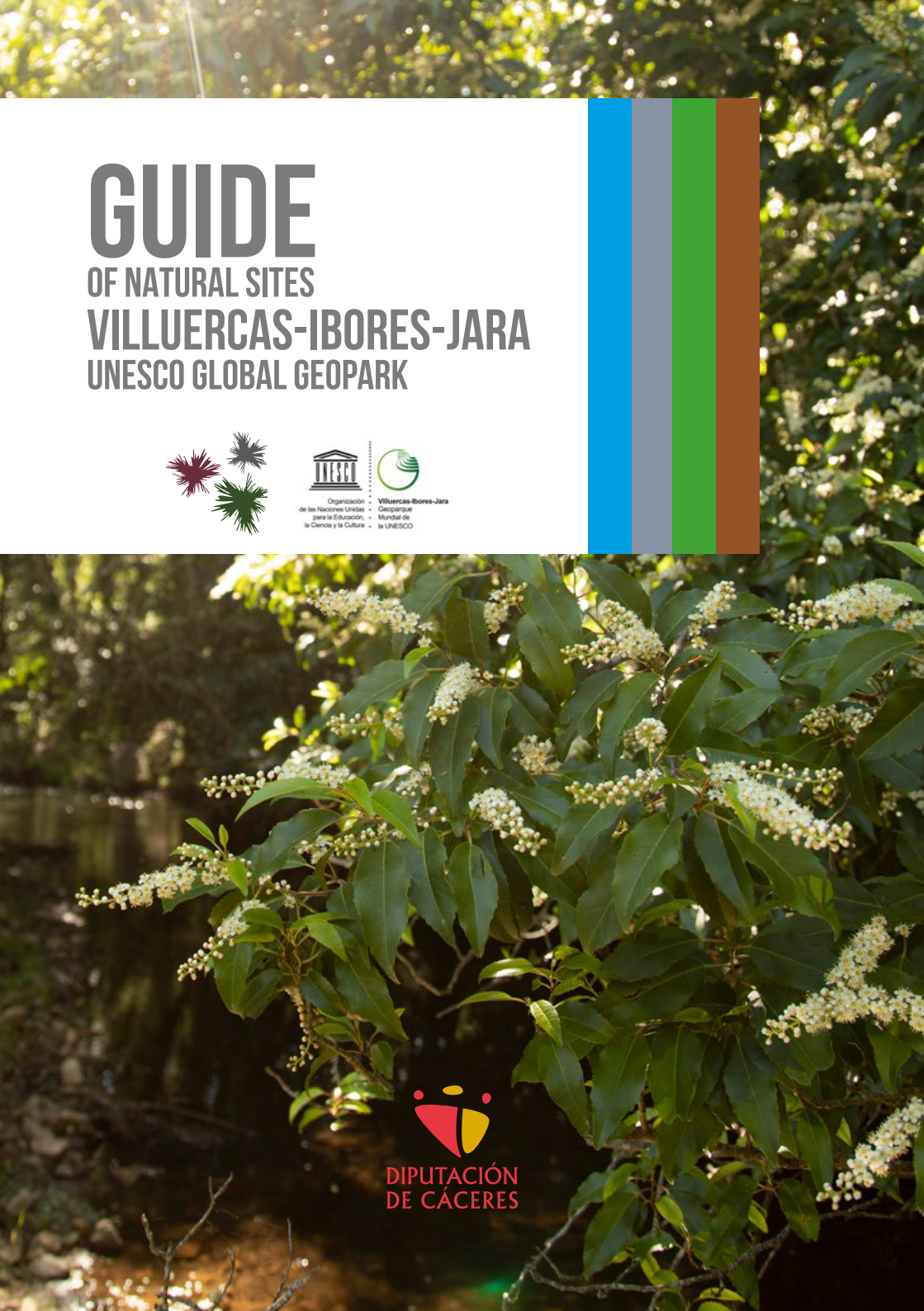
GUIDE
OF NATURAL SITES
VILLUERCAS-IBORES-JARA
UNESCO GLOBAL GEOPARK



Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura

Villuercas-Ibores-Jara Geoparque Mundial de la UNESCO

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Las Villuercas offers one of the best ways to contemplate and understand the ever-creative language of Nature. Let us draw close to listen to these landscapes and, perhaps, find a little more meaning to the dilemma of being alive.

Joaquín Araújo Ponciano

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INTRODUCTION

In September of 2011, the territory of Villuercas-Ibores-Jara, in the province of Cáceres, was recognized as a member of the European and Global Geoparks Networks backed by UNESCO. Four years later, in November of 2015, UNESCO approved the International Geoscience and Geoparks Program, granting recognition as a UNESCO GLOBAL GEOPARK to the VILLUERCAS-IBORES-JARA Geopark.

This guide aims to explain the biological richness and heritage of the different natural spaces that are part of the Geopark. These are areas that, thanks to their geographic uniqueness, allow for the conservation of a certain biodiversity like none other in all of Europe. An extraordinary natural heritage that includes seven Special Protection Area for Birds (SPA) and eight Sites of Community Importance (SCI) recognized in the European Union's Habitats Directive.

In total, the Villuercas-Ibores-Jara Geopark has twenty-one protected natural areas, comprised of the aforementioned SPAs and SCIs and three unique trees (Calabazas Chestnut Trees, The Portugal Laurels of La Trucha, and The Oak of La Nava), an Ecological and Biodiversity Corridor (Guadalupejo River) and a Natural Monument (Castañar Cave).

Unique trees, thousand-year-old forests, caves, rivers, dehesas, natural monuments, mountains, gorges... an entire array of natural resources that showcase the richness of this mountainous massif situated between the valleys of the Tagus and Guadiana Rivers. To explain this natural wealth, we have selected twenty-eight special interest points that showcase the biological and geographical wealth of the whole area, taking into account three aspects: geology, fauna, and flora.

GEOLOGY

Geologically speaking, the Villuercas-Ibores-Jara Geopark is an area that is very abundant in Proterozoic and Paleozoic materials that have been deposited and structured throughout different geological stages and periods.

In the Geopark, there are more than fifty places of special geological interest –"Geosites"– that have been cataloged with different geological, paleontological, and geomorphological features. Especially noteworthy are the La Villuerca Crag, Santa Lucía Syncline, Porthole of Almonte, and the Peña Amarilla Viewpoint. Many of them are also of cultural and biological interest, as they have refuges or shelters with schematic cave paintings. The Vetton hillforts, Arab castles, and the Logrosán mines also have a wealth of fauna and flora surrounding them.

FLORA

The Villuercas- Ibores-Jara Geopark has a great variety of vegetation and flora in accordance with the different altitudes found in the area. From bottom to top, there are the following plant formations: riparian forests, holm oak groves, dehesas, cork oak groves, oak groves and summit plants.

The riparian forests are along the shores of rivers and the edges of gorges. The dominant tree is the alder, mixed with ash trees and willows. These riparian forests have a rich lianoid layer, with climbers such as ivy, wild vine, and honeysuckle.

Amongst the herbaceous species, noteworthy are the royal fern, the spiral orchid of the summer, and bushweed. In the more humid gorges of Las Villuercas, we can find relict forests, known as Portugal Laurel Forests, that are very scarce in the Iberian Peninsula.

The more or less clear oak forests appear on the plains and in the lower parts of the slopes, generally over shallow siliceous soils (granite and slate). Around the holm oaks, many shrubs thrive – noteworthy amongst them are the lavender, flax-leaved daphne, retama, white broom, Scotch broom, and various orchids. The typically Mediterranean and main forest of the Villuercas-Ibores-Jara Geopark thrives well in the sunny and shady areas of the mountains. These forests additionally foster the abundant presence of rockroses and heather, which are quite representative of the area.

In the higher parts of the mountains and in the valleys where there is temperature and humidity inversion, there is a range of plant species adapted to the cracks in the rocks. Noteworthy is the juniper, the only conifer native to the region, which reaches the height

of a small tree. Also the oak, abundant in the plains and at the beginning of slopes, appears here in its scrub form – an example of how adaptable it is. Among the rock-dwelling bushes, we can note the presence of the genus *Cytisus*. Also, directly growing on the rocks, we can find abundant lichen (pioneers in plant succession) mosses, and ferns. Of the herbaceous species, it is worth mentioning the genus *Dianthus*, the *Narcissus rupicola*, the *Narcissus pallidulus*, and the navelwort.

FAUNA

The low population density of the area around the Villuercas-Ibores-Jara Geopark and the variety of landscapes and ecosystems allows for a great variety of fauna made up of deer, wild boar, and cattle. In the more unspoiled areas, there are specimens of the Iberian lynx. The numerous areas declared Special Protection Areas for Birds (SPA) make the region the ideal place for different bird species, whether they reside here or only make a migratory stop here.

The rocky areas allow for a great number of cliff-nesting birds to be observed in the area. One example is the crag martin.

This species makes its nests in cracks in rocks and gaps in uninhabited human constructions, and it feeds on insects and small vertebrates. Other small birds linked to the cliffs and ledges are the alpine swift, black wheatear, red-rumped swallow, and accentors. Although it is very scarce, at times the rock thrush has been seen. Birds of a greater size include griffon vultures, Egyptian vultures, golden eagles, and Bonelli's eagle, peregrine falcons, common kestrels, red-billed choughs, and Eurasian eagle-owls.

The species of greatest ornithological value in this region is the black stork, considered by the National Catalog of Endangered Species to be in danger of extinction. Currently, there are about a dozen pairs nesting in the Geopark.

When they fly away from the high mountain ranges, the jays call attention because of their abundance. These are beautiful birds of a medium size that are black, white, and blue with a brown or red mantle. Worthy of special mention, due to the good state of its population, is the white-throated dipper, which inhabits the higher sections of the rivers: it is squat, brownish/blackish, and features a white chest. One bird of great importance for the local bird life in Extremadura is the Iberian magpie, which looks very similar to the Eurasian magpie. Its striking bluish color in its tail and its wings, and its black "jockey" hat make it quite attractive.

Other common species in the area are the birds of prey such as the short-toed snake eagle and booted eagle, as well as the common buzzard, kite, goshawk, Eurasian sparrowhawk, and small birds like cuckoos, shrikes, goldfinches, wagtails, blackbirds, starlings, hawfinches, redstarts, robins, etc.

While birds are easy animals to observe, mammals are nocturnal or crepuscular and elusive; thus, they are difficult to spot in the wild. One animal that stands out because of its abundance is the roe deer.

Sometimes in the dark we can find a deer, wild boar, fox, genet, badger, or wild cat.

The otter enjoys the ideal conditions that are offered by the middle courses of rivers. Also there (and nearby), there is the confirmed presence of the majority of the Iberian snakes; common are the Montpellier snake, horseshoe whip snake, ladder snake, and the viperine snake, although also possible to find are grass snakes and Iberian false smooth snakes, as well as Iberian worm lizards.

The otter enjoys the ideal conditions that are offered by the middle courses of rivers

One reptile that is certainly common and representative is the

Fox

snub-nosed viper, which finds ideal conditions for survival in the rocky slopes covered with vegetation. Another set of reptiles are lizards, which also abound

A reptile that is different from the others because of its climbing ability is the European common gecko. Similar to a lizard, although much more robust, it is gray in color, has a large head, and lives in the walls of country houses and in rocks with hiding places.

Amphibians which do not have a tail in their adult stage are of the order Anura. Examples are the toads and frogs. Those that do have a tail, like salamanders, are of the order Urodela. In this region, we can effortlessly find common toads, the Iberian spadefoot toad, the natterjack toad, Iberian ribbed newt, as well as common midwife toads and specimens of the genus *Triturus*. The fire salamander is the most

Eurasian Eagle Owl

representative member of the order Urodela in the Villuercas-Ibores-Jara Geopark and cannot be confused with other animals because of its black and yellow colors which combine in different ways on each individual animal.

We once again must focus on the upper courses of the rivers to speak about the Iberian frog, another native of the Iberian Peninsula which looks slender and has a uniform brown color. This animal lives perfectly in fast, cold waters.

By their appearance, which is very similar to that of the turtle, we can recognize Galápagos turtles. Their body is inside a strong, corneous shell and they hide their legs, head, and tail inside their shell for protection while secreting a substance with a very unpleasant odor. One of the two Iberian species of the Galápagos turtle, the Caspian turtle (*Mauremys caspica*), is very common here, being easily found in rivers and ponds.

Adapted to live in the waters at the start of fast and icy rivers is the brown trout.

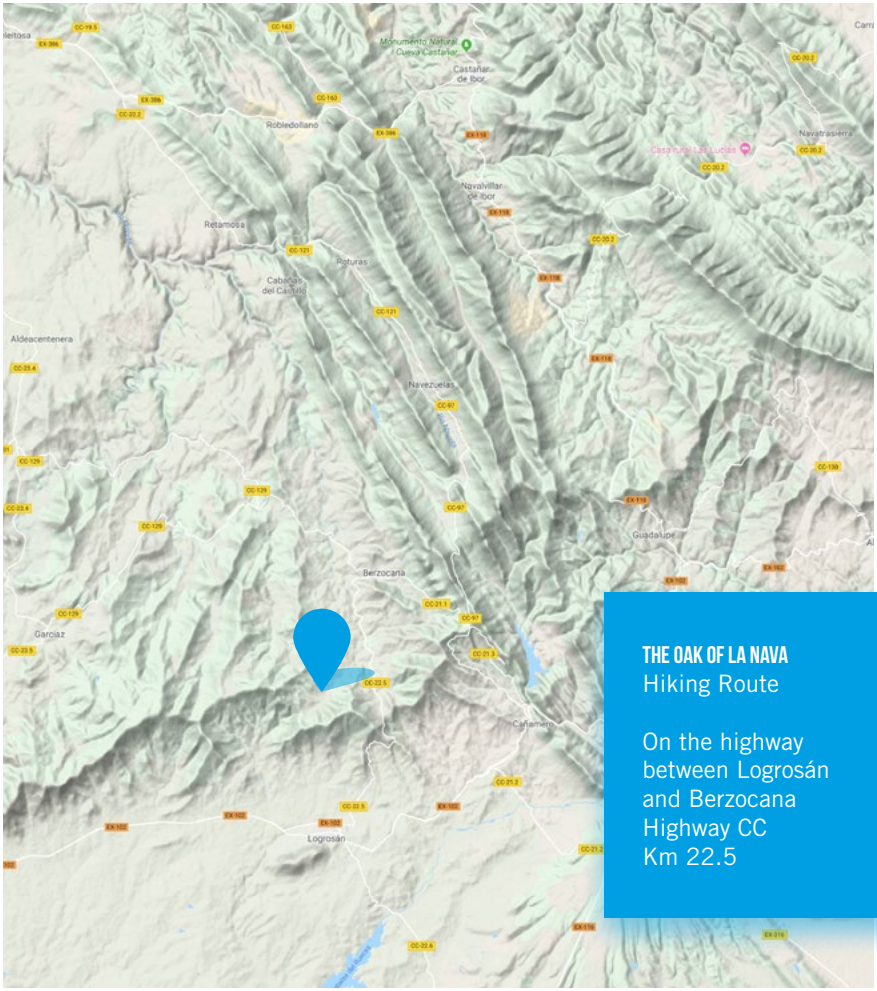
This is a fish with a great sporting and culinary value.

Further downstream, in calmer, warmer waters are the Iberian nase and the common barbel.

Plant diversity and a lack of agricultural chemical use helps there to be countless invertebrate species: butterflies, beetles, and spiders can be discovered, if you are patient, in the Villuercas-Ibores-Jara Geopark.

THE OAK OF LA NAVA

ACCESS AND LOCATION



This magnificent specimen, which will be described here, is located inside the **Sierra de Cabeza del Águila SCI**, protected area of **great botanical interest which also features splendid fauna and landscape.** These mountains are the continuation of Las Villuercas towards the west and reach their maximum height of 1,130 MASL at Pico Venero. The land slopes gently towards the north, while the southern slopes are more abrupt.

FLORA

The mountains and valleys that we find between Berzocana, Logrosán, Garciaz, and Zorita are some of the best examples of **deciduous forest in the Geopark**. These extensive patches of green are covered by Pyrenean oak that reach their scenic splendor in autumn, when the plant life of the mountain begins to change its leaves.

One of these oak trees (*Quercus pyrenaica*), has reached such a size that it has its own name and has been included in the category of **'Singular Trees of Extremadura'.** Known as the **Roble de la Nava or Roble de la Maribela** *("The Oak of La Nava" or "of La Maribela")*, this specimen stands out in the dehesa that is just next to the La Nava stream.

With an estimated age at around **400 years**, this tree measures 20 m in height and 4.55 m in perimeter. The sloped terrain has forced the tree to develop buttress roots at its base, leaving part of the root system exposed. One of its branches is quite low, almost touching the ground.

It is estimated that the oak has an age of around 400 years

In some areas of Las Villuercas, **the Pyrenean oak has been planted in the dehesa and/or pruned as if it were a holm oak.** In terms of the Oak of La Nava, and due to said practice, the great horizontal development of its branches is worthy of mention, with one of its branches almost touching the ground. Its conservation status is acceptable for its age. It has no rotting or lesions of importance and its foliage is dense and bears fruit abundantly.

Among the plants in the oak forest covering these mountains, the **daffodil is common** especially the rare *Narcissus pseudonarcissus subsp. portensis*.

Narcissus pseudonarcissus subsp. portensis

Photo: Nino Barbieri

The abundance of daffodils is noteworthy in the oak forest

FAUNA

Without a doubt, the most emblematic species in this area is the **European honey buzzard** (*Pernis apivorus*), a scarce species in Extremadura. This bird of prey, also known as the pern, feeds mainly on the nests of bees and wasps. Other birds present in the area are the black stork, tawny owl, great spotted woodpecker, and Eurasian jay, along with other small forest birds. Amongst the reptiles is the **Iberian emerald lizard**.

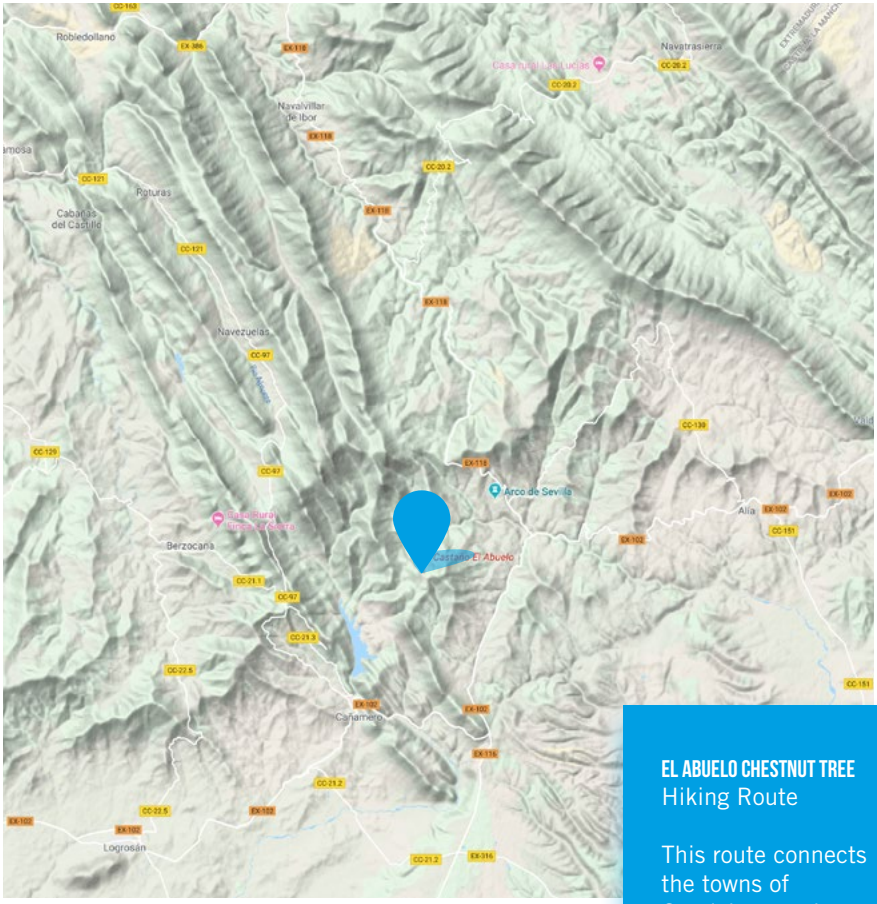
There are very interesting species of bats in the area, such as **Bechstein's bat** (*Myotis bechsteinii*), which occupies voids in old tree trunks and logs. Other bats present are the greater horseshoe bat and Mehely's horseshoe bat. Even a coleopteran as interesting as the **stag beetle** (*Lucanus cervus*) can be found in these Galicio-Portuguese oak forests.

The Iberian emerald lizard is common in this region

Ocellated Lizard

EL ABUELO CHESTNUT TREE

ACCESS AND LOCATION



EL ABUELO CHESTNUT TREE
Hiking Route

This route connects the towns of Guadalupe and Cañamero
PR-CC Km 242

This is a mountain journey, a classic hiking route that uses the old bridleway that linked the towns of Guadalupe and Cañamero. It is somewhat difficult to travel this path because of its unevenness and the rocky terrain; however, **it traverses some of the most beautiful landscapes of the Villuercas-Ibores-Jara UNESCO Global Geopark.**

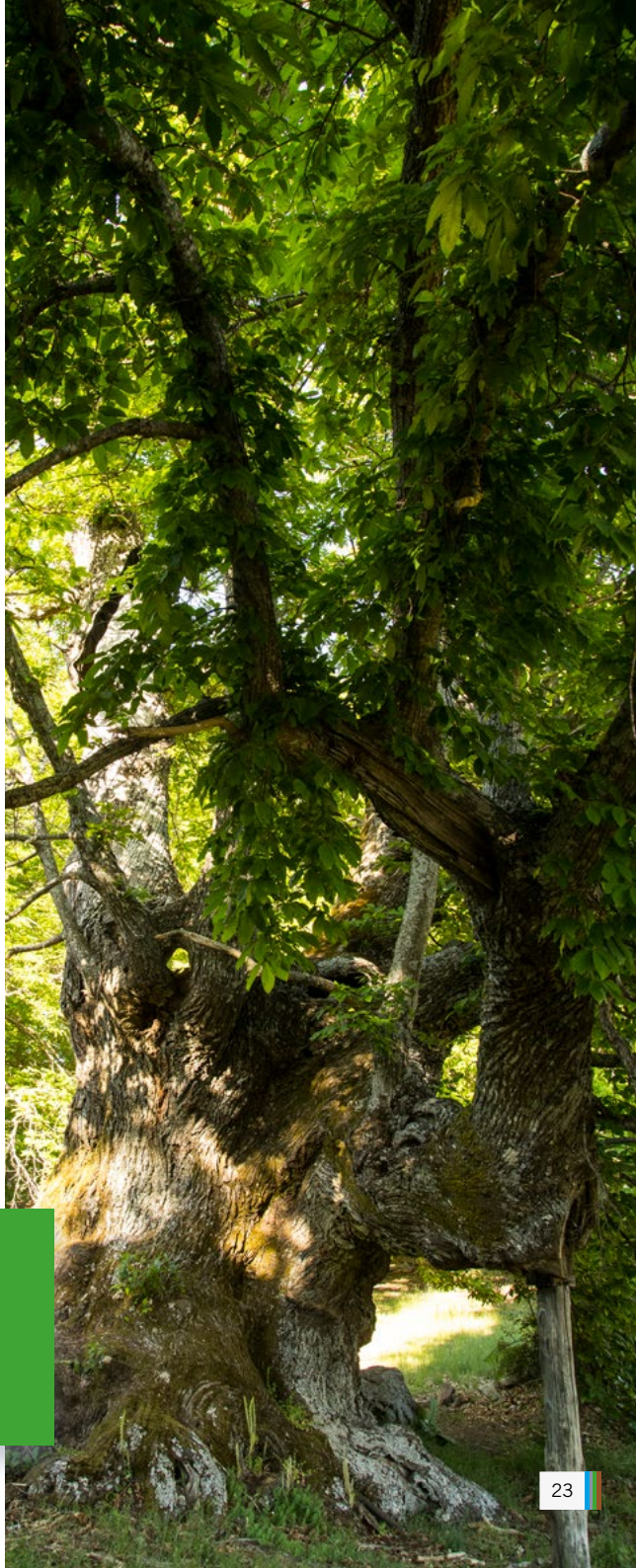
Between Cañamero and Guadalupe, along the well-known Route of Isabella 'La Católica,' we find a magnificent old chestnut tree known as **El Abuelo** ('The Grandfather').

Located on a high area whipped by wind, in a beautiful wooded setting near the Hermitage of Mirabel, this chestnut tree has been admired by kings and shepherds, as well as by writers and travelers.

Queen Isabella 'La Católica' called this area "*My Paradise*" and thinker Miguel de Unamuno once wrote:

"We went up to Mirabel and came back down through one of the densest and lushest forests that I have ever had the pleasure to enjoy. I have never before seen larger and denser chestnut trees."

This chestnut tree has been admired by kings, shepherds, writers,and travelers



The age of this sweet chestnut (*Castanea sativa*) is unknown, but there are documents on boundaries and landmarks dating back as far as 1353 that refer to this chestnut tree as the "big tree." It undoubtedly **is over 800 years old** and is now in its final stage of life after having withstood being struck by lightning.

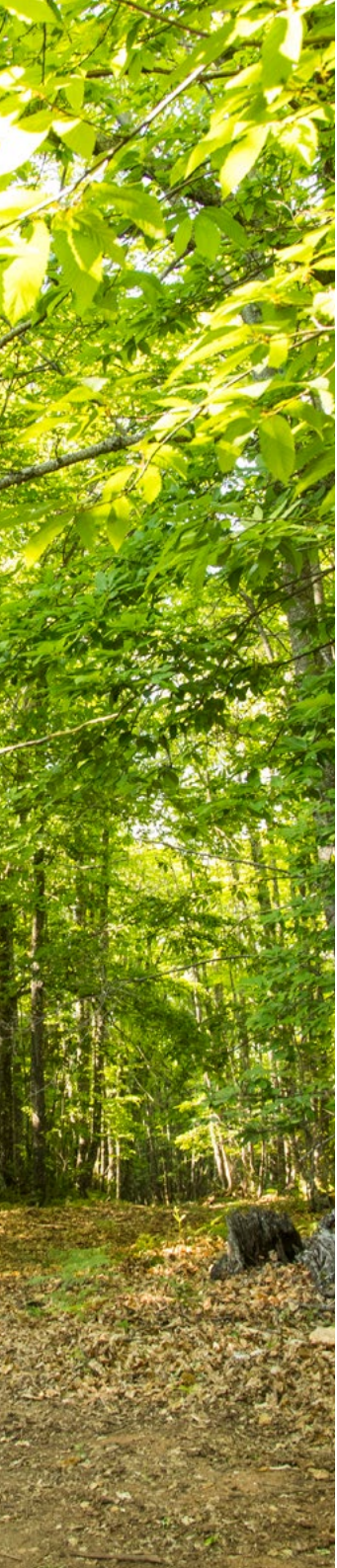
GEOLOGY

The Ruecas Syncline can be found next to a chestnut tree. Quartzite rocks appear everywhere and there are frequent signs of the effects of erosion and frost weathering (freezing-thawing) over thousands of years, especially during the cold climate periods in the Quaternary.

FAUNA

These groves are home to the **roe deer, wild boar, and deer.** They are also home to forest and cliff-nesting birds. Numerous species can be named such as the Griffon vulture, golden eagle, Bonelli's eagle, Eurasian sparrowhawk, goshawk, Eurasian eagle-owl, tawny owl, red-billed chough, and fauna such as the Eurasian jay, Eurasian golden oriole, woodpeckers, Alpine accentor, etc.

Bonelli's eagle



FLORA

The forests that surround El Abuelo, as Unamuno rightly said, are "lush and dense." The main indigenous forest is the oak forest with supra-Mediterranean siliceous soils and the main tree is the Pyrenean oak (*Quercus pyrenaica*), accompanied by checker trees (*Sorbus torminalis*). In this forest, the chestnut is a tree that has been cultivated or domesticated for centuries by the local inhabitants. Other species in the area are the alder, ash tree, willow tree, Portugal laurel, and trees of a lesser height like cork oaks, strawberry trees, and holm oaks.

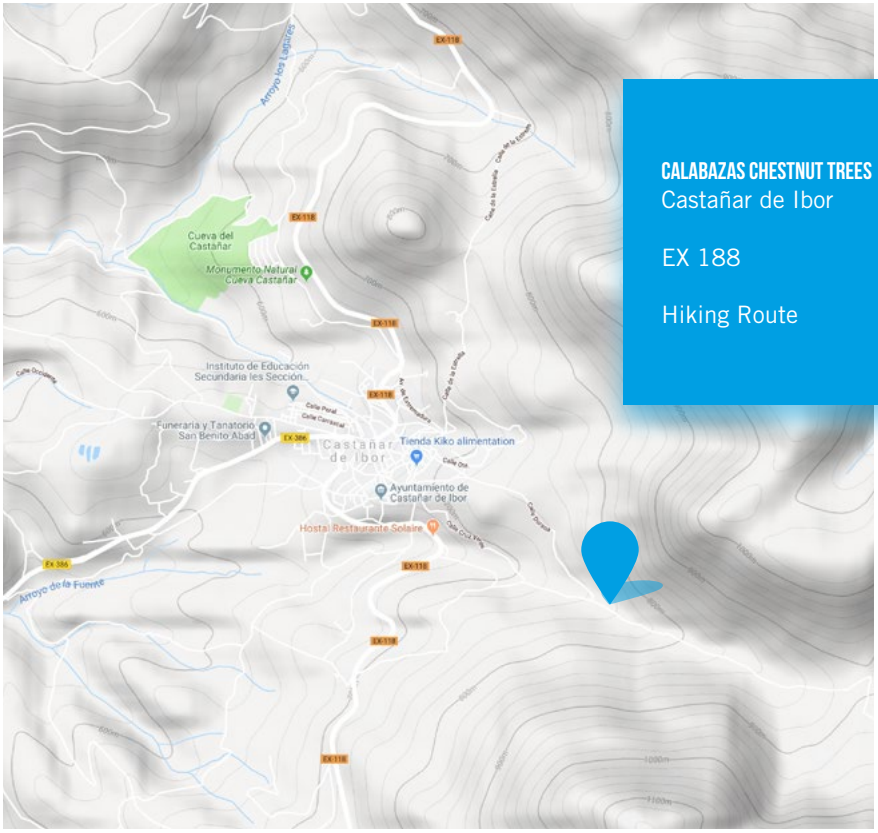
Oak and chestnut trees are deciduous and their leaves create a rich layer where mushrooms of the genera Amanita, Boletus, Russula, Lactarius, and Cantharellus all abound.

Boletus

Photo: F. Durán

CALABAZAS CHESTNUT TREES

ACCESS AND LOCATION



CALABAZAS CHESTNUT TREES
Castañar de Ibor

EX 188

Hiking Route

This route can be done all year round and the landscape is beautiful during any season. But, if visited in autumn, during the 3 or 4 weeks that the chestnut trees change their color to brown and yellow before losing their leaves, a true sight is to be seen.

The Calabazas Chestnut Trees are along the path that takes us to **Chorrera de Calabazas**. The route can be started from the village's streets by looking for the Las Pasaderas path. The easiest option is to set off by car towards Navalvillar de Ibor and Guadalupe until you arrive to Solaire Hostal (to the right of the highway).

www.geoparquevilluercas.es/chorrera-de-calabazas

GEOLOGÍA

Between the lofty **Camorro de Castañar** (monadnock or residual relief form of the Ibor Anticline) and **Chorrera de Calabazas**, we can find stony mountain slopes formed by cracked **quartzite rocks** and whose origins can be traced back to the **"ice wedge effect"** of the periglacial climates of the Pleistocene (Quaternary Period). **The Calabazas** ('Pumpkin') **Stream** bears its name in ironic allusion to the voluminous rocks.

This area is full of quartzite rocks with trace fossils

This entire area is rich in **trace fossils** that show us how some marine invertebrates lived in the Lower Ordovician Period (Paleozoic). Amongst the different fossils **showing signs of inhabitance and feeding** are ***Daedalus*** (with a garlic clove shape, attributed to annelid worms that lived on sandy seabeds), ***Skolithos*** (worms that lived in vertical burrows buried in marine sand), and ***Cruziana*** (attributed to the passage or crawling of marine arthropods known as Trilobites).

FLORA

A beautiful **Pyrenean oak forest** grows on the quartzite slope next to the Calabazas Stream. **The Pyrenean oak** (*Quercus pyrenaica*) is a native species and represents the area's natural vegetation, without human intervention. In the midst of these oaks, a set of **fifteen old sweet chestnut trees** stands out (*Castanea sativa*). This set is located along the Calabazas Gorge and has one specimen, known as the, as the most famous. This tree has a striking root system on the surface of the ground –an adaptation to counteract the terrain's instability– and a trunk height of 15 m, although it was probably much higher before being struck by a lightning bolt.

On the opposite side of the Postuero Chestnut, in the middle of another rocky area, we can find the beautiful **Quejigo de la Fuente Oak**, which measures 15 m in height and 3.30 m in perimeter around its trunk. Both the set of chestnut trees and the oak have been declared **'Singular Trees of Extremadura.'**

Near the chestnut trees, cade **juniper** can be found (*Juniperus oxycedrus*) and near the water are some Portugal laurel trees (*Prunus lusitanica*) -- a tree that, in times past when there was a warm and humid climate, was very abundant in the entire Mediterranean basin and which is now reduced to populating only humid areas.

There are fifteen big, old chestnut trees of great interest in this area

Of the **herbaceous plants, common are the peony** (*Peonia broteroi*), **cowslip** (*Primula veris*) **and different orchids** (*Dactylorhiza sulphurea, Orchis tenera, Cephalanthera longifolia y Anacamptis champagneuxii* amongst others).

Orchis langei

FAUNA

In terms of this area's **fauna**, noteworthy is the presence of the **Eurasian jay** (*Garrulus glandarius*), and this is also a roaming area for the **Eurasian sparrowhawk** (*Accipiter nisus*).

Eurasian jay

THE PORTUGAL LAURELS OF LA TRUCHA

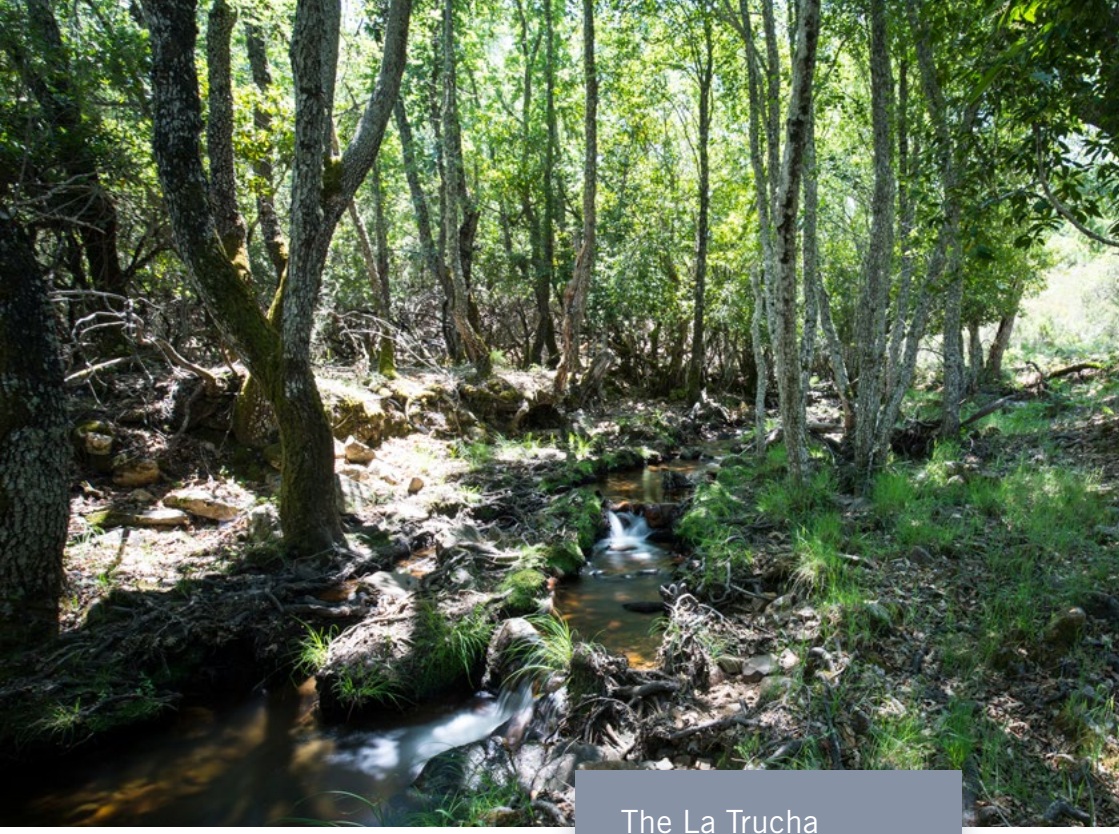
ACCESS AND LOCATION

‘La Lorera de la Trucha’ (‘The Portugal Laurels of La Trucha’), located in the gorge with the same name in the municipality of Alía (Cáceres), i**s the best Portugal laurel formation** *(Prunus Lusitanica L. subsp. lusitanica)* of Spain. This is a relict species from the Tertiary Period that is very sparsely found around much of the Iberian Peninsula, something which gives this area added value.

THE PORTUGAL LAURELS OF LA TRUCHA (ALÍA)
Hiking Route

To access the laurels, it is necessary to change directions after passing kilometer 96 of the EX- 102 highway. There are some picnic areas there along the Guadarranquejo Stream. The journey from that point to the laurels is approximately 19-20 km.

https://www.geoparquevilluercas.es/cancheras-de-la-truchaalia/



The La Trucha Stream runs along the path of a strike-slip fault

GEOLOGY

In terms of the **Geopark's numerous anticlines and synclines**, worthy of mention because of its great size and spectacular nature is the **Guadarranque-Gualija Syncline**, approximately 70 km long and 10 km wide and which spreads from the Valdecañas Reservoir (Tagus River) to the Cíjara Reservoir (Guadiana River).

This syncline houses **great paleontological richness**. Fossils of Trilobites, Brachiopods, Molluscs and Graptolites abound, among many others. A 'must-see' sight is the **Fossil Interpretation Center in Navatrasierra**, where a representative selection of the Geopark's fossil fauna can be found.

The **Charco de la Trucha Pond** is located next to a spectacular quartzite ridge in the center of the Guadarranque syncline, near a notable strike-slip fault. Because of erosion, Diamictite rock can be seen, characterized by irregularly shaped clasts in a pelitic matrix and whose origins can be related with the **glaciation at the end of the Ordovician Period**, which produced widespread species extinction.

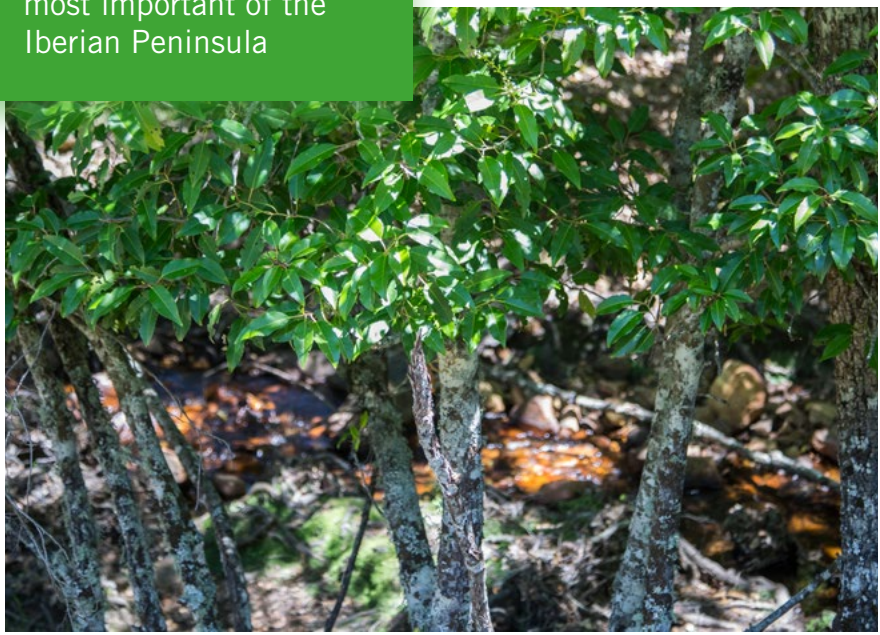
FLORA

Here, **one of the most curious and rare plant formations of the Iberian Peninsula can be found, the Portugal Laurel of the La Trucha Gorge**. Portugal laurel (*Prunus lusitanica*) **is considered to be a relict species**, although during the Tertiary Period it abounded in the Mediterranean basin in a subtropical climate that was warm and humid, giving rise to the so-called 'Laurel Forest' or '**Laurisilva**.'

The popular name for this species, Portugal laurel, is due to the resemblance that its leaves have with those of the well-known laurel tree, although the two trees are from different botanical families. **The Geopark is the only place in Extremadura where this unique tree thrives**, especially in the La Trucha Gorge with approximately 1500 feet of plant life. Because of its extension and good conservation status, the Portugal Laurel of La Trucha has been protected in the '**Singular Tree**' category.

Other plant species present here are the holly (*Ilex aquifolium*), laurustinus (*Viburnum tinus*), strawberry tree (*Arbutus unedo*), Tutsan (*Hypericum androsaemum*), in addition to numerous alders, ash trees, and climbers such as ivy and wild vine.

This Portugal laurel forest is one of the most important of the Iberian Peninsula



FAUNA

In terms of fauna, we must mention the **abundance of deer** (*Cervus elaphus*), roe deer (*Capreolus capreolus*), otters (*Lutras lutra*) and many winged animals such as the griffon vulture (*Gyps fulvus*), Egyptian vulture (*Neophron pernocterus*), tawny owl (*Strix aluco*), Eurasian golden oriole (*Oriolus oriolus*) and many other forest birds.

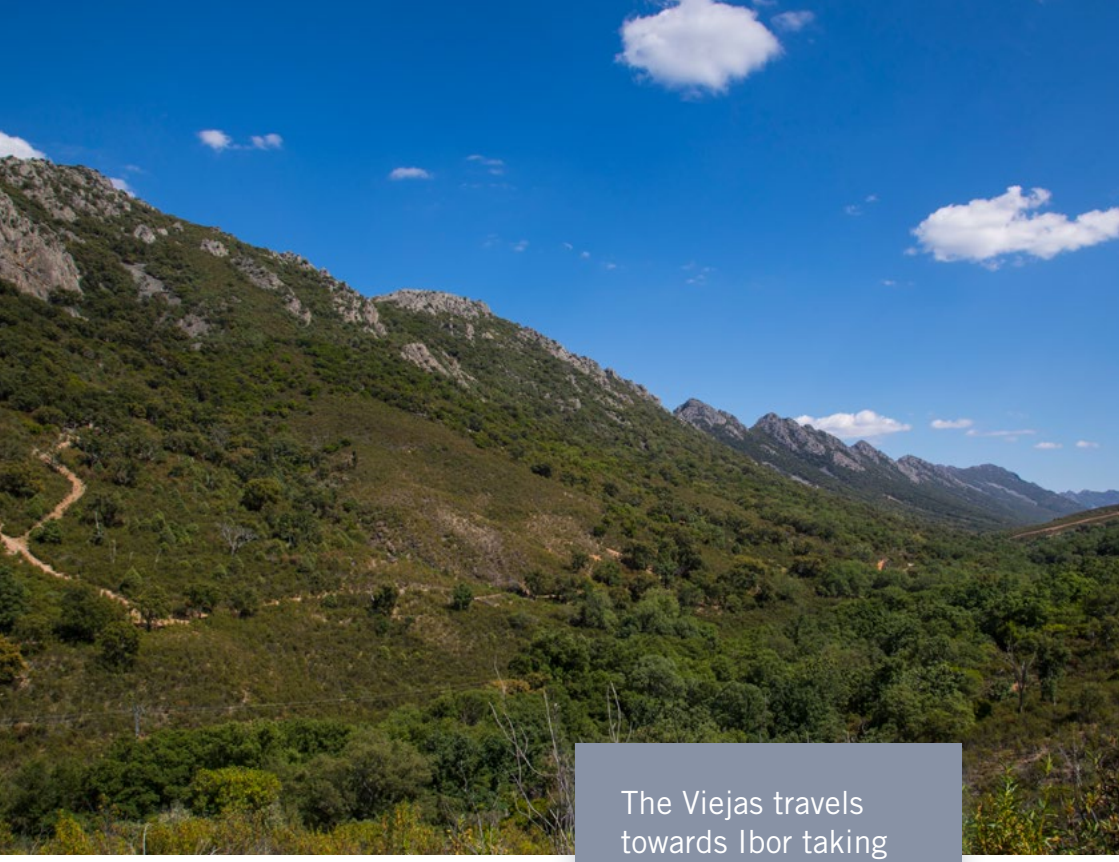
Egyptian Vulture

THE PORTUGAL LAURELS OF THE VIEJAS RIVER

ACCESS AND LOCATION

THE PORTUGAL LAURELS OF THE VIEJAS RIVER (CASTAÑAR DE IBOR)

Between Robledollano and Castañar de Ibor (abundant flora, gallery forest)



The Viejas travels towards Ibor taking advantage of an armorican quartzite strike-slip fault

GEOLOGY

The **Viejas-Torneros Syncline** travels through the Geopark from the La Villuerca Crag to Campillo de Deleitosa, picking up the Viejas River in the southeastern area while the Torneros Stream passes through the northeast.

The materials found in this syncline are **lutite (slate) and quarzite rocks from the Ordovician Period**. Between Robledollano and Castañar there is a strike-slip fault known as **Canchos de la Narices** and, if you look closely, next to the road you can see its "**fault mirror**," a darker, shiny area originated by the friction of displacement.

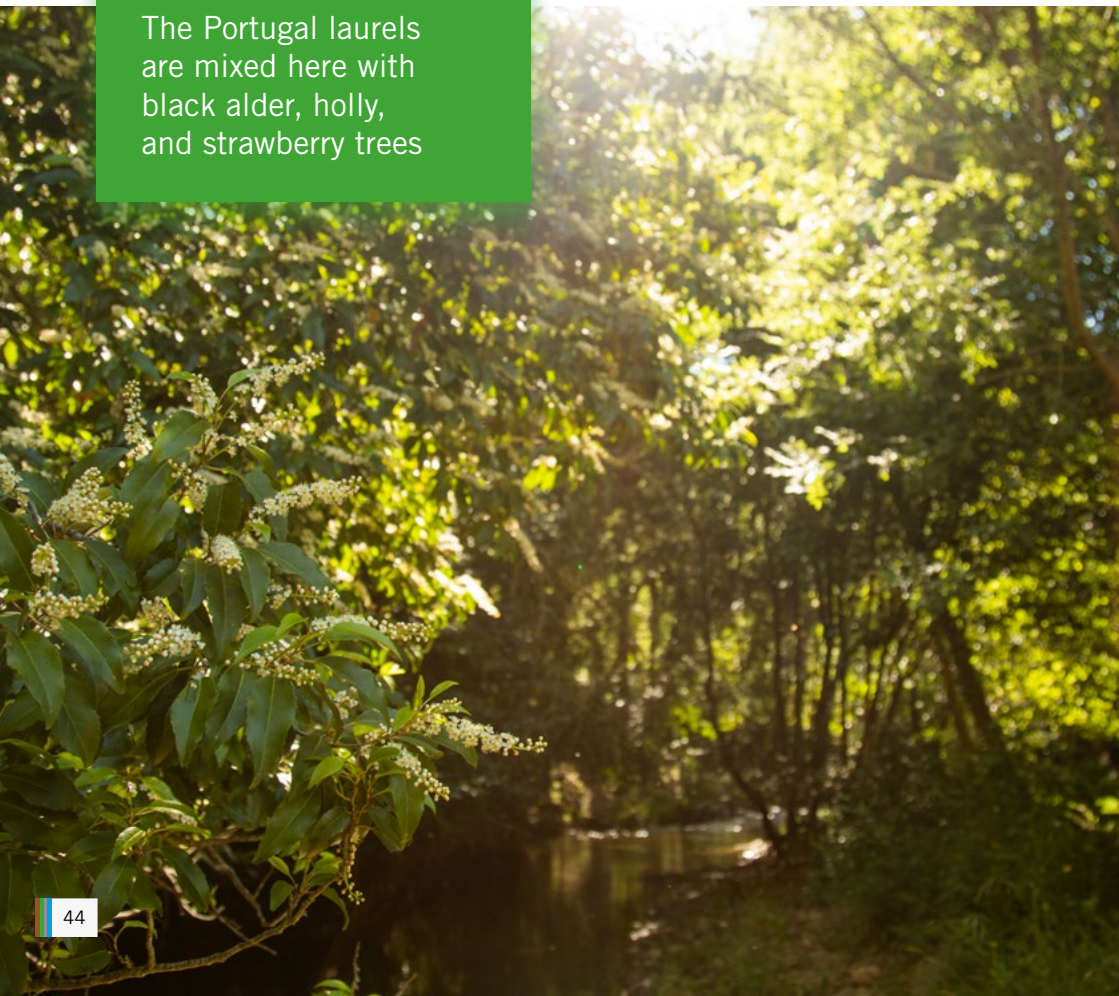
These slopes are **rich in paleontological sites (fossils)**, with remains of trilobites, brachiopods, crinoids, and graptolites appearing in the slate. On the quartzite rocks, pyrolusite mineralization can be found (Manganese dioxide), which can be confused with fossils, but these are crystalline aggregates which acquire dendritic forms.

FLORA

The flora and vegetation of the valley is **plentiful and varied**. While there are Pyrenean oaks at the higher areas, the cork oaks on the slopes are more abundant, full of scrub with strawberry trees, heather, rockrose, broom, and Montpellier maple.

And, next to the water is a riparian forest that leads to **numerous Portugal laurels** (*Prunus lusitanica*), a true testament of the Laurisilva that once existed in the Tertiary Period, which featured a warm and humid climate. The Portugal laurels appear mixed with black alder (*Alnus glutinosa*) and narrow-leafed ash (*Fraxinus angustifolia*), also common are specimens of holly (*Ilex aquifolium*), laurustinus (*Viburnum tinus*), and strawberry trees (*Arbutus unedo*) – all of which need plenty of moisture.

The Portugal laurels are mixed here with black alder, holly, and strawberry trees

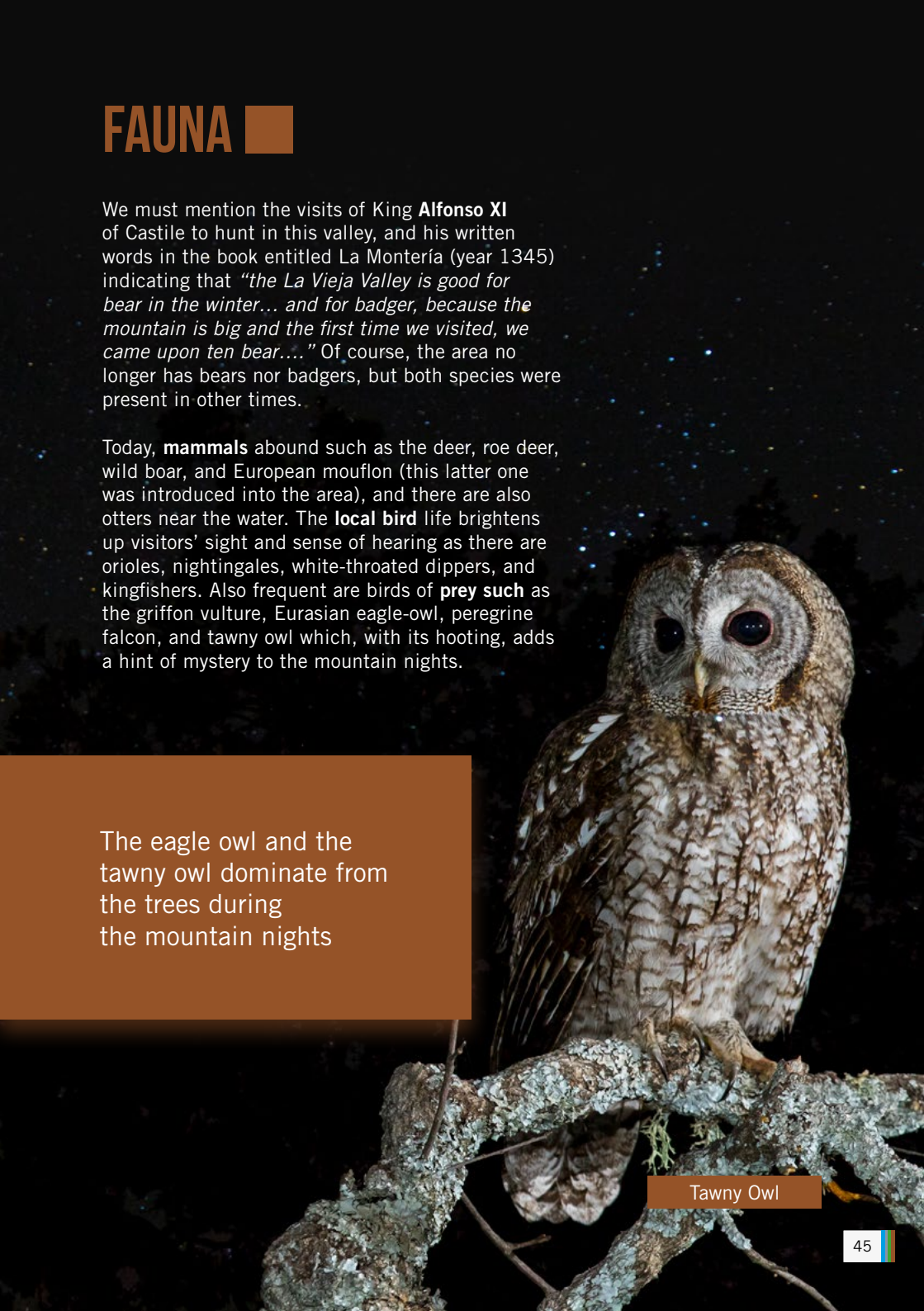


FAUNA

We must mention the visits of King **Alfonso XI** of Castile to hunt in this valley, and his written words in the book entitled La Montería (year 1345) indicating that *"the La Vieja Valley is good for bear in the winter... and for badger, because the mountain is big and the first time we visited, we came upon ten bear...."* Of course, the area no longer has bears nor badgers, but both species were present in other times.

Today, **mammals** abound such as the deer, roe deer, wild boar, and European mouflon (this latter one was introduced into the area), and there are also otters near the water. The **local bird** life brightens up visitors' sight and sense of hearing as there are orioles, nightingales, white-throated dippers, and kingfishers. Also frequent are birds of **prey such** as the griffon vulture, Eurasian eagle-owl, peregrine falcon, and tawny owl which, with its hooting, adds a hint of mystery to the mountain nights.

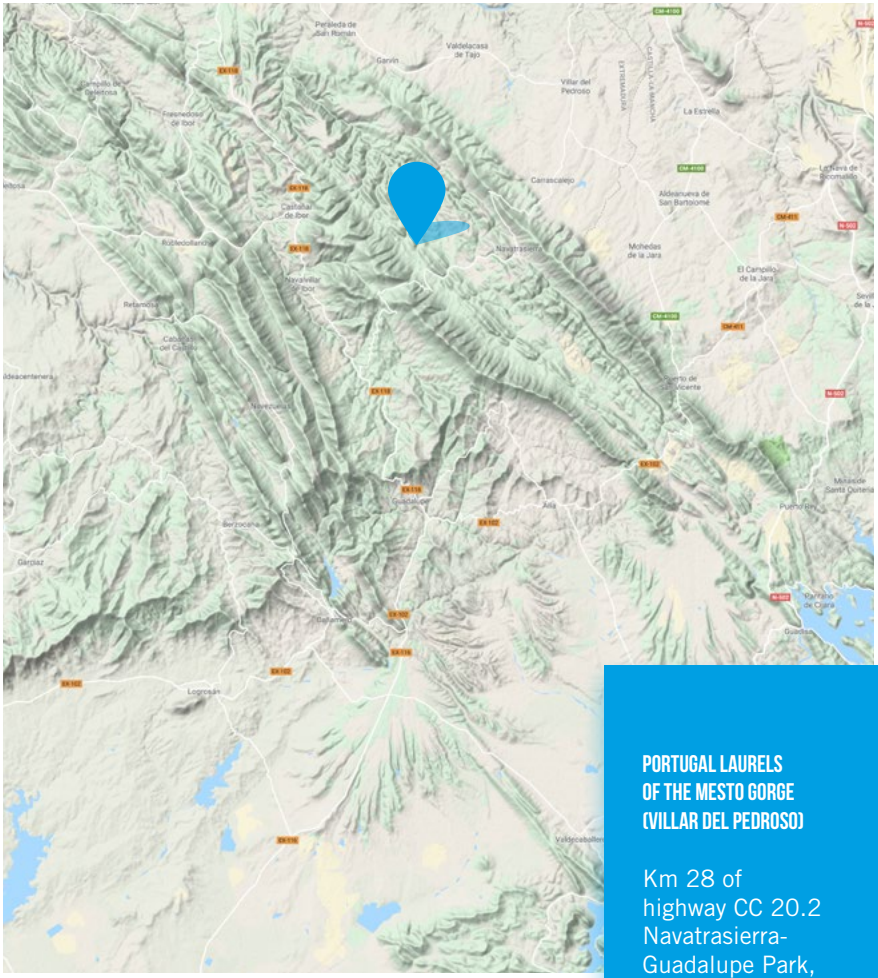
The eagle owl and the tawny owl dominate from the trees during the mountain nights



Tawny Owl

THE PORTUGAL LAURELS OF THE MESTO GORGE

ACCESS AND LOCATION



The best Portugal laurel formations of the interior of the Peninsula can be found at Las Villuercas, especially the Portugal Laurels of La Trucha and of the Mesto Gorge.

PORTUGAL LAURELS OF THE MESTO GORGE (VILLAR DEL PEDROSO)

Km 28 of highway CC 20.2 Navatrasierra-Guadalupe Park, next to a small red sign indicating "Castañarejo." From there, walk less than a kilometer until arriving to a narrow, dark gorg.

This place is always surprising due to its beauty

GEOLOGY

Between the **Hospital del Obispo Mountains** and the **Cerro Fortificado Hill** (which reaches 1,424 MASL), we can find the **Hospital del Obispo Valley**, a place of passage or pilgrimage to Guadalupe through the Castile Camino Real ('Royal Road'). **Populated by a dense forest of deciduous oak trees**, the Valley is traversed by the gorge with the same name, which creates a deep defile when it reaches **Canchos del Ataque**.

This spectacular place with large stones at a 45º angle represents the southwestern side of the **Guadarranque Syncline** (and the northwestern side of the Ibor Anticline). The water from the gorge passes through this area, creating striking waterfalls. The water, calm after its descent, leveling out, joins the water of the **Mesto Gorge** and we can find some magnificent 'Portugal Laurel Forest' (or 'Laurisilva') specimens there.

FLORA

In times gone by, during the Tertiary Period, the climate was warm and humid and a large part of the Mediterranean basin was populated by laurisilva forests, from which **the Portugal laurel survives**. Always seeking refuge near riverbeds where it can find the necessary moisture, the Portugal laurel is the Geopark's most curious and interesting tree. Alongside the Portugal laurel are species like alder, ash, holly, strawberry trees, laurustinus, and climbing plants such as ivy and wild vines.

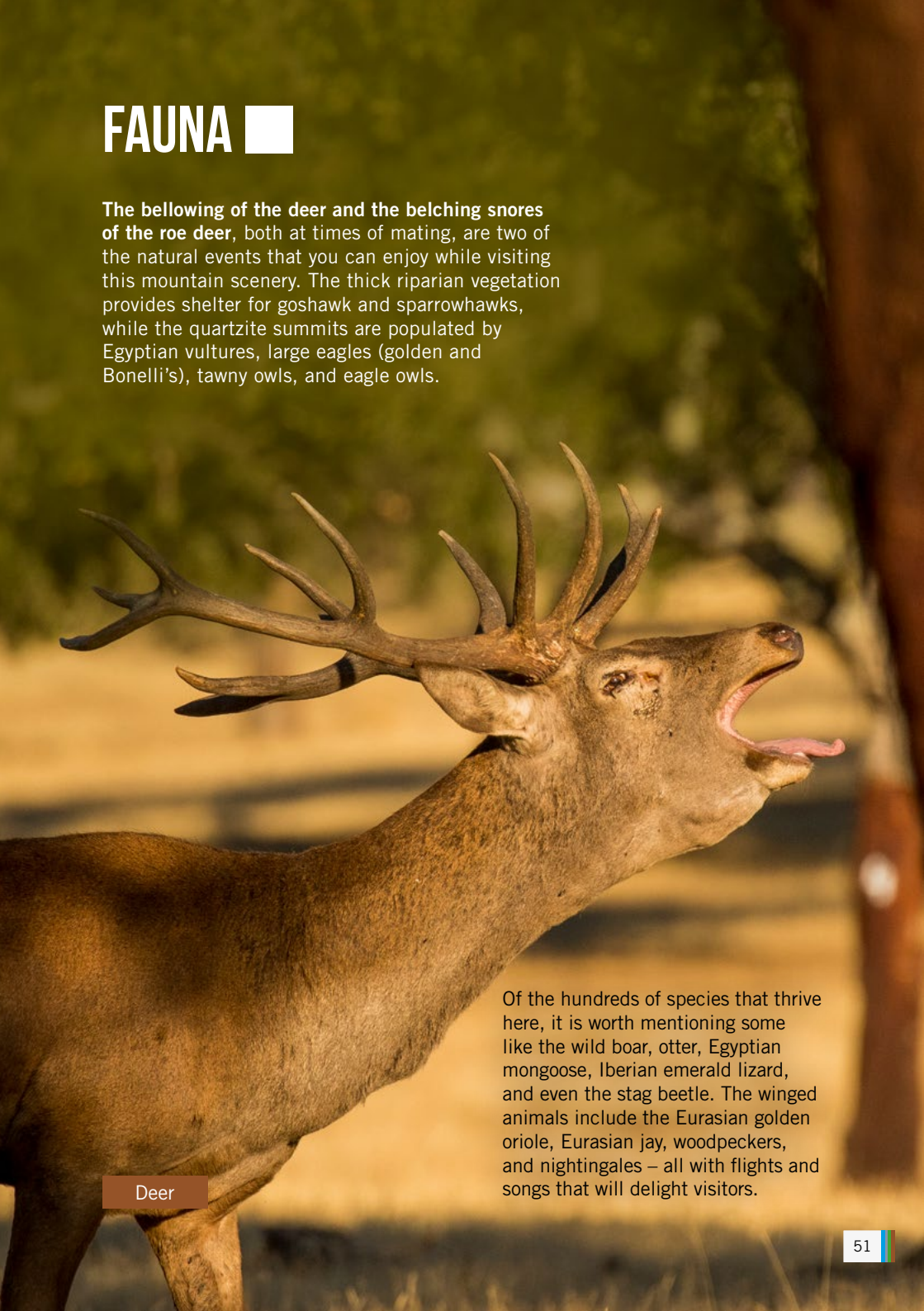
> Orchids dance with the gentle wind of the mountain

We cannot leave **Hospital del Obispo** without getting a closer look at some of its bogs or swamps, waterlogged areas in which some plants like the **Round-leaved sundew** (*Drosera rotundifolia*) grow amongst mosses of the Sphagnum genus, plants which capture insects with their sticky hairs to complete their diet. There we can also find striking **orchids**, amongst which ***Dactylorhiza irenica*** stands out, a species discovered in the bogs of Las Villuercas.

Dactylorhiza irenica

FAUNA

The bellowing of the deer and the belching snores of the roe deer, both at times of mating, are two of the natural events that you can enjoy while visiting this mountain scenery. The thick riparian vegetation provides shelter for goshawk and sparrowhawks, while the quartzite summits are populated by Egyptian vultures, large eagles (golden and Bonelli's), tawny owls, and eagle owls.



Of the hundreds of species that thrive here, it is worth mentioning some like the wild boar, otter, Egyptian mongoose, Iberian emerald lizard, and even the stag beetle. The winged animals include the Eurasian golden oriole, Eurasian jay, woodpeckers, and nightingales – all with flights and songs that will delight visitors.

Deer

PEÑA AMARILLA VIEWPOINT (ALÍA)

POINT OF ORNITHOLOGICAL INTEREST

ACCESS AND LOCATION

PEÑA AMARILLA VIEWPOINT
Viewpoint

East of the
village of Alía

Access is via
highway EX-102

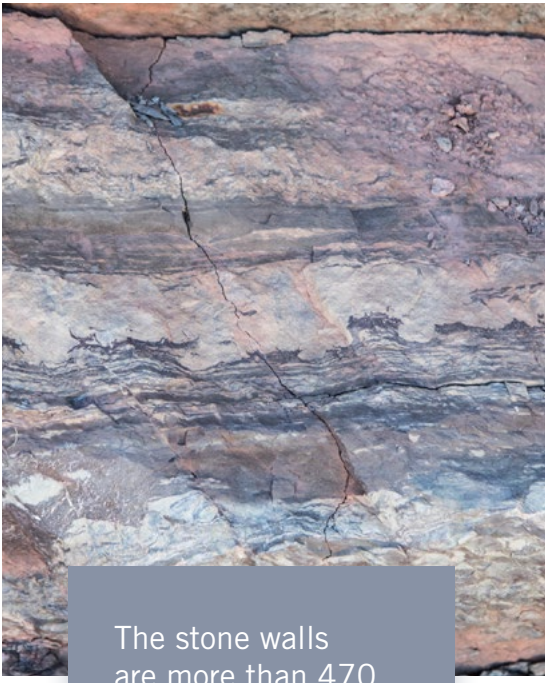
At kilometer 92.5, there is a viewpoint and parking lot on the northern side of the road. After visiting the Peña Amarilla Viewpoint, it is recommendable to follow the road towards Puerto de San Vicente and, after just 3 kilometers, take the track that will bring you to the Guadarranque River Valley.

www.geoparquevilluercas.es/estrecho-de-la-pena-amarilla

GEOLOGY

The Jarigüela Stream cuts through the hard quartzite rocks of the western side of the **Guadarranque-Gualija Syncline**, creating the **Estrecho de la Peña Amarilla** (Yellow Rock Defile), given this name because of the abundance of yellow lichens (*Acarospora oxitona*) that grow directly on the rocks there.

This **defile is one of the most spectacular places in terms of scenery in the Geopark**, where the stone walls from the Lower-Middle Ordovician (older than 470 million years) have undergone significant tectonic movements and the rocks (armorican quartzite) have many joints (fractures that have occurred in the lack of displacement).



The stone walls are more than 470 million years old

Trilobite and *cruziana*

Photo: F. Durán

The **geological uniqueness** of this place is such that we may find a mismatch between the Ediacaran-Lower Cambrian strata and the Ordovician strata, separated by an emersion period with continental deposits and subsequent marine transgression.

Near the viewpoint, **excellent *Cruziana* specimens** can be found, indicating the passage or crawling of marine Trilobites, arthropods that are totally extinct. Some extremely beautiful *Cruziana* can even be found in transverse sections of road.

FLORA

The vegetation varies amongst the **riparian forests** close to the water (which are populated with alder, ash, and ferns). **Amongst the Mediterranean forest scrub that is typical of these mountain slopes**, we can find rockroses, strawberry trees, holm oaks and cork oaks.

Strawberry Trees

Ferns

FAUNA

Bonelli's eagle

The Estrecho de la Peña is an excellent viewpoint or bird watching observation point, especially for sighting cliff-nesting birds that live amongst the rocks for safety (due to the inaccessibility of said quartzite walls).

We must highlight the **presence of birds of prey** like the abundant griffon vulture (*Gyps fulvus*), Spanish imperial eagle (*Aquila adalberti*), and Bonelli's eagle (*Aquila fasciata*), as well as the Egyptian vulture (*Neophron percnopterus*), peregrine falcon (*Falco peregrinus*) and the common kestrel (*Falco tinnunculus*). In the evenings one can hear the hooting of the Eurasian eagle-owl (*Bubo bubo*). Other species that can be seen in this spectacular rocky terrain are the Eurasian crag martin (*Ptyonoprogne rupestris*), white-rumped swift (*Apus caffer*), red-billed chough (*Pyrrhocorax pyrrhocorax*) and the black stork (*Ciconia nigra*).

Some **birds** that inhabit the nearby woods can be seen moving about, such as the Eurasian jay (*Garrulus glandarius*), Eurasian sparrowhawk (*Accipiter nisus*), and the Northern goshawk (*Accipiter gentilis*). Along the Jarigüela Watercourse, species can be enjoyed such as the kingfisher (*Alcedo atthis*) and the White-throated dipper (*Cinclus cinclus*).

Eurasian Eagle Owl

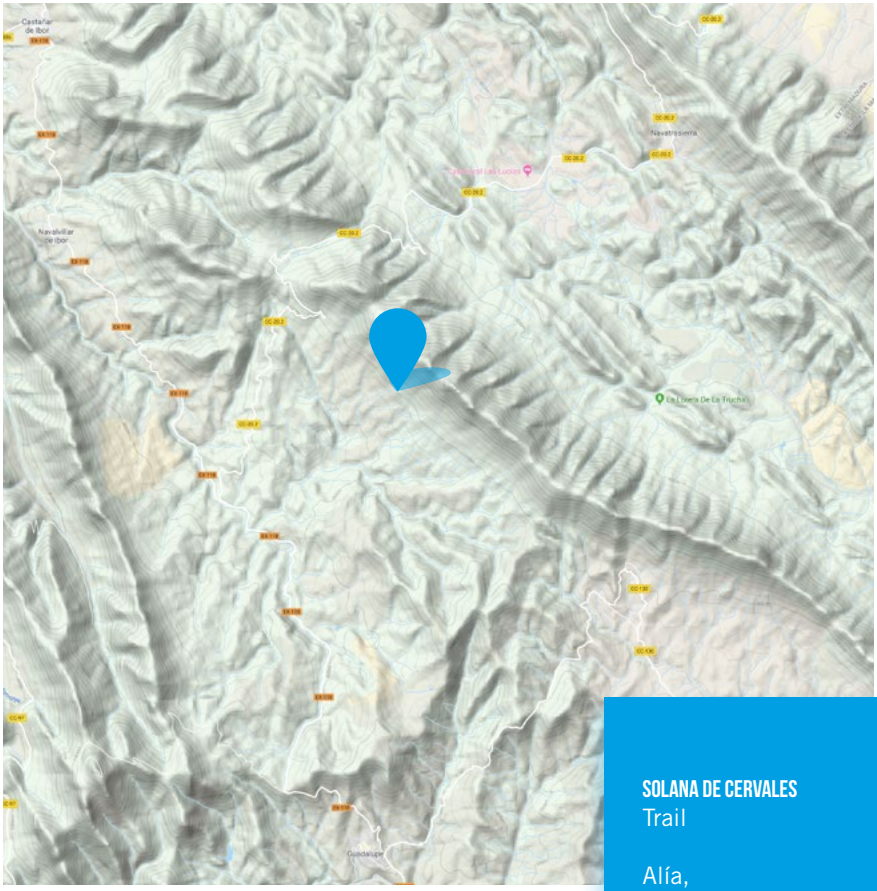
Black Stork

The elusive Spanish Imperial Eagle can be seen in this narrow pass

SOLANA DE CERVALES

POINT OF ORNITHOLOGICAL INTEREST

ACCESS AND LOCATION



SOLANA DE CERVALES
Trail

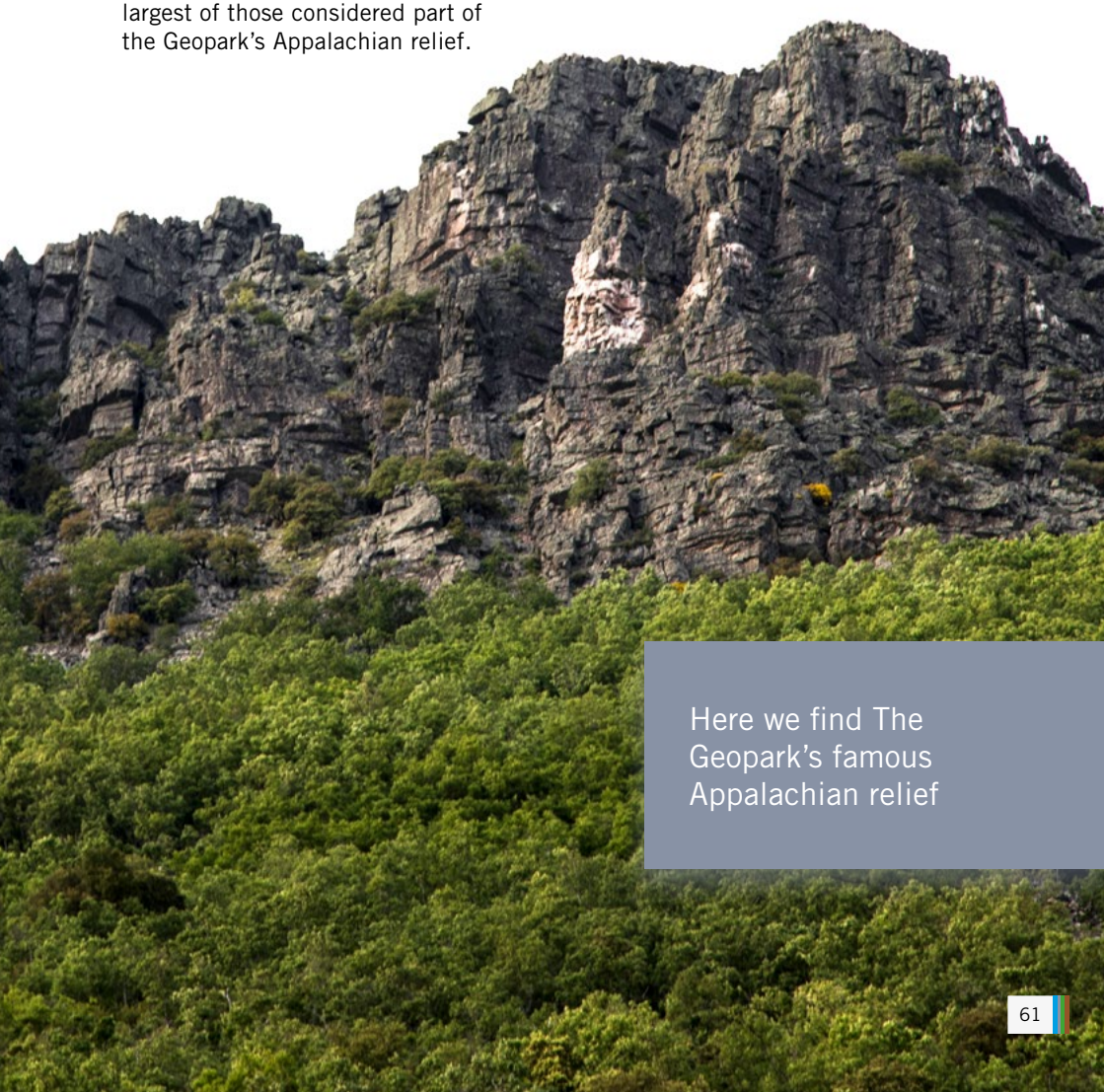
Alía,
Villar del Pedroso

The Cervales Crag, at 1,441 MASL, is the **second highest of the Geopark** and it is located atop a ridge of the **Hospital del Obispo Mountain Range**. Its isolation and original nature give this peak a certain charm, a peak which is nearby others like **Carbonero Crag** (1,369 m), **Cerro Fortificado Hill** (1,424 m), and **Turuñuelos Crag** (1,410 m).

GEOLOGY

Today, these mountain heights are part of the **southwestern side of the Guadarranque-Gualija Syncline** (and the northeastern side of the old Ibor Anticline, of which all that is left are the Camorro de Navalvillar and the Camorro de Castañar). From here, you will have the best views of said syncline, the largest of those considered part of the Geopark's Appalachian relief.

The hard armorican quartzite of these peaks is rich in **fossil remains**, especially in the Carbonero Crag area, where it is easy to find trace *Daedalus, Skolithos* and –to a lesser extent– *Cruziana* fossils.



Here we find The Geopark's famous Appalachian relief

FLORA

Both the sunshine and the shady areas surrounding these summits lead to a **Pyrenean oak forest** (*Quercus pyrenaica*), which also features the checker tree (*Sorbus torminalis*) and flowers such as the **Martagon lily** (*Lilium martagon*), Maral root (*Rhaponticum coniferum*), and *Centaurea toletana subsp. toletana*. The summits also are home to the bush whose scientific name is *Adenocarpus argyrophyllus*, a leguminous plant with yellow flowers characteristic of the Geopark's rocky summits.

In some of the Guadarranque-Gualija Gorges (like the La Trucha Gorge or the Mesto Gorge), the best examples of Portugal Laurel Forests in Las Villuercas can be found – laurisilva forests that have stood the test of time here while disappearing in many other spots on the Peninsula due to climate changes (a change to a Mediterranean climate). Also in the **Hospital del Obispo Valley** there are bogs or swamps which remain – places more inherent to cool Atlantic climates than the warm Mediterranean climate. There, one can find **abundant examples of mosses of the *Sphagnum genus*, insectivorous plants, and curious orchids**.

The round-leaved sundew (*Drosera rotundifolia*), an insectivorous plant, can be found here. It is very rare and typical of bogs

Photo: F. Durán

FAUNA

Groves are home to the elusive **roe deer** (*Capreolus capreolus*), whose mating season is in May. The echos of the deer's (*Cervus elaphus*) bellowing sound in these mountains appear during September, with **autumn hunting** outings for deer and wild boar (*Sus scropha*) being frequent.

The local bird life **is rich in cliff-dwelling birds and forest birds**. Amongst those that use the quartzite rocks to make their nests are **red-billed choughs** and the blue rock thrush, as well as griffon vultures, Egyptian vultures, peregrine falcons, eagle owls and some pairs of golden eagles and Bonelli's eagles. In the plants and forests there are tawny owls, woodpeckers (Lesser spotted woodpecker), Eurasian jays, Eurasian sparrowhawks, short-toed treecreepers, Eurasian nuthatches, Eurasian blue tits, and great tits.

Red-Billed Chough

IBOR RIVER

EGG LAYING OF THE BARBEL

ACCESS AND LOCATION

IBOR RIVER

Highway CC.19.3 - Mesas de Ibor to Ex-118 until reaching Bohonal de Ibor

Hiking trail next to the Bridge.

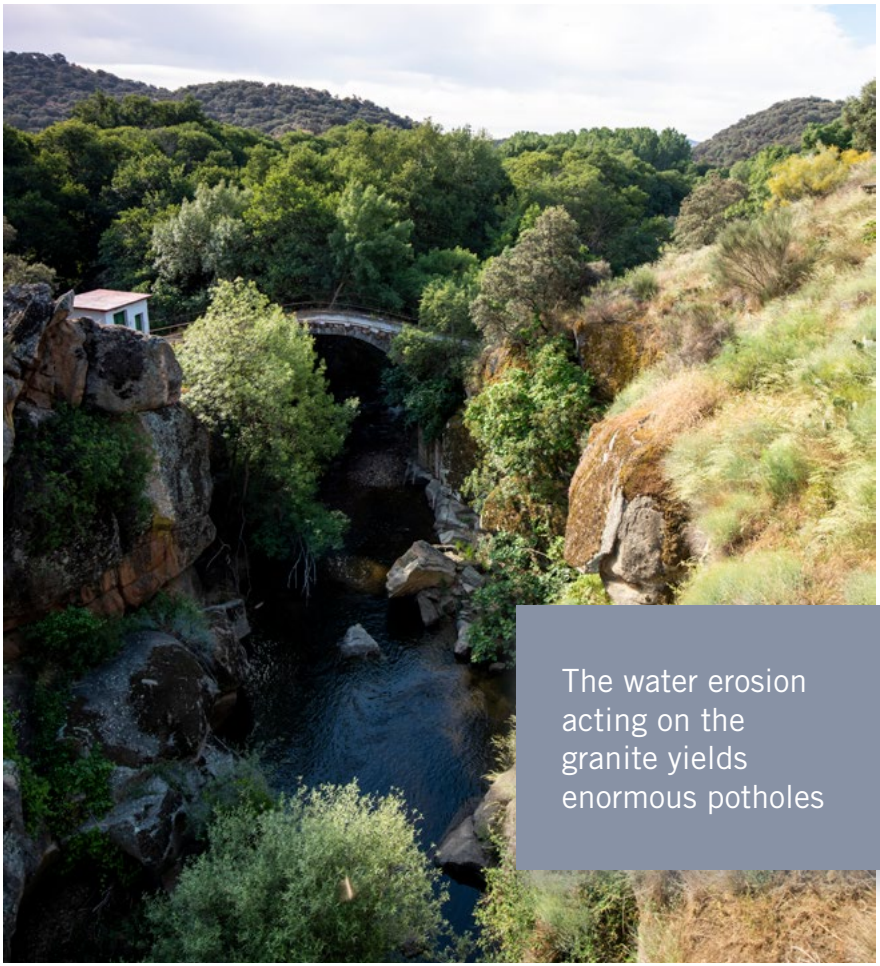
Each spring, a **natural show** happens once again in Extremadura. The barbel travel the currents of the **Ibor River** to breed, in search of the headwaters of rivers, cleaner waters with more oxygen – areas with shallow riverbeds of sand and gravel where they being their mating and spawning rituals.

https://www.geoparquevilluercas.es/anticlinal-del-ibor-guadalupe/

GEOLOGY

An exceptional place to see the spring journey of the barbel is around the **Mesas de Ibor Bridge (Puente de las Veredas)**, where one can also enjoy **giant's cauldrons or moulin potholes** that have been carved into the blocks of granite by the erosive action of water that is filled with small stones.

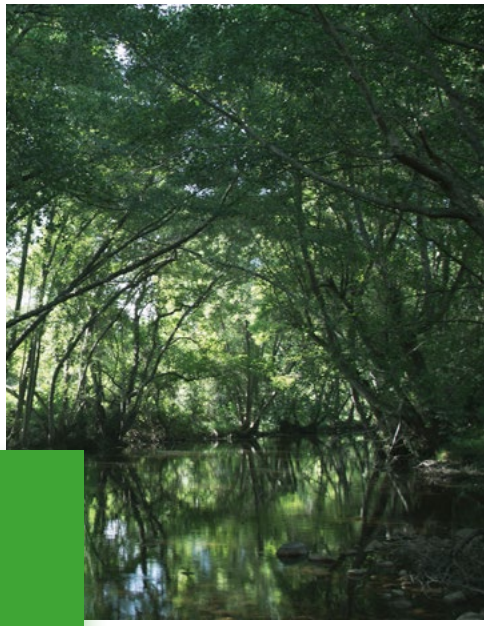
This area is home to a good example of a **granite batholith outcropping, in which the parent rock** (granite) has been eroded (chemical and mechanical weathering), giving rise to rounded blocks of stone, "balancing rocks," "rock pedestals," and abounding joint fracturing.



The water erosion acting on the granite yields enormous potholes

FLORA

On the banks of the Ibor, in the riparian area, we can find a fresh environment with shade from **groves of alder, ash and willow trees**. There, species live such as otters, Galápagos turtles, kingfishers, and now the American mink – an invasive species that is spreading across the Geopark's rivers.



Alder, ash, and willow trees shelter an abundance of wildlife

FAUNA

Each spring, usually in the month of April, with a good amount of water in the river but with the absence of floods, **the barbel go back to the Ibor River** from the Valdecañas Reservoir (Tagus River) in search of the best spawning areas to reproduce and ensure the continuation of their species. This life adventure reminds one of the salmon rivers in other areas of the Iberian Peninsula.

The **common barbel** (*Barbus barbus*), belongs to the *Cyprinidae* family and is characterized by its fleshy lips and four striking whisker-like structures. It is an omnivorous fish that feeds on the larvae of invertebrates, algae, and even carrion. A gregarious species that inhabits stony riverbeds with calm waters, once a year the barbel will follow its reproductive instinct and change its behavior.

During its adventure, the barbel faces the current and take up the strenuous activity of traveling many kilometers upstream in search of the cleaner headwaters with more oxygen. On the way, **the adult males are easy to identify because they develop white bumps on their nose**. When the females arrive to the spawning areas, they dig a small nest amongst the stones with their caudal fin and lay their eggs there. The males compete with each other to fertilize the greatest number of eggs, threatening each other with sudden, though harmless, movements.

At the end of June, when the water is scarcer and the temperature is too hot, the spawning process ends and the barbels return to the Valdecañas Reservoir, where they habitually live and feed.

Barbels seek cleaner waters with more oxygen for spawning

MESAS CAVERAS

ACCESS AND LOCATION

MESAS CAVERAS (DELEITOSA)

On the A-5 highway, exit 219 towards Deleitosa, then change at Km 4.5 to Highway EX 386

GEOLOGY

Near Deleitosa, in an area of confluence between the Geopark and the Monfragüe Biosphere Reserve, we can find a magnificent example of a geological formation known as a **fanglomerate or stone glacis, deposits of materials from the nearby mountain ranges** that, as they move away from the mountains, acquire the form of a **plateau or mesa** (elevated, flat platforms).

The Deleitosa fanglomerate formation, known by locals as the '**Mesas Caveras**,' is between the Sierra de la Breña Mountains on one side and the Almonte River on the other and, along with the Cañamero fanglomerate formations and the Mesillas fanglomerate formation (Castañar de Ibor), the Deleitosa fanglomerate formation is one of the best examples of this geological phenomenon in the Geopark.

The **Deleitosa fanglomerate** formation's origin comes from the nearby Sierra de la Breña, where a **system of fractures** (faults) can be found. These faults are parallel and have strike-slip displacement, allowing the different interruptions in the continuity of the outcrops of quartzite to clearly be seen.

Fanglomerate formations are deposits located at foothills, usually in the form of alluvial fans and originating from nearby mountain ranges. Their **lithology** is comprised of **conglomerates, sands, gravels, and clays** – usually of a reddish-orange color. They create **tabular reliefs** similar to mesas or elevated platforms (isolated from the landscape). Fluvial erosion at the edges of the fanglomerate formation produces characteristic lobed forms.

FLORA

As for the vegetation of this area, we can say that human **uses have resulted in a heterogeneous mosaic** featuring olive groves, dehesas (holm oak and cork oak), scrub, and grasses.

The dehesa (or clearing with scattered holm oaks and cork oaks) **is what dominates this fanglomerate formation.** There abounds scrub such as *Retama sphaerocarpa*, Spanish lavender (*Lavandula stoechas*), *Genista hirsuta, Genista tridentata, Erica umbellata*, and sometimes there are even areas of gum rockrose (*Cistus ladanifer*) and *Halimium ssp*.

Human uses have brought about a broad mosaic of flora

FAUNA

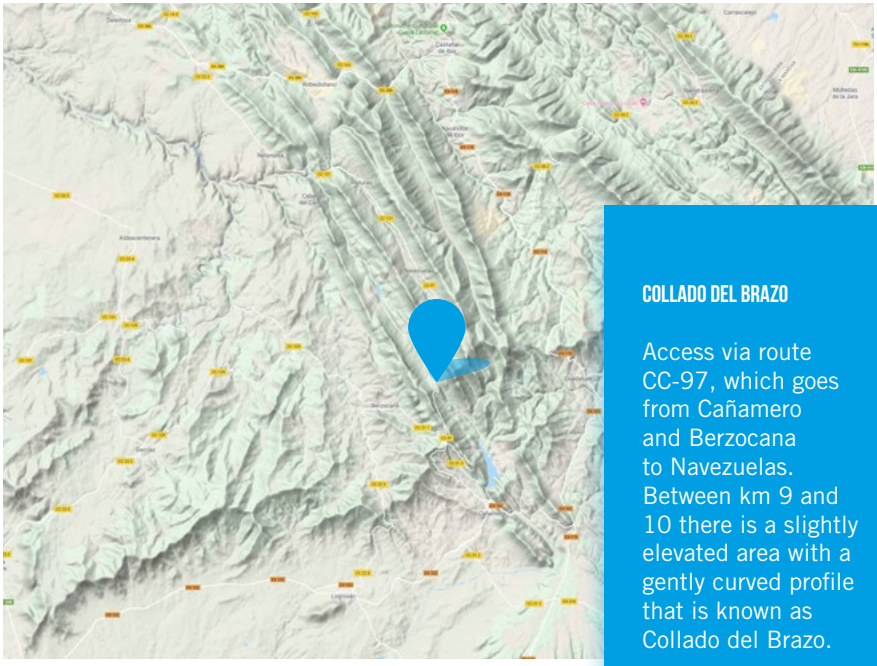
Fauna abounds, as we cannot forget that we are at the doorstep of the **Monfragüe National Park**, which is a roaming area for the Spanish imperial eagle, black vulture, griffon vulture, and Egyptian vulture. Some species typical of the dehesa that can be seen are the hoopoe, Iberian magpie, cuckoo, great spotted cuckoo, booted eagle, and kites – among many others.

Goshawk

COLLADO DEL BRAZO

POINT OF ORNITHOLOGICAL INTEREST

ACCESS AND LOCATION



COLLADO DEL BRAZO

Access via route CC-97, which goes from Cañamero and Berzocana to Navezuelas. Between km 9 and 10 there is a slightly elevated area with a gently curved profile that is known as Collado del Brazo.

The '**Era del Gato**' ('Gato Threshing Floor') is an **old traditional** threshing floor for grain, located in **Collado del Brazo** which, in turn, is within the core of the **Santa Lucía Syncline** (which features an inverted relief, as it is topographically higher than the nearby anticlines).

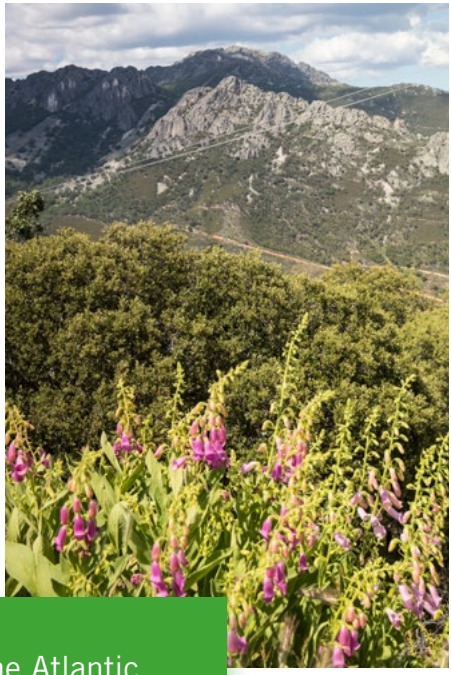
This area is the **watershed for the Tagus and Guadiana**: to the north the Santa Lucía Gorge can be found, a tributary of the Almonte River which flows into the Tagus, while the El Brazo Stream is to the south, a tributary of the Ruecas River whose waters end up in the Guadiana.

There, facing the four cardinal directions, are the **circularly arranged stones of the Gato Threshing Floor**, which has lost its traditional use and is now a good observation point for landscape, flora, and fauna.

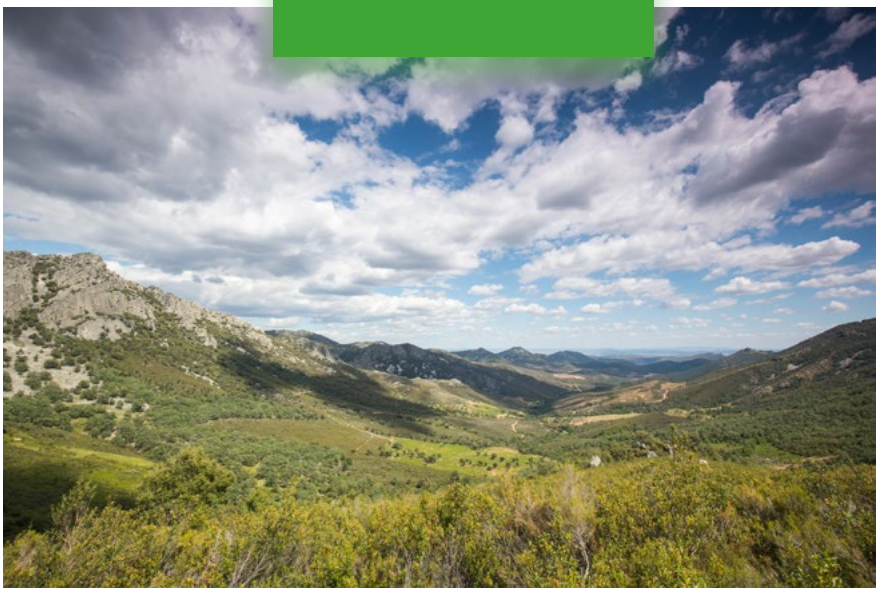
www.geoparquevilluercas.es/collado-del-brazonavezuelas

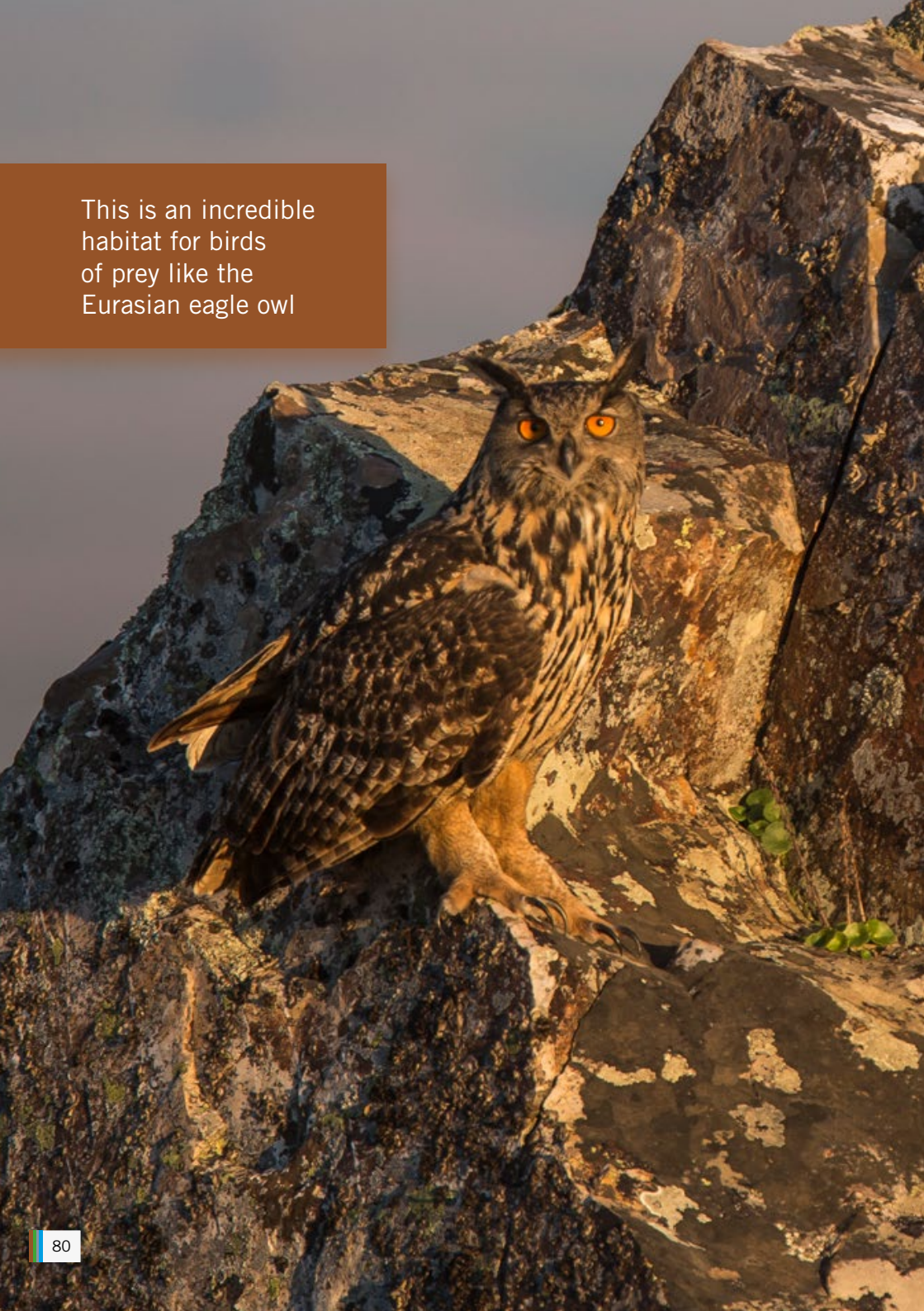
FLORA

If we look towards the Pico La Villuerca Peak, we can see that the **oaks climb** the quartzite rocks in search of height and moisture. In contrast, if we look towards the Santa Lucía Gorge, **Mediterranean scrub** comprised of rockrose, heather, strawberry trees, and cork oaks will surround us. Finally, we must mention that this place is not only a watershed but also a point where two plant worlds collide: the Atlantic deciduous forest with oak trees on the one hand and the **sclerophyllous Mediterranean *evergreen* forest** on the other.



Here, the Atlantic and Mediterranean forests collide



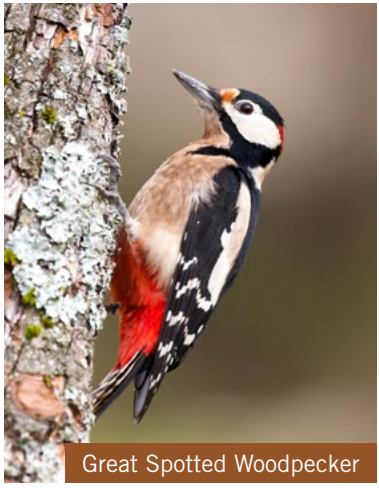

This is an incredible habitat for birds of prey like the Eurasian eagle owl

FAUNA

Visitors should go to this threshing floor with binoculars and telescopes to enjoy the **local bird life**. The white spots in the quartzite ridges indicate that there lies a **colony of nesting griffon vultures** (*Gyps fulvus*), which are easy to see in flight or perching on the rocks.

This region, whose views to the south showcase the **Cancho del Fresno Reservoir** and even far-off mountain ranges of Badajoz, is inhabited by **golden eagles and Bonelli's eagle**. These birds are of similar sizes; therefore, they compete for hunting areas and nesting sites. Also, the great king of the night, the **eagle owl**, finds walls on which to nest and raise its nestlings here.

The **red-billed chough** (*Pyrrhocorax pyrrhocorax*), a noisy member of the Corvidae family, also calls these solitude mountains home. If we hear a drumming sound on the wood, surely a **great spotted woodpecker** (*Dendrocopos major*) is searching for food in the trunks of old trees.



Great Spotted Woodpecker

Other species that can be observed from here are the Egyptian vulture, peregrine falcon, short-toed snake eagle, sparrowhawk, tawny owl, black stork, black kites, red kites, crows, blue rock thrushes, and young Eurasian blue tits and great tits.

SIERRA DE LAS VILLUERCAS AND GUADARRANQUE VALLEY

SPA AND SCI

Photo: F. Durán

ACCESS AND LOCATION

SIERRA DE LAS VILLUERCAS AND GUADARRANQUE VALLEY Interpretation Center

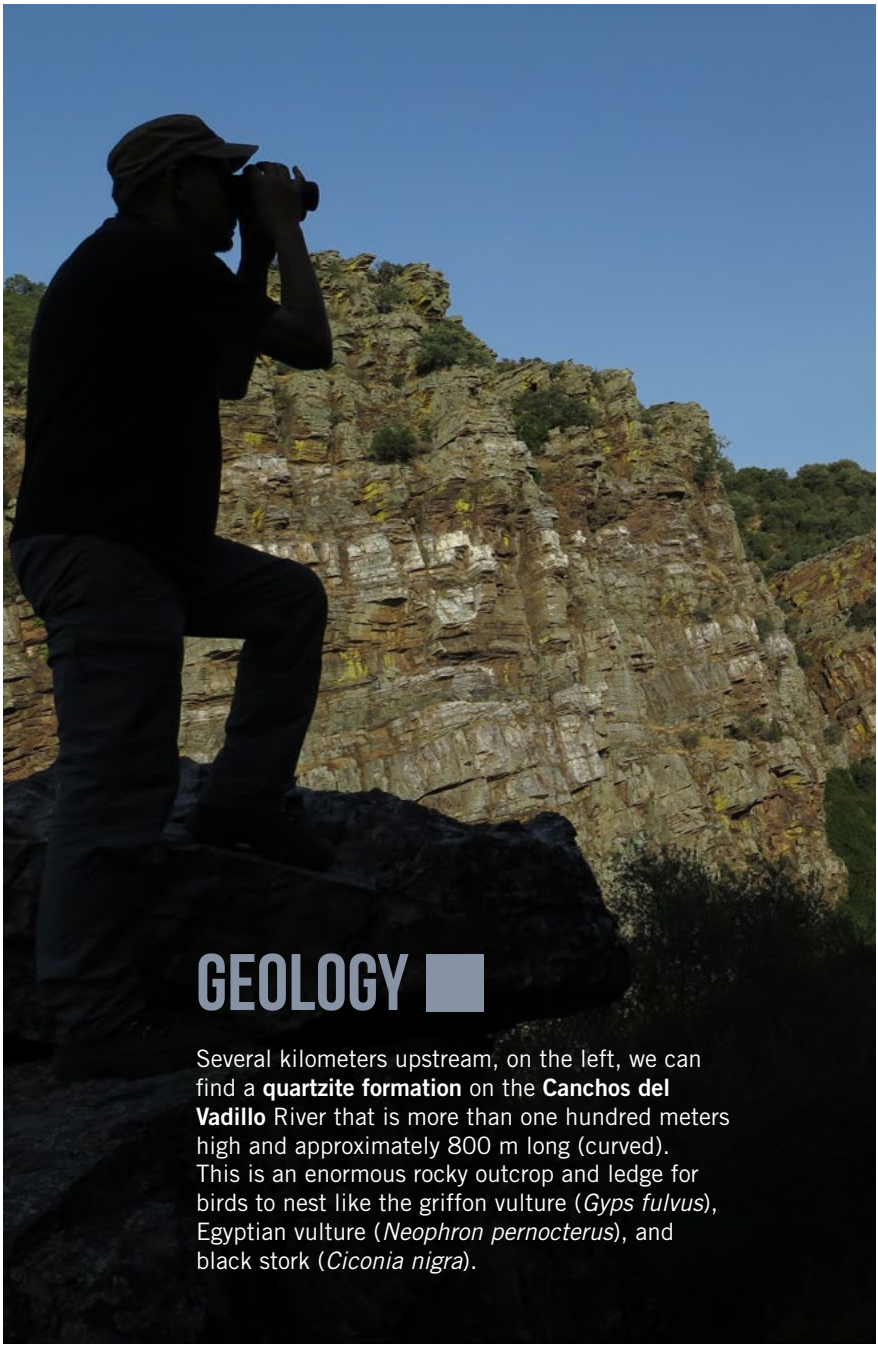
Cancho del Fresno Reservoir Highway, just 3 km from Cañamero. Access is from old highway CC-21.1.1 (Cañamero-Berzocana).

These **protected areas** include many of the Geopark's mountains and valleys. From Alía to Peraleda de San Román or from Berzocana to Castañar de Ibor, the valleys of Santa Lucía, Almonte, Viejas, Ibor, Gualija, and Guadarranque are all included.

In the **Guadarranque-Gualija Syncline**, there is also a watershed, as **two rivers that run** in opposite directions begin in this valley. The **Gualija River** flows into the Tagus and the **Guadarranque River** flows into the Guadiana Basin.

Peraleda de San Román would be the best way to access the steep Gualija Valley, doing so via a track that goes along the Mina Marialina and arrives at (and crosses) this watercourse. Once on the other side of the river, we can find a large area with marble rocks known as Parralejo, which is rich in basophilic vegetation, highlighting the thickets of grey-leaved cistus (*Cistus albidus*), kermes oak (*Quercus coccifera*), and numerous orchids (with an abundance of species of the *Ophrys and Anacamptis* genera).

www.geoparquevilluercas.es/centro-de-interpretacion/centro-de-interpretacion-de-la-zepasierra-de-las-villuercas-y-valle-del-guadarranque



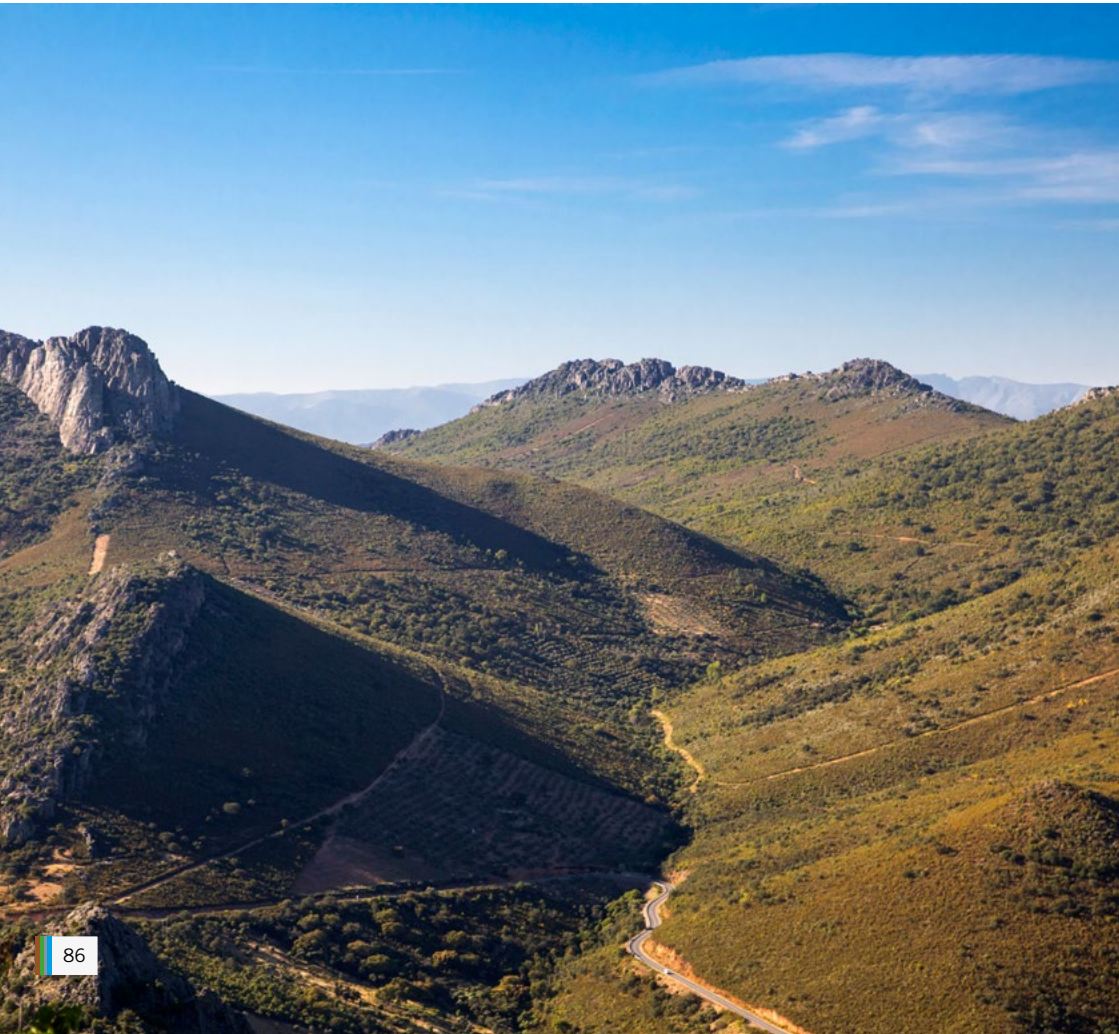
GEOLOGY

Several kilometers upstream, on the left, we can find a **quartzite formation** on the **Canchos del Vadillo** River that is more than one hundred meters high and approximately 800 m long (curved). This is an enormous rocky outcrop and ledge for birds to nest like the griffon vulture (*Gyps fulvus*), Egyptian vulture (*Neophron pernocterus*), and black stork (*Ciconia nigra*).

Photo: F. Durán

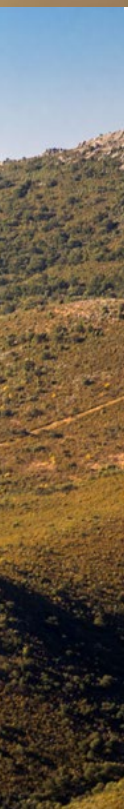
The best way to get to know this stunning area is to set out **from Peraleda de San Román along the Dehesilla trail that leads up to the Gualija River** to see the area from the other shore (the right) and avoid bothering the many species of birds that use the rocks as a nesting area.

Other places that are **good observation points for fauna and flora** in this extensive protected area are: the Cabañas Castle and its lookout point over the Santa Lucía Valley, the Peña Amarilla Viewpoint near Alía, The Cervales and Carbonero Crags, the Gato Threshing Floor, and –of course– Pico La Villuerca Peak (1,601 m), where the Geopark's Appalachian relief can be seen in all its splendor.



Ophrys

We can find numerous orchids (with an abundance of species of the *Ophrys* and *Anacamptis* genera)

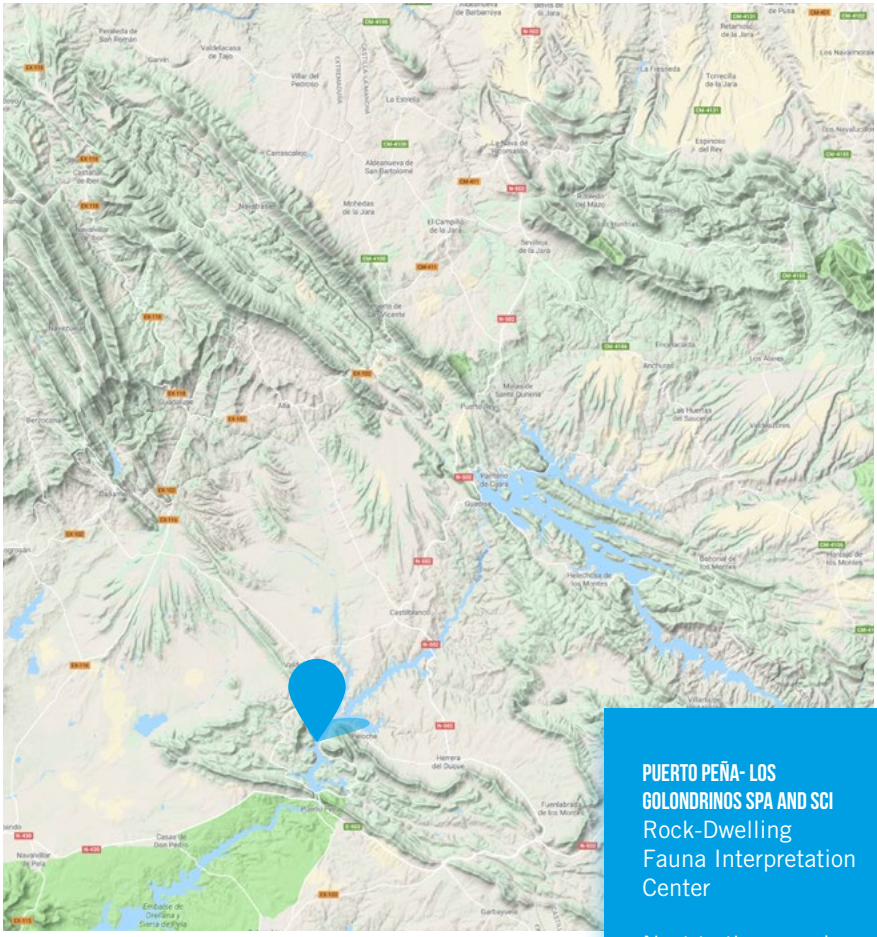


Finally, we cannot forget that in the Berzocana area are the so-called **Canchos de las Sábanas, towering quartzite stones with a strong dip (tilt) and a wealth of trace fossils**. Next thereto is a **botanical garden** with species that are representative of the plant life of Las Villuercas. And, at the peak of this area, the **Risco Gordo** Crag (1,263 m) is a magnificent place for birdwatching and to take in the characteristic Appalachian relief of these mountains.

PUERTO PEÑA-LOS GOLONDRINOS

SPA AND SCI

ACCESS AND LOCATION



The main attraction of this area is the final portion of the **García Sola Reservoir**, from the defile formed by the Sierra de los Golondros and the Sierra de Valdecaballeros Mountain Ranges to the Cíjara Reservoir dam. This area also includes part of the **Guadalupejo River** and the lands it irrigates to the south of Las Villuercas.

PUERTO PEÑA- LOS GOLONDRINOS SPA AND SCI
Rock-Dwelling Fauna Interpretation Center

Next to the camping area at Puerto Peña Reservoir, Highway N-430, km 167, García de Sola Reservoir, Badajoz

GEOLOGY

To the south of Las Villuercas, the **quartzite mountains** continue to create haughty landscapes that, in this area, have been partly covered by the water channeled from the Guadiana into the **García Sola (Puerto Peña) and Cíjara Reservoirs**. A large part of the territory is part of the northeast of the province of Badajoz, while a smaller section in the southeast of the Province of Cáceres is also within the Geopark.

There are numerous examples in the area of **folded strata**, the result of plate movements that occurred about 300 million years ago, during the Hercynian orogeny. These wavy layers, the result of tectonic pressure, are like **miniature anticlines and synclines**.

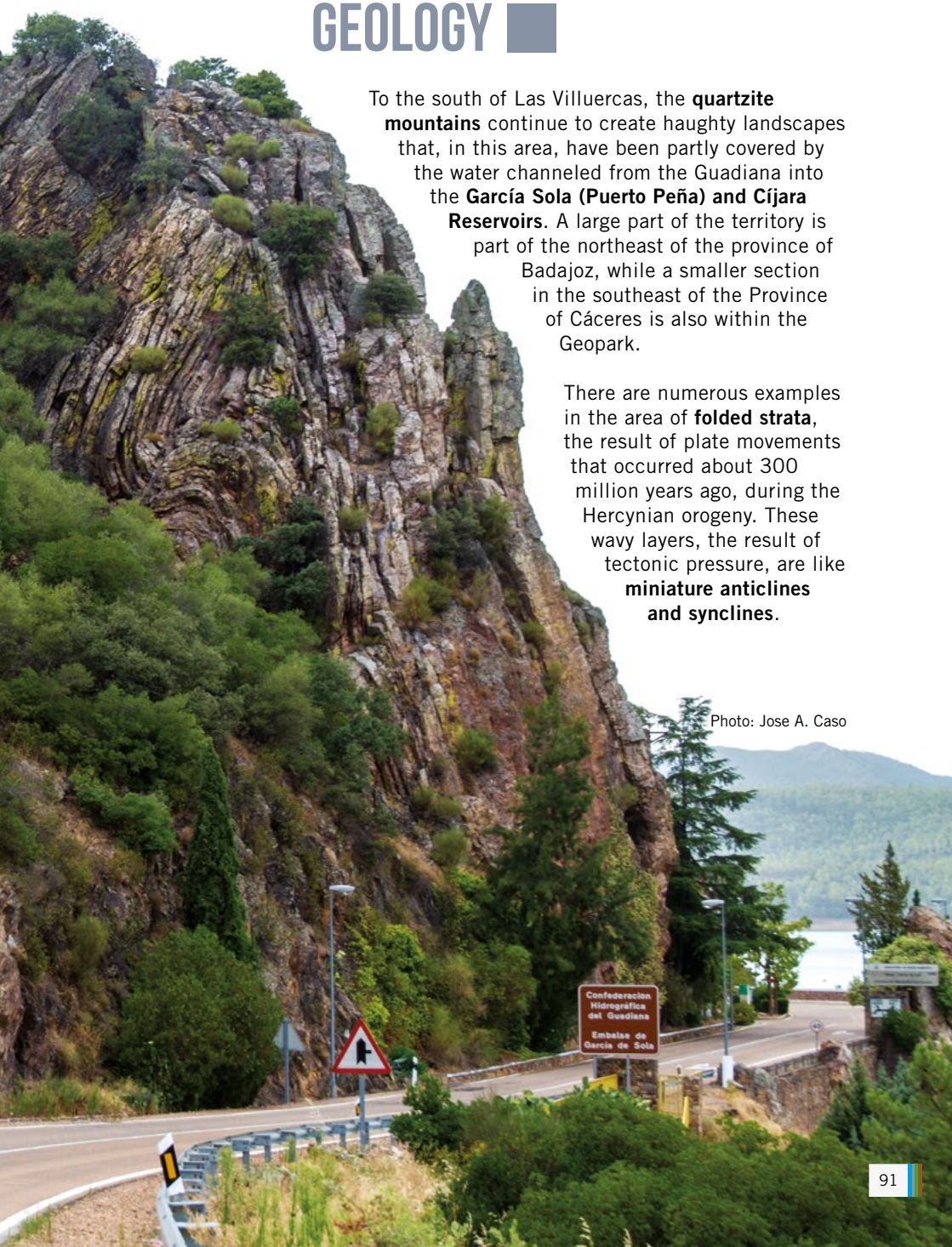


Photo: Jose A. Caso

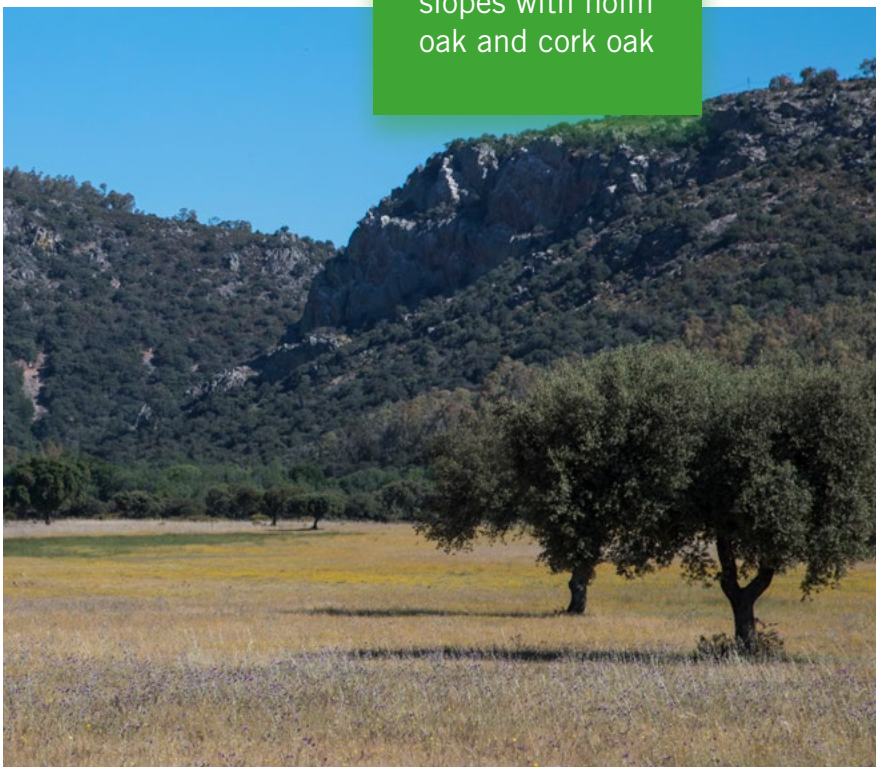
FLORA

The **Mediterranean vegetation of the mountain** foothills have the cork oak (*Quercus suber*) as their main tree. That tree is accompanied by scrub with strawberry trees, rockrose, heather, as well as juniper (*Juniperus oxycedrus*) and rupicolous trees (growing among the quartzite rock). In terms of habitats, the importance of retama can be highlighted (*Retama shaerocarpa*), as well as Mediterranean scrub and **Thermo-Mediterranean gallery forests**.

Rockrose Flower

Photo: Jose A. Caso

Dehesas and slopes with holm oak and cork oak



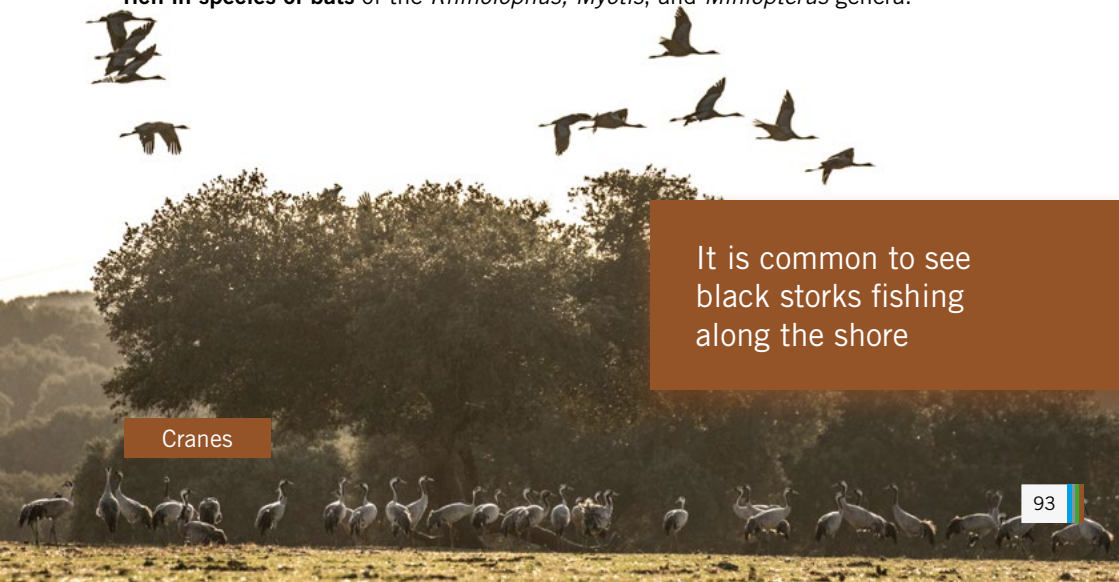
FAUNA

A good starting point to get to know the fauna of the region is the **Rock-Dwelling Fauna Interpretation Center**, located next to the campground and the Puerto Peña Reservoir. The informational panels at said center are filled with the silhouettes of the winged animals living in the quartzite rocks.

Abundant are the **griffon vultures**, which seem to enjoy turning during flight in thermal columns that help them to climb almost without using any energy to flap their wings. Other birds of prey that can be seen are the golden eagle and Bonelli's eagle, Egyptian vulture, eagle owl, peregrine falcon, and common kestrel. Rock-dwelling species also include the Alpine swift, red-rumped swallow, Eurasian crag martin, red-billed chough, and blue rock thrush.

Golden Eagle

As regards **wildlife linked to the water of these reservoirs**, worthy of mention are the otter, grey heron, great cormorant, northern shoveler, mallard, Eurasian coot, and little egret. The **black stork** also goes to the shores to fish and, in the dehesas near reservoirs, we can hear **the bugling of hundreds of crane** who spend the winter there. In terms of **fish**, we must mention the presence of *Squalius alburnoides* and the Iberian nase (*Pseudochondrostoma polylepis*). The area is also **rich in species of bats** of the *Rhinolophus, Myotis*, and *Miniopterus* genera.



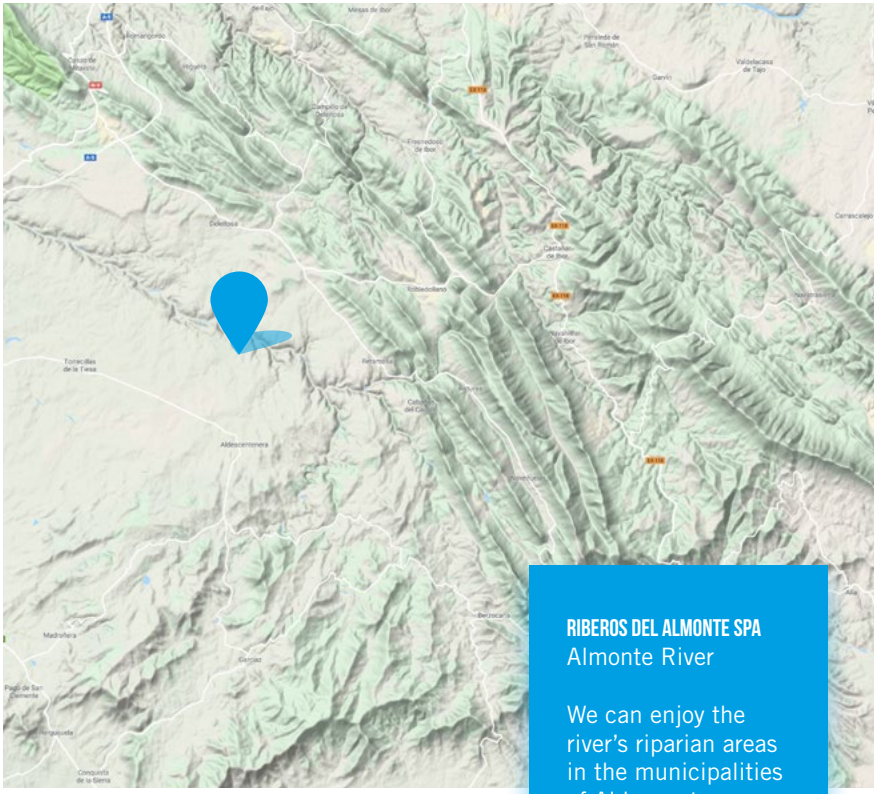
It is common to see black storks fishing along the shore

Cranes

RIBEROS DEL ALMONTE

SPA

ACCESS AND LOCATION



RIBEROS DEL ALMONTE SPA
Almonte River

We can enjoy the river's riparian areas in the municipalities of Aldeacentenera and Deleitosa

As we have described this watercourse in detail in the **Río Almonte SCI** section from its source to the Puente del Conde area (Aldeacentenera), here we will focus on the **part of the river that starts to cross the vast Trujillo/ Cáceres peneplain**. There, inside the Geopark, the Almonte traverses Aldeacentenera and Deleitosa – a municipality whose southern border is marked by said river.

The most important tributaries that flow into the Almonte on the peneplain, outside of the Geopark, are the Tozo, Marinejo, Magasca, and Tamuja. When it crosses the peneplain, the Almonte has a slightly wandering path with light curves and meanders.

https://www.geoparquevilluercas.es/nacimiento-del-almontex/

GEOLOGY

Rocky materials are mainly lutites and graywacke, a stone that looks like slate and emerges forming characteristic rocky outcrops. Both materials were deposited during the Ediacaran period and their approximate age is between 580 to 600 million years; therefore, they are among the oldest sedimentary rocks of Europe.

The Almonte area has many fanglomerate formations, especially in Deleitosa, Jaraicejo, Torrejón el Rubio, Monroy, and Santiago del Campo. Fanglomerate formations, which originated through the erosion of nearby mountains, have surfaces that are almost horizontal and layers measuring 2 to 10 m thick composed of quartzite, gravel, sand, and clay.

Puente del Conde with graywacke in the foreground

Cherry trees and chestnut trees coexist with the original oaks

FLORA

The vegetation of the riparian area is characterized by **scattered trees** like willows, ash, and some alders. The most typical vegetation includes **bushweed and thorn scrub** inherent to areas with low water levels (the river dries up in the summer or is reduced to small puddles). **Brushweed** (*Flueggea tinctoria*) was often used in the past century to make brooms for sweeping corrals and stables.

The sunny slopes of these riparian areas have **typical vegetation**: wild olive (*Olea europea subsp. sylvestris*), which is more or less scattered amongst the rocks -- usually slate or granite.

On the plain, the cleared **Mediterranean forests** that we know as **dehesas** dominate. Scattered holm oaks and cork oaks, grasses for livestock, and areas with scrub that include *Retama sphaerocarpa*, *Genista hirsute*, and Spanish lavender (*Lavandula stoechas*) are common.

FAUNA

Booted Eagle

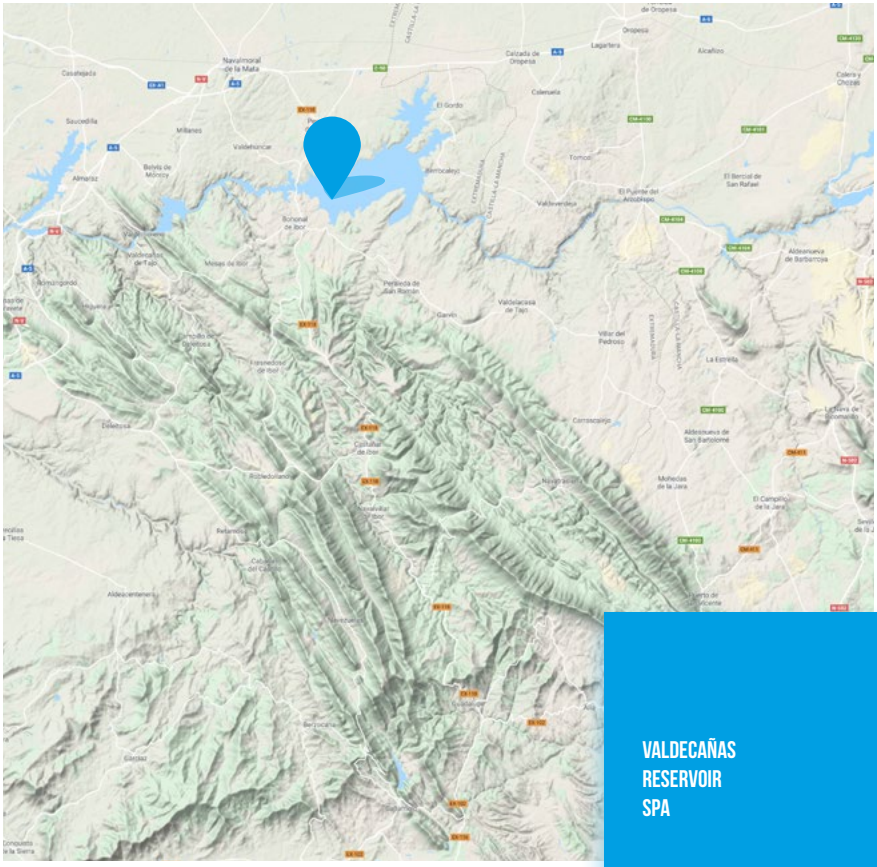
The fauna of the dehesa is quite varied. Among the mammals we find the genet, fox, and Egyptian mongoose. **Many birds** inhabit this space, highlighting hoopoes, Iberian magpies, European bee eaters, cuckoos, and great spotted cuckoos. Birds that live in the mountain ranges get their food from the dehesa, such as the Spanish imperial eagle, Bonelli's eagle, short-toed snake eagle and booted eagle, as well as griffon vultures, black vultures, Egyptian vultures, black storks, and eagle owls – amongst many other species. Without a doubt, **the dehesa is a model of sustainable development that we must maintain**.

Some plains with few trees in the Almonte basin have **steppe birds** such as the great bustard (*Otis tarda*), little bustard (*Tetrax tetrax)*, Montagu's harrier (*Circus pygargus*), and the Eurasian stone curlew (*Burhinus oedicnemus*).

VALDECAÑAS RESERVOIR

SPA

ACCESS AND LOCATION



VALDECAÑAS RESERVOIR SPA

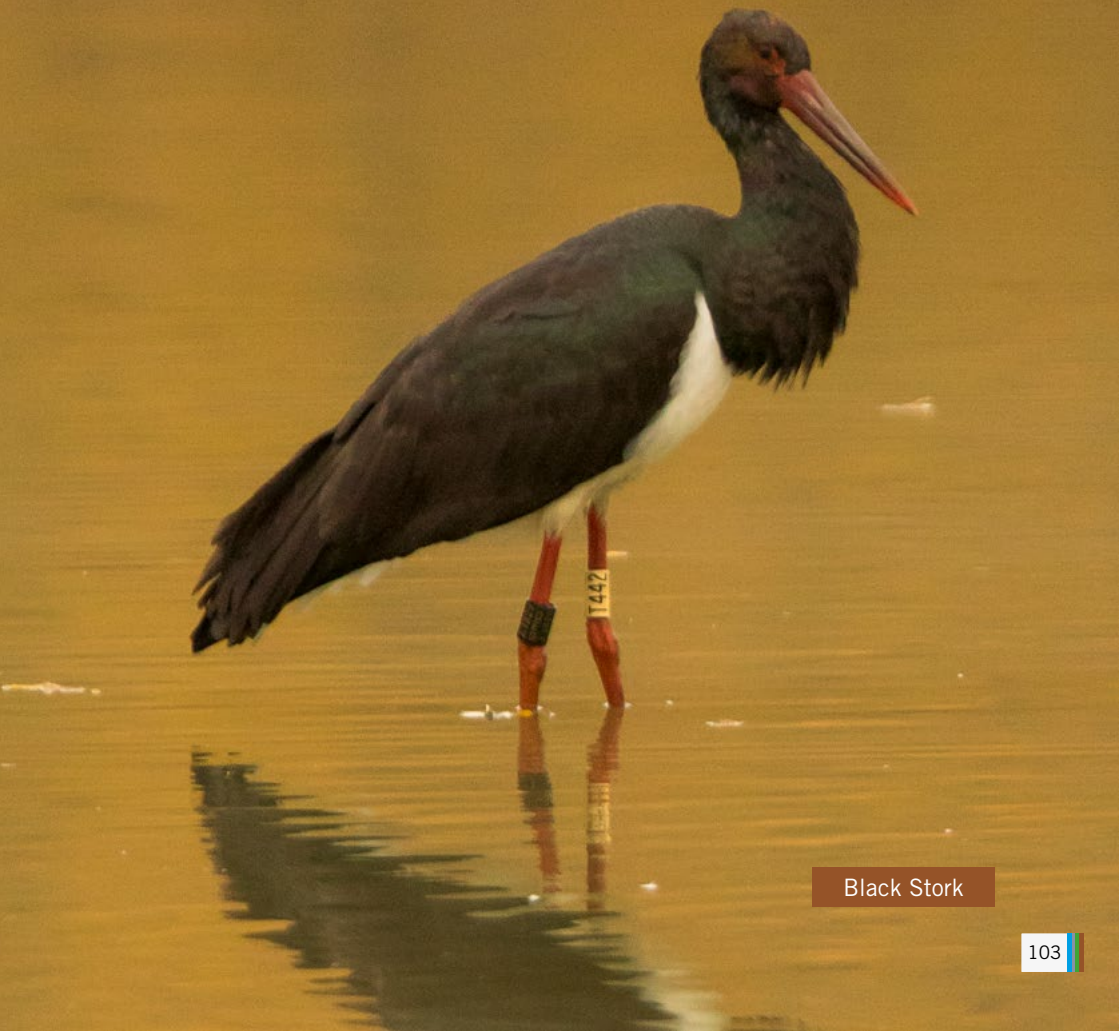
The **Valdecañas Reservoir** is located **in the east of the Province of Cáceres**, on its border with Toledo, occupying an area of **7,459 hectares**. It is built on the **Tagus River** in the area where it receives the waters of the Gualija and Ibor Rivers, both from the Geopark.

This large reservoir provides water to the irrigated lands of **Valdecañas**; therefore, it suffers from severe droughts that are most noticeable in the reservoir's shallow areas but not in its central area, because of its large capacity.

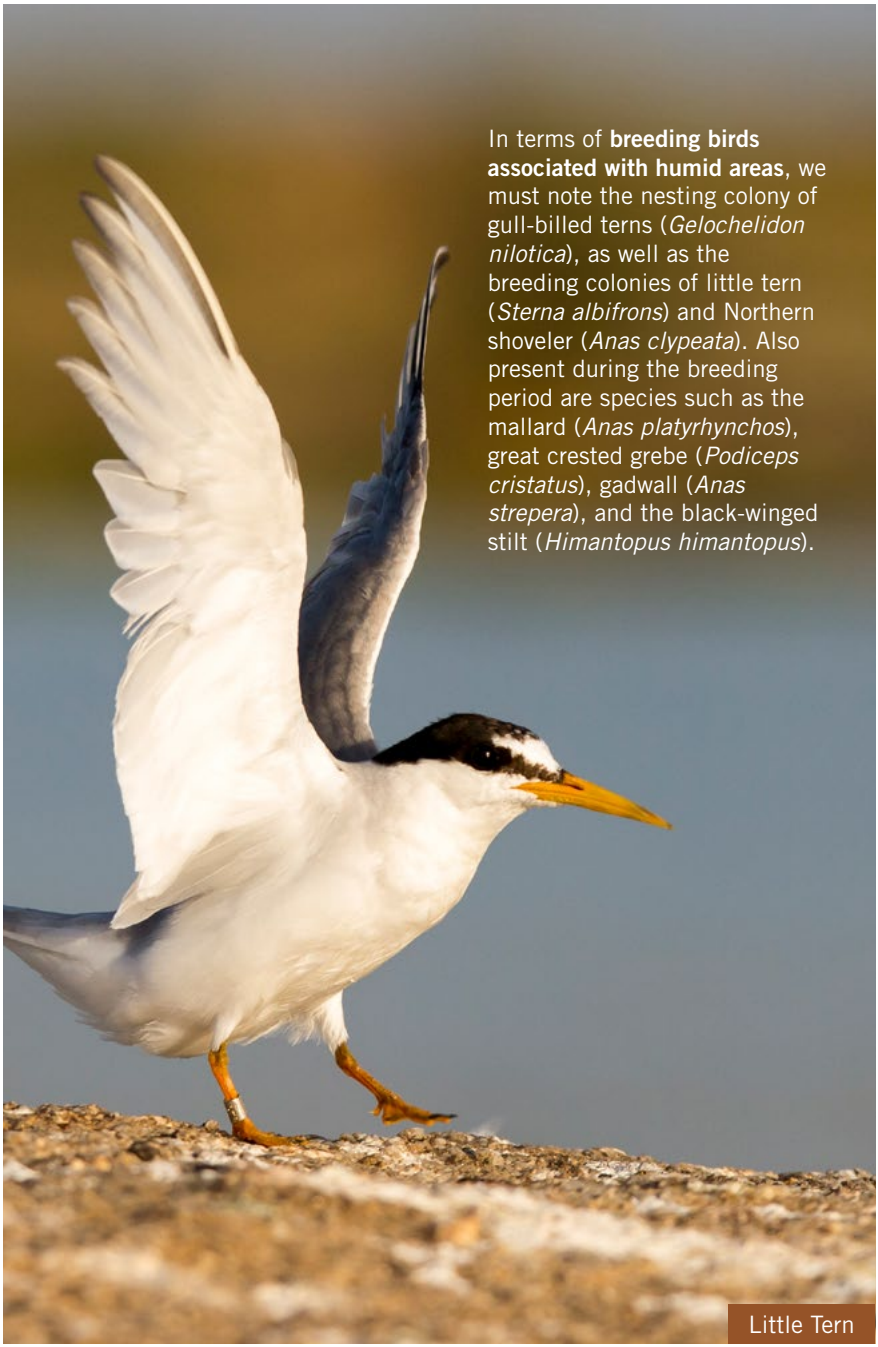
FAUNA

This is a **natural space of great importance for birds associated with humid areas**, for the black stork and for large birds of prey – home to 21 bird species included in **Annex I of the Birds Directive**.

Protected species make their nests in rugged areas at the back of reservoir, such as the Spanish imperial eagle (*Aquila heliaca adalberti*), Bonelli's eagle (*Aquila fasciata*), Egyptian vulture (*Neophron pernocterus*), griffon vulture (*Groups fulvus*), and black stork (*Ciconia nigra*). This area also serves as a roaming and feeding area for species such as the Eurasian black vulture (*Aegypius monachus*) and golden eagle (*Aquila chrysaetos*).



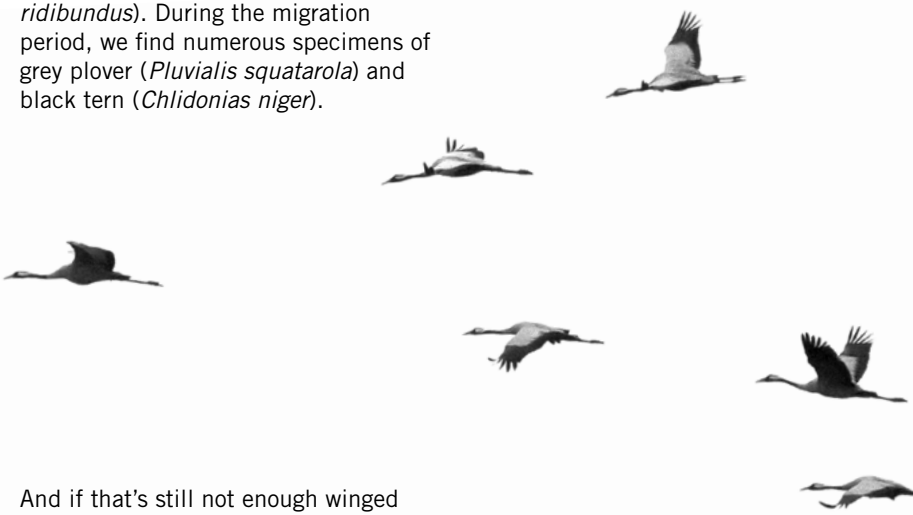
Black Stork



In terms of **breeding birds associated with humid areas**, we must note the nesting colony of gull-billed terns (*Gelochelidon nilotica*), as well as the breeding colonies of little tern (*Sterna albifrons*) and Northern shoveler (*Anas clypeata*). Also present during the breeding period are species such as the mallard (*Anas platyrhynchos*), great crested grebe (*Podiceps cristatus*), gadwall (*Anas strepera*), and the black-winged stilt (*Himantopus himantopus*).

Little Tern

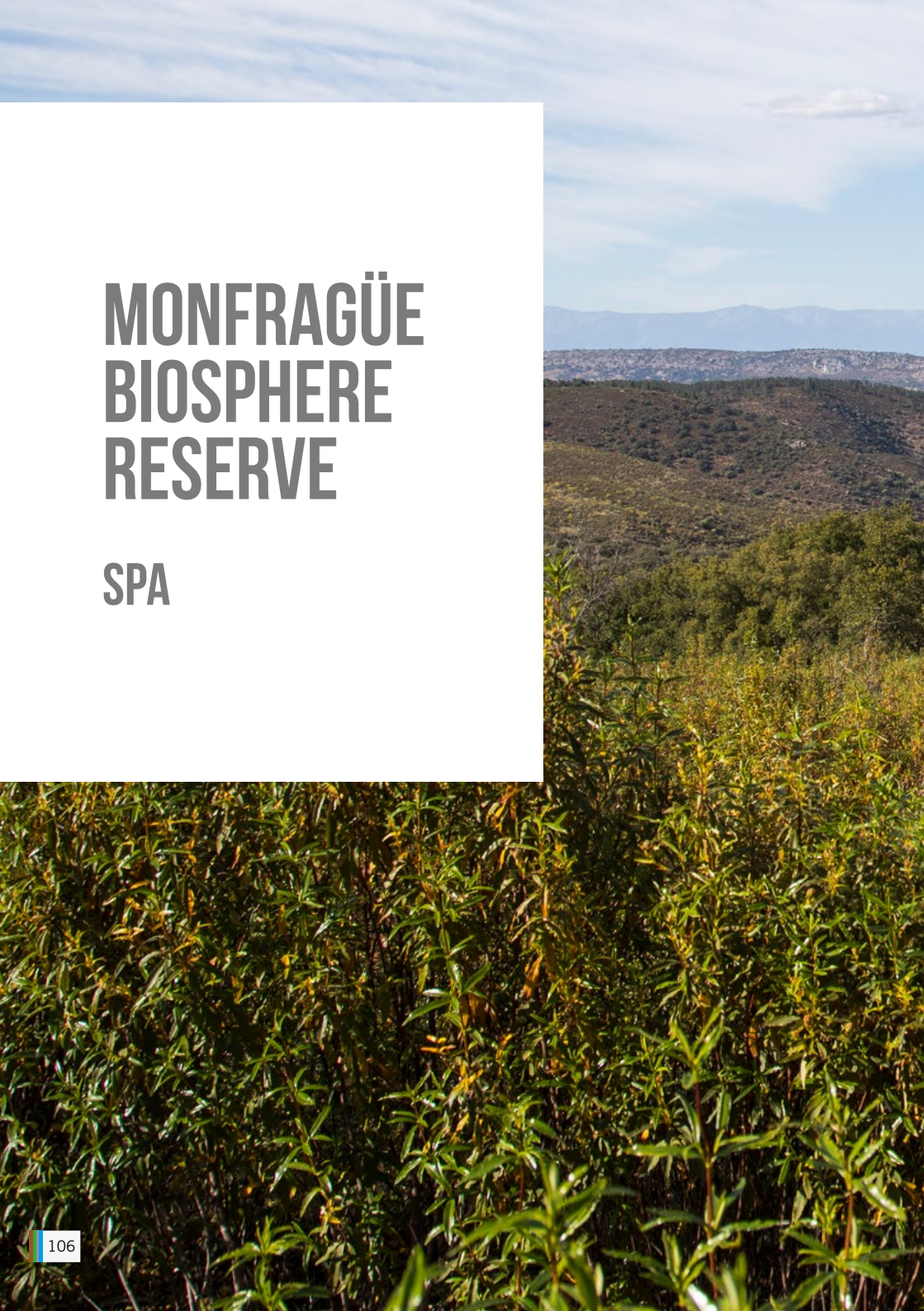
This is also an important **wintering area** for species such as the great cormorant (*Phalacrocorax carbo*), lesser black-backed gull (*Larus fuscus*), and black-headed gull (*Chroicocephalus ridibundus*). During the migration period, we find numerous specimens of grey plover (*Pluvialis squatarola*) and black tern (*Chlidonias niger*).



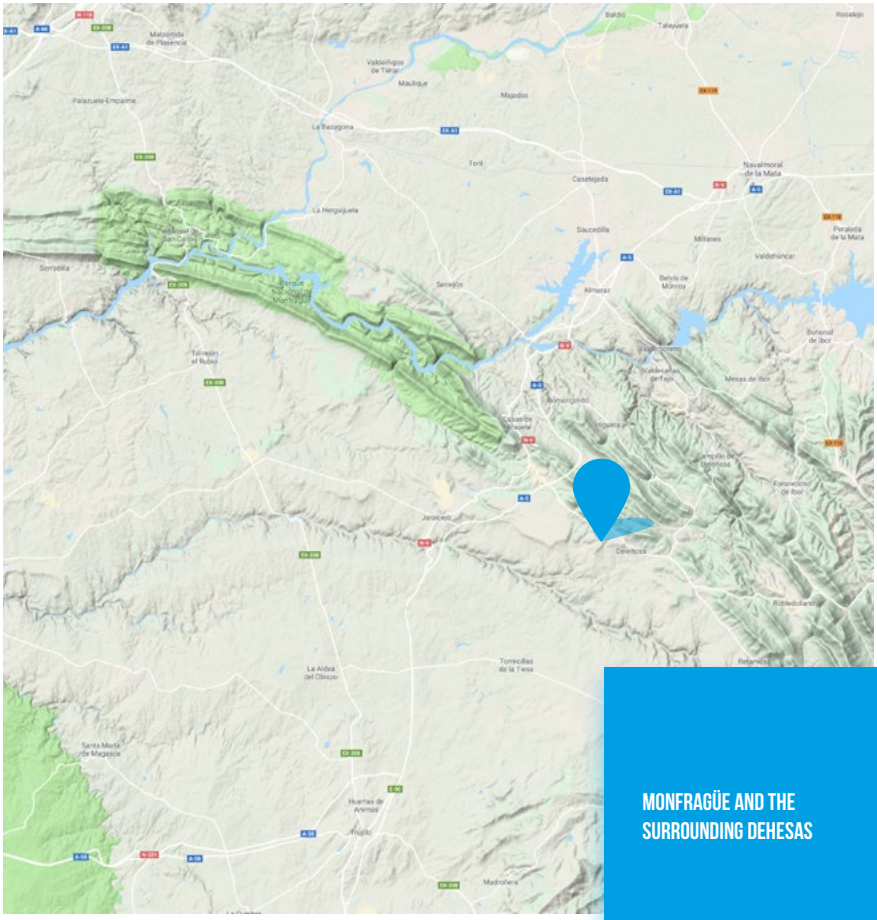
And if that's still not enough winged biodiversity for you, the dehesas and plains that surround the reservoir **are home in the winter to thousands of cranes** (*Grus grus*) who liven up the area with their bugling and use the reservoir as a roost. Over the last few years, the greylag goose (*Anser anser*) has also been present in the pastures and waters during the months of autumn and winter.

MONFRAGÜE BIOSPHERE RESERVE

SPA



ACCESS AND LOCATION



MONFRAGÜE AND THE SURROUNDING DEHESAS

This space is located at the **confluence of the Tiétar and Tagus Rivers**, in the north of the Province of Cáceres, formed by a succession of mountain ranges that tie in with Las Villuercas.

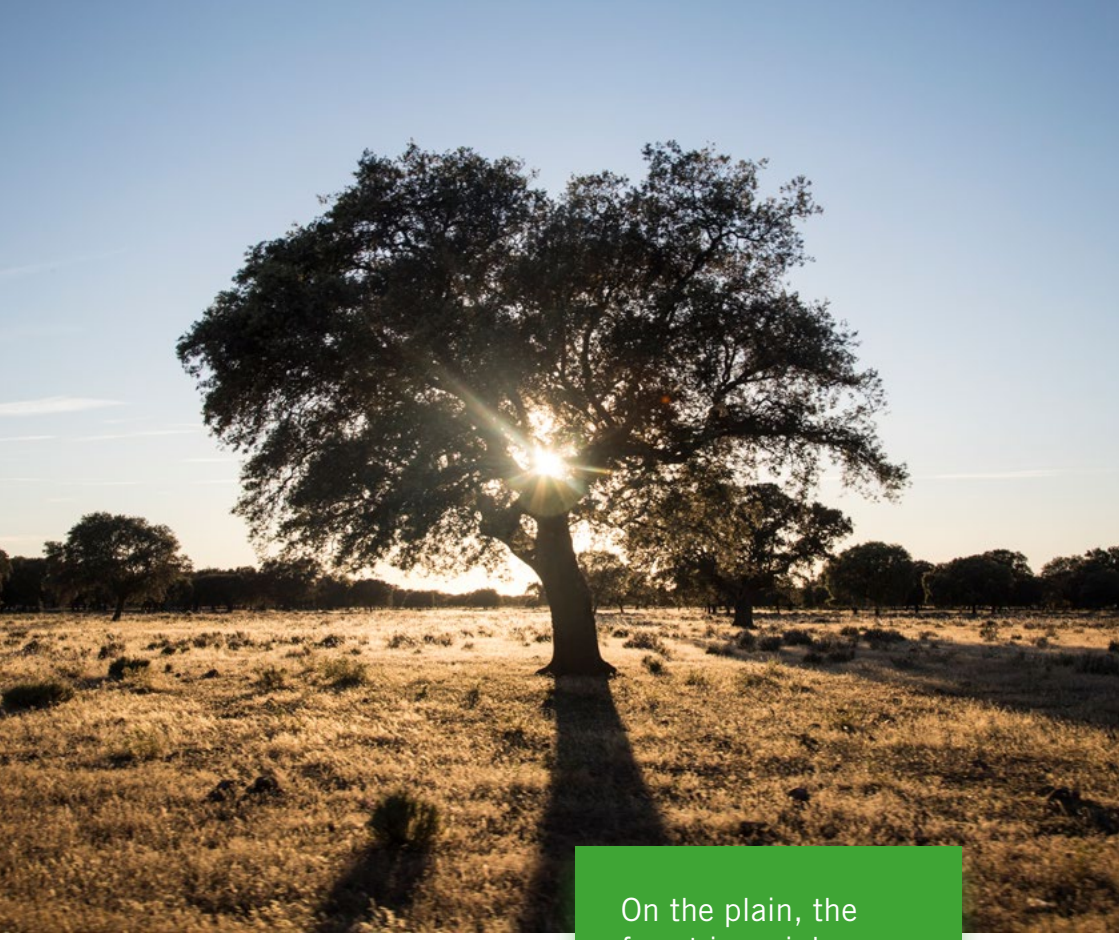
The Monfragüe SPA and the surrounding dehesas are in the following municipalities: Aldea del Obispo, Casas de Miravete, Gargüera, Jaraicejo, Majadas, Malpartida de Plasencia, Mirabel, Plasencia, Romangordo, Serradilla, Serrejón, Tejeda de Tiétar, Toril, and Torrejón el Rubio.

GEOLOGY

From the geological point of view, **The Monfragüe Syncline is the northwestern continuation of the Geopark**. To the north of Deleitosa, the **quartzite ridges** of the Sierra de la Breña Mountains can be found – a good example of how the Hercynian and Alpine orogenies have folded and fractured the hard rocks in Las Villuercas. Here we can observe a **parallel fault system that gives rise to strike-slip displacement**. These parallel fractures of the Breña Mountain Range are strike-slip faults, as the fault plane is vertical and movement is horizontal in nature.

The slopes of these mountains are covered in stone and rubble that has gradually overtaken the vegetation. And further down the slopes, one can find the accumulation of different materials making up fanglomerate formations known as '**rañas**' – curious geological formations that are quite common in Extremadura.

The slopes of these mountains are covered in stone



On the plain, the forest is mainly cleared as a result of human activity

FLORA

The **scrub and Mediterranean forest** many times becomes impenetrable on these mountain slopes, full of rockrose, heather, broom, strawberry trees, terebinth, oaks, and cork oaks. However, on the plains, **the forest is mainly cleared as a result of centuries of human activity**, creating a dehesa where some trees remain and pastures appear which can be used by livestock. Scattered holm oaks and cork oaks alternate with Spanish lavender, Genista hirsuta, and other species rich in scent.

Some important areas of the municipalities of Higuera and Campillo de Deleitosa have seen their native forests and scrub disappear, replaced by **monospecific pine and eucalyptus plantations**.

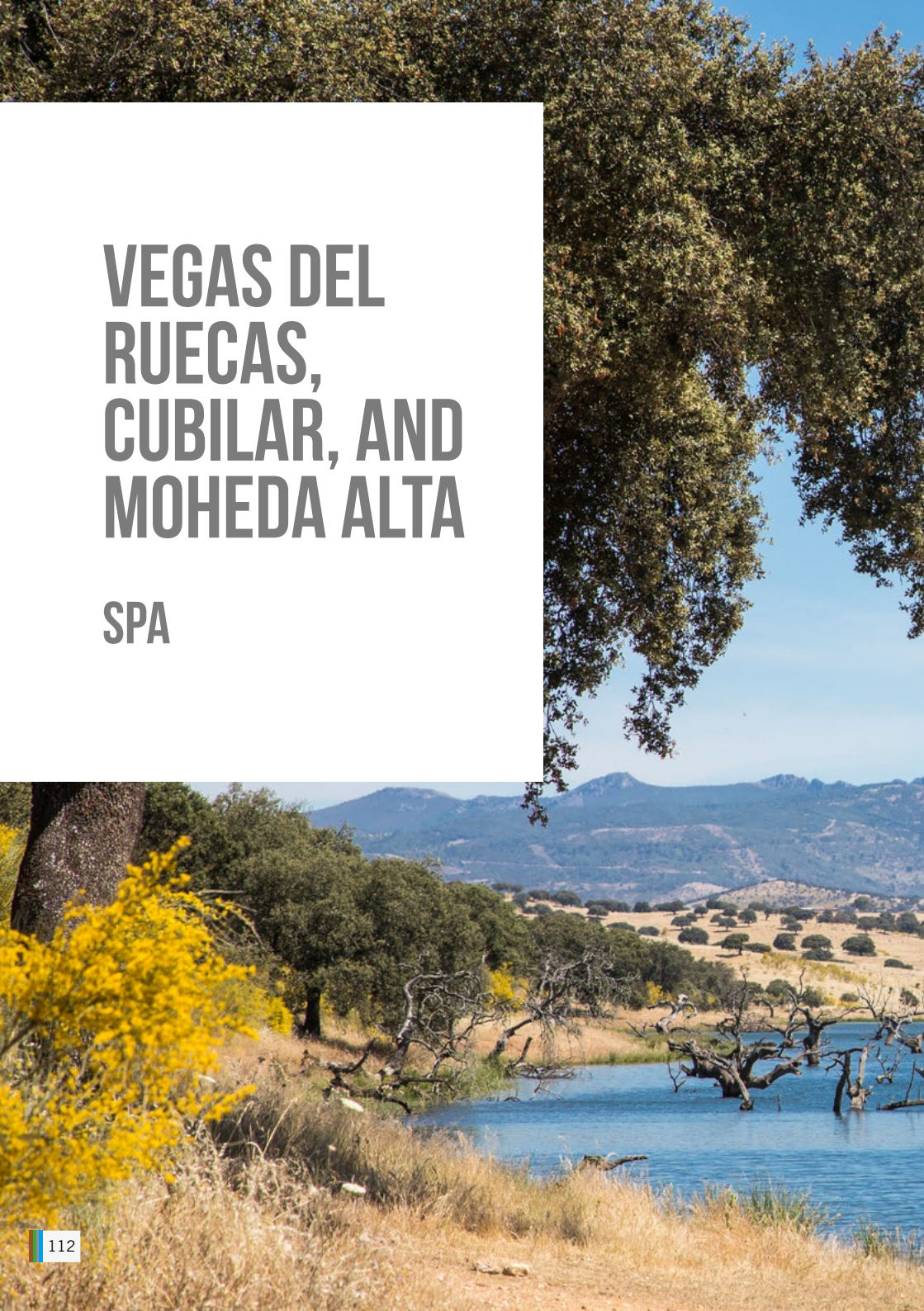
FAUNA

The fauna that inhabits the high rocky ridges is made up of the griffon vulture (*Groups fulvus*), eagle owl (*Bubo bubo*), Egyptian vulture (*Neophron pernocetrus*), and peregrine falcon (*Falco peregrinus*). Amongst the scrub, it is common to find deer (*Cervus elaphus*) and wild boar (*Sus scropha*). Dehesas are **roaming areas** for different species of eagles, such as the Spanish imperial eagle (*Aquila heliaca adalberti*), Bonelli's eagle (*Aquila fasciata*) and short-toed snake eagle (*Circaetus gallicus*), as well as griffon vultures, black vultures, and Egyptian vultures. The rhythmic sounds of the song of the hoopoe (*Upupa epops*) and the cuckoo (*Cuculus canorus*) provide music for all the dehesa.

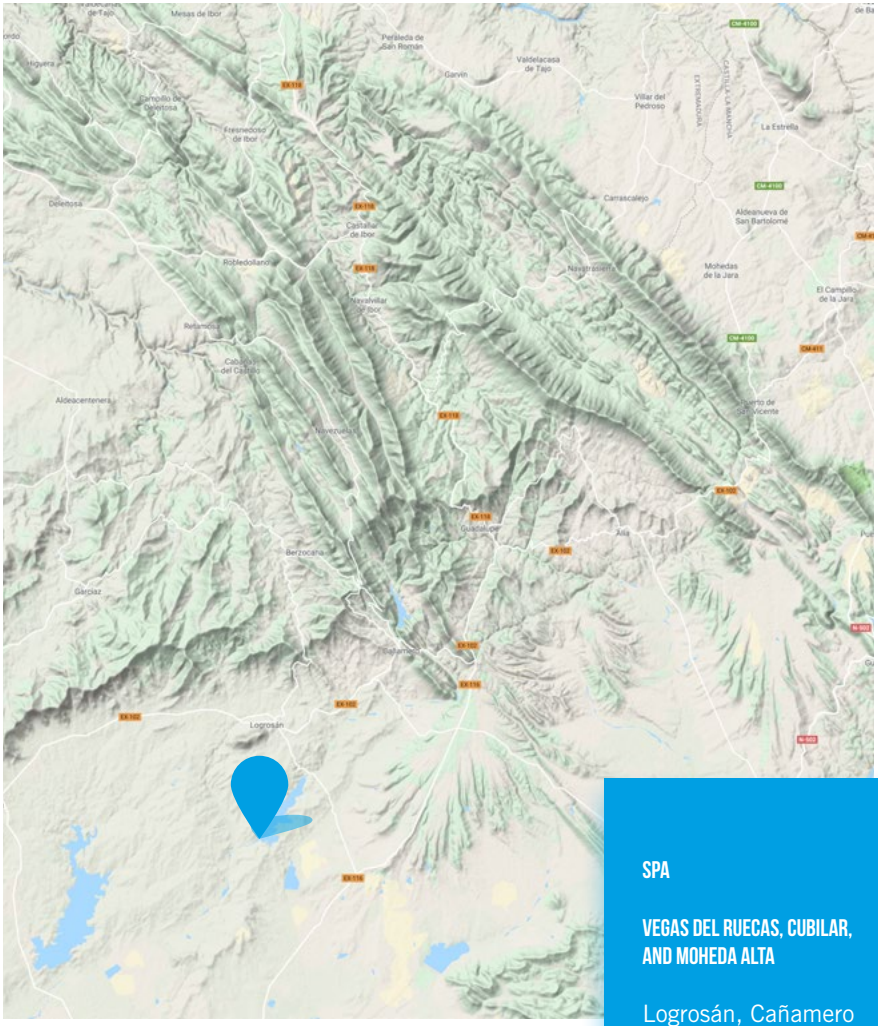
Black Vultures and Griffon Vultures

VEGAS DEL RUECAS, CUBILAR, AND MOHEDA ALTA

SPA



ACCESS AND LOCATION



SPA

VEGAS DEL RUECAS, CUBILAR, AND MOHEDA ALTA

Logrosán, Cañamero

This SPA is located i**n the central eastern part of the region**, on the edge of the Province between Cáceres and Badajoz, part of the municipalities of Logrosán (Cáceres), Navalvillar de Pela, and Acedera (Badajoz). It features two large rivers: Ruecas and Cubilar.

FLORA

A **large number of habitats** converge here, amongst which we can highlight dehesas, irrigated lands, riparian areas, and wetlands (El Cubilar Reservoir). The SPA includes all of the Dehesas de Ruecas y Cubilar SCI and part of the Moheda Alta Periurban Conservation and Recreation Park (Navalvillar de Pela).

The evergreen dehesas featuring *Quercus ssp.* (holm and cork oaks) –a **habitat distinctly Mediterranean**– have a good conservation status here, as this habitat type occupies most of the space in the SPA.

Amongst the dehesa are some **Mediterranean wet meadows with high grasses** and an abundance of plants belonging to the Cyperaceae and Juncaceae families, in addition to numerous Gramineae (plants with spikes). On these grasslands, we find the *Serapias perez-chiscanoi* orchid species, discovered in Extremadura and cataloged as being "In Danger of Extinction."

Serapias perez-chiscanoi

Photo: F. Durán

An orchid that was discovered in Extremadura can be found on these grasslands

Another habitat that is quite well represented in this area is that of **Thermo-Mediterranean riparian scrub**, especially in terms of the presence of bushweed. Bushweed (*Flueggea tinctoria*) is a thorny bush that grows in riparian areas around rivers with very low water levels (they may even dry up in the summer).

FAUNA

In terms of fauna, noteworthy are **steppe birds, aquatic birds, and wintering birds**.

As for **steppe birds**, the SPA boasts the large and beautiful Great bustard (*Otis tarda*), the agile Montagu's harrier (*Circus pygargus*), and the black-winged kite (*Elanus caeruleus*) – a crepuscular bird of prey. The conservation status of these three species is acceptable.

In terms of **aquatic birds**, we can mention the collared pratincole (*Glareola pratincola*) and the little tern (*Sternula albifrons*), two breeding species which are cataloged as being sensitive to habitat alterations. Also found is the **elusive black stork** (*Ciconia nigra*), a species that searches for its food in the different watercourses.

During the **winter** these dehesas and wet areas host important populations of the crane (*Grus grus*), greylag goose (*Anser anser*), black-tailed godwit (*Limosa limosa*), northern pintail (*Anas acuta*), and many other waterfowl.

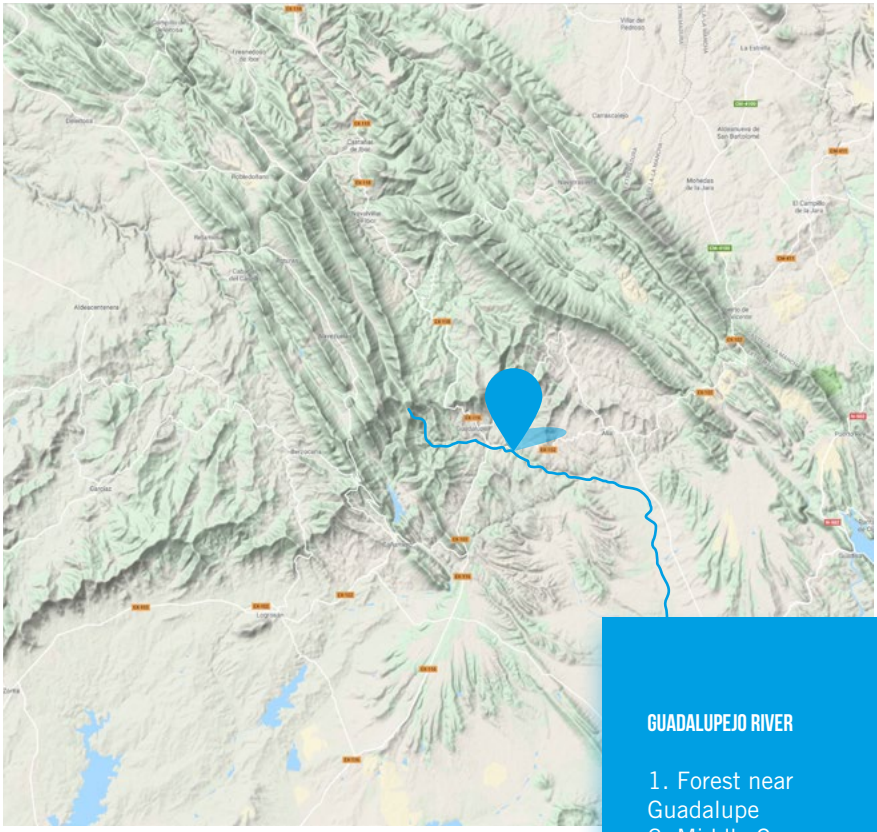
We can find abundant fish species such as the *Pseudochondrostoma willkommii* and *Cobitis paludica* here.

Black Stork

GUADALUPEJO RIVER

SCI

ACCESS AND LOCATION



GUADALUPEJO RIVER

1. Forest near Guadalupe
2. Middle Course

Near the Geopark's peak, the **La Villuerca Crag** (1601 m.), this river that gets its name from the Guadalupe begins – a name which can be translated as "**river of wolves.**" The river begins very near **Pozo de la Nieve** ('The Snow Pit'), the renowned place where the friars of the Guadalupe Monastery kept the abundant snow that then fell in the winters, using it throughout the year.

The current population of **La Puebla de Guadalupe** drinks from the waters of this river, supplied from the **Mato Dam**.

FLORA

The plant environment that surrounds this dam is one of the most lush and dense of the Geopark and it is dominated by chestnut trees and Pyrenean oak that, during the autumn when their leaves change, acquire brown, red, and golden hues.

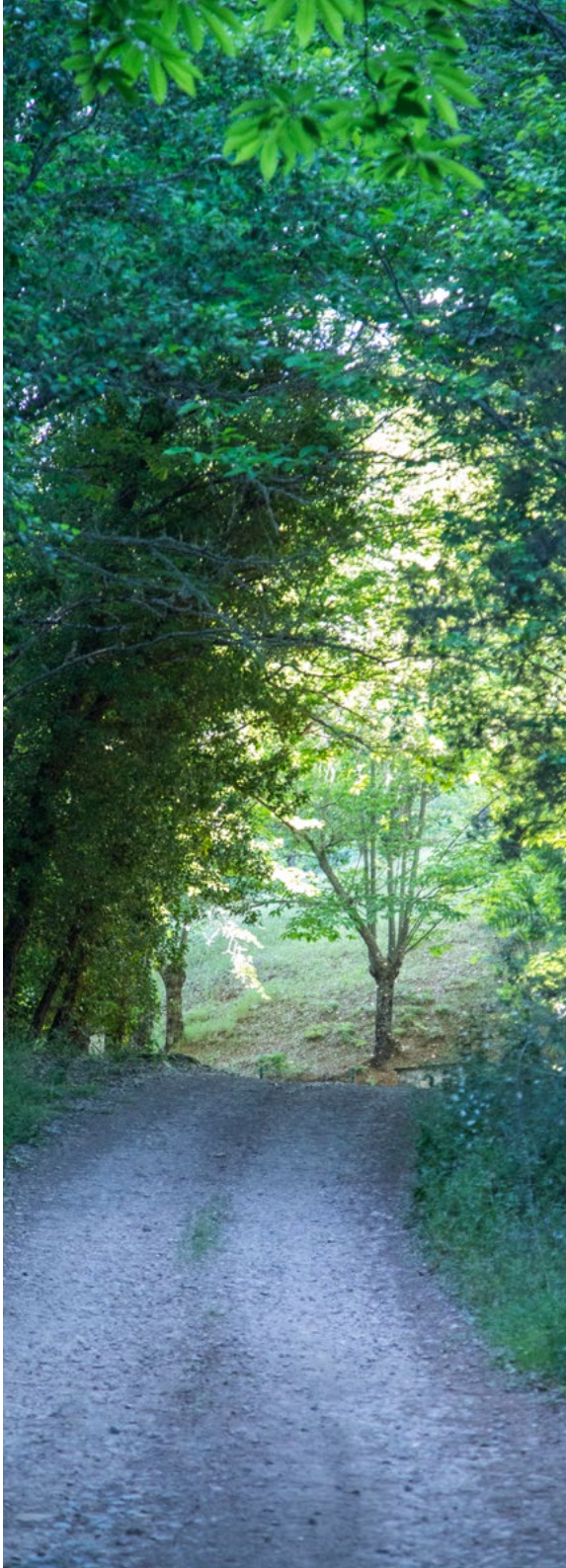
This is one of the Geopark's most leafy areas

Photo: F. Durán

Of the 40-km trek to the mouth of the Guadiana river, **the high stretch is the richest in abundance and diversity of plant species**. Miguel de **Unamuno**, during his visit in 1908, described it as follows:

"What human art can offer us in Guadalupe is, without a doubt, extremely beautiful; however, even more beautiful is what nature can offer us there. We went up to the Mirabel Hermitage and went down from there through one of the densest and lushest forests that I have ever had the pleasure to enjoy. I have never before seen larger and denser chestnut trees; and walnut trees, poplars, cork oaks, Valencian oak, holm oaks, ash trees, almond trees, alder trees next to the stream – and all of this full of the aroma of fragrant shrubs." And even before that, Queen Isabella 'La Católica,' who visited Guadalupe frequently, called this area "My Paradise."

The forests of the middle section have lost their splendor of other eras and little is noteworthy in that area. Near the mouth, green trees and shrubs once again dominate the scene with willows, poplars, and other aquatic plant species.



FAUNA

In terms of fauna, we must note that **wolves and lynx** were abundant in the region until the 1960s, but today **they are extinct** in the area and remain only as memories of a not-too-distant time in which the ecosystems still retained much of their structure.

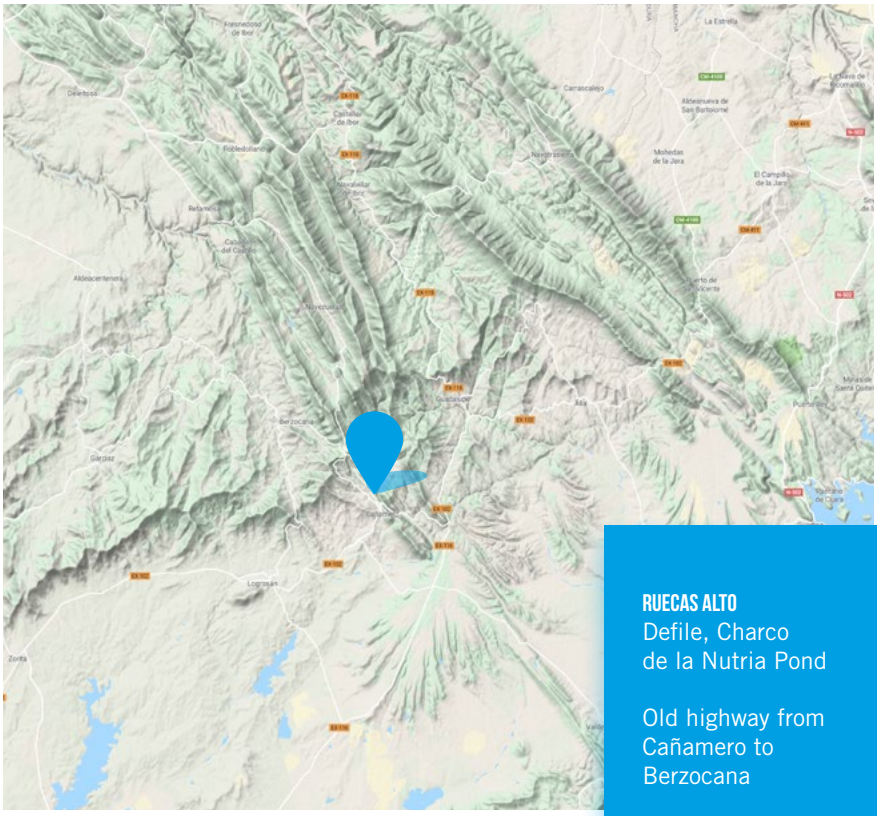
Luckily, we still have in this area the roe deer, deer, wild boar, wildcat, otter, badger, golden eagle, Bonelli's eagle, eagle owl, tawny owl, goshawk, sparrowhawk, common buzzard, peregrine falcon, etc. Among the birds linked to water (for food), noteworthy are the white-throated dipper, kingfisher, grey heron and purple heron, black stork, as well as numerous ducks.

The boar roams freely about these lands

RUECAS ALTO

SCI

ACCESS AND LOCATION



RUECAS ALTO
Defile, Charco de la Nutria Pond

Old highway from Cañamero to Berzocana

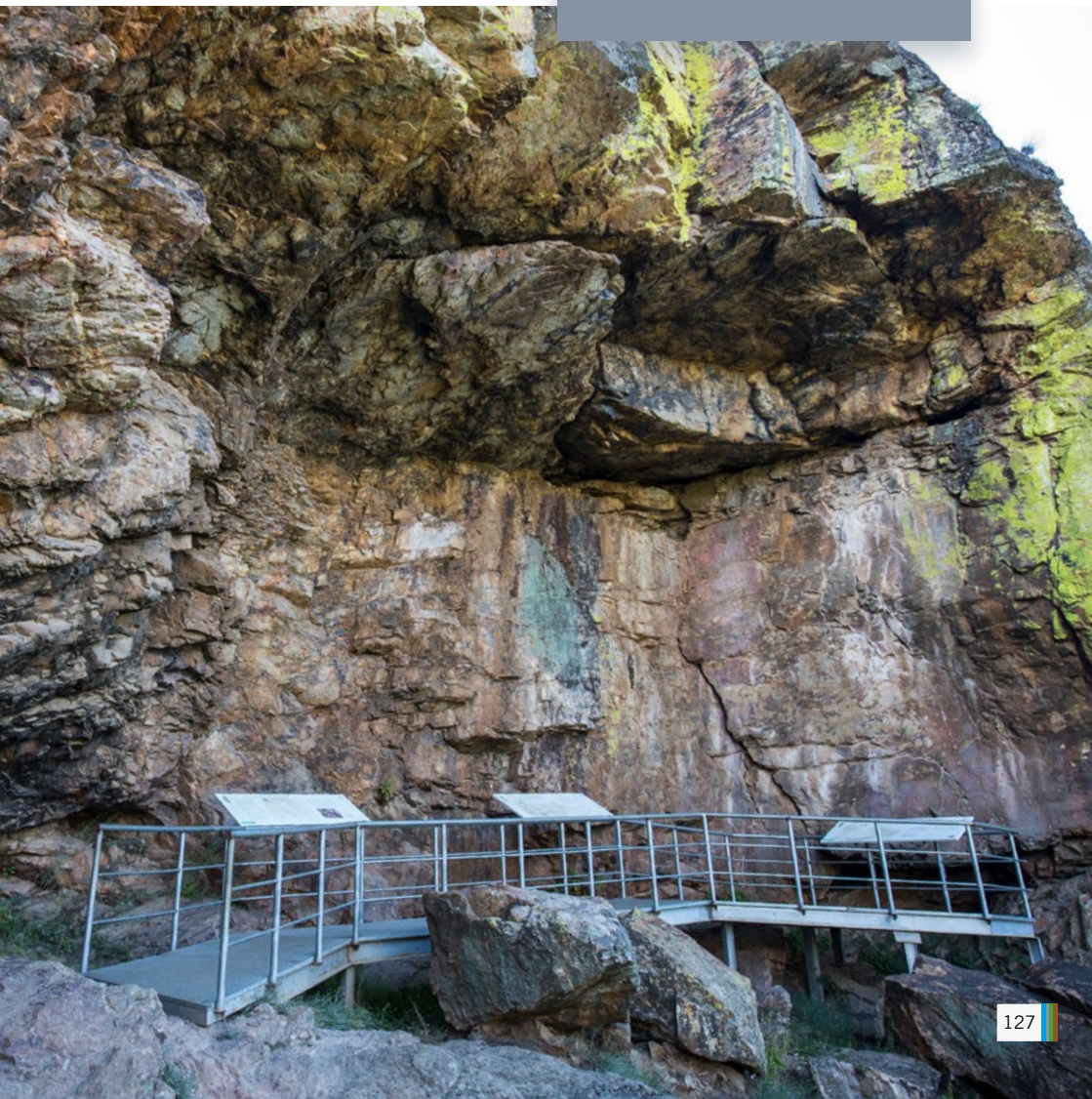
The **Ruecas River** begins at a high altitude, near **Pico Villuercas** Peak (1,601 MASL), and it briskly descends to the municipality of Cañamero, although its flow has been regulated with the **Cancho del Fresno Reservoir**. After going through the dam, the river begins to wind amongst quartzite stone, creating a spectacular defile of **great scenic beauty**, which extends to the **Huertos del Río** floodplain. This defile can be accessed in several ways, but perhaps the most attractive of them is by means of the old highway to Berzocana, which leaves us next to the **Cueva Chiquita Cave** (also known as the Álvarez Cave), very near Charco de la Nutria Pond.

https://www.geoparquevilluercas.es/desfiladero-del-ruecascanamero/

GEOLOGY

Numerous folds can be seen on the **quartzite walls**, **with narrow synclines and anticlines**. It is also easy to find signs of activity or trace fossils, amongst which the most noteworthy are ***Cruziana*** (caused by *Trilobites*) and ***Skolithos***.

The Cueva Chiquita Cave is a great example of a quartzite wall



FLORA

The plant life consists of **gallery forests and riparian forests** on the banks of the river, with alder (*Alnus glutinosa*), willows (*Salix alba*), and poplars (*Populus alba*), as well as the presence of Portugal laurel (*Prunus lusitanica*) and chestnut trees (*Castanea sativa*). Away from the river, the main high forest is composed of Pyrenean oak (*Quercus pyrenaica*), although in the part near the dam and the defile we can find **Mediterranean vegetation** which features cork oaks, holm oaks, and a lot of scrub (rockrose, Spanish heath and Briar root, broom, and butcher's broom).

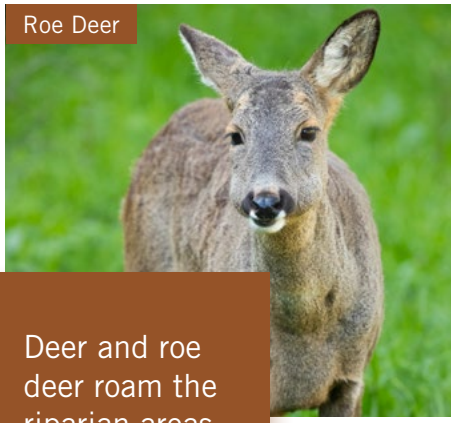
The forest takes shape with a great variety of noble species

FAUNA

Deer and roe deer abound along the riparian areas and slopes of this place, with the otter (*Lutra lutra*) being present due to the quality of the water. Having said that, in the so-called Charco de la Nutria ('Otter Pond') the American mink (*Neovison vison*) has also been spotted – an invasive species that can alter the area's biodiversity.

The most frequent **fish** are the *Pseudochondrostoma willkommi, Squalius alburnoides, Cobitis palúdica*, barbel (*Barbus comiza*), and the *Iberochondrostoma lemmingii*.

It is easy to see the **Spanish pond turtle** (*Mauremys leprosa*), especially when they nap on the sunny rocks (thermoregulation), and another frequent species is the Iberian emerald lizard (*Lacerta screiberi*) and the Grass snake (*Natrix natrix*).


Roe Deer

Deer and roe deer roam the riparian areas


Galápagos Turtle

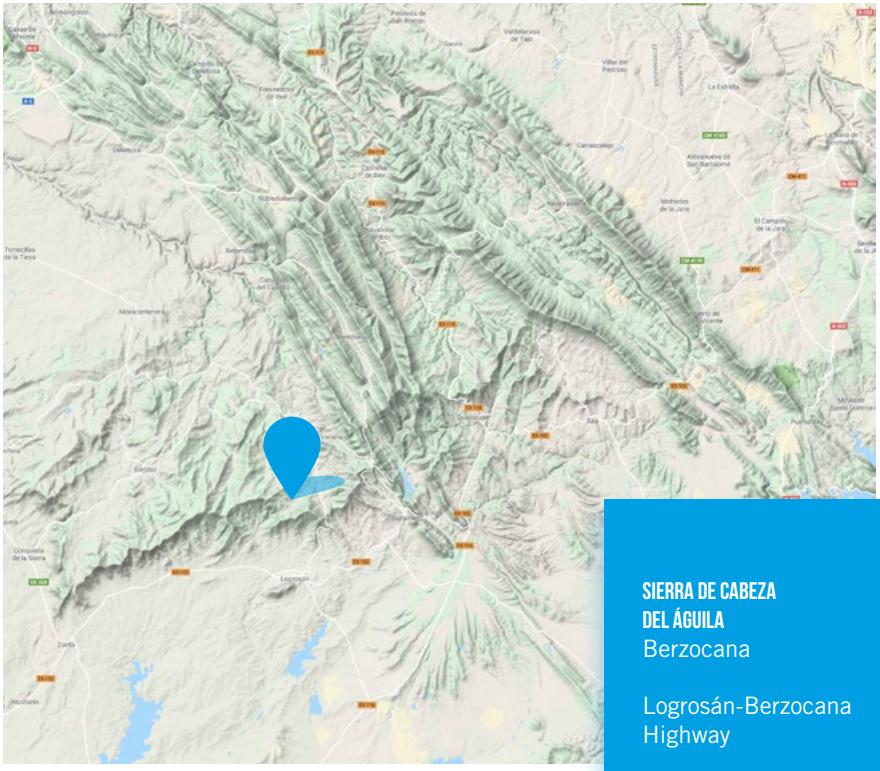

Kingfisher

Of the **birds** that can be spotted, we must note the white-throated dipper, kingfisher, black stork, black kite, Eurasian golden oriole, Eurasian sparrowhawk, tawny owl, and barn owl.

SIERRA DE CABEZA DE ÁGUILA

SCI

ACCESS AND LOCATION



SIERRA DE CABEZA DEL ÁGUILA
Berzocana

Logrosán-Berzocana Highway

Between the municipalities of Berzocana, Logrosán, and Garciaz an **area of hills, mountains and valleys covered by a dense forest of Galicio-Portuguese oak with an excellent conservation status can be found**. This area is the natural continuation of Las Villuercas towards the west, reaching its maximum altitude at Pico Venero Peak, which is 1,130 meters. The mountains descend gently towards the north, whereas the southern slopes are more abrupt.

We suggest starting from Logrosán, where you can visit the **Costanaza Mine** and the **Geological and Mining Museum**. Taking the highway to Berzocana, you will pass Puerto de Pollates and, further down, you will find a trail to the left that will take you to the oak forests of La Nava, where you can also enjoy a magnificent oak specimen declared a '**Singular Tree**.'

https://www.geoparquevilluercas.es/cabeza-del-aguila/

Caesar's Mushroom

Photo: F. Durán

Mushrooms proliferate in these oak dehesas

FLORA

We are surrounded **by deciduous Pyrenean oak forests** (*Quercus pyrenaica*) in the form of a dehesa at the La Nava estate. These forests have beautiful oak specimens which change their color in autumn and turn brown and yellow to transform the landscape. As a companion tree, one can find some scattered checker trees (*Sorbus torminalis*), whose leaves turn red in autumn.

Among the **herbaceous species**, **noteworthy are a number of daffodils** and, especially, *Narcissus psudonarcissus subsp. portensis*, which is very rare in Extremadura; therefore, it has been cataloged as "Of Special Interest."

These wooded areas with an abundant layer of fallen leaves are perfect for **many species of fungi**, including edible mushrooms like Caesar's Mushroom (*Amanita caesarea*), the bronze bolete (*Boletus aereus and B. edulis*) and pale chanterelle (*Cantharellus pallens*), which appears in the springtime.

Iberian Emerald Lizard

FAUNA

The fauna of this area has a **rich variety of species**, highlighting among the **mammals** the abundance of roe deer (*Capreolus capreolus*) and otter (*Lutra lutra*) in the watercourses, near which the **Iberian emerald lizard** (*Lacerta schreiberi*) can usually be found.

Tawny Owl

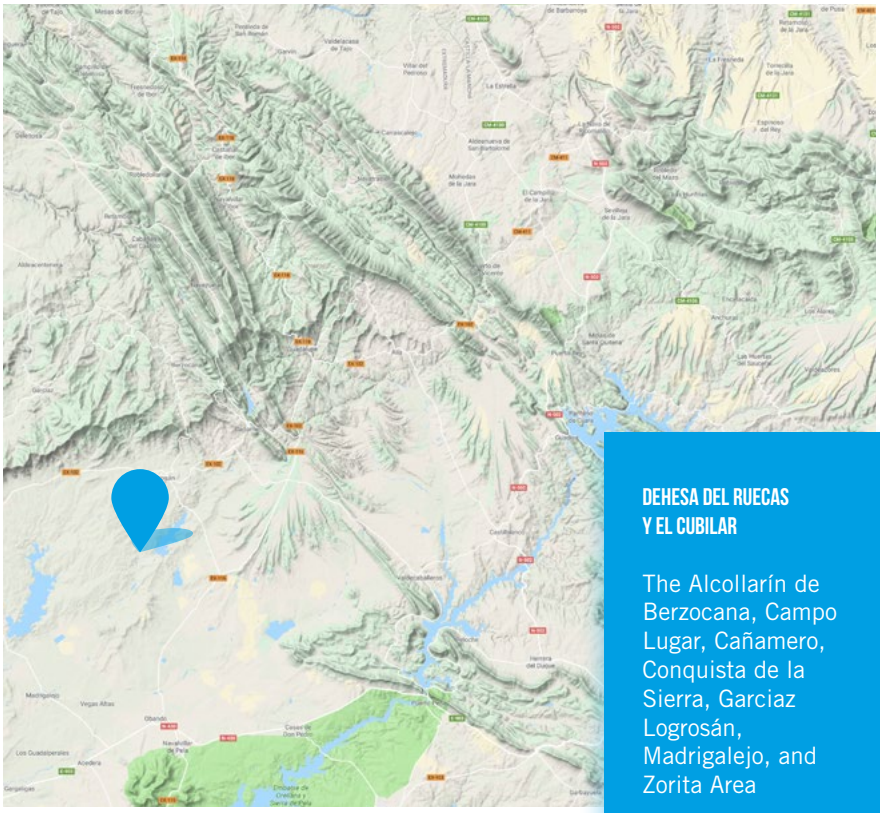
In terms of **birds**, the jewel is the European honey buzzard (*Pernis apivorus*), a bird of prey that bases much of its diet on bees. We can also see here the elusive black stork (*Ciconia nigra*) and the boisterous Eurasian jay (*Garrulus glandarius*). At nightfall, the hooting of the **tawny owl** (*Strix aluco*) adds a touch of mystery. In fact, now that we've mentioned the nighttime, several species of bats live here, such as Bechstein's bat (*Myotis bechsteinii*), the greater horseshoe bat, and Mehely's horseshoe bat.

The hooting of the tawny owl adds a touch of mystery to the night

DEHESA DEL RUECAS Y EL CUBILAR

SCI

ACCESS AND LOCATION



DEHESA DEL RUECAS Y EL CUBILAR

The Alcollarín de Berzocana, Campo Lugar, Cañamero, Conquista de la Sierra, Garciaz Logrosán, Madrigalejo, and Zorita Area

The **protected Dehesa del Ruecas y El Cubilar SCI** is fully inside the **Dehesa del Ruecas y El Cubilar SPA**. The area included in the SCI is only in the municipality of **Logrosán**.

The **dehesa meadows of Extremadura**, magnificently represented in this area known as Ruecas y Cubilar, are a good example of how human beings have developed ways to take advantage of **natural resources while being respectful in terms of maintaining the majority of the area's biodiversity**, and even in terms of contributing to habitat and species diversity in the region. Conservation here goes beyond the classic concept of a mere protected area and must address the dynamic aspects of the ecosystems and integrate the socio-economic and cultural components of the region alongside biodiversity.

FLORA

The **dehesas** around the Ruecas and Cubilar basins, with a **good conservation status**, feature *Quercus ssp.* evergreen trees (holm oak and cork oaks), as well as areas with wet **meadows rich** in Juncaceae, Carex, and Poaceae. The botanical family of the **orchids** is well represented by the genus Serapias, with species such as Serapias cordigera and, especially *Serapias perez-chiscanoi* – discovered in Extremadura and cataloged as being "**In Danger of Extinction**."

This is a magnificent example of a dehesa

Another well represented habitat in this area is that of **Thermo-Mediterranean scrub**, where bushweed (*Flueggea tinctoria*) appears in the form of a thorny bush that grows in riparian areas around rivers with low water levels.

Bushweed is abundant in dehesas

FAUNA

Montagu's Harrier

Photo: José Antonio Lagier

Of the **fauna linked to the aquatic environment**, particularly important in the area are the collared pratincole (*Glareola pratincola*) and the little tern (*Sternula albifrons*), two breeding species which are cataloged as being sensitive to habitat alterations.

Also important is the presence of **steppe birds** such as the large and beautiful great bustard (*Otis tarda*), Montagu's harrier (*Circus pygargus*), and the black-winged kite (*Elanus caeruleus*) – a bird of prey.

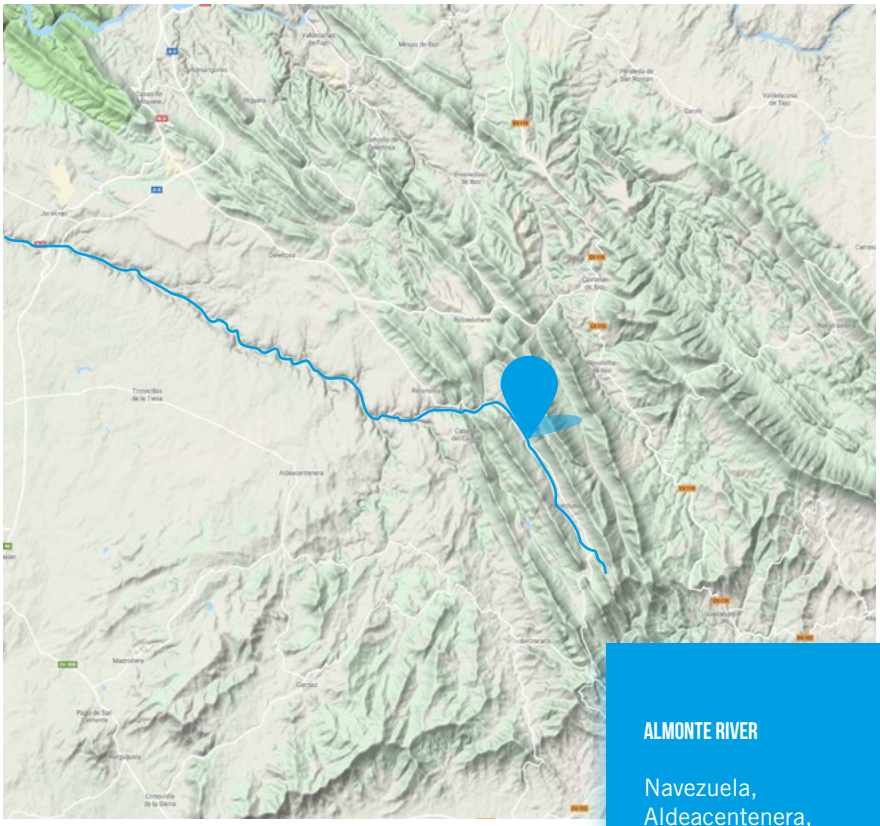
During the autumn we find important populations of the crane (*Grus grus*), greylag goose (*Anser anser*), black-tailed godwit (*Limosa limosa*), northern pintail (*Anas acuta*), and many other waterfowl.

Amongst the **fish** species, we must note the *Pseudochondrostoma willkommii* and *Cobitis paludica*.

ALMONTE RIVER

SCI

ACCESS AND LOCATION



ALMONTE RIVER

Navezuela,
Aldeacentenera,
Puente del Conde

The **Almonte river** starts at a large rocky area located on the northwestern slope of the **La Villuerca Crag**. Rainwater seeps in and circulates under the large rocks, and it can be heard flowing and trickling amongst the quartzite.

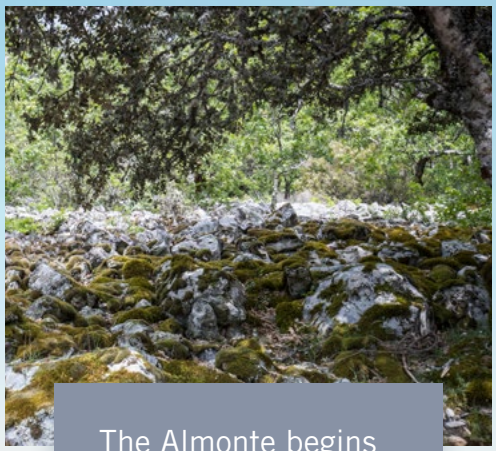
While the river's source is spectacular, no less spectacular is the place where it abandons the Geopark's mountains:

Las Apreturas or Portilla del Almonte, a beautiful river defile which is the result of a quartzite fracture and also has a magnificent monoclinal fold of great size. From there, the Almonte goes towards the west over the Trujillo peneplain in search of the Tagus River.

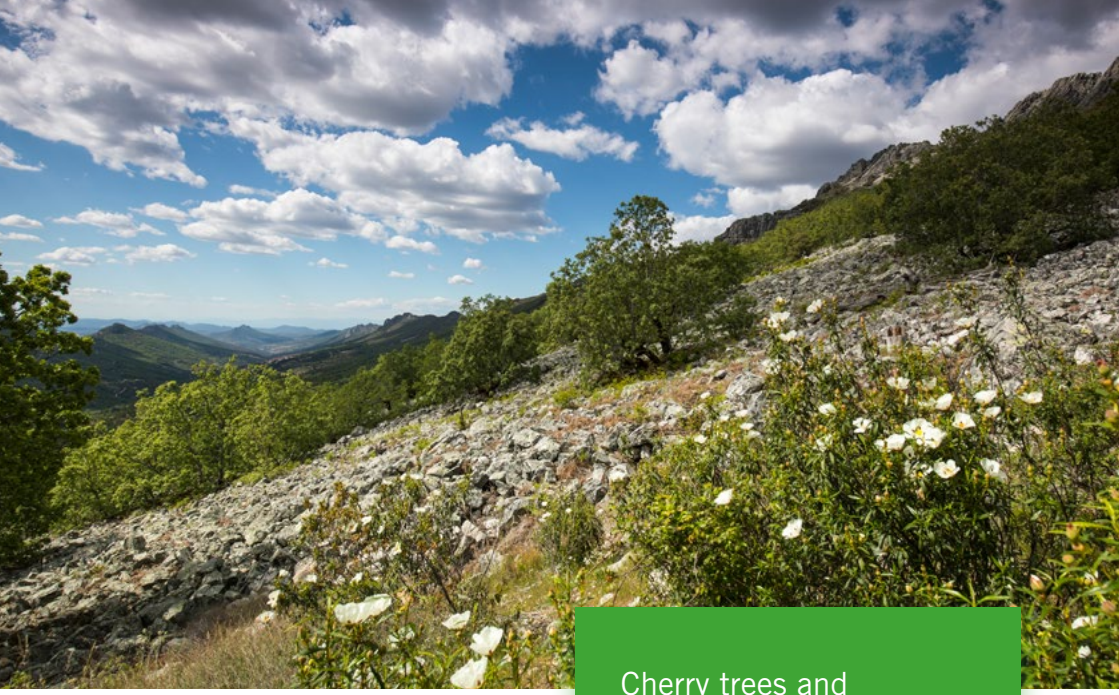
https://www.geoparquevilluercas.es/apreturas-del-almontecabanas-del-castillo/

GEOLOGY

The river's high course runs through the **Almonte Anticline**, a megastructure that originated during the Hercynian orogeny, approximately 300 million years ago. The erosion of this anticline has allowed a narrow band of rocks from the Ediacaran (541 million years ago) to outcrop. These rocks feature abundant fossils, possibly of marine algae (*Vendotaenids*).



The Almonte begins in a rocky area of Pico Villuercas Peak



Cherry trees and chestnut trees coexist with the original oaks

FLORA

Here, **deciduous forests** coexist in the higher areas, and there is rich **Mediterranean vegetation** at lower altitudes. The **Pyrenean oak** (*Quercus pyrenaica*) is the main tree in the forests and it is accompanied by checker trees (*Quercus broteroi*). Some areas of oak were transformed centuries ago into the **domesticated sweet chestnut** (*Castanea sativa*), and this is an area with high chestnut production – and, more recently, **cherries**.

Lower down, the always-green **Mediterranean vegetation** includes cork oaks and holm oaks, which are accompanied by strawberry trees, heather, broom and rockrose. Juniper (*Juniperus oxycedrus*) is also found here, usually as a rock-dwelling plant. The riparian areas are abundant in alders, ash trees, willows, and some Portugal laurels.

Away from the mountain ranges, like in the Puente del Conde area (near Aldeacentenera), there is a characteristic riparian area known as a '**tamujar**' (bushweed patch). Bushweed (*Flueggea tinctoria*), is a thorny, deciduous shrub of a reddish-brown color that is considered to be endemic to the Iberian Peninsula. The sunny slopes in these mountain areas **have typical vegetation with wild olive** (*Olea europea subsp. sylvestris*), which is more or less scattered amongst the rocks – usually slate or granite.

FAUNA

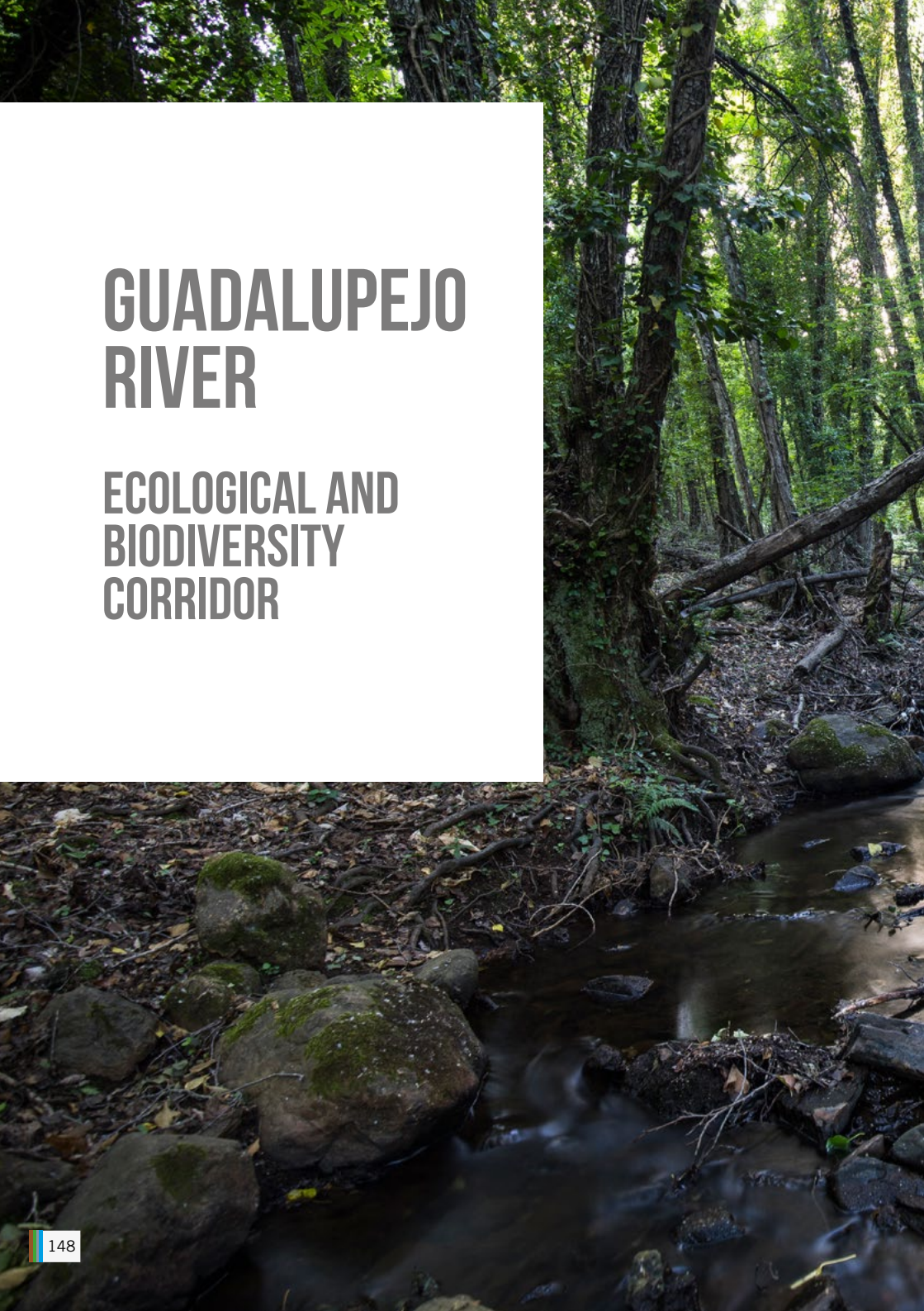
The fauna is also quite varied. **Mammals** include deer, roe deer, otters, and badgers. **Bird life** includes **many birds of prey**, amongst which is the golden eagle and Bonelli's eagle, griffon vulture, Egyptian vulture, eagle owl, tawny owl, sparrowhawk, and goshawk. Other birds which abound here are the Eurasian jay, Eurasian golden oriole, white-throated dipper, warblers, and wagtails, among many other species.

There are many mammal species and birds of prey

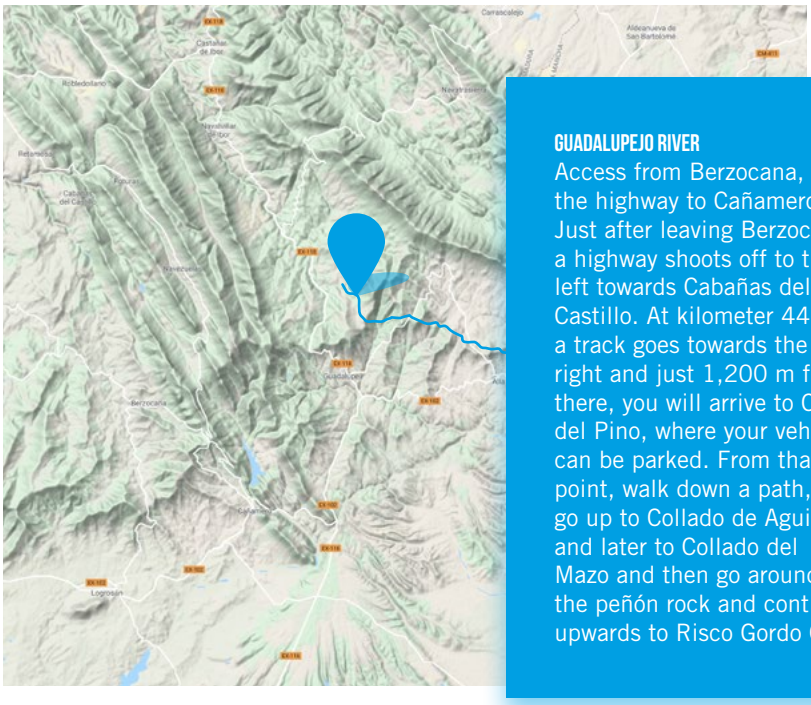
Deer

GUADALUPEJO RIVER

ECOLOGICAL AND BIODIVERSITY CORRIDOR



ACCESS AND LOCATION



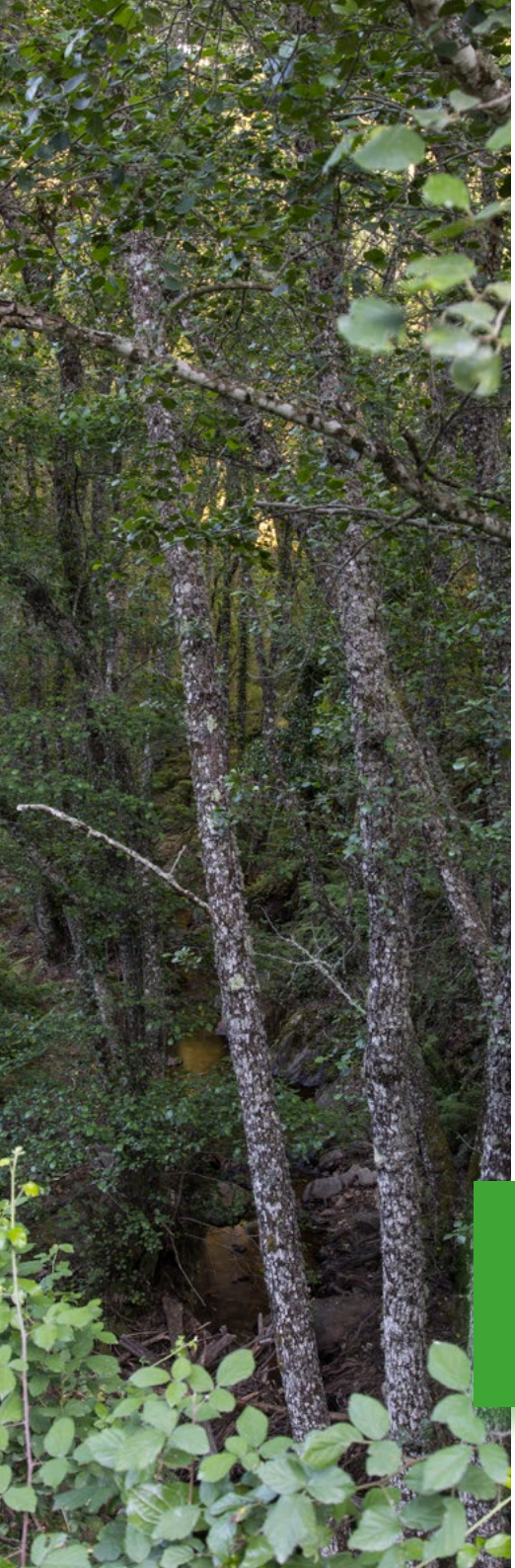
GUADALUPEJO RIVER
Access from Berzocana, via the highway to Cañamero. Just after leaving Berzocana, a highway shoots off to the left towards Cabañas del Castillo. At kilometer 44.7, a track goes towards the right and just 1,200 m from there, you will arrive to Casa del Pino, where your vehicle can be parked. From that point, walk down a path, go up to Collado de Aguilar and later to Collado del Mazo and then go around the peñón rock and continue upwards to Risco Gordo Crag

This **protected area** around the Guadalupejo River connects two other important areas: the Sierra de Las Villuercas and Guadarranque Valley SPA with the Puerto Peña-Sierra de los Golondrinos SPA.

The **Guadalupejo River** starts out at an iconic part of Las Villuercas, near the **Pozo de la Nieve** ('Snow Pit'), a construction used by the friars of the Guadalupe Monastery to keep the snow from the winter so that it could be used all year round. Downstream, among beautiful chestnut groves, the river's waters are dammed in the Mato Reservoir, which serves the town of Guadalupe.

The high stretch, where lie the remains of numerous mills and fulleries that are no longer in use today, includes plant life chronicled by Queen Isabella 'La Católica' and writer Miguel de Unamuno. Over its path of more than 40 km in length, until reaching its mouth, the Guadalupejo zigzags through quartzite and slate in search of the way out of the mountains in Alía. Around Valdecaballeros and Castilblanco, where its waters are more restful, it finally joins the Guadiana.

The high and low sections of this river have rich and varied flora, fauna, and mycology – something which gives it considerable importance from an ecological and scenic point of view.



FLORA

The **flora** of the high stretch growing in the riparian areas includes alder (*Alnus glutinosa*), ash (*Fraxinus angustifolia*), willows (*Salix alba*), and white poplar (*Populus alba*); also present are some Portugal laurels (*Prunus lusitanica*), with the rest of the non-riparian vegetation being a **forest** abundant in oak and chestnut trees.

Near its mouth, at the reservoir of the decommissioned and dismantled Valdecaballeros Nuclear Center, there is once again a grove abundant in alder trees, willow trees, poplars and reeds.

The vegetation and flora gradually evolves with the river's course

FAUNA

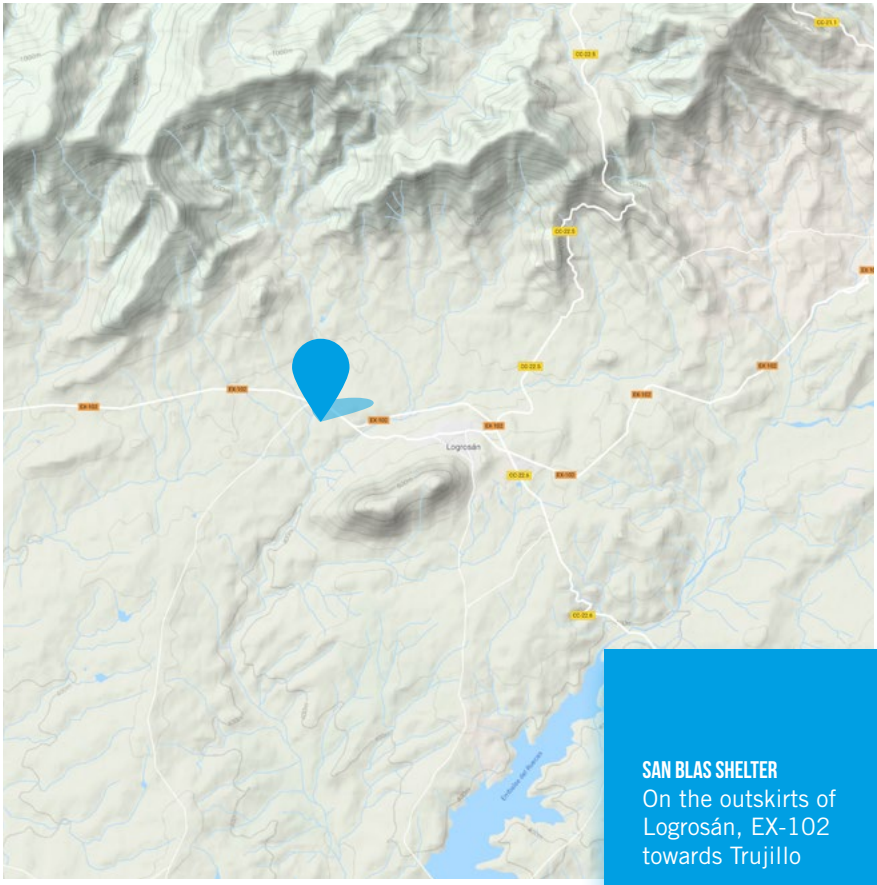
The **fish animal life** includes *Iberochondrostoma lemmingii* and the Valencia chub. The otter is also present in these waters. Additionally, there are Beech martens, shrews, the black stork, eagle owl, kite, goshawk, Eurasian sparrowhawk, as well as waterfowl like the great cormorant, little grebe, black-winged stilt, **great crested grebe**, red-capped plover, and little ringed plover, among many other species.

The great crested grebe gracefully navigates the Guadalupejo

ALTO DE SAN BLAS SHELTER

SAC

ACCESS AND LOCATION



SAN BLAS SHELTER
On the outskirts of Logrosán, EX-102 towards Trujillo

The **Alto de San Blas Shelter** is located on the outskirts of the municipality of **Logrosán**, near the highway to Trujillo. It is an abandoned **mining complex located** in Alto de San Blas and made up of a single gallery measuring 110 meters in length. Despite its short length, **it serves as a shelter for a significant population of cave-dwelling bats**.

Granite is a plutonic rock formed inside the earth's crust

GEOLOGY

This **shelter** is almost at the **foot of the Sierra de San Cristóbal Mountain**, an isolated mountain measuring 680 m in height. It is a **Batholith or Pluton outcrop with a granite surface that is located in Logrosán**. Granite is a **plutonic rock** formed inside the earth's crust by the slow cooling of liquid magma. At the top of the hill, mining trenches, galleries, and tools have been found which date to the end of the **Bronze Age**.

In the vicinity of the granite batholiths, veins of minerals or rocks are often found (faults filled with crystallized magmatic fluids). A remarkable **phosphorite vein** can be found at the **Costanaza Mine**, on the other side of the town, which is open for visits to one of its galleries and to the well-known **Geological and Mining Museum**. Logrosán's phosphorite, exploited until the middle of the twentieth century, was used to make **superphosphates** to fertilize the crops in many parts of Europe.

FAUNA

The abandoned mines and tunnels in disuse, as well as the natural grottos, are **the best forms of shelter for bats**, species that feed on insects and thus are of great importance to control insect populations – **helping to avoid the appearance of certain pests**. To protect bats, their natural and artificial shelters must be kept in good condition.

Up to four bat species can be found at Alto de San Blas. Noteworthy is the large breeding and wintering colony of Mehely's horseshoe bats (*Rhinolophus mehelyi*). During their hibernation period in the winter, we can find colonies of the greater horseshoe bat (*Rhinolophus ferrumequinum*) and the common bent-wing bat (*Myniopterus schreibersi*). Lastly, we must note the breeding colony of greater mouse-eared bats (*Myotis myotis*).

Up to four bat species can be found at Alto de San Blas

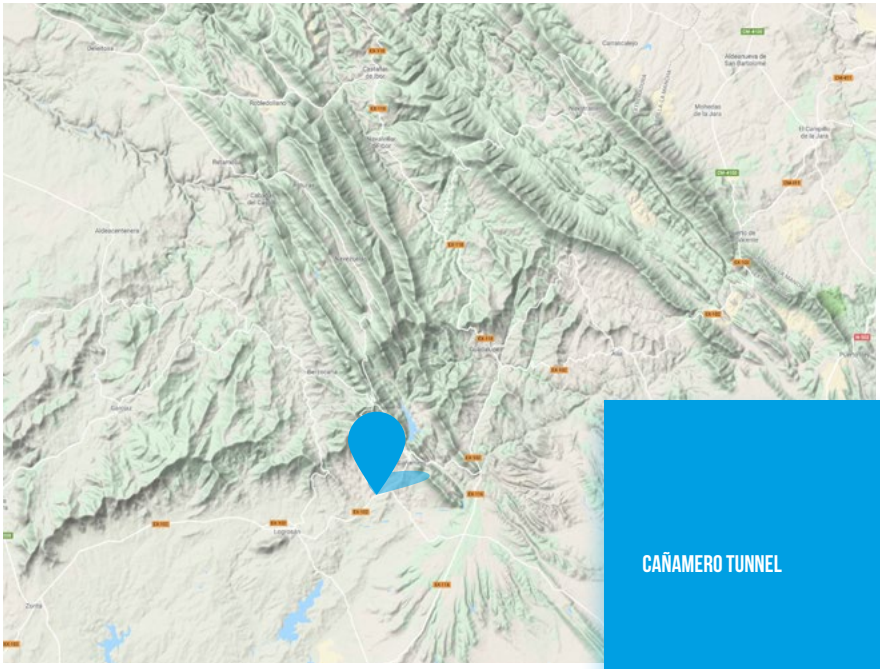
Greater Mouse-Eared Bat

Photo: MissMhisi

CAÑAMERO TUNNEL

SAC

ACCESS AND LOCATION

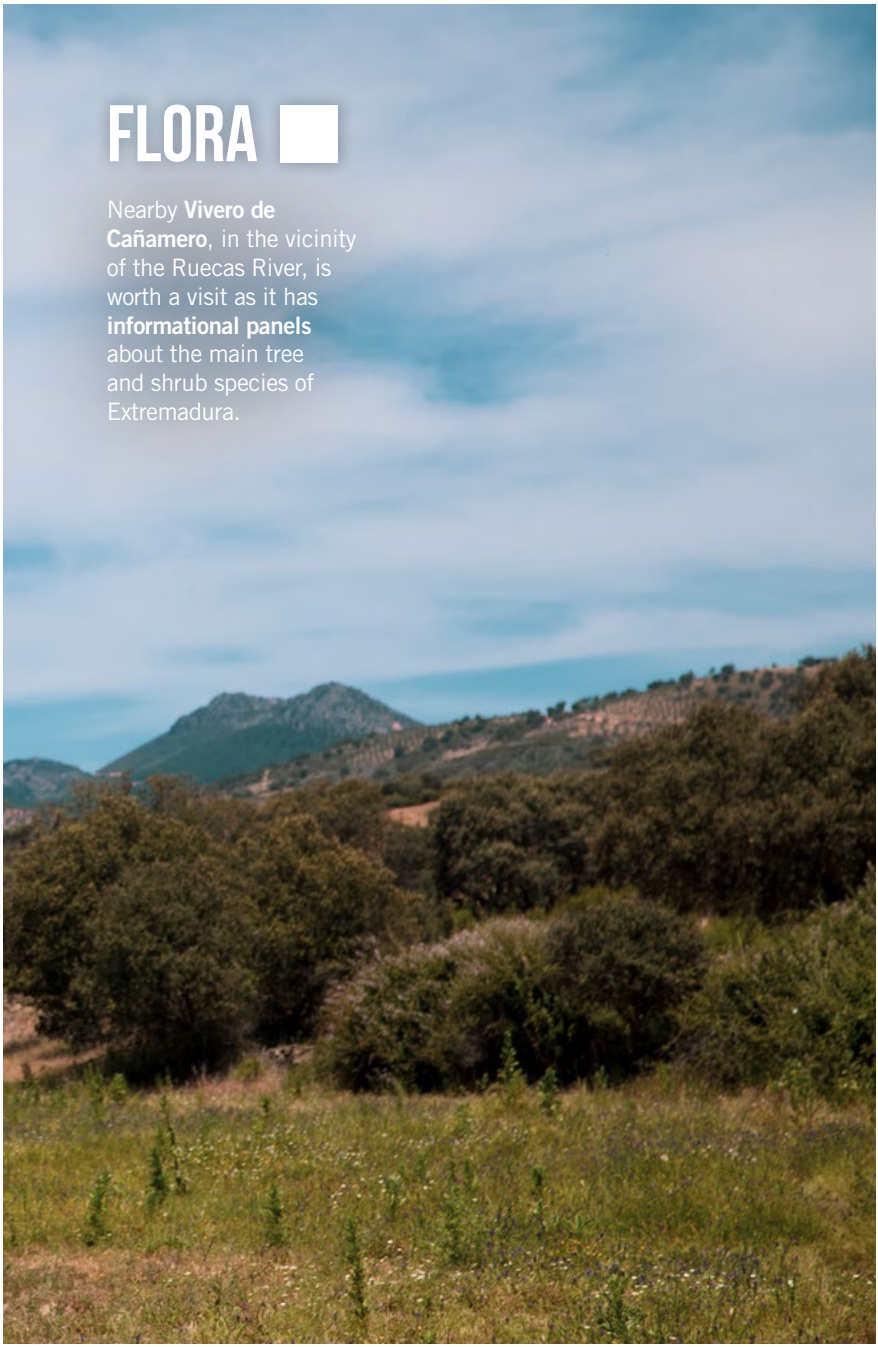


This tunnel **was built during the first half of the twentieth century** as part of the railway line that would link Madrid and Badajoz, but that construction work was abandoned and left unfinished a short while later. Interestingly, over time this structure has become the **ideal habitat for several species of cave-dwelling bats**, which is why it has been declared a **Site of Community Importance (SCI)**.

Located near Cañamero when traveling from Logrosán, just at the turning that leads to Vivero de Cañamero, this tunnel made of concrete and rock and open at either end extends the length of almost 600 m in a curved shape and occupies a surface area of two hectares. The fact that the tunnel has been flooded at the bottom for all of the year deters human presence and facilitates the reproduction and wintering of the bats who find shelter there.

FLORA

Nearby **Vivero de Cañamero**, in the vicinity of the Ruecas River, is worth a visit as it has **informational panels** about the main tree and shrub species of Extremadura.



FAUNA

The natural caves and abandoned mines and tunnels in disuse are great sources of shelter for these cave-dwelling animals, which also need open woodland space, like the area around Cañamero. To protect bats, their natural and artificial shelters must be kept in good condition.

This tunnel is considered to be an **important shelter in Europe because of its diversity and the large wintering colony of common bent-wing bats** (*Miniopterus schreibersii*) that live there (this species also reproduces there, but to a lesser extent).

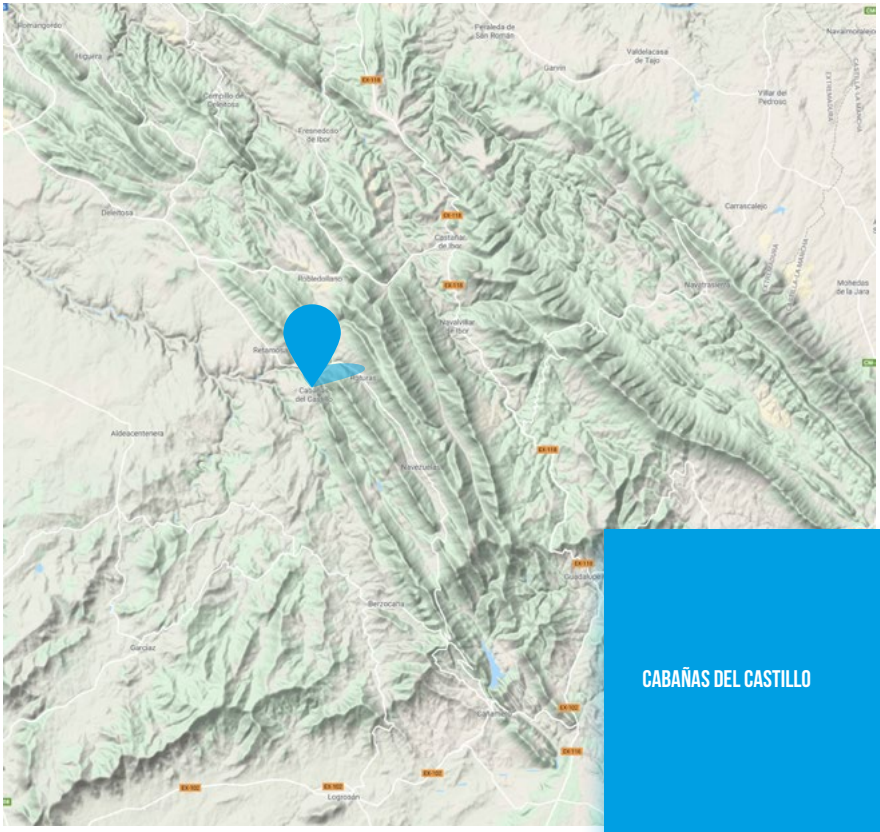
The main bat species that use the tunnel during the breeding season are the **greater horseshoe bat** (*Rhinolophus ferrumequinum*), **Mehely's horseshoe bat** (*Rhinolophus mehelyi)*, and the **Mediterranean horseshoe bat** (*Rhinolophus euryale*). This latter species is cataloged as "**In Danger of Extinction**."

Other species that use this shelter for reproduction are the greater mouse-eared bat (*Myotis myotis*) and Geoffroy's bat (*Myotis emarginatus*). At wintertime, we can also find Daubenton's bat (*Myotis daubentonii*).

Three bat species use the tunnel to reproduce

CABAÑAS DEL CASTILLO

ACCESS AND LOCATION



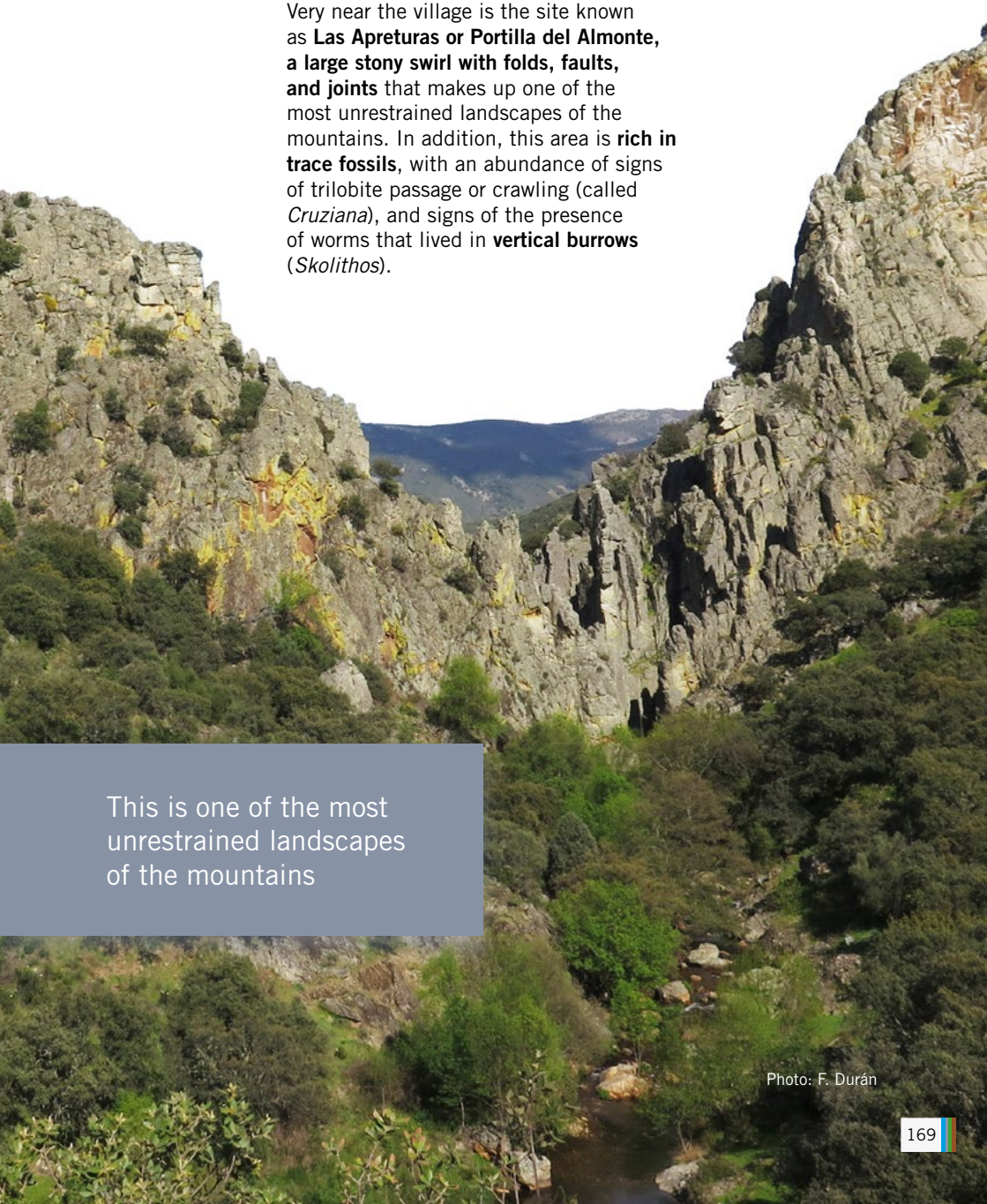
CABAÑAS DEL CASTILLO

Views of the **Santa Lucía Syncline** can be enjoyed from the **Era del Gato** Threshing Floor (Collado del Brazo), but we can also find another spectacular view thereof from the small village of **Cabañas del Castillo**, one of the most charming municipalities of the Geopark.

Located next to the same armorican quartzite as the syncline, Cabañas has, in its **Arab castle, a balcony that is perfect to taken in the Appalachian relief and the flight of several bird species in the Las Villuercas area**. In addition to **Peña del Castillo Rock**, there is another great quartzite wall near Peña Buitrera Rock. This one is almost vertical and its name, which means "Vulture Rock" comes from the fact that it is the favorite nesting place for the griffon vulture.

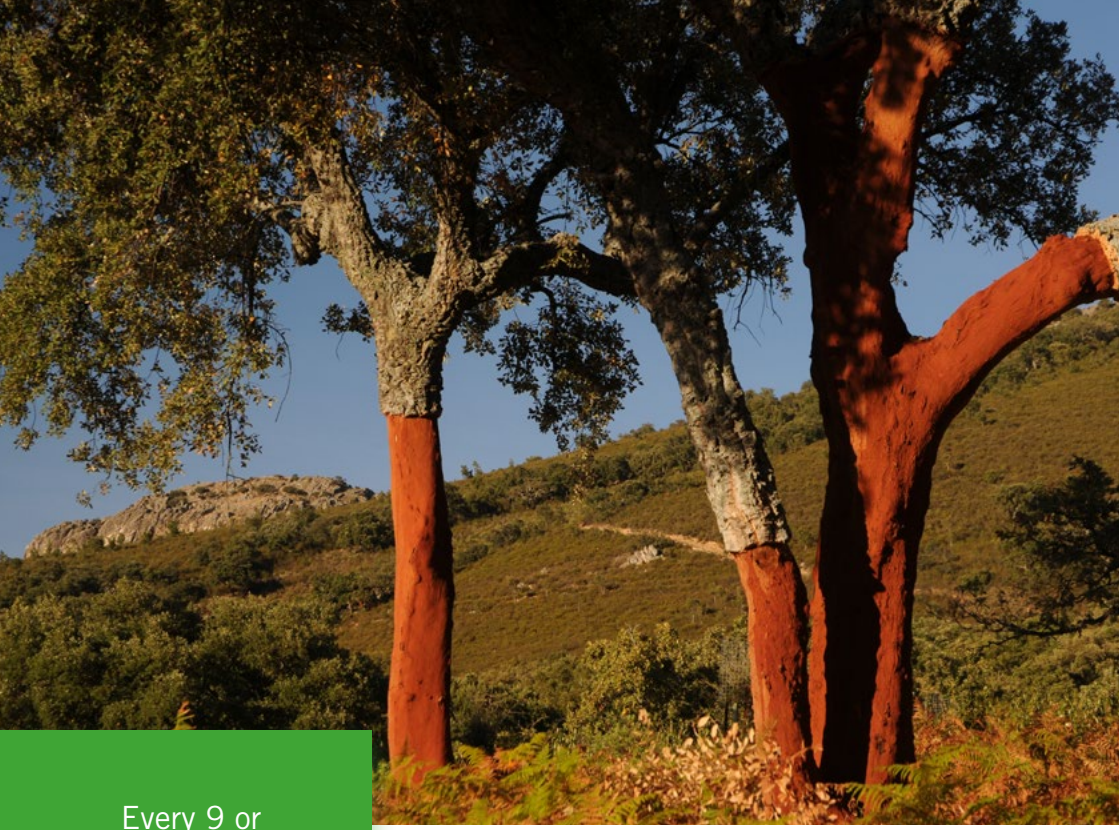
GEOLOGY

Very near the village is the site known as **Las Apreturas or Portilla del Almonte, a large stony swirl with folds, faults, and joints** that makes up one of the most unrestrained landscapes of the mountains. In addition, this area is **rich in trace fossils**, with an abundance of signs of trilobite passage or crawling (called *Cruziana*), and signs of the presence of worms that lived in **vertical burrows** (*Skolithos*).



This is one of the most unrestrained landscapes of the mountains

Photo: F. Durán



Every 9 or 10 years, cork is extracted from the cork oak

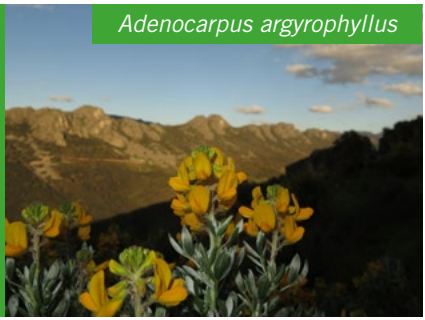
Photo: F. Durán

FLORA

Mediterranean evergreens dominate this place and the cork oak forest is the main forest on the slopes and in the dehesa of the flat lands that can be seen from the village. Every 9 or 10 years, cork is extracted from the cork oaks (*Quercus suber*) – a species that provides the region with ecological and financial wealth.

In the shade, the cork oak is accompanied by the Portuguese oak (*Quercus faginea*), strawberry trees, laurustinus, tree heather, and broom, while the sunny slopes have rockrose and Spanish lavender. In the Santa Lucía Gorge, which joins the Almonte near here in the Los Puentes ('Bridges') area (it gets its name because there are two bridges there, one over each riverbed), alder, ash, and willow are common, and there are also some Portugal laurels.

Two species are worth mentioning here which seem to be growing almost on top of the summits themselves. Juniper (*Juniperus oxycedrus*), the only conifer native to the Geopark, and *Adenocarpus argyrophyllus*, a beautiful yellow member of the Fabaceae family.



Adenocarpus argyrophyllus

Photo: F. Durán

Blue Rock Thrush

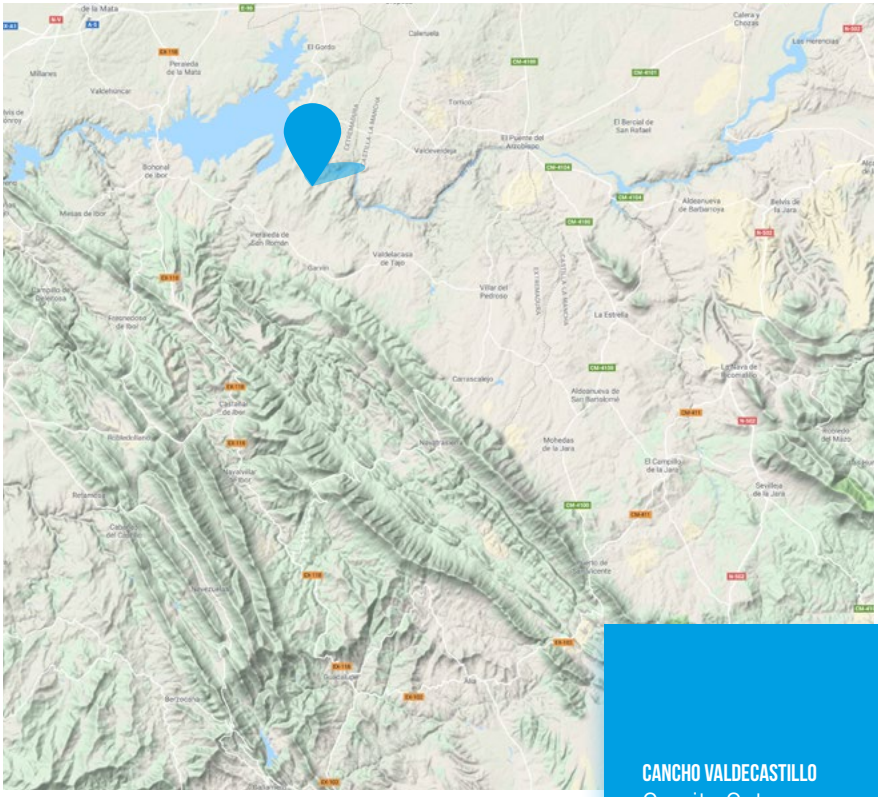
FAUNA

Some of the species that can be seen from this vantage point are the griffon vulture and the Egyptian vulture, as well as Bonelli's eagle, the short-toed snake eagle, and the booted eagle. Also, the black stork, crag martin, Alpine swift, and the **blue rock thrush** are common. When migration is occurring, you can hear and see hundreds of cranes and greylag geese in the vicinity.

This is a magnificent place for birdwatching

CANCHO VALDECASTILLO

ACCESS AND LOCATION



CANCHO VALDECASTILLO
Granite Outcrop

A **spectacular granite outcrop** extends from the Gualija River towards Peraleda de San Román and continues on to Valdelacasa de Tajo. These areas of granite are abundant in Extremadura and are known in Spanish as '**berrocales**,' or 'spheroidal weathering sites' (near here, on the other side of the Tagus, there is a town called Berrocalejo).

www.geoparquevilluercas.es/berrocal-y-cancho-valdecastilloperaleda-de-san-roman

GEOLOGY

The formation of **spheroidal weathering** in granite comes about as a result of the erosion (weathering) of the chemical components in the atmosphere, which act on granite stones. The end result is a **landscape that can only be described as sculptural and magical**, with an abundance of granite spheroids, rocks with mushroom shapes, caves, balancing rocks, and many fractures (joints).

This is a sculptural and magical landscape

A path sets off from Peraleda de San Román that will take us to the main stone formation of this spheroidal weathering site, known as the '**Cancho Valdecastillo**' – a giant granite boulder that, because of its boat bow shape and size, has been heard of and visited since ancient times. Along with other nearby rocks, a cavity is formed that has not only supplied shelter to shepherds but also has been used as a **sanctuary by the ancient people of the area**. The **cave engravings** found here (bowls, anthropomorphic figures, soliform figures, etc.) tell us of a magical past in which this place was the center of ceremonies, gatherings, and rituals.

FLORA

The **vegetation of the area** is that of a **dehesa with holm oaks** (*Quercus ilex*) and abundant presence of broom (*Retama sphaerocarpa*) and Scotch broom (*Cytisus scoparius*). Scattered among the rocks are Mediterranean hackberries (*Celtis austrlis*), junipers (*Juniperus oxycedrus*), and turpentine trees (*Pistacia terebinthus*), while in other areas there is more gum rockrose (*Cistus ladanifer*).

Nearby sunny areas with granite have olive trees (*Olea sylvestris*) scattered about, accompanied by abundant *Asparagus albus*.

Asparagus albus is common amongst the granite stones

Goshawk

FAUNA

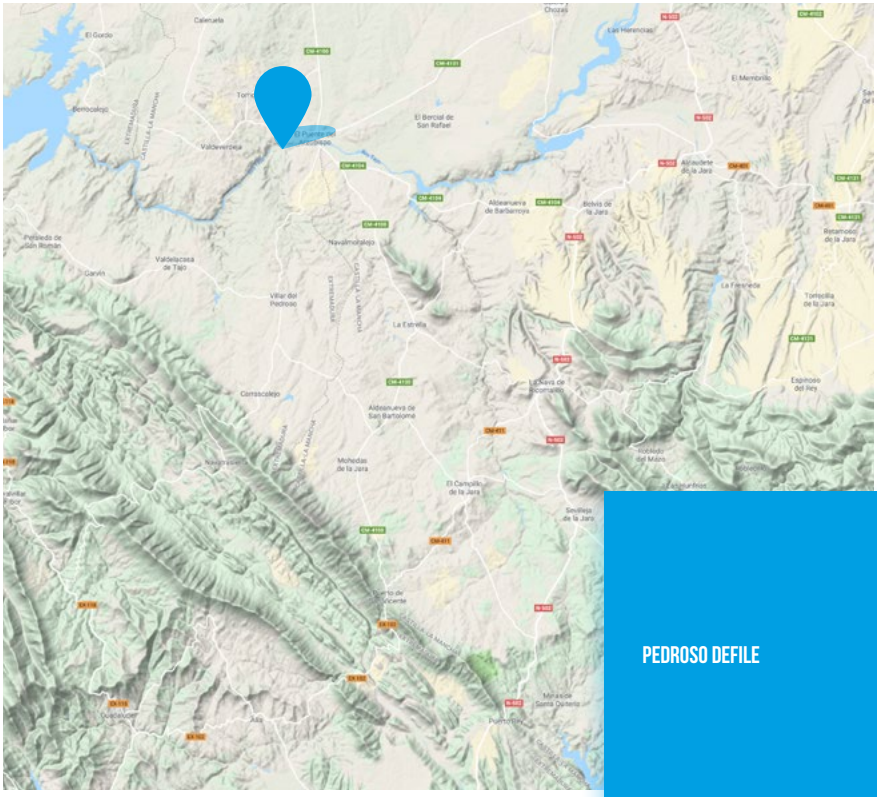
The fauna is **typical of the dehesa**, although the closeness of the cliffs cut by the Tagus River helps this to be a **roaming area** for black vultures, griffon vultures, and Egyptian vultures, Spanish imperial eagles, Bonelli's eagle, short-toed snake eagles, and booted eagles, as well as the Eurasian eagle-owl.

Griffon Vulture

Vultures and eagles abound in the nearby dehesas

PEDROSO DEFILE

ACCESS AND LOCATION



PEDROSO DEFILE

The municipality of **Villar del Pedroso** is crossed by the Pedroso Stream which, before flowing into the Tagus near **Puente del Arzobispo Bridge**, has created a defile of great beauty and grandeur.

This **defile,** measuring approximately 700 m in length, has been dug out of the granite stone by the **Pedroso Stream**. The granite here is Aplitic granite, which brings about walls that are many meters high and blocks of seemingly amazingly balanced stone.

www.geoparquevilluercas.es/el-desfiladero-del-pedrosovillar-del-pedroso

Photo: F. Durán

GEOLOGY

Here you will find **different types of eroded granite**: rounded blocks, stones with a mushroom shape, balancing rocks, and fracture planes (joints), among others. Additionally, there is a **spectacular waterfall fed by the stream** and magnificent examples of giant's cauldrons or panholes.

In addition to the many granite formations of this area, we must note that, in the squares of several villages (Villar del Pedroso, Valdelacasa), visitors can enjoy **zoomorphic sculptures** (known as 'verracos' or 'boars') **in granite that were made during the Iron Age**.

A spectacular place where water and stone merge

Photo: F. Durán

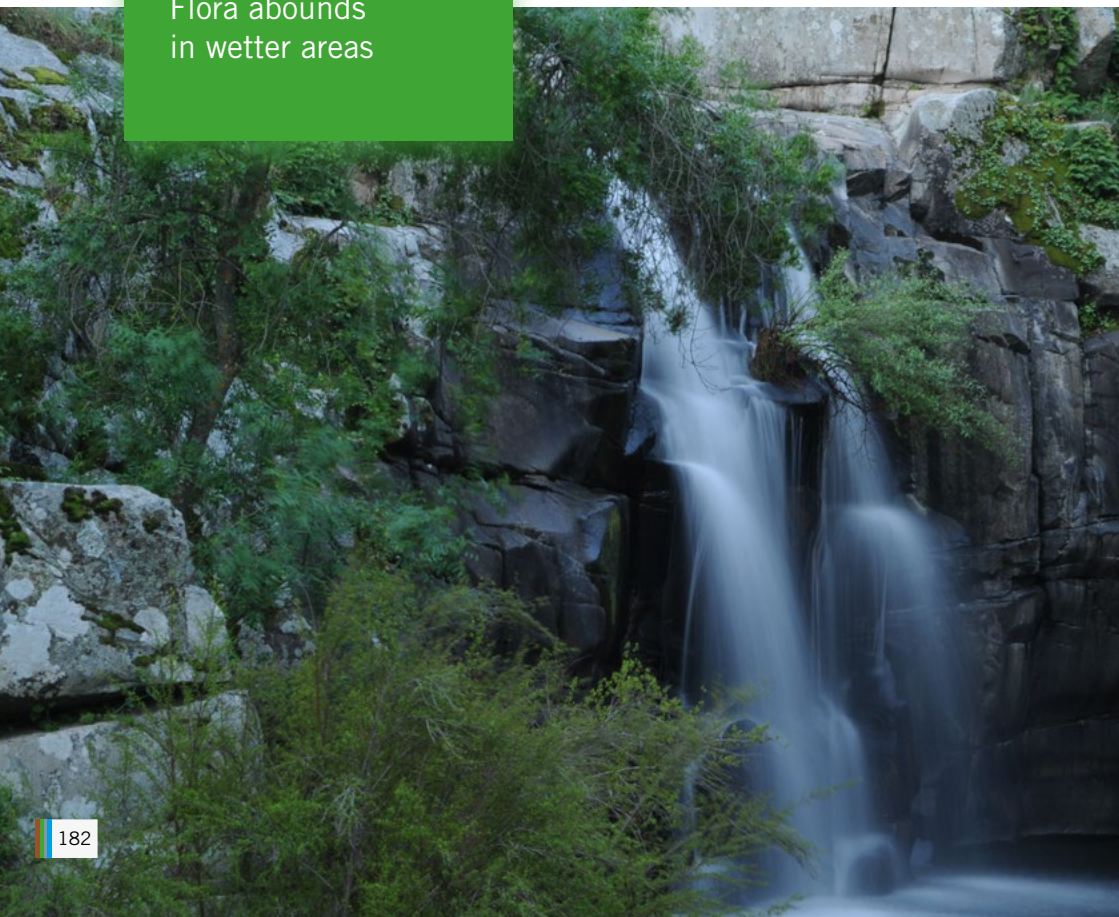
FLORA

In terms of vegetation, we differentiate the **flora linked to the water** and that of the rocky slopes. Near the water are scattered ash trees (*Fraxinus angustifolia*) and some willows (*Salix spp.*). Something that is very abundant is the bushweed (*Flueggea tinctoria*) -- a thorny, deciduous shrub. Amongst the rocks near the water, because of their coolness, there are several ferns (*Polypodium and Ceterach*).

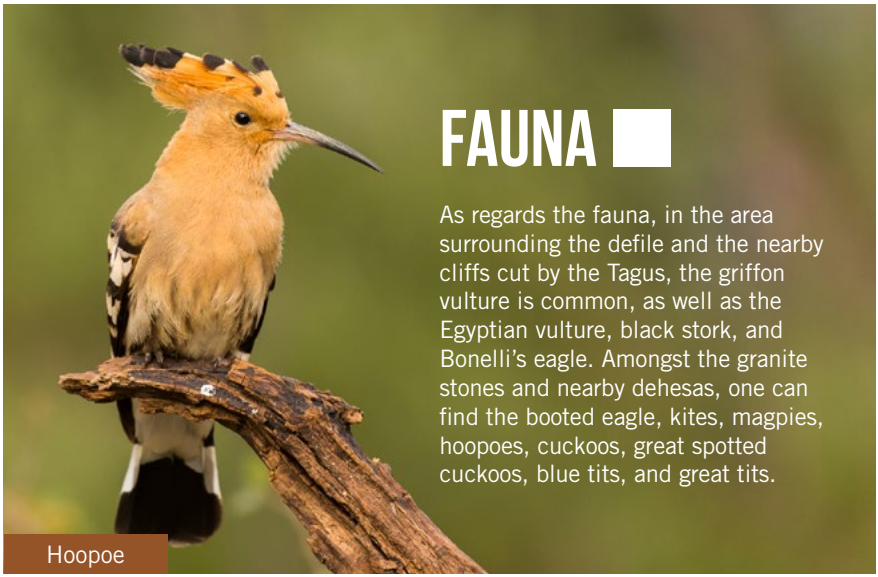
The **vegetation that thrives scattered atop the granite outcrop** has many wild olives (*Olea sylvestris*), as well as wild almonds (*Prunus dulcis*), Mediterranean hackberries (*Celtis australis*) and common hawthorn (*Crataegus monogyna*). The scrub is composed of numerous specimens of Scotch broom (*Cytisus scoparius*) and white broom (*Cytisus multiflorus*), terebinth (*Pistacia terebinthus*) and *Asparagus albus*. Away from the granite outcrop, the vegetation is **common dehesa vegetation**.

Flora abounds in wetter areas

Photo: F. Durán



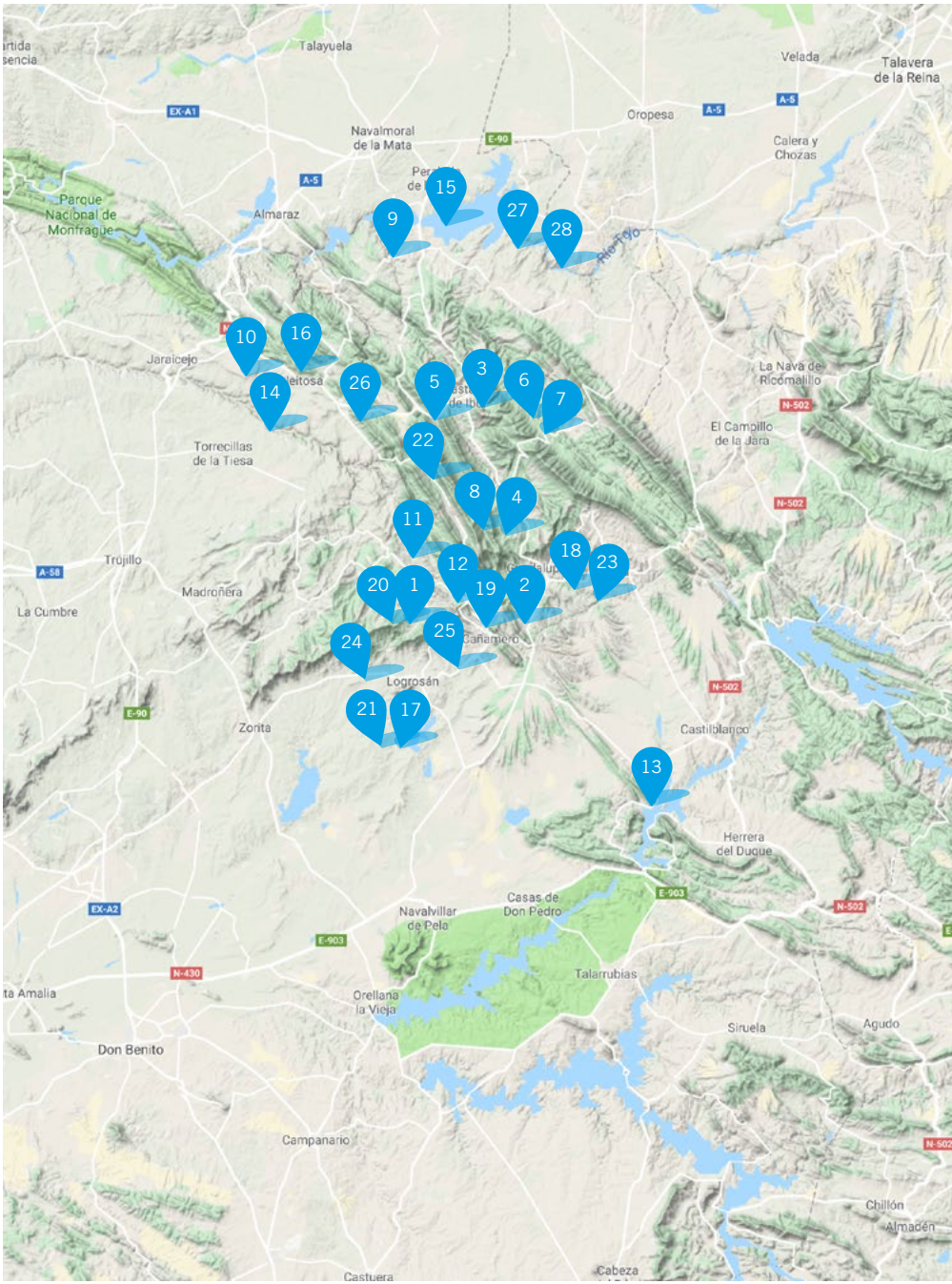
Iberian Magpie



FAUNA

As regards the fauna, in the area surrounding the defile and the nearby cliffs cut by the Tagus, the griffon vulture is common, as well as the Egyptian vulture, black stork, and Bonelli's eagle. Amongst the granite stones and nearby dehesas, one can find the booted eagle, kites, magpies, hoopoes, cuckoos, great spotted cuckoos, blue tits, and great tits.

Hoopoe


Talayuela
Velada
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Oropesa
Calera y Chozas
Navalmoral de la Mata
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Almaraz
Río Tajo
Jaraicejo
La Nava de Ricomalillo
El Campillo de la Jara
Torrecillas de la Tiesa
Trújillo
Madroñera
La Cumbre
Logrosán
Zorita
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Herrera del Duque
Navalvillar de Pela
Casas de Don Pedro
Talarrubias
Orellana la Vieja
Siruela
Agudo
Don Benito
Campanario
Chillón
Almadén
Cabeza
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1. OAK OF LA NAVA
2. EL ABUELO CHESTNUT TREE
3. CALABAZAS CHESTNUT TREES
4. THE PORTUGAL LAURELS OF LA TRUCHA
5. THE PORTUGAL LAURELS OF THE VIEJAS RIVER
6. THE PORTUGAL LAURELS OF THE MESTO GORGE
7. PEÑA AMARILLA VIEWPOINT
8. SOLANA DE CERVALES
9. IBOR RIVER
10. MESAS CAVERAS
11. COLLADO DEL BRAZO
12. SIERRA DE LAS VILLUERCAS AND GUADARRANQUE VALLEY
13. PUERTO PEÑA - LOS GOLONDRINOS
14. RIBEROS DEL ALMONTE
15. VALDECAÑAS RESERVOIR
16. MONFRAGÜE BIOSPHERE RESERVE
17. VEGAS DEL RUECAS, CUBILAR, AND MOHEDA ALTA
18. GUADALUPEJO RIVER
19. RUECAS ALTO RIVER
20. SIERRA DE CABEZA DEL ÁGUILA
21. DEHESA DEL RUECAS Y EL CUBILAR
22. ALMONTE RIVER
23. GUADALUPEJO RIVER
24. ALTO DE SAN BLAS SHELTER
25. CAÑAMERO TUNNEL
26. CABAÑAS DEL CASTILLO
27. CANCHO DE VALDECASTILLO
28. PEDROSO DEFILE

NOTES

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