



Generalitat de Catalunya
**Departament d'Agricultura,
Ramaderia, Pesca i Alimentació**

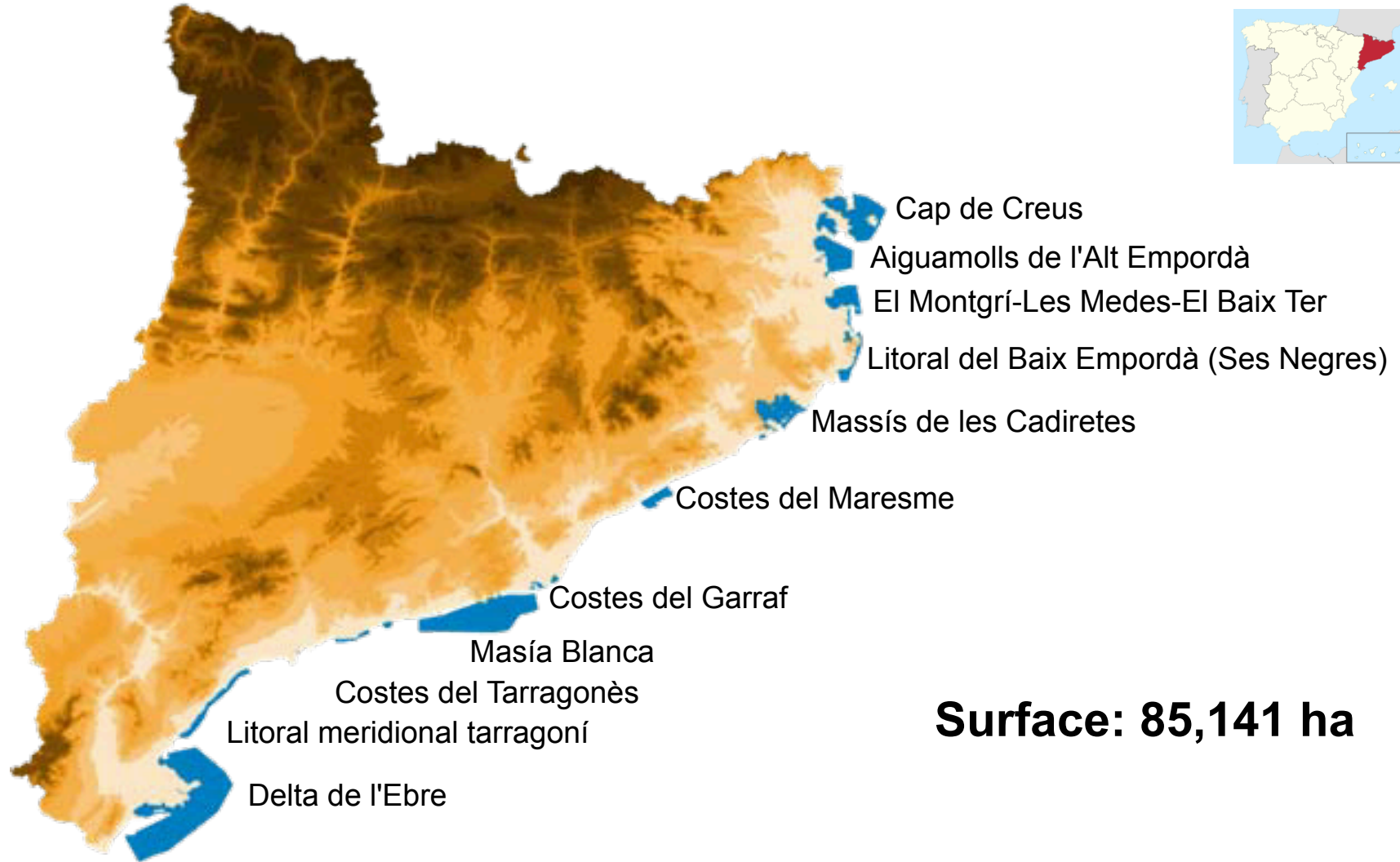
Management of Fishing Activities in Marine Protected Areas in Catalonia

European Parliament - PECH, 22 March 2017

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The Natura 2000 network in the marine environment



Surface: 85,141 ha

Guidelines for the management of Natura 2000 sites

Directrius per a la gestió dels espais de la xarxa Natura 2000



Generalitat
de Catalunya

□ Specific guidelines for fisheries

- The management of fishing activities will seek to maintain the existing activity in a compatible way to the conservation in the Natura 2000 sites
- The regulation for trawl fisheries already establishes the minimum depth where the activity is permitted (now by the Med. Reg.)
- The fishing with LL is allowed within the SCIs with spatial restrictions for the protection of birds, and time restrictions for the protection of marine turtles (*Caretta caretta*)
- Towed gears on sea grass beds, is forbidden (now also coralligenous and mäerl by the Med. Reg.)
- Specific measures tailored to each site will be detailed in the respective management plans

5 de Setembre 2006

The Natura 2000 network in the marine environment

Name of de Area	Type/date	Surface (ha)	Fisheries management
1. Cap de Creus	SPA/2005 SCI/2006 SAC/2014	3063,7	Partial Reserve: Artisanal fisheries permitted Integral Reserve: Total ban of fishing activities
2. Aiguamolls de l'Alt Empordà	SPA/1988 SCI/2006 SAC/2014	5857.7	-
3. El Montgrí-Les Medes-El Baix Ter	SPA/2005 SCI/2006 SAC/2014	1944.7	Buffer zone Medes: - Specific census - Trammel nets and LL under specific conditions - Recreational fisheries with restrictions No take zone Medes: Total ban of fishing activities
4. Litoral del Baix Empordà (Ses Negres)	SPA/2005 SCI/2006 SAC/2014	1795.7	Total ban of fishing activities (Ses Negres)
5. Massís de les Cadiretes	SPA/2006 SCI/2006 SAC/2014	1457.4	-
6. Costes del Maresme	SCI/2008 SAC/2014	2906.4	-

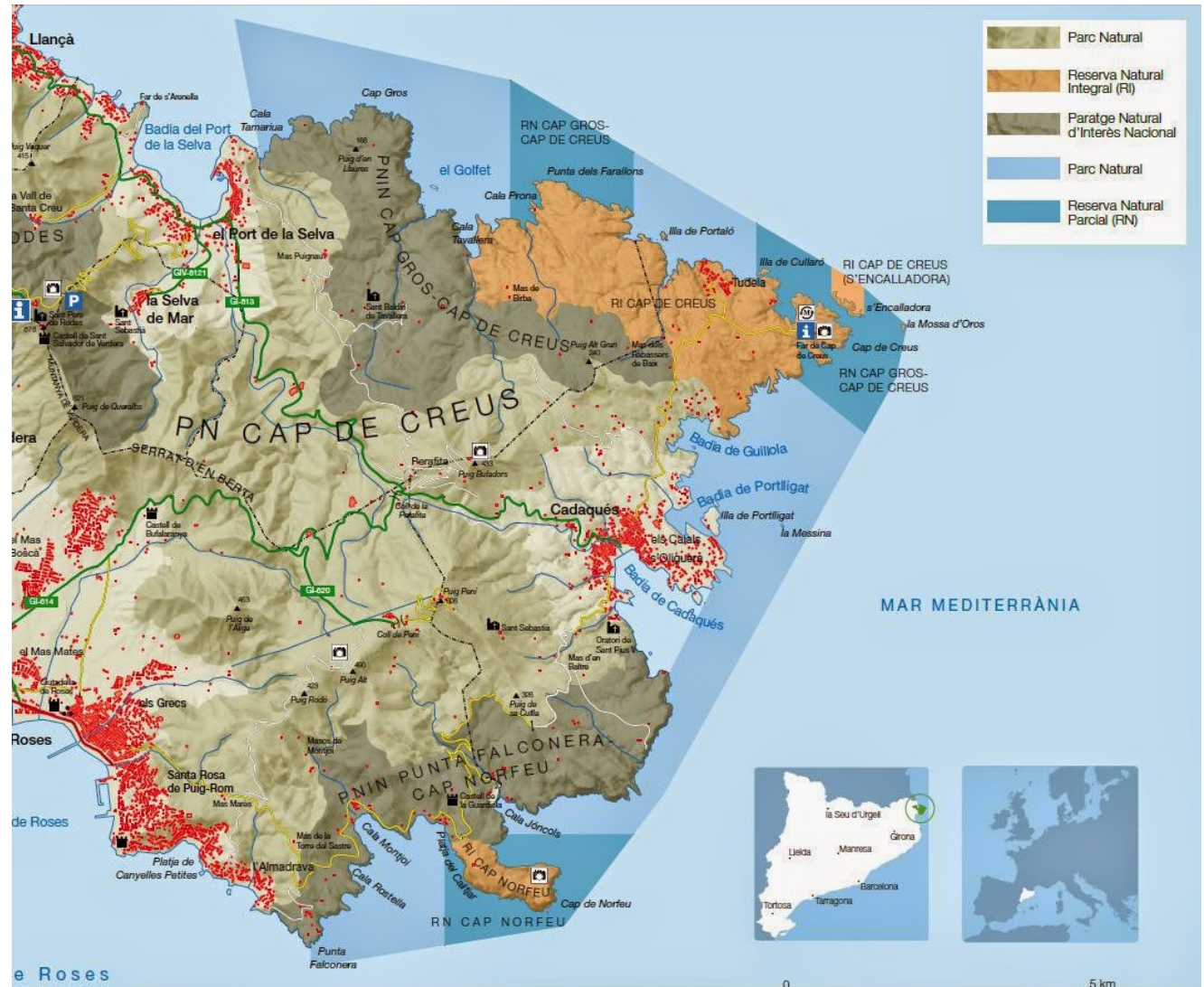
The Natura 2000 network in the marine environment

Name of de Area	Type/date	Surface (ha)	Fisheries management
7. Masía Blanca	SCI/2008 SAC/2014	440.6	Buffer zone - Specific census - Trammel nets and LL under specific conditions - Scientific sampling No take zone Total ban of fishing activities
8. Costes del Garraf	SPA/2006 SCI/2008 SAC/2014	26473.8	-
9. Costes del Tarragonès	SCI/2006 SAC/2014	948.9	-
10. Litoral meridional tarragoní	SCI/2008 SAC/2014	4593.9	-
11. Delta de l'Ebre	SPA/1988 SCI/2008 SAC/2014	35647.1	-

The Natura 2000 network in the marine environment

□ Cap de Creus (3064 ha)

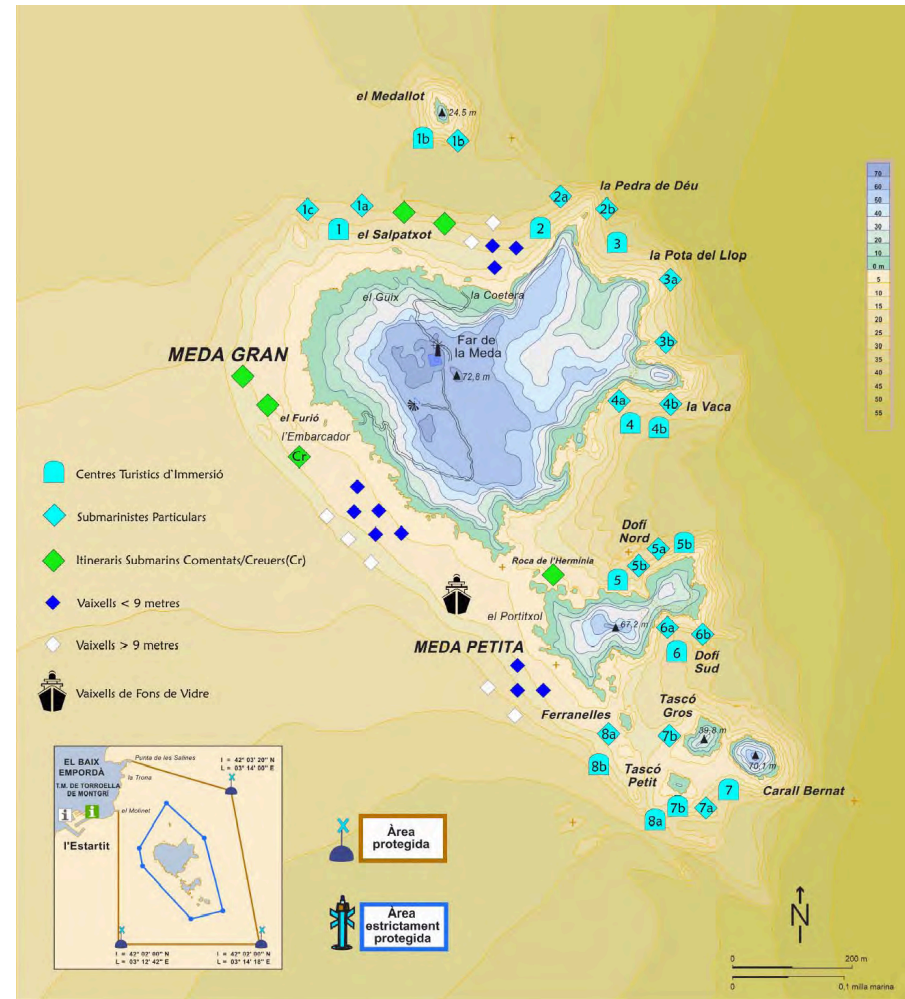
- **1998:** Natural Park
- **Partial Reserve (3):** Artisanal fisheries permitted
- **Integral Reserve:** Total ban of fishing activities



The Natura 2000 network in the marine environment

□ Medes Islands (533 ha)

- **1990:** Protected Area
- **2001:** SPAMI (Bar. Con.)
- **No take zone:** Total ban of fishing activities
- **Integral Reserve:** Total ban of fishing activities
- **Buffer zone:** Specific census, Trammel nets and LL under specific conditions, Recreational fisheries with restrictions



The Natura 2000 network in the marine environment

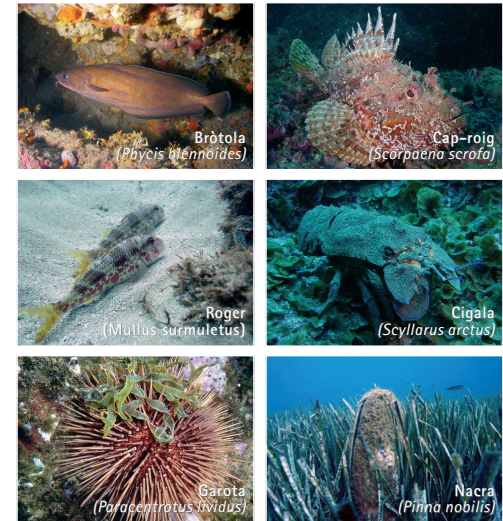
□ Ses Negres (15 ha)

- **1993:** Closure
- **No take zone:** Total ban of fishing activities



SES NEGRES

Vedat de pesca del Cap Negre al Pa de Pessic



Més informació:



Amb el suport de:



The Natura 2000 network in the marine environment

La Direcció General de Pesca i Acció Marítima del Departament d'Agricultura, Alimentació i Acció Rural va crear l'any 1993 la zona vedada del Cap Negre al Pa de Pessic (Ses Negres).

Les 80 ha de la reserva, al litoral de Begur, són un bon representatiu dels sistemes somers rocosos de la costa catalana.

Des de gener de 2007, el CRAM s'encarrega de la vigilància de la reserva pesquera.

La creació de reserves pesqueres permet:

- Protegir les poblacions explotades.
- Incrementar les **pesqueries** mitjançant la dispersió d'adults i juvenils cap a les zones de pesca.
- Donar **refugi** a espècies vulnerables.
- Protegir els hàbitats sensibles.
- Facilitar la **recuperació** d'ecosistemes alterats.
- Promoure la **biodiversitat**.



Activitats no permeses a Ses Negres

La condició de zona vedada de Ses Negres està regulada per l'Ordre 93/041/143, de 3 de març, per la qual es prohibeix la pesca i l'extracció de recursos marins i s'estableixen normes d'obligat compliment.



Pesca professional



Pesca recreativa



Submarinisme



Navegació a més de 3 nusos



Recol·lecció de plantes i animals

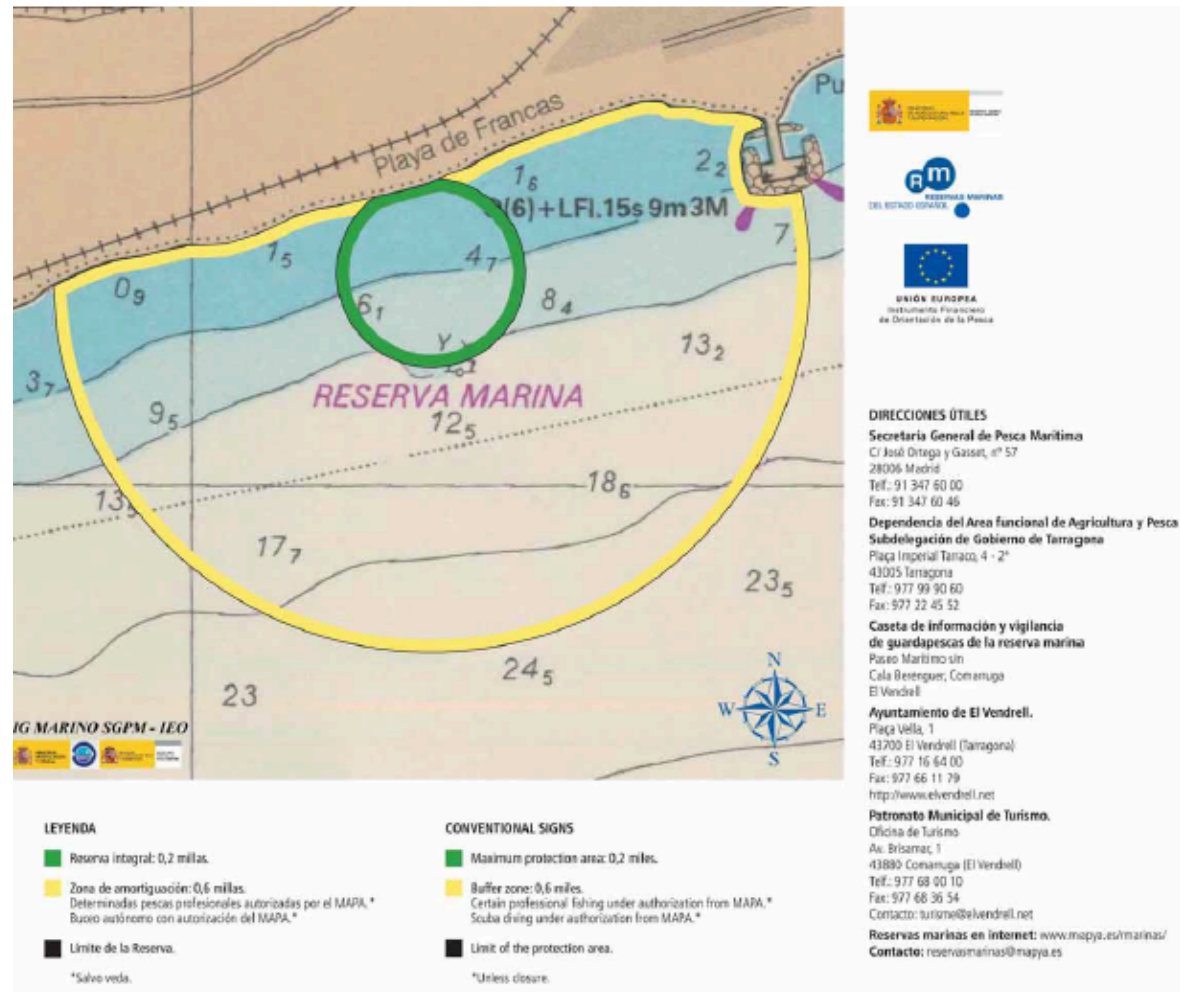


Ancoratge d'embarcacions

The Natura 2000 network in the marine environment

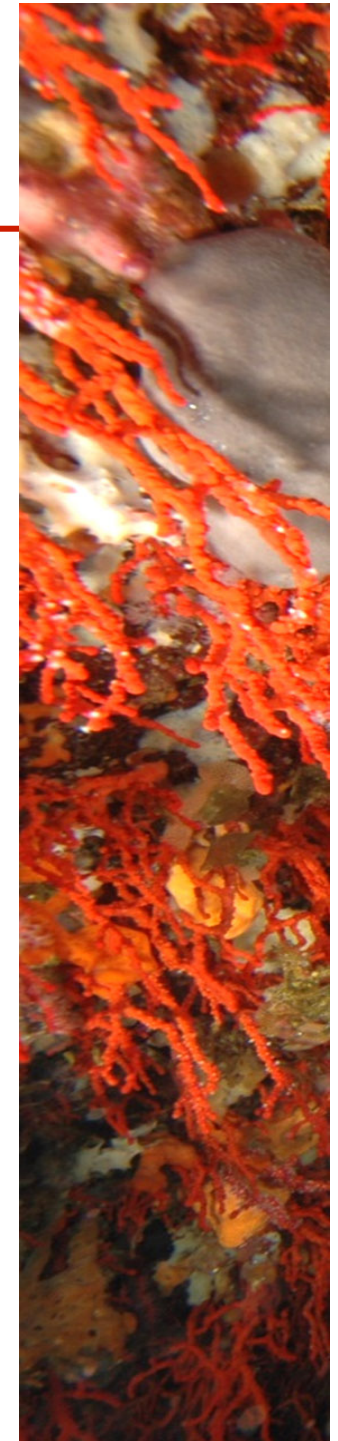
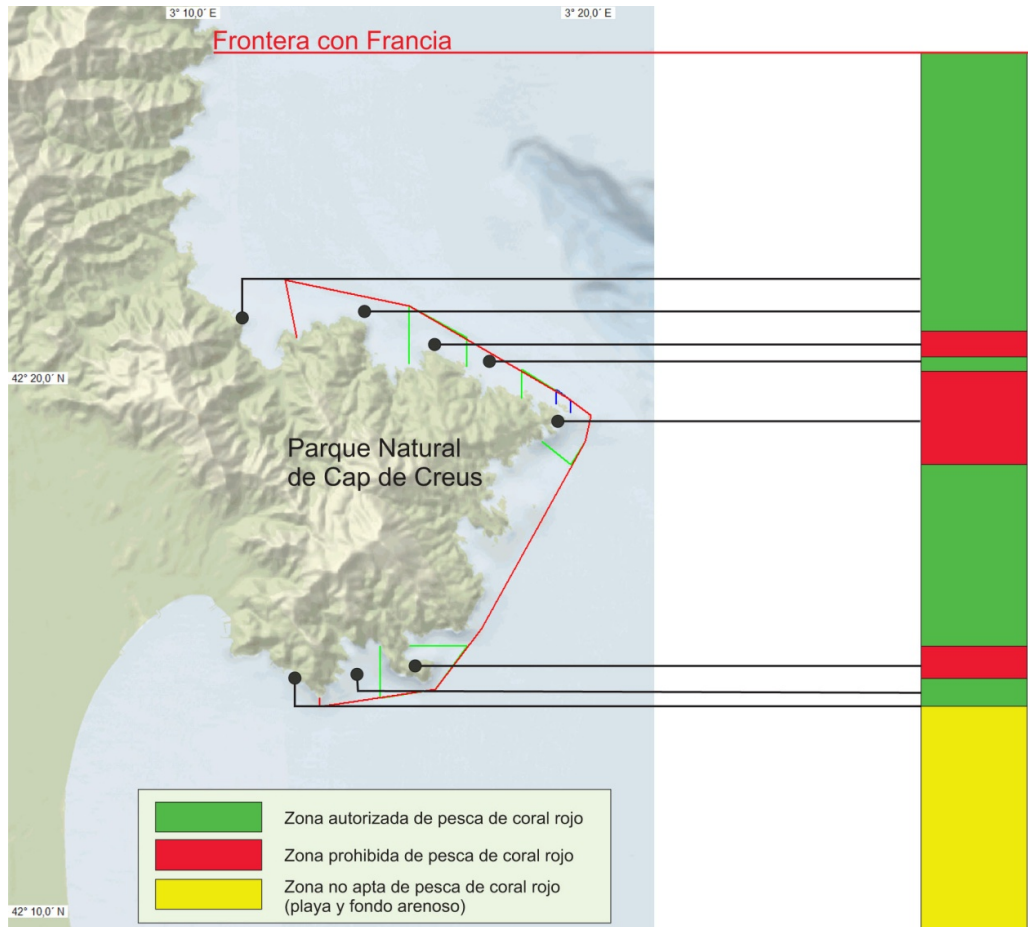
□ Masía Blanca (440 ha)

- **1999:** Marine Reserve
- **Integral Reserve:** Total ban of fishing activities
- **Buffer zone:** Specific census, Trammel nets and LL under specific conditions, Diving, Scientific sampling



The specific case of the red coral

Current restrictions

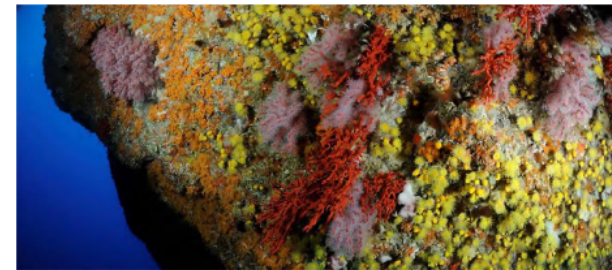


The specific case of the red coral

- The DGPAM commissioned a scientific study on the state of the populations of red coral in Catalanian waters
 - Only 10% of the populations between 0-50m are well conserved
 - 75% reduction of catches the last 40 year
 - Recovery only possible in the absence of extractive activities
 - Over 30 years to achieve a good level of conservation
- Moreover,
 - Subject to increasing illegal fishing
 - Although several regulations have been adopted at national and international level for over 15 years, recovery is not perceived
 - In 2015 the IUCN included this species in its red list (risk of extinction)

Informe sobre l'estat de les poblacions de coral vermell (*Corallium rubrum*) a les aigües de Catalunya

30 Gener 2017



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The specific case of the red coral

Conclusions and Recommendations

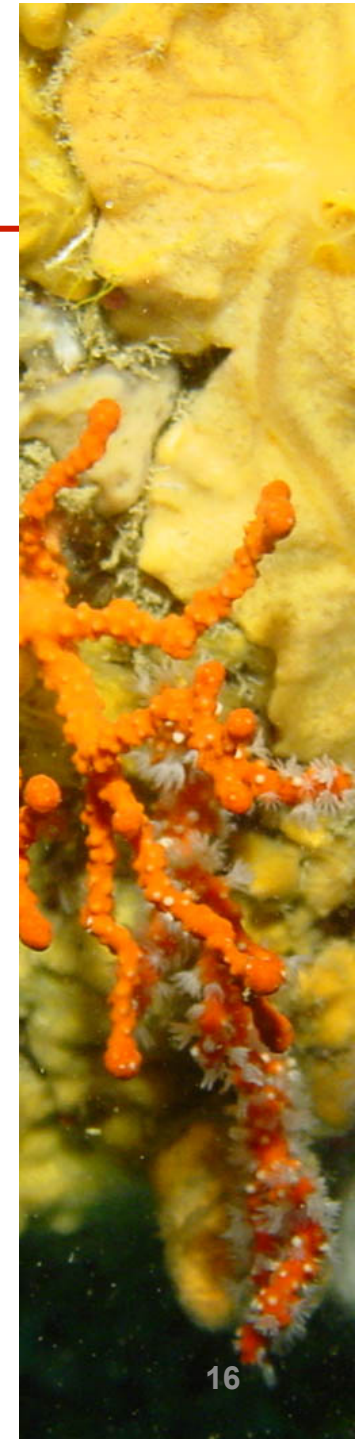
- Coral populations in Catalonia, under current levels of exploitation, is risking extinction
- Therefore, the main recommendation of the study in order to ensure the survival of the species and its related fishing activity is **a 20-year fishing moratoria**
- Establish no take zones for the species
- Regulate diving activity in the distribution area



The specific case of the red coral

Resolution 418/XI of the Parliament of Catalonia on red coral in January 2017 adopted by consensus

- Assess the status of the red coral subject to the scientific study and justify the need to establish a moratoria as an efficient measure for its protection and recovery as a crucial element for the natural subaquatic environment
- Strengthen the control of IUU activities to avoid its negative environmental consequences and to eradicate the feeling of invulnerability of poachers
- Introduce at educational level (schools and others) the awareness of the ecological values of the subaquatic environment as a natural heritage that must be preserved



The specific case of the red coral

The new legal text in process of adoption:

- Reduce by **50%** the number of licenses in 2017 (from 10 to 5)
- A **10-year moratorium** to be revised based on the scientific monitoring of the populations

LAVANGUARDIA | Vida

Vida > Natural > Big Bang > Tecnología > Salud > Vanguarda > Qué estudiar > Bienestar > Ecología > Vanguardia de la Ciencia

EL ORO ROJO DEL MEDITERRÁNEO

Catalunya prohíbe extraer coral rojo

El Govern impone la moratoria de diez años porque las colonias están casi esquilimadas



La talle, antes y ahora. Este agente de la Generalitat enseña, en el cabo de Begur como era el coral en la Costa Brava a finales de los sesenta (aquí está) y ahora (Nàixer Cervera)

En coral rojo (*Corallium rubrum*) está catalogado como especie en peligro de extinción en el Mediterráneo. Es la consecuencia de una fuerte presión pesquera, impulsada por un comercio que usa sus esqueletos en la industria de la ornamentación y la joyería.



El oro rojo del Mediterráneo

La imagen representada en esta ilustración ya no puede contemplarse en la costa catalana. La enorme belleza del coral rojo es su perdición: una sobrepesca desmedida y más recientemente el calentamiento del agua del mar afectan gravemente a su supervivencia.

UN ANIMAL SUSPENSIVÓR
El cuerpo del *Corallium rubrum* es un especie de tubo con una base "trufadora" rodeada por ocho tentáculos con los que capturan el alimento que flota en el agua, para no tener células de alimento para ingerir las partículas nutritivas: es un filtrador pasivo.

1. LIBERACIÓN DE GAMETOS
Entre mediados de junio y julio, los corales machos liberan sus gametos (espermatocitos) en la columna de agua, donde chocan con las células femeninas que son atraídas por la corriente...

2. FERTILIZACIÓN INTERNA
...el gameto llega a la columna femenina y penetra en la cavidad gastrovascular, donde fertiliza al óvulo. Después de 30 días debe llegar a su destino, que será un individuo...

3. NACIMIENTO DE UNA NUEVA COLONIA
...abandonada al pulso en busca de un sustrato donde asentarse, y allí desarrollará una nueva colonia de coral.

COLOMIA MASCULINA **COLOMIA FEMENINA**

CRECIMIENTO Y LONGEVIDAD
Al ritmo de 2 mm en altura o 0,25 mm en diámetro anual, pasando luego a un ritmo de 200 días.

EL CORAL ROJO (Josep Riera)

El informe de los expertos concluye que los corales no pueden ya sobreponerse a la presión de la pesca en la costa catalana. Sólo el 10% de las poblaciones estudiadas (4 de 39) muestra un buen estado de conservación (es decir, sus colonias de más de 10 cm de altura y 7 mm de diámetro en la base), mientras que el 90% presenta un estado de conservación deficiente.

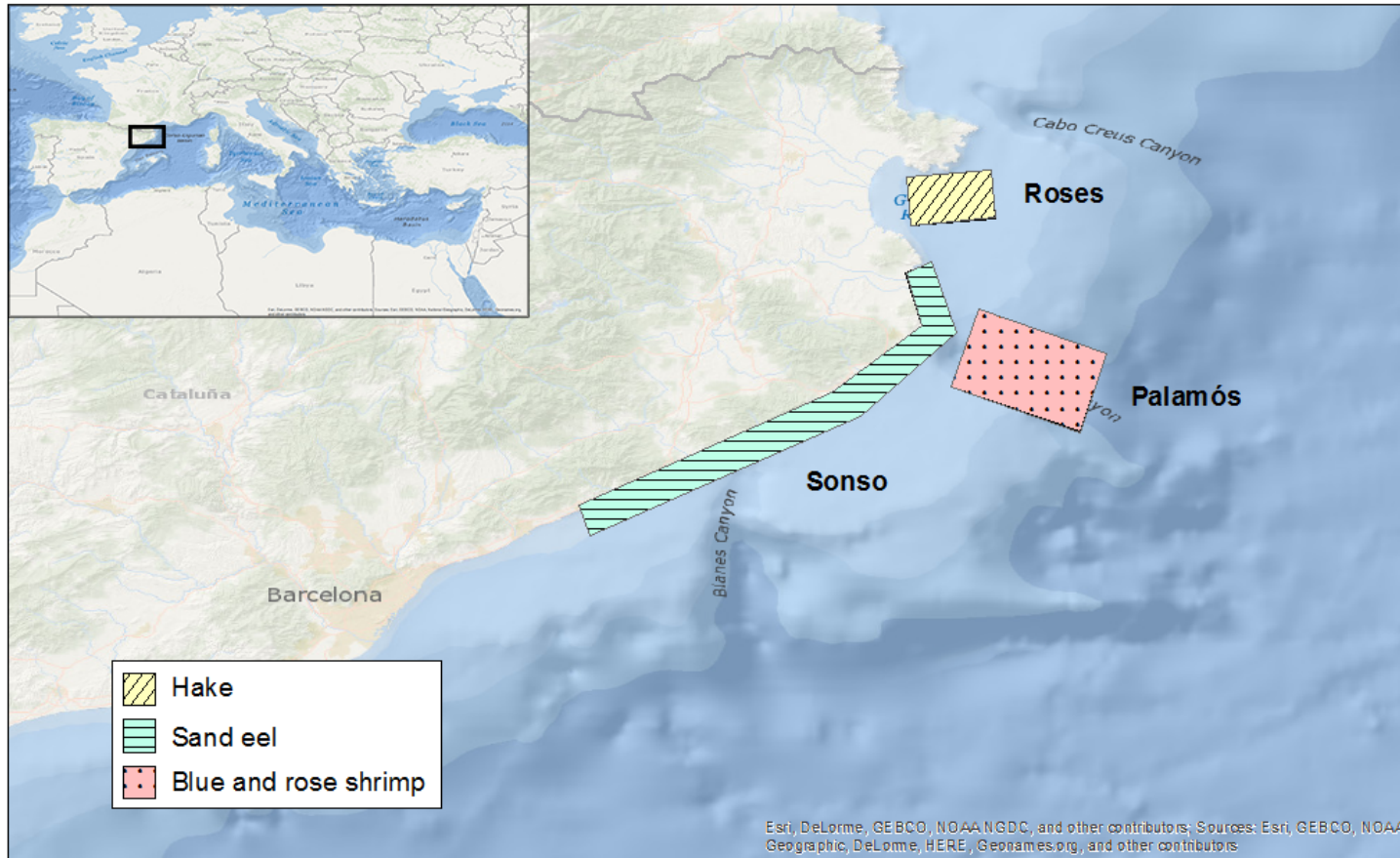
The fisheries governance model in Catalonia

- The DGPAM has elaborated a specific legal text (decree), now in the process of adoption, based on two priority axis:
 - The establishment of comprehensive management plans as the tool for regulation, monitoring and control of the fishing activity, with a long term environmental, social and economic sustainability approach
 - The **legal devolution of management power from the administration to stakeholders** through the creation of co-management committees for fisheries, integrated by the fishing sector, scientists, NGOs, and the administration



The fisheries governance model in Catalonia

The Catalan co-management experience: shrimp, sandeel and hake



The fisheries governance model in Catalonia

- Five years experience in fisheries co-management has allowed us:
 - To be proactive and find shared solutions
 - To adjust management measures to reality
 - To find innovative solutions

- Main achievements
 - Effective co-management allows for a true adaptive fisheries management
 - Adaptive management has the potential to increase profitability without increasing fishing effort
 - Increased sense of ownership among fishers translated in high level of compliance and commitment
 - Gain the essential knowledge to ensure stock sustainability

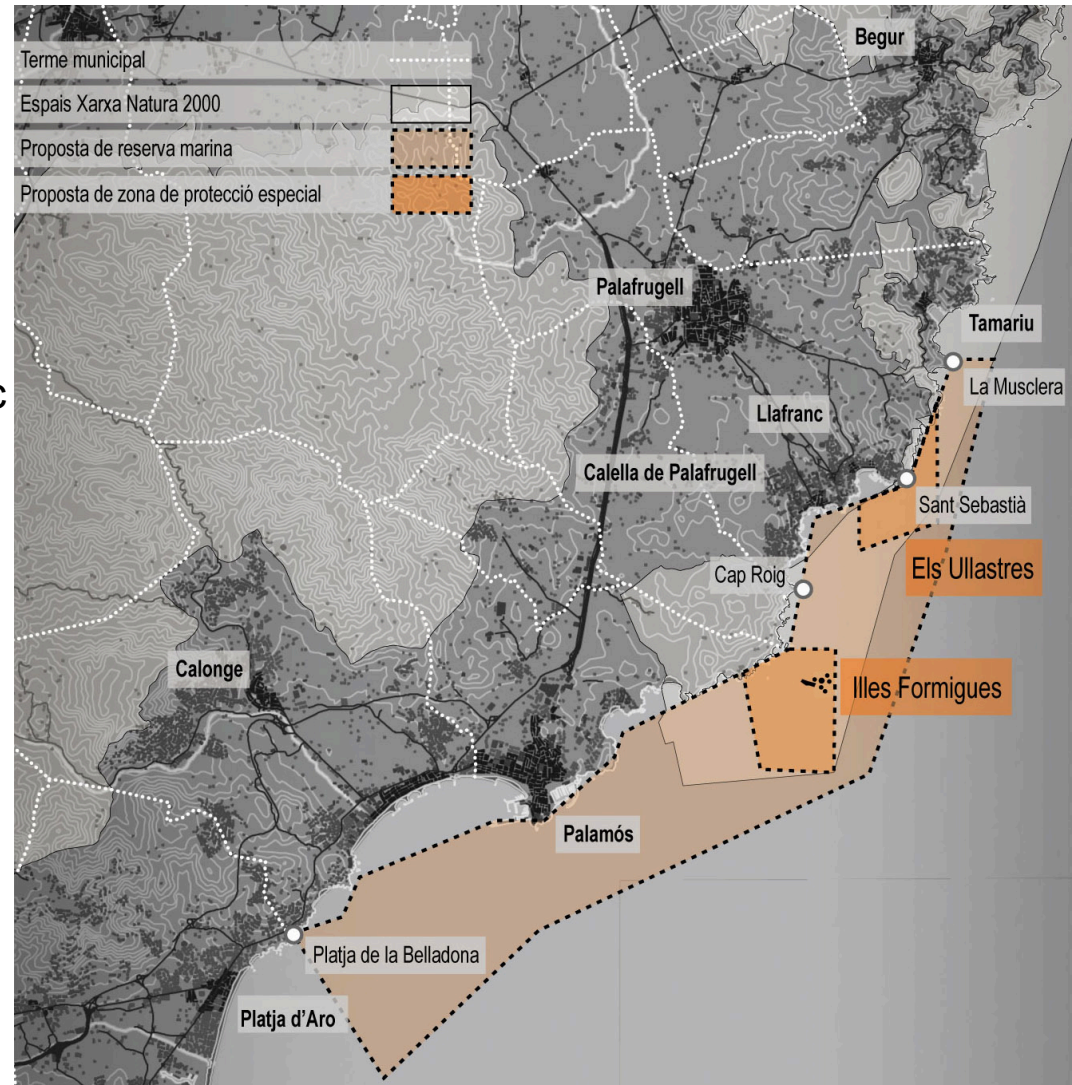


Co-management: a model to be expanded beyond fisheries

Illes Formigues

□ Background

- A groups of 16 small islands within a Natura 2000 site
- Refugee of birds and key benthonic species (gorgonia, red coral, etc.)
- Intense recreational activity (sailing, diving, fishing, etc.)
- Proposal of Marine Reserve that did not succeed
- Social movements both, **in favor and against** the creation of the reserve (2009)

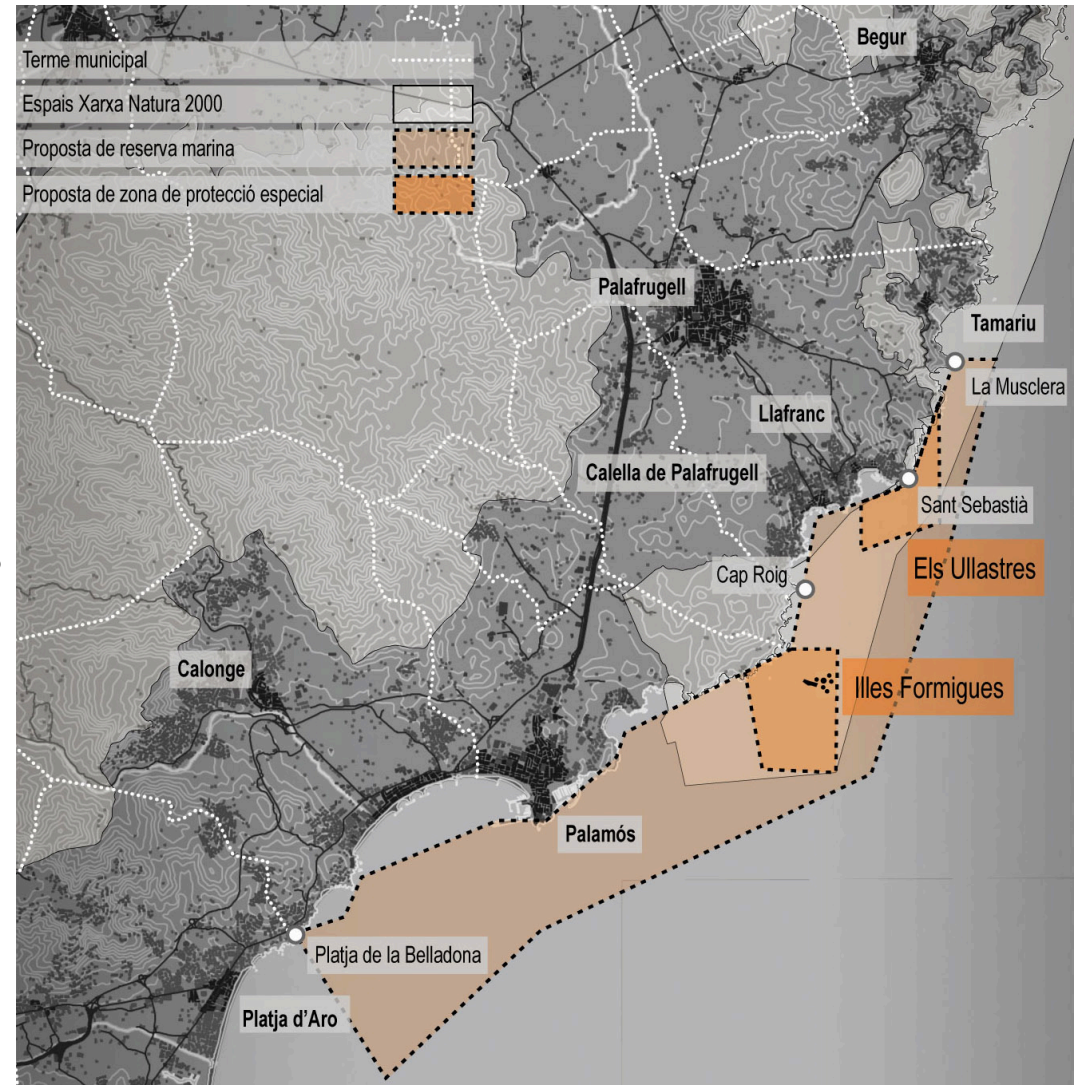


Co-management: a model to be expanded beyond fisheries

Illes Formigues

□ Where are we now?

- The Government of Catalonia is designing an ambitious co-management process in order to protect the area and provide solutions to current users conflicts
- Over 100 associations have been identified (recreational, professional fishing, NGOs, administration, scientific and economic sectors) as interested actors



Fisheries closures: a key element to manage Mediterranean mixed fisheries

The hake case in GSA 6 and 7

□ The fishery

- Among the most overexploited fisheries in the Med
- Strong decrease in mean size, particularly from LL catches
- Concentrations of juveniles on the continental shelf
- Minimum conservation reference size 20 cm versus age at first maturity over 35 cm

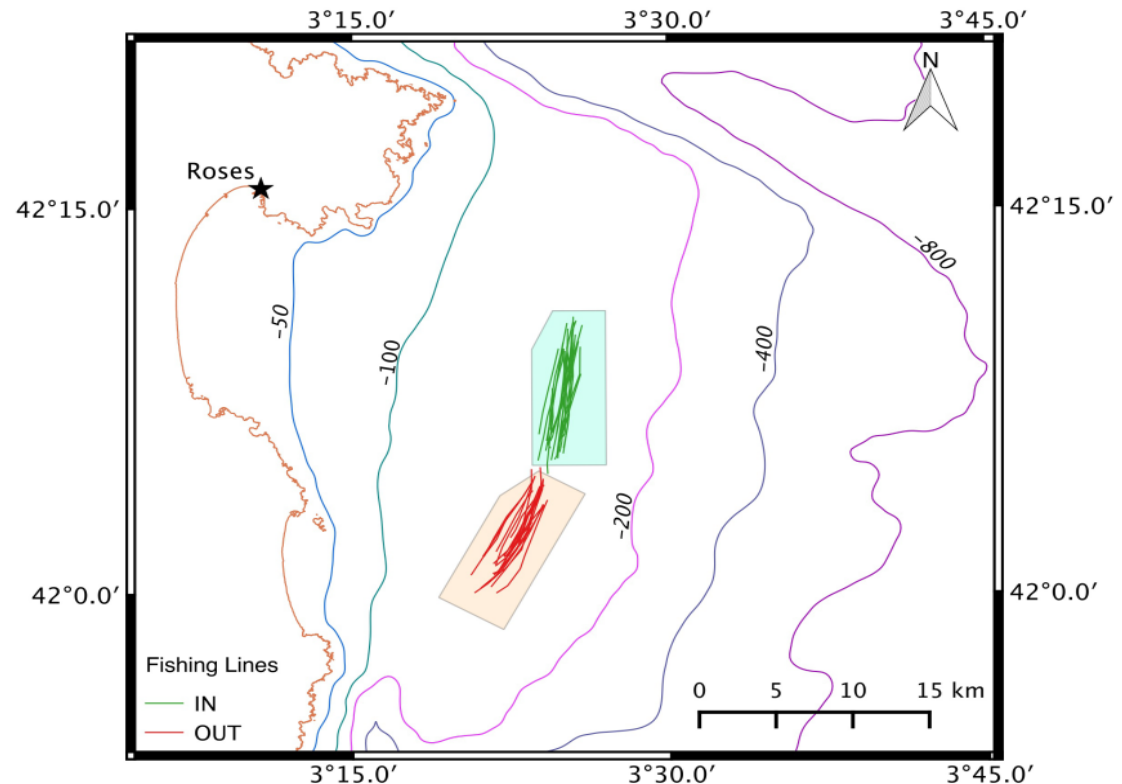


Fisheries closures: a key element to manage Mediterranean mixed fisheries

The hake case in GSA 6

□ The Gulf of Roses experience

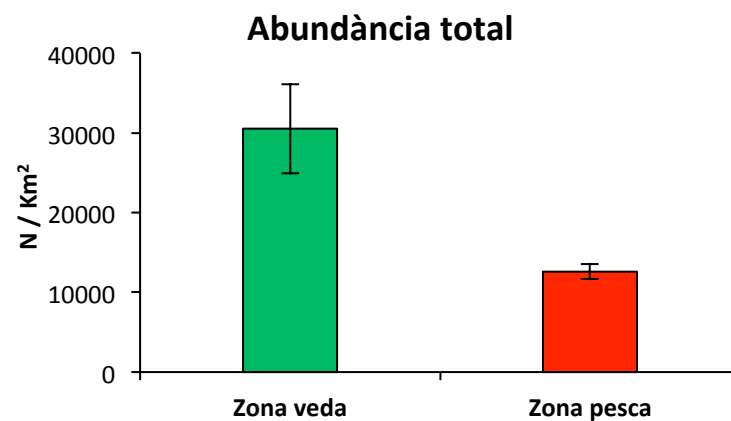
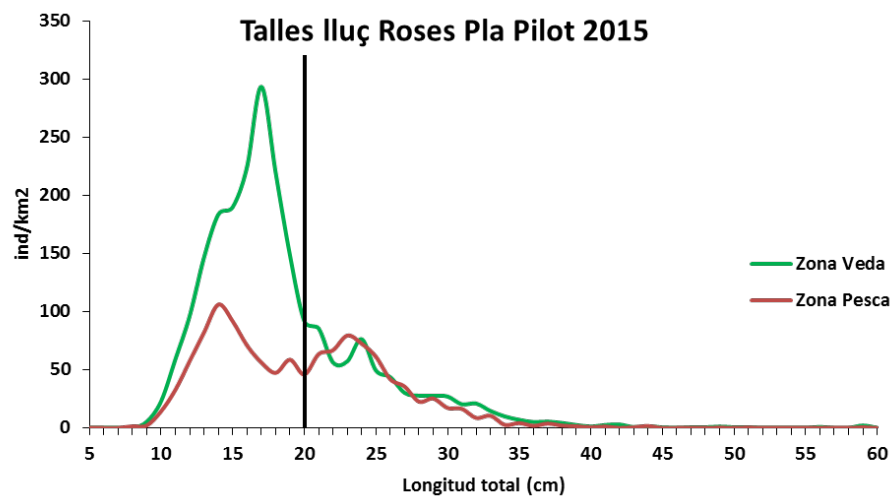
- A fishermen initiative
- Green: permanent closure
- Red: Control area
- Area: 50 km²
- Period: 3 years



Laura Recasens and Joan B. Company (in preparation)

Fisheries closures: a key element to manage Mediterranean mixed fisheries

The hake case in GSA 6



Laura Recasens and Joan B. Company (in preparation)



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Thank you!