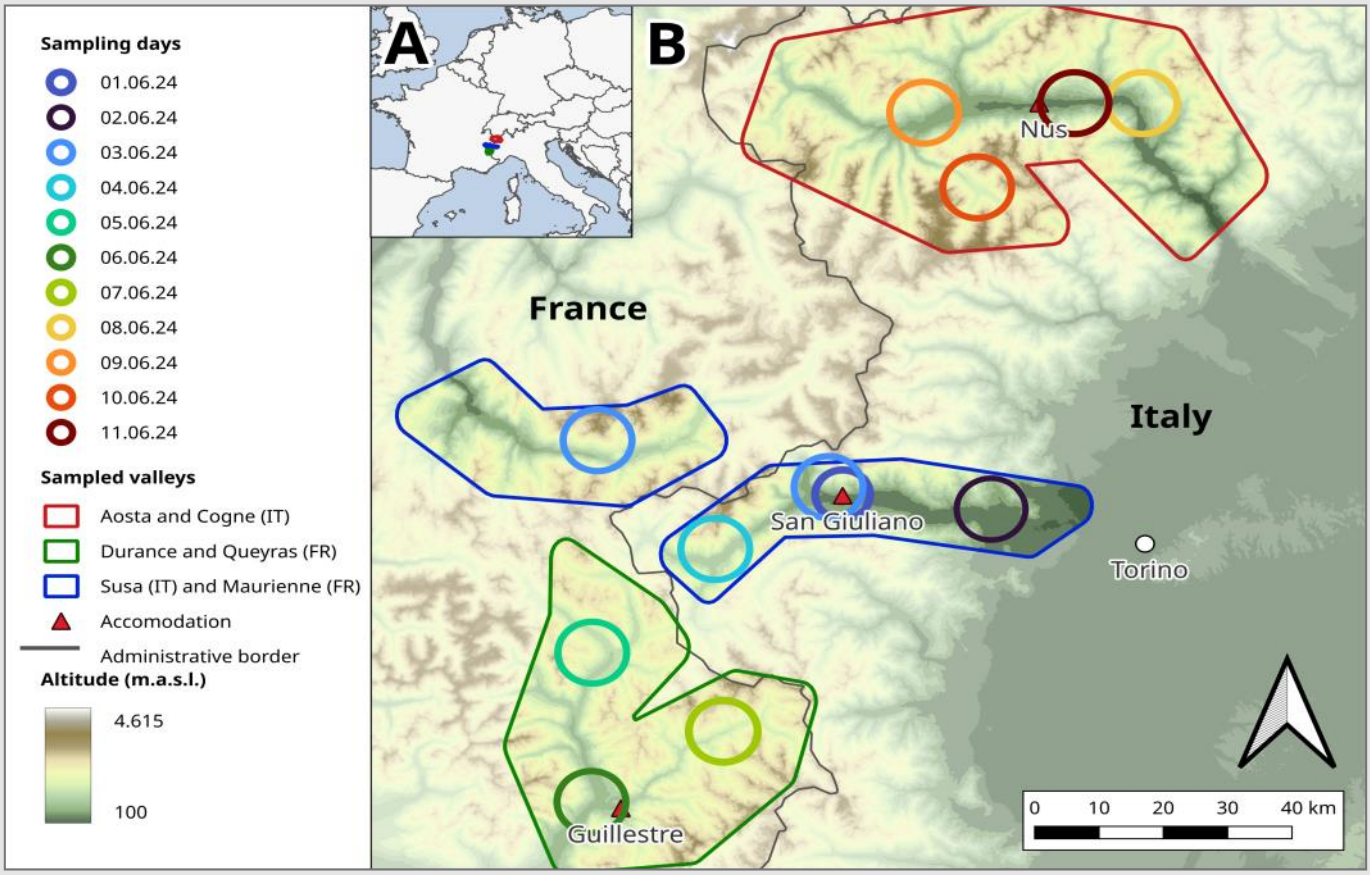


**Map of the sampling area (coloured polygons) in the South-Western Alps. (B) Eleven sampling days were evenly distributed across the valley systems of Susa/Maurienne, Durance/Queyras and Aosta/Cogne. The background map is based on a digital elevation model.**

**A precisely delimited EDGG Biodiversity Plot being surveyed by well prepared botanists.**

**Group photo of the participants in front of our third accommodation in Nus, Aosta Valley, Italy.**

**1st June 2024 – Susa Valley**

Our Field Workshop started with the arrival at our accommodation in San Giuliano, located in the Susa Valley, the "Azienda Agricola San Giuliano di Giai Pier Luigi e figli", a former farm that has been renovated as an agritourism. In the afternoon, we met with the local organisers, led by Michele Lonati, from the University of Torino, who prepared sampling locations for the upcoming days in the Susa Valley. While the last participants were still arriving, most of us were drawn to the grasslands above the venue. There, we sampled the first 10-m² plots of the Field Workshop. The day ended with a long, three-course Italian-style dinner, during which the plan for the field course was outlined.

**View into the Susa Valley from San Giuliano.**

**Strong interest to explore the local flora sparked immediately among the participants.**

***Stipa eriocaulis* grasslands, rich in annuals, were characteristic for the slopes above San Giuliano, where we sampled the first 10-m$^2$ plots.**

**2nd June 2024 – Susa Valley**

In the morning, the field equipment was distributed and the standardised EDGG methodology (re-)introduced to all participants to calibrate surveying practices among them. In the following, separate teams split up and sampled on the hillsides of the valley until a thunderstorm forced us to return to San Giuliano. There, work continued with determination of unidentified species from the field.

**Accurate sampling of the plots requires well-organised field equipment, teamwork and is rewarded with beautiful views into the Susa Valley.**

**Spider and bryophyte sampling often involves working face-to-face with the soil surface.**

**Both botanists and herbivores enjoy the open landscape between the trees.**

**In the evening, the group gathered to identify uncertain species collected from the field.**

**3rd June 2024 – Valleys of Susa and Maurienne**

After two days, routines were already developed for splitting the group into three survey teams and distributing equipment. Two teams surveyed the grasslands on the hills and terraces around Susa and Brozulo in the central part of the Susa Valley. The last team took on a longer journey over the border into the Maurienne Valley in France.

**In pleasant weather, we sampled beautiful grasslands on the slopes above the Susa Valley .**

**Also in the Maurienne Valley, our work was devoted to steep slopes.**

**4th June 2024 – Susa Valley**

On the last day in the Susa Valley, all groups focussed on sampling sites in the inner part of the valley around the town of Oulx with colourful flowering meadows.

In the village of Signols, our sampling intentions attracted much interest among the local farming community and stimulated engaged discussions about land use practices and our work.

**Probably the most colourful grassland of the workshop.**

**To keep up productive sampling in the field and species identification in the evening, a good supply of drinks is essential.**

**5th June 2024 – Durance Valley**

In the morning, our group, counting 21 persons, packed themselves and the equipment into three cars and a minivan. We crossed the mountain pass over the border to France and got down into the valley of Durance, dominated by the highest city in France, Briançon (1,326 m a.s.l.). There, we met the local organisers from the Conservatoire Botanique National Alpin (National Alpine Botanical Conservatory), led by Sylvain Abdulhak. After a short introduction to the area, the group split up into three teams to survey the diversity around Briançon. In the evening we moved to our new accommodation, the "Cap Verb Hostel" in Guillestre, where we adapted to the French dinner habits.

**The van is packed to leave San Giuliano and after a scenic trip over the Alps we were welcomed by our french colleagues.**

**Sometimes you can find more people than species in a plot (the so-called people-rich plots).**

**The now well-oiled team is quickly familiarising itself with the French flora.**

**6th June 2024 – Durance Valley**

After an intensive morning of sampling in the Durance Valley, we met all together at the hot spring of Plan de Phazy, located near a Roman road, which has brought pilgrims and travellers from Italy to Spain since ancient times, for our first common lunch. The site is included in the Natura 2000 network for its uniqueness. It is shaped from two major hot springs (26–28 °C) that join and create a halophyte marsh and the surrounding salt meadow - something very different to our common sampling locations. One group stayed to collect vegetation data and to try the hot water first hand. The rest of the group moved on to a rare Spanish juniper (*Juniperus thurifera*) open forest until a heavy rain drew a line under this day's work.

**The hot water of the *Sources thermales du Plan de Phazy* captivates both plants and humans and provided a good spot for a shared hearty lunch.**

**The only Spanish juniper (*Juniperus thurifera*) forest in France, located in Saint-Crepin.**

**The heavy rain spared none - neither humans nor *Trichodes alvearius*.**

**7th June 2024 – Queyras Valley**

On our last workday in France, most of us sampled in the Queyras Valley. The day started with a common sampling in a flower-rich meadow in Château-Ville-Vieille. For lunch, we visited a floodplain and then split again for steeper sites, for example around Abriès.

However, in the evening, we never missed our get-together to identify the more challenging species and store the cryptic ones.

**Ready for the day… and for the Queyras Valley**

**Sometimes our plots were steep and sometimes flat…**

**… but always fascinating (on the left *Narcissus poeticus* and on the right *Astragalus monspessulanus*).**

**In the evening in Guillestre, we are back to school.**

**8th June 2024 – Aosta Valley**

In the morning we hit the road again, back to Italy. Through the Susa Valley once again, we arrived at noon in the Aosta Valley where Andrea Mainetti, the local organiser from Gran Paradiso National Park, awaited our arrival. Then we spread ourselves around the village of Saint-Vincent in the outer part of the Aosta Valley and discovered the flora of this humid and warm area. In the evening, eventually, we moved into our last accommodation, the "HostHello" in Nus and closed the day in the restaurant across the road.

**Back on the road! Next stop: Aosta Valley, the smallest of the 21 Italian administrative regions.**

**There is much to capture in this valley that we would like to gather as many pictures as possible for long winter evenings.**

**Working and eating together is what makes the Field Workshop most fun.**

**9th June 2024 – Aosta Valley**

We dedicated ourselves to the middle part of the Aosta Valley. Some bad weather couldn't stop us and we split again into three groups to survey the diversity around the city of Aosta.

The best grasslands of Quart, Saint-Pierre and Praz Bas were sampled with the now well-internalised methodology.

**A good Italian-style breakfast is needed to start the day.**

**The weather conditions no longer matter, we are already addicted to sampling. Dry grasslands still amaze us, even when everything is wet.**

**Tighten the measuring tape, collect the soil samples, then estimate the cover values… we can do it blindly.**

**10th June 2024 – Cogne Valley**

On our last full day, we drove into the Cogne Valley, a southern tributary to the Aosta Valley. Around the village of Cogne, we sampled while enjoying a view of the snow-covered Alps.

For lunch, we met in the village of Valnontey where we visited *Paradisia*, the alpine botanical garden of the Gran Paradiso National Park.

**View onto the name-giving mountain of the national park, the Grand Paradiso, where we treated ourselves with a colourful mesic mountain meadow (*Poo alpinae-Trisetetalia,* class *Molinio-Arrhenatheretea*).**


**Meeting an old friend after many years! Thomas Becker is surveying a population of *Astragalus exscapus* (right), which he already visited for his PhD study.**




***Paradisia*, the alpine botanical garden of the Gran Paradiso National Park in Valnontey gave us a short rest, but we could not stop ourselves, we had to get as many plots as possible.**



**Last evening of the 18th Field Workshop in Nus.**

**11th June 2024 – Aosta Valley**

The day when we said goodbye. But before that, we used the last hours to do what we can do better… sampling! We took a closer look into the deepest part of the Aosta Valley before heading to where this beautiful data sampling campaign started: Torino.

**The last survey in the Aosta Valley and we are still not tired of seeing … *Stipa eriocaulis*.**

**It's time to pack and divide the collected material…**

**… and to say goodbye, see you next time!**

**Selected species from the 18th Field Workshop**

**Xeric, meso-xeric and rocky grasslands (*Festuco-Brometea*)**

***Ephedra distachya* subsp. *helvetica* (left), *Oxytropis halleri* subsp. *velutina* (centre) and *Phelipanche arenaria* (right).**

***Chrysopogon gryllus* (left), *Ononis natrix* (centre), *Carex liparocarpos* (right).**

***Paradisea liliastrum*.**

***Achillea tomentosa* in a field of *Trifolium arvense* (left) and *Dactylorhiza sambucina* (right).**

***Trifolium montanum* (left) and *Laserpitium gallicum* (right).**

**Rocky outcrops (*Sedo-Scleranthetea*)**

***Poa perconcinna* growing together with *Sedum album* and *Sempervivum arachnoideum*.**

***Jasione montana* (left), *Allium sphaerocephalon* (centre) and *Paronychia kapela* (right).**

***Silene conica* (left) and *Armeria alliacea* (right).**

**Cryptogams**

**Coloured lichen community with *Psora decipiens* (left) and the liverworts *Riccia ciliifera* (big thalli) and *R. warnstorfii* (small thalli) growing together (right).**

***Grimmia pulvinata* (gray-green in picture on the left) and *Orthotrichum cupulatum* (light green in the picture on the left), and a dense ground cover of *Cladonia convoluta* (right)**

**A species-rich bryophyte and lichen layer dominating a rocky outcrop community.**

**Arachnida**

***Euscorpius italicus*.**

***Gnaphosa lucifuga* (left) and a juvenile *Eresus sp.* (right).**

# *Recent Publications of our Members*

In this section, the contents of which will also be made available via our homepage, we want to facilitate an overview of **grassland-related publications** throughout Eurasia and to improve their accessibility. You are invited to send lists of such papers from the last three years following the format below to Rocco Labadessa, rocco,labadessa@gmail.com. We will include your e-mail address so that readers can request a pdf.

### Biodiversity and Ecology

Buzhdygan, O., Chase, J., Baldauf, S., Borovyk, D., Vynokurov, D., Ladouceur, E.R., Chusova, O., Iemelianova, I., Budzhak, V., (…), **Dengler, J.**, (…) & Kuzemko, A. 2025. Scale-dependent effects of plant diversity drivers across different grassland habitats in Ukraine. *Ecology and Evolution* 15: e70941. doi.org/10.1002/ece3.70941

Hähn, G.J.A., Damasceno, G., Alvarez-Davila, E., Aubin, I., Bauters, M., Bergmeier, E., Biurrun, I., Bjorkman, A.D., Bonari, G. (…), **Dengler, J.**, (…) & Bruelheide, H. 2025. Global decoupling of functional and phylogenetic diversity in plant communities. *Nature Ecology and Evolution* 9: 237–248. doi.org/10.1038/s41559-024-02589-0

Maylandt, C., **Kirschner, P.**, Pirkebner, D., Frajman, B., Peñas, J., Schönswetter, P. & Carnicero, P. 2024. Evolution, range formation and a revised taxonomy of the disjunctly distributed European members of *Astragalus* sect. *Caprini*, an intricate group including highly endangered species of dry grasslands. *Molecular Phylogenetics and Evolution*: e108242. doi.org/10.1016/j.ympev.2024.108242

### Conservation and Restoration

**Asada, A.A.**, Ohwaki, A., Yaida, Y.A., Kawakami, F., Masuda, M., & Ushimaru, A. 2025. Prescribed burning effectively maintains threatened species in semi-natural grasslands on lava flows. *Plants, People, Planet*. doi.org/10.1002/ppp3.10629

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***Tulipa montana*, Alborz Mts, Iran. Photo: J. Noroozi.**

# *Forthcoming Events*

**33rd Conference of the European Vegetation Survey**
28 April - 02 May 2025, Perugia, Italy
Details: http://vnr.unipg.it/33evsperugia2025/

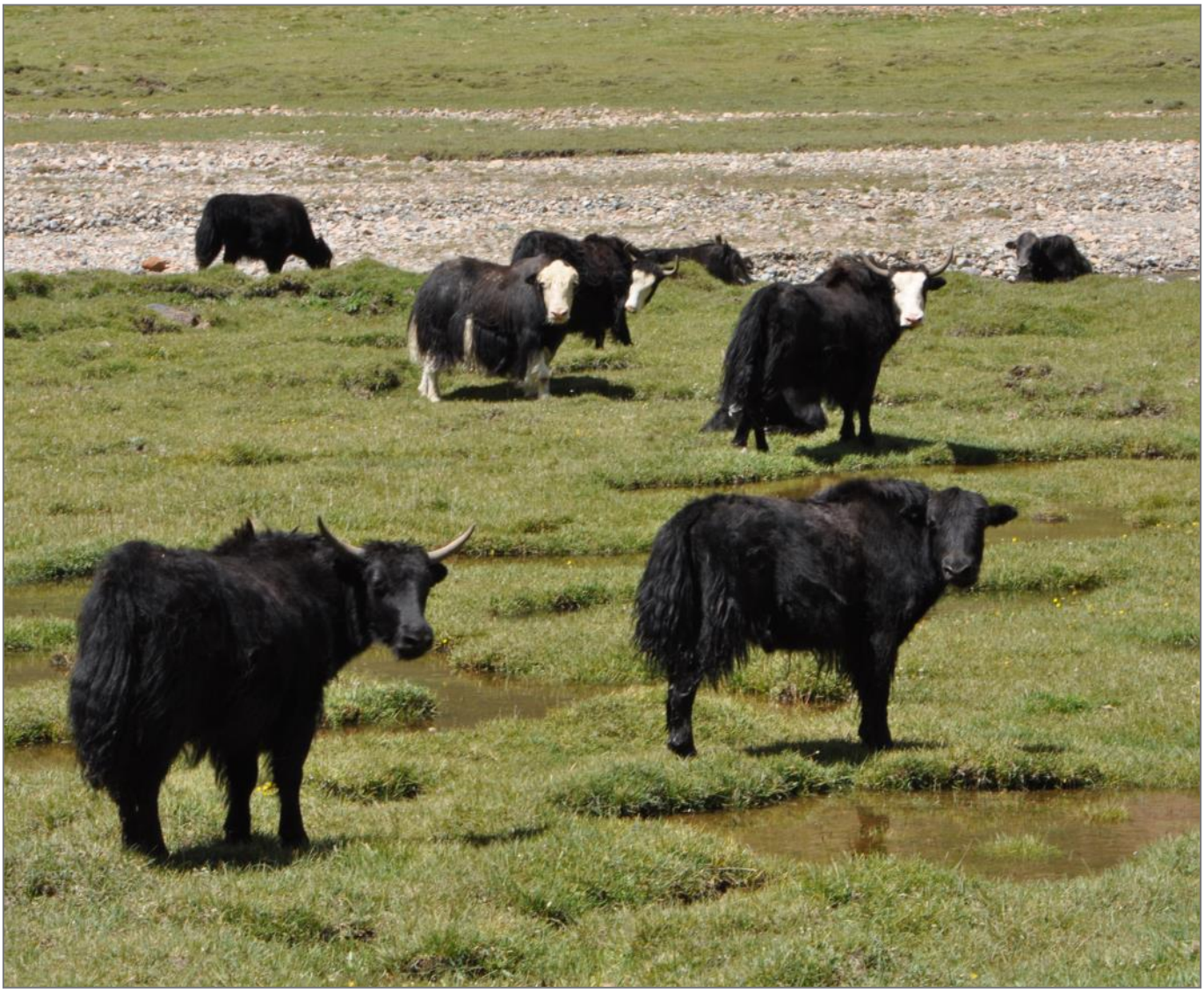
**20th EDGG Field Workshop**
27 May – 6 June 2025, Maritime and Ligurian Alps, Italy
Details: see pp. 6-11

**21st EDGG Field Workshop**
28 June – 6 July 2025, Turku Archipelago, Finland
Details: see pp. 12-18

**20th Eurasian Dry Grassland Conference 2025**
7-10 July 2025, Oulu, Finland
Details: see pp. 19-23

**67th IAVS Annual Symposium**
29 July - 3 August 2025, Greeley, Colorado, US
Details: https://www.iavs.org/events/

**Conference of the Ecological Society of Germany, Austria and Switzerland (GfÖ)**
1-5 September 2025, Würzburg, Germany
Details: https://www.gfoe-conference.de/



**Yaks in Obikhingou Valley, Central Tajikistan. Photo: A. Nowak.**

***EDGG on the web:***
http://www.edgg.org

The Eurasian Dry Grassland Group (EDGG), founded in 2008, is a working group of the International Association for Vegetation Science (IAVS) and member of the European Forum on Nature Conservation and Pastoralism (EFNCP). On 27 February 2025, it had 1521 members from 65 countries.

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

**The EDGG covers all aspects related to 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.

## *EDGG Executive Committee and responsibilities of its members*

**Idoia Biurrun,** Spain, idoia.biurrun@ehu.eus
Membership Administrator; Deputy Chief Editor of *Palaearctic Grasslands*

**Jürgen Dengler,** Switzerland, dr.juergen.dengler@gmail.com
Secretary-General; Deputy Treasurer and Representative to IAVS; Special Feature Coordinator; Deputy Chief Editor of *Palaearctic Grasslands*; Deputy Field Workshop Coordinator

**Ellen DeVrieze,** Belgium, ellen.devrieze@ugent.be
Social Media Administrator; Deputy Editor of Website; Deputy Secretary-General

**Rocco Labadessa,** Italy, rocco.labadessa@gmail.com
Chief Editor of *Palaearctic Grasslands*

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Treasurer and Representative to IAVS; Deputy Chief Editor of *Palaearctic Grasslands*

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Website Editor; Conference Coordinator; Deputy Social Media Administrator

**Denys Vynokurov**, Ukraine, denys.vynokurov@gmail.com
Field Workshop Coordinator, Deputy Conference Coordinator

**Early flowering of *Matthiola fruticulosa*, Matera, Italy. Photo: R. Labadessa.**