

## *The Botany of the Devesa*

### WALK

#### ROUTE

The walk runs around the area known as *Pla de Na Sanxa* (Sancha's clearing), which is located to the south of the *Gola de El Pujol* (El Pujol Canal). The route goes through the inland dune system, an area of stable dunes populated by dense scrub and pine.

#### LENGTH OF THE WALK

Approximately 800 metres.

#### DURATION

Approximately 45 minutes.

#### WHAT TO DO

- \_ RESPECT THE PLANTS AND ANIMALS. Do not pick flowers or leaves.
- \_ RESPECT THE SOUNDS OF NATURE. Do not make noise.
- \_ DO NOT LEAVE YOUR LITTER BEHIND. Use the bins and containers provided.
- \_ DO NOT LIGHT FIRES.
- \_ KEEP TO THE MARKED PATHS AND TRACKS.
- \_ DO NOT GO BAREFOOT. Use appropriate footwear for walking.

#### USEFUL NUMBERS

DEVESA-ALBUFERA SERVICE	96 161 03 47
EL SALER FORESTRY PROTECTION CENTRE	96 183 00 12
FIRE AND EMERGENCY	112



# THE BOTANY OF THE DEVESA WALK



## STOPS ALONG THE WAY

- |   |  |
|---|--|
| <b>1</b> PLA DE NA SANXA  | <b>6</b> THE MARITIME PINE AND SARSAPARILLA              |
| <b>2</b> MEDITERRANEAN "MAQUIA" (SCRUB)                                     | <b>7</b> WILD TEA, THE ROCKROSE, AND THE KERMES OAK      |
| <b>3</b> THE MEDITERRANEAN FAN PALM, THE MYRTLE AND THE PALESTINE BUCKTHORN | <b>8</b> THE MASTIC AND THE NARROW-LEAVED CISTUS         |
| <b>4</b> THE ALEPPO PINE AND THE EVERLASTING                                | <b>9</b> ROSEMARY, THE ITALIAN BUCKTHORN AND HONEYSUCKLE |
| <b>5</b> HEATHER, ALBAIDA AND THE FALSE OLIVE                               | <b>10</b> THE SEA GRAPE AND KUNAI GRASS                  |

## 1st Stop

### PLA DE NA SANXA



The first reference related to *Plà de Na Sanxa* (Sancha's clearing) dates from the end of the 14th century and mentions a woman, Sancha, who was authorised to graze her cattle and goats in this clearing.

Later, in the novel *"Cañas y barro"* by Blasco Ibáñez, there is the legend of "Sancha and the Goatherd". According to the author, in this clearing there lived a goatherd whose only friend was a small snake that he called Sanxa. Every day he would give her a bowl of milk from his goats, and he would play with her. The people of the place were terrified when they saw Sanxa with the goatherd, and when she wrapped herself around his body. The goatherd had to go to war, as a soldier, and he was away for some years. When he returned, Sanxa had grown considerably and when she saw her friend she wrapped herself around him as before and asphyxiated him.

## 2nd Stop

### MEDITERRANEAN "MAQUIA" (SCRUB)



The characteristic vegetation of the Devesa is the dense Mediterranean scrub known as "maquia".

The term "maquia" (from the Italian "macica") is originally a Corsican word which is used to refer to Mediterranean vegetation made up mainly of tall bushes of more than 2.5 metres high and generally hard perennial leaves (sclerophyll). The word "maquis", used to describe a person who lives a clandestine life, hidden in an area of dense vegetation, has the same origin.

The dense scrub, made up of Kermes Oak, Mediterranean Fan Palm, False Olive, Mastic, and Italian Buckthorn, among others, is one of the most interesting and characteristic plant communities of the Devesa. Normally this scrubland is found together with pine forest, usually made up of Aleppo Pine, and to a lesser extent Maritime Pine.

## 3rd Stop

### THE MEDITERRANEAN FAN PALM, THE MYRTLE AND THE PALESTINE BUCKTHORN

Among the tangle of vegetation that can be seen at this point, the Mediterranean Fan Palm, the Myrtle and the Palestine Buckthorn are particularly worth noting.



**The Mediterranean Fan Palm (*Chamaerops humilis* L.)**, also known here as the *Margalló*, is the only palm that is native to continental Europe. It is usually small but can, in some cases, reach 3 metres high. It has a fibrous trunk, and the heart is eaten in salads, though it cannot be extracted without killing the palm.

The Mediterranean Fan Palm produces small round dates, which are not edible for humans, but are eaten by some rodents.

For centuries people have used its fan shaped leaves to make objects for domestic use, such as brooms, baskets, hats and bags.

From the middle of the 19th century, when the crafts that used the Mediterranean Fan Palm were industrialized, the demand for this plant increased considerably. Currently, with the appearance of synthetic products (plastics) the plant is no longer used for these purposes.

**The Myrtle (*Myrtus communis* L.)**, also known locally as *Murta*, is an aromatic bush that can grow to up to 5 metres in height. Its leaves are a brilliant green. The white flowers grow from the leaf axils (the joint where the leaves meet the stem). The whole plant is very fragrant and aromatic.



The leaves and berries, called "*murtones*", are used to prepare an aromatic tonic wine that is very agreeable to the palate.

The plant also contains an alcohol, myrtol, with balsamic, antiseptic and sedative properties, and for this reason it has traditionally been used in the treatment of lung and bronchial ailments.

Traditionally, the branches are used in many villages to prepare, in fiestas and processions, the so-called "*enramades*" which are carpets of branches that are spread in the streets to perfume and decorate them for festivals and processions.

**The Palestine Buckthorn (*Rhamnus oleoides* L.)**, also known as *Arçot*, is a bush that can reach 3 metres in height.



The berries are round, initially green and later turning black as they ripen. Its stems and branches end in strong thorns.

We can sometimes see lizards, grasshoppers or other insects and small reptiles stuck on these thorns. This is because the shrike (a small bird) uses the bush to hold its prey while it eats it, and as a larder (it kills them in times of abundance and stores them for times of scarcity).

## 4th Stop

### THE ALEPPO PINE AND THE EVERLASTING

At this point the route passes through an area where there used to be a car park, and where pines have now been planted.

**The Aleppo Pine or White Pine (*Pinus halepensis* Mill)**, is the most abundant variety of pine in the Devesa. It has a great capacity to adapt to areas with extreme conditions. It is called the White Pine, because as it gets older its bark turns a whitish colour.



It is easy to recognize due to its small needles and because the cones stay on the branches even when they are open and dry.

In spring, when it flowers, the male flowers produce a large quantity of pollen. It is therefore very common in that season to see the ground in the Devesa covered in yellow powder, as if it had been dusted with sulphur.

The wood is very resinous and hard, so that its use for carpentry is very limited. Its bark is one of the pine barks with most tannins and it has therefore been used

to cure leather. Like other pines, it is a source of turpentine, which is used to make white spirit. It is also used to extract aromatic essences to make bath salts.

**The Everlasting (*Helichrysum stoechas* L.)**, also known locally as *Mançanilla borda*, is a small perennial that grows up to 50 centimetres high and has very narrow leaves. It has a very particular smell and its bright yellow flowers grow in groups. It flowers in spring.



The petals, dyed with different colours, are used to create the tapestry of the *Virgen de los Desamparados* (Our Lady of the Forsaken) each year in May, in the city of Valencia, to celebrate the festival of the patron saint.

## 5th Stop

### HEATHER, ALBAIDA AND THE FALSE OLIVE

Here we can see three shrubs that are also typical of this particular ecosystem. From smaller to larger they are Heather, Albaida and the False Olive.

**Heather (*Erica multiflora* L.)**, also known locally as *Petorret*, is a small shrub which can grow to over a metre in height. It has very small narrow leaves grouped in threes. The pink flowers are grouped at the end of the branches. It flowers in winter and can be seen in the clearings of the scrubland of the Devesa.



Due to the beauty of its flowers, it is cultivated as an ornamental shrub. The wood of the root is still used to make pipes and oil lamps.

**Albaida (*Anthyllis cytisoides* L.)**, also known here as *Albada* or *Botja Blanca*, is a shrub with whitish leaves and branches. It flowers in spring. Its yellow flowers form ears at the end of the branches. It is abundant throughout the open scrubland of the Devesa.



**The False Olive (*Phillyrea angustifolia* L.)**, also known locally as the *Aladern de fulla estreta*, a shrub that can grow to over 4 metres in height. It looks very similar to the olive though its leaves are smaller. Its berries, which are small and black when ripe, are food for many birds in the Devesa. It is very common in all low-lying Mediterranean scrubland. It flowers from February to April.



The False Olive and the Italian Buckthorn are the species that characterize the *maquia* of the Devesa, and belong to the *Phillyrea-Rhamnetum angustifoliae* plant community.

## 6th Stop

### THE MARITIME PINE AND SARSAPARILLA

At this point we can see an example of Maritime Pine, together with the spectacular Sarsaparilla which wraps around other shrubs.

**The Maritime Pine (*Pinus pinaster* Aiton)** is a tree with a pyramid-shaped canopy. It has a thick trunk, with rough cracked bark. The pine cones can reach up to 20 centimetres long. The needles can also grow very long, to almost 25 centimetres, and this means that birds do not nest in the tree.



The tree was introduced to the Devesa at the start of the 20th century. It has not adapted well to the area which explains its progressive disappearance.

**The Sarsaparilla (*Smilax aspera* L.)**, also called *Aritjol* or *Parrilla* locally, is a trailing vine with snaking prickly stems. The heart-shaped leaves are hard and shiny, sometimes with spiny edges and two tendrils at the base, which the plant uses to climb trees and shrubs.



The berries, which grow in bunches, like grapes, are used to make a refreshing drink, *Sarsaparilla*, which was drunk a lot in Spain before the arrival of cola drinks. It is currently used as flavouring for soft drinks, ice creams and cakes in general.

## 7th Stop

### WILD TEA, THE ROCKROSE, AND THE KERMES OAK

Among the impenetrable vegetation, three clearly different shrubs can be seen; Wild Tea, the Rockrose and the Kermes Oak.

**Wild Tea (*Osyris quadripartita* Salzm)**, which is known locally also as *Ginestó valencià*, is a semi-parasitic shrub with green-yellow leaves. It flowers in spring and its flowers turn into orange berries.



It is common in the scrubland in the Devesa, and it tends to be found on the crests of stable dunes.

**The Rockrose (*Halimium halimifolium* L.)**, also known locally as *Estepa d'arenal*, is a shrub that grows in the less populated areas of the dunes in the Devesa. Its leaves and stems tend to be grey because of the number of small hairs that grow on the stems. Its flowers, which are yellow with five identical petals, appear in May and June. In some specimens a purple stain can be seen on each of the petals.



Locally it is known with the name of *herba dels esperits* (the herb of the spirits), since its branches and leaves were burned to ward off evil spirits, when anyone fell ill or was dying.

**The Kermes Oak (*Quercus coccifera* L.)**, also known locally as the *Coscoll*, or *Coscolla*, is a bush with greyish bark and prickly leaves. Its fruit is the acorn which takes two years to ripen. They are bitter and inedible, though in the past they were toasted and used as a substitute for coffee. Because of their high calorific value they were used in ovens.



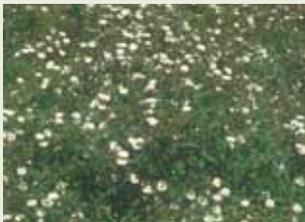
This plant used to be of considerable importance due to the role of *grana* (carmine), a red dye which was extracted from an insect, the cochineal, which feeds on its leaves.

## 8th Stop

### THE MASTIC AND THE NARROW-LEAVED CISTUS

In this section of the walk we can see the Mastic and the Narrow-leaved Cistus.

**The Mastic (*Pistacia lentiscus* L.)**, also known here as *Llentiscler*, is a perennial shrub and it is dioecious (the male and female flowers are found on separate plants). The female flowers are a yellow-green colour, and the male ones are dark red and very small. The berries, initially red, turn black as they ripen.



Due to the large amount of oils it contains (like the pistachio, which is from the same family) starlings use it as their main source of food. During the day they come in hundreds to the Devesa from Valencia to eat.

It is still used as a green element in flower arrangements. In some areas a resin is extracted by means of incisions in the trunk which is sold under the name of "mastic". It was used by the Greeks and Romans as chewing gum.

**The Narrow-leaved Cistus (*Cistus salvifolius* L.)**, also known as the Montpellier or Sage leaf Cistus and locally as *Estepa borrera*, is a shrub of between 20 and 100 centimetres high. Its flowers, which appear in April and June, are white and generally yellow in the centre.



It is abundant in the clearings of the Devesa scrubland and it is dioecious (the male and female flowers are found on separate plants).

Different kinds of metallic coloured beetles can often be seen on its yellow stamens.

## 9th Stop

### ROSEMARY, THE ITALIAN BUCKTHORN AND HONEYSUCKLE

Among the plants that can be seen at this point are Rosemary, Italian Buckthorn and Honeysuckle.

**Rosemary (*Rosmarinus officinalis* L.)** also known locally as *Romani*, is a small aromatic shrub with narrow dark green leaves. The flowers, which appear in winter, are blue.



It is one of the best known Mediterranean plants due to its tradition as a culinary and medicinal plant. Its agreeable aroma and its digestive properties make it a plant that is frequently used as an ideal condiment for heavy, fatty dishes.

**The Italian Buckthorn (*Rhamnus alaternus* L.)** is a shrub that can reach 5 metres in height. The edges of the leaves are often serrated. It flowers in spring and its berries are initially red and later black. When it grows in the shade its leaves tend to be larger and it can be confused, when in fruit, with holly.



Together with the False Olive, this is the species that characterizes the scrubland of the Devesa.

It has purgative and astringent properties and the leaves, berries and bark are used for medicinal purposes.

**The Honeysuckle (*Lonicera implexa* L.)**, known locally as *Xuclamel* or *Lligabosc*, is a climbing plant that can reach 2 metres high. Its flowers are whitish-pink with a sweet aroma, and the stamens stick out. It flowers from April to June. It is very common in the Devesa, in open scrubland. The berries are red and grow in groups. The seeds are toxic.



It is grown for ornamental purposes, and is used for cosmetics and perfumes.

## 10th Stop

### THE SEA GRAPE AND KUNAI GRASS

Two plants can be seen here; one is the Sea Grape, which is relatively abundant in the stable dunes of the Devesa where the scrubland is not too dense, and the other is the Kunai Grass which grows mainly on the edges of ditches and the dune slacks.

**The Sea Grape (*Ephedra distachya* L.)**, known locally also as the *Trompetera* or *Caboteta de parot*, is a small dioecious shrub (the male and female flowers are found on separate plants). Its branches are broom-shaped and the berries, which are red, appear at the end of the summer. The berries grow in bunches, hence the common name of Sea Grape. Locally it is known by the name of *caboteta de parot* because the berries look like the head of a dragonfly.



**The Kunai Grass (*Imperata cylindrica* L.)**, also known locally as *Sisca*, is a strong robust grass. It flowers from June to September and its silvery ears are eye-catching.