







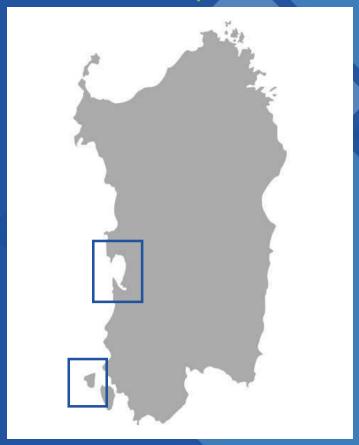


# Enhancing the Protection of Migratory Birds: 2 sustainable projects in Sardinia Francesca Etzi - MEDSEA





- > An island of mussel shells in the Gulf of Oristano
- > Enhancing the protection of migratory birds which are wintering and nesting in Carloforte





#### THE AIMS OF THE TWO PROJECTS



- ✓ increasing nesting space
- ✓ decreasing competition between species for nesting areas
- √ increasing safe areas from predation by strays or terrestrial wildlife

#### An island of mussel shells | WHERE?

#EUGreenWeek



Located in the Corru Mannu pond

Protected at International level (Ramsar site, Natura 2000 site)

Regional concession assigned to the Cooperativa Pescatori Arborea (Nieddittas)





# #EUGreenWeek PARTNER EVENT

#### THREATS AND PRESSURES

- > presence of stray animals that are a major problem for the birds, especially during the nesting period.
- > scarcity of safe nesting areas (islands) create strong competition for nesting spots among bird species.

#### **THE AIM**

- ✓ Re-use of a waste product from mussel farming to create a nesting island
   (mussel shells that cannot be sold or that are leftover from production free of contaminants, without the edible part ) >> circular economy
- ✓ **Biodiversity restoration** such as Nature Based Solution according to the approach used by the European Commission to identify nature-based strategies, actions, interventions that provide environmental services and socio-economic benefits capable of increasing the resilience of the environment

#### An island of mussel shells | HOW?





ovoid shape > about 20 meters long, 7 meters wide and 2 meters high, i.e. about 50 cm above average sea level and is therefore almost completely immersed in water.

2000 jute sacks full of mussel shells (deriving from the Nieddittas processing) to create the external bank

50 meters from the mainland.

#### An island of mussel shells | HOW?





The space inside the embankment was further filled with mussel shell waste, stratified and gradually compacted to make the surface stable and walkable.





#### An island of mussel shells | HOW?

mixed layer of crushed shells, mussels and fine linen for the surface layer to make the surface welcoming for future guests of the islet.











#### An island of mussel shells | RESULTS

#### AIM OF THE MONITORING

- Verify adjustments in terms of surface texture
- High from the water level
- Need of silhouettes of birds, if necessary, to attract other species to the land for nesting.





- numerous pairs of birds have colonised the small island
- constant intervention to restore the above-ground part will be necessary to maintain functionality (after nesting periods)
- No silhouettes seem to be necessary



### Enhancing the protection of migratory birds in Carloforte | WHERE?





Protected at International level (Natura 2000 site) > Site of Community Importance (SCI) "Isola di San Pietro"

Relevant presence of priority habitats of Community interest, in terms of fauna, especially birdlife (the Flamingo, the Corsican seagull, the Stiltplover, the Little egret, the Peregrine falcon, the Avocet and the Little Tern)

The Muggini pond represents the first evaporating basin of the salt system, to which water from the emissary canal flows and from which water is subsequently channeled through other evaporating zones.

Two ongoing projects are developed in the area:

- Municipality of Carloforte
- Saline di Mare



# Enhancing the protection of migratory birds in Carloforte | WHY?



#### THREATS AND PRESSURES

> Following the closing of the saltworks from a productive point of view, the complex environmental system has undergone processes of environmental degradation and loss of hydraulic functionality, as well as increased settlement pressure along the border, which has led to a significant decrease in the natural bank system, with consequent negative effects on birdlife.

> Presence of stray dogs and cats, especially in wetlands where the species find refuge/feeding

#### THE AIM

- ✓ improve the health of habitats
- ✓ decrease the danger from stray animals
- ✓ increase the conservation status of ecosystems











PATAGONIA GRANT, financed in 2022, to implement a pilot action

COLLABORATION WITH THE MUNICIPALITY AND PRIVATE COMPANY that are developing the reactivation of the salina

The project will relocate the sediments and place them within the pond to create a small island



# Enhancing the protection of migratory birds in Carloforte | TIMING AND EXPECTED RESULTS







THE WORKS WILL START IN AUTUMN, AFTER THE NESTING SEASON

THE END OF THE PROJECT IS EXPECTED IN DECEMBER 2023

#### **EXPECTED RESULTS**

- ✓ Maintaining the number of nests of the main and commonly breeding species
- ✓ Increasing the number of nests of the protected species
- ✓ Maintaining the number of nesting colony



#### **THANK YOU**

With the contribution of















In collaboration with













www.fairtradelebanon.org www.medartsal.com