



Interreg



UNIONE EUROPEA



MARITTIMO-IT FR-MARITIME

Fondo Europeo di Sviluppo Regionale

# GESTIONE E TUTELA DELLE COSTE

TERZO INCONTRO TERRITORIALE

Cabras 25 ottobre 2019

## *Posidonia e spiagge.....non solo foglie e sabbia*

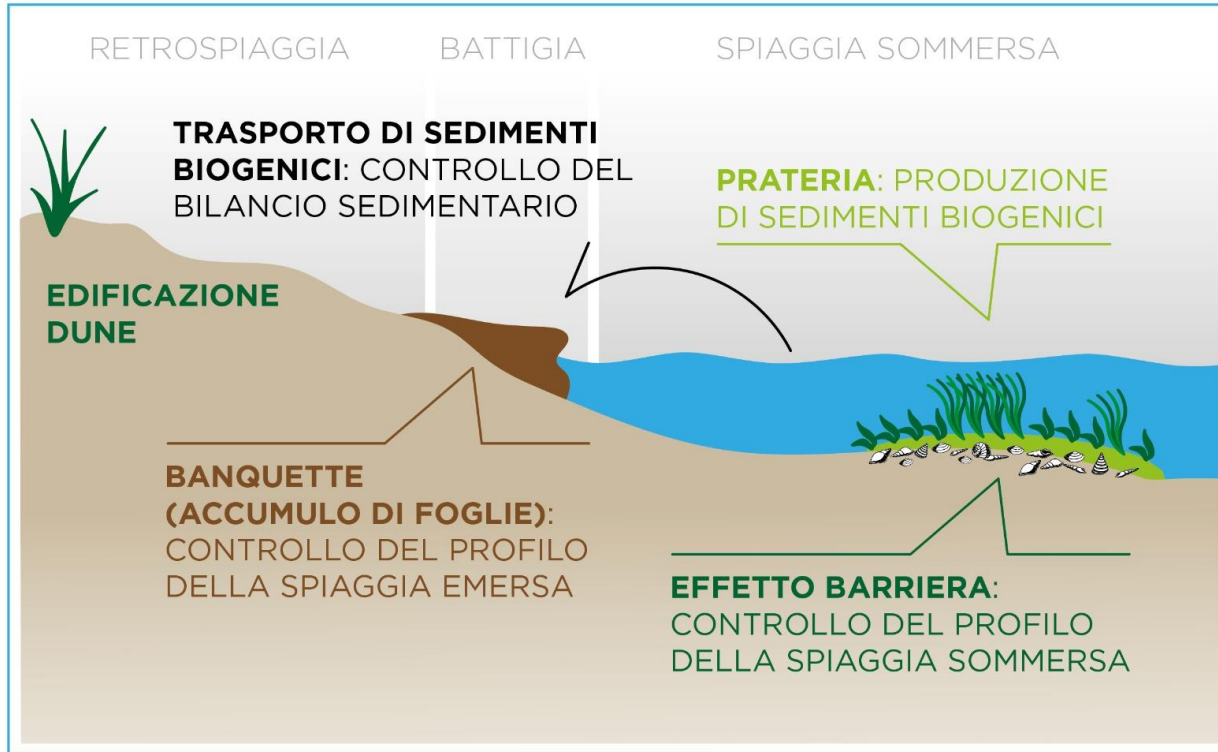
Simone Simeone<sup>1</sup>, Walter Brambilla<sup>1</sup>, Alessandro Conforti<sup>1</sup>, Ivan Guala<sup>2</sup>, Paolo Mossone<sup>2</sup>, Fabio Antognarelli <sup>1</sup>,  
Andrea Satta <sup>1</sup>, Giovanni De Falco<sup>1</sup>

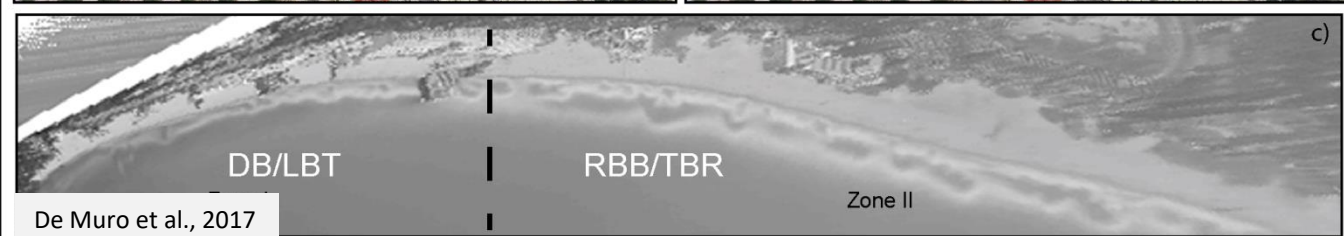
<sup>1</sup> Istituto per l'Ambiente Marino Costiero – C.N.R., loc sa Mardini, Torregrande, Or

<sup>2</sup> Fondazione IMC –ONLUS - loc sa Mardini, Torregrande, Or

La cooperazione al cuore del Mediterraneo

# Schema delle interazioni tra le praterie di posidonia e la dinamica delle spiagge





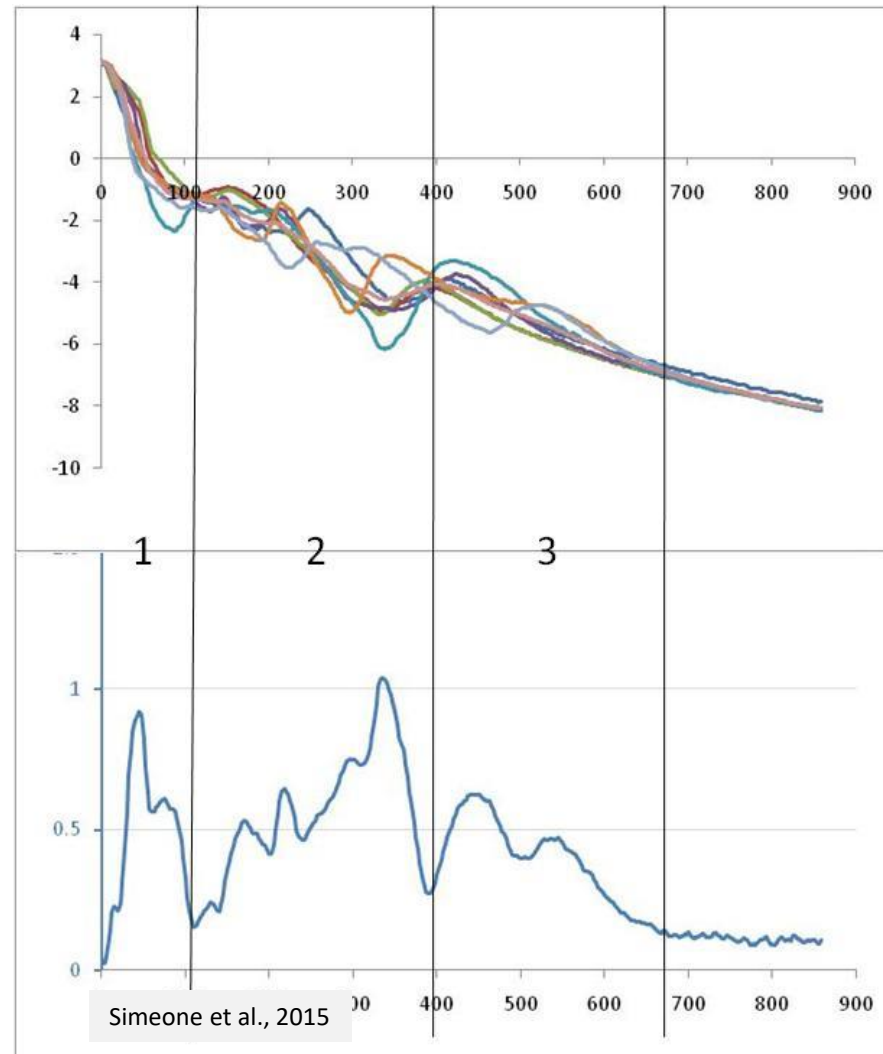
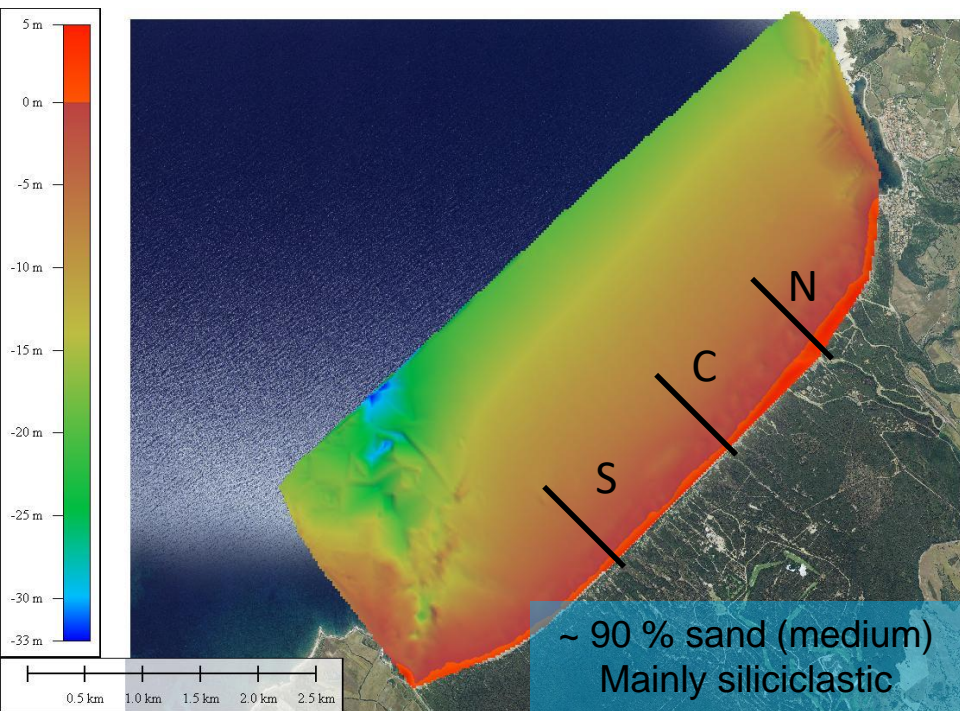
De Muro et al., 2017

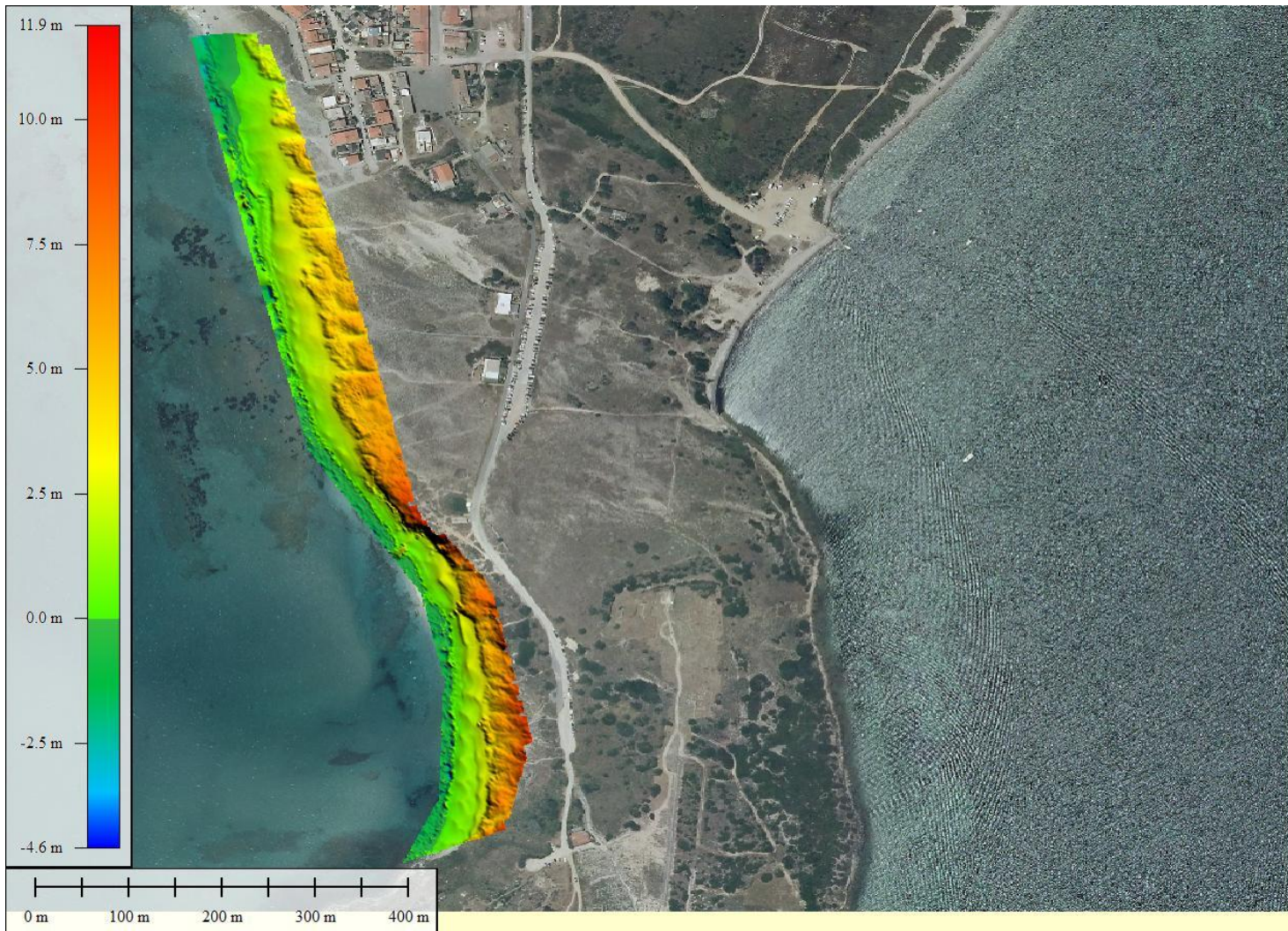
Exp Mode=Manual FStop=6.3 ISO=Auto(0) WB=Auto AvgGray=100 Zoom=240 ExpTime=7.580652s

Oct 19 07 10:01:34

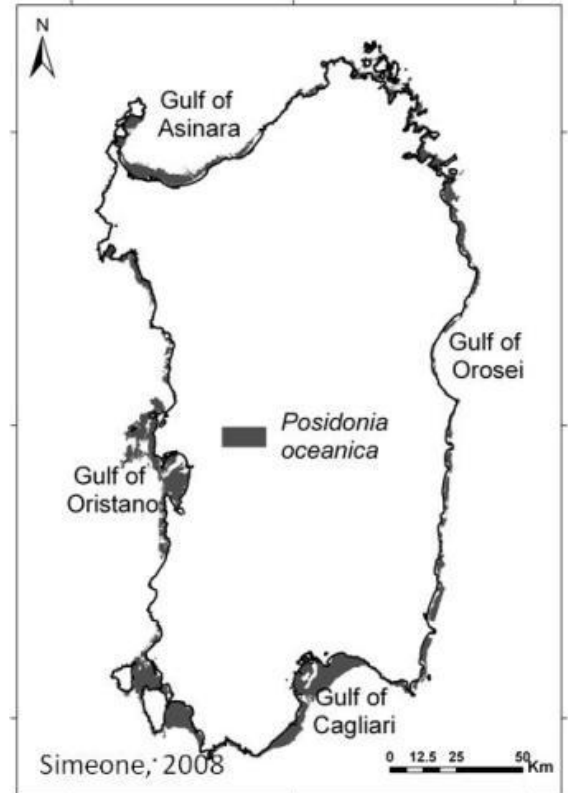


Simeone et al., 2013

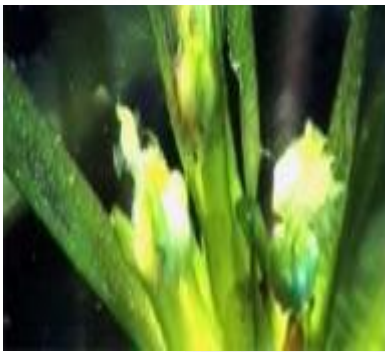
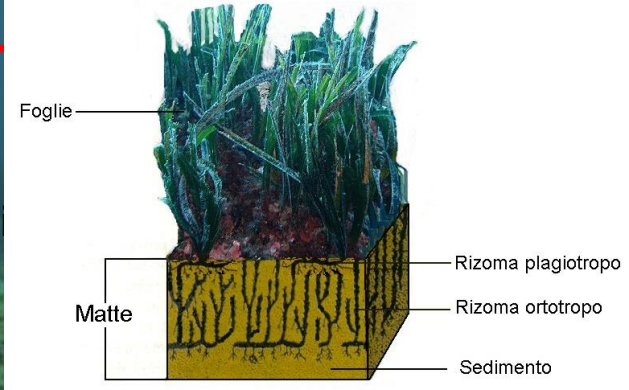
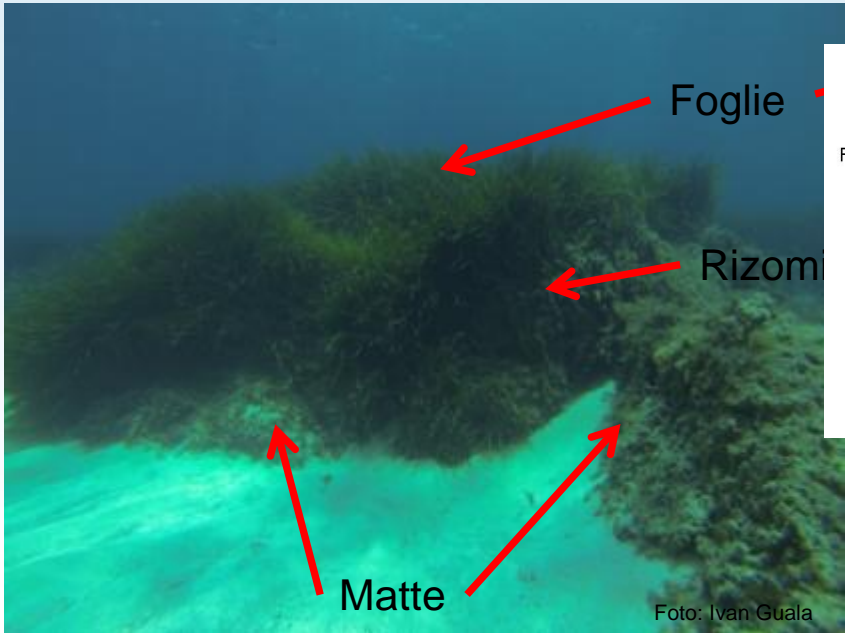


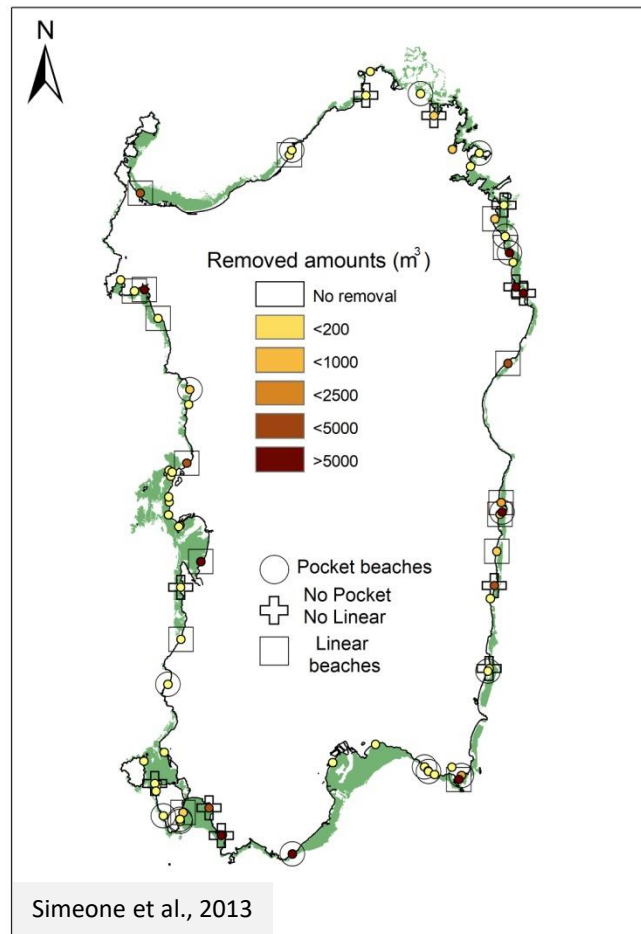
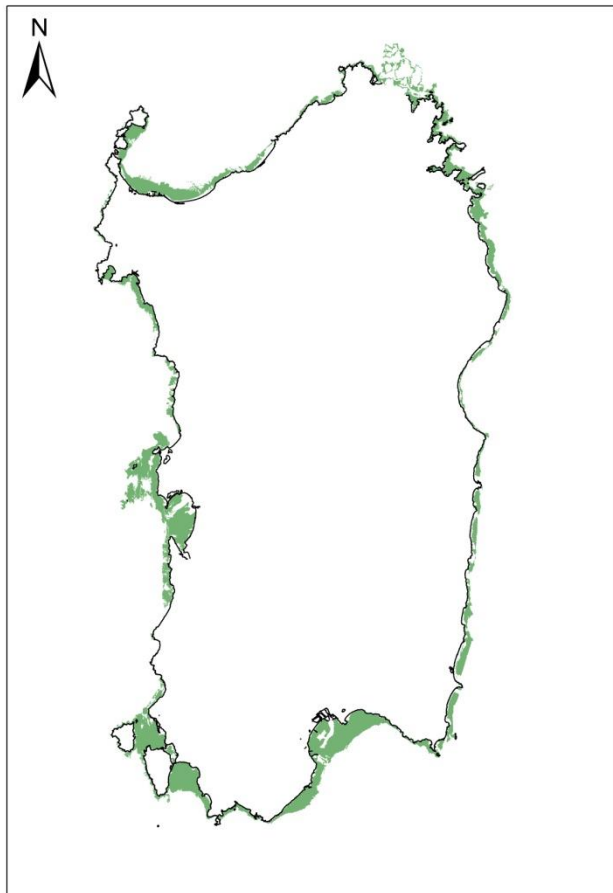


## Praterie di Posidonia

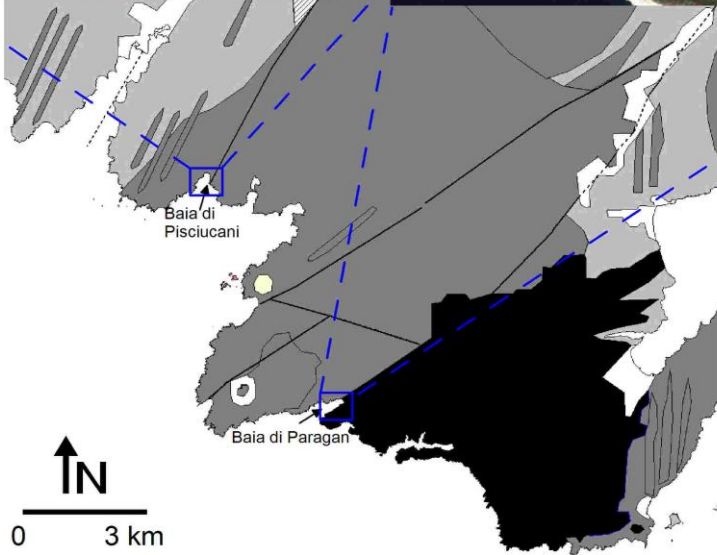


# Praterie di Posidonia

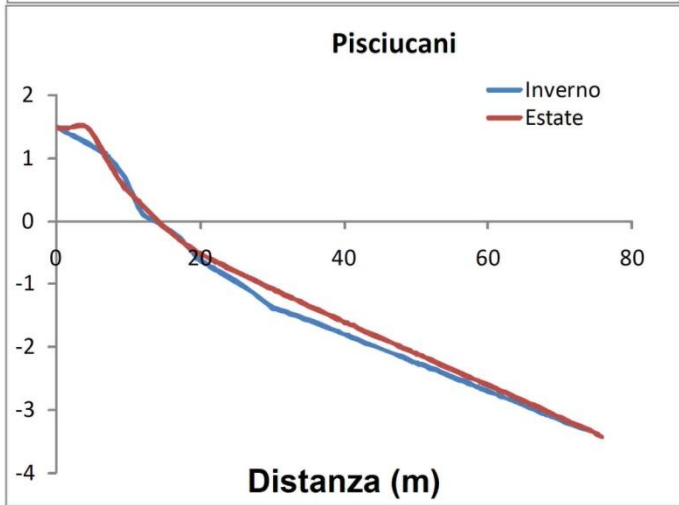
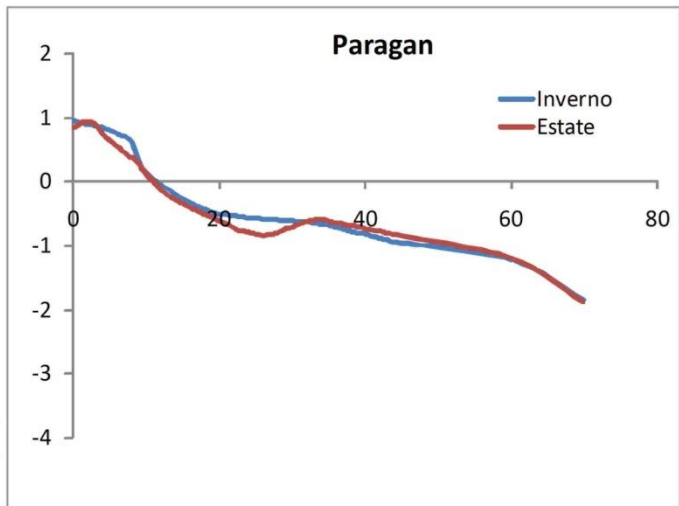








- |   |   |  |
|---|---|--|
|  Alluvioni                                   |  Granodioriti e monzograniti       |  Tonalite         |
|  Calcari bioclastici (Miocene inf. e medio) |  Leucograniti e graniti a biotite |  Faglie e filoni |

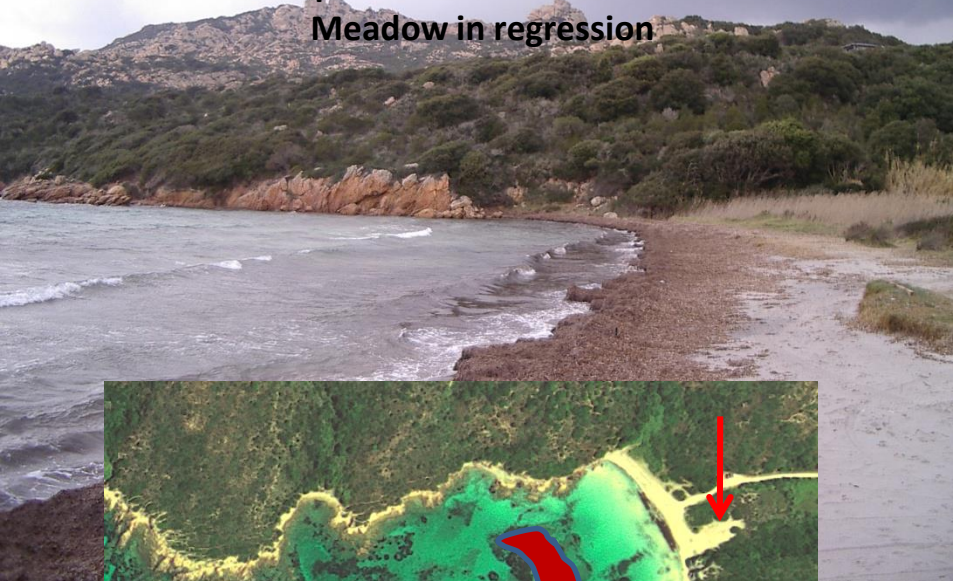


**Paragan beach (removed banquette)**

**120 m length; 20 m wide**

**banquette volume 100-150 m<sup>3</sup>**

**Meadow in regression**



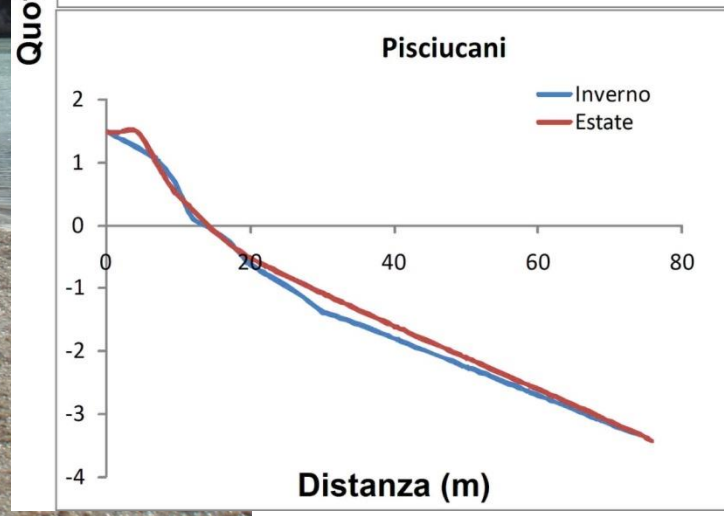
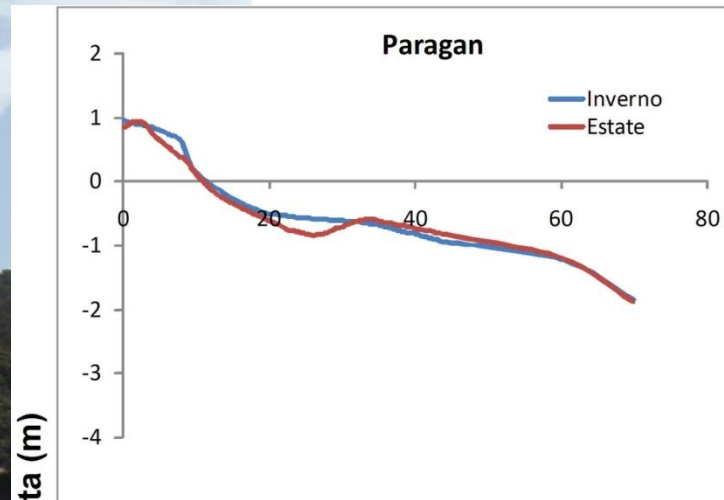
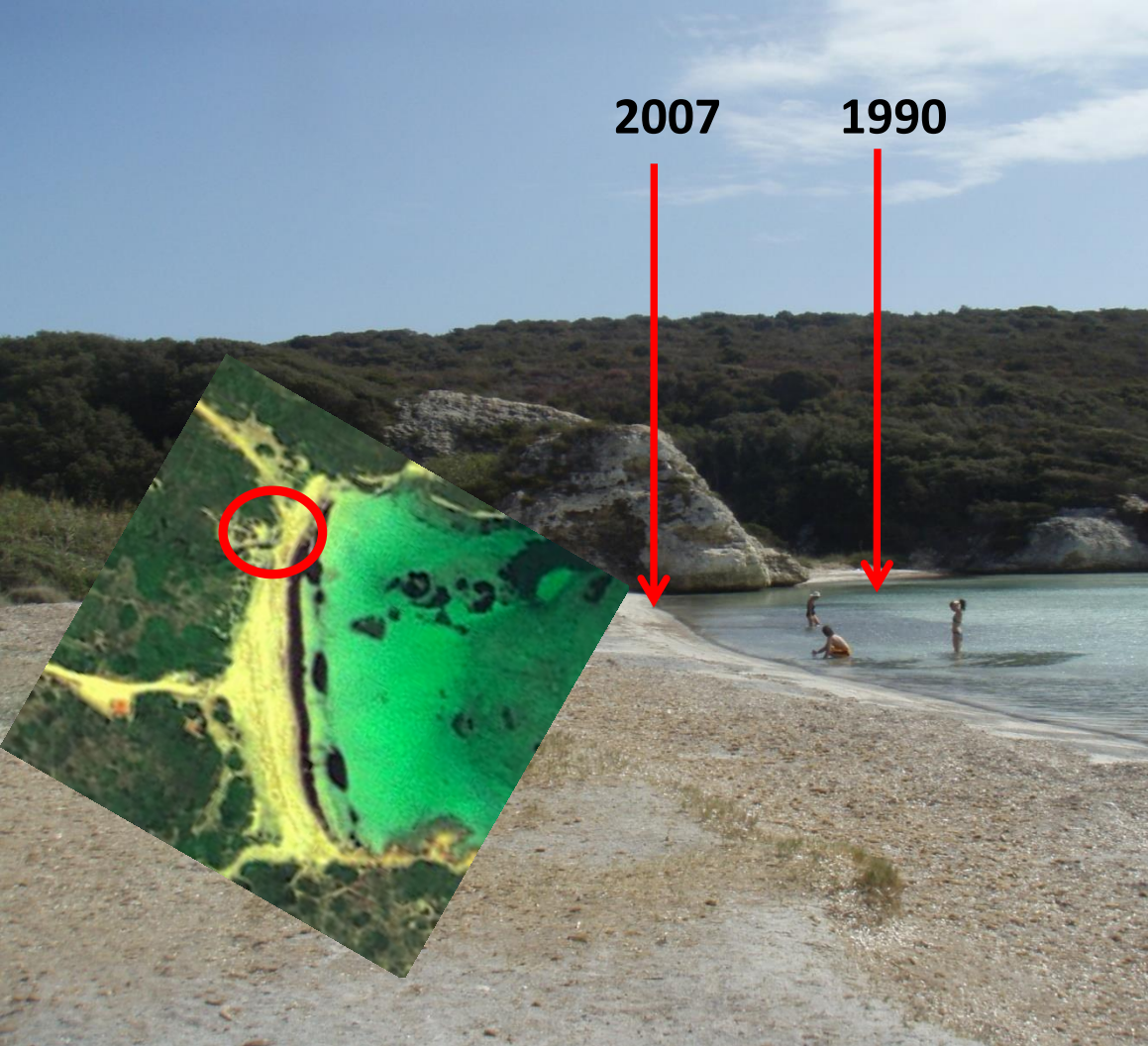
**Comparison site Pisciucani beach (no removal)**

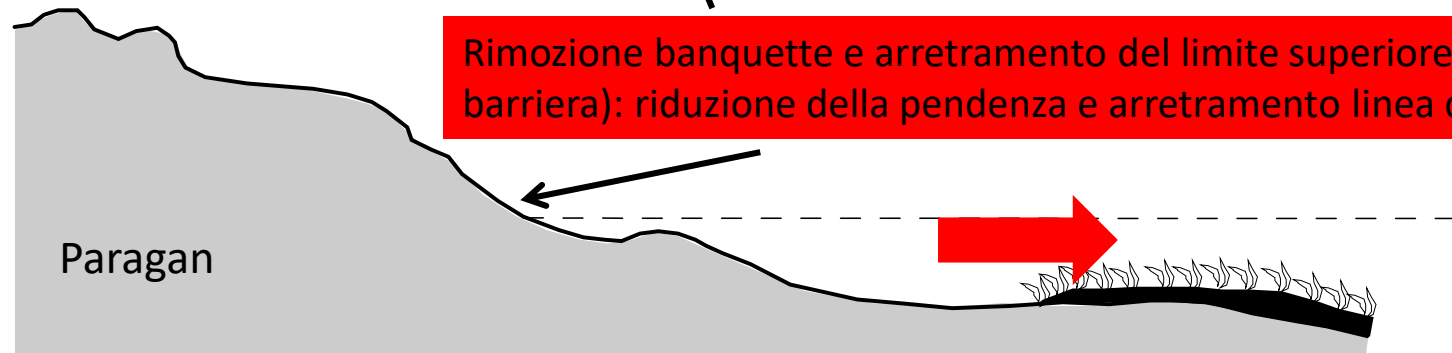
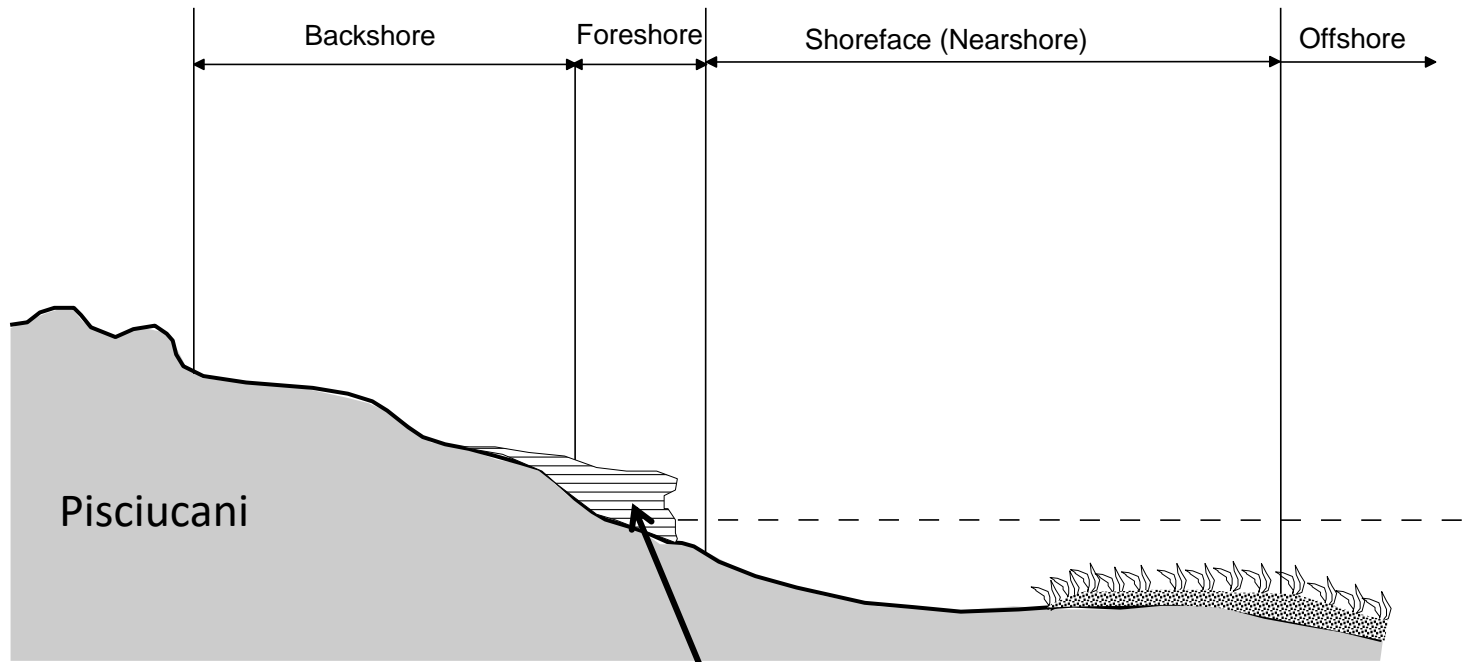
**150 m length; 30 m wide**

**banquette volume 200-300 m<sup>3</sup>**

**Meadow not in regression**

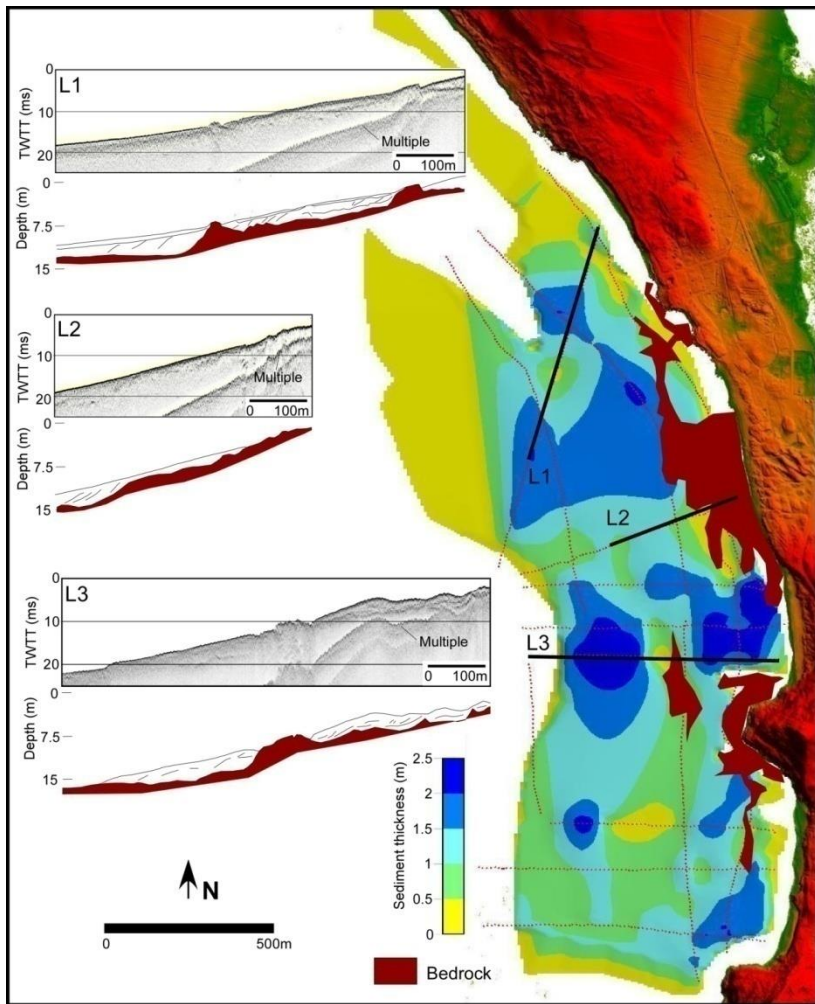








# Volume di sedimenti





Grani relitti

(Age 36000-10000 years BP, from James et al 1997)



**Modern Bioclastic Grains**, grani biogenici moderni (sample SG-28, from the coastal wedge)

(Age 450-4500 years BP, from De Falco et al., 2017)



**Molluscs**

**Calcifying  
Algae**

**Benthic  
Foraminifera**

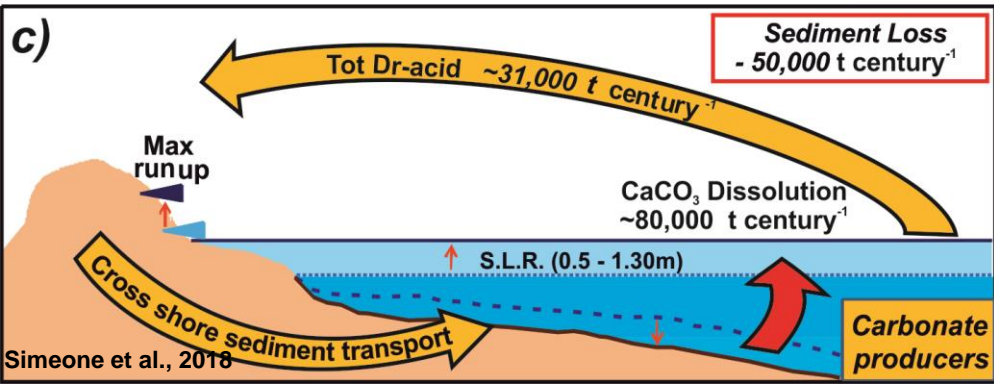
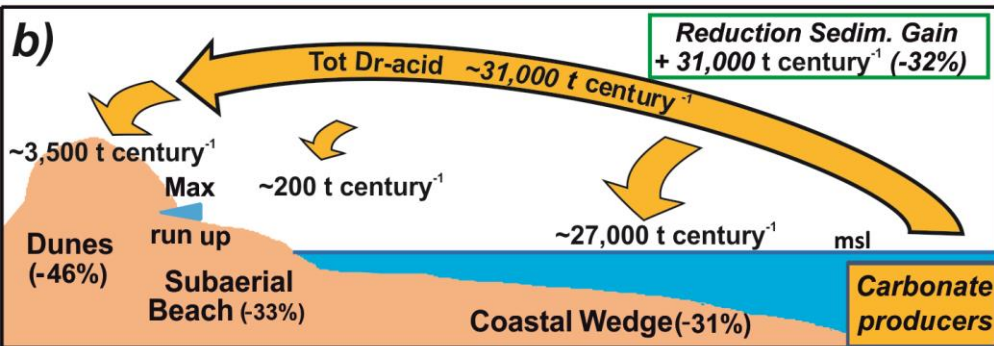
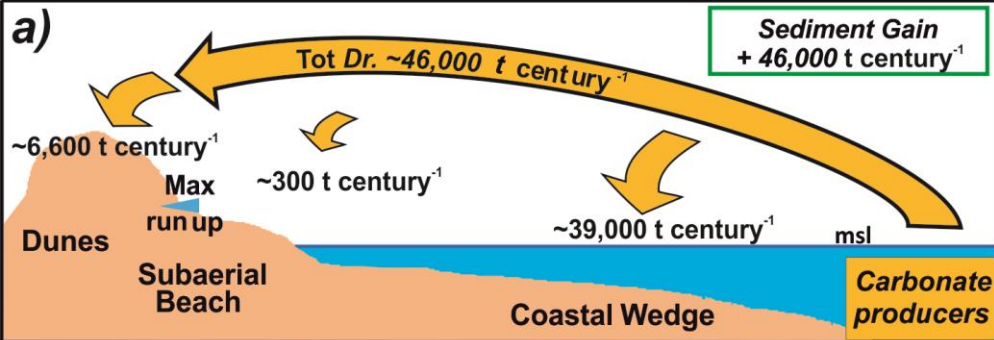
**Echinoids**

**Brachiopods**

**Bryozoans**

~ 50% della massa di sedimenti di S. Giovanni è biogenica moderna

(Simeone et al., 2018;  
De Falco et al., 2017)

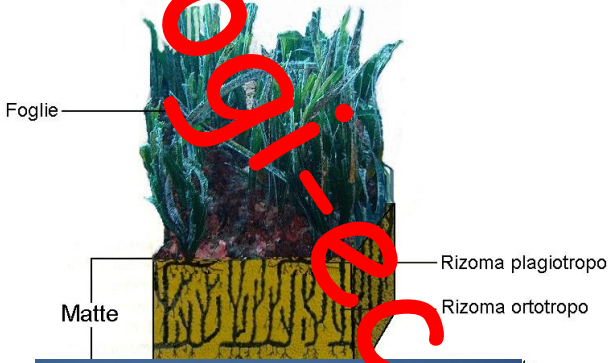








# Gestori



# Biologia - Ecologia

# Geomorfologia



# Qualche domanda sul problema banquette



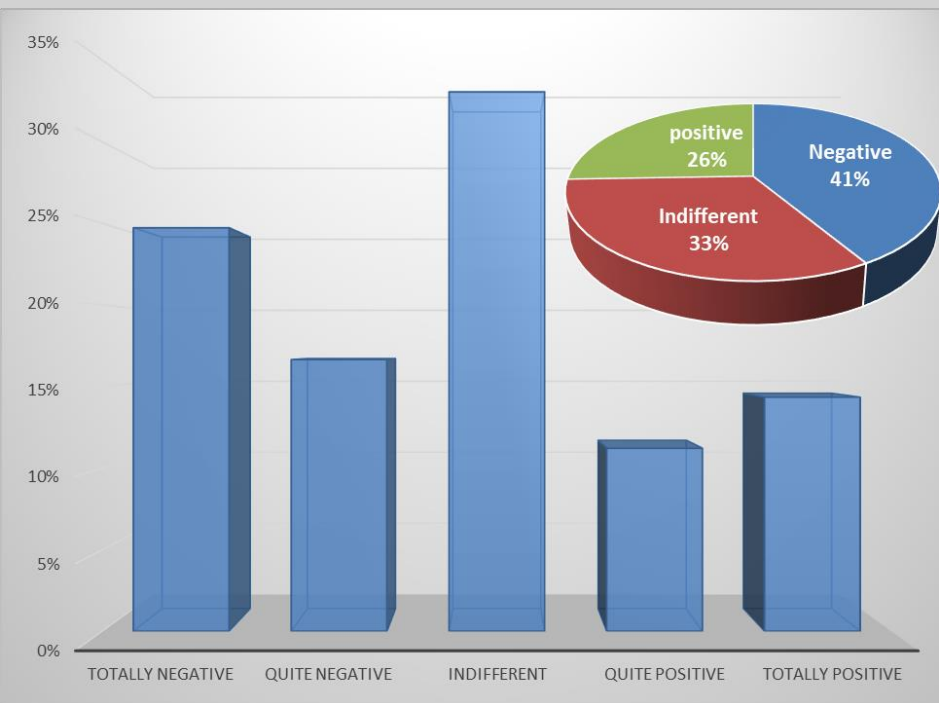
Project co-financed by the European Regional Development Fund

## PROJECT PARTNERS

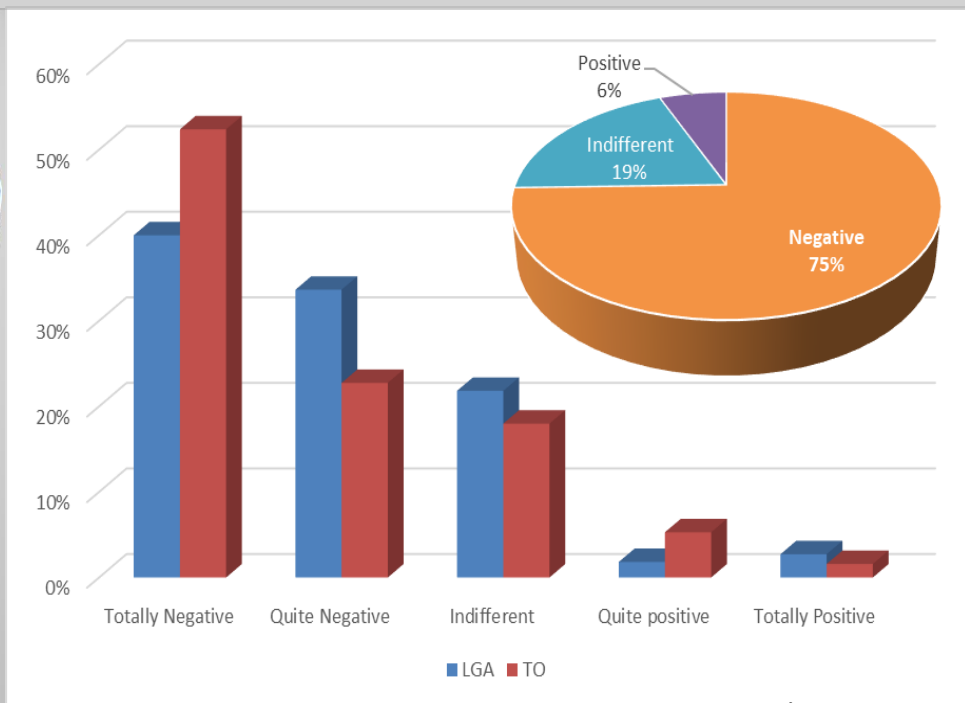


- Questionario sulle aspettative per le amministrazioni e gli operatori : come vorreste fossero gestiti le banquette?
- Questionario sulla percezione (bagnanti)  
Come percepite le banquette e li vorreste proteggere?

## Bagnanti



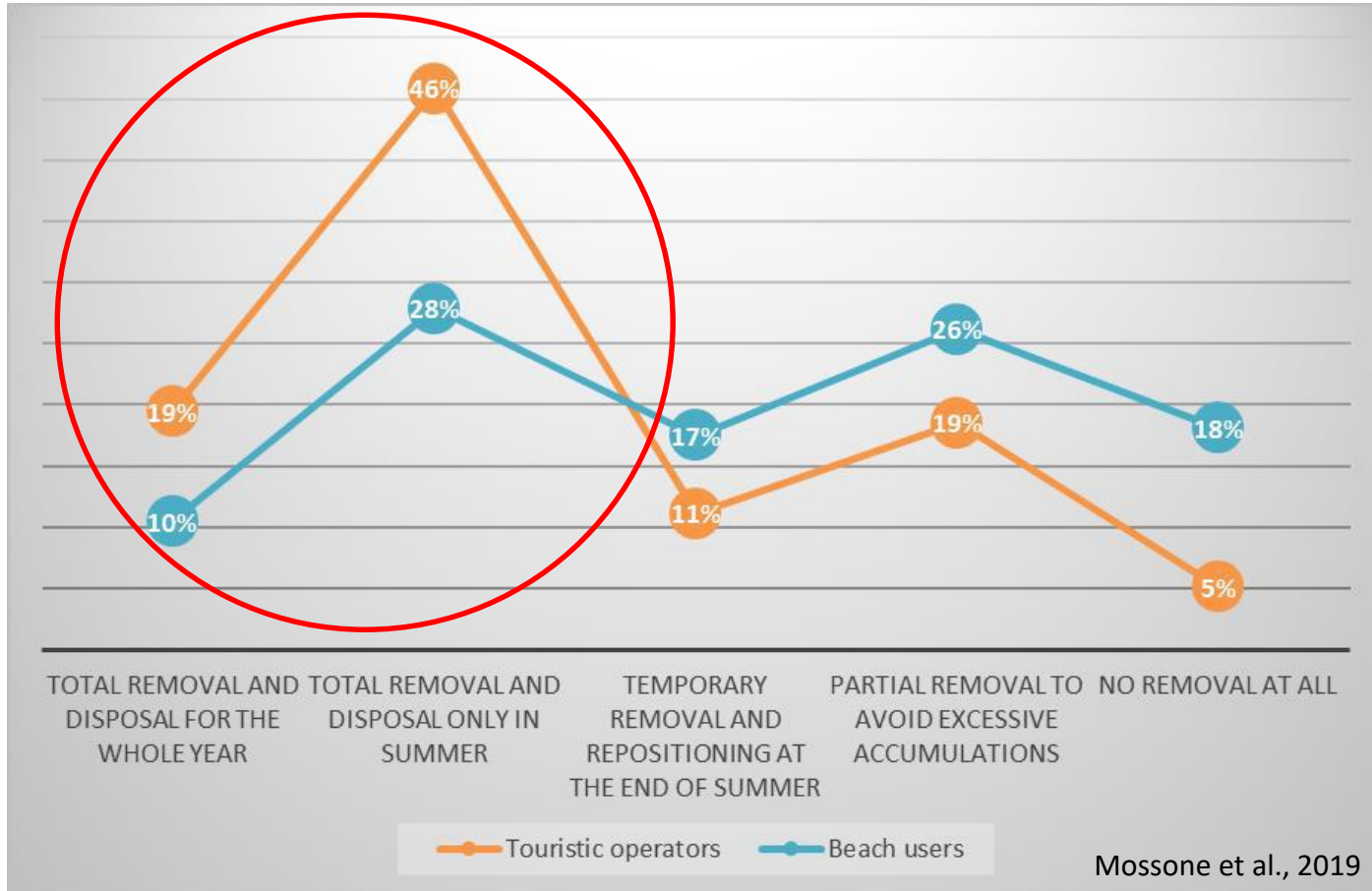
## Enti gestori e operatori



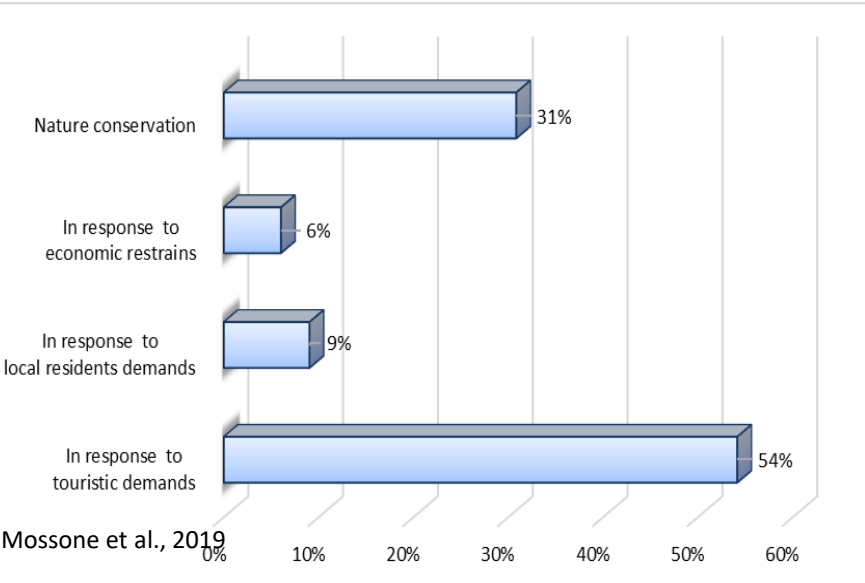
Mossone et al., 2019

43% degli intervistati dichiara di cambiare spiaggia quando incontra le banquette

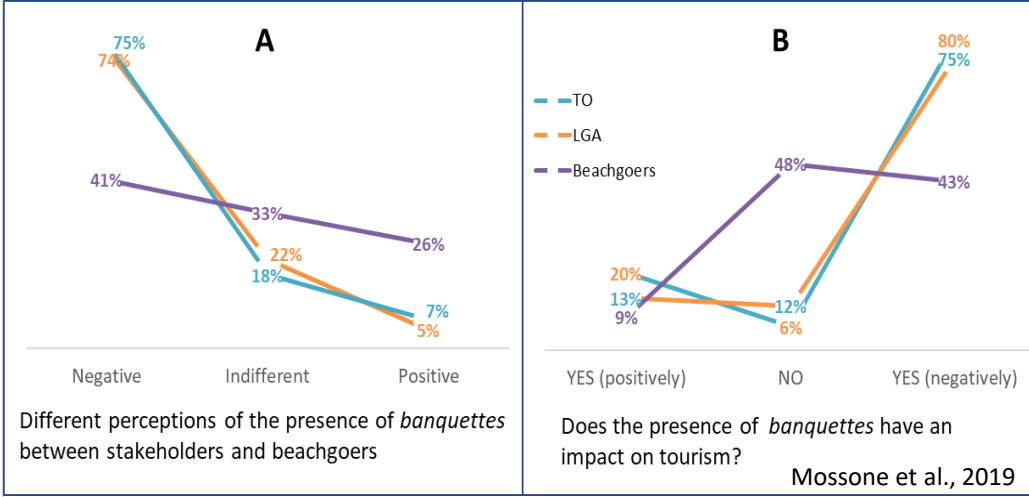
# Come vorreste rimuovere le banquette ?????



# Perche si rimuovono le banquette?? (LGA)



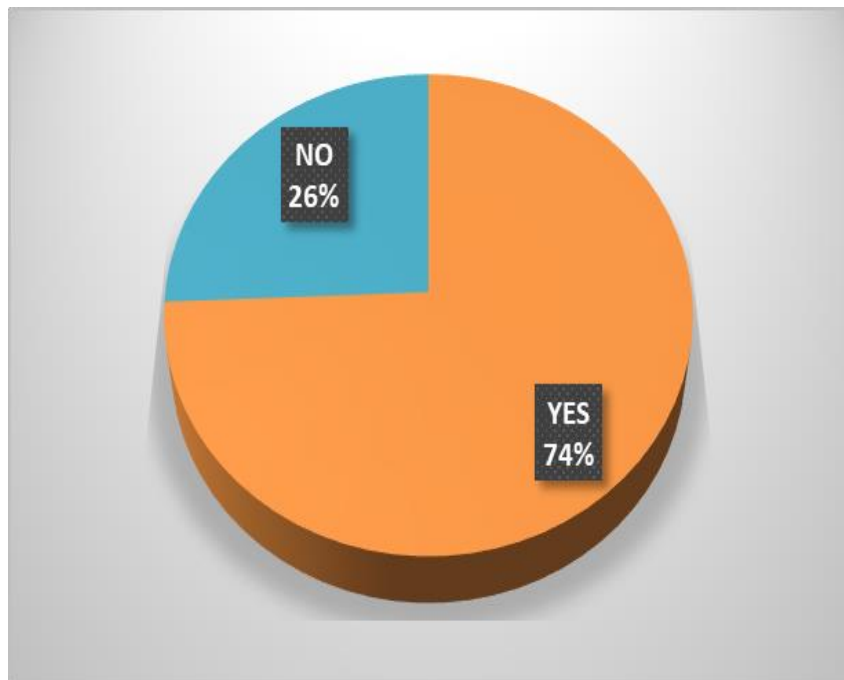
# Percezione di effetti sul turismo



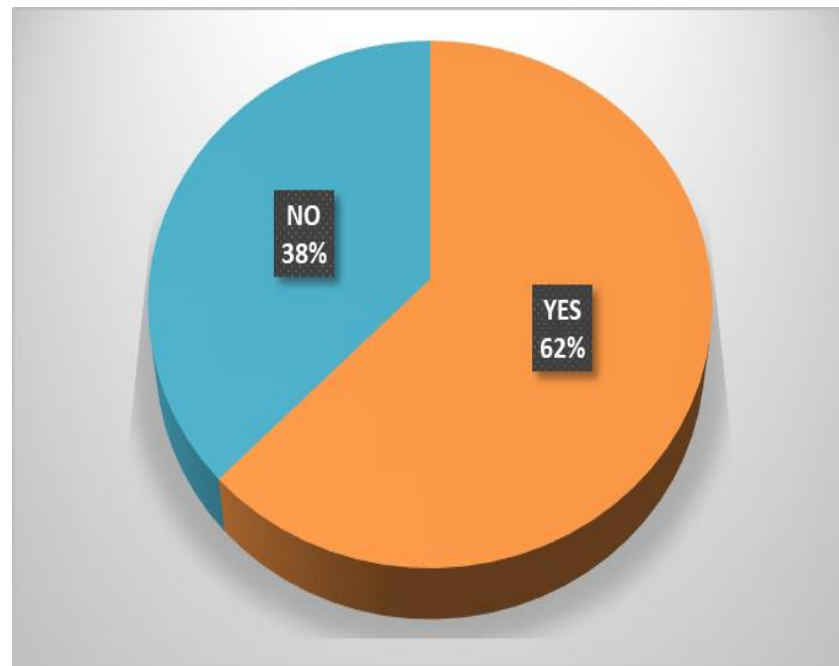
# Scostamento fra utilizzatori e fornitori

La creazione di un 'green label' per le spiagge in cui si lasciano le banquette puo incrementare il grado di accettazione??

Utenti (bagnanti)

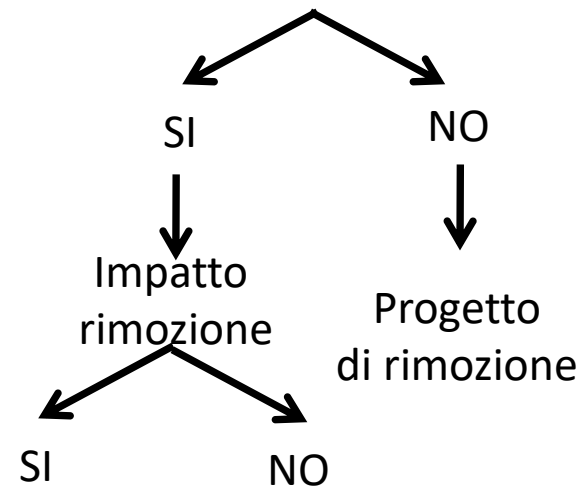


Operatori e Amministrazioni

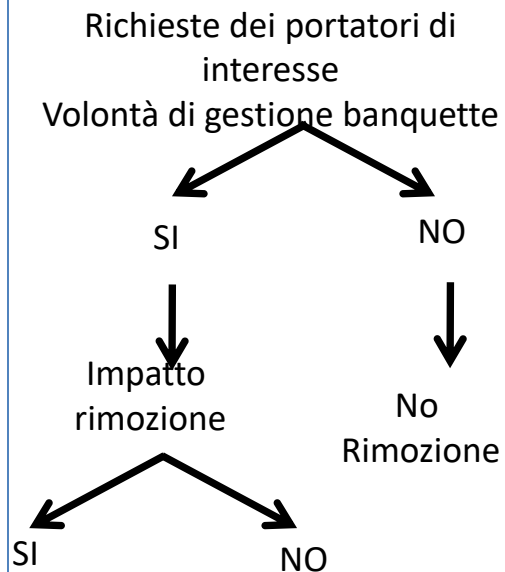




## Spiagge Urbane



## Spiagge Semi Naturali



## Spiagge Naturali (Aree Marine Protette)



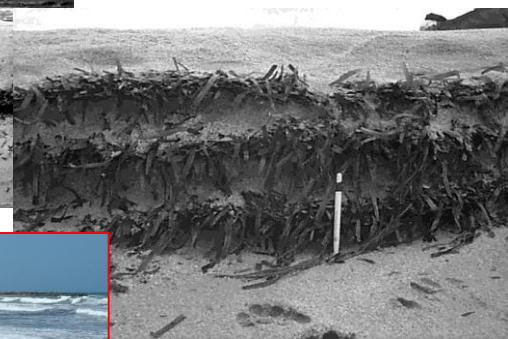
**Accettazione del fatto che tali spiagge sono governate esclusivamente da processi naturali**

**Nessuna Operazione**

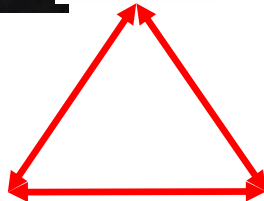
# Perche quella slide??????



IMC  
International  
Marine Centre



Consiglio Nazionale  
delle Ricerche



AREA MARINA PROTETTA  
PENISOLA DEL SINIS  
ISOLA DI MAL DI VENTRE



Molti studi e progetti sulle banquette sono stati fatti qui nel SINIS nell'AMP del Sinis

- NON si sono MAI rimossi

- I turisti hanno un altissimo grado di accettazione
- Molte delle spiagge sono governate dal mare e "dalla Posidonia" .....e nessuno si lamenta (forse)



GRAZIE A  
TUTTI!!!!!!

