



# SAN JUAN DE ORTEGA - BURGOS

Hills rivers and moors



NATURE  
ON THE WAY  
OF ST JAMES





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# SAN JUAN DE ORTEGA - BURGOS

## Hills, rivers and moors

In the 29 km of this stage you will pass through the last landscapes of the Cordillera Ibérica, saying a final farewell as you leave behind the evergreen oak forest of the Sierra de Atapuerca.

After culminating with this Sierra that has contributed so much to humanity's history and going down between the rivers Pico and Vena to the fertile plain of the river Arlanzón, you will get immersed in the urban landscape of Burgos, end of the stage and a city deserving of an unhurried visit for its great historical importance within Castilla y León.

The embanked riverside of Arlanzón on its way through the city and the exuberant leafiness of the parks that oxygenate it, constitute in themselves, islands of nature in the middle of the metropolis surrounding them that we invite you to visit, before continuing the Way.

*This series of pocket guides : **Nature on the Way of St James**, is fruit of the collaboration agreement between the Social Work Programme of Caja de Burgos and the Natural Heritage Foundation of Castilla y Leon.*

*The object of these pamphlets is to give pilgrims, hikers and inhabitants of the Jacobean area some interesting notes on the nature and landscape of the Way.*

*The stages described are part of the the French Way as it passes through Burgos: Santo Domingo de la Calzada-Belorado; Belorado-San Juan de Ortega; San Juan de Ortega-Burgos; Burgos-Casrjeriz and Castrojeriz-Frómisa, covering the approximate 132 km of the Way in Burgos.*

*We hope that the reader will be able to appreciate and, above all, respect what Nature has to offer and thanks to these simple notes will enjoy and understand the Way a little better.*



## STAGE I: SAN JUAN DE ORTEGA - ATAPUERCA



Roe Deer droppings



Roe Deer tracks



Wild Boar





## The forest tells us how we have changed

The forest landscape you cross when leaving San Juan de Ortega has changed through the centuries because of the use that has been made of it. The Pyrenean Oak is the native species of this area, which, due to wood-cutting became transformed into scrub Oak.

More recent are the Scots pines you will see on your left, planted some 50 years ago to replace the scrub.

You should consider that these leafy woods you see now weren't always so, because they were cut regularly to obtain firewood.

Moreover, cattle grazed everywhere eating the young saplings.

Society has changed and instead of firewood we use other energy sources; now there are more Roe Deer and Wild Boars than before...

Are we capable of accepting the changes?



## The ponds are alive, even if you find them dry



Natterjack  
toad

There are places where rain water accumulates naturally and it makes a pond that normally dries during the summer. At other times the pond is man-made but the result is the same: it creates an environment that attracts a large number of animals and plants which otherwise wouldn't exist there.

These temporary ponds maintain water plants, insects and amphibians adapted to the disappearance of the water for a period of time. Some will leave seeds and others will fly or jump to look for new ponds to live in.



Water Plantain

Great Diving  
Beetle Larva

*When the forest starts to clear you will see  
this pond on the left of the Way.  
In summer time it will almost certainly be dry.*



Common Toad



Common  
Spike Rush

Damselfly



Water  
Buttercup



Common  
Pondskater



Adult Great  
Diving Beetle

Water Boatman  
(backswimmer)



Water Plantain





## Up onto the plateau

You will have noticed that the vegetation has been thinning out, giving way to a more open landscape: you are in full transition between the landscapes of *Sierras Ibéricas*, and the Castilian Moors.

Although you still have to finish with the modest but important *Sierra de Atapuerca* we invite you to observe the subtle changes in the vegetation and the landscape during the next kilometres.

The countryside will be opening out giving way to a landscape even more modified by man.

The forest will relinquish its territory to the extensive croplands, with small woods and isolated trees, witnesses to what this landscape was like when we weren't around.



Cutting between  
Santovenia and Agés





Before arriving at Agés, you will cross a kind of valley. It wasn't formed naturally: it's the remains of a cutting for a wide track railway whose instigators believed it would constitute a cheaper way of transporting iron from Pineda de la Sierra to the smelting furnaces in Bilbao, taking it directly.

The companies and promoters were the same who built the single track mine railway from Villafra to Monterrubio de la Demanda. The mineral obtained would be transported from one train to another to avoid paying the high costs of other train companies.

It was all a spectacular failure for being economically inviable: they would never have produced enough to cover the costs.

Regardless of this bad management, the works of the mine railway in one of its cuttings has led to one of the most important discoveries of human history: the archaeological site of the *Sierra de Atapuerca*.

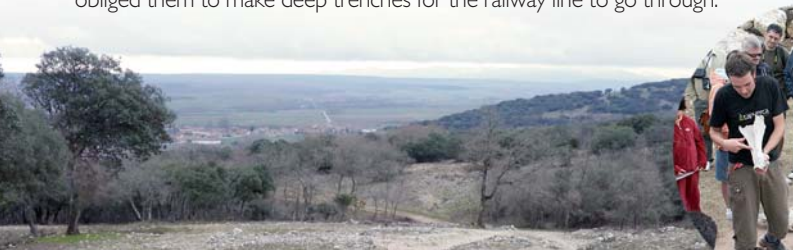


## STAGE 2: ATAPUERCA - CARDEÑUELA RIOPICO

### Atapuerca and the origins

You won't pass by the site of Atapuerca, but you will cross the village and the sierra that give their names to this emblematic place.

To exploit the mineral richness of the Sierra de la Demanda – mainly iron, copper, zinc and coal - to transport it to Burgos and then to the north, led to the building of a mine railway that never functioned commercially. Disastrous management from the beginning, combined with other circumstances that are not very clear, made it necessary to carry out various ground levelling works similar to those already passed before Agés. In some places the limestone of the sierra obliged them to make deep trenches for the railway line to go through.





It was in one of these cuttings, long after the railway was abandoned, where the human remains that have revolutionized and modified the history of our evolution as human beings were discovered: the site of the Sierra de Atapuerca.

Although the Way doesn't pass through the site - it is in the southeast of the sierra - in the village of Atapuerca, as well as further on in Burgos, you can take a break to have a look at our past in the installations and museums that explain it.

#### **Information in Burgos:**

Museo de la Evolución Humana  
<http://www.museoevolucionhumana.com>  
Paseo Sierra de Atapuerca, s/n  
Burgos

#### **Information in Atapuerca:**

Excmo. Ayuntamiento de Atapuerca  
<http://www.atapuerca.es/>  
Tel.: 947 430 435  
Visits coordination:  
<http://www.visitasatapuerca.com>

In this village there are also some wetlands recently made where you can observe water birds.



## The Holm-oak wood of Atapuerca has also changed

The different kinds of trees which formed the forests here more than a million years ago are very well known. The pollen found at different levels of the excavation shows us that there was a Beech and Oak forest, from which developed a Mediterranean countryside similar to the present which was superseded by Pines adapted to intense cold.

There were periods without trees when heathers dominated...

In the 1950s the *sierra* became quite bare due to the cutting of wood and grazing. In the present day the hills are covered by Holm-oak and the Portuguese oak is regaining territory lost to human interest: the Holm-oak burns better than the Portuguese oak.

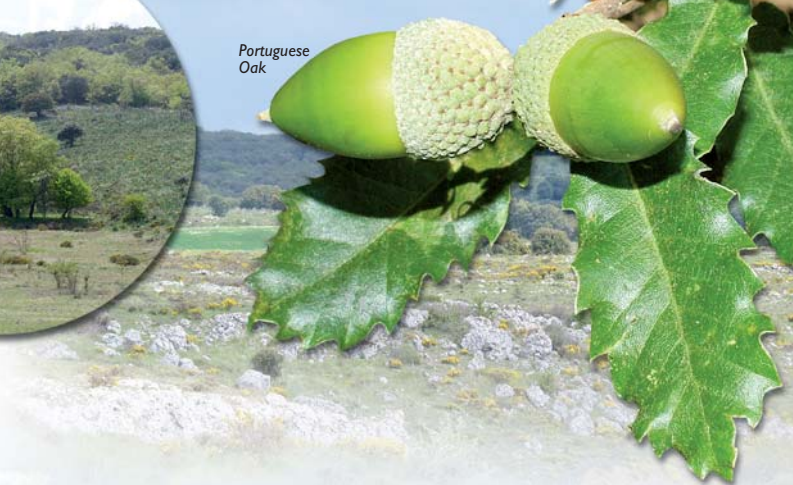


*The climb up  
the sierra of Atapuerca*





Portuguese  
Oak



Changes, both natural and man-made, are something that forms part of life itself. The question is to know how to adapt and to rectify when we are responsible.

Holm Oak






## Other living beings older than the hills

All limestone rocks are not the same and when they have fossils we can deduce the sedimentary environments where they were formed: marine near the seashore, at depth, fresh water lakes...

In the climb up to the sierra and at the top, called Matagrande (1078m.) you can observe the limestone rocks near to the cross.

They were formed in the Upper Cretaceous, about 90 million years ago, under the sea. If you are lucky you will see some fossil remains that belong to marine organisms called foraminifera. These indicate that the rocks were formed in marine areas with tides.



*Remains of fossilised  
organisms in the limestone  
of Atapuerca*

These marine limestones are the last ones you will see on the Way in Burgos. From Burgos city onward the rocks you will see were formed in great interior lakes.



The rivers which fed these lakes didn't lead to the sea, but to the biggest basin of the Península Ibérica: the Duero basin. You will finally enter the Duero basin when you come down from this *sierra*. Its formation began between the Oligocene and the Miocene, about 23 million years ago.


The Sierra de Atapuerca existed already and was surrounded by these lakes. The waters from the Duero basin and the Ebro basin joined in the Corredor de la Bureba (Bureba Passage). Its narrowest area is located precisely here, to the north, between the Sierras of Ubierna and Atapuerca.

For more than 20 million years the Duero basin continued receiving sediments from the Cordillera Cantábrica, Ibérica and Sistema Central which surrounded it.

You have more than 100 kilometres of what remains of this basin to cross. But that comes later.








*Dartford Warbler*

## Coming down to civilization

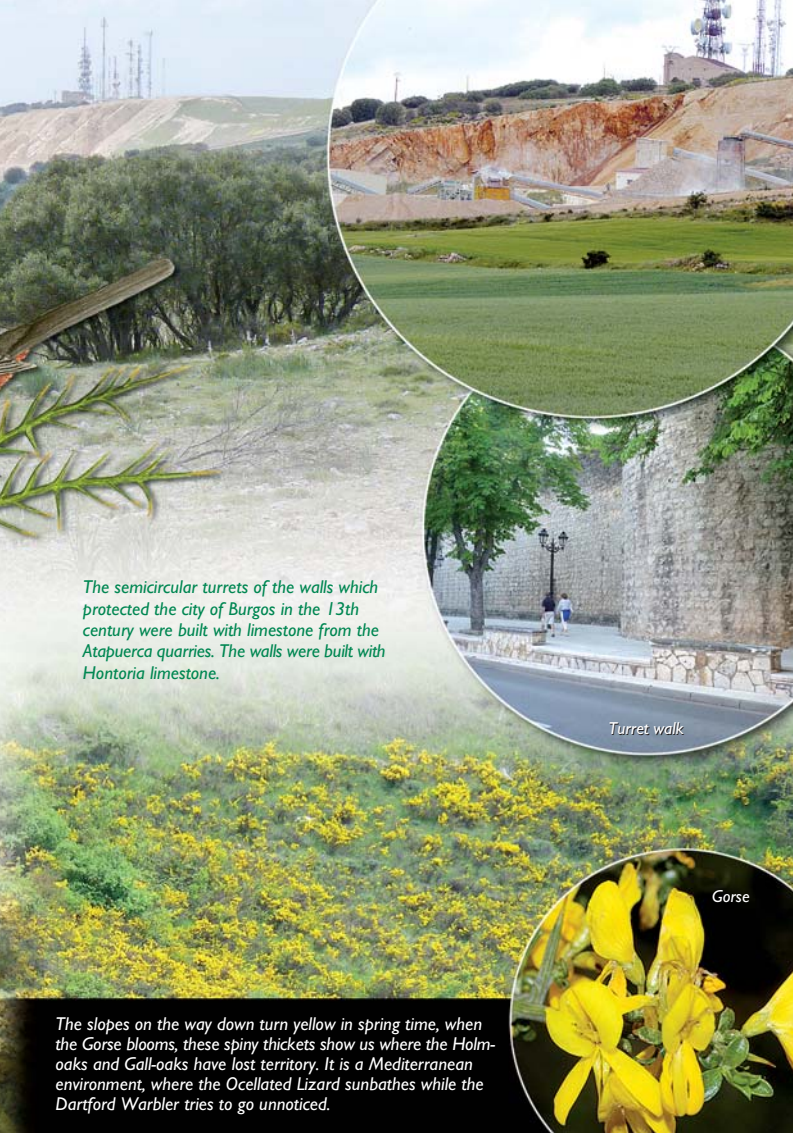
On your right you can see a big quarry that extracts limestone from the sierra. The use of natural resources must always go accompanied by environmental restoration projects, which, once the exploitation has finished, should leave the landscape as far as possible as it was before. With a minimum amount of soil and humidity nature will cover the wounds made to satisfy our necessities.

We should think of future generations and leave them, as a legacy, a healthy environment in balance with its use.



*Ocellated Lizard*





The semicircular turrets of the walls which protected the city of Burgos in the 13th century were built with limestone from the Atapuerca quarries. The walls were built with Hontoria limestone.

Turret walk

Gorse

The slopes on the way down turn yellow in spring time, when the Gorse blooms, these spiny thickets show us where the Holm-oaks and Gall-oaks have lost territory. It is a Mediterranean environment, where the Ocellated Lizard sunbathes while the Dartford Warbler tries to go unnoticed.



STAGE 3: CARDEÑUELA-RIOPICO - BURGOS



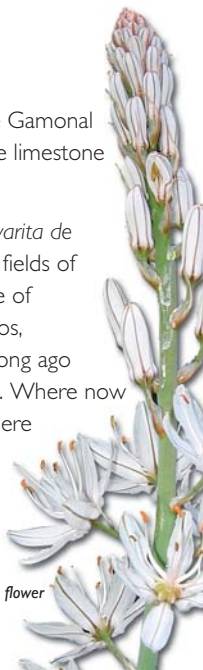
Fruit of  
the White Asphodel



## Gamonal is the name of a plant

The first church you will see on entering Burgos, in the Gamonal quarter, is Nuestra Señora de La Antigua, built with the limestone you saw in the sierra.

White is the flower of the White Asphodel (*gamón o varita de San Jose* – St Joseph's wand). And white are the fields of this plant known as *gamonales*. The name of the quarter by which you enter Burgos, Gamonal, is due to the presence long ago of great numbers of these plants. Where now you can see buildings, before there were Asphodel fields.

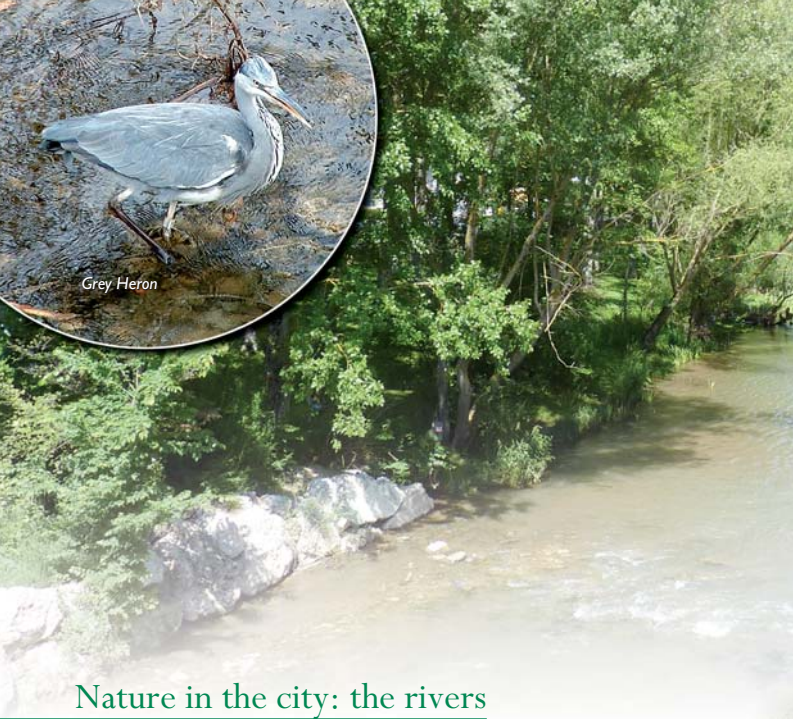


*White Asphodel in flower*





Grey Heron



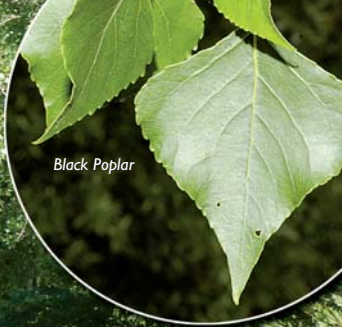
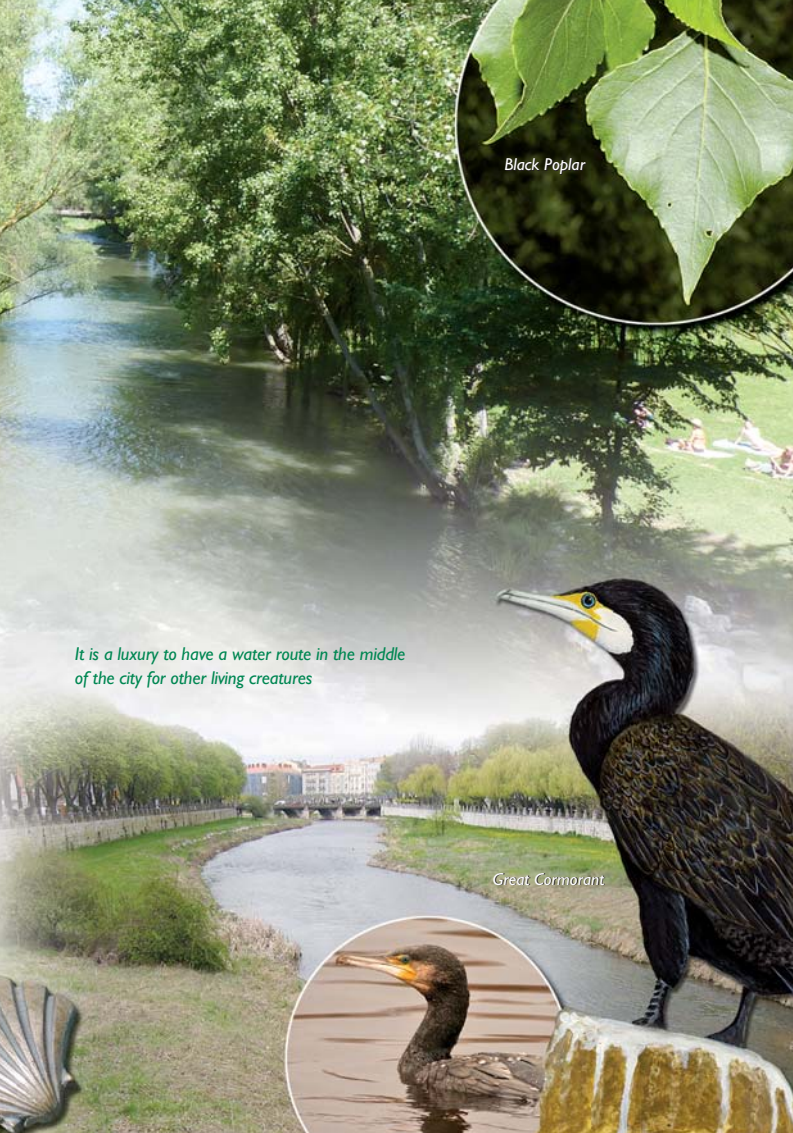
## Nature in the city: the rivers

Arlanzón river, with its two tributaries, river Pico and river Vena are the rivers of Burgos which provide a transit for animals and plants from the outskirts of the city. For this reason it is easy to see Cormorants and Grey Heron during a good part of autumn and winter.

Nowadays, the river Arlanzón is channelled and regulated at its head, but its past floods were spectacular.







Black Poplar

*It is a luxury to have a water route in the middle  
of the city for other living creatures*



Great Cormorant

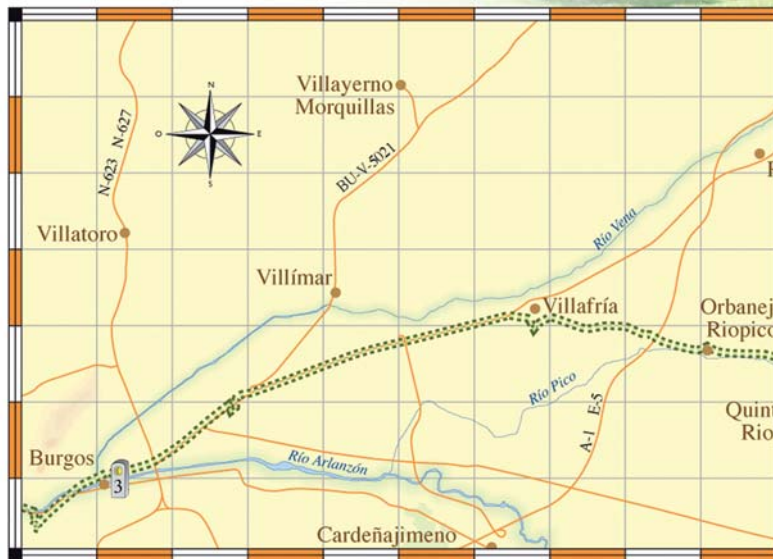




## Nature in the city: the city parks



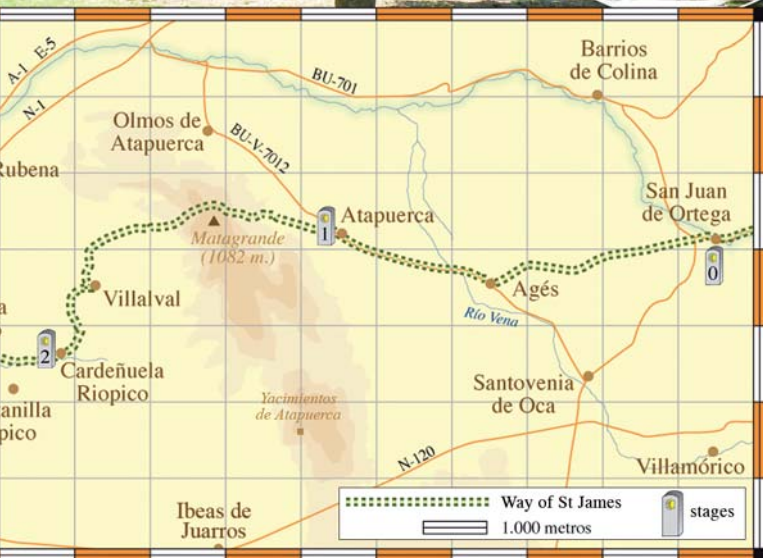
Burgos has numerous parks and gardens that are worth the visit, but there are two which are closely linked to the Way. *El Paseo de la Isla* (Island Walk) has good examples of ornamental trees and the park *El Parral* with its curiously pollarded Black Poplars, full of holes and the best examples in the area. These old trees are the urban home of various birds. An interesting colony of Jackdaws, Stock Dove and Tree Sparrows have their last refuge from the city here. Magpies have fewer problems as they are able to build their nests in almost any corner.





On your journey to Santiago you can count on the continued company of the wildlife that has evolved in the countryside as a result of the works of Nature and Man.

**Good Journey!**





For more information:



## BURGOS - VALLADOLID - PALENCIA

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