POSIDONIA GROWS: Recovery of Posidonia at Cap de Creus

The ***Posidonia Grows*** project will replant 300 Posidonia Oceanica seedlings at Cala Galladera Cap de Creus

Sponsor: Emporda Mar

Promoter and management: Empordà Mar

Collaborators: Cap de Creus Natural Park, MITECO, Mar d'Amunt Association, Rovira i Virgili University

Objectives:

1. To halt the erosion of dead vegetation in the cove.
2. Restore$^{25m^2}$of dead vegetation in Cala Galladera to living grassland by transplanting 300 *P. oceanica* seedlings from the MITECO nursery in Portman.
3. To reduce the presence of *C. cylindracea* algae in Cala Sa Sabolla by reducing its available habitat.
4. Contribute to improving knowledge and techniques for restoring *P. oceanica* meadows.
5. Estimate the carbon emissions balance of the project.
6. Raise awareness among the population of Cap de Creus about the usefulness of the Posidoniagrows project, and among the nautical and recreational tourism sector in the area, about responsible anchoring practices and the need to avoid anchoring in Cala Galladera.

Implementation:

- Mapping of the seabed, marking of the limits of the erosion front, monitoring of the evolution of the algae

Caulerpa cylindracea in the cove.

- Passive restoration, cordoning off the area to keep it free of anchoring and thus guarantee the success of the action and prevent the spread of *C. cylindracea* by anchors.
- Application for administrative permits, protection, marking and identification of the area.
- Collection of Posidonia seeds and transport to nursery
- Creation of 24 replanting areas with seedlings and vegetative fragments, distributed over three clearings of dead *P. oceanica* scrub
- Transport of seedlings from the nursery to the Port de la Selva aquarium and transfer to the cove for planting in the polygons.
- Monitoring of the survival, growth and branching of the transplants, the evolution of the Posidonia meadow cover, dead vegetation and C. cylindracea in Cala Galladera. Monitoring of the progress of the erosion front. Obtaining sediment samples to estimate and measure the carbon balance of the project.
- Awareness campaigns

Conclusions:

This project will replant 300 *P. oceanica* seedlings.

In addition, it will attempt to slow down the advance of the dead vegetation erosion front currently observed in the shallowest area closest to the beach. It also plans to monitor the success of the transplant for at least the next three years, the evolution of C*. cylindracea* in relation to the development of the *P. oceanica* transplants *and* estimate the carbon balance of this priority habitat restoration project over a 30-year period. However, to measure the success of the project and its carbon balance beyond three years, additional funding will be required.

Currently, the area of dead scrub covered by *C. cylindracea* is estimated at around 1,100 $^{m^2}$($^{1.2\ acres}$), and this project only aims to plant 25 m^2 $^{0.2\ acres}$. Therefore, this is a pilot project which, if successful, could be reinforced in the future.

Given the slow growth of *P. oceanica*, we can expect that there will continue to be plenty of space for dead vegetation, whose recolonisation could eventually be reinforced in the future with new replanting, as in the case above.

To prevent the loss of *P. oceanica* from continuing in this cove and to allow its natural recovery and through transplants, free anchoring in Cala Galladera will be permanently prohibited. This is without prejudice to the Cap de Creus Natural Park and/or MITECO installing some ecological anchorages to partially meet the high tourist demand for anchoring in this cove.

PosidoniaGrows is the result of a public-private partnership that also involves various public administrations of the State.

Organised by:

EMPORDÀ MAR
COMPROMÍS AMB EL MAR

SALVAMARS CIRKUS

In collaboration with:

UNIVERSITAT ROVIRA i VIRGILI

ASSOCIACIÓ CULTURAL SUBMARINISTA MAR D'AMUNT

Parc Natural de Cap de Creus

GOBIERNO DE ESPAÑA
MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA Y EL RETO DEMOGRÁFICO

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