

EXCURSION TO THE CANTABRIAN MOUNTAINS

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Food and water will be provided. Bring clothes for warm weather, sturdy shoes, hat & sunscreen, and a raincoat (depending on weather).

ITINERARY

09:00 Departure from Gijón/Xixón ([Polytechnic School](#))

09:45 Technical stop in Proaza (café, WC). Views to Asturian landscape.

10:30 SITE 1 – Surroundings of Cueva Huerta (30 min walk)

11:30 SITE 2 – Hayedo de Montegrande (3 h walk + Lunch)

15:00 SITE 3 – Puerto Ventana (45 min walk)

16:00 Technical stop in San Emiliano (café, WC). Views to León landscape.

19:00 Arrival to Gijón



SITE 1 – Surroundings of Cueva Huerta (30 min walk)

The Cantabrian mountains were raised during the Alpine orogeny, together with the Himalayas, the Alps, the Pyrenees, and other European mountains. According to the WWF classification, they are included in the *Cantabrian Mixed Forests Ecoregion*, together with the lowland Atlantic areas of northwest Spain.

We will cross the Parque Natural Ubiñas-La Mesa, a Unesco Biosphere Reserve area characterized by narrow valleys and calcareous massifs up to 2,411 m a.s.l., including picturesque landscapes linked to the traditional use of pastures and forests.

Cueva Huerta is a natural subterranean cave 20 km length, one of the largest in the Cantabrian mountains. The natural park also hosts a museum of prehistory, with a representation of world caves with rock art, with a special focus on the Atlantic arc.



We will stop briefly at this site to walk along a pedestrian path with views to the northern Atlantic valleys dominated by temperate mixed forests with oaks (*Quercus* sp. pl.), maple (*Acer pseudoplatanus*), common ash (*Fraxinus excelsior*), European chestnut (*Castanea sativa*) or hazel (*Corylus avellana*).

We also will look at successional shrub communities dominated by *Genista hispanica* subsp. *occidentalis*, including several endemic species specialized to limestone bedrocks of the Cantabrian mountains and the Iberian Peninsula. We also will visit a local population of *Petrocoptis pyrenaica*, a chasmophytic genus endemic to the cliffs of the Iberian Peninsula, mainly represented in the Cantabro-Pyrenean mountains. Likely, we will find mature seeds of this and other species associated to these habitats.

SITE 2 – Hayedo de Montegrande and Xiblu waterfall (3 h walk)

The northern slopes of the Cantabrian mountains are mostly dominated by beech (*Fagus sylvatica*) forests, although they may be also intermixed with patches of *Quercus petraea* or *Betula pubescens* subsp. *celtiberica*. The species composition of these forests is mainly driven by the bedrock, with two major substrate types occurring on acid (siliceous quartzite or slade) or basic (limestone) soils.

We will visit one beech forests (Hayedo de Montegrante) to see the remnants of traditional forest management on acid soils. The Cantabrian region was one of the refugial areas of European beech during the glaciations. Regional forests are now covered by a humid understory characterized by holly trees, heaths, ferns, etc.



Our path will end in a waterfall (cascada del Xiblu) that collects water from the streams originating in the central axis of the Cantabrian range, very close to the site. The oceanic influence makes these mountains rich in natural springs and humid habitats that never get dry, in contrast with the Mediterranean habitats found southwards to the mountains.

Along the path, we will find plant specialists of mesic forests, together with light-demanding species that make use of natural or artificial forest gaps, and other plants associated to nitrophilous or humid vegetation.



Polygonatum verticillatum



Prunus spinosa



Valeriana pyrenaica

SITE 3 – Puerto de Ventana

Puerto de Ventana (“window pass”) is a mountain pass (1587 m a.s.l.) that divides the two main axes of the Cantabrian Mountains. The road goes through one of the largest beech forests of the Cantabrian mountains (*hayedo de Ventana*).

In the last decades, the area was subjected to multiple human activities, including coal mining and grazing. We will visit this unique scenario to understand forest dynamics and the on-going process of passive rewilding that is occurring here and in many other mountains of southern Europe.

We will walk along a path to see the expansion of pioneer species like the wind-dispersed birch (*Betula pubescens* subsp. *celtibérica*). We also will learn about plant-animal interactions by linking dominant trees with their main animal dispersers.



Towards the mountain village San Emiliano, we will see how the southern slopes of the Cantabrian Mountains become relatively drier in the province of León (Babia and Luna valleys, Unesco Reserve Biospheres). The area was the main destination of long-distance trashumant sheeps for hundreds of years, and now it is also an important site for mown meadows with a traditional manage.

In the trip back to Asturias, we also will see a landscape mainly dominated by *Quercus pyrenaica*, a submediterranean oak, and relict woodlands of the Iberian Juniper (*Juniperus thurifera*) which indicates continental and dry climate conditions that were common at the late Pleistocene.

