



Gaia Parks
everything, for a smooth ride

Local Nature Reserve of Douro Estuary



USEFUL INFORMATION

Local Natural Reserve of Douro Estuary

The Reserve was established under the terms of the legal system for the conservation of Nature and Biodiversity (decree law n.º 142/2008 of July 24th) by regulation n.º 82/2009, published in "Diário da República" 2nd series - n.º 30 of 12 February 2009. This is a small Nature Reserve for the protection of the many birds which nest and spend the winter in the Estuary of the River Douro.

Opening Hours

Open every day, from dawn to dusk.
Free entry, but conditioned by signalization.

Location

The Local Natural Reserve of Douro Estuary is located on the south bank of River Douro, in the City Council of Vila Nova de Gaia; it covers an area of approximately 62 hectares of the Douro Estuary and Cabedelo.

Access

From the Ribeira de Gaia, follow along the River Douro towards the sea. Shortly after passing Afurada, you will find the Local Natural Reserve of Douro Estuary. You can also access the Reserve from Candal and Arrábida, on motorway A1.

GPS 41o8'8.77"N / 8o39'43.97"W

Special Programs

There are regular meetings for the observation of the birds accompanied by Technicians of the Gaia Biological Park. For reservations please contact the Attendance Office: atendimento@parquebiologico.pt
Phone: +351 227 878 138 | Fax: +351 227 833 583.
More information: estuariododouro@parquebiologico.pt

Please see our program of activities at
www.parquebiologico.pt
or at the reception of the parks



PLEASE RESPECT ALL THE SIGNS AND NOTICES THAT YOU WILL FIND IN LNRDE

Don't forget that the existence of good conditions conducive to the rest, feeding and shelter for the migrant birds depends on you too!

Walk through the Reserve, without disturbing the tranquillity of the area.

The proper use and enjoyment of this area is to contribute to the conservation and maintenance of their natural wealth.

All sporting and leisure activities are prohibited anywhere other than in the designated areas (article 6, bans, point A).



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A Little Egret near a group of shoreline birds



A Bluethroat



Marsh

LOCAL NATURE RESERVE OF DOURO ESTUARY

The Local Nature Reserve of Douro Estuary, which is located on the south bank of River Douro, in the City Council of Vila Nova de Gaia, maintains a significant ornithological wealth. It protects an area of 62 hectares.

The classification as a Local Nature Reserve, whose regulations are published in **Diário da República 2nd Series - N.º 30 of 12th November 2009 (Regulation n.º 82/2009)**, makes possible an appropriate and concerted protection policy and the possibility of carrying out improvements at the site in order to obtain increases in appreciation of the area as an Ornithological shelter.

The Park presents a coastal frontage and a dunes reef known as “Cabedelo” and includes an area of estuarine characteristics that include sand fringes and a small marsh.

FAUNA AND HABITATS

The final part of the Douro Estuary, in particular Cabedelo and Bay of S. Paio, the area that remains of the marshes and the sandy areas that is covered and uncovered by the sea, has an important natural and scenic value and, more specifically, offers favourable conditions for the shelter and nesting of many birds, some of which are species of high priority conservation, in the terms of the Birds Directive (79/409/CEE). The ebbing and flowing of the tide is also why estuaries are ecosystems of high productivity. It's where the organic matter is deposited and the nutrients are carried by the rivers.

Here, where the River Douro merges with the sea, the water shows a great variation in the salinity, depth and temperature, depending on the rising and falling of the tides.

These characteristics result in habitats to which extremely specific organisms have adapted and are capable of dealing with these wide-ranging variations. Hiding in the sands at low tide there are numerous species of invertebrates. This is the reason that brings the different birds of the shoreline, all attracted by these special places. If you look at the birds through binoculars, you will notice that they have different variations in their beaks according to the species. The Herons have a long beak similar to a spear, but Whimbrels have a curved beak to sink in the sand at low tide, from where they extract the food; the Ruddy Turnstones have shorter beaks, with which they remove small crustaceans from the intertidal limit, and the Great Cormorants seem to have hooks on the tip of the beak, with which they hunt mullets under the water... It will not be far from the truth if you want to see the beaks as cutlery designed for a specific use.

Being an important visual reference, seen from the sky, the coastline is often used by wild birds as a migratory corridor. Some of these birds travel extensively, flying from as far away as Scandinavia on their way to Africa. For this reason, it is understandable that these small “service areas” are vital so that they are able to rest and feed, in the pauses necessary to their survival.

Thousands of gulls live permanently on the River Douro and the adjacent coastline, feeding on all kinds of organic waste carried by the river water or in the sea. For some years, the Yellow-legged Gull (*Larus michahellis*) have nested on the roofs of the houses that surround the estuary. The Black-headed Gull (*Larus ridibundus*), which becomes black-headed in the adult state during the breeding season, is very common during winter.

VEGETATION

Not far from the pedestrian path there is what appears to be a small pond, where rushes of various species grow. It is, in fact, a marsh. The profusion of plants adapted to this environment creates aquatic mazes, created by the stems and roots, where small fish with a commercial value in their adult state, can hide themselves. Their juvenile survival depends on this protection. If they were born in the sea, they would quickly be picked off and eaten by predators. It can be said without fear of contradiction that coastal fishing depends largely on the estuaries, rivers and lagoons along the coast.

This vegetation also has a considerable ability to purify water, as it absorbs the excess of nutrients.

Among the other plants that you will find in this salt marsh, we should highlight the Sea Purslane (*Halimione portulacoides*). Especially tolerant to salinity, their greyish leaves are easy to distinguish. More distant from the waterline, are the dozens of species of dune vegetation. These are the ones that stabilize the dunes. We should also mention the Jasione (*Jasione lusitanica*), an endemic species of Douro Litoral, along with the Sea Holly, *Otanthus maritimus*, to mention but a few.



A Jasione