

Project

# GEOMORPHOLOGIC EVOLUTION AND EVOLUTION OF VEGETATION IN THE DUNAL SYSTEM OF PLATJA DE MURO

I+D+i  
**GIZC**  
GESTIÓ INTEGRADA  
DE LA ZONA COSTANERA

Axis  
Bloc 1.1  
Thematic area

Disciplinary research  
Environment  
Biodiversity and global change



## Summary

Coastal systems are highly dynamic and are characterised by a high number of geographical, geological, biological and climatic agents.

In the scientific field there are antecedents of specific studies relating to coastal dynamics, but there is currently no integration of these studies with the aim of going into more depth.

After years of use of the Balearic coast, it is time for a study integrating distinct factors influencing the dynamics of the dune-beach system to establish good long-term management policy.

## Actions

-Describe the subaerial environment of the beach-dune system (obtaining a baseline) at a the level of geomorphology and vegetation for the whole of *Platja de Muro*.

-Determine how the number of visits to the beach and management-protection measures of it affect the establishment of pioneer plants.

-Assess the state of conservation of the only population in the Balearic Islands of *Juniperus oxycedrus* subsp. *macrocarpa*.

-From data gained, propose sustainable alternatives for action against coastal erosion (soft action, sustainable tourism, etc.).



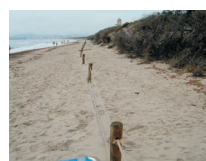
*Juniperus oxycedrus macrocarpa*



*Lotus cytisoides* (flor)



Sampling pioneer plants



Protecting the beach



Total station

## Applications

### Research

Scientific interest in this project is rooted, on the one hand, in the study of the vegetation of the beach-dune system of Es Comú, which plays an important role in dunal dynamics and, on the other hand, in the geomorphologic description of dunal systems. With these data we can sketch the relationships existing between vegetation and erosive processes, an area which until now has not received great attention in Spain.

### Administration

The Natural Park of S'Albufera is especially interested in georeferencing areas occupied by juniper, since they have no information about the size or exact location of this species, which is classed as vulnerable by the World Conservation Union (IUCN) within the park. Knowing about the causes of dunal regression and the effect it has on vegetation in these systems can be of great interest for managers of coastal environments.

## Contact

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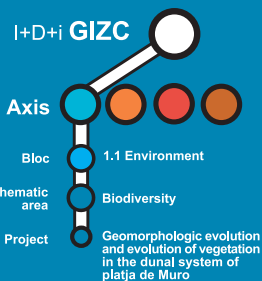
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