

EDGG Event

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Gipuzkoako
Foru AldundiaGobierno de Navarra
Nafarroako Gobernua**EGC 2020****17th Eurasian Grassland Conference****Tolosa, Spain****7-13 September 2020**

Grassland dynamics and conservation in a changing world
Second Call



View of Tolosa. Photo: I. Salcedo.

17th EGC focuses on global change as one of the major drivers of grassland biodiversity and productivity, with special sessions devoted to global change, succession and urban grasslands. The conference aims to bring together and connect the latest research with practical management and policy, and thereby contribute to the sustainability of natural and semi-natural grasslands and their animal and plant resources. As in previous years, we offer opportunities for the exchange of information during our standard talk and poster sessions, as well as the mid-conference excursion to the Aizkorri-Aratz Natural Park. In addition, we offer a *Meet the Editors Workshop* and a *Workshop on Orthoptera*. Furthermore, we will host three inspiring keynotes. We cordially invite all grassland researchers and conservationists to join us in Tolosa!

Programme

This year's conference offers three keynote talks, two optional workshops and an optional post-conference excursion, in addition to the talk and poster sessions, mid-conference excursion and grassland party. On 7th September, participants have the opportunity to participate in two workshops: i) *Meet the Editors* of high impact ecology and vegetation journals, ii) workshop on *Orthoptera*, led by Rocco Labadessa. We welcome Alfonso San Miguel, Monika Janišová and Frank Yonghong Li as our keynote speakers. The mid-conference excursion will take us to Aizkorri Natural Park, and a three-day optional post-conference excursion will take place mostly in Navarre (11–13th September). This region is located at the intersection of three biogeographic regions: Atlantic, Mediterranean and Alpine. The

Please register at <http://www.edgg.org/egc2020>

Deadline: 1st May 2020

participants will have the opportunity to see grassland landscapes of those biogeographic units, and learn about their flora and fauna, as well as grassland use. Below you will find the preliminary programme. To find more information, please visit the conference web site: www.edgg.org/EGC2020.

Preliminary programme

7th September	Workshops, registration
12:00-17:30	Introduction to <i>Orthoptera</i> (lunch in between, after the room session)
17:30-18:30	Meet the editors
18:30-20:00	Registration and welcome drink
8th September	Talks and Poster Sessions I and II
8:00-9:00	Registration
9:00-9:20	Opening ceremony
9:20-10:20	Keynote lecture by Alfonso San Miguel
10:20-11:30	Talks and posters, with coffee break at 11:05
13:30-15:00	Lunch in Zerkausia (see map)
15:00-16:00	Keynote lecture by Monika Janišová
16:00-19:00	Talks and posters, with coffee break at 17:00
19:00	Touristic tour
9th September	Mid-Conference excursion, Grassland Party and Auction
8:00	Departure of buses from Navarra bridge (see map)
19:00	Grassland Party in Arantzazu with Auction
22:00	Departure of buses from Arantzazu to Tolosa
22:30-22:45	Arrival at Tolosa
10th September	Talks and Poster Sessions III and IV
9:00-10:00	Keynote lecture by Frank Yonhong Li
10:00-13:30	Talks and poster, with coffee break at 11:00
13:30-15:00	Lunch in Zerkausia (see map)
15:00-17:45	Talks and posters, with coffee break at 16:45
17:45-19:00	General Assembly and Closing Ceremony
11-13th September	Post-conference excursion (optional, max. 40 people)
11 September, 8:00	Departure from Tolosa (Navarra bridge)
13 September, 20:00	Arrival at Biarritz (hotel with shuttle to airport)

Sessions

Global change is one of the major threats of natural and semi-natural grasslands, which are facing important challenges for their conservation, caused by land-use and climatic change. The 17th EGC aims to improve our knowledge of the diversity and management of Palaeoartctic grasslands in face of global change. Palaeoartctic grasslands are among the most threatened in the world, and include both natural grasslands (mainly alpine grasslands and steppes) and semi-natural grasslands used for animal husbandry. Due to several factors - land-use abandonment and intensification being the strongest - these grasslands have declined in extent, integrity and diversity. Their conservation is crucial, as Palaeoartctic grasslands account for almost 40% of the World's grasslands, and exhibit global maxima for small-grain plant species richness.

The conference intends to emphasize the following topics in focused sessions:

1. Succession and species turnover in abandoned grasslands

Ecological succession leads to shrub and tree encroachment of semi-natural grasslands after land-use abandonment. This session welcomes contributions dealing with the effect of land-use abandonment in any type of grasslands, including studies reporting data from permanent plots, monitoring of species and habitats, remote sensing, etc.

2. Biodiversity of urban grasslands

Across the Palaeoartctic urban grasslands are becoming a last refuge for endangered flora, fauna, and grassland habitats, especially when the surrounding rural landscapes experience either forest encroachment after abandonment, or management intensification, either through fertilization, afforestation or conversion to crops. Natural grasslands are declining in extent and quality due to overgrazing, but they are also converted to crops as irrigation becomes available. Therefore, throughout the Palaeoartctic, urban grassland patches may become conservation hotspots, and contribute value to urban communities. This session encourages studies focused on factors associated with diversity in urban grasslands, their contribution to the quality of urban life, and management for their persistence.

3. Above and belowground grassland diversity

In the Palaeoartctic Realm a major part of the biodiversity within most trophic levels and taxonomic groups is found in grasslands. This session will host studies dealing with alpha and beta diversity, at the taxonomic, phylogenetic or functional levels, including those reporting work on plants, animals, fungi and bacteria. Studies relating diversity patterns to variation in land use are especially welcome.

4. Grassland conservation and global change

This session will be focused on historical changes and future prospects on grassland extent and quality in the context of land-use trends and climate change. We encourage studies that examine the *drivers* of land-use change, *economics* of

grassland conversion, *projections* of changing grassland extent and composition, and studies of the impacts of conservation and management *policies* in the real world, whether they address changing native or alien components of vegetation, or the management of habitat for grassland inhabitants.

5. Classification of Palaeartic grasslands and other open habitats

Studies developing and/or applying grassland typologies are welcome in this session. Specially encouraged are contributions from Asia, North Africa and European regions lacking recent/comprehensive classifications of grasslands and other non-forest vegetation. We also call for studies that link phytosociological syntaxa to broadly defined habitat or vegetation types, both those used for conservation (e.g., EUNIS typology) or those applied in mapping and ecologic studies.

Special Issue

EDGG supports the visibility of the research presented in the EGCs. Studies presented in the conference will be eligible for submission to our regular special features in *Tuexenia* and *Hacquetia*. A special feature in the IAVS journal *Vegetation Classification and Survey* is planned to welcome studies dealing with grassland classification as well as its application for management and nature conservation.

Important dates

Registration opens: **1st March**

Early Bird registration deadline – **20th April**

Travel grant application deadline – **20th April**

Late registration deadline – **1st May**

Abstract submission deadline – **1st May**

Post-conference excursion application – **1st May**

Travel grant allocation – **31st May**

Acceptance of abstracts and type of presentation – **31st May**

We encourage you to register for the conference and the optional activities. Please find detailed information from the conference homepage and Register for the conference.

IMPORTANT: The number of participants for the post conference tour is restricted to forty (40). Thus, the local organizers must apply the principle of “first come, first served”. This means that the first 40 who register themselves for the post conference tour will be accepted. The rest will be included in a waiting list. After application for the post-conference-excursion, you will receive an invoice and payment details by e-mail.

Venue

The conference will be held in Tolosa (Basque Country, Spain, almost 20,000 inhabitants), a historic town in the province of Gipuzkoa, 25 km away from the province capital, San Sebastian (Donostia in Basque), a famous touristic location, a 20-30 min. train journey away (https://en.wikipedia.org/wiki/Tolosa,_Gipuzkoa; <https://turismoa.tolosa.eus/en/information/tourism-office>). In medieval times, Tolosa was a very important checkpoint between the Kingdoms of Navarre and Castile, France and the Cantabrian harbours. Currently it hosts many important



Fig. 1. View of Tolosa and the River Oria with the Navarra bridge. The white building to the left of the bridge is called Tinglado (Zerkausia), where we will have lunch on 8th and 10th September. The bus for the mid and post-conference excursions will depart from a bus stop on this side of the bridge. Photo: I. Salcedo

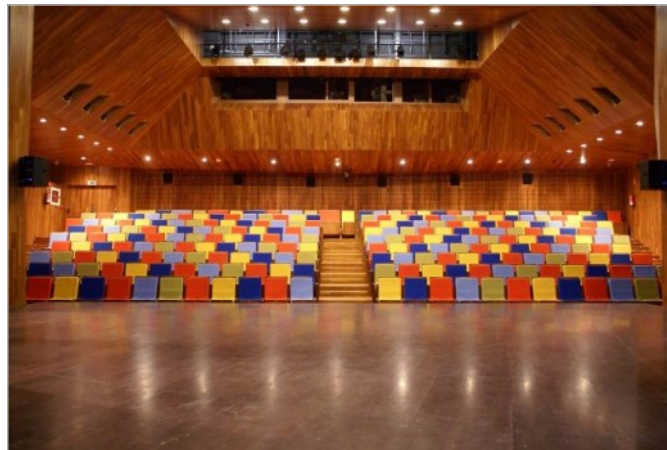


Fig. 2 (a, b). Venue of the EGC, TOPIC (Tolosa Puppets International Centre). On the left, TOPIC in the middle of Euskal Herria square (photo: <http://bit.ly/2Fl3fgo>); on the right, the conference hall (photo: <http://bit.ly/37y4hlk>).

cultural events and a traditional market every Saturday (Fig. 1).

The registration and conference sessions will be held in TOPIC, the Tolosa Puppets International Centre, in Tolosa city centre: Euskal Herria, 1 (Figs. 2 and 3).

Accommodation

Accommodation should be booked independently by each participant. In Tolosa, there are two hotels, three guest-houses, and several rural accommodations. Below we give details about them. Please take into account that beginning of September is High Season in the area, so prices are not cheap. As the availability of accommodation is rather limited, we recommend booking as soon as possible. There is also the possibility of hiring flats online. Prices given below include VAT. Breakfast is a continental breakfast.

Hotels:

[Hotel Oria](#), 5 min. walking from the conference venue (. Prices: single room with breakfast: €77.80; double room with breakfast: €105. Free Wifi.

[Hotel BideBide](#), adjacent to conference venue. Prices: individual €54, double €80, triple €110 (prices excluding breakfast, but with 20% discount if reservation is made via the hotel's webpage). Free Wifi.

Guesthouses:

[Pensión Karmentuku](#), in the town center. Prices: €30 single room without bathroom, €50 double room without bathroom, €75 double room with bathroom. Breakfast available, but not included. Free Wifi.

[Pensión Oyarbide](#), in town center. Prices: €35 single room, €50 double room, both with en suite bathroom. Possibility of additional bed. Free Wifi. No breakfast service, but many cafeterias in surroundings. Parking: €10.

[Hostal Bentaldea](#), 1 km from Tolosa (Polígono Industrial 38, Anoeta). Rooms and Prices: 2 rooms with one double bed (40 €); 3 double rooms (55 €, 28 € per person), two of them with three beds, so with possibility of three persons. In this

case, the room is 70 €, so 24 € per person. All rooms with bathroom. Free Wifi.

Rural accommodations:

[Korteta Nekazalturismoa](#). Rural accommodation at a distance of 1.5 km from the town centre. Only suitable for people with a car, as it is quite steep to get there (160 m higher than town center). Six double rooms available, with possibility of supplementary beds, total room for 18 people. Prices change from €25 to €50 per person, depending on single/double room and season.

[Teileri](#) in Berrobi village. New building used as rural accommodation at 5 km distance from Tolosa. Only suitable for people with car. Two apartments with parking. Each apartment with three double rooms, two complete bathrooms, kitchen, etc. Prices: Whole apartment: €155 per night, whole house (two apartments): €310 per night.

[Akulebi](#) in Villabona, Legarreta Auzoa. 4.5 km distance from Tolosa, 1.2 km from the railway station. Three double rooms with bathroom. Breakfast service available.

[Urresti](#) and [Alustiza](#) Rural houses, both in Villabona, Amasa . 7 km distance from Tolosa.

Travelling to Tolosa

There are two international airports in the surroundings:

[Biarritz airport](#), in the French Basque Country, with direct flights to several European cities, including Munich, London, Berlin, Geneva, etc. There are direct buses from the airport to the bus station in San Sebastian (only one intermediate stop in San Sebastian city), 45 min.

[PESA](#): only one bus per day, summer timetable not available yet (currently, bus leaves Biarritz airport at 11:35, arrival at San Sebastian bus station at 12:30 (weekends: 12:35 and 13:30). In the other direction, the bus leaves San Sebastian bus station at 10:30, arrival at Biarritz airport at 11:15.

[ALSA](#). This company offers three buses every day, but summer timetable not yet available.

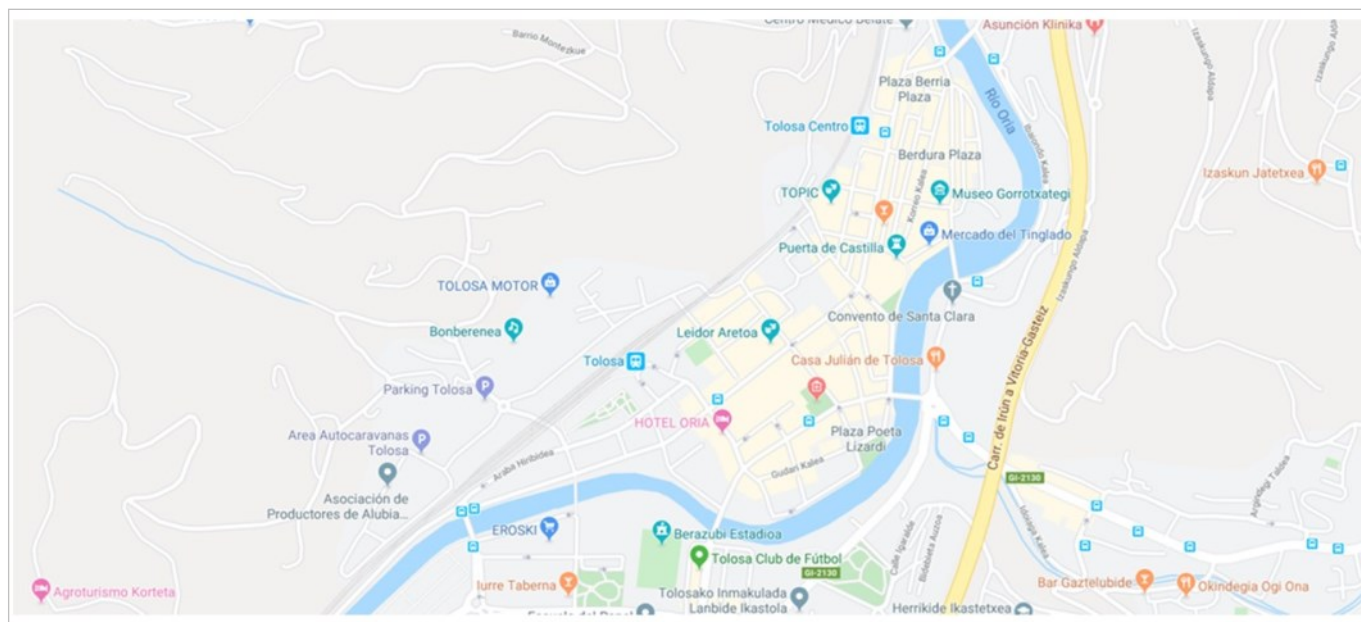


Fig. 3. Map of Tolosa showing the two railway stations: Tolosa Centro (Tolosa Erdia officially) and Tolosa (estación, geltokia), and the conference venue TOPIC (BideBide hotel is adjacent) (GoogleMaps). Mercado del Tinglado (zerkausia), by the river, is a covered market where we will have lunch during the conference. The bridge adjacent to the Tinglado is the Navarra bridge. The bus for the excursions will leave at the south side, indicated with a cross. All distances in Tolosa are very small, from hotel Oria to TOPIC 5 to 10 minutes walking distance.

[Bilbao airport](#), near Bilbao, with direct flights to many European cities. PESA company offers direct buses from the airport to San Sebastian bus station (€17.10, 1 hour and 8 min.). Timetables not yet available, but there is high frequency of buses.

There is also a regional airport, **San Sebastian Airport**, located at Hondarribia, on the border with France. This airport only operates with Air Nostrum, Iberia and Vueling, flying to Barcelona and Madrid. If you fly to this airport, there are two buses you can take to reach Tolosa (<http://www.aena.es/en/san-sebastian-airport/public-transport.html>). Bus E21 takes you directly to San Sebastian bus station, with a departure every hour. If you have to travel from San Sebastian airport to Tolosa during the weekend, you should take bus E27.

Once you reached San Sebastian bus station, you should move to the adjacent train station (bus and train stations are connected by a lift), and take a train to Tolosa (20 or 30 min.). The train has two stops in Tolosa (Tolosa centro or Tolosa erdia), in the town centre, very near the conference venue and most hotels and guesthouses, and the main station (Tolosa estación, or Tolosa geltokia), closer to Hotel Oria.

If you are travelling from Madrid, there are buses from Madrid airport and Madrid bus station to Tolosa, with ALSA company. This route stops in several cities before reaching Tolosa, so it is not so convenient. On average, the journey lasts 6 and a half hours, both for buses leaving from the airport and from the bus station.

Visas

If you require an official invitation letter to attend the conference, please contact the Chair of the Organizing Committee, Idoia Biurrun, after registering (Department of Plant Biology and Ecology, University of the Basque Country (UPV/EHU) P.O. Box 644, 48080 Bilbao, Spain. Email: idoia.biurrun@ehu.eus). This letter will not represent any commitment on the part of the organizers to provide financial support for you; it is only for the purpose of obtaining your visa or other such purposes.

Keynote lectures

The 17th EGC is pleased to welcome three keynote speakers

Diversity, management and conservation of natural and semi-natural grasslands in Spain

Alfonso San Miguel, Department of Natural Systems and Resources, Polytechnic University of Madrid, Madrid, Spain

Spain is a country with an amazing diversity of natural and semi-natural grasslands. Most of them are included in old cultural landscapes and/or High Nature Value Farmland. That is why their conservation, and that of their associated biodiversity (flora, fauna, habitats of community interest), requires suitable management. In his keynote lecture, San Miguel will offer an overview of the diversity of natural and semi-natural grasslands in Spain and their associated biodiversity, and on their conservation status after the changes in their management during the last decades.



Alfonso San Miguel is full professor at the Department of Natural Systems and Resources, Polytechnic University of Madrid. He is a member of the Spanish Society of Pastures (President between 2010-2014) and the Spanish Society of Geobotany. He is also the Director of the National Parks Chair. His research

topic is management and conservation of natural and semi-natural grasslands and rangelands and their associated biodiversity: flora and fauna. Some of his latest works deal with typology of natural and semi-natural grasslands in Spain, Types of Habitats of Community Interest and wild ungulate carrying capacity and management in Natural Protected Areas. ResearchGate profile: https://www.researchgate.net/profile/Alfonso_Miguel3.

Species-rich semi-natural grasslands of Europe – historical masterpieces of human-nature interaction

Monika Janišová, Institute of Botany, Slovak Academy of Sciences, Banská Bystrica, Slovakia

Examples of positive impact of humans on ecosystem biodiversity are rare. One of the phenomenal examples are species-rich secondary grasslands of Europe, which were formed as a consequence of the low-intensity farming. Their maintenance is the main goal of current grassland conservation. Through several examples from the Carpathian Mountains, I would like to demonstrate: i) the importance of a deep knowledge of local history and traditions, which lead to the formation of each particular grassland; ii) the risks associated with substitution of traditional grassland management practices by their modern analogies; iii) the irreplaceable role of domestic animals in grassland conservation. Additionally, I would like to highlight approaches in-

Monika Janišová is a vegetation ecologist focusing mainly on grasslands, their classification, biodiversity, succession, management and conservation. She is also interested in biogeography and endemism, as well as population biology and conservation of rare plants. Recently, the main subject of her research includes traditional ecological knowledge, bio-cultural heritage and sustainable agriculture in the Carpathian Mountains (Central and Eastern Europe). ResearchGate profile: https://www.researchgate.net/profile/Monika_Janisova3.



spired by our ancestors (based on traditional ecological knowledge) that could help to keep/increase grassland diversity for our descendants.

Patterns, dynamics and conservation of the steppes on the Mongolian Plateau

Frank Yonghong Li, School of Ecology and Environment, Inner Mongolia University, Hohhot, China

In his keynote, Professor Yonghong Li will summarize the patterns and dynamics of the vast and continuous easternmost part of the Eurasian steppe, based on his field research experiences. He will discuss species diversity and vegetation dynamics in relation with climate and land-use changes, and present the status of, and the challenges for, the conservation and sustainable management of the prestigious natural grasslands.

Frank Yonghong Li (PhD 1992, Montpellier) is professor and dean of the School of Ecology and Environment, Inner Mongolia University, China. His research career includes many years in the Institute of Botany of Chinese Academy of Sciences (Beijing) and New Zealand AgResearch-Grasslands Research Center (Palm. North). His current research covers biodiversity conservation, ecosystem processes and multifunctioning, and restoration and adaptive management of grassland ecosystems under climate and land-use change. ResearchGate profile: https://www.researchgate.net/profile/Frank_Li10.



Workshops

17th EGC offers two optional workshops: Meet the Editors and Introduction to *Orthoptera*.

Meet the Editors, facilitated by Didem Ambarlı

7th September, 17:30-18:30, with informal follow-up during the welcome drink.

We'd like to provide a platform for our participants to meet with editors of high impact journals on ecology, conservation and vegetation science and ask questions about the peer-review process and get tips on submitting a successful paper. We will have Peter B. Pearman, Jürgen Dengler, Daniel Sánchez-Mata, and Peter Török with us, who work as editors of the journals *Journal of Biogeography*, *Vegetation Classification and Survey*, *Biodiversity and Conservation* and *Ecological Restoration*, respectively. Additional Chief or Associate Editors of other journals might be in the definitive panel. This event is free of charge and all participants are cordially invited to join us before and during the welcome drink.



Fig. 4. *Euchorthippus declivus* (left) and *Acrometopa italica* (right). Photos: R. Labadessa.

Rocco Labadessa is an active EDGG member, working as freelance biologist for environmental studies and biodiversity conservation projects in southern Italy. His main research focus is plant and insect ecology and conservation, with specific studies on orthopteran ecology and biogeography, and their relationship with grassland structure and dynamics. ResearchGate profile: https://www.researchgate.net/profile/Rocco_Labadessa.



Introduction to Orthoptera, led by Rocco Labadessa

7th September, 12:00-17:30, with lunch break after indoor session

The workshop will provide key aspects on the taxonomy and ecology of grasshoppers, katydids and crickets. Through a brief course indoors and practical activities in the field, the workshop will familiarize participants with sampling and determination techniques, also give hints on the interpretation of orthopteran community and biodiversity data (Fig. 4).

This event is optional, with a fee of €20.

Excursions

17th EGC offers a mid-conference excursion to the Aizkorri-Aratz Natural Park on 9th September and a post-conference excursion in Navarre from 11-13 September. Main excursion sites, as well as overnight towns, are indicated in Fig. 5.

Mid-conference excursion (9 September 2020)

We aim to show participants the biodiversity-rich grasslands of the Cantabrian valleys and mountains in the Basque Country. Two optional excursions are planned:

Excursion 1. Mountain walk to Aizkorri peak, led by Javier Loidi.

We will travel by bus to Otzaurte, where we will start a mountain hike to the top of Aizkorri Mountain Range, and finish in Arantzazu. It will be a long hike, with approximately 1,000 m slope.

The highest peak in the Basque Autonomous region, Aitzuri (1,551 m a.s.l.) is located in this limestone mountain range, which limits the Cantabrian and Mediterranean basins (Fig. 6). Basque legends place one of the houses of the goddess Mari, a personification of mother earth, and all the elements it contains, in these summits. In these mountains, we can find such treasures as the Tunnel of San Adrian, containing a chapel, crossed by a medieval road, and the Arrikutz cave, with galleries full of giant stalactites.

In 2006, the Aizkorri mountain range became the Aizkorri-Aratz Natural Park, of 19,400 ha. Several forest types are abundant in these mountains, mostly beech forests, but there is also space for semi-natural grasslands in many open areas that have been retained for extensive grazing, especially in Urbia and Oltza open fields, at approximately 1,000 m a.s.l., which have been used for the summer grazing of sheep since the Neolithic, as testified by several megalithic monuments (Fig. 7). Nowadays also cattle and horses are grazing in these fields, but the indigenous latxa breed has been traditionally bred, mainly for its milk, which is used to make Idiazabal cheese. Shepherd's join in small group of txabolas (small mountain houses) during the summer months. Besides shepherding, charcoal-making has also been a traditional activity in these mountains.



Fig. 5. Map showing the venue of the conference (Tolosa), destination of the mid-conference excursion (Aizkorri-Aratz) and main destinations of the post-conference excursion to Navarre (source: GoogleEarth). Airports are also indicated, as well as main cities in the surroundings.

Many species of mammals, birds and amphibians inhabit these forests, pastures and cliffs: alpine newt (*Ichthyosaura alpestris*), Iberian frog (*Rana iberica*), Peregrine falcon (*Falco peregrinus*), Griffon vulture (*Gyps fulvus*), Egyptian vulture (*Neophron percnopterus*), Alpine chough (*Pyrrhocorax graculus*), Red-billed chough (*Pyrrhocorax pyrrhocorax*), European snow vole (*Chionomys nivalis*), European pine marten (*Martes martes*), European polecat (*Mustela*

putorius), European wildcat (*Felis silvestris*) and several bat species.

On our way to the mountain summit, we will cross dry grasslands with *Helictotrichon cantabricum* and *Sesleria autumnalis* and basophilous thorny-cushion scrub with *Genista occidentalis*, successional stages of *Quercus pubescens* forests. We will go up to the Urbia fields, at 1,100 m a.s.l., through beech forests. In Urbia, grasslands of *Violion caninae* and heathlands of *Daboecion cantabricae* form the

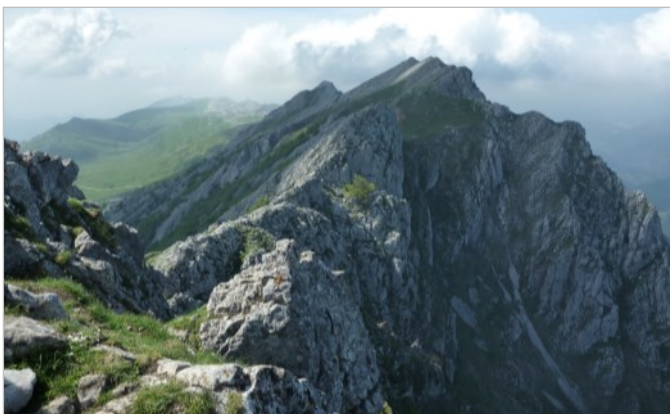


Fig. 6. Aizkorri summit. Photo: J. Loidi.



Fig. 7. Urbia fields (photo: <http://bit.ly/31ovWls>).



Fig. 8. Surroundings of Orendain, Aralar. Left: Larreta farm (photo: <https://www.larretaesnekiak.com/>); right: sheep herd with Txindoki mountain on the back (photo: <http://bit.ly/39qD9Ws>).

traditional pastoral landscape. Back on the limestone steep slopes towards the summit, rocky grasslands of the class *Festuco-Ononidetea* occur, with *Teucrium pyrenaicum*, *Carex caryophylla*, *C. ornithopoda*, *Festuca rectifolia*, *Brachypodium rupestre*, *Clinopodium alpinum*, *Thymus praecox*, etc. At higher elevations, we will find subalpine dry grasslands with *Festuca gautieri* subsp. *scoparia* and *Agrostis schleicheri* (*Festucion scopariae*). Near the summit, limestone cliffs harbour rupicolous communities, with *Potentilla alchimilloides*, *Hornungia alpina* subsp. *auerswaldii*, *Dethawia splendens* and *Erinus alpinus* (*Sedo-Seslerion hispanicae*), as well as mesic chionophilous grasslands with *Sesleria caerulea* (*Primulion intricatae*).

Excursion 2. Visit two farms, meadows and pastures in Aralar and Aizkorri mountain ranges, led by Idoia Biurrun.

Our first stop will be a short walk to enjoy morning fresh air in the northern foothills of the Aralar mountain range

(Aralar Natural Park), near the villages of Abaltzisketa and Larraitz, under the impressive silhouette of Mount Txindoki. After this nice walk, we will visit the Larreta farm in the village of Orendain, at 5 min. distance by bus (Fig. 8).

We will then move to Ataun, in the western foothills of the Aralar range, where we will learn about an old method of bringing the hay to the valley from the steep slopes in the hills, and also have a nice walk by the stream and surrounding meadows (Fig. 9). In Ataun, we might visit another farm, but this is not fixed yet.

After our picnic in Ataun, we will travel to Arantzazu (45 min.), already in the Aizkorri-Aratz Natural Park. In Arantzazu, we will first hike for 2-3 hours to mountain grasslands above the village, and afterwards visit the Gomiztegi farm and shepherd school. They will show us their facilities, how they make the Idiazabal cheese with the milk of the Latxa sheep, and perform a demonstration with Basque shepherd dogs working with sheep herds (Fig. 10).

Both excursions will join at 19:00 for the Grassland Party nearby the Arantzazu sanctuary.

Post-conference excursion (11-13 September 2020)

(optional - maximum number of participants: 40)

The three-day post-conference excursion will take place mostly in Navarre, a highly diverse region where three biogeographic regions meet: Atlantic, Alpine and Mediterranean. Fig. 11 shows the main natural vegetation types in Navarre. The Atlantic region covers the north and centre of the region and it is divided into two main areas: Cantabrian valleys, with oceanic and rainy temperate climate, and sub-mediterranean valleys, where the climate is still temperate, but a bit dryer and more continental. Natural vegetation in this region is formed by oak forests (mostly *Quercus robur*, but also *Q. pubescens* in submediterranean areas) in valleys and hills, and beech forests in the mountains. Grasslands are semi-natural grasslands, except for azonal grasslands in the coastal ecosystems and rocky areas. Meadows are

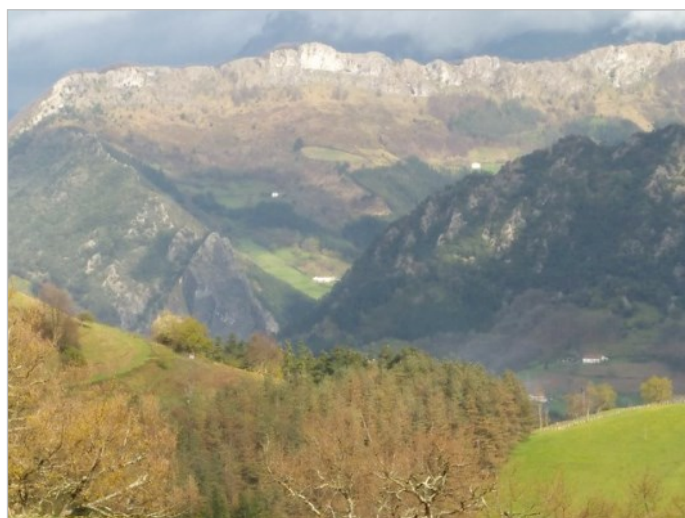


Fig. 9. Dome in Ataun (photo: <http://bit.ly/2UK4KOP>).



Fig. 10. Gomiztegi farm and shepherd school (photo: <http://www.oñatiturismo.eus/es/listings/gomiztegi-baserria/>).

mostly found in valleys, while in the mountains, acidophilous grasslands of *Violion caninae* (*Nardetea strictae*) and basophilous dry grasslands of *Potentillo-Brachypodium pinnati* (*Festuco-Brometea*) and *Bromo-Teucrium pyrenaici* (*Festuco-Ononidetea*), the latter in rocky slopes, prevail. Heathlands are one of the most typical landscape features, especially on siliceous bedrocks and leached soils.

The Alpine region, in the northeast corner, is the Pyrenees, one of the most beautiful and impressive European mountain ranges. The Pyrenees form the border between Spain and France from the Mediterranean to the Atlantic, and in Navarre, they are represented by the Western Pyrenees, the most oceanic part of the range. Natural vegetation comprises downy oak (*Quercus pubescens*) and silver fir-beech forests in the montane belt, *Pinus uncinata* forests in the subalpine belt and alpine grasslands over the timberline, belonging mostly to the alliances *Primulion intricatae*, *Festucion scopariae* and *Carici macrostylidi-Nardion strictae*.

The Ebro River valley occupies the south of the region, with a typically Mediterranean climate, though we can still find

differences from the upper part to the centre of the valley (the so-called Ebro depression). On the upper part, the climate is still quite rainy, and natural vegetation corresponds to deciduous forests dominated by *Quercus faginea*, whereas evergreen *Quercus rotundifolia* becomes dominant on the rocky slopes. Secondary grasslands still belong to *Festuco-Brometea*, at least in the deepest soils, although a particular meso-xeric grassland where *Brachypodium phoenicoides* is dominant. Down the valley, the climate becomes drier and warmer, and the natural vegetation is formed only by evergreen sclerophyllous trees (*Quercus rotundifolia*). Secondary shrublands and grasslands are typically Mediterranean: garrigues, with *Rosmarinus officinalis* (*Ononido-Rosmarinetea*) and Mediterranean grasslands, where *Brachypodium retusum* is the dominant species (*Lygeo-Stipetea: Phlomidio lychnitis-Brachypodium retusi*).

The driest area in Navarre is located in the southernmost corner, near the Ebro River. Here, the bioclimate is Mediterranean xeric, too dry even for the sclerophyllous forest, and thus the natural vegetation is an open woodland with *Pinus halepensis* and *Juniperus thurifera*, which is better represented towards the center of the Ebro depression, in the Zaragoza province. An exceptional grassland type can be found here on the clayey soils: the relict Mediterranean steppes, formed by *Lygeum spartum*, with *Stipa capillata* and *S. lagascae* (*Agropyro-Lygeion sparti*). *Lygeum spartum* also forms grasslands on the edges of inland saltpans (*Limonion catalaunico-viciosoi*), in contact with halophilous scrub (*Suaedion brevifoliae*) and grasslands (*Puccinellion lagascae*). Another outstanding feature of this semi-arid area is the abundance of nitrophilous steppic scrub of the class *Pegano-Salsoletea*. Mediterranean grasslands and scrubs are used as winter pasture by big sheep folks that move to the Pyrenean grasslands in summer (Fig. 12).

On the first day, we will leave Tolosa at 8:00 in the morning from the same bus stop as the mid-conference excursions (near Navarra bridge, see map). We will travel directly to Jaizkibel, a small coastal mountain between San Sebastian and Hondarribia, a beautiful town on the border with France. Sandstone is the prevailing rock in this mountain, and thus heathlands cover almost all the surface, maintained by repeated burning and extensive grazing. These coastal heathlands are very thermophilic, as frost is very rare near the ocean, and therefore the floristic composition is quite different to that of the mountain heaths. Small patches of mires are scattered in the heathland, with interesting communities belonging to *Anagallido-Juncion* and *Hyperico elodis-Sparganion*. After a walk in the heathland, we will have coffee and refreshments near Guadalupe chapel, with an impressive panorama of the estuary of the Bidasoa River, the natural border between Spain and France, with the towns of Hondarribia (Spanish Basque Country) and Hendaye (French Basque Country) (Fig. 13).

We will continue our journey by bus up the Bidasoa River, and will enter Navarre a few kilometers from the sea. We will climb to the Belate mountain pass, in the interfluvium of the Atlantic and Ebro basins. The trip will take us one hour

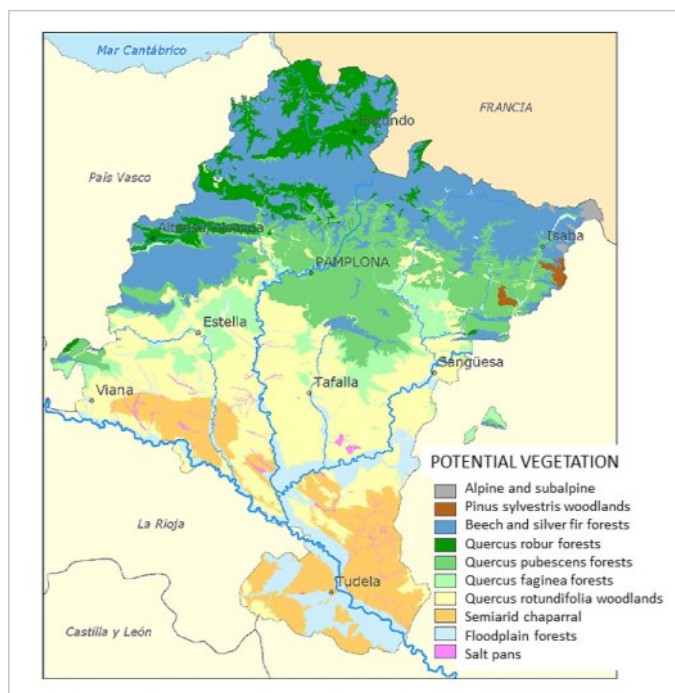


Fig. 11. Map of potential vegetation of Navarre. Modified from the http://www.cfnavarra.es/agricultura/informacion_agraria/MapaCultivos/seriesvegetacion.html.

or less. In Belate, we will stop to visit mountain acidophilous grasslands and heathlands, but we will especially focus on the Belate mire. This is one of the largest mires in the Basque mountains, although it has long suffered drainage, eutrophication and overgrazing. During recent years, a restoration project has been initiated, and we will be able to see some of the permanent plots used for monitoring. Asun Berastegi and Javier Peralta, our guides on this excursion, are responsible of this monitoring study, so we will have all the information, and we will be able to ask about the progress.

In the afternoon, we will continue our journey by bus southwards, and our next stop will be in the Urbasa mountain range. There, we will enjoy the mountain landscape, with

basophilous beech forests and extensive grasslands. The location of this mountain, south of the Atlantic-Mediterranean divide, creates a high diversity of vegetation, with temperate grasslands of *Festuco-Brometea* and *Nardetea* co-occurring with submediterranean grasslands of *Festuco-Ononidetea*, with *Festuca hystrix*, *Helianthemum incanum*, *Jurinea humilis*, etc. From Urbasa we will go down to the Mediterranean region, and travel to our accommodation in the historical town of Olite (Hotel La Joyosa Guarda) (Fig. 14). We are already in Ebro valley, although still on the margins of its tributary Cidacos. For those of you who never visited the Mediterranean Region, we will make a special toast during the dinner!!

On the second day, we will travel directly southwards to the Ebro depression, towards the driest area in Navarre, Bardenas Reales. En route, we will stop near the River Aragón in Mélida, a tributary of the River Ebro, coming from the Western Pyrenees, to enjoy panorama and visit some halophilic and gypsophilic communities in Caparrosa. The main stop of the journey will be in the impressive Bardenas Reales, and huge non-urbanized extension of badlands, plateaus, salt pans and canyons, in which the soils comprise clay, chalk and sandstone (Fig. 15).

After a long stop in Bardenas, picnic included, we will return our journey and travel northwards to the Pyrenees. We will make a last short stop in the Mediterranean Region, near the village of Lumbier (Iso mountain pass) and a photo stop at the panorama of the impressive canyon Foz de Arbayun. In the evening, we will reach our accommodation in the village of Isaba. We will sleep at the Isaba hotel, but before going to bed we will have the opportunity to walk around the village, which is full of life during summer weekends.

On the third day, we will go by bus to the mountain pass called Piedra de San Martín, on the border with France. From there we will hike through subalpine and alpine grasslands and dwarf shrublands with *Juniperus alpina* and *Rhododendron ferrugineum* (Figs. 16 and 17). The most abundant grasslands are acidophilous *Nardus stricta* grasslands (*Campanulo-Nardion*) on deep soils, communities of *Festucion scopariae* on the sunny and rocky slopes (Figs. 18 and 19), and of *Primulion intricatae* where snow accumulates.



Fig. 12. Sheep herds are taken from the winter pastures in Bardenas Reales to the summer pastures in the Pyrenees along traditional paths (Cañadas Reales), nowadays most of them under roads. Sheep arriving to Pyrenean valleys (left), climbing to the mountain (center), enjoying the subalpine grasslands. Photos: A. Berastegi.



Fig. 13. Estuary of Bidasoa River, frontier between Spain (below) and France (above). Photo: I. Salcedo.

In the afternoon, we will return to the bus and go down the mountain pass northwards, entering France. We will enjoy the nice traditional landscape of French Basque Country from the bus, with small white villages, meadows, heathlands and small patches of natural forests. We will stop in one of these villages for some refreshment and, if we have some time, visit some meadows and heathlands. In the evening we will reach our accommodation near Biarritz airport, the hotel IBIS Biarritz Anglet Aeroport, at 1.5 km distance from the airport. Our three-day journey will finish here. Next day participants with flights in the afternoon will have the possibility to visit the touristic town of Biarritz, at 3 -4 km from the hotel.

Practical advices for the participants about the excursions

Excursions will take place at the end of the summer, so the weather may be either warm and sunny, or rainy and a bit

chilly, especially in the mountains. Therefore, participants should bring rainwear for the excursions.

Grassland Party

The Grassland Party will take place on 9th September, near the Arantzazu sanctuary, where the participants of the two mid-conference excursions will join at around 19:00. The Sanctuary, located over a steep ravine at 750 m a.s.l., is the main entrance to Aizkorri-Aratz Natural Park, is famous for its great artistic and architectonic value (Fig. 20).

During the Grassland Party we will taste local food (cheese, vegetables, meat, etc.) and drink (cider, wine), and we will have the opportunity to see and listen to Basque traditional dances and music, including an exhibition of [txalaparta](#), a traditional percussion instrument where two txalapartaris (txalaparta musicians) play music using two wooden sticks each over a board (Fig. 21).



Fig. 14. Palace of the kings of Navarre of Olite. Photo: A. Berastegi.



Fig. 15. Castil de Tierra, Bardenas Reales, with *Lygeum spartum* on the front. Photo: J. Loidi.

Auction

The auction will take place during the Grassland Party in Arantzazu.

Conference participants are encouraged to bring foods and drinks from their countries. Any other object related to grasslands, their management and biodiversity are also welcome, e.g., books, traditional tools and music instruments, plants and animal drawings, etc. All items brought for the auction will be delivered upon registration, so that they can be exhibited during the first conference day. The organizers will be responsible for taking all the objects for the auction to the Grassland Party.

Fees

The registration fee provides full participation in the conference, including registration and conference materials, admission to the conference, lunches and coffee breaks on 8th and 10th September, mid-conference excursion with lunch pack, grassland party, and Meet the Editors workshop. A childcare service will be offered upon demand and free of charge. Please indicate during registration if you will need it.

Fees of the optional events

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

- Post-conference excursion (11-13 September): €275
- Workshop on *Orthoptera* (7 September): €20

Payments

Payments should be made by bank transfer by 20th April at the latest for early bird registration and by 1st May for late registration. Below are the bank details. We are not able to accept payment of the registration fee at the conference: this must be paid in advance by bank transfer.

	Early Bird Registration Until 20th April	Late Registration until 1st May
Student IAVS members*	€150	€180
Students, not IAVS members*	€170	€200
Other IAVS members*	€200	€230
Non-students and non-IAVS members	€220	€250

**Please submit evidence of IAVS membership and/or your enrolment at a University by emailing confirmation of matriculation to idoia.biurrun@ehu.eus*

Bank: Kutxabank

IBAN: ES35 2095 0292 9191 1945 3561

SWIFT (BIC): BASKES2BXXX

Account holder: Universidad del País Vasco-Euskal Herriko Unibertsitatea

Payment reference: EGC 2020, participant's name and surname (Please indicate this information in the details of your payment!)

Please note that, the post-conference excursion fee should be paid after you receive a confirmation email about your place.

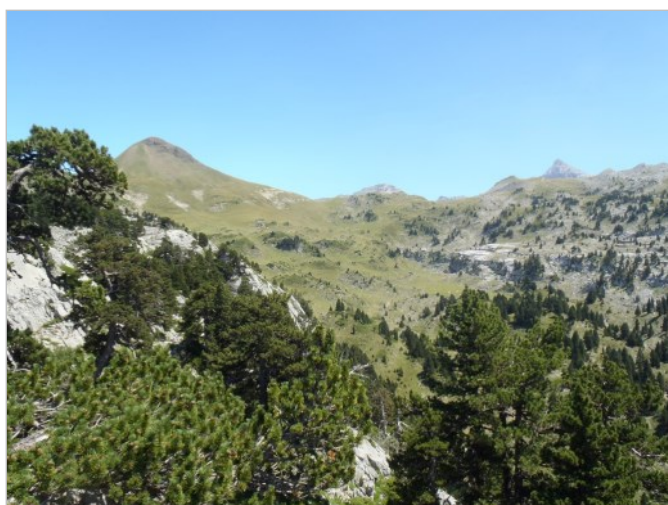


Fig. 16. Larra karstic area in the Western Pyrenees. Photo: A. Berastegi.

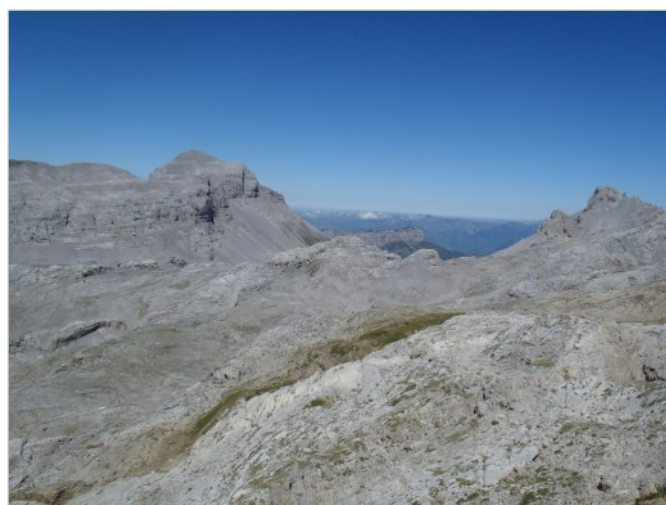


Fig. 17. Pic d'Anie, 2,507 m a.s.l., in the border between France, Navarre and Aragón. Photo: A. Berastegi.

Cancellation and refund

Cancellation and repayment for symposium:

100% cancellation until 31st June

80% cancellation until 31st July

No refund for cancellation after 31st July

Cancellation and repayment for post-conference excursion:

No refund for cancellation after 30th May

Financial support

Thanks to the EDGG's mother organization IAVS, we can support a number of participants with travel grants. Travel grants will be awarded according to the IAVS criteria, based on income level and country of origin. They will preferentially be given to early-career and other financially constrained scientists. The support usually covers only part of the participant's costs, according to the number of successful applications. To qualify for a travel grant, active participation at the conference (oral presentation or poster) is required. Only the presenter of the contribution will be supported so each applicant should apply with a separate talk or poster and she/he will be the presenter. After the conference, grantees must provide a short report of the event, and some photos that can be used in *Palaeoarctic Grasslands*.

Travel grants can be applied for during registration until 20th April, including a short motivation letter. Applicants for IAVS travel grants must be IAVS members for the year 2020. Information about travel grants will be given at the latest by 31st May.

Young Investigator Prizes

As in previous years, prizes will be awarded to young scientists for excellent presentation of their research (orally or in poster form). For these purposes, young scientists (less than 30 years old) will be asked during registration if they wish to

participate in the contest. An applicant can apply for one category (best talk or poster) in one conference. During her/his presentation, applicant needs to explain clearly her/his contribution to the work.

Registration

For registration, please follow these steps:

- Register a new account or log into the website if you already have an account: [EDGG homepage login](#). You cannot proceed to the next steps if you do not log in.
- Make sure your user account contains up-to-date contact data and details relevant for the conference organizers (e.g. special diet).
- Register for the conference in the separate webform: [EGC2020 Registration](#)
- Check your [preliminary conference invoice](#) and pay the conference fees.
- [Upload abstracts](#) for your conference contributions.

You will find the same links on the menu to the right.

Hope to meet you in EGC2020!

Organizers

The conference is organized by the EDGG and the University of the Basque Country. It is supported by the Basque Government, Government of Navarre, the Gipuzkoa Provincial Council, the Town Council of Tolosa, IAVS, the University of the Basque Country and Hazi, public agency for rural, coastal and food development.

[The Eurasian Dry Grassland Group \(EDGG\)](#) was established in August 2008 as the European Dry Grassland Group. Recently it expanded its ecological and geographical scope to cover all types of semi-natural grasslands of the whole Palearctic realm. The EDGG is an official group of the



Fig. 18. *Festuca gautieri* in scree. Photo: A. Berastegi.



Fig. 19. *Festuca altopyrenaica* on rocky slope. Photo: A. Berastegi.



Fig. 20. Arantzazu Sanctuary (Photo: <http://bit.ly/2UORIEy>).



Fig. 21. Txalapartaris (Photo: <http://bit.ly/2ONEofi>).

International Association for Vegetation Science (IAVS, www.iavs.org). Its basic aims are to compile and to distribute information on research and conservation of natural and semi-natural grasslands beyond national borders, and to stimulate active cooperation among scientists, practitioners and all who work with or are interested in grasslands.

The International Association for Vegetation Science (IAVS) is a worldwide union of scientists and others interested in theoretical and practical studies of vegetation: its composition and structure, history, classification, distribution, ecology, dynamics, management and uses in the landscape. The main goals of the IAVS are to facilitate personal contacts among vegetation scientists all over the world and to promote research in all aspects of vegetation science and its applications.

The University of the Basque Country (UPV/EHU). In a prosperous region stretching along the Atlantic coast of northern Spain, the people of the Basque Country are the custodians of one of Europe's most ancient languages and cultures. Yet, they not only have a high esteem for tradition, but are also remarkably forward-looking and have established a highly regarded industrial sector. The region's success and scientific and technological progress are underpinned by the University of the Basque Country, a vibrant 30-year-old institution with 45,000 students, 5,000 world-class academic staff and state-of-the-art facilities. Our logo, symbolizing the tree of science, was created by the Basque artist Chillida, motivated by a strong popular movement in the 70s towards the creation of the Basque university. Following our motto 'Give and spread knowledge', the University of the Basque Country is an integrating institution willing to produce knowledge, experience and research, in order to forward them to the general public.

Local Organizing Committee

Idoia Biurrun, Chair, University of the Basque Country
Itziar García-Mijangos, University of the Basque Country
Javier Loidi, University of the Basque Country
Juan Antonio Campos, University of the Basque Country
Isabel Salcedo, University of the Basque Country
Peter B. Pearman, University of the Basque Country
Asun Berastegi, Gestión Ambiental de Navarra, guide on the Post-conference excursion

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Gipuzkoa Provincial Council
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