



the  
**SAND DUNES**



# CIRCEO

PARCO NAZIONALE

The Circeo National Park was established in 1934 and is about 8900 hectares wide. Its territory, situated along the coast of the Latium Region, includes various environments: the Circeo Promontory, the "Selva di Circe" forest, the Island of Zannone, a diverse coastline with caves, cliffs, wide beaches and sand dunes, and the wetlands with four coastal lakes: Sabaudia (Paola), Caprolace, Monaci and Fogliano.



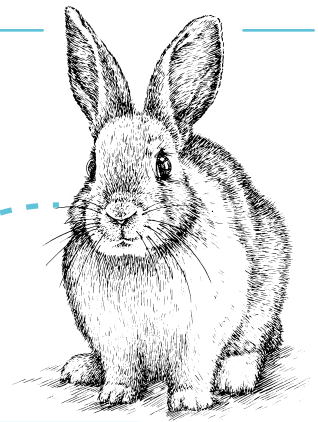


## BEAUTIFUL AND FRAGILE

The park boasts the longest coastal dune in Europe which stretches for about 22 km from the Promontory to Capo Portiere, reaching a maximum height of 27 meters.

A rare, precious and very fragile environment, it needs the help of all of us to be protected.

### THE EUROPEAN RABBIT



EUROPEAN RABBITS MOVE AMONG THE BUSHES OF THE DUNES AT NIGHT. IN THE MORNING IT IS EASY TO FIND THEIR OVAL FOOT PRINTS SLIGHTLY BIGGER THAN A TWO-EURO COIN.

## SEA BINDWEED CHAMOMILE



THE SEA LILY SEEDS THAT CAN BE FOUND AT THE PLANT FEET AND THAT ALLOW ITS DISPERSION THROUGH FLOATING, LOOK LIKE BITS OF CHARCOAL.

### THE PIONEERS AND THE OTHERS

The small and humble plants which grow near the sea are the real pioneers in conquering the dune. They need little amounts of water and nutrients; their roots prevent the sand from shifting, allowing other more demanding plants to settle.

Among them, the sea-lily and the sea bindweed chamomile colour the sand dunes with their blossoms.

The effect of the pioneers is proved by the variation in the vegetation height. In the 50 meters from the base of the dune to its highest point, vegetation height goes from the few centimeter of the grey birdsfoot trefoil, to the two/three meters of the lentisk or the juniper.



CONES  
OF MARITIME PINE

## THE OTHER SIDE OF THE DUNE

The soil of the foredune is richer and more fertile thanks to the lowest wind, the higher humidity and to the vegetation. True trees grow here, such as holm oaks, stone pines, maritime and cluster pines. When the sand dunes reach the banks of the lake the conditions change again and you can find trees which love water such as alders and ash trees.

### ALDER

THE LEAVES OF THE ALDER HAVE A PAPER-LIKE TEXTURE AND ARE SLIGHTLY STICKY. THE TREES ON THE DUNE CAN BE HARDLY SPOTTED BECAUSE THEY OVERLOOK THE LAKES.





PRICKLY  
JUNIPER

## A HARD LIFE

High temperatures, a long dry season, poor quality soil and strong winds are typical conditions of the sand dune environment.

Only the plants that developed special adaptations can live on these sandy mountains.

A careful eye will notice the hairy surface of the *Helichrysum*, the small and coriaceous leaves of the juniper, the waterproof wax that covers the lentisk foliage. These are all strategies that minimise water losses, helping the plants to keep the water inside.

## GREEN “FLAGS”

On the dune, you can see trees and bushes that have a characteristic shape, as if they were combed by the wind.

Their crowns have developed to offer less resistance to the aerosol-rich air blowing from the sea, and they assume a flag-like appearance.





### ROUGH COCKLE (ACANTHOCARDIA TUBERCOLATA)

THE SHELL LOOKS LIKE A HEART WHEN SEEN FROM A LATERAL VIEW WITH THE TWO VALVES PERFECTLY IDENTICAL WHICH CONTAIN A MOLLUSC WITH A BRIGHT RED FOOT.



## ALL YEAR LONG ON THE DUNE

In summer the main attraction is the sea, but early in the morning you can also spot traces of the nocturnal passage of rabbits, lizards and beetles. The autumn sunset is perfect to admire cormorants flying from one lake to another. In this season it is sometime possible to observe thousands of small blue sails which cover the sea along the seashore. These are the emerged part of the jellyfishes called "by-the-wind sailors".

During the winter, after a storm, the sea carries ashore shells and many other treasures which await to be discovered and identified. On the smooth and wet beach the tracks of seagulls, crows and foxes are evident. Spring offers colourful blossoms which welcome the arrival of thousands of migratory birds flying to the lakes. On the beach you might also be lucky enough to meet oyster catchers and partridges.







## COMFORTABLE AND VIRTUOUS

The massive impact of tourists on the sand dunes could destroy the patient work of the plant roots which prevent the sand from shifting, and open the way to erosion.

Using the boardwalks to reach the beach allows you to not walk on the hot sand and, above all, to prevent damages to the dunes. Moreover, each boardwalk represents also a short path that allows you to appreciate how the vegetation changes from the highest point of the dune to the beach, as well as how the dunes slowly re-forms after a strong erosion.

## WALKING ON THE DUNE

On the road which runs along the top of the sand dunes from an area called “La Bufalara” on “Via della Lavorazione” to “Rio Martino”, you allowed only on foot or bicycle. This road also offers the chance to walk along Monaci lake. Along this path it is possible to understand how fragile is the dune system and what happens when erosion progresses.

THIS HARMLESS BEETLE MOVES A LOT ON THE SAND LEAVING BEHIND IT THE IMPRINT OF ITS BODY WITH A PATTERN THAT RECALLS A ZIPPER ABOUT ONE CENTIMETER WIDE.

BEETLE  
(PIMELIA BIPUNCTATA)







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