

# Guide for the management of the Sardinian Beaches



How to protect and preserve this environmental asset

*Io dove fui felice  
era una terra  
che vi nacqui  
cantando  
ed era il mare.*

*Marcella Massidda  
Poetesse of Gallura*

Sandro De Muro Gianni De Falco Maurizio Costa  
www.osservatoriocostesardegna.com

## A guide for preserving the beaches of Sardinia.

The INTERREG IIIA GERER project "Gestion intégrée de l'environnement à haute risque d'érosion" (Integrated environmental management in areas of high risk of erosion) has the aim of increasing knowledge and awareness regarding beach systems in Sardinia and Corsica. A fundamental part of the process undertaken by GERER is to communicate this information. The idea of the guide is to offer suggestions to those who benefit from and enjoy this asset and to those responsible for preserving it. It aims to establish procedures necessary for a conscious

management of the environmental and economic heritage that the beach represents while continuing the research for suitable solutions to specific problems that may arise on the beaches, each to be approached individually. The guide contains some of the rules and advice that are the starting point for the creation of the "Manual of procedures for appropriate beach management" foreseen in the INTERREG IIIA GERER Project.

## Glossary of terms and rules

### BEACH



#### The beach belongs to the sea and not to the land.

The beach is a stretch of sandy coast between the land and the sea which is much wider than most people think. It can include wetland areas, dunes, the beach itself and the submerged foreshore areas.

It is in a state of constant evolution in the short, medium and long term. We should consider it as a part of the sea rather than of the land.

The beach and the materials that form it are an extraordinary environmental and economic resource. They cannot be reproduced. Man can only create a poor imitation.

### POSIDONIA



#### Posedonia is not seaweed.

*Posedonia oceanica* is a marine plant endemic in the Mediterranean, capable of colonising vast areas of the sea bed and forming immense expanses called grasslands which extend from the surface to depths of up to 40 metres in very clear water.

These grasslands of *Posedonia* trap sediments, reduce both wave size and the slope of the submerged beach. The foliage that falls from *Posedonia* is often washed up on the shore, especially in winter, forming banks that protect the beach from wave erosion. When the large quantity of biomass, deriving from shell fish present in the grasslands, ceases its living cycle, it produces a significant part of the nourishment of the beaches.

## Rules for the Protection of the beach and conscious beach management



### 1 - Do not collect sand or shells.

Do not remove sand, pebbles or shells from the beach, the dunes or the rivers that feed them. The beach lives from these supplies. Without these elements the beach deteriorates and eventually disappears.



### 2 - Do not remove the 'seaweed'.

Do not remove beached *Posedonia* (commonly known as 'seaweed'), reeds, pieces of wood and natural matter that the beaches and rivers accumulate. These natural elements have been nourishing and protecting the beaches from erosion for thousands of years.



### 3 - Do not build on the beaches.

Do not build structures that interfere with the sedimentary dynamics of the beach system e.g. car parks, promenades, roads, building terraces, piers, jetties, barriers etc. These structures affect the natural life of the beach and trigger erosion processes.



### 4 - Protect the seabed.

Protect the 'grasslands' of *Posedonia* on the submerged beach. It is a natural form of underwater protection and provides new sediment for the beach every year.



### 5 - Do not destroy the back of the beach.

Avoid erosion of the dunes caused by walking or using any form of transport across them. The dunes are the beach's natural reservoir. Without them, as a supply of sediment, the beach deteriorates and dies.

## Rules for creating awareness of the beach's fragility



### 6- The beach is fragile.

Make users of the beach aware of the fragility of the Sardinian beaches that is caused by the lack of sediment brought by large rivers.



### 7- Manual litter clearing.

The Sardinian beaches are made up of a variety of natural materials which are environmentally precious, including sand, shells, plants and seaweed deposited during sea storms. The cleaning of the beaches should, where possible, be carried out by hand and not using heavy machinery such as tractors.



### 8- Unified action to defend the beach.

Involve and educate the users of the beach, the local authorities, kiosk keepers, managers of beach facilities, hoteliers and tourist operators in the active management of the beach and the dunes, sharing the aims and methods.

## Rules for research and Monitoring



### 9- Prevention.

The dynamics and evolution of every beach should be monitored. An innovative management of the beach should be supported by sound scientific knowledge regarding how the system works.



### 10- Research.

#### How to carry out monitoring correctly.

Monitoring should be based on procedures, techniques and criteria capable of scientifically defining the evolution of the beach. The effectiveness of the managerial undertaking can in this way be evaluated and corrective measures introduced. GERER is a pilot project that experiments procedures and techniques with a view to extend them comprehensively to all the Sardinian beaches.

Authors:



Project partners:



Con il Patrocinio di:

