



GET TO KNOW
THE RIA FORMOSA
NATURE PARK



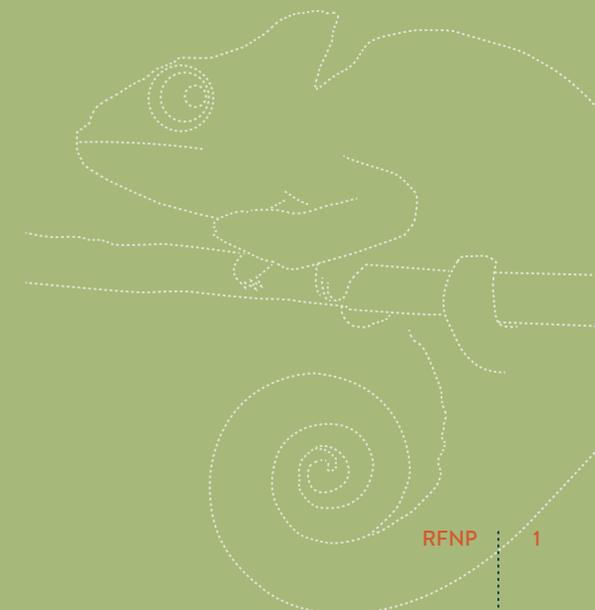


Ria Formosa, Olhão - DS



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HOW TO GET TO THE PARK



Ria Formosa Nature Park Headquarters

- 1 São Lourenço Trail
- 2 Ludo Routes
- 3 CEAM Route
- 4 Barreta Island (or Deserta Island) Route
- 5 Barril Beach Trail (Tavira Island)



- Asphalt
- Watercourse
- Ria Formosa Nature Park



HOW TO GET TO THE PARK HEADQUARTERS:

GPS: 37°1'58.63"N 7°49'18.42"W

On the EN 125 national road heading from Faro towards Vila Real de Santo António, a kilometre after Olhão, turn right where you see a sign for "Parque Natural" ("Nature Park"). On the A22 motorway, take the Olhão exit and, a kilometre before Olhão, turn left where you see a sign for "Parque Natural" ("Nature Park"). From here, keep going straight ahead and, after you pass the railway line, you will come to the headquarters of the Ria Formosa Nature Park (RFNP).

OPENING TIMES:

- » RFNP Headquarters and Interpretation Centre:
9 am to 5 pm
- » Centro de Educação Ambiental de Marim (Marim Environmental Education Centre - CEAM):
Monday to Friday:
8 am to 8 pm
Weekends and public holidays:
10 am to 8 pm
- Closed on 1 January, 1 May and 24-25 December**



Little Tern *Sternula albifrons* - AG

GET TO KNOW THE PARK

The **Ria Formosa Nature Park (RFNP)** stretches for 60 kilometres along the Algarve coast, from the Ancão Peninsula to Manta Rota. Spread across the municipalities of Loulé, Faro, Olhão, Tavira and Vila Real de Santo António, it covers an area of around 18,400 hectares. The Ria Formosa's lagoon system occupies most of this area (11,000 hectares). This line of barrier islands and sandy peninsulas runs more or less parallel to the coast, sheltering a lagoon containing a labyrinth of channels that are visible at low tide, as well as marshes, mudflats, islets, salt pans and freshwater courses that flow into the estuary. These last are the mouths of the watercourses that flow into the lagoon, such as the River Gilão and the Almargem, Cacela and São Lourenço streams. Part of the lagoon system is permanently under water and part of it emerges at low tide. The average depth of the lagoon is two metres.

The RFNP also contains a 7,000 hectares strip of land on the mainland, consisting mostly of built-up areas, pine forest and farmland.

The entire area is located in a region with a Mediterranean climate, with low and irregular rainfall, mild temperatures and plenty of sunshine.

Starting in the Palaeolithic era, various peoples travelled to, or settled along, the Algarve coastline, including Conii, Romans, Visigoths and Arabs. A well-balanced relationship between

people and nature can result in a combination of outstandingly beautiful landscapes and sustainable economic activities. Examples of this are the village and promontory of Cacela Velha, the salt pans cut into the marshes of the Ria Formosa and the dryland orchards along the mainland.

However, when this fragile balance is disturbed, the wounds on the landscape are clear to see and the impacts on the natural and cultural heritage are very harmful. This is precisely what happened starting in the 1960s, when tourism in the Algarve grew in a completely haphazard fashion, the unfettered building work causing inexorable harm to the entire coastal strip.

The creation of the Ria Formosa Nature Reserve in 1978 (Decree-Law 45/78 of 2 May) was intended precisely to protect the lagoon area from growing urbanisation and tourism, due to its considerable ecological, scientific, economic and social value, as well as preventing the area's fertile farmland from being exploited for other purposes.

In 1987, the Reserve was reclassified as a Nature Park (Decree-Law 373/87 of 9 December), in acknowledgement of the fact that the natural resources of almost the entire area were being exploited and that it was partially humanised. As such, the status of "nature reserve" was no longer deemed appropriate.



The Ria Formosa Nature Park was created for the following purposes:

- » To preserve and protect the lagoon system;
- » To protect the fauna and flora and their respective habitats;
- » To ensure orderly use of the territory and its natural resources in order to safeguard their continuity;
- » To promote economic activities compatible with the rational exploitation of the natural resources;
- » To ensure orderly and disciplined recreational activities to guard against the degradation of the

region's natural, semi-natural, scenic, aesthetic and cultural elements.

More than 40 years on from the date of the area's Portuguese classification, other international protective statuses have been implemented, the most important of these being: *Wetland of International Importance*, awarded in 1981 by the Ramsar Convention; and the inclusion in the European nature conservation network, Rede Natura 2000, as a *Special Protection Area for wild birds* (Decree-Law 384-B/99 of 23 September) and *Special Conservation Area* (Regulatory Decree 1/2020 of 16 March), as a natural habitat for fauna and flora.



Praia de Faro (Faro Beach) - HR



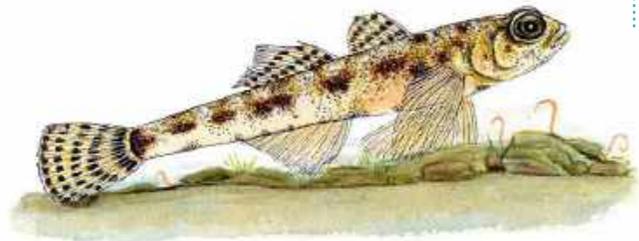
HABITATS

THE LAGOON AREA

The Ria Formosa is the largest wetland area in southern Portugal. Its high biological productivity and the variety of habitats within its boundaries make it a fundamental area for aquatic fauna, in particular birds and many species of fish, molluscs and crustaceans.

Living in the sand and mud at the bottom of the Ria Formosa are populations of **annelids** (worms, polychaetes and others), **crustaceans** (crabs and prawns), **cephalopod molluscs** (cuttlefish and octopuses), **gastropod molluscs** (limpets, whelks and sea slugs) and **bivalve molluscs**, greatly exploited as an economic activity, such as grooved carpet shell clams, razor clams and oysters.

Over a hundred species of **fish** can be found in the Ria Formosa. Some are resident species, such as the short- and long-snouted seahorses *Hippocampus hippocampus* and *H. guttulatus*, respectively, goby *Gobius spp.* and sand smelt *Atherina presbyter*; others, such as the European eel *Anguilla anguilla*, are migratory; and still others live in the ria as juveniles, migrating to the sea as adults. This last group includes sardines *Sardina pilchardus*, common two-banded sea bream *Diplodus vulgaris*, white seabream *Diplodus sargus*, European bass *Dicentrarchus labrax*, sole *Solea solea* and red mullet *Mullus surmuletus*, these last being highly lucrative.



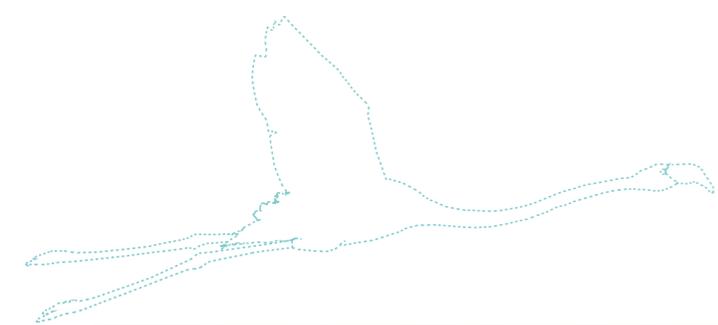
Long-snouted seahorse
Hippocampus guttulatus - JR



Peacock worm *Sabella pavonina* - MC



Sea slug *Felimida luteorosea* - MC

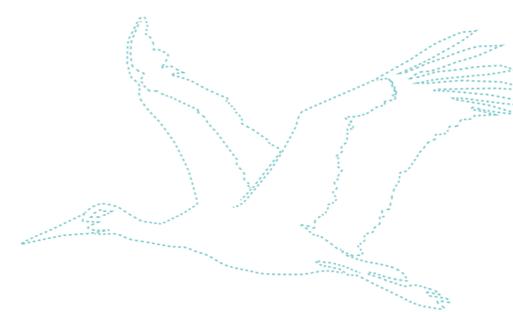


Sanderling *Calidris alba* - AG



Little egret *Egretta garzetta* - HS

Little Tern *Sternula albifrons* - AG



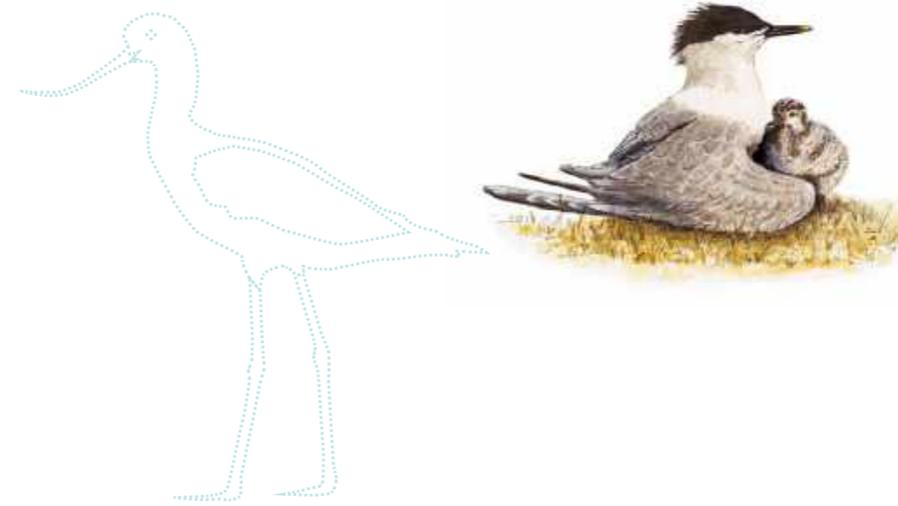
Western swamphen
Porphyrio porphyrio - HS



The **birds** are one of the Ria Formosa's most noteworthy aspects; over 200 species have been recorded here, some of them very rare or endangered.

In winter, over 20,000 aquatic birds agglomerate in the ria, which is crucially important to migratory species from northern Europe that either spend the winter here or stop off in the ria on their way to Africa. Highlights among the wintering species are **Anatidae** such as the Eurasian wigeon *Anas penelope*, the northern shoveler *Anas clypeata* and the Eurasian teal *Anas crecca*, and **waders** such as the dunlin *Calidris alpina*, the Eurasian curlew *Numenius arquata* and the grey plover *Pluvialis squatarola*.

Equally important are the **nesting** species, in particular the breeding populations of little egrets *Egretta garzetta garzetta*, Audouin's Gull *Ichthyaetus audouinii*, Kentish plovers *Charadrius alexandrinus* and **little terns** *Sternula albifrons*, whose habitats (dunes and saltpans) have been shrinking worldwide.

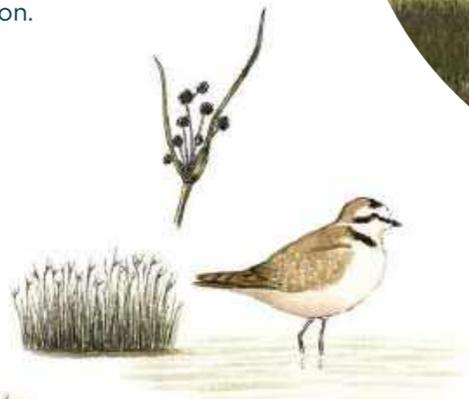


We must make special mention of the **western swamphen** *Porphyrio porphyrio*, a resident species chosen as the symbol of the RFNP back in the 1970s because, at the time, it was one of the rarest birds in Portugal and was only found in the Ria Formosa.

Apart from its enormous value in terms of fauna, the Ria Formosa is also of great **botanical interest**. As regards the vegetation, an essential element for the preservation of the fauna, the nature park essentially consists of marshland and dune vegetation. The former is a hugely important ecosystem in terms of balancing the cycle of organic matter, while the dune vegetation contributes to the aggregation and consolidation of the dune systems and to more efficient coastal protection.

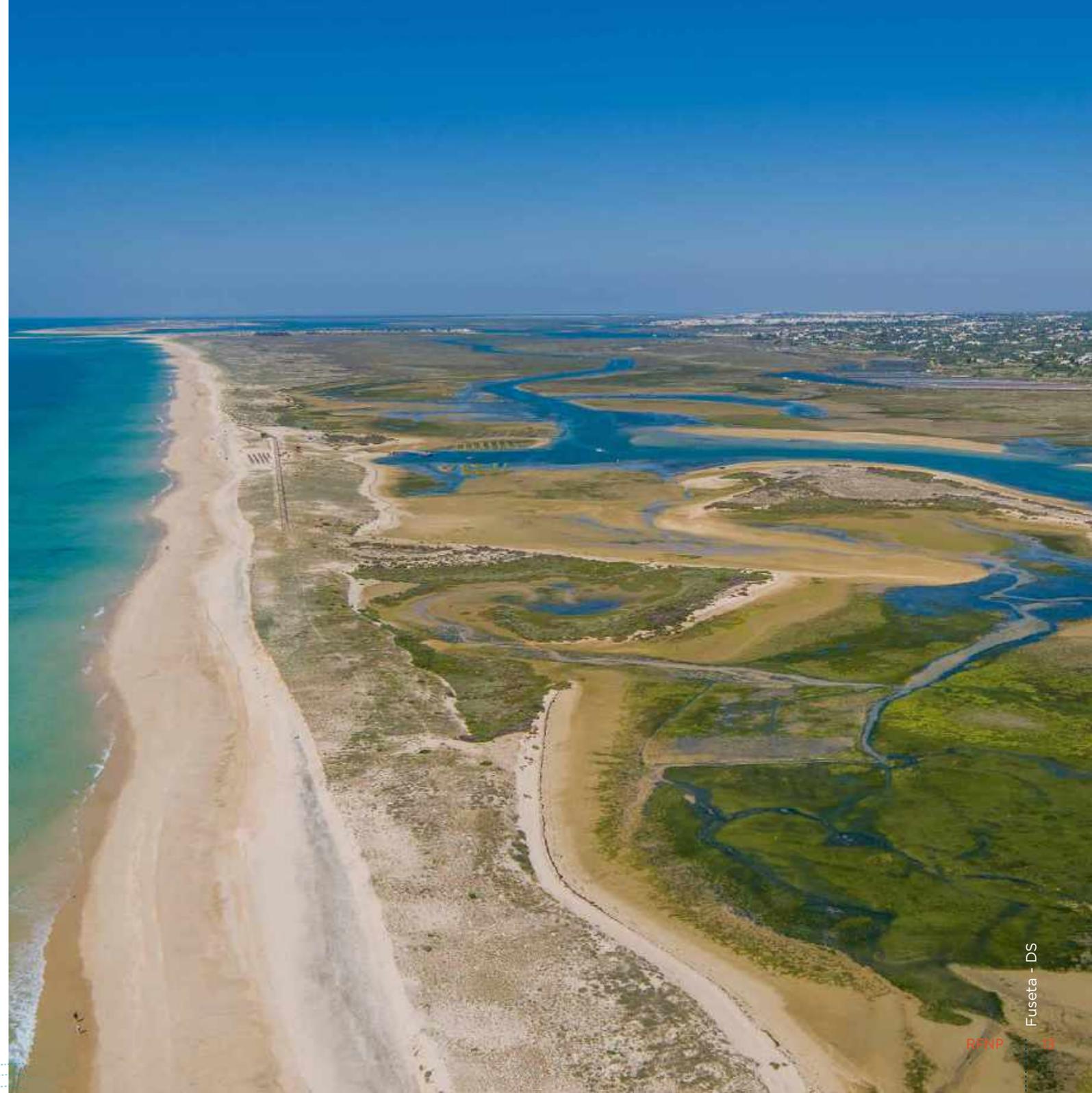
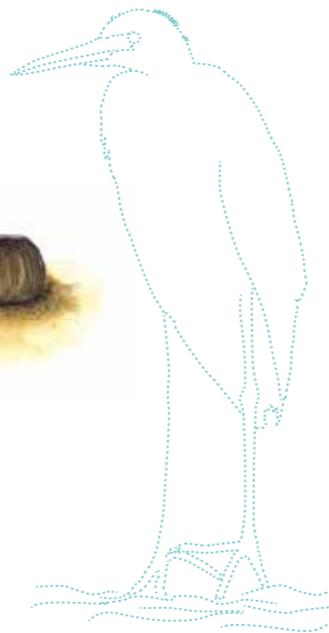


Kentish plover
Charadrius alexandrinus



Small cordgrass *Spartina maritima* - JP

Razor clam *Solen marginatus*



DUNES

The **line of dunes** is the mainland's natural defence against the encroaching sea, storms and other climate-related phenomena. Due to the wind, currents and tides, the shapes of the barrier islands in the Ria Formosa change constantly and they are currently moving closer to the mainland.

The dunes are formed as a result of plants taking root and growing on them; these plants are species capable of adapting to the harsh conditions along the coastline (sunshine and lack of water, salty winds, scarce nutrients and moving sands), as a result of which only the best-adapted species are able to colonise this environment. Highlights among the almost 50 species of plants found here are the pioneers in stabilising the dunes, which grow on the side facing the sea. They include **sea holly** *Eryngium maritimum*, cottonweed *Otanthus*



Dune - JP



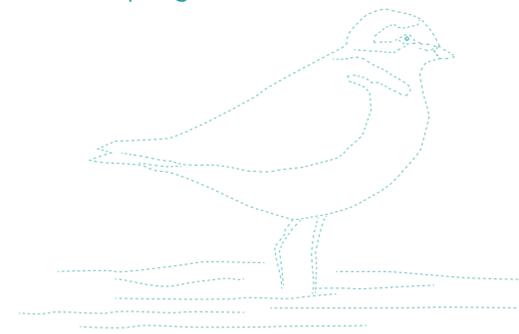
maritimum and marram grass *Ammophila arenaria*, whose very long roots are capable of securing more sand than any other plant. Behind the crest of the dune, in the lower-lying trough between the dunes, which is sheltered from the wind, you will find more diverse plant life. This is where species such as the sea daffodil *Pancretium maritimum*, **curry plant** *Helichrysum italicum* and **spiny thrift** *Armeria pungens* grow, to name but a few.

Various birds nest in this habitat in summer, including Kentish plovers *Charadrius alexandrinus* and little terns *Sternula albifrons*.

Certain actions, such as walking or building on the dunes, harm them and threaten their very existence. Another threat comes from invasive plant species such as acacias and Hottentot figs *Carpobrotus edulis*, originally from South Africa. In some parts of the country, the proliferation of these invasive species along the coast is reaching unmanageable proportions, leaving the dune system featureless and threatening the survival of the native vegetation. Under Portuguese law (Decree-Law 92/2019 of 10 July), they are considered invasive species and may not be grown, sold or introduced into nature.



Marram grass *Ammophila arenaria* – Grows on dunes and sandy coastlines; often found on dune crests, dominating the primary dunes. Visible all year round. Flowers: In spring.



MARSHES

The **marshes** are areas of creeping vegetation consisting of species that tolerate the salinity of the sea water that washes over them twice a day. They form in intertidal areas, estuaries and sheltered coastal areas.

Various plants grow in the marshes and the species gradually change depending on how close to land they are and how much time they spend under water. In the lower marshes, which are almost permanently submersed, the dominant species are **small cordgrass** *Spartina maritima*, sea purslane *Hilimione portulacoides* and perennial glasswort *Sarcocornia perennis*. *Hilimione portulacoides* and *Sarcocornia perennis* appear at higher levels, in the upper marshes. Capable of capturing and retaining pollutants such as herbicides, pesticides and heavy metals, this vegetation acts a filter.

Since they are hugely productive, the marshes are among the most biodiverse areas on the planet. Sheltered and offering vast quantities of nutrients, they provide numerous species of fish, molluscs, bivalves, crustaceans and water birds - waders especially - with ideal conditions in which to take refuge, feed, spawn and nest.

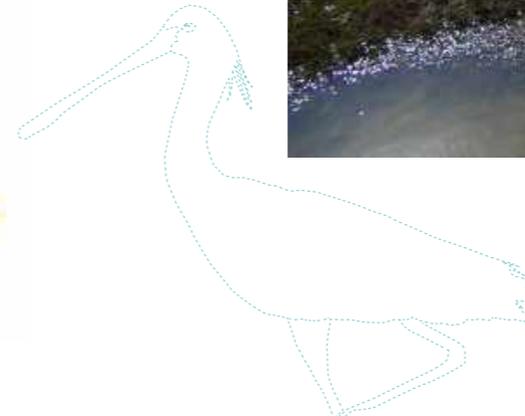
A relatively diverse group, **waders** feed on small organisms (such as worms, **crustaceans** and molluscs) that live buried in the mud. The various species of waders have beaks and feet of different sizes, letting them hunt for food in different layers of the mud, thus reducing competition between them. This is why you will often see mixed flocks of waders all feeding together at the same place.



Sole larva



Small cordgrass *Spartina maritima* - This grass is well-adapted to long periods submersed in salt water and is the first to colonise the marshes, forming extensive meadows that help stabilise sediment and open the way for the growth of other halophyte species.
Visible all year round.
Flowers: April to September



Kentish plover
Charadrius alexandrinus - HS



Black-winged stilt *Himantopus himantopus* - AG



Saltmarsh - PM

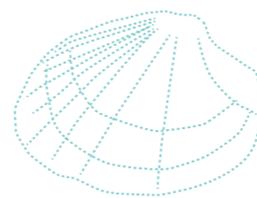
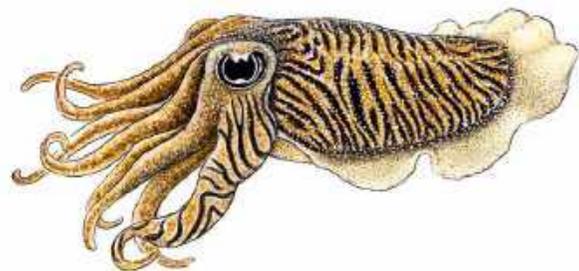
SEAGRASS BEDS

Continuing on from the marshes, you will encounter muddy and sandy areas that emerge at low tide and are covered with a type of seagrass called **dwarf eelgrass** *Zostera noltii*. This habitat is home to important populations of invertebrates (molluscs, annelids and many others), providing an excellent source of food for the birds in the Ria Formosa. Nearby, as you approach deeper water, you will find another habitat: sandbanks with no vascular vegetation or covered by seagrasses, including the one mentioned above and others such as *Zostera marina* and *Cymodocea nodosa*.

The **seagrass meadows** are areas of huge biological and environmental importance for the Ria Formosa, since they are biodiverse places of refuge (spawning and breeding grounds), as well as providing food, eliminating/recycling waste (immobilisation of heavy metals) and capturing carbon from the atmosphere, helping to reduce the effect of greenhouse gases.

This habitat has been shrinking in the Ria Formosa due to human activity, in particular the mooring of boats and the installation of clam and oyster nurseries.

Cuttlefish *Sepia officinalis*



Seahorse
H. hippocampus - JR



The Ria Formosa's **seagrass meadows** are home to an important and endangered community of seahorses.

Seahorses are fish that swim upright and move slowly. They feed on small, crustaceans and plankton that they suck in through their tubular snouts. *Hippocampus hippocampus* and *Hippocampus guttulatus* are the two species found in the Ria Formosa, which at one time was home to the largest seahorse community in the world. These populations have shrunk dramatically over the last 20 years, largely due to illegal fishing, disturbance caused by boats and the disappearing seagrass meadows. In 2020, two safe havens were created for them in the Ria Formosa, with the aim of slowing the species' decline.

MAINLAND STRIP

The RFNP also encompasses a narrow **strip of the mainland** (about 7,000 hectares) with plenty of human development and where some remnants of the ancient Mediterranean forest still exist.

Instead of the original scrubland consisting of holm, cork and kermes oaks, along with strawberry, olive and carob trees (evergreens, adapted to the long, dry Mediterranean summer), we now find maritime pine *Pinus pinaster* and stone **pine** *Pinus pinea*, which dominate the country's southern coastal landscape. Beneath the pine trees you can still find some bushy and grassy plants typical of the Mediterranean scrubland, such as **gorse** *Ulex argenteus* or *Stauracanthus boivinii*, rosemary *Rosmarinus officinalis* and French lavender *Lavandula stoechas*.

Despite human encroachment, you can still find various plants here that are endemic to the Algarve. Particularly noteworthy examples, due to their rarity, are *Linaria algarviana*, *Thymus lotocephalus*, a type of thyme, and *Tuberaria major*, a member of the rockrose family.



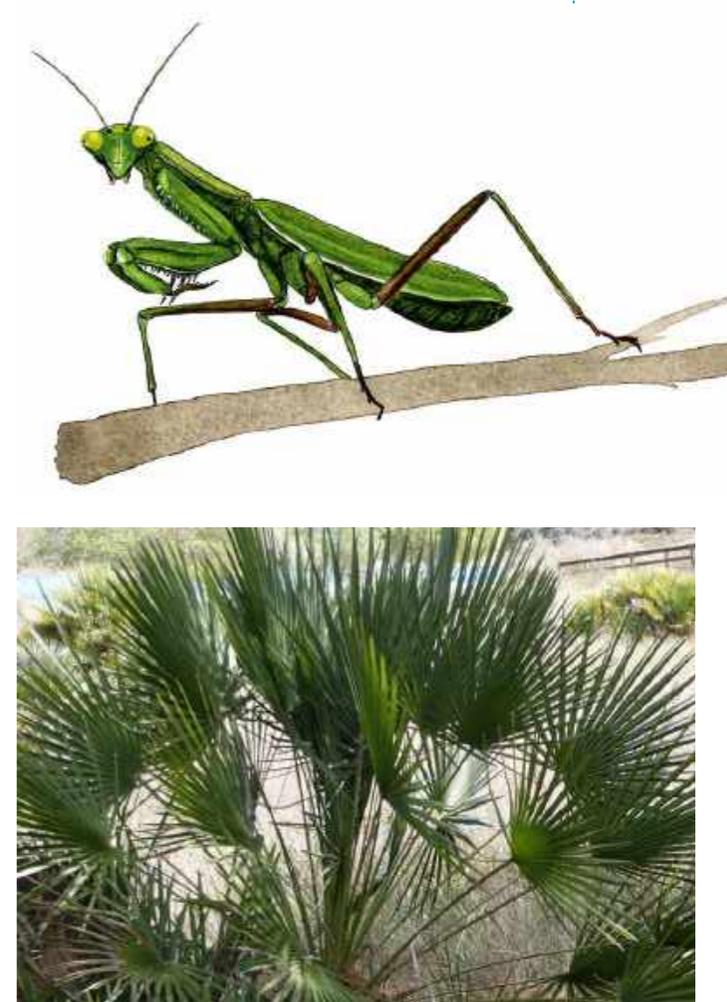
Pontic rhododendron *Rhododendron ponticum* L. subsp. *baeticum*



The *Tuberaria major* is a small vivacious plant with yellow blossom. It is an endemic Lusitanian species, and is found in sparse, non-continuous colonies along the Algarve coast and in the transitional "barrocal" area farther inland. As a consequence of increasing pressure from urban development, this species is currently at risk of extinction.



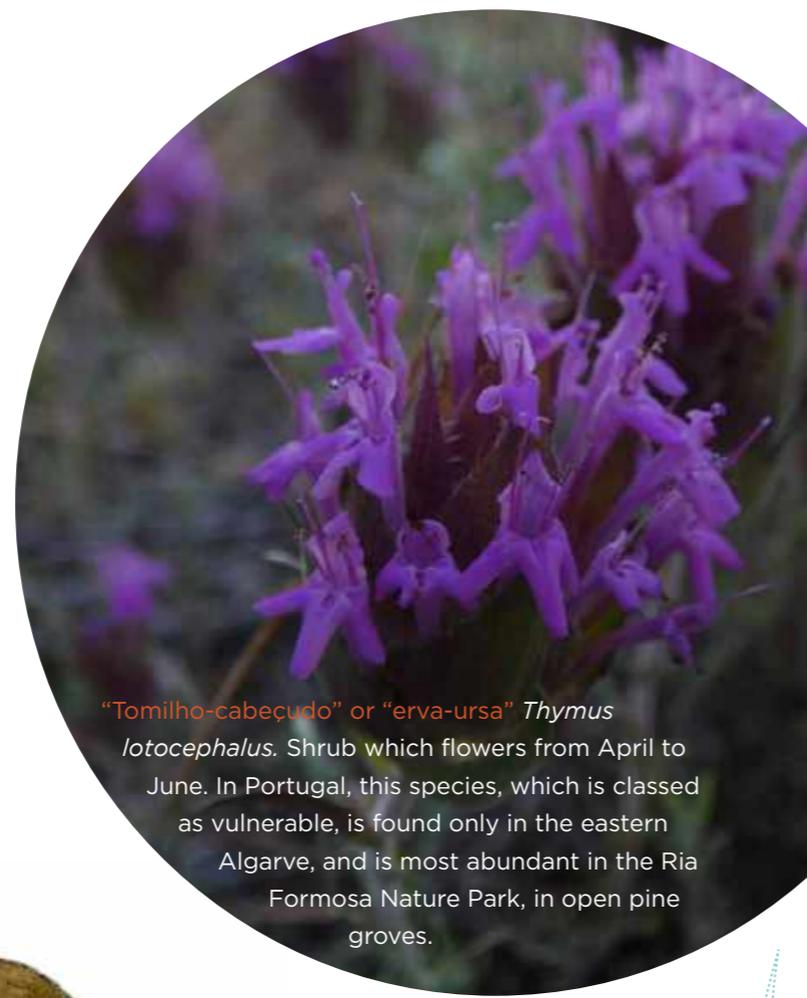
Eurasian blue tit *Cyanistes caeruleus* - RJ



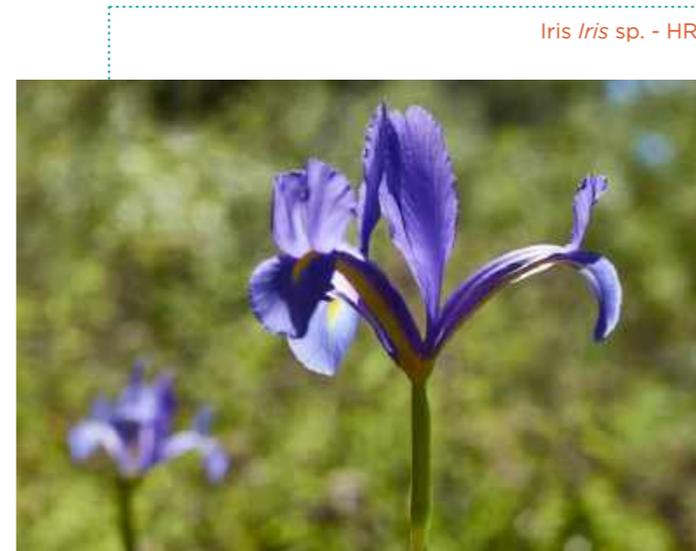
Praying mantis *Empusa pennata*

Dwarf fan palm *Chamaerops humilis* - PM

As far as **mammals** are concerned, the nature park is less significant, with only 34 recorded species. However, it is interesting to note the presence of animals such as **otters** *Lutra lutra*, genets *Genetta genetta*, badgers *Meles meles* and various types of bats that feed in the park.



"Tomilho-cabeçudo" or "erva-ursa" *Thymus lotocephalus*. Shrub which flowers from April to June. In Portugal, this species, which is classed as vulnerable, is found only in the eastern Algarve, and is most abundant in the Ria Formosa Nature Park, in open pine groves.



Iris *Iris* sp. - HR



Chameleon
Chamaeleo chamaeleon



Pine grove - JP



Salt pans, Santa Luzia - DS

HUMANS AND THE RIA FORMOSA

The Ria Formosa has always been crucial for the survival of the riverside populations, with fishing, shellfish gathering and the exploitation of salt being ancient activities. These were added to in the mid-20th century with the advent of aquaculture and tourism.

As was the case in the past, the Ria Formosa is still highly significant in economic terms; it is a crucial resource for the resident population, whose economic activity is directly connected to the ria.

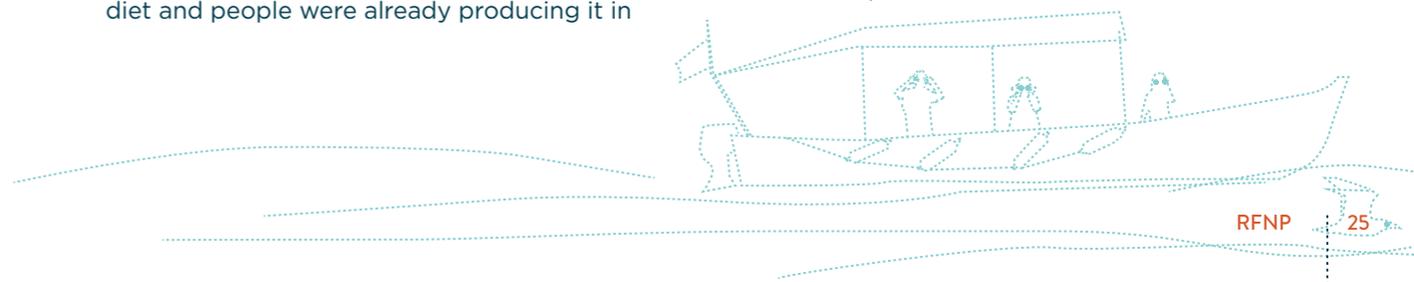
SALTPANS

The Ria Formosa salt pans stretch across a vast area between Loulé and Tavira and are responsible for around half of Portugal's sea salt production. Although cut into the marshes and operating at their expense, the salt pans are a man-made habitat of interest to nature conservation, since they provide birdlife with shelter, food and nesting sites. Indeed, salt production is an example of a sustainable type of exploitation of natural resources.

Salt is an essential ingredient in the human diet and people were already producing it in

the Ria Formosa in pre-Roman times. These populations used salt to preserve fish or as an ingredient in fish-based products that they stored in amphorae and exported all around the Mediterranean. In the Middle Ages, salt was bartered all over northern Europe and the north of Africa. It also played an important role in the region's booming canning industry in the late 19th and early 20th centuries. From 1950 onwards, salt prices began falling, resulting in many salt pans being abandoned. This process would not see an about-turn until the current century, when people began to value the nutritional qualities of salt produced in the traditional manner and a seal of quality called "Protected Designation of Origin", or "PDO" for short, was created.

In the Ria Formosa, two types of salt manufacturing operate alongside one another. One is the traditional method, in which the entire process of preparing the salt pans and harvesting the salt is done manually, using age-old techniques; and the other is the industrial method that uses large crystallisers, with the salt being harvested by machines and subsequently washed and processed.



Fishing - RTA



FISHING, SHELLFISH GATHERING AND BIVALVE FARMING

Since the Ria Formosa is a refuge for endangered fish species (such as seahorses, eels and rays, among others) and a **hatching ground** for the juveniles of many other species, **fishing** is restricted inside its boundary (Ordinance 560/90 of 19 July). Consequently, the ria's importance as far as commercial fishing is concerned is not due to hauls caught in the lagoon but, rather, to the lagoon's function as a nursery for sea bass and various types of bream (including white, striped, gilt-head, two-banded and Senegal bream), among others.

Shellfish gathering has gone on in the Ria Formosa for longer than anyone can remember and is currently done outside the areas run by the nursery concessionaires. Clams, razor clams, cockles, oysters and a variety of crustaceans are gathered on the ria's natural banks, along with prawns and various types of crab.

By the middle of the 20th century, this simple gathering process had evolved into a farming process, when the first **clam** and, later, **oyster nurseries** were set up in the ria. At the present time, there are around 1,300 licensed nurseries, covering a total area of 450 hectares. At low tide, you can see the stakes that mark them out.



Grooved carpet shell clams *Ruditapes decussatus* - RTA

Bivalve cataplana - TV



The conversion of the nurseries from grooved carpet shell clams to oysters is currently cause for considerable concern, since oysters, and especially the Japanese oyster *Crassostrea gigas* (an exotic species), are more voracious feeders than clams. This could endanger the Ria Formosa's only pure population of grooved carpet shells.

The RFNP's regulations forbid the expansion of the area given over to the nurseries, since this would require the ground to be cleared, devastating areas of sea meadows and destroying their biodiversity.

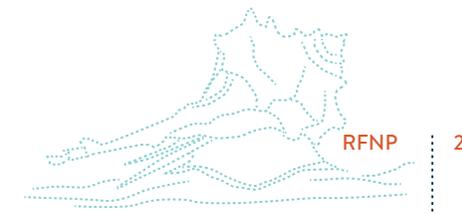
The Ria Formosa is responsible for about half of Portugal's bivalve production, making it a hugely significant economic activity for the local population, directly involving around 1,500 people and some 8,500 in related activities.

Seafood from the Ria Formosa is highly appreciated in regional dishes such as *xarém* (maize porridge), seafood or razor clam rice, bean and whelk stew, and clams cooked in a *cataplana*.

The quality of the seafood produced here depends on the quality of the ria's waters, which can be affected by pollution originating on the mainland or by tourism and recreational activities in the Ria Formosa, especially during the summer holiday season.



Shellfish gatherer - JR



TOURISM

Tourism in the Algarve, still in its early infancy during the first half of the 20th century, would grow massively from 1950 onwards, eventually becoming the region's main economic driver. Initially, tourism in the Algarve was mainly the so-called "Sun and Sand" product, with the accommodation and pressure resulting from this tourism of the masses being concentrated in the coastal municipalities. By the turn of the century, however, it was evolving into a range of more diversified products, such as golf and nature tourism.

The tourism potential of the Ria Formosa is vast and while its beaches were the main attraction to begin with, birdwatching, hiking, boat trips, water sports and other recreational and leisure activities have now become popular too. This charm is also its greatest weakness since the pressure exerted by humans on the lagoon ecosystem is enormous, especially in summer.

Birdwatching - JR



Boat trip - RTA

AGRICULTURE

The terrestrial part of the Ria Formosa Nature Park, on the inland side of the lagoon, consists of good farmland where you would traditionally see dryland orchards consisting of carob, almond, fig and olive trees, and vegetable gardens in places with access to irrigation. The practice of growing citrus fruit, which is ancient in the Algarve, is believed to have been one of the first intensive farming activities here, with water coming from the water table by means of boreholes.



In the current century, the construction of the Odeleite Dam and the Eastern Algarve Agricultural Irrigation System which, within the boundaries of the RFNP, stretches from Cacela to Fuseta, has made it possible to grow greenhouse and other irrigation crops in places previously occupied by dryland orchards. A featureless landscape, the loss of biodiversity and the leaching of agricultural chemicals into the lagoon are some of the factors resulting from the intensive farming practised in the area of the irrigation perimeter.



Orange orchard - RTA



WALKING ROUTES

SÃO LOURENÇO TRAIL

This is a very enticing route for birdwatchers due to the presence of three distinct habitats: marshes, scrubland and a freshwater lake.

As you walk between the marshes and the golf course, you will be able to see a variety of aquatic birds, especially waders. At the end of this section, the path brings you close to the Ludo route, where you can take advantage of the bird observatory. Next, you will come to a stone pine thicket where the undergrowth consists of mastic trees *Pistacia lentiscus* and rockrose *Cistus*

Start and finish: Opposite the wooden bridge that connects Quinta do Lago to the Ancão Peninsula.



GPS: 37° 01'41.76" N 8° 01'15.72" W

Suitable for: Walkers and mountain bikes



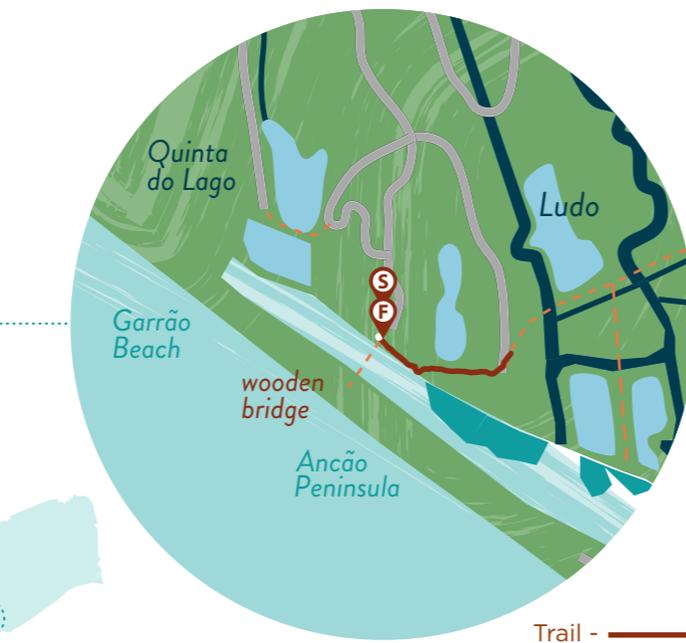
Itinerary: Linear

Time needed: 1 1/2 to 2 hours

Length: Approximately 3 km (there and back)

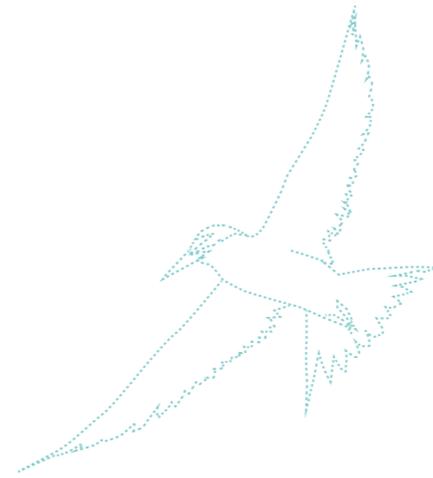
Difficulty level: Easy

Support structures: Marked route, bird observatory

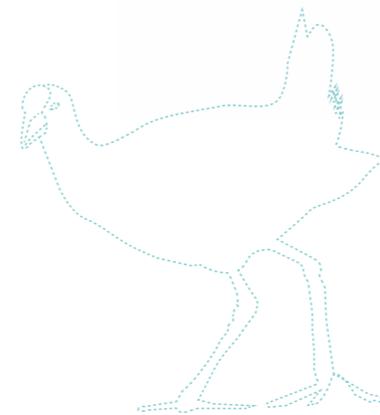


ladanifer, as well as aromatic plants, such as thyme and French lavender *Lavandula stoechas*. Look out too for azure-winged magpies *Cyanopica cooki* and hoopoes *Upupa epops*. In the freshwater lake, at the final section of the São Lourenço Stream, another bird observatory gives you great viewing opportunities for a number of species, including Eurasian coots *Fulica atra*, common moorhens *Gallinula chloropus*, Eurasian teal *Anas crecca*, western swamphens *Porphyrio porphyrio* and little grebes *Tachybaptus ruficollis*, among others.

At the end of the route you will find the ruins of the Roman-era fish-salting tanks, dating from the 2nd century CE.



European bee-eater
Merops apiaster



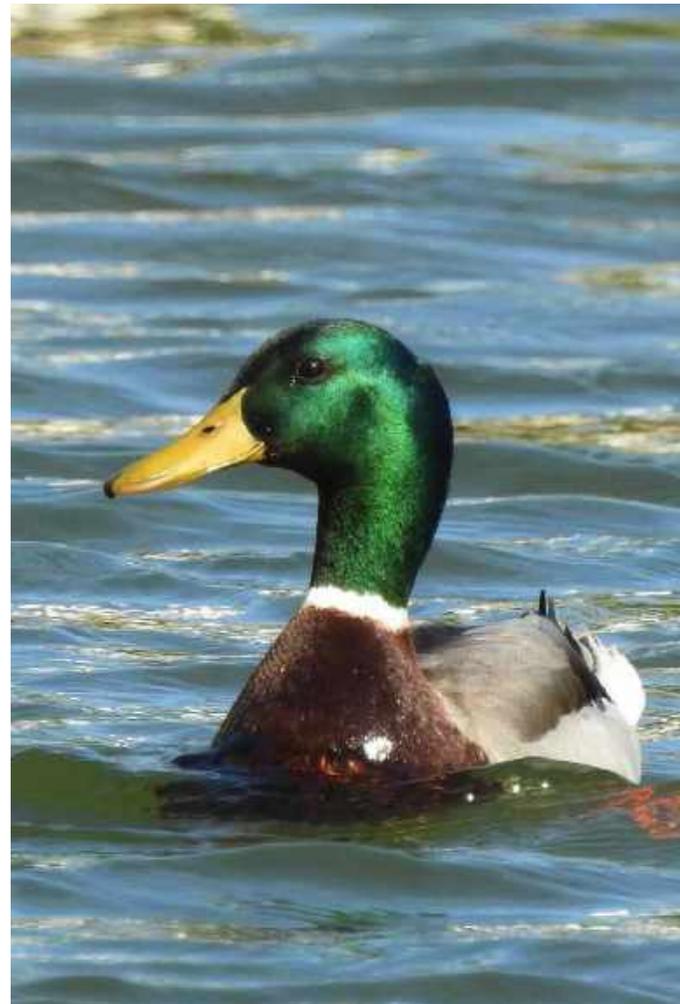
Quinta do Lago - HR



Moorhen *Gallinula chloropus* - HS



Flamingos *Phoenicopterus roseus* - AG



Mallard *Anas platyrhynchos* - RJ



Great crested grebe *Podiceps cristatus*

LUDO ROUTES

The Ludo Routes take you through a variety of habitats: marshes, inlets, salt pans, cane plantation, riparian vegetation and pine forest. Each habitat has its own distinct fauna and flora, details of which are provided at the various stations along the routes.

The highlight here is the birdlife, as one would expect given that Ludo is one of the most important sites in the Algarve for aquatic birds, whether they are nesting, wintering or post-nuptial migratory species. Consequently, depending on the time of year, you can expect to see flamingos *Phoenicopterus roseus*,

spoonbills *Platalea leucorodia* and various species of ducks, herons and waders.

Also worthy of a mention is the São Lourenço Stream, which flows into the Ria Formosa and whose vegetation is a very important source of shelter and food for the wildlife. The riparian vegetation includes such species as cattail *Typha sp.*, tamarisk *Tamarix africana* and common reeds *Phragmites australis*. Amphibian inhabitants include the Iberian midwife toad *Alytes cisternasii*, while the reptilian population includes two native Portuguese turtles, the Mediterranean pond turtle *Mauremys leprosa* and the European pond turtle *Emys orbicularis*.

Start and finish: Start/finish by Quinta do Eucalipto/Ludo path: 37° 01' 45.86" N 7° 58' 29.71" W or Ludo salt pans: 37° 01' 00.59" N 7° 59' 17.97" W

Suitable for: Walkers and mountain bikes



Itinerary: Two linear routes that intersect.

Length: Ludo trail – between 5 km and 7 km; Ludo salt pans – 5 km (there and back).

Time needed: Variable

Difficulty level: Easy

Support structures: Marked route, bird observatory



CENTRO DE EDUCAÇÃO AMBIENTAL DE MARIM ROUTE (MARIM ENVIRONMENTAL EDUCATION CENTRE):

The Centro de Educação Ambiental de Marim (Marim Environmental Education Centre – CEAM) is a facility geared towards environmental education in the Algarve. The centre is located on an old farm alongside the ria and consists of a Ria Formosa interpretation centre and a visitors' route with 23 stations that include marshes, dunes, bivalve nurseries, a pine forest, Roman ruins, a noria, a tide mill and more. Along the route, you will discover most of the habitats that make up the Ria Formosa Nature Park (RFNP), as well as (possibly) spotting some of its plants and animals and the signs



of human intervention on the landscape. Particularly worthy of a mention here are the chameleon *Chamaeleo chamaeleon*, a reptile that, in Portugal, is found only along the Algarve coast, and the many passeriformes found at the CEAM, which include azure-winged magpies *Cyanopica cooki*, common blackbirds *Turdus merula* and great tits *Parus major*. Two observatories provide excellent birdwatching opportunities; one faces the marshes, where you can see a variety of waders; and the other is located on a freshwater pond, where you will mostly find Anatidae and herons.

Start and finish: CEAM gate



GPS: 37°1'58.63 N 7°49'18.42 W

Suitable for: Walkers



Itinerary: Circular

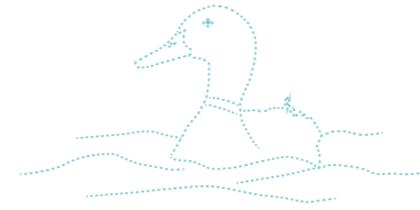
Length: 2.5 km

Time needed: 1 1/2 to 2 hours

Difficulty level: Easy

Support structures:

Marked route, two bird observatories, picnic area, Ria Formosa Interpretation Centre and RIAS Information Centre.



CEAM Trail - RTA

Noria - AM



White stork, little egrets and black-winged stilt seen from the observatory over the freshwater pond - HS

Ruddy turnstone *Arenaria interpres* - AG



Ilha Deserta (Deserta Island) - RTA

Sea daffodil *Pancratium maritimum* - JR

BARRETA ISLAND (OR DESERTA ISLAND) ROUTE

It is on this island that you will find the southernmost point in continental Portugal, Cape Santa Maria. The only buildings here are fishing and beach support structures.

The route lets you see various landscapes typical of the Ria Formosa: beaches, dunes and marshes. Walking along the beach, you can observe seabirds such as gulls and terns, as well as wintering waders (from October

to March) such as sanderlings *Calidris alba* and ruddy turnstones *Arenaria interpres*. On the dunes, the route takes you along an elevated walkway, built to prevent people treading on the plants. Here, you will see species such as sea daffodils *Pancratium maritimum*, with their eye-catching white flowers in spring and summer, and marram grass *Ammophila arenaria*, whose long roots are instrumental in building up the dune crest. In the marshes, you will see numerous waders, which feed in the mud at low tide.

Start and finish: Ilha Deserta pontoon (catch the boat to the island from Faro).

Suitable for: Walkers

Itinerary: Circular

Time needed: 2 hours

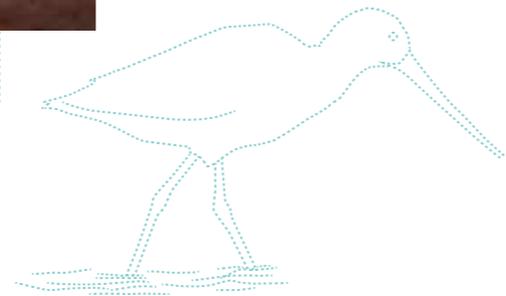
Difficulty level: Easy

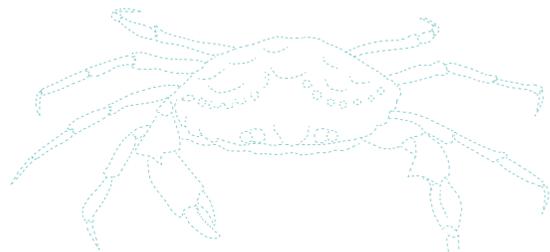


Length: 3 km



Trail -

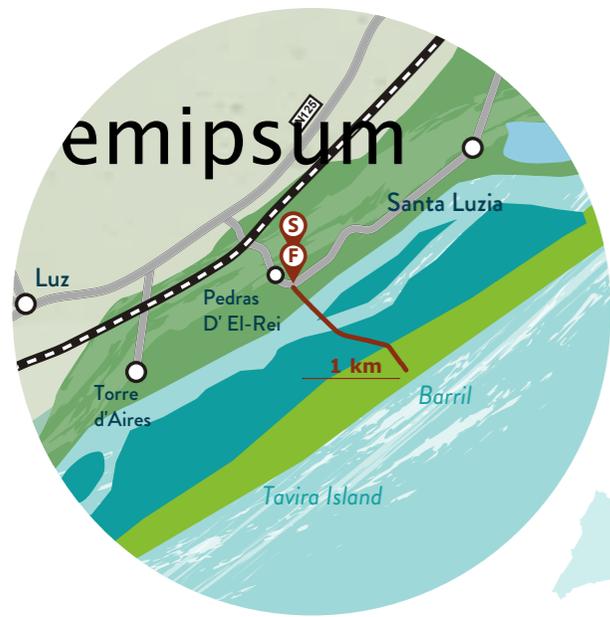




BARRIL BEACH TRAIL (TAVIRA ISLAND)

The first half of the route takes you across the marshes of the Ria Formosa. You will see large amounts of *Limoniastrum monopetalum*, a bushy plant with lilac flowers, growing alongside the path. You should have no difficulty spotting typical marshland species, such as West African fiddler crabs *Uca tangeri*, and birds such as herons, dunlins, plovers and black-winged stilts, especially at low tide. Following on from the marshes, you come to the dunes, where the curry plant *Helichrysum italicum* dominates the landscape, exhibiting its yellow flowers with their strong curry smell

in the dry season. At the end of the walkway you will find the “Arraial do Barril”. In the Algarve, an “arraial” was a support structure for fishing and this one has now been converted to provide beach support instead. From 1841 to 1966, the “armação do Barril” (a fixed fishing facility) was located on this beach. Survivors of this maritime heritage here are the “anchor cemetery” and the “arraial”, where the fishermen used to live with their families from April to September. They made their living from the tuna that swam offshore as they migrated to the Mediterranean and subsequently returned to the Atlantic. The railway line found here was built around a century ago to provide support for the fishing industry.



Start and finish: Pedras D'El Rei, after the footbridge to Barril Beach.



GPS: 37° 05'35.02 N 7° 40'30.79" W

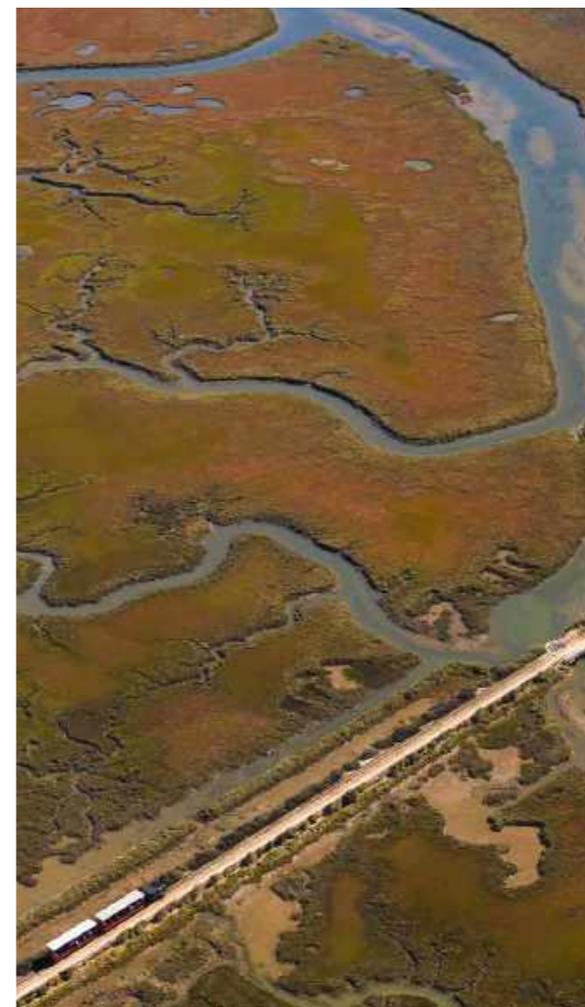
Suitable for: Walkers



Itinerary: Linear **Length:** 1.5 km (3 km there and back)

Time needed: 30 minutes

Difficulty level: Easy



Barril, Tavira Island - HR

Anchor cemetery - Barril Beach - JR



Limoniastrum monopetalum - RTA



Cacela Velha - HR

POINTS OF INTEREST

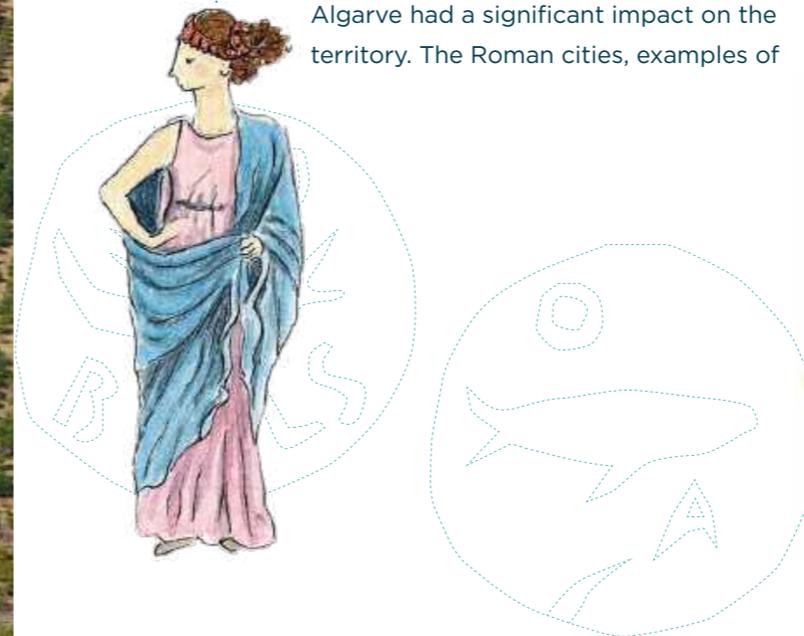
People have lived in the area occupied by the RFNP since the distant past, as can be seen from the archaeological evidence, customs and traditions, and the landscapes marked by human intervention.

In the Iron Age, the pre-Roman port cities of Tavira and Faro were busy trading ports frequented by Mediterranean merchants. Techniques such as iron reduction, the potter's wheel, the production of olive oil and wine, and fabric dyeing were brought by the Phoenicians. This was also a time when fishing and the fish-salting industry developed enormously.

Later, the arrival of the **Romans** in the Algarve had a significant impact on the territory. The Roman cities, examples of

“civilisation”, had a forum (the political and religious centre) and spas with plumbed water. Farming flourished and manor-style farmhouses - *villae* - began appearing in the countryside. In the area encompassed by the RFNP, cities such as Balsa, in the municipality of Tavira, stood out, as did the *villa* of Marim, a huge agricultural property that included dwellings, a temple, baths and a cemetery. Part of this complex - the fish-salting tanks - can be seen on the Marim Environmental Education Centre route.

The Arab influence can be seen in the vegetable gardens and citrus fruit orchards, tools, water mills, **norias** and in fishing, where the “almadravas” or tuna fishing facilities survived in the Algarve until the mid-20th century.



Barril Beach - DS



Salt pans and old Arraial Ferreira Neto tuna fishing structure, Tavira - DS



Cacela Velha - HR

In the 16th century, tuna and sardine fishing, along with salt trading, were the booming activities in the Algarve, and were strongly connected to maritime expansion. In the past, there were a number of fishing support facilities in the Ria Formosa, but the only ones which have survived to the present day are the Arraial do Barril and the Arraial Ferreira Neto, now both converted for tourism.

The vestiges of the past in the area encompassed by the Nature Park are many and varied, from the watchtowers and ramparts (Aires and Bias Towers) and the fortresses built along the ria to defend the coastline (Rato Fort, São João da Barra Fort and Cacela Fort) to palatial houses like the [Dr. João Lúcio Chalet](#), rural farms, chapels, churches, tide mills, norias and more.



The historical centre of [Cacela Velha](#), classified as property of public interest, is one of the most important and best preserved heritage ensembles in the Algarve. It was a pre-Roman trading post and a military base for the Roman Empire but its heyday came during the Islamic period, when it was a riverside fortress of unrivalled strategic importance at the entrance to the Ria Formosa. At the time, its status surpassed that of Tavira.

Mediaeval in origin, but featuring architectural styles from various other periods, its highlights include a fortress, a church with a Renaissance portal, the Casa da Misericórdia (House of Mercy, 13th century), the municipal buildings, dating from the 16th century, the prison building, a mediaeval water tank and an old cemetery.





RULES OF CONDUCT IN NATURE

When you visit our nature park...

TAKE HOME ONLY PHOTOGRAPHS, PLEASANT MEMORIES AND A DESIRE TO RETURN



LEAVE BEHIND ONLY FOOTPRINTS



WALK ONLY ON EXISTING TRAILS



DO NOT PICK PLANTS



DO NOT DISTURB THE ANIMALS



DO NOT SMOKE OR LIGHT FIRES



PUT ALL RUBBISH IN THE APPROPRIATE BINS



READ THE CODE OF CONDUCT AND GOOD PRACTICES FOR VISITORS TO PROTECTED AREAS



(at: <https://www.icnf.pt/api/file/doc/dec9fe218d76ab5f>)

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