



The dunes of Sant Pol

Sant Feliu de Guíxols

You are on the beach of Sant Pol, northeast of the town of Sant Feliu de Guíxols. This beach still retains the beauty of buildings from the last century, clear shallow waters and the remains of a fragile and rare ecosystem in Catalonia: the coastal dunes.

The dune ecosystem of Sant Pol is small, but its exceptional nature makes it ecologically important. It provides a history lesson about what the landscapes of this coastline were like, not so many years ago.

The survival of the dunes of Sant Pol allows us to learn about and value them. If, in addition, we learn to respect and preserve them, we will be able to enjoy them for many years to come.

www.doss.studio Photograph: Mireia Veleco / Freix Casas (Global warming) Map: Institut Cartogràfic de Catalunya



Many small animals live hidden among the dunes, although they are often hard to spot.

If you look carefully, you can find the traces they leave behind, such as footprints, droppings, feathers...

Here you can find BEETLES, LITTLE SNAILS, BUTTERFLIES, LIZARDS and birds such as WAGTAILS and SPARROWS...

They are all essential to the functioning of the ecosystem, as they help plant species to reproduce.



Rising atmospheric temperature, as a result of our activities and burning fossil fuels, has significant erosive effects on the coast due to rising sea levels and weather phenomena such as storms, high winds and waves. This impact is predicted to increase in the future unless we urgently reduce emissions.

Natural features such as Posidonia and Cymodocea meadows found on the seabed, beaches and dune formations can protect the plant and animal life found behind the dunes and constructions.

Enjoy the route!

Follow the information panels and enjoy the dunes at your own pace.

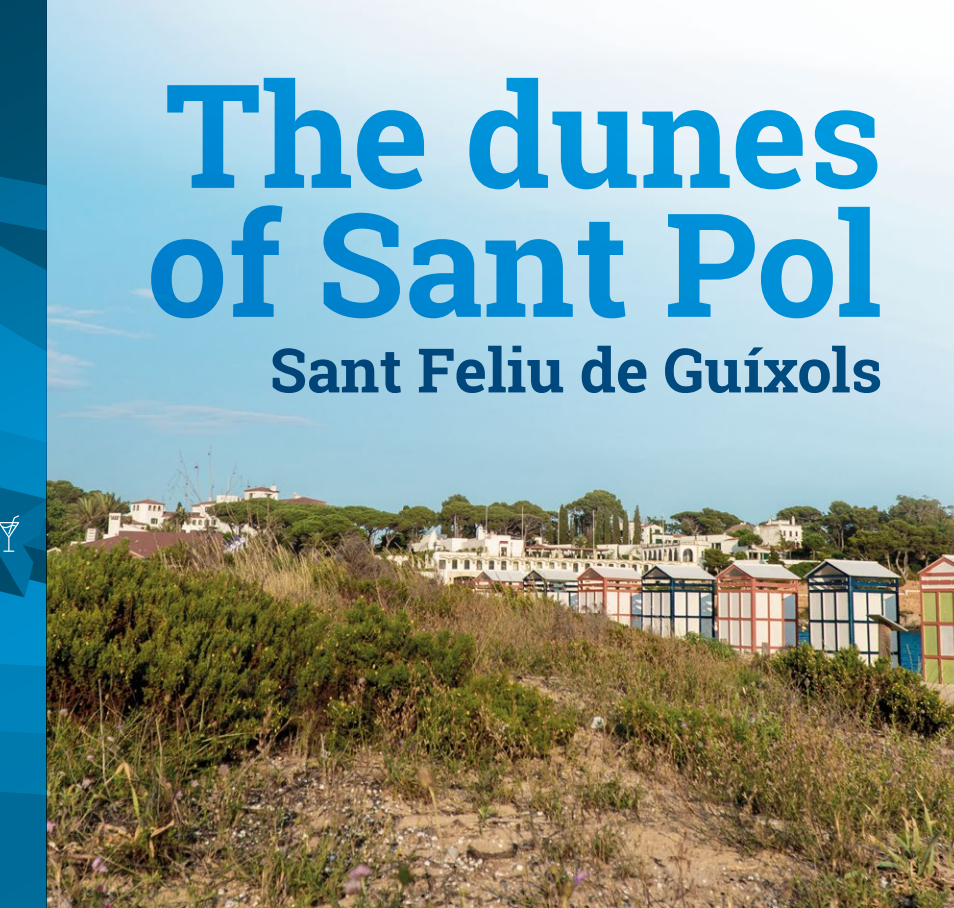


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Recommendations

- 1 Respect the plants so they can continue the cycle of life.
- 2 Stay on the marked paths, so you can enjoy the natural world without damaging it.
- 3 Keep your dog on the path, as it may harm the fauna and flora.
- 4 Be careful not to start a fire and keep an eye on anything that could cause one (cigarettes, glass, etc.).
- 5 Observe and respect the diversity of animal and plant species.
- 6 Look after the environment. Place all rubbish in the correct waste bins.



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Dune formation

Foredune

On the dune

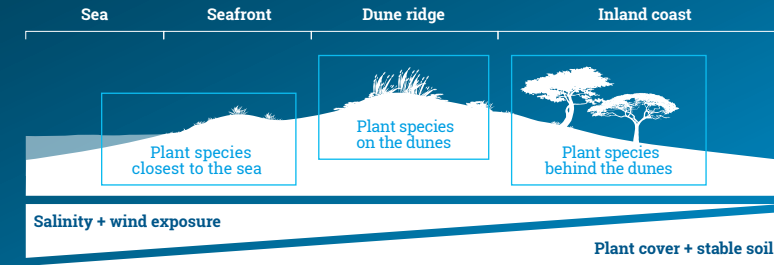
Coastal dunes are accumulations of sand that form in dry areas behind beaches. The sea deposits the sand on the beach and then the wind transports the finer grains. When the wind hits an obstacle, grains of sand accumulate around it. Over time, the dune grows and vegetation colonizes it; this causes the sand to settle, as the plants stop the wind from blowing it away again.

Why are dunes important?

The dunes guarantee the continuity of the beaches: they act as a natural sand reservoir and as a protective barrier against storms.

In addition, they are a unique but threatened terrestrial ecosystem due to their location: the seafront, an area of high tourist value in our region. They are home to characteristic flora and fauna.

What are the dunes like?



The dunes are a dynamic element of the beach landscape. They are formed by a combination of many determining elements:

- SEDIMENT
- WIND EXPOSURE
- SOIL STABILITY
- VEGETATION
- SALINITY

From sea to land these factors vary and create very different environments in a small space. Dune formation is a very slow natural process that can rarely be completed today due to human activity.

Dune vegetation is unique because it has adapted to these demanding and changing environmental conditions and it is fundamental to dune formation.



Biodiversity

The dunes are a reservoir of biological diversity. The organisms that live there are completely adapted to the conditions of this ecosystem, which has been degraded and is disappearing all over the world.

They are a natural treasure!



Plant species closest to the sea

We basically find low-growing herbaceous species very specialized to the place where they live. For example:

Sand dropseed

This small sand grass has long shoots and small hard leaves; it is one of the grasses that colonize the shoreline of the beach, where sea spray splashes it during storms.

Sand couch-grass

This grows alongside the sporobolus in the transition zone between the beach and the dune. It is also a grass.



Plant species that grow on the dune

Most plants on the dune ridge are herbaceous and low-growing as they are highly exposed to the wind, but taller species also begin to appear, such as:

Marram grass

This is the largest, most eye-catching and familiar plant on the dunes. This grass grows on the dune ridge (upper part). Its very deep roots help it survive and are responsible for the dune starting to stabilise.

Sea rocket

Another species we find in this area is sea rocket. It can easily be recognized by its flowers with their four pink petals, its fleshy leaves and bean-shaped fruit.



Plant species that grow behind the dune

In this space we find more developed shrub-like species.

The most typical shrub in the dunes of Sant Pol is yellow restharrow, a relative of brooms. Its yellow flowers give this space its characteristic colour. In the hot mid-summer, the harsh, rugged landscape is adorned with beauty, with the flowering of this plant and the sea daffodil.