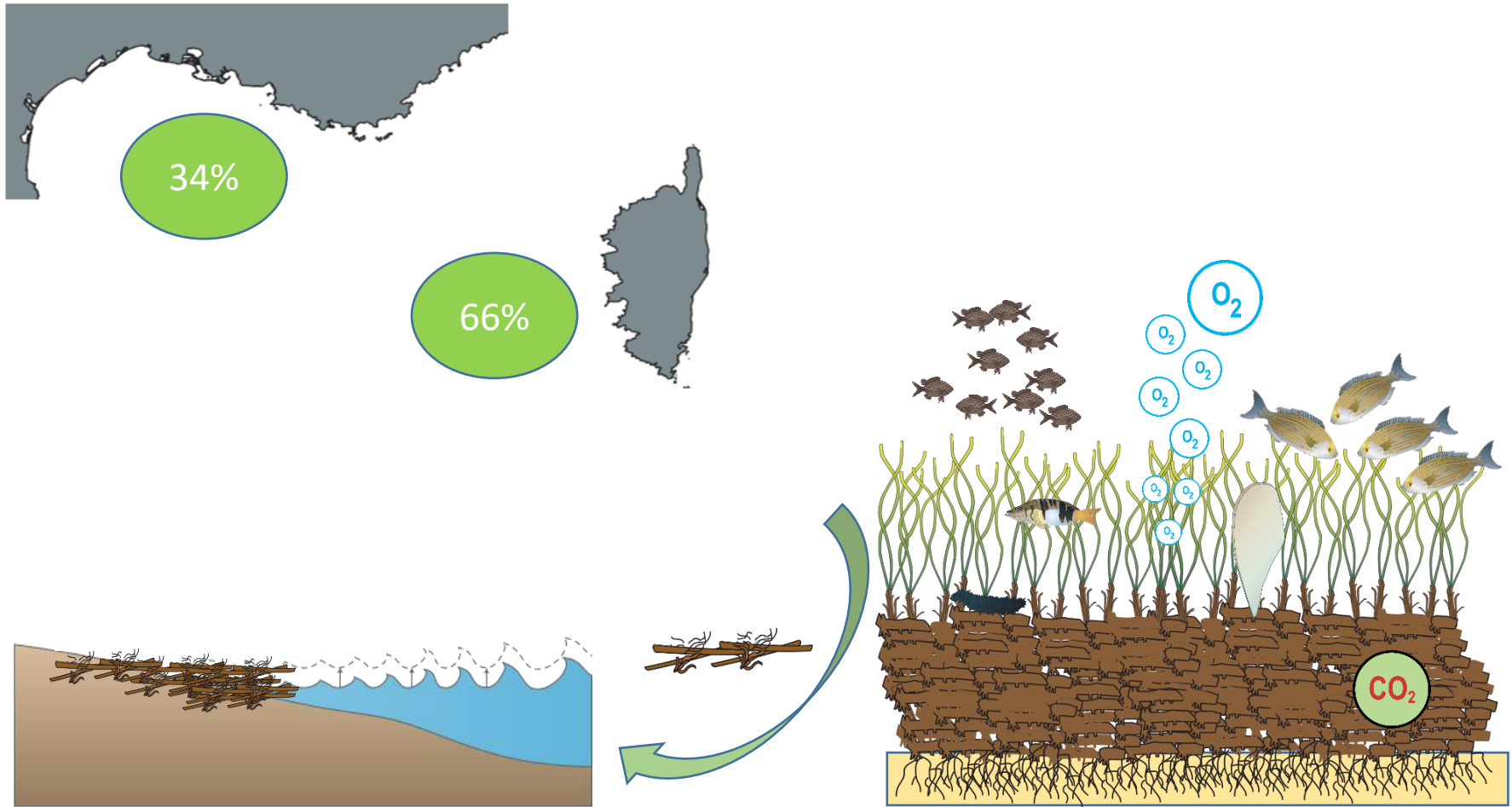




Restoration of anthropogenic patches in *Posidonia oceanica* meadows

Boulenger Arnaud, Marengo M., Fontaine Q., Fullgrabe L., Boissery P., Lejeune P., Gobert S.

Posidonia oceanica, a keystone species in the Mediterranean Sea



Anthropogenic pressures on Posidonia meadows : Anchoring



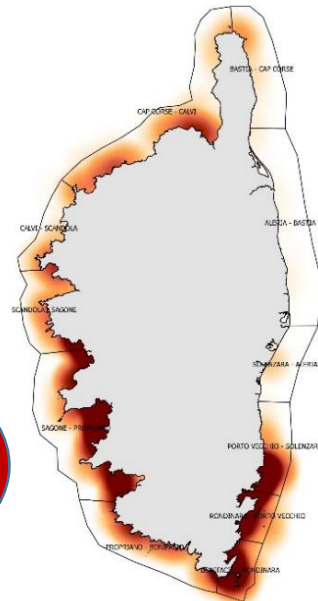
30% large leisure boats
Between Cote d'Azur and Corsica each summer

1/4
in the meadow



1/7 large leisure boats
Around Corsica each summer

1/3
in the meadow



Fontaine et al., 2019

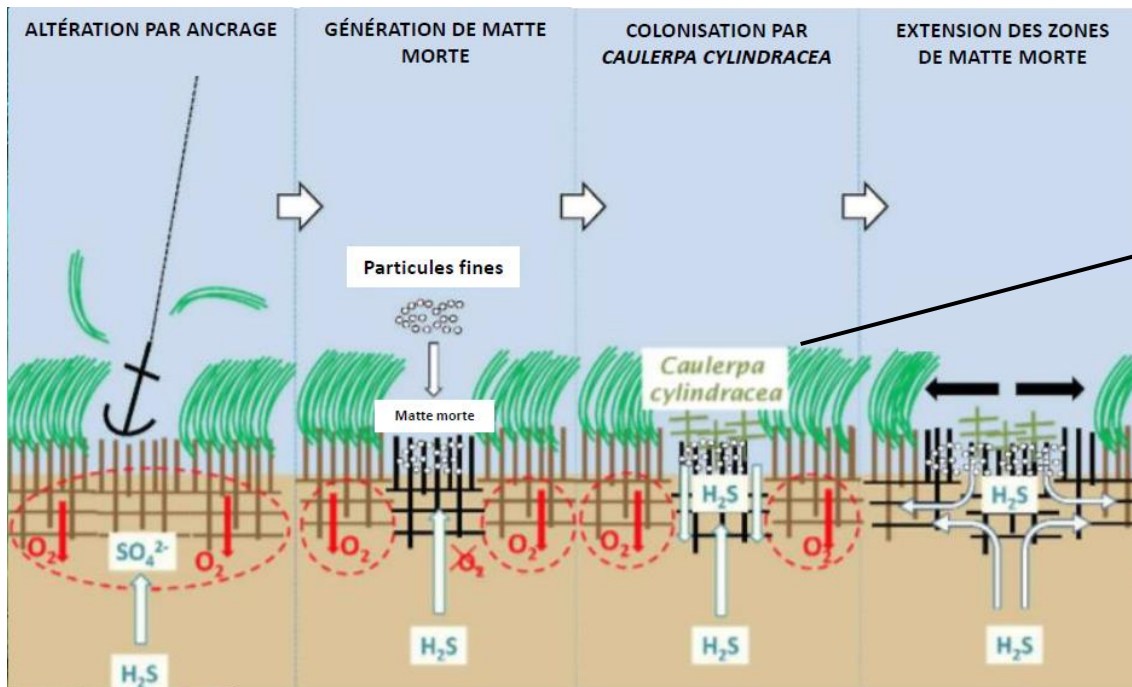
Damages caused by anchoring

Physical



Damages caused by anchoring

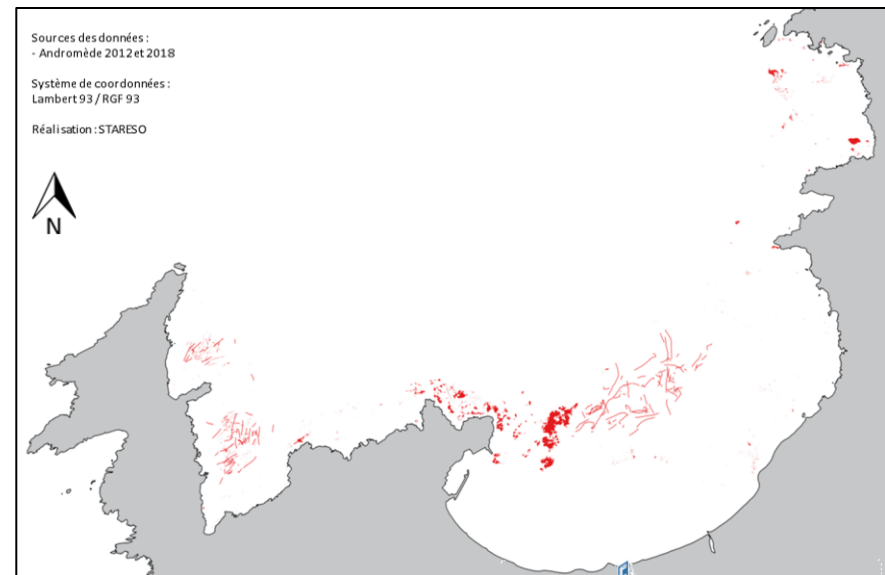
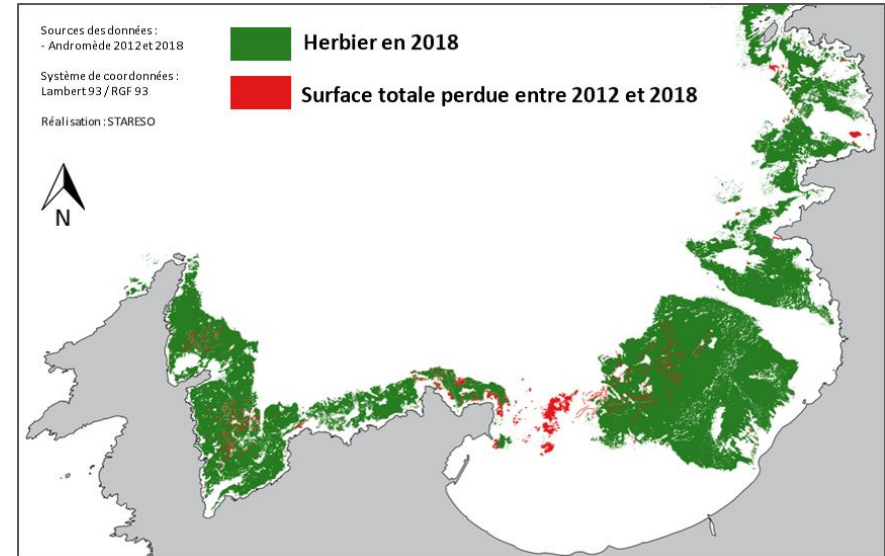
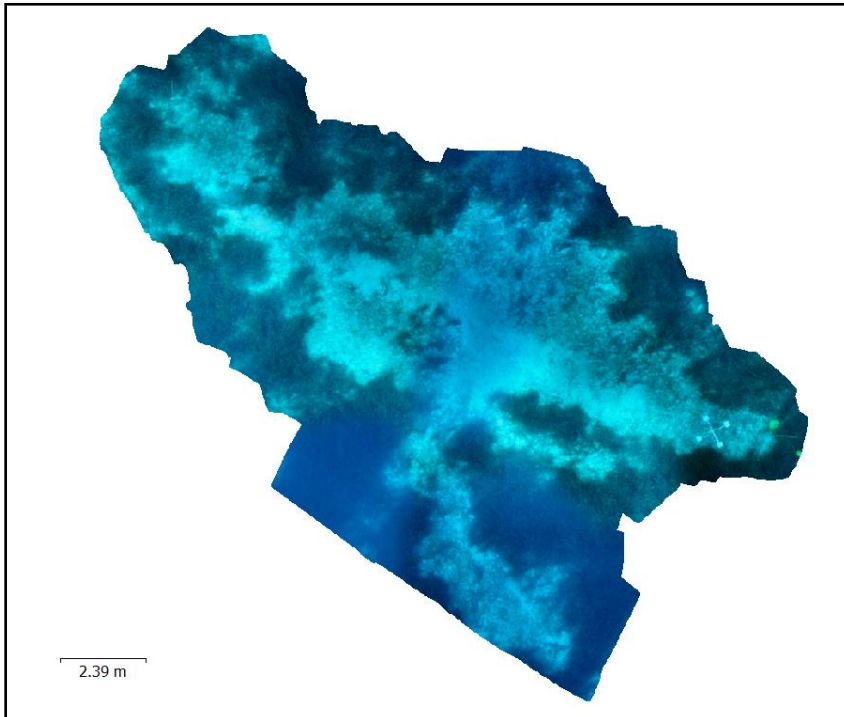
Chemical



Modified from Abadie et al., 2016

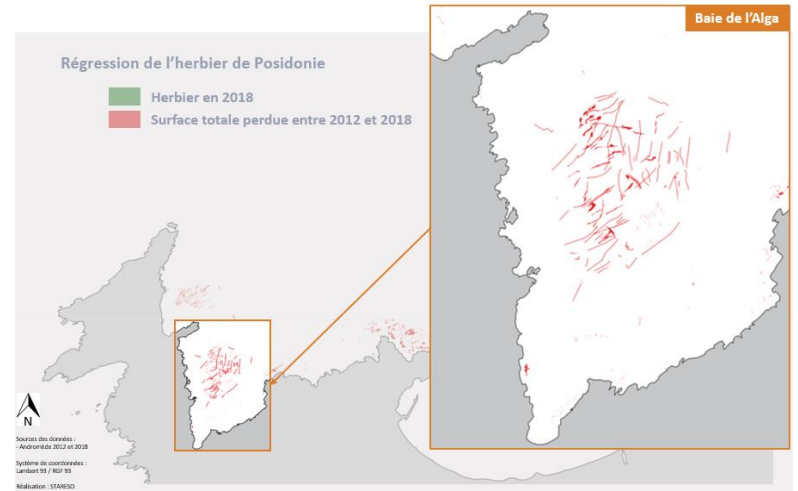
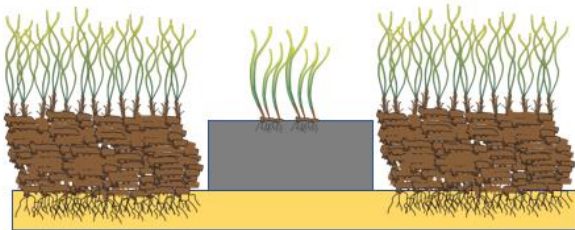
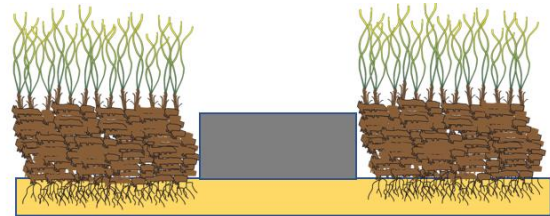
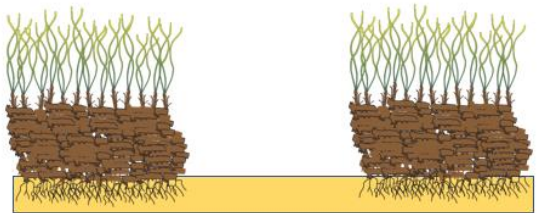
The case of Calvi Bay

Regression of 8ha in 6 years



The originality of REPAIR

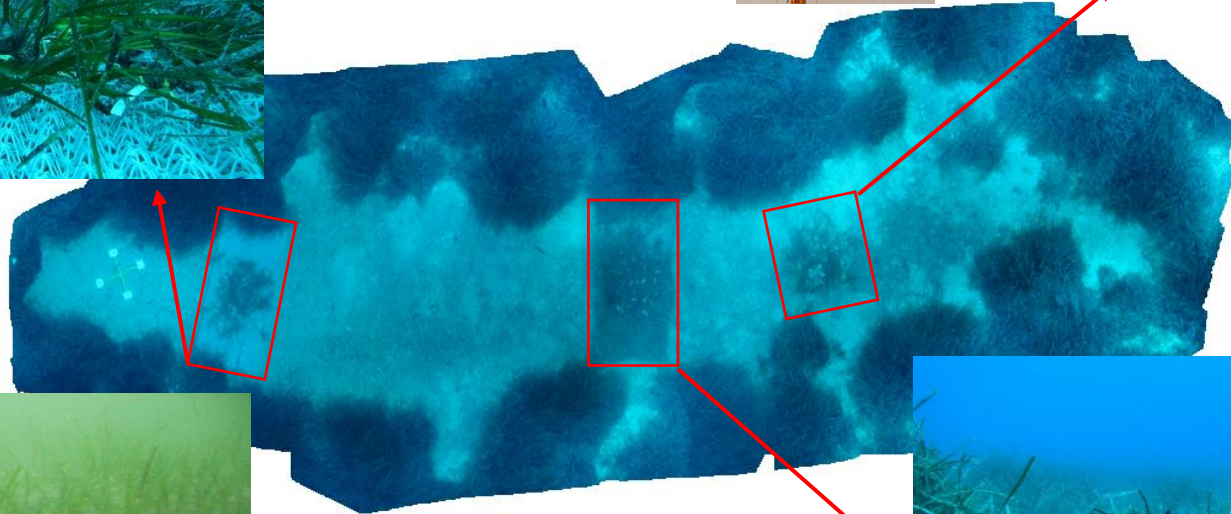
1 Limiting the expansion of anchor grooves



2021 – 2025
First transplantation in June 2022

The originality of REPAIR

2 Biodegradable artificial substrates



Coming soon: April 2023

The originality of REPAIR

3 Cuttings' origin: Non destructive sampling on surrounding meadow



2/3
Storm
fragments



1/3
Erosion side
intermattes

The originality of REPAIR

4 Abiotic variables monitoring

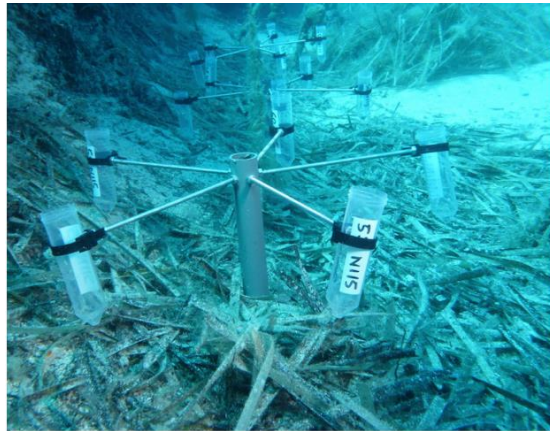
8 experimental sites: 2 depth

20 m

28 m



Sediment traps



Abadie et al., 2019

HOBO (T and PAR)



Current meter



The originality of REPAIR

5 Fundamental and applied research

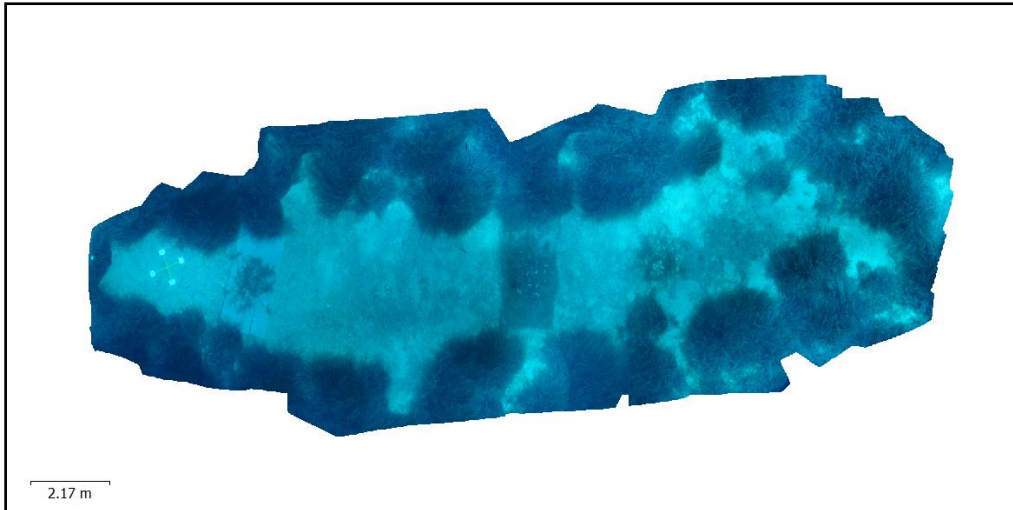


Bi-annual monitoring: September and May



Photogrammetry

Agisoft
Metashape



Morphology and physiology

