

# The significant role of European projects in the management of the Natural Reserve of the Strait of Bonifacio

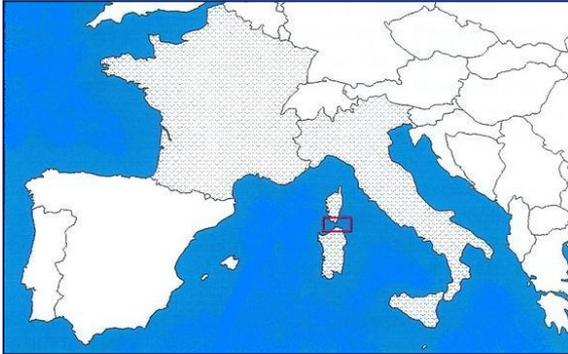
L'importance des projets européens dans la gestion de la réserve naturelle des Bouches de Bonifacio (RNBB)

Maddy Cancemi

Director of the Natural Reserve of the Strait of Bonifacio



# The Strait of Bonifacio-Les Bouches de Bonifacio



# The various European projects

- **INTERREG I, II and II (since 1995)**

➔ Knowledge of the region and creation of the Nature Reserve of the Strait of Bonifacio (RNBB) on 23/09/1999

- ***Temporary LIFE Mares 1999/2004***

➔ Creation of the Nature Reserve of Tre Padule (RNTP) on 11/12/2000

# Map and regulations concerning protected areas



# The various European projects

- **INTERREG I, II and II (since 1995)** → Knowledge of the region and creation of the RNBB on 23/09/1999
- ***Temporary LIFE Mares 1999/2004*** → Creation of the RNTP on 11/12/2000
- ***LIFE LINDA 2004/2006*** → Limitation of negative interactions between dolphins and human activity
- **INTERREG III B MEDOCC** → Role of MPAs in the sustainable management of economic activities linked to traditional fishing and tourism
- ***AMPAMED 2006/2008*** → Integrated management of high erosion sites
- **INTERREG III A *MANAGE* 2006/2008** → Crossborder network of parks
- **MARITIME PO 2007/2013** → Governance and Integrated observation of marine Natural Habitat
- ***RETRAPARC 2009/2012***
- **MARITIME PO 2007/2013** → Creation of E.G.C.T.-P.M.I.B.B. and set up of joint scientific monitoring
- ***GIOHNA 2009/2012***
- **MARITIME PO 2007/2013 PMIBB**

# Contribution of European programmes to managing fishery resources



## Interreg I, II, III

**1995** First fishery studies and first Ichthyology assessments on a southern Corsica scale

**1995-1999** Preparatory work for the R.N.B.B. by-law with professional fishermen  
**1999-2014** First service provision agreements between the Corsican Environment Office (O.E.C.) and the Bonifacio fisherman's corporation:

- More than 1 million euros pledged; partly financed by European funds
- Performance agreements allow the operator to involve the fishing industry
- Encourage the embarkation of scientific personnel to obtain reliable data on effort monitoring and fishing productions

**2005-2012** **Scientific projects drawn up on request from fishermen:**

- Interactions with bottlenose dolphins
- The conversion of creel fishing
- Tracking spiny lobsters through marking/recapture
- The issue of conserving stocks of edible sea urchins

**2000-2012** **Every 3 years, fish monitoring using divers at 10 and 20 m depth throughout the Strait of Bonifacio**



# Contribution of European programmes to managing fishery resources



## Interreg I, II, III

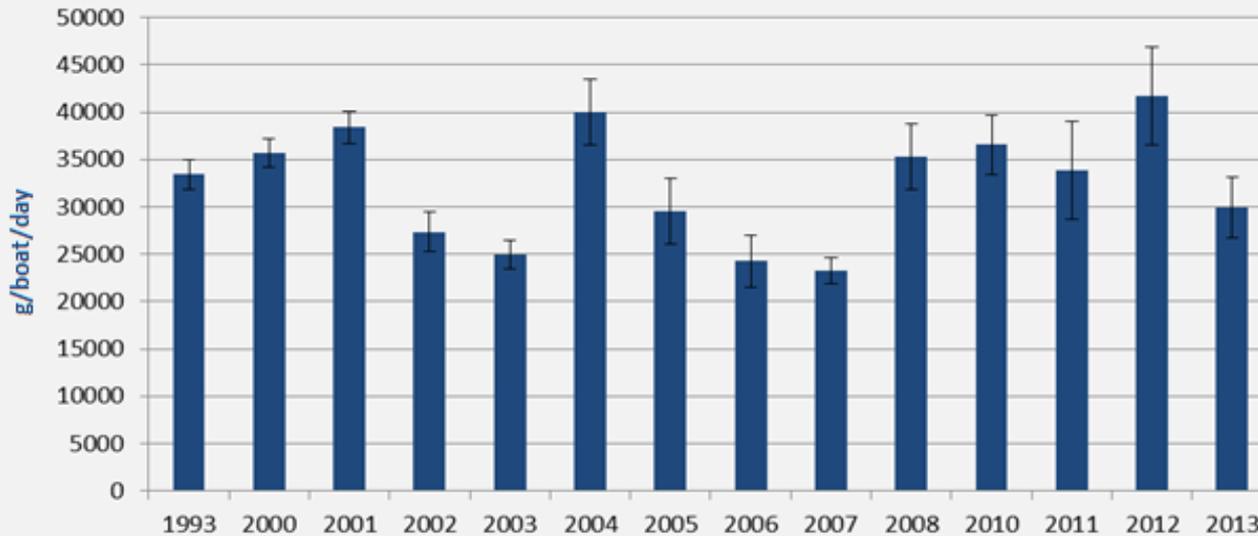
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1999-2014 First service provision agreements between the Corsican Environment Office (O.E.C.) and the Bonifacio fisherman's corporation:



Development of the average yield per boat and the average fishing effort practiced at the 7 R.N.B.B fishing ports between 1993 and 2013, (preferential period: May, June and July)



# Contribution of European programmes to the monitoring of the bottlenose dolphin *Tursiops truncatus*



**2004-2007 LIFE LINDA Programme 2004/2006: Study of the interactions between the bottle nose dolphin and traditional fishing, (depredation in fishing nets and deterioration of equipment)**

- Highlighting of the economic loss caused by these interactions for traditional fishing: **13% of nets attacked**
- Creation of a photo-identification catalogue for bottlenose dolphins observed in the Strait of Bonifacio



**2007-2009 Continued monitoring of the bottlenose dolphin population in the Strait of Bonifacio**

**2009-2012 GIONHA Programme 2009/2012 (as part of the Maritime PO France-Italy 2007-2013): coordination of photo-identification campaigns for the bottlenose dolphin carried out in the Strait of Bonifacio region, (Corsica and Sardinia), Liguria and Tuscany.**

- Acquisition of data and improved knowledge of bottlenose dolphin populations in the Strait of Bonifacio: **approximately 139 individuals**
- Participation to set up the Web GIS Intercet, a platform for data exchange between the programme partners, developed by the Aquarium of Genoa



**Since 2012 Continued monitoring of the bottlenose dolphin population in the Strait of Bonifacio**

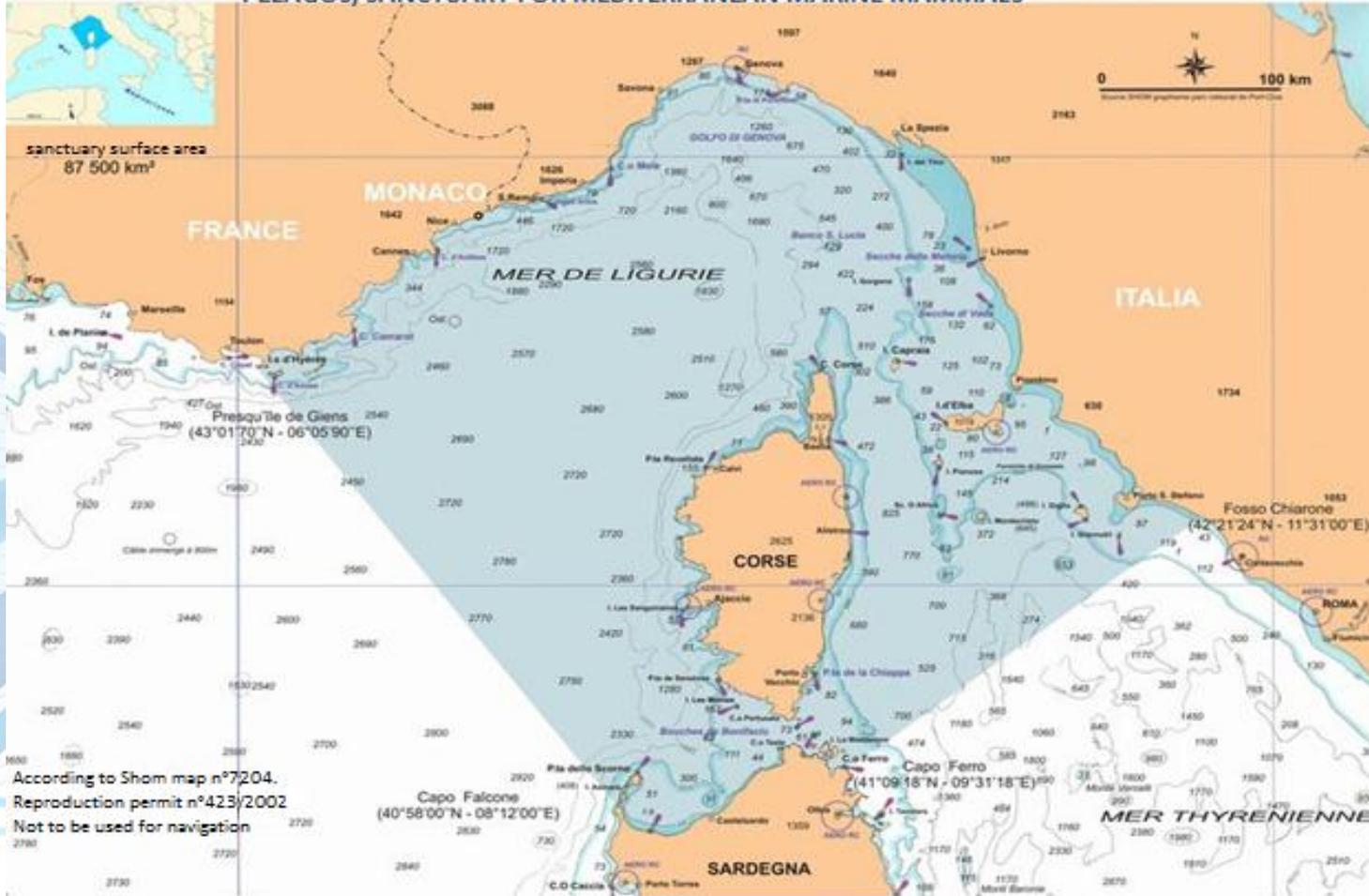
**In 2014 signature of the partnership agreement to make the tool durable throughout the Pelagos Sanctuary**



# Contribution of European programmes to the monitoring of the bottlenose dolphin *Tursiops truncatus*



2004-2007 LIFE LINDA Programme 2004/2006: Study of the interactions between the bottlenose dolphins and traditional fishing (degradation in fishing nets and PELAGOS, SANCTUARY FOR MEDITERRANEAN MARINE MAMMALS)



# Contribution of the INTERREG III A project: MANAGE to the tracking of Posidonia banquettes *Posidonia oceanica*

## Highlighting the importance of *Posidonia oceanica* areas for coastline conservation

- Exportation of sediment when banquettes retreat, rising to 50kg/m<sup>3</sup> in some cases
- Example of Paraguan beach: coastline retreat between 8 and 10 metres (40% of the beach) in 15 years



Realisation by communities living close to the Reserve



End to the removal of banquettes on all RNBB beaches in 2012



Implementation by the O.E.C. of long-term monitoring in order to better understand the phenomenon

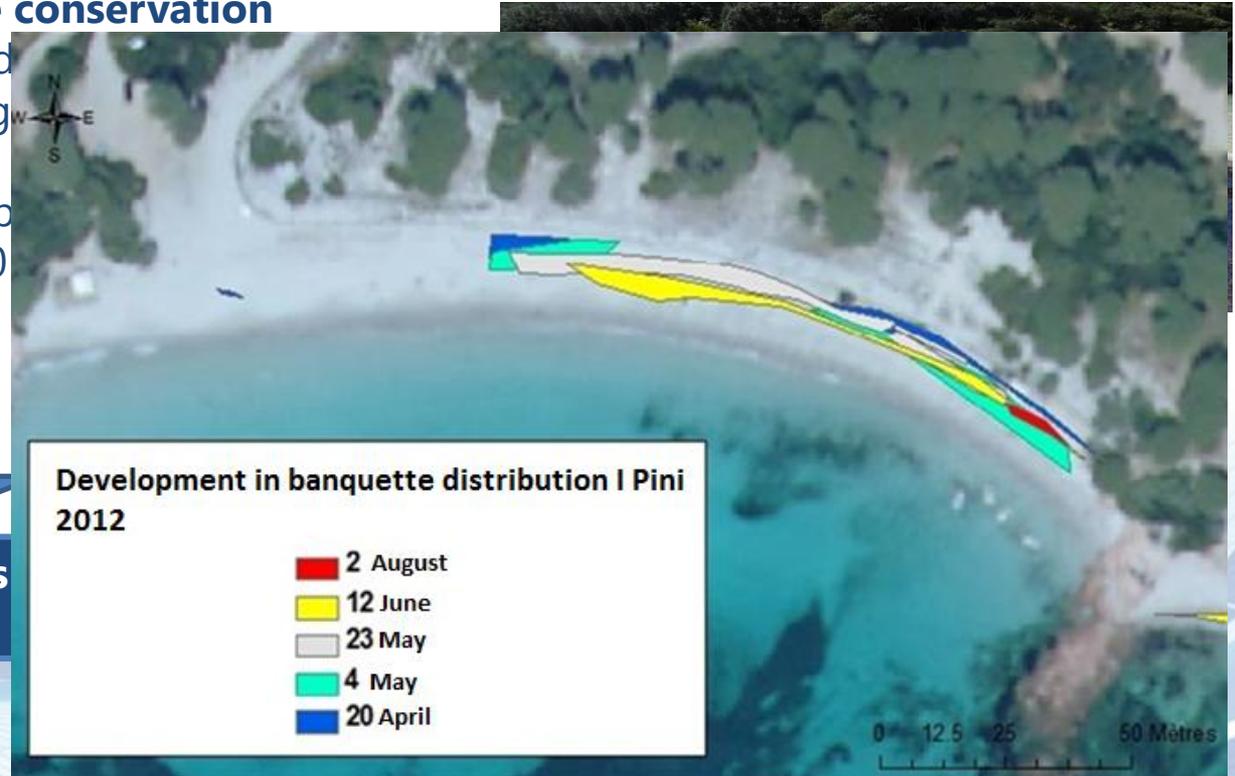
Information from local users and socio-professionals



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# PLAN DE BALISAGE DES LAVEZZI

Commune de Bonifacio

CONFORMÉMENT AUX ARRÊTÉS PRÉFECTORAL ET MUNICIPAL EN VIGUEUR

# LAVEZZI TRAILMARKING MAP

Bonifacio Municipality

IN CONFORMITY WITH THE BY-LAWS IN FORCE

**KEY**

- Anchoring area prohibited (isobath: 40m)
- Anchoring area permitted in Bays
- Non-monitored swimming area
- Access channel to beach
- Safe area
- Jetty
- Lavezzi island paths

Isobath 40 m

Isobath 40 m



0 125 250 500 Mètres

Calo di Chiesa

Calo di u Grecu

Calo di l'Achiarinu

Calo di Giuncu



Source: IGN, NMA, © IGN, 2002. Carte au 1:25 000. Carte de l'Etat-Major. Imprimé en France.

# R.N.B.B. Visitation monitoring: management measures

## Excessive summer tourism on Lavezzu Island:

**IMPACT:** expansion of paths and damage to dune habitats

**MANAGEMENT:** installation of fencing to keep visitors on paths, visitor reception, monitoring

## Tourists venturing off paths :

**IMPACT:** removal of giant limpets, disturbance of seabirds, risk of damage to some sensitive environments and/or species

**MANAGEMENT:** awareness raising (brochures, signs), visitor reception, monitoring

## Increased visitor numbers in spring:

**IMPACT:** risk of disturbance to seabirds (breeding period)

**MANAGEMENT:** Installation of nest indicators close to paths



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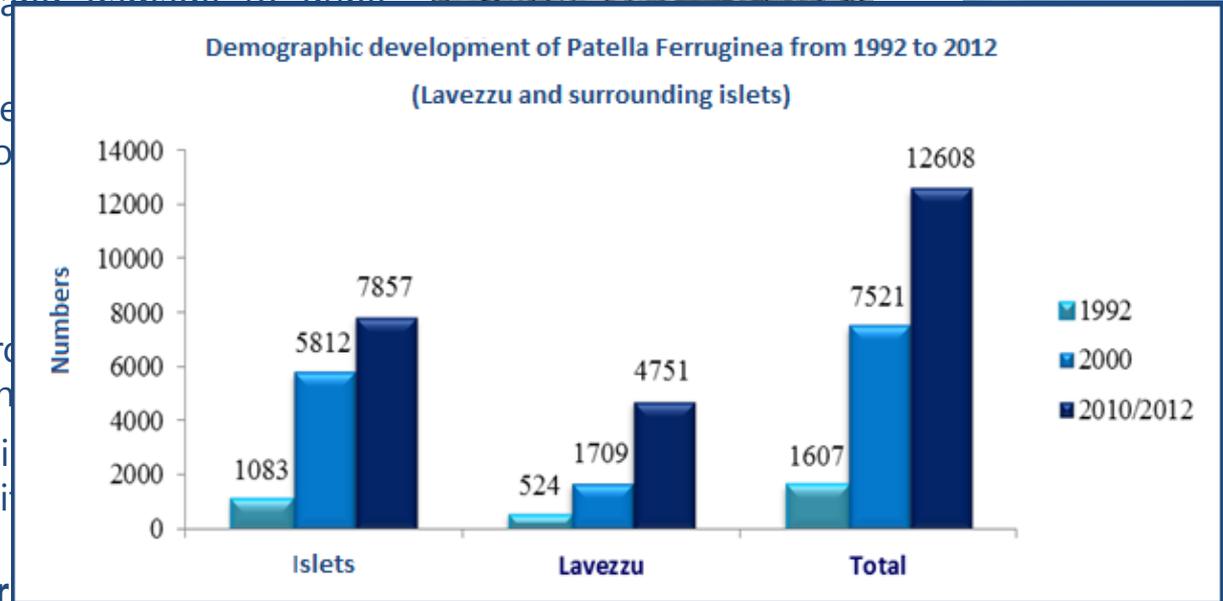
**IMPACT:** removal of vegetation, disturbance of seabirds, damage to some sensitive environments

**MANAGEMENT:** awareness raising, visitor reception, monitoring

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# R.N.B.B. Visitor number monitoring: Visitor number peaks 2002 and 2010 (MARITIME PO 2007/2013 PMIBB)

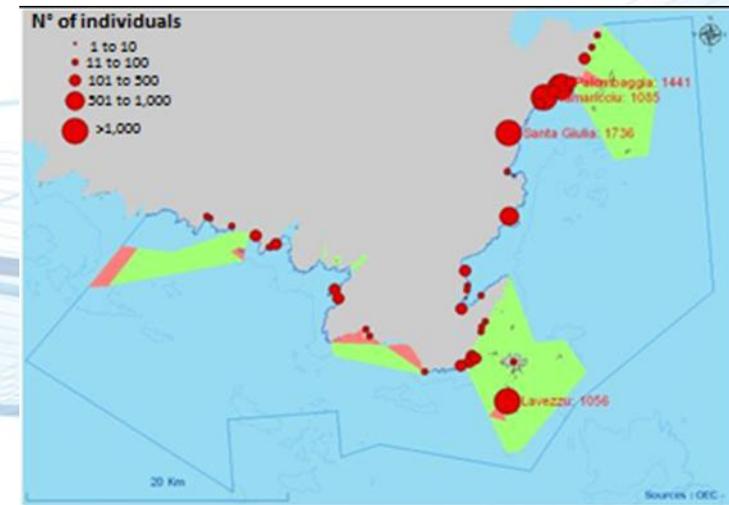
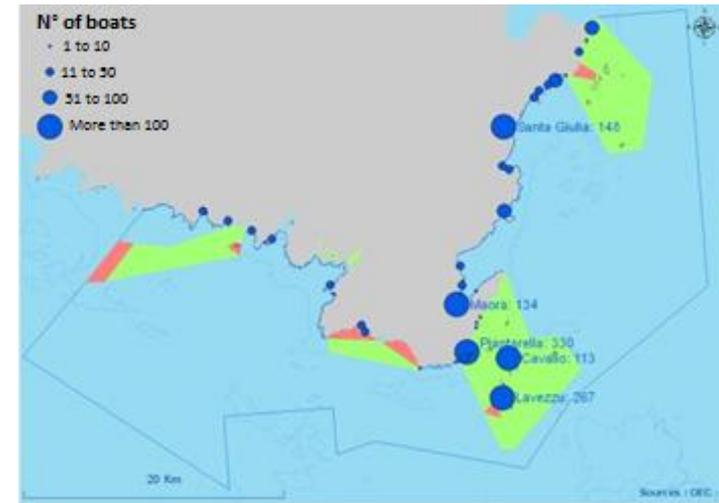
Visual count 15 August 2002 between 3pm and 6pm:

- **11,000 people counted on the beaches**
- **1,650 boats counted**, (1,420 anchored boats and 230 sailing)

↳ **A total of 19,250 people estimated within the R.N.B.B. perimeter**

Aerial count on 19 August 2010 (photographs taken from a ULM and analysis) between 2pm and 4pm:

- **9,736 people counted on the beaches**
- **1,409 boats counted** (1,272 anchored boats and 137 sailing)
- **601 boats attached to an anchorage buoy**



# R.N.B.B. Visitor number monitoring: management measures

## Anchoring:

**IMPACT:** Damage to posidonia beds and to other species (mother-of-pearl, etc.)

**MANAGEMENT:** Installation of trailmarkers



## Excessive tourism:

**IMPACT:** disturbance of seabirds, degradation of water quality

**MANAGEMENT:** Training of professionals prior to the season, water tests (Regional Health Agency) and application of swimming restrictions



## Management of diving activities:

**IMPACT:** damage to coralligenous, (gorgonians, etc.)

**MANAGEMENT:** Installation of organised moorings (2005) and introduction of a Code of Conduct (2006)

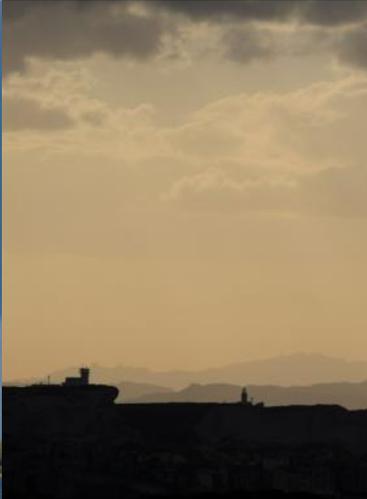
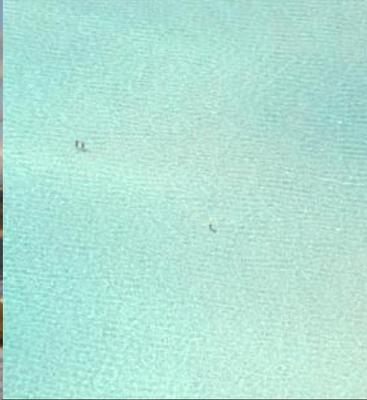
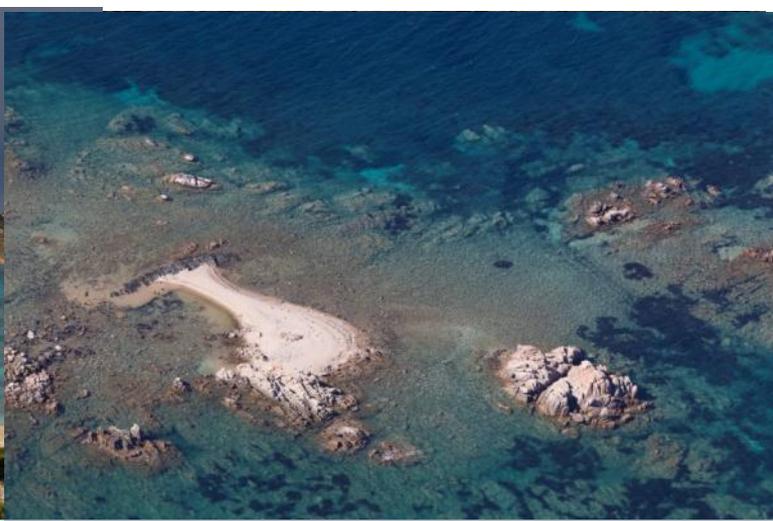


## Management of recreational fishing:

**IMPACT:** Depletion of fish stocks for some species (croakers and common dentex, etc.)

**MANAGEMENT:** By-law limiting catches to 5kg/day/person in the R.N.B.B.





*Thanks for your  
attention*