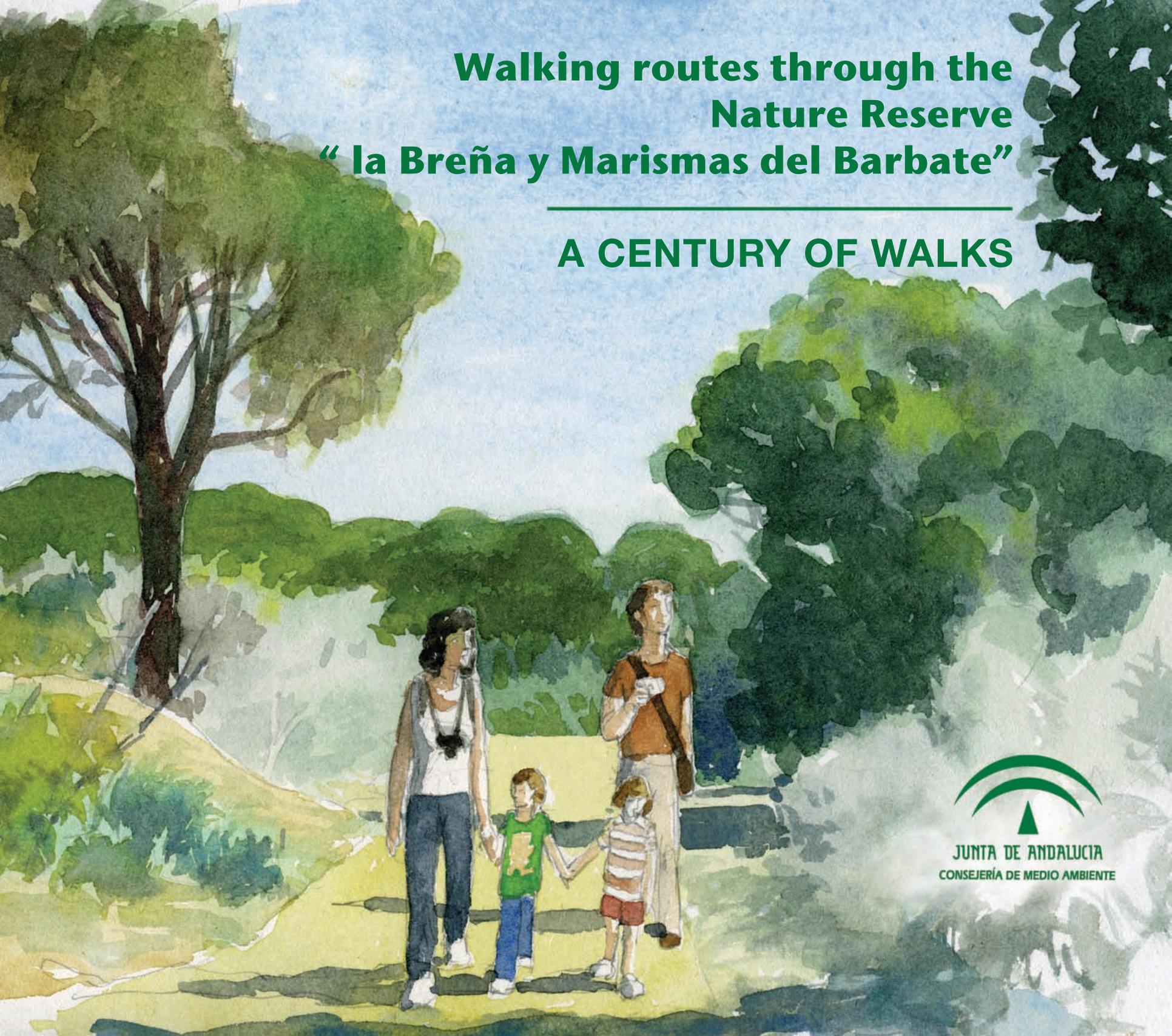


# Walking routes through the Nature Reserve “La Breña y Marismas del Barbate”

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## A CENTURY OF WALKS



JUNTA DE ANDALUCÍA  
CONSEJERÍA DE MEDIO AMBIENTE



F. CARRER

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**Depósito legal**

**Impreso en papel reciclado**

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**WALKING ROUTES THROUGH THE NATURE RESERVE  
“LA BREÑA Y MARISMAS DEL BARBATE”  
A CENTURY OF WALKS**



F. ERARDEN

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## PREFACE



This present issue aims to acquaint you with the ethnographic and natural values of the Nature Reserve La Breña y Marismas del Barbate.

We will explore the various facets of the time-honoured customs which have been treasured and upheld by its local inhabitants as we retrace the history of the park and its origins under the following themes:

The process of creation of the nature reserve and the origins of the Aleppo pine forest.

Remembering bygone trades and crafts associated with the park, mostly extinct, but largely linked to nature. The inhabitants who carried out these trades showed a huge respect for the

natural surroundings that provided them with suste-

nance as well as a profound knowledge of nature and her workings.

Features that complete our overview of the park's ethnographic heritage: cuisine, ethnobotanics (medicinal and practical uses of herbs and plants), architecture.....

These natural surroundings are historically linked to the local towns of Vejer and Barbate, and are part of the cultural heritage of 'el Litoral de la Janda ('La Janda' coastal region). Local inhabitants have provided most of the content of this publication and it is structured around the idea that it is fundamentally 'an expression of their local history and culture, made by - and for - them, written in their own language but translated into English so that everyone can become acquainted with these wonderful natural surroundings. It also underlines the need for every local inhabitant to become a spokesperson and representative of his local rural culture.

This publication falls within the Rural Heritage Initiative, (la estrategia de puesta en valor del Patrimonio Rural) developed by the GDR of el Litoral de la Janda for 2009-2015 and has been made possible by the co-funding of the Consejería de Medio Ambiente de la Junta de Andalucía.

**Jaime Castro Romero**

*President of G.D.R. Litoral de la Janda*

## INTRODUCTION



Foto: Consejería de Medio Ambiente de la Junta de Andalucía

There are many routes to follow through the Parque Natural La Breña y Marismas del Barbate; to start with we will take in the main walking routes which will allow you to get an overview of the area.

The 'Torre del Tajo' trail leads you to one of the most emblematic areas of the park, which takes in sights of the Aleppo pine forest, coastal junipers, and finally leads you to the majestic view of the sea of Trafalgar from the cliffs. From here there is another trail that leads down to the 'Yerbabuena' beach, flanking the spectacular river gully.

The trail that leads from 'el Jarillo' will take you to Torre de Meca, an old Moorish tower from which the name of the trail is taken. It can also be accessed from the Caños de Meca road.

These nature trails display the diversity of the local ecosystems that exist in the Reserve. In the Marismas del Barbate you will find another trail flanked by Rio

Barbate's right-hand bank, a privileged place from which to observe migratory birds resting from their journey over the Straits to Africa. And lastly, you have gorgeous views of the park from the beach. El Parque Natural La Breña y Marismas del Barbate is one of the only Andalusian Nature Reserves that includes an area of coastline.

And although these surroundings speak for themselves, this book will show you that these walking routes have been well trodden since the 1900's by locals of Vejer and Barbate:

Trails forged out of tradition, steeped in history and customs that offer us a chance to enjoy these privileged natural surroundings today, and that stay true to their cultural roots, exponents of a deep understanding of the natural habitat by local inhabitants evident in the daily lives of the people that have inhabited these lands since time immemorial.

The Nature Reserve, located in the municipality of Barbate and Vejer de la Frontera, in the 'la Janda' region, has, according to archaeological remains found in different sites, been inhabited by man since prehistoric times.

From these bygone beginnings, humans have had a profound effect on their natural surroundings. The majority of these alterations carried out by man were in direct response to their needs. In the case of La Breña, the main changes were fruit of two motivating factors:

1. The struggle against natural elements, in this case wind and sand, which led to the transformation of what is now La Breña into an extensive pine forest, whereas a century ago the area was dominated by the yellow colour of the sands that had spread out from the system of coastal dunes and which constantly threatened to devour everything around them.

2. Making use of products from the forest via wood-cutting, logging, pinecone collecting and grazing. Activities that were carried out under regulation and control, eventually resulting in the official protection of

this natural area upon its being declared a Nature Reserve.

We will retrace its history step-by-step, covering the park's ethnographical heritage, the words and opinions of men and women local to the area, skills and craftsmanship lost in the mists of time, traditions, myths, legends and living customs...

Starting with the origins of the park, our tour will take in five key phases of the park's history and development. It is worth looking at a geographical map of the area (showing the layout of all the old hills and dunes) and comparing it to an updated map of the park's trails, paths, installations and access points. It allows you to retrace the park's history and acquaint yourself further with this rare ethnographic heritage, so treasured by the people who inhabit these natural surroundings.

On our tour through the Parque Natural La Breña y Marismas del Barbate we will be joined by local personalities, which will allow us to learn more about the cultural history and customs of these two towns united by a Nature Reserve.





## MORE LOCAL HERITAGE

### **The Eurasian Eagle Owl**

is the wisest of all owls. He will be giving you details of local customs and history.

*Draws: Francisco Labrador Jiménez*

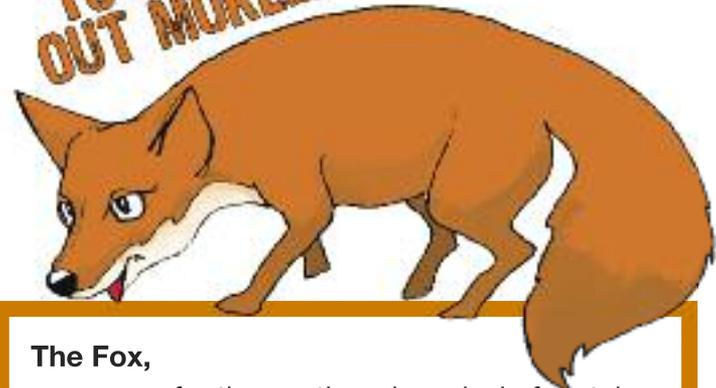


IT IS LOCALLY BELIEVED THAT...

### **The Chameleon**

will inform you on local folklore, expressions, sayings and beliefs...

TO FIND  
OUT MORE...



### **The Fox,**

necessary for the continued survival of certain species of flora ( e.g.: the coastal juniper), is an ideal candidate to show us how valuable these natural surroundings are.

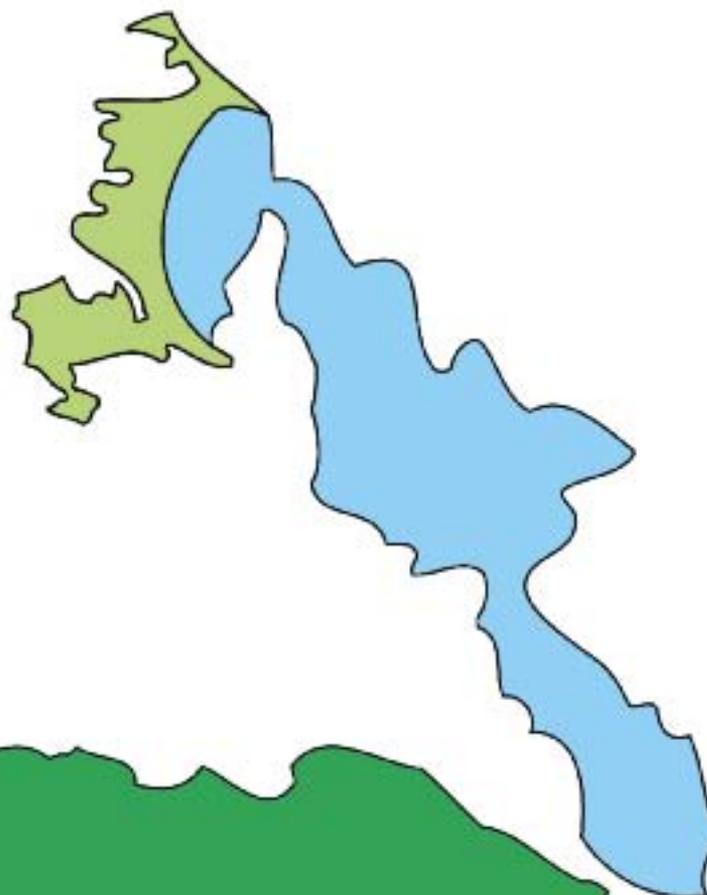
## MAP LAYOUT OF HILLS

 **Peña Cortada y Las Quebradas**  
(The Severed Peñon and The Riverbank Gullies)

 **Marismas del Barbate**  
(Barbate Marshes)

 **Breña Alta y Baja**  
(High & Low-lying Woodland/Thicket)

 **Monte Dunas**  
(Pine Forest)



Source: Red de Información Ambiental de Andalucía. Own processing.

MAP OF THE PARK



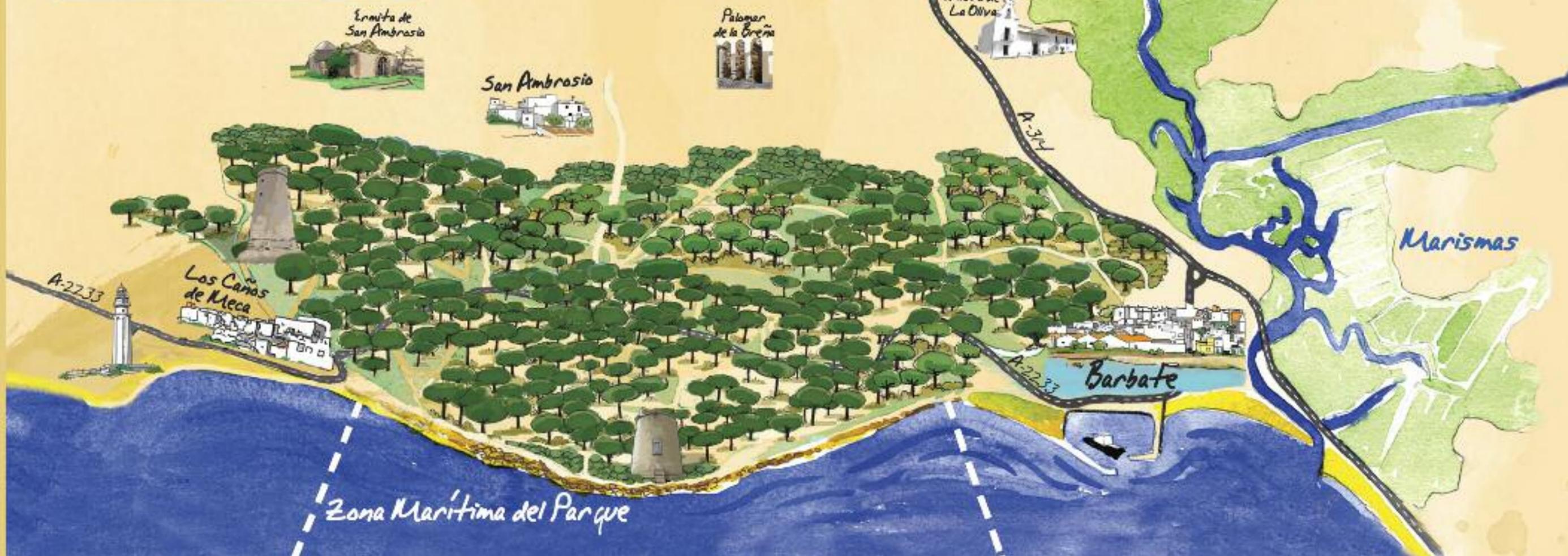
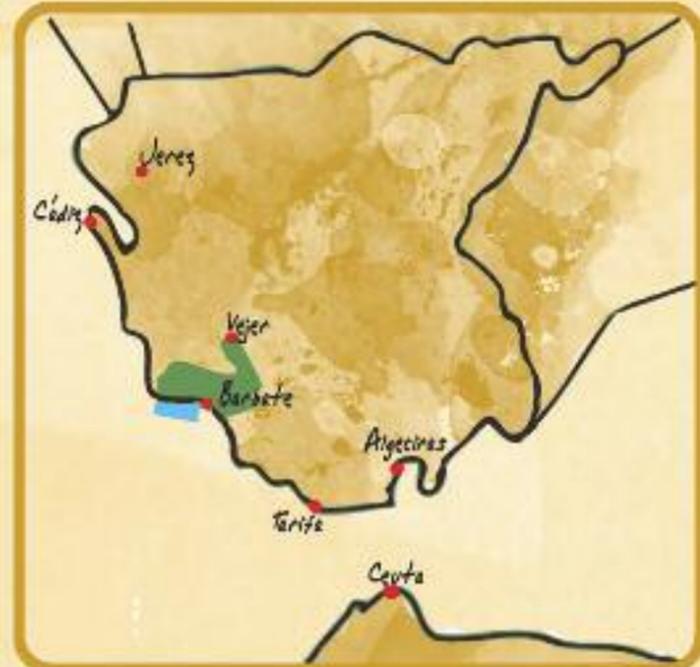
Torre de Meca



Torre del Tajo



Monumento Natural  
Tómbolo de Trafalgar



# CRONOLOGY

Wind and Sand



Creation of "Monte Dunas"



Declaration as a Nature Reserve



Second expansion:  
Montemarismas, Peña Cortada and Las Quebradas

Commencing of works to  
fix position of dunes



From communal patrimony to natural heritage



First expansion:  
Marshes of the Barbate River



1.995 2.005

1.893

1.906

1.926

1.938

1.989

10 years

## I. 1893: Sand and Wind



**W**ind, according to the dictionary, is a natural current of atmospheric air. However, in Vejer and Barbate, it means much more than that. Here, as a consequence of the powerful converging of local atmospheric forces, you find two predominant winds: levante and poniente.

The coming and going of these two winds has an enormous influence on this area, not only on the natural surroundings, but also on the lives and habits of its people, who have tenaciously adapted their lifestyles to protect themselves from, and make use of, these winds.

The wind also played a key role in the creation of the Nature Reserve La Breña y Marimas del Barbate.

By 1893, the easterly levante, a gusty and furious gale force wind that regularly whips through the local towns, had built the main dune up to a size covering 1,500 hectares. At that time, the pine forest of La Breña covered only 400 hectares and was therefore under constant threat of being invaded and buried by sand. In addition, on strong levante days, whirlwinds laden with sand would spin off the dunes and blow onto the town of Barbate causing much annoyance to local inhabitants.

As a result, in 1894 the Parks and Sand Dunes Commission recommended the bolstering and stabilising of the sand dunes by planting pines.



IT IS LOCALLY BELIEVED THAT...

### LEVANTE vs PONIENTE:

Levante come from the east, from African Sahara. It is warm and strong, and can blow night and day.

When a local feels a little off colour, he will often say “Levante’s coming!” This is due to the fact that it is an irritating wind that tends to make one feel lazy, upset or depressed. Some people suffer from headaches or show symptoms of physical tiredness. Babies are said to forecast the coming of levante: the day before it arrives they tend to sleep longer and get highly irritated when awake. Days of levante mean driving, gusty wind, heat, dust and fatigue. However, even though it can make daily life a bit of a struggle, it is generally appreciated by locals because “it dries everything out” – humidity and damp in houses, crops and grain, palm trees, fish, etc.

The elders of the area say that ‘Levante never brings any ill, unlike its westerly cousin, poniente, which is an Atlantic westerly wind, more moderate than levante, but rather chilly and humid. The poniente wind tends to drop in strength as the sun goes down.



## MORE LOCAL HERITAGE

### THE GRAIN MILLING INDUSTRY

In the nineteenth century the grain milling industry started taking advantage of local winds by erecting windmills in and around Vejer. Seeing that the northern Manchego model couldn’t cope with the strong local winds, they opted for the Mediterranean model, which is lower, and with thicker walls, based on, the ancient Carthaginian design, which had a slightly conical tower. Thus, the windmills began to harness the wind, and the craft of grain milling industry proliferated. (Muñoz, Ballester and Doncel, 2007).

Along with the milling of grain, (a long-extinct craft) there are other trades that require an intimate knowledge of local winds and their effects on the surroundings, such as that of the Boatwright,- riverside carpenters who hand-built boats that would stand up to local wind and sea conditions.



## II. 1.906: Commencing of works to fix position of sand dunes

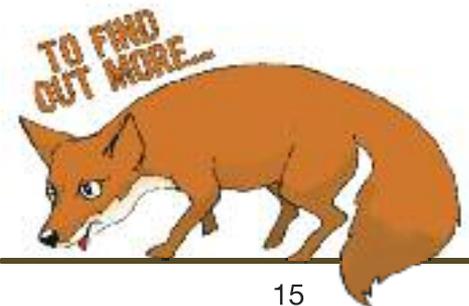
In the “Cuaderno etnográfico del Parque Natural La Breña y Marismas del Barbate”, (Ethnographical Record of the Nature Reserve Breña and Marismas of Barbate) Miguel Cueto states that “the panoramic surroundings that we enjoy today in the extensive Aleppo pine forest of La Breña are relatively new. The blanket of green that extends to the sea was, a century ago, a continuous yellow covering with some green patches” (2009,5) representing small pine groves at some distance from the coast. By 1919, the sand-covered surface had been reduced to 950 hectares, and over 200 hectares had been repopulated with pines.



Photo: Paco Bravo Rosano

### THE CLIFFS

One of the most emblematic sights in the Nature Reserve La Breña y Marismas del Barbate is that of the cliffs that overlook the shoreline, named “el Tajo.” They originated as a result of wind and wave erosion over the years caused by the poniente wind and are now over 100 metres above sea level. The wind whips up the waves and they crash against the cliff face, blasting salty foam upwards where it is blown inland by the wind in a curtain of spray, a phenomenon known locally as spray salino. At the top you have the pine forest, planted at the end of the nineteenth century. There are also plenty of coastal junipers, a species in danger of extinction.



### III. 1926: The Creation of “Monte Dunas”

The project to re-distribute dunes created by invading sands was officially underway. To contribute to the project, the Town hall of Vejer handed over 1,202 of the 2,072 hectares of its common land in “Monte Breña Alta y Baja” thus creating the “Monte Dunas” pine forest, maintaining its status as administrator of the remaining 870 hectares.

In order to carry out this project, several techniques were used to prepare the ground and lay down the required organic material, then a forest tree called the Aleppo Pine (*Pinus Pinea*) was chosen, the same species that thrived nearby in the woods of “Monte Breña”, a very adaptable species in adverse environments. This project typifies man’s struggle against the elements, in this case, sand and wind where the impending movement and shifting of the sand dunes was successfully stopped, thus safeguarding the population of Barbate (at that time belonging to the Vejer municipality) from air-born sand, whirlwinds and shifting dunes.

Already, in 1930, there were surveys that described La Breña as an adult pine grove with large trees which had clearly produced favourable results in the fixing and bolstering of the dunes.

*“One could ask nothing more of this young grove, whose existence pays tribute to the workers who brought it into being, all the more commendable when one bears in mind the gusty violence of the local levante winds that blow and shift the desolate sands. A pine grove where no trace of fire is ever seen due to precautions taken by locals” (Ceballos y Bolaños, 2,000, 112)*



#### IT IS LOCALLY BELIEVED THAT...

- “Levante that comes in the day, within three goes away”.
- “The two winds battled and held equal sway, poniente by night and levante by day”.
- “The sea wind turns your aft about; levante turns you inside out”.
- “Poniente: neither wind, nor people”.

## IV. From Communal Heritage to Natural Heritage

The extensions of forest have been object of many traditional uses, such as grazing livestock, woodcutting, manufacturing coal, etc. By the end of the nineteenth century, the majority of the wooded land around Vejer and Barbate was being exploited in some way, except for Monte Dunas and Monte Breña, which were the last areas of land administered by the Vejer and Barbate town halls, i.e.: still included in their municipal territories. Around this time, the marsh area was still generally used as pasture for grazing, although at the beginning of the twentieth century, coinciding with the growth of the fish-canning industry in Barbate, an area locally known as “Isla de San Paulino” was given over to the creation of salt flats. (Múñoz et al., 2007)

### Traditional trades and crafts now extinct

The natural surroundings today that make up the Reserve have, over the years, provided many families from Vejer and Barbate with a means of sustenance, and many trades and crafts were closely linked to their immediate environment. Sadly, most of these crafts are now extinct.



#### Las Hazas de Suerte (Lottery of Farmland Plots)

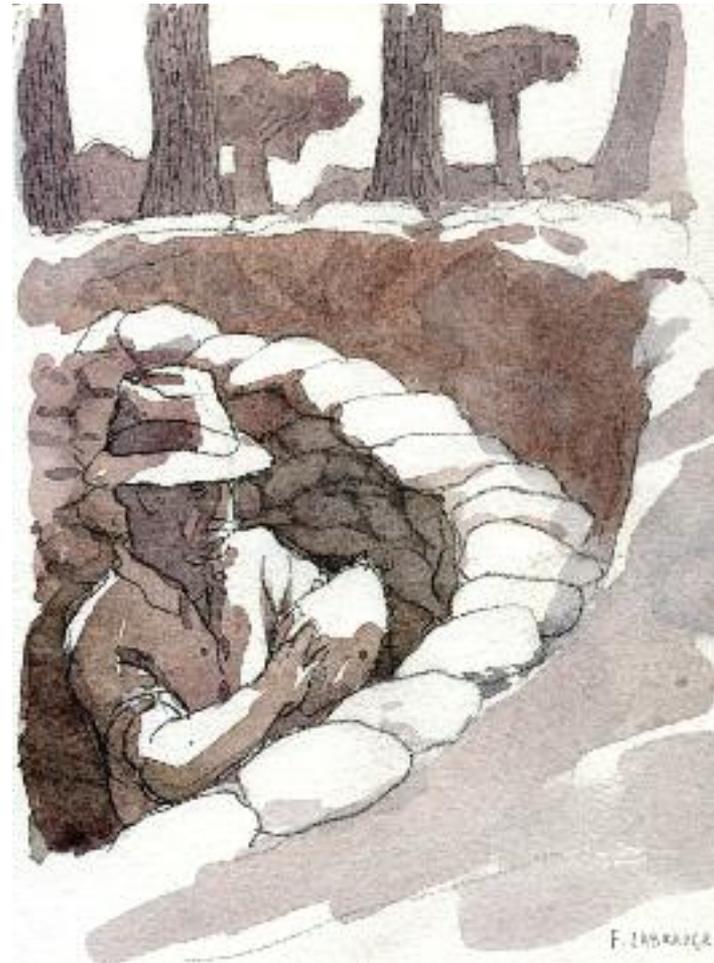
In addition to the extensions of woodland which the locals made full use of, Vejer enjoyed a special time-honoured event, unique in Spain, which is still continued to date, called “Hazas de Suerte”. This grew out of a Medieval institution, where the Townhall and the *Junta de Hazas* (“Farmland Committee”) award a plot of farmland to a townsman randomly selected by a raffle. These public raffles were held every four years. (Idem)

## Quicklime production

From *La Barca de Vejer* (located at the foot of Vejer) to Monte Breña local inhabitants set up lime kilns at locations near natural deposits of firewood and chalk. The extracted quicklime was used to whitewash walls and roofs, and as a building mortar-base for the construction of walls. These activities bespoke a wide-scale industry, existent up to a few decades ago. (Muñoz et al., 2007)

The kilns and ovens were built using refractory stone for their walls. The first task for the kiln workers was to load the kiln with the previously collected chalk and slake - which took around five days' labour. Then a fire would be lit underneath, which was fed with firewood non-stop for 48 hours, slowly baking the chalk above it. When the quicklime started to crumble, it was considered ready.

Those who purchased the quicklime would then submerge it in cold water in large earthen jars to prepare for use as whitewash.



IT IS WIDELY BELIEVED THAT...

The wispy clouds that sometimes appear on the Sierras of Tarifa, locally referred to as “barbas de levante” signify the coming of strong levante, and the thundering of rough seas is said to be the snoring of Saint Ambrosio. A soldier stationed in Vejer was said to have written to his mother, stating: *“I am in Vejer, where the saints snore and the wind grows a beard!”*



### **The Patios of the local residents.**

In the spring and summer months, when the weather gets dry, buildings, roofs and walls are whitewashed throughout the town. This domestic activity was traditionally carried out by women of the household. As well as giving the town that characteristic whitewashed look, it also provides a natural way of maintaining cleanliness and hygiene. In the older patios of Vejer, any building work, however minor, can knock off and expose the multi-layered build-up of quicklime on walls, pillars and steps. There can sometimes be up to five hundred extremely fine layers of limestone from which you could almost gauge the age of the dwelling. (Muñoz et al., 2007, 170)

## Charcoal production



In former times, stoves of burning charcoal were used to heat homes and cook stews. The first job of the coal maker was to obtain wood from the hills, usually from the lower-lying areas as this was thought to help prevent fires from spreading.

The wood they collected was arranged into a circle on the proposed site of the kiln and built up into a dome. Then fine twigs were laid on top, and the whole thing was then covered with earth.

A hollow space was left in the middle to accommodate the firewood, and several lateral openings were made to control the burning and temperature of the fire, making sure that the wood was evenly charred. This process could take up to fifteen days.

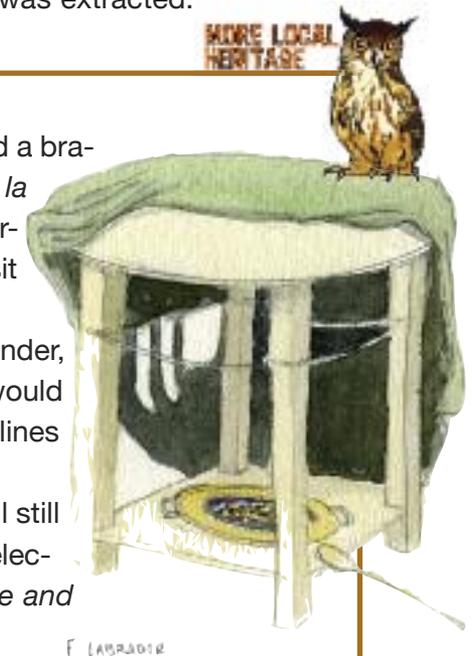
Once finished, the kiln was said to be cocido or ‘cooked’. It would take roughly a day for it to cool down. Then the charcoal was extracted.

### La copa de picón (The charcoal brazier)

Charcoal was used to keep people warm in winter time and most local houses had a brazier. Every evening, families would gather together around a circular table to “ *echar la copa*” (light the brazier). A heat-resistant oval recipient was filled with smouldering charcoal and placed in a hollow in the middle of the table base. The family would then sit round the table under a blanket, warming their toes after a hard day’s work.

Aromatic herbs were usually burnt to perfume the dwelling, like rosemary and lavender, which was often present in houses where there were newborns, and whose aroma would signal bath time and indicate the best moment to hang the washing, traditionally on lines around the brazier.

Nowadays the braziers have all but disappeared, although in many homes you will still find the old-fashioned circular table with a blanket around it – now equipped with an electric heater instead of a charcoal burner. Notwithstanding, the locals still say “*Come and warm your toes around the brazier*”.



## Collecting shellfish



In the marshes of the Barbate River it was easy to find fishermen spending their time collecting shellfish. “They were formally known as riberos (“riverside folk”), and they would use a wide range of traditional fishing techniques to secure their captures. It was fairly common for the fishermen to introduce their own personalised variations in technique.” (Conde, 2007)

Cockles, clams, winkles, prawns, etc. were caught.



### La Almadraba

The rather complicated Almadraba technique of tuna fishing goes back over a thousand years and, in Barbate, it is carried out twice a year, taking full advantage of its geographic location (between the Mediterranean and the Atlantic) where, from April onwards, the tuna migrate to the Mediterranean to reproduce and then return to the Atlantic towards the end of August. It is an amazing sight to behold from the water: the fishing boats arrange themselves into two parallel lines and drive the tuna fish into the funnel shaped nets, or copos, where they are then physically wrestled out of the net by fisherman and hauled aboard with gaff hooks. Getting the fish from the net to the boat deck is known as the levanta. It requires experienced personnel as this task is often done in dangerous currents. Larger specimens of tuna fish can reach a weight of 700 kilos and measure a full three metres.



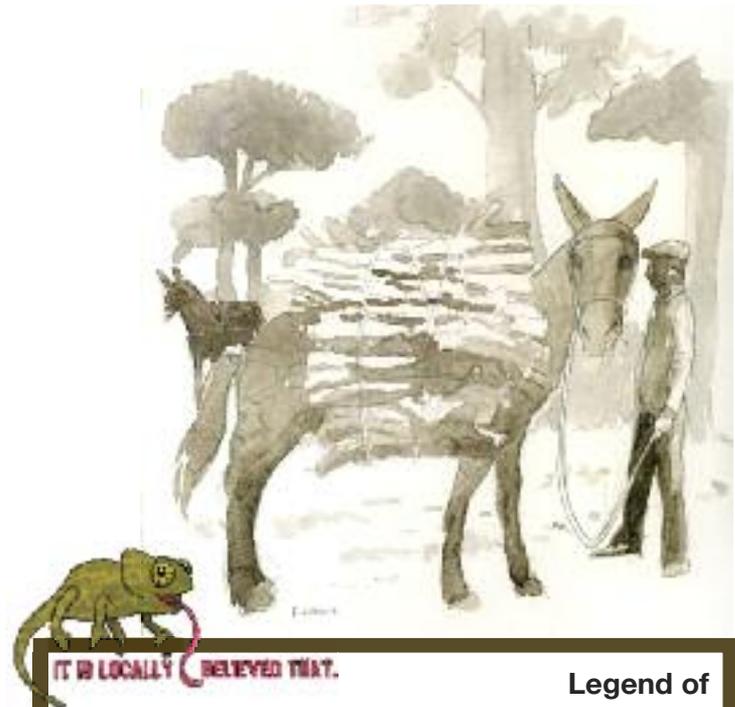
## Transportation by mule

**A**t the turn of the twentieth century, both everyday life and local trades were closely linked to their natural surroundings. Mule drivers provided a mode of transport for everyday goods that both families and tradesmen made use of. Locally, they were known as “*gente de trajín*” (folk of comings and goings), and they made a living by transporting hay, charcoal, firewood, pines, chalk, etc.

Firewood was required for everything: stoves, boilers, charcoal kilns, bakers’ ovens and domestic use. Wood was cut from different types of tree and thicket - aleppo pine, rosemary, montpellier cistus, then mixed up and tied into faggots. In the past, the pruning and collecting of wood not only provided fuel; it also helped to clear and clean the scrubland, consequently favouring tree growth, helping to prevent fires and facilitating transportation through the hills.

However, excessive pruning and clearing of land could run the risk of eliminating the protective layer of vegetation that covered the ground, in which case local habits would soon change, at the same time that firewood was no longer in such demand as fuel.

Donkeys constituted a useful form of transport and local drivers were well-skilled at negotiating the many steep hills and slopes of towns like Vejer. The animals tended to slip backwards, so ropes made from the walnut yew with loops at each end were tied around the front left ankle and run through the girth crossways to the rear right-hand ankle. This meant that if the animal slipped on a hill, it would avoid spread-eagling its legs.



IT IS LOCALLY BELIEVED THAT.

### Legend of

#### “La Fuente del Viejo” (Old Man’s Spring)

A mule driver in Vejer, on his way home after dropping off firewood in Barbate, found a new-born baby abandoned in a basket next to a spring. He picked it up and took it with him on his donkey with the idea of handing it over to the authorities. However, every time he advanced forward the load he was carrying seemed to take on more weight. Eventually, it felt like he was dragging something heavy behind him.

When he looked round he saw that the baby’s face had transformed into that of an old man. As a result, the spring came to be known as “Old man’s spring”. Nor hide nor hair was ever seen of the mule driver again. He was said to have run away in a state of fright, leaving his donkey and belongings behind. (Andariegos, 2009)

## Collecting salt

At the turn of the twentieth century there was a salt works located in an area of the Barbate river marsh known as the island of Saint Paulino. These works belonged to the “Consortio Nacional de Almadraberos” (National Consortium of Blue-fin Tuna Fishermen), and was dedicated to the salting and preservation of fish. They closed down when the tinning industry collapsed and the Consortium folded. Despite neglect, the salt works are still perfectly recognisable today in the form of “Long irrigation channels that fill with seawater from the estuary; sluice gates and locks which once served to recycle and replenish the water.” (Conde, 2.007, 115)

**MORE LOCAL  
HERITAGE**



### **The salting and fish-canning industry**

This activity can be traced back to Roman times. The industry in Barbate was dedicated to the salting and preservation of fish in olive oil. Tuna was the mainstay of this industry (thanks to local tuna-fishing technique - Almadraba), however, mackerel and Atlantic bonito (striped tuna) was also regularly caught. The National Consortium of Blue-fin Tuna Fishermen owned the most important factory in the area, which made up a significant part of Barbate's income. Women had a very important role in the fish-preservation and tinning industry as factory workers. (Idem)



Salt harvesting began in March. It was rigorous work that was carried out barefoot in adverse weather conditions, exposed to sun, wind and rain. As well as harvesting salt, the workers were also responsible for collecting fish from the breeding pools in the months of October and November. The fish were of exquisite quality, similar to fish taken from fish farms today, but with the added advantage of having been bred ecologically in natural surroundings. In fact, the Barbate River and its marshes have now been officially declared fit for the development of fish and aqua farms.

## Traditional trades and crafts that have endured to date

**The** Nature Reserve territory still bears witness to some traditional trades and crafts. Some necessary adaptations to suit modern times have taken place, but they still follow a tradition of respect towards the environment.

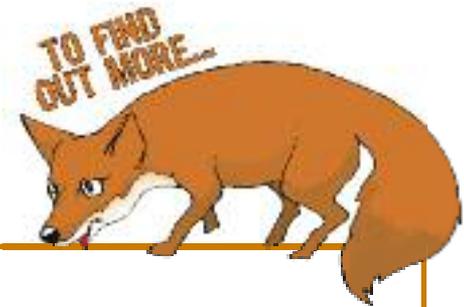
### Caring for livestock

**In** the fourteenth century, an area of local marshland was used as a pasture for grazing. During the yearly Cattle Fair of Vejer, visiting farmers would use the nearby pastures of “Monte Marismas” and “Las Quebadas” for grazing their cattle. It was said that many brought their cattle to the fair for the sole purpose of having them graze there for seven or eight days straight.

The hilly terrain of La Breña has long been used for cattle grazing, the main breed being the bovine strain: “retinta”, which adapts perfectly to these surroundings. The cowherds also affirm that the Breña benefits from the presence of cattle; they act as ‘great firemen’ due to the fact that they eliminate loose foliage in a natural, balanced way, without clearing it completely.



The mechanisation of rural farming meant that cattle were increasingly used in meat production. The natural pastures of the Reserve are mostly located in the area around Monte Marisma and Monte Dunas, and these grazing pastures, the surrounding woodlands and the proliferation of locally-bred cattle make livestock farming and stock-breeding a key activity in this area.



#### **The *Retinta* breed**

The *retinta* is one of the most common breeds of cow in the southwest of Spain. Used for agricultural means as well as for its meat, it has thrived here for centuries. One of the distinguishing features of this bovine is the reddish tinge of its hide, hence its name. It comes in several shades, *retinta*, being the darkest and *rubia* or *colorada* being the palest.

This local breed of cow takes full advantage of its natural surroundings; it thrives on fairly dry pastures and scrubland that other breeds of cow would take great difficulty to adapt to.

## Pinecone collecting and pine nut harvesting



**The** Aleppo pine forest occupies the main part of the protected area. One of the most traditional jobs carried out in the forest was the collecting of pine cones.

In 1938, when Barbate and Vejer separated into different municipalities, they divided the marshes, forest and scrubland between them, Vejer receiving 65.14% and Barbate, 34.86%. (Muñoz et al., 2007)

Pinecone collection techniques have evolved over time. Originally, collectors physically climbed up the tree to get at the cones; later on, ladders were used, which were finally substituted for *trepes* – a type of crampon with metal hooks worn on the feet.

Once the pinecones had been collected they were transported to a storage point or *piñera* in seventy-kilo sacks, which were carried by the collectors themselves or transported by donkey.

A batch of seventy kilos fetched a mere 20 *pesetas*, which translates to about 50 *pesetas* for a hard day's work.

The husks were used for roof tiles and as fuel to feed furnaces used in brick making.

The pinecones were then toasted in ovens to obtain their most valued commodity, the pine nut. This process works because the pine cone drops its nuts to the ground when exposed to extreme heat – a natural reaction that ensures survival in the case of a forest fire. The pine nuts obtained were then toasted to prepare them for human consumption.

Nowadays, pinecones are mainly harvested for their nuts. The pine nuts from La Breña are special in that



they have a very fine shell yielding a large, succulent nut.

This harvesting process benefits the locality in two ways: it helps to reduce natural plagues and infestations in La Breña, and it provides work in a season that sees other activities become scarce.

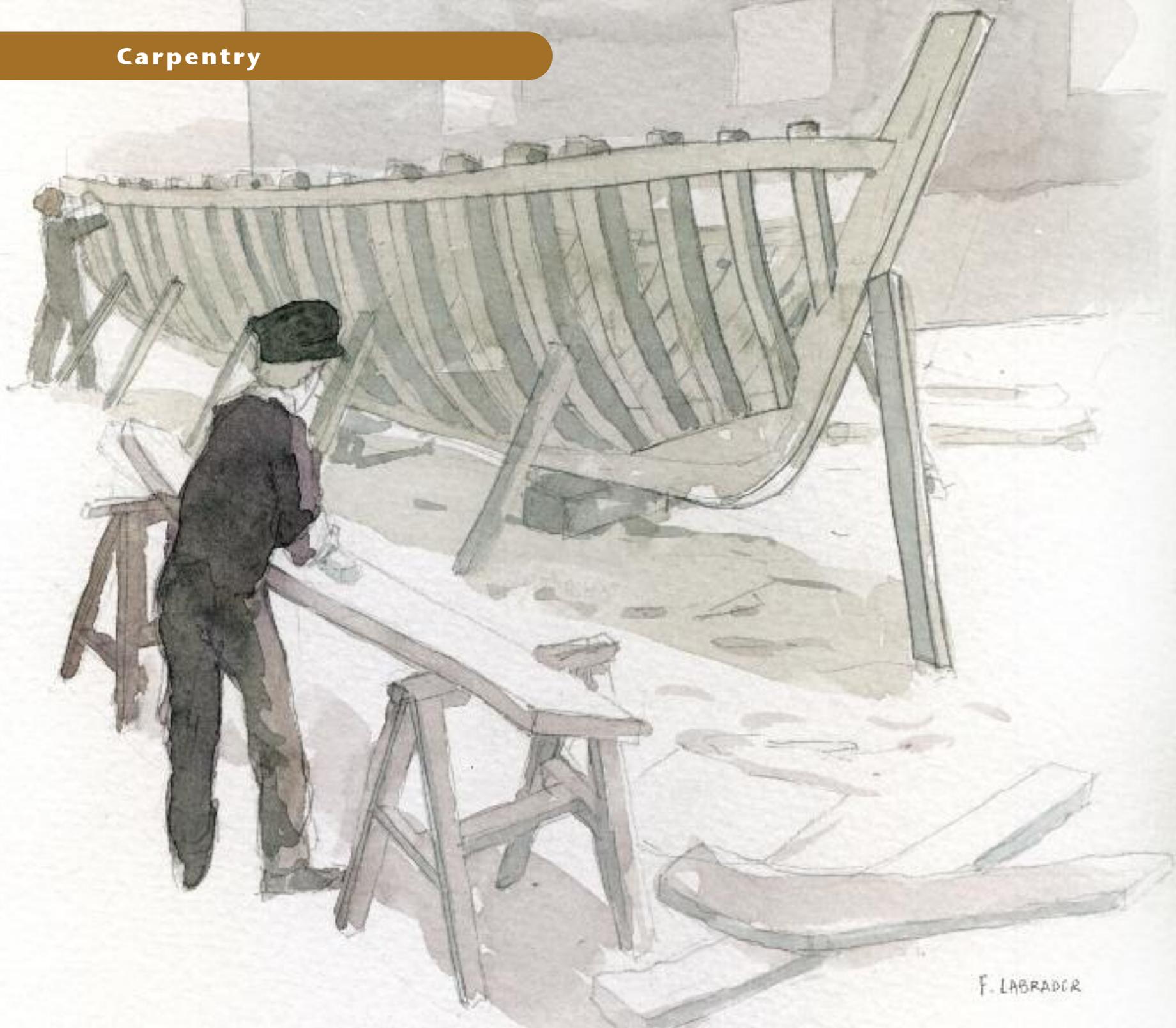


### **The aleppo pine**

It is thought that this species of pine originated in Crete. It dates back to the first civilisations that settled in the Iberian Peninsula and it would have adapted perfectly to this environment. It is also known as “pino de la tierra” or earth pine, to differentiate it from other strains. It is thought to be the only type of pine that has proliferated without human intervention. (Ceballos y Bolaños, 2000)



# Carpentry



F. LABRADOR

**A** boatwright is a riverside carpenter who builds wooden boats by hand using a traditional method, locally known as quilla cuaderna y forro (“keel, double fours and lining”); a trade which developed in Barbate just after the turn of the twentieth century as a result of the need for increasing numbers of fishing boats. Pine wood from La Breña was used, which was very water-resistant.

In former times, these highly-skilled carpenters could almost build a whole boat out of just one tree trunk. The branches obtained from stripping activities were used for keels as the wood was naturally curved.

The Barbatian boats were built in a similar way to the northern Spanish Cantabrian boats, but certain features are different.

*“A whole generation of traditional vessels was designed and constructed by highly-skilled riverside carpenters.”* (Conde, 2007, 114) Nowadays, synthetic materials have all but replaced wood, which means that the riverside carpenters now earn a difficult living by repairing wooden boats and building small vessels to order.



### **La Traiña (The Trawler)**

This type of embarkation made up the majority of Barbate’s fishing fleet at the turn of the twentieth century. It is a small vessel that was traditionally used for fishing in the Cadiz bay. Over the years, there have been certain changes in its design: it is now bigger (it has a larger cargo hold); the bridge, previously inexistent, occupies the central part of the boat. Nowadays, you will find fish-detecting apparatus and mechanical winches for tacking, which were formerly carried out by hand. (Idem)

## Palm weaving and basket weaving



In former times, “*everything was handmade and everybody was a craftsman of some sort*” (Trigo, master palm craftsman). This quote gives us an idea of how palm weaving, like other skills, was an integral part of everyday life for families in and around Vejer and Barbate.

The raw palm was collected in spring, which, if carried out correctly, respects the natural cycles of its growth. Next, it was left to dry, away from humidity for a month or so where it took on that characteristic toasted colour. It was then kept in a dry storage place.

The first task, when it came to harvesting palm, was a process known as *ripiar*, in which the protruding branches and leaves on the sides of the palm were shaved off, leaving the stalks smooth and straight. They were then woven into plaits (in a 5,9,11 pattern). Following that, a large needle was used to sew them together using threads made from twisted palm leaves, or *tonizas*. Using this process local weavers and basket makers produced woven mats, sets of curtains, hampers, baskets and many other items.

The only pattern that used four stalks was called *de piquito*. It is a much more laborious task than the odd-number pattern and was traditionally undertaken by women to make decorative items such as hats and handbags, etc. Nowadays, palm weaving is considered a traditional craft, and although it no longer plays a part of everyday life, you can still find an array of different palm-woven articles in shops and households, which retain the colour and odour of the local countryside.

## V. Declaration as a Nature Reserve and expansion

**O**n 28th July, 1989, the hilly terrain of “Dunas de Barbate” and “Breñas Alta y Baja” covering 2,017 hectares, plus the mile-long stretch of coastline, received official status as a Nature Reserve, under the name: “Parque Natural del Acantilado y Pinar de Barbate”.

The awarding of status as a Nature Reserve means a new organisation of its resources, with no limit placed on its development, whilst ensuring its protection as a balanced natural environment, with the aim of promoting green tourism and furthering the economic and social progress of this area.

### 1.995 First expansion

**T**he marshes of the Barbate River are the only remains of the former Janda lagoon, which measured almost 4,000 hectares, making it the largest of the Iberian Peninsula and the most important interior wetlands of Europe, in relation to the migratory bird crossing between Europe and Africa.

The Janda lagoon was drained for agricultural purposes in the 1960s, which altered the river bed and the marshes.

By incorporating it in the Reserve, the protection of this extremely valuable ecosystem is achieved, avoiding its abandonment as an unproductive and unhealthy area especially since the marshes of Barbate continue having special importance for birds, housing important colonies of endangered birds – resident and migratory – that find refuge and food in the scarce remnants of wetlands which currently persevere and the agricultural and forest systems that surround them.

## 2.005 Second expansion



Foto: Consejería de Medio Ambiente de la Junta de Andalucía

**The** Barbate and Vejer town halls apply for the incorporation of the “Monte Marismas” (co-owned by the two town halls), plus “Monte Quebradas” and “Peña Cortada” (owned by the Vejer town hall) into the “Parque Natural de Breña y Marismas del Barbate.”

The surface area is increased by 357 hectares make a total of 5,077 hectares, which is what the park measures today.

The National Park is deemed as a Special Protec-

ted Area for birds (ZEPA) and Nominated Site of Community Importance, forming part of the Red Natura 2000 (Nature Network 2000).

It has been a hundred years since the first trees were planted, turning the coastal area of dunes into pine groves. They have made the terrain more stable and have fostered the growth of complex ecosystems housing a diverse range of flora and fauna.

## VI. Quality of life



Formally, those who frequented the area of the Nature Reserve went there to work, to look for jobs that would complement their meagre income at home, or to subsist on nature in times of scarcity.

Nowadays, things have changed for the better. One of the main benefits afforded to local inhabitants and visitors is an improved quality of life. People now, instead of going to the Breña to work, go to stimulate their senses and enjoy the privileged natural surroundings.

Next, we will run through some of the main points of cultural interest of the park's heritage that will help to enrich your vision, sharpen your hearing, add texture to tact, and diversify your sense of taste and smell. Natural treasures that make these privileged surroundings something different. An environment steeped in history which has witnessed the comings and goings of man since time immemorial.

## La Breña TEACHES US: Artistic, Historic and Archaeological Heritage

The protected area of La Breña has always been considered historically important due to the constant presence of settlers dating back to prehistoric times.

### THE MOORISH TOWERS

La Torre de Meca and La Torre del Tajo form part of a network of towers that overlook and protect the local Cadiz coastline. Their main function was to guard the coast and transmit signals. They occupy prominent positions overlooking the coast and constitute first class lookout points for viewing the panoramic surroundings.

LA TORRE DEL TAJO, also known as Torre Nueva and Torre de la Tembladora (Tower of the Stingray) dates back to the sixteenth century and was originally built to defend the “el Cabo de la Tembladora” (Stingray Cape). It is located on the highest point of the cliffs.

LA TORRE DEL MECA, also known as Torre de la Breña and Torre Romeral (Rosemary Tower), was built in the nineteenth century to resolve difficulties created by lack of visibility between Torre del Tajo and the Cape of





Trafalgar. It is located in the most westerly point of the park, above el Cerro de Meca, at a height of 162 metres. (Conde, 2007)

### **THE HERMITAGE OF NUESTRA SEÑORA DE LA OLIVA (Our Lady of the Olive tree)**

A basilica Christian church was built over the grounds of an ancient Roman villa in the year 678. In the mid-fourteenth century the hermitage was dedicated to “Nuestra Señora de la Luz” and by the end of the latter half a brotherhood of followers had formed under the name of “Santa Maria de la Oliva”. Towards the end of the eighteenth century the old hermitage was demolished and rebuilt. The hermitage is very well preserved and represents an important part of local artistic heritage, as well as being home of “Nuestra Señora de la Oliva”, the Patron Saint of Vejer de la Frontera.

### **THE HERMITAGE OF SAN AMBROSIO**

This was originally a Visigoth church built over the remains of an ancient Roman Villa in the seventh century A.D. It was consecrated in 644 AD and subsequently reformed. Today, we find the hermitage in an extreme state of decay. The small chapel to one side is less deteriorated due to the fact that, until recently, there was an image on display of Saint Ambrosio, who was highly venerated by the local population. (Conde, 2.007)



Photo: Isabel Mateos Vela

### **CORTIJO DE LA PORQUERA (Swineherder's Farmstead)**

There are some very interesting archaeological remains linked to cattle herding and agricultural activities in the Nature Reserve. The most significant of these is the “Cortijo de la Porquera”, the biggest rural edification to be found in the river valleys of *Mondragón* and *San Ambrosio*, which represent the northern limits of this natural parkland. This estate, now open to tourists, houses a most interesting pigeon coop, notable for its well-preserved state and its enormity. It is probably the largest in Andalusia and dates back to the eighteenth century. It was subsequently extended in size to allow for the production of fertiliser.

### **ARCHAEOLOGICAL REMAINS**

In the records of the *Sistema de Información del Patrimonio Histórico de Andalucía* there is an inventory of over ninety archaeological remains within the municipalities of Vejer and Barbate, and some of them are inside the park.

#### **Roman remains: the Hermitage of San Ambrosio**

Excavations have certified the existence of a Rustic Villa dating back to the period between 200Bc and 200Ad. As can be seen from the remains, wheat was cultivated and ground into flour. They also show that wine was also possibly produced.

**Roman remains: Huerta de Santos:** In these Roman ruins parts of a ceramic oven were discovered, with plenty of amphora for cooking. (idem)

**Roman fish-salting factory:** The Romans used to have two factories, one in Cape Trafalgar and the other one in Caños de Meca (now buried under sand) which date back to the period between 100bc and 200ad. (idem)

**Visigoth remains: Pabellón.** There is said to once have been a Visigoth necropolis located five hundred yards from the Hermitage of Saint Ambrosio. This area abounds with such anecdotal tales. Locals were also said to have stolen stones slabs from tombs for personal use.

**Roman remains: Cerro de Bújar** is located in the river marshes of Barbate. Numerous relics dating back to Roman period have been unearthed here (Idem) In the records of the *Sistema de Información del Patrimonio Histórico de Andalucía* there is an inventory of over ninety archaeological remains

## La Breña CUISINE: Local Gastronomy



**In** this part of Spain, it is traditional for friends, workmates and families to gather together to cook and eat in big groups, which are invariably social events with a festive ambience. With this in mind, the park has been equipped with specially-prepared picnic zones, where you will see groups of people enjoying typical local dishes made with rice, omelettes, etc...

A lot of ingredients used in traditional recipes are taken from the surrounding countryside and you can see many locals picking wild asparagus, mushrooms, snails, wild chard, etc.

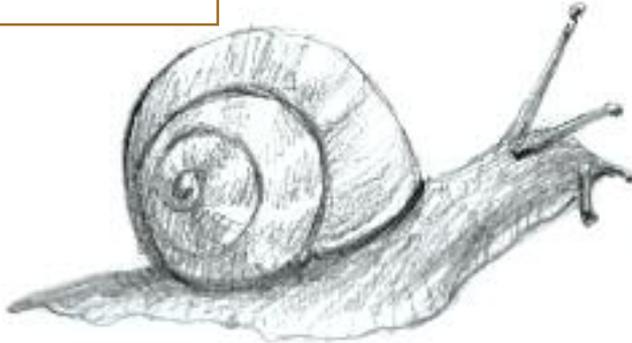
They are skilled pickers who respect the park's natural flowering cycles, animals and local plant life; people who know how to harvest and protect nature at the same time.

If you are interested in traditional picking methods, talk to the elders of the town - who, as well as telling you where, when and how to pick - will awaken your curiosity with anecdotes and facts on traditional culinary customs linked to the Nature Reserve.

Below, you will find some traditional recipes based on locally-harvested ingredients, including the acclaimed local fish and seafood.

## Snails in broth

**Difficulty:** medium  
**Preparation:** 1 hour  
**Cooking:** 1 hour



**S**nail season usually runs from the beginning of May to the end of July. Snail collecting is an age-old tradition that is carried out in the afternoon and evening. It used to be an enjoyable social event for the local muchachas (country maidens) who gathered in groups to go off snail collecting in the countryside. Once collected, they were dropped through a *criba* (sieve) to sift out the smaller ones.

### INGREDIENTS

Snails.

1 onion.

1 head of garlic.

A spice bag, or *muñequilla* of snail spices, made with fennel, mint and chilli pepper.

Salt.

### PREPARATION:

1. Wash and rinse the snails thoroughly with abundant water and salt several times until the snail is free

of grit and slime. This process should be done meticulously.

2. Simmer the snails in a large pan of water for twenty minutes, during which, the snail should come out of its shell (locally referred to as *gaitando*)

Then boil on a high flame and sift off the froth that is produced until the broth becomes clear.

3. Season it by adding: the spice bag, chopped onion and garlic and boil the snails until they are cooked.

4. Remove the spice bag and serve the snails on a dish or in a bowl.

### IT WILL HELP YOU TO KNOW THAT...

Snails are an excellent source of nutrition thanks to their high levels of proteins: 12% to 16%. Furthermore, over 80% of their meat is made up of water, and it is very rich in minerals and vitamins.

It is advisable to leave freshly-obtained snails spread out on a piece of netting for one day in a cool, well-ventilated area. This encourages them to expel grit and excrement.

The *muñequilla* is a wrap of cloth which acts as a filter, filled with herbs and spices and tied off with a thread. It flavours the broth whilst leaving it clear of bits.

To prevent the snails from climbing out during cooking, the edges of the pan are rubbed with raw lemon juice.

## Potaje de tagarninas (wild chard stew)

**Difficulty:** very  
**Preparation:** 20 minutes.  
**Cooking:** 1 hour



**T**agarnina (a type of wild chard) comes into season in January at the same time as the wild grasses, and is collected throughout the winter by locals.

It is a rather thorny plant, which means you have to pick it by cutting through its base with a knife. Once collected, you slice off the spiny bits, leaving the pulpy part exposed.

### INGREDIENTS

Half a kilo of *tagarninas*.

Quarter of a kilo of pork or hock of beef.

1 large knob of lard and a small glass of olive oil.

Half an onion.

One cupful of chickpeas.

Threes cloves of garlic.

Salt to taste.

### PREPARATION:

1. Peel and clean the *tagarninas*, chop the stalks into small chunks and wash them thoroughly in water until they are free of earth.

2. Prepare the stew by placing the chopped *tagarninas*, the meat, the lard, the olive oil plus diced onion and garlic (to taste) into a pressure cooker. Add water up to the halfway mark and season. Pressure-cook for one hour.

3. The last touch: Remove the lard and meat and place it on a separate plate as an accompanying side dish. Pour the *tagarnina* stew into a large serving dish and serve hot.

### IT WILL HELP YOU TO KNOW THAT...

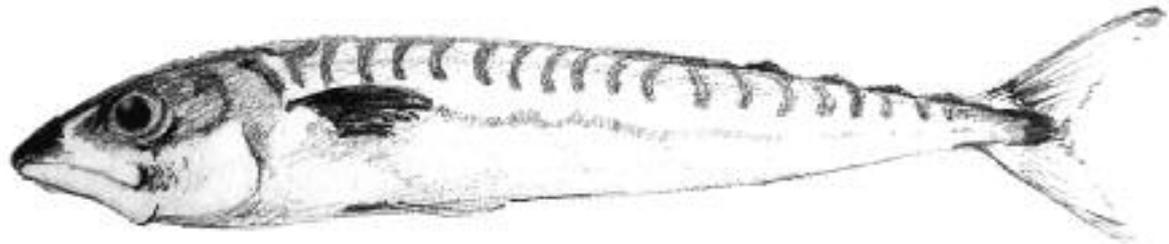
This local variety of wild chard, or *tagarnina*, once cleaned, can be frozen both raw, and after boiling in salted water.

The chickpeas should be left to soak in water overnight to prepare them for cooking.

The *tagarnina* plant flowers in May and June, which means you can't go picking in either of these two months.

## Caballa con fideos (Mackerel with noodles)

**Difficulty:** none  
**Preparation:** 30 minutes  
**Cooking:** 1 hour



**M**ackerel can be prepared in a variety of ways and is present in many traditional recipes such as this one. Smaller sized fish are generally considered better quality. This fish falls into the 'blue fish' category and is very popular thank to its succulent flesh and delicious taste.

### INGREDIENTS

Half a kilo of mackerel fish.  
1 packet of thick noodles.  
1 large tomato.  
1 pepper.  
1 medium-sized onion.  
2 cloves of garlic.  
Laurel, saffron, olive oil, water and salt.

### PREPARATION:

1. Finely chop the onion, pepper and garlic and add the laurel and saffron. Fry gently until onions are golden (*sofrito*). Put to one side.
2. Lightly boil the mackerel in salted water and remove, putting the broth aside for later use. Gently break the fish into chunks by hand and remove any

spines.

3. Pour the fish broth into the frying pan with the lightly-fried vegetables, add the noodles, cover, and simmer for 5 minutes.

4. The last touch: add the mackerel and continue cooking until the noodles are ready. Place in a large serving dish and serve hot.

### IT WILL HELP YOU TO KNOW THAT...

Mackerel is a fish that starts to show symptoms of going off within a few hours of its capture. As a shopper you are advised to look for shiny skin and firm consistency.

Whatever method you use to prepare this fish, never bother trying to remove its skin because it is virtually 'glued' to the flesh and is very tricky to separate.

Blue fish like mackerel are rich in Omega-3 acidic oils, which help to reduce cholesterol and triglyceride levels in the blood stream.

## Caramelised pine nuts

**Difficulty:** medium  
**Preparation:** 10 minutes  
**Cooking:** 15 minutes



### INGREDIENTS

Ten teaspoonfuls of sugar.

100 grams of Breña pine nuts.

### PREPARATION:

1. Make golden-coloured caramel by slowly heating sugar in a pan – take care not to burn it.
2. Pour in the pine nuts and stir with a wooden spoon.
3. Remove from flame and spread evenly over baking paper or a ceramic surface rubbed with oil. Let it cool.
4. The final touch: chop into chunks and delight your friends with this pine nut delicacy.

### IT WILL HELP YOU TO KNOW THAT...

Pine nuts are rich in proteins, essential oils and minerals.

The protein content of an Aleppo pine nut is similar to that of a peanut or a lentil, which is superior to that of soya.

Pine nuts are rich in essential oils such as oleic acid, which play a vital role in maintaining healthy circulation and reducing cholesterol levels.

The pine nuts of La Breña are renowned for their large size and white colour. They don't have blackened ends like so many other imported pine nuts.

## La Breña CURES: Ethnobotanics

**The** science of Ethnobotanics is the study of the role of plants and herbs in past and present societies over history. Society, with its socio-economic activities and politics, has always benefited from its dynamic relationship with the plant world, obtaining everything from medicines to tools and decorative items.

In the Parque Natural La Breña y Marismas del Barbate, local plants and herbs have always been, and still are, a part of local culture, and many today still swear by their properties and cures.

We will introduce you to some of these plants, their medicinal properties, traditional uses plus some other interesting facts and relevant data.

**ROMERO**, *Rosmarinus officinalis* L. (Rosemary)

*Romero*, or rosemary, is a perennial green bush with brownish branches that can reach a height of around two metres. It survives in most environments and usually forms part of the brushwood that thrives in dry, arid environments. It flowers all year round and is regularly cultivated as an ornamental and aromatic plant.

In Andalusia, the rosemary plant is linked to the magic of falling in love: young couples declare their love for each other by handing over sprigs of rosemary.

The nectar obtained from this plant is excellent food for bee farming. Bees prefer it to anything else and produce exquisite honey as a result.

Its medicinal uses are indicated for hypertension and chest colds.



**LAVANDER O CANTUESO**, *Lavandula stoechas* L.

This is a bushy shrub around a metre tall, covered in protruding, spiky, violet flowers. It tends to grow near thyme and the montpellier cistus, and it is generally cultivated for use as an ornamental plant.

In some places, it is believed that if you wear a sprig of lavender when you are outdoors under stormy skies, you won't get hit by lightning.

Medicinally, it is used as an antiseptic and healing agent for cuts.

**RUSCO**, *Ruscus aculeatus* L. (Myrtle)

Myrtle, also known as *arrayán* produces an intensely red-coloured berry. It grows in the lower-lying areas of the forest, preferring shade and damp to sunlight.

Greeks and Romans all gorged themselves on these soft berries, much as locals do today on asparagus. In some places, the dried twigs obtained from this shrub were bound together for use as brooms. In medieval times, its twigs and branches were used to cover meat and select foods because the thorns frightened off rats, at that time so feared for spreading plagues.

It was also widely used to stimulate appetite before a meal as well as a diuretic. It has the peculiar effect of strengthening capillary blood vessels, hence its use in treatment against haemorrhoids and varicose veins. Tea made from its root is supposed to alleviate fever and boiled root broth mixed with lemon juice supposedly combats gallstones.

It also eliminates termites.



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ASOCIACION PARA EL DESARROLLO  
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