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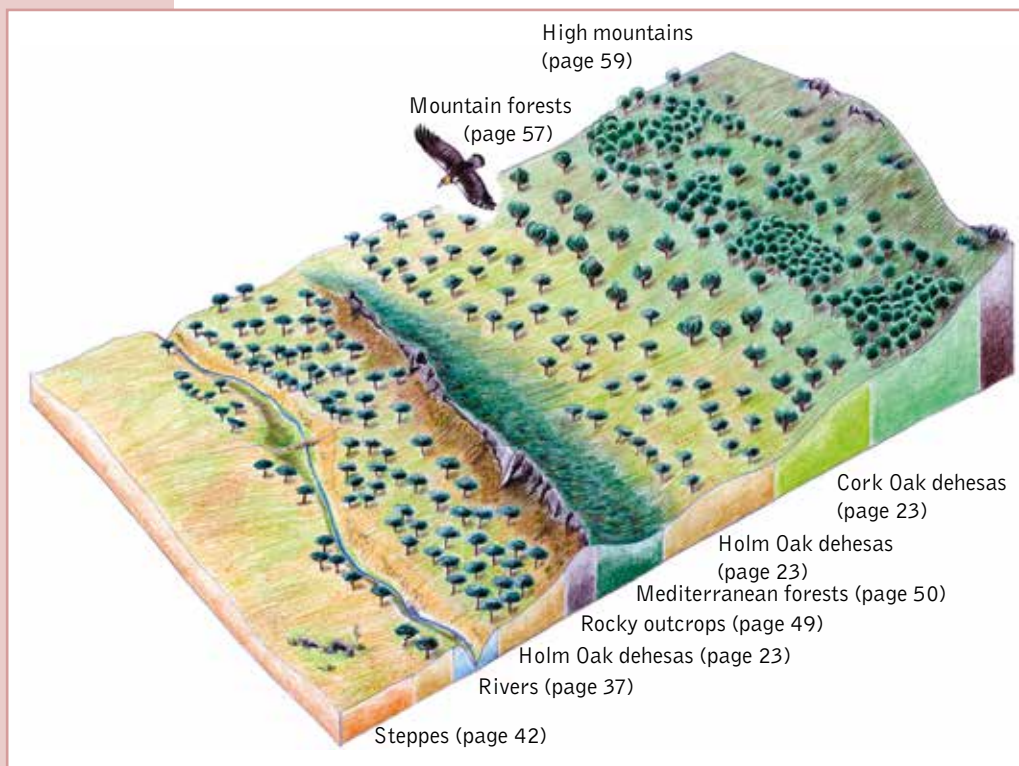
HABITATS

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Schematic cross-section of the habitats of Extremadura, from the mountains of La Vera to the steppes on the plain.

landscape and of the challenges, curses and blessings it brings to its inhabitants. The behaviour of birds, the shape of flowers, the colour of leaves and even the smell of the landscape can be understood when seen in the context of habitats and habitat adaptations. Of course this brings up a truckload of new questions. The fascinating thing about unravelling Oscar Wilde's mystery is that it makes a lot more visible. That is, it enables you to find plants and animals and to discover principles and processes that would otherwise have remained hidden to you.

With all of this in mind, this guidebook has been organised around the habitats of Extremadura. The routes we suggest to you have been carefully chosen to give the best possible introduction to all the habitats in the region, thereby optimising your chances of seeing all the plants and animals.



Dehesa

Extensive holm oak dehesas are part of the landscape of routes 1, 5, 6, 7, 9, 11, 14, 18, 19 and 21, plus sites A, E, G on pages 202-205 and sites A and C on pages 243-245. Old Cork Oak dehesas feature on routes 1, 9, 19 and 21 plus site A on page 243. Narrow-leaved Ash dehesas we found on routes 1, 14 and 21, and pasturelands with old Pyrenean Oaks are present on route 14.

Pick any road or track around the Monfragüe National Park. Go from Torrejón to Serradilla. Or to Monroy or to Jaraicejo. Gnarled oak trunks curl out from behind ancient stone walls, peppered with foxglove and asphodel. Above the gentle breeze you hear Hoopoes calling and Thekla's Larks singing from several directions. A squadron of Griffon Vultures glide by, directly followed by a Short-toed Eagle (or two).

This is not an exaggeration, but a real image of the dehesas of Extremadura: a paradise for naturalists.

What are dehesas?

The rolling, tree-dotted hills and plains of Extremadura are called dehesas. They undoubtedly form the most typical and special landscape of Extremadura and never fail to impress the visitor.

The dehesa, a rolling parkland with evergreen oaks, is Extremadura's most typical landscape.



Old age and drought (result of climate change) result in the death of many Holm Oaks. Although it is prohibited to cut down Holm Oaks, replanting them is not mandatory. As such the death of these trees is a threat to the dehesa ecosystem.



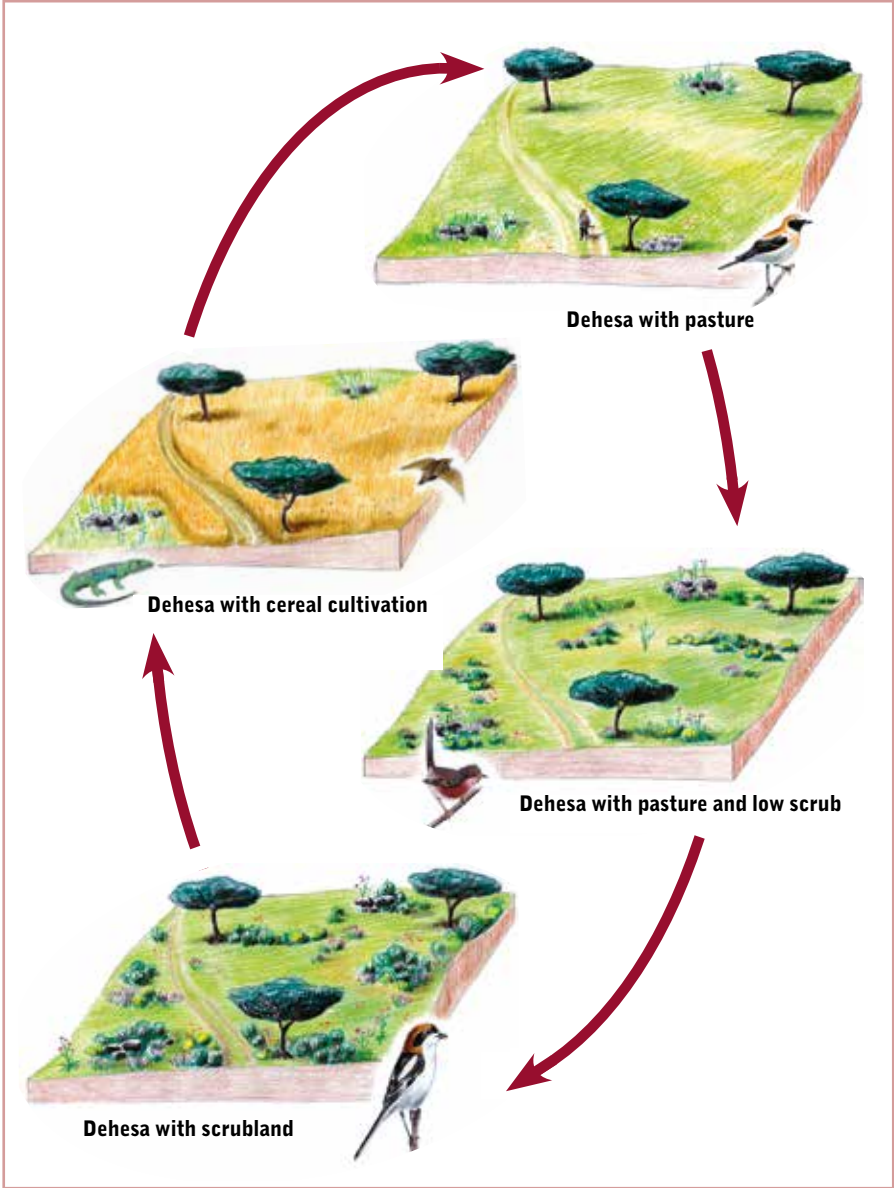
Buntings, open, fallow dehesas support Little Bustards, Stone Curlews and the reptiles of open land. The shrubby dehesas form perches for Woodchat Shrikes and Sardinian Warblers.

Now, if you adopt a bird's eye view to examine the dehesa landscape as a whole, instead of a single plot, you see a pattern of shifting cultivation. The dehesa landscape shows a continuously changing pattern of fields, pastures and scrublands underneath the open canopy of ever-green oaks. Every plot of dehesa is in a different stage in this cycle. The dehesas on poor soils take eight to ten years to complete the cycle, whilst the more fertile ones are back to barley again within four years.

The cycle of the dehesa

The cycle of the dehesa – Once every six to ten years cereals are planted in the dehesa. In years that follow, the land is left fallow and sheep and cattle graze the pasture. Gradually, the dehesa is invaded with scrub, until the landowner clears it and sows cereals again. Rocky patches and river valleys escape the cycle and function as a retreat for plants and animals.

Each stage of the cycle supports its own flora and fauna (e.g. Quail in the cereals, Black-eared Wheatear in the open pasture, Dartford Warbler in low scrub and Woodchat Shrike in tall scrub). The cycle of the dehesa sets the pace for a unique and varied ecosystem. The agricultural developments of recent decades has made it increasingly difficult for farmers to maintain the dehesa cycles, making it an ecosystem in distress.



Low mountains – Mediterranean forest and cliffs

Visit the low mountain ranges on routes 1, 2, 3, 8, 9, 19, 21, 22 and 24, plus site F on page 247. Bird-rich cliffs are a feature on routes 1, 2, 9, 22 and Site J on page 206. The only truly developed Mediterranean forests are found in Monfragüe (routes 1, 2 and 3). Route 2 is the best of these.

The north slopes of the mountains (called *Umbría* in Spanish) are clad in a wild and dense Mediterranean woodland (route 24).

Extremadura is riddled with steep but low mountain ranges. Geologically, most of them are folds in the Hercynian bedrock that have since been eroded. These ranges, many of which are spread in an east-west direction, typically have a slowly rising base that quickly becomes steeper and ends in a vertical rocky crest, like an exponential curve. At the base are dehesas and olive groves, the steeper slopes are often clad in cistus scrub, while the crests are bare rock. All this may be at an elevation of only a few hundred metres above the lowlands and not more than a few kilometres in cross-section, but of superb value to Extremadura's wildlife.



Cliffs

The temperatures rise quickly on the south-facing cliffs, producing an environment that is unlike all the others in Extremadura. This is the realm of several birds of the southern Mediterranean that you won't easily find in another habitat: Blue Rock Thrush, Alpine Swift, Crag Martin, Rock Bunting and Black Wheatear are some of the typical species here, all of which breed in the many crags and cracks in the rocks. Very locally you may also find White-rumped Swifts.

Above all however, the cliffs are the breeding sites of raptors. The warm, rising winds stroking the south-facing cliffs are perfect to lift up the large, broad-winged birds. With this in mind, one of the reasons for Extremadura's unsurpassed number of raptors becomes clear – there are so many good breeding sites, surrounded by vast expanses of dehesas and steppes to hunt. Thereby, the low mountain ranges have a firm ecological connection to the surrounding dehesas and steppes. Animals that hunt in the dehesas and steppes, breed on the cliffs. For example, the roughly six-by-thirty kilometre stretch constituting Monfragüe's National Park holds over 650 pairs of Griffons (2015 census). They all live off the carcasses of cattle and game – food that is not present in great supply in the Mediterranean forest itself. The vultures can soar up and wander as far as to 200 kilometres away from their nests. They are commonly found scavenging in the steppes around Trujillo and Cáceres.

The colonies of Griffon Vultures are indeed most impressive, because the birds breed close to one another. Some colonies have 80 pairs or more (such as the famous Peñafalcon in Monfragüe; route 1), but there are many, many small colonies. Often, there are other birds breeding nearby – Egyptian Vulture, Golden and Bonelli's Eagles, Peregrine and Eagle Owl.

It is wonderful to gaze up from below the cliffs and watch the birds take off from their ledges and majestically circle overhead. Perhaps more impressive though, is to see this at eye-level while you stand on top of the ridge.

There are several places where you can do this easily (e.g. route 2, 9, 22 and 24) because on these ridges there are many castle ruins reached by convenient tracks or paths. During the period of the Reconquista, the borders between the Moorish caliphate and the Catholic kingdom shifted many times, and what makes a better spot to build defensive towers than on top of a ridge with unimpeded views to all sides? Hence both the Arab and the Catholic rulers built their share of castles. Beneath them, small villages were often founded. Today, these are the starting point from which you can walk up to the castillo (or its ruins).

History

The human history of Extremadura begins in the Neolithic age, during which hunter-gatherer tribes roamed the plains of Extremadura. When these gradually switched to tending herds and growing crops, they

thinned the original Mediterranean forest to a savannah-like landscape – a sort of proto-dehesa. The first evidence of a dehesa-like agricultural system stems from approximately 4,000 years ago.

Details of the early history of the area is, in the absence of much hard evidence or written accounts, relatively obscure. The Vettones,

often regarded as a pre-Celtic group, persisted in northern Extremadura into the 2nd century BC. However, it is likely (but not certain) that the Celtic presence in Iberia goes back to the 6th century BC. The Celtiberians (either Celticised locals or Celts influenced by the pre-Celtic population) were the most influential ethnic group in the area prior to Carthaginian and subsequent Roman incursions.

The Roman era

Where the Carthaginians settled, the Romans were never too far behind and it was the latter who made the lasting impression. Extremadura saw big changes with the coming of the Romans, who conquered the region in 206 BC. Remarkably intact remains of Roman structures can still be found in many places in Extremadura. Extremadura's capital Mérida is famous for its Roman heritage. In its day, it was the capital of the whole of Lusitania, a Roman province which encompassed Extremadura and a very large part of present-day Portugal. In Mérida (*Augusta Emerita* in Roman times) you will find one of the most intact Roman amphitheatres in the world and the largest Roman bridge in all of Spain (which is good for birdwatching too; see route 17).



The passing of history along the Almonte river: the old medieval bridge with, in the background, two that were built in the 20th century. The furthest bridge is that of the Madrid-Mérida motorway (route 1).



The Sawfly Orchid has the largest flowers of all of the bee orchids, measuring up to 3.5 cm in length. Being the only one of this group to grow well on acidic soils, it is the most widespread of the bee orchid group (*Ophrys*) in Extremadura. Lange's Orchid looks like a very loose-flowered version of Early-purple Orchid. It grows in the Mediterranean forest (bottom).



of species. Widespread are Lange's Orchid* (*Orchis langei*), a largely Iberian species, and Dense-flowered Orchid, which has tiny flowers. The parasitic Violet Bird's-nest too is a widespread, if often local, orchid.

In the mountains, the Chestnut woodlands are often rich in orchids. The most conspicuous species here is the pale-yellow Sicilian Orchid, which often grows together with Early-purple Orchid, and Tremols' and Narrow-leaved Helleborine. A complete orchid list for Extremadura can be downloaded from our website.

On the aforementioned areas of limestone, the Pink Butterfly Orchid is sometimes abundant, just as is Sawfly Orchid. But there are many more species to be found here: Yellow Bee Orchid (usually common on limestone), Mirror Orchid (also often numerous), Woodcock Orchid (fairly common), Dull Bee Orchid (less common), Bee Orchid (uncommon) and Spanish Omega Orchid (quite rare) – all are members of the insect-mimicking genus *Ophrys*. The small but very pretty flowers look like bees or wasps. The appearance of the flower is so convincing that the male bee or wasp tries to copulate with the flower and by doing so, pollinates it.

On limestone soils the most abundant species is probably the Naked Man Orchid, so named because of the flower's humanoid, specifically male, appearance. In southern Extremadura, there are two other orchids that grace the limestone hills very early in the year: the Giant Orchid (which starts to flower in mid February) and the very rare Fan-flipped Orchid, which appears a week or so later. The best limestone sites are in Badajoz Province, near Zafra (route 21) and Olivenza (route 20). In Cáceres, the hills near Almaráz (route 1), are the richest.

The Mediterranean forests and dehesas on the hillsides of the sierras, characterised by a rich soil and more humid climatic conditions, support a different set



Head north in the direction of Plasencia.

1 Through the fine Holm Oak dehesas and with views of the Monfragüe mountain range in the distance, you head towards the Arroyo de la Vid, a stream that in typical Extremaduran fashion, has cut out a small gorge in the hard Hercynian bedrock. Along the way, look for typical dehesa birds such as Hoopoe, Azure-winged Magpie, Thekla's Lark and Woodchat Shrike.

Just before you cross the stream, there is a small car park on the left. Park here and walk to the bridge, cross it and follow the trail to the right to the river. The puddles and slow-flowing parts are excellent for Spanish Terrapins, Viperine Snakes and amphibians. Meanwhile, don't forget the check the skies for passing Black Storks, Egyptian Vultures and other cliff dwellers, which breed along the cliffs of the Arroyo, or come in from Monfragüe.

Return to the car and continue. On your right lies the castle of Monfragüe on the mountain ridge (the goal of route 2). Stop on the car park of on the edge of the Tagus reservoir, from where you have great views over the cliffs on the Tagus edge.

2 This is the *Salto del Gitano*, Monfragüe's grand entrance. The impressive escarpment on the opposite side is the *Peñafalcón*, the famous vulture rock. The many Griffon Vultures that circle around the rock are the immediate eye-catcher at this site. The colony on the Peñafalcón is one of the largest in Monfragüe. Once the air starts to warm up in the morning, the vultures depart to cruise the thermals in search of carrion and sometimes soar right over your head. One or two pairs of Egyptian Vulture and Peregrine Falcons breed as well in some years. Black Storks breed in the fissures just above the water line. To see their nest, you have to walk a little further on, go around the corner and then look back to the rock. Other birds that can be seen near the Peñafalcón include Rock Bunting and Blue Rock Thrush (on the slopes close to the car park), Red-rumped Swallows and, in the sky, Black Vulture (which breeds on tree tops all over Monfragüe, unlike the cliff-breeding Griffons). Black Kite and perhaps Golden or Spanish Imperial Eagle may also pass by. Botanists can enjoy the endemics Spanish Adenocarpus* (*Adenocarpus argyrophyllus*) and Spanish Foxglove* (*Digitalis thapsi*) on the cliffs around the car park.

Monfragüe is home to Europe's highest concentration of Black Vultures.

Continue along the road. Notice that once past the Peñafalcón, you drive on the north-facing side of mountain (*Umbria*), which is clad in dense Mediterranean evergreen forest. Cross the Tagus (*Río Tajo*) and park on the car park on the other side.



3 Unlike the Guadiana in southern Extremadura, the Tagus has so many dams that it has become a string of reservoirs rather than a river. Ecologically, this has been disastrous for the river habitat, especially for the fish fauna.

Nevertheless, this spot may have some interesting sights in store for you. Underneath the bridge there are many House Martin nests, and you may see Alpine Swift, Crag Martin and sometimes Rock Sparrow. This general area has Bonelli's Eagle too, so keep your eyes open for this elusive bird as well.

Continue to Villarreal de San Carlos.

4 This village, with bar and visitors' centre, is the only settlement in the park and consists of one big car park and one small street. Villarreal was founded by King Carlos III to house royal guards, who had to ensure the safety of the travellers in what was then a dangerous and desolate region.



The Iberian endemic Spanish Foxglove* (*Digitalis thapsi*) flowers in May and is fairly common on rocky soil.

After Villarreal, take the first right, in the direction of Saltos de Torrejón.

5 These scrubby hills covered with young Holm Oaks, French Lavender and Gum Cistus, are not very interesting, but ironically, they are the reason that Monfragüe received its protective status. Under the Francoist regime's drive to create a paper industry they were planted with Eucalyptus. It was envisaged that Eucalyptus woodland would cover all of Monfragüe, but thankfully, strong opposition from the germinating Extremaduran conservation movement prevented this ecological disaster (see also page 69). The young Holm Oaks were replanted to restore the original Mediterranean forest.

6 Just before reaching the dam on the Tiétar there are two viewpoints on the right. The first has a short circular path around a hill overlooking the Tiétar river just before it meets the Tagus, and the second overlooks a small vulture colony, where beside Griffons, Egyptian Vulture usually breeds. On the other side of the dam lies Saltos de Torrejón, a village that was built to accommodate the dam workers.

Spanish Terrapins are numerous in the streams in and around Monfragüe.





A Cork Oak near the Portilla del Tiétar. A year after the cork is stripped, the trunk gets a beautiful, velvety red colour.

Continue until you see the Río Tiétar on your left. There are various viewpoints here at either side of the river where you can stop, admire the landscape and look for birds of prey.

The next site is the rocky outcrop you see ahead. Stop at one of the parking spaces and continue on foot.

7 From the bend in the road you overlook the Portilla del Tiétar, Monfragüe's more modest but still very scenic 'back door'. Its Griffon Vulture colony is smaller than on the *Peñafalcón*, but closer. In some years, Eagle Owl, Egyptian Vulture and Black Stork also breed on the cliffs and nearby rock escarpments and are easily seen. The surrounding Cork Oak dehesa is a breeding site for Booted, Short-toed and above all for Spanish Imperial Eagle, for which this is by far the best spot in Extremadura. For the last couple of years now, it bred on a tree just to the right of the cliff. Other birds here are Blue Rock Thrush and Red-rumped Swallow.

8 If it is not too busy, walk the next 2 kms to the restaurant (see map). This walk leads through an excellent Mediterranean forest with Strawberry Trees, Tree Heath, Laurustinus and Palmate Anemone. A stile over the fence on the left allow you to enter the Cork Oak dehesa on the edge of the river – an excellent opportunity to explore this habitat from up close. This spot is all the more interesting because the so dominant oaks are replaced by Narrow-leaved Ash as the dehesa tree – a rare phenomenon.

There are some interesting plants too, like One-leaved Squill* (*Scilla monophyllos*) and Green-flowered Birthwort – the latter visited by the pretty Spanish Festoon butterfly, for which this is the larval food plant.

Return to the car and continue along the road. This leads through a beautiful and rather lush Cork Oak dehesa. Go right on the sign *Ruta Rosa* on a dirt track. At the junction 250 metres further on, go left and continue until you reach the tarmac road again.



9 This track leads through more dehesa, but, unlike the road, offers you the option to stop wherever you want. Similar birds can be seen here as elsewhere, with addition of Rock Sparrow, which is quite numerous here.

Back on the tarmac, go right. You pass the village of Serrejón and continue in the direction of Almaráz. Where the road reaches a roundabout you turn left. At the next roundabout you can choose to visit the marshes of Arrocampo (which we've described separately as route 4), or continue along this route, for which it is easiest to use the motorway. Head towards Madrid and after 2 kms, take the next exit (Almaraz Este). Instead of driving to Almaraz, turn right (towards Valdecañas del Tajo) and park at the second track on the left (only 200 metres from the motorway). A sign here describes an orchid route (see small map on next page). Follow it.

10 The hill, clad in olive groves, is a limestone outcrop, a rare substrate in northern Extremadura. It supports a rare flora which includes 11 species of orchids. Although their numbers have dropped over the recent years (most probably because of changing land use), you should be able to locate quite a few Naked Man, Woodcock, Mirror and Small-flowered Tongue Orchids. Late March to late April is the best time.

Naked Man Orchids in the verge of the trail near Almaráz.



ROUTE 1: MONFRAGÜE NP ROUND TRIP

The olive groves are a good place to find Ocellated Lizard, Large Psammomys and Ladder Snake, plus Cirl Bunting and Orphean Warbler, two of the less common songbirds of Extremadura.



Woodcock Orchids are numerous on the 'orchid trail' in early spring.

Return to the motorway and back in the direction Trujillo. After 2 kms, take exit 200 to Almaraz Sur (this is from where you came), and on the roundabout, and follow the old NV road to Puerto de Miravete.

11 With the coming of the Motorway in the 1990's the winding N-V road over the mountains via Casas de Miravete became almost obsolete. Today, it is a little travelled route, very much the opposite of the road that cuts through Monfragüe. On the pass there is a picnic spot with views over the vast dehesas of the Trujillo-Cáceres plain.

Continue to Jaraicejo and proceed on the NV to the bridge over the Almonte river.

12 The Almonte south of Jaraicejo is another excellent place for a picnic and a stroll along the crowfoot-lined water. Spanish Terrapin and Viperine Snake can be seen here, Bee-eaters breed nearby and vultures and eagles cruise overhead. Another highlight here are the three bridges – the large motorway bridge in the distance, the smaller N-V bridge and the small but beautiful old Roman bridge (p. 62).

Return to Jaraicejo and turn left towards Torrejón el Rubio.

13 The dehesas between Jaraicejo and Torrejón are again excellent. You can stop at the small chapel just outside Jaraicejo and explore the surrounding dehesa. Azure-winged Magpie, Woodchat Shrike and other dehesa birds can be found here and the wide, unimpeded views over the plains offer another shot at viewing raptors. The very last stretch of dehesa before hitting the Trujillo-Torrejón road is very scenic in April for its masses of flowering French lavender.

Turn right to Torrejón. If you fully explored all the stops along this route, it must be midnight by now.