

## GOOD PRACTICE



Accessible Facility



The capture of animals is not permitted



Walk on the marked paths



Starting fires is strictly forbidden



Please avoid making noise



Fishing is prohibited



Please leave rubbish in the bins provided



Plant collecting is not allowed



Please respect private property



Access with motor vehicles is not allowed

## HUELVA

Emergency phone: 112

PARAJE NATURAL  
Marismas de Isla Cristina

## MORE INFORMATION

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## OTHER CATEGORIES OF PROTECTION



### • ROUTE

Circular (2 versions)

### • LENGTH

5.7 km (long version) - 4.1 km (short version)

### • ESTIMATED TIME

1 hour and 45 minutes(long version)

### • DIFFICULTY

Low - Trail accessible for persons with reduced mobility

### • TYPE OF TRAIL

Path or Trail

### • LANDSCAPE / VEGETATION

Marsh vegetation

### • SHADE

None

### • SPECIAL AUTHORISATION

Not required

### • RECOMMENDATIONS

Carry drinking water and sun protection in summer and wear suitable clothing and footwear.

### • PROVINCE / MUNICIPALITIES

Huelva / Ayamonte

### • SHEETS OF MTN MAP 1:50.000

998

### • START / END COORDINATES

37° 11' 27" N/7° 20' 47" W

37° 11' 27" N/7° 20' 47" W



## HOW TO GET THERE

From Ayamonte head towards Punta del Moral, along Avenida Cañada Real. You'll reach the trail about 150 metres before reaching the first roundabout entering Punta del Moral. But to reach the start you'll have to turn back at the roundabout return, following the signposts.



## PARKING

There are no marked parking spaces. You can leave your vehicle close to the start of the Trail.



## PUBLIC TRANSPORT

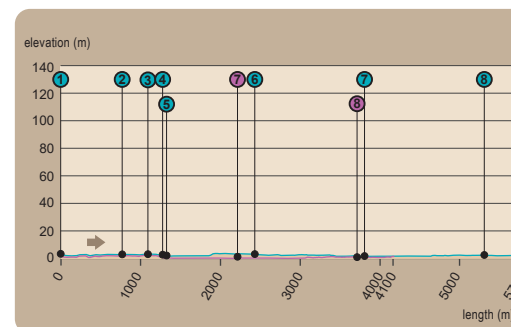
It is not possible to access the trail by public transport. The principal company running regular local bus routes in the area is DAMAS SA (959 256 900; [www.damas-sa.es](http://www.damas-sa.es))



## OTHER TRAILS

The Laguna del Prado and Molino Mareal del Pozo del Camino trails are located nearby, a section of the latter running along the Huelva - Ayamonte Greenway.

## PROFILE OF ROUTE



### • MAXIMUM GRADIENT

2,93 m (long version)

2,19 m (short version)

### • MAXIMUM ALTITUDE

3,04 m (long version)

2,30 m (short version)

### • MINIMUM ALTITUDE

0,11 m (long version)

0.11 m (short version)



## TRADITIONAL SALT MARSHES

The salt marsh tradition of the Isla Cristina marshlands dates back to Roman times. It's a tradition whose simple engineering has survived practically unchanged for two thousand years and Has been passed from father to son, thanks to the fishing and salt industries of the area. Although most of the artisan salt marshes have evolved into aquaculture holdings, the salt marshes of Pozo del Camino remain active, harvesting the precious.

Seawater circulates through the salt marshes through a series of ponds of varying depths. As the water flow from one enclosure to another, the concentration of salt increases. The salt crystallizes by saturation. The extraction process begins in late spring when the high tide floods the estuaries and is entirely natural and artisanal. The salt farmers skim the surface of the water using a lousse without touching the bed, as the mired salt is of no use.

To isolate the production of salt from the influence of the ocean, the salt marsh enclosures are separated by resistant walls protected by saltwort plants, such as those we see on this trail. Salt extraction has always been of strategic importance throughout history. But around 1950, new methods for the conservation of fish reduced the use of salt dramatically and, with it, salt marshes. This was the case of the Salina del Duque.

HUELVA

PARAJE NATURAL  
Marismas de  
Isla Cristina

# Trail

## Salinas del Duque



Junta de Andalucía  
Consejería de Agricultura, Ganadería,  
Pesca y Desarrollo Sostenible



## Salinas del Duque

The trawls and sediments accumulated in the rivers Guadiana and Carreras, combined with the Atlantic winds, generated new lands profoundly influenced by the seas. These unique spaces recovered from the sea are home to an array of *caños* or inlets, estuaries and remains of old marshes with expanses of salt marshes, forming a rich and diverse ecosystem. They are, in fact, the ideal habitat for a plethora of birds, such as the Eurasian spoonbill, which has come to breed in these salt marshes. For inhabitants of the area, the traditional exploitation of these salt marshes was also an important economic resource.

### On the wall of the salt marsh

To discover them first-hand, the trail runs anti-clockwise along the perimeter wall of the salt marshes. It does so on the open marsh, as the sun beats down with no shade and the westerly Atlantic winds intensify the smells of tradition, fishing and saltpetre. The itinerary encompasses a double circuit, so, if you wish, take a left at the fork some three hundred metres from the start, to cross the transversal wall crossing the salt marsh.

The start panel [1] is located alongside a gate. Turn right towards the path that runs parallel to one of the main channels of the Carreras river. After some seven hundred metres we reach the first of the transversal channels that cross the path. The bridge [2] sits on the lock gates that regulate the flow of the water between the interior and exterior of the salt marshes. This form of water management is also used in artisan fish farming, which uses the displacement based on the tide numerous fish shoals.



Further ahead are the remains of series of jetties [3] which attest to the intense fishing activity here in the past and the origins of the town of Isla Cristina. Another activity intertwined with the fishing sector is that of shellfish gathering and farms cultivating the palourde clam have been installed in the muds on both sides of the estuary.

### The beat of life in the salt marsh

With the humid and saline environment soaking our skin, we reach the panel on the vegetation of the marsh [4], just before the crossing with the short circuit transversal wall [5]. All of the plants that grow here have had to deploy an arsenal of resources the stress caused by the extreme salinity, direct sunshine with no respite and the changing tides, described in detail on the panel. Cordgrass, duckweed, salicornia, samphire, *A. macrostachyum* and salgados are common species to be spotted, especially in the old basins of the salt marsh.



But the plants are not the only ones that have to adapt to the rigours of the environment. The birds have also developed a surprising variety of anatomical adaptations to take advantage of the productive waters of the marsh. The wealth of invertebrates, crustaceans, molluscs and fish make it a real oasis on the migratory routes of many birds. Reach for your binoculars as it's highly likely you can recognise the elegant avocet with its upwardly curved bill and black and white plumage, or the unmistakable Eurasian spoonbill, with its spoon-shaped bill which it uses to wade from side to side in the waters where it feeds. You'll spot many others, especially from the heron family, but also waders like the redshank, Kentish plover, curlew and oystercatcher.



### The Carreras: a river and a ría

Continuing on the long circuit, and in the intermediate zone of the marsh, we can make out pastures of *spartina maritima* forming part of the pulsating system of the Carreras estuary. At 14 kilometres long, the Carreras river is really a ría, or brackish estuary or inlet that structures the marshes of Isla Cristina and gives shape to the town. On the other side of the estuary [6], almost at arm's reach, sits Isla Cristina with its boats and its port.



The trail now winds to the west, crossing a new bridge towards the salt marsh pools [7] which slowly come in to view. Over the course of this section, which runs parallel with the Caño de la Cruz, there are a series of pastures of *zoostera nolti*, a particularly vulnerable sea grass visible at low tide as areas of intense green. As well as their role as a biomarker of the quality of the waters, they function as a forest generating oxygen and providing food, refuge and intimacy for the reproduction of numerous species.



Leaving the crossing with the transversal wall that connects again with the short circuit, the trail runs south. Before the end you'll find an observation point [8], built with natural materials from the area, like the old huts on the marsh, offering a final view of the birds. Even if you don't have binoculars, try to pick them out. Recognising a bird in its natural habitat is an unforgettable experience.



**Trail**  
**Salinas del Duque**



- Landmark (see text)
- Interpretive panel
- Bridge
- Observatory
- Salinas del Duque Trail
- Roads
- Paths
- Boundary of Natural Space

