El consejo científico del ICES

- El ICES es el encargado por la UE de la evaluación de los stock pesqueros
- Las evaluaciones intentan cumplir con el objetivo **UE** para la **PPC**
  - Que para 2020 todos los stocks sean sostenibles produciendo al **RMS**

RMS: Rendimiento máximo sostenible

- La evaluación se basa en **criterios y modelos científicos** según la mejor información disponible para cada stock: proporcionando **puntos de referencia biológicos y pesqueros**
- Según la información disponible el ICES identifica 6 categorías de stock:
  1. **Stocks ricos en datos: análisis cuantitativo. Criterio RMS**
  2. **Stocks con evaluación analítica pero sólo tendencias . Criterio RMS**
  3. **Stocks con tendencias basadas en campañas. Proxy RMS**
  4. **Stocks con una serie histórica de capturas fiables. Proxy RMS**
  5. **Stocks pobres en datos. Criterio de precaución - Indicadores**
  6. **Stocks con capturas ínfimas o sólo como by-catch de otros stocks. Criterio precaución – indicadores**
  - **Stocks con planes de gestión y acuerdos UE – Otros actores**

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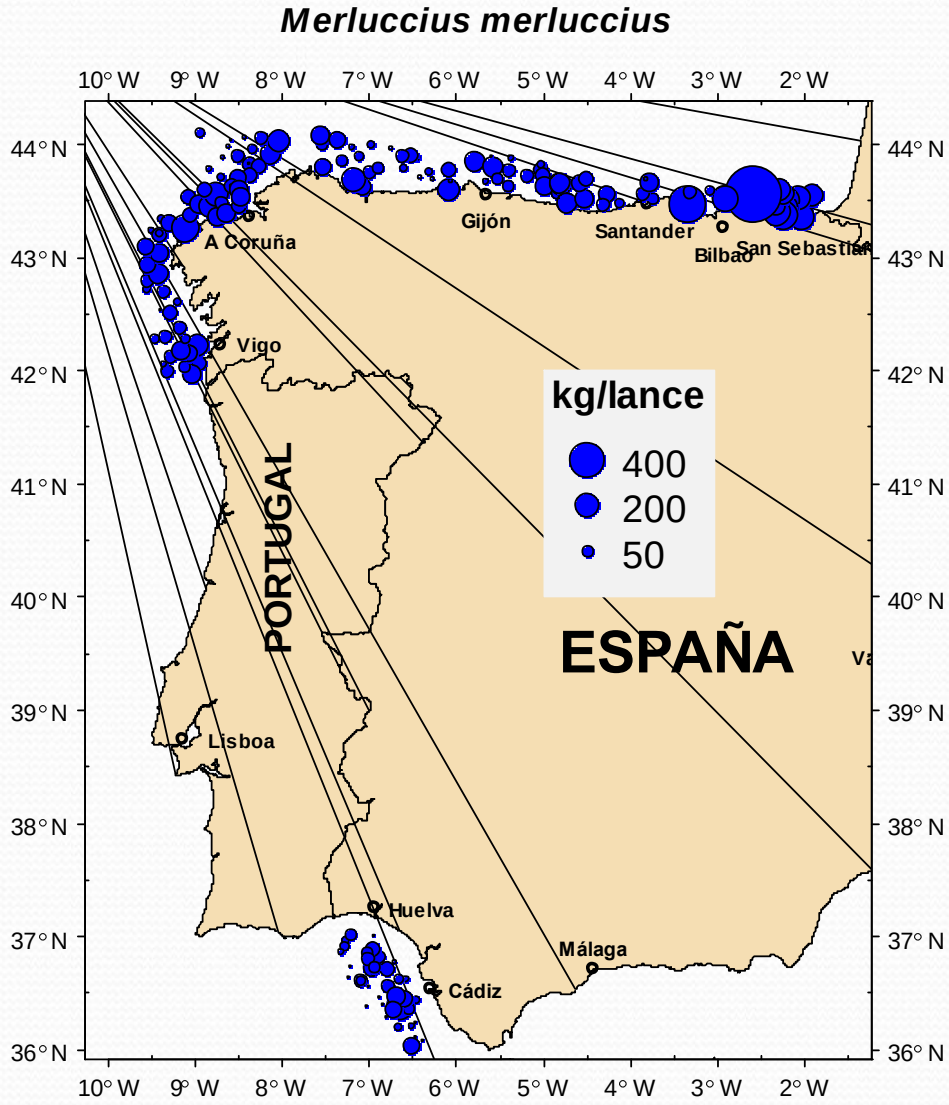
Resumen del consejo científico de ICES para los recursos pesqueros de interés para la flota española en aguas Atlántico ibéricas

I Stocks demersales

Programa ICES
Área de Pesquerías
Instituto Español de Oceanografía

Madrid
10 julio 2018

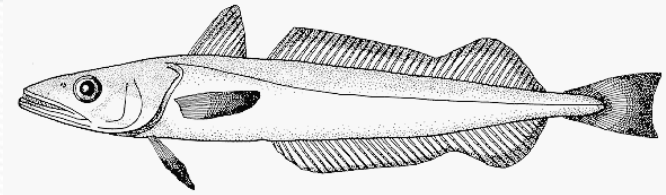
hke 8c9a



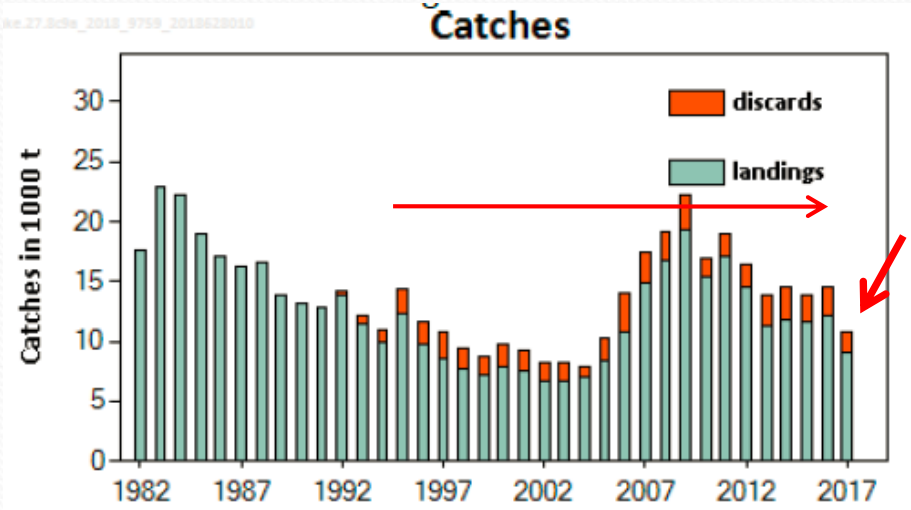
Merluza stock sur

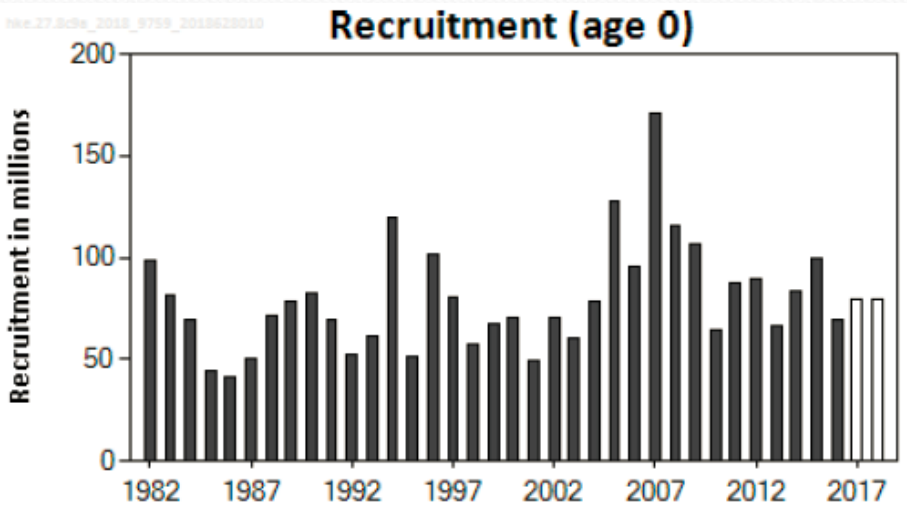
Consejo 2018 para 2019

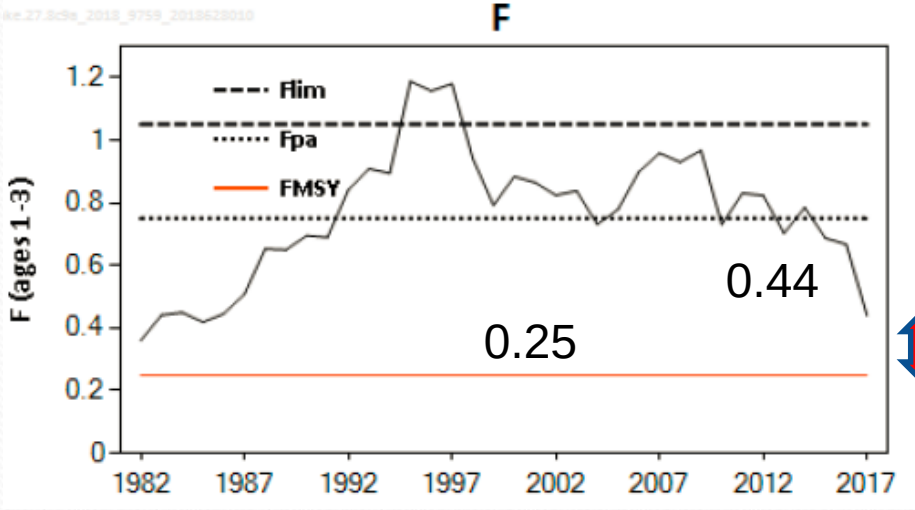
(*Merluccius merluccius*)

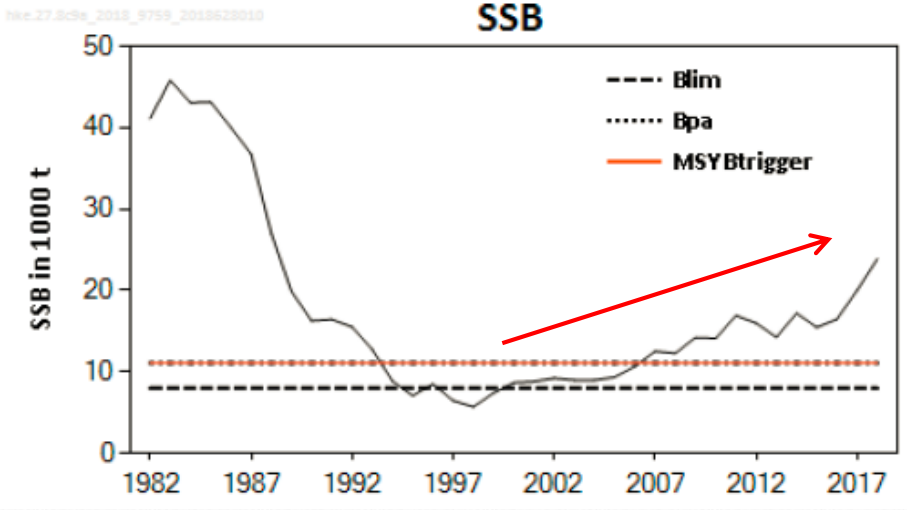


hke 8c9a


Catches
Catches in 1000 t
discards
landings
0
5
10
15
20
25
30
1982
1987
1992
1997
2002
2007
2012
2017


Recruitment (age 0)
Recruitment in millions
0
50
100
150
200
1982
1987
1992
1997
2002
2007
2012
2017


F
F (ages 1-3)
Flim
Fpa
FMSY
0.44
0.25
0
0.2
0.4
0.6
0.8
1
1.2
1982
1987
1992
1997
2002
2007
2012
2017


SSB
SSB in 1000 t
Blim
Bpa
MSYBtrigger
0
10
20
30
40
50
1982
1987
1992
1997
2002
2007
2012
2017

hke 8c9a

EVOLUCION DEL STOCK

Presión pesquera por encima F_{MSY} pero por debajo Fpa y Flim

Biomasa del stock reproductor por e[illegible]m

Campaña ARSA (Suratlántica)

ICES stock data category	1 (ICES, 2016c)
Assessment type	Length–age analytical assessment (GADGET[illegible] model and in the forecast
Input data	Commercial catches (international landings, discards, and length frequencies from catch sampling); three survey indices (SP-NSGFS-WIBTS-Q4 [1983 to 2017], SPGCGFS-WIBTS-Q4 [1997 to 2017], and Pt-PGFS-Q4 [198[illegible]UTR [1985 to 2012] and P-TR [1989 to 2017]); annual matu[illegible]l mortality a constant value (0.4) w[illegible]
Discards and bycatch	Included in the assessment since 1992 and considered negligible before. Data series raised to the effort.
Indicators	None
Other information	Benchmarked in 2014 (ICES, 2014)
Working group	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)

Campaña Demersales

IBTS Portugal

ESTADO DEL STOCK

		Fishing pressure				Stock size			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✗	Above	MSY $B_{trigger}$	✓	✓	✓ Above trigger
Precautionary approach	F_{pa},F_{lim}	✓	✓	✓	Harvested sustainably	B_{pa},B_{lim}	✓	✓	✓ Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	– Not applicable

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EVOLUCION DEL STOCK

Presión pesquera por encima F_{MSY} pero por debajo Fpa y Flim

Biomasa del stock reproductor por encima MSY $B_{trigger}$ y B_{pa} B_{lim}

ICES stock data category	1 (ICES, 2016c)
Assessment type	Length–age analytical assessment (GADGET; ICES, 2018b) that uses catches in the model and in the forecast
Input data	Commercial catches (international landings, discards, and length frequencies from catch sampling); three survey indices (SP-NSGFS-WIBTS-Q4 [1983 to 2017], SPGCGFS-WIBTS-Q4 [1997 to 2017], and Pt-PGFS-Q4 [1989-2017]); two commercial indices (SP-CORUTR [1985 to 2012] and P-TR [1989 to 2017]); annual maturity data from commercial catch; for natural mortality a constant value (0.4) was used.
Discards and bycatch	Included in the assessment since 1992 and considered negligible before. Data series from the main fleets raised to the eff
Indicators	None
Other information	Benchmarked in 2014 (ICES, 2014)
Working group	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)

Flota arrastre A Coruña — **Flota arrastre Portugal**

ESTADO DEL STOCK

		Fishing pressure				Stock size			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✗	Above	MSY $B_{trigger}$	✓	✓	✓ Above trigger
Precautionary approach	F_{pa},F_{lim}	✓	✓	✓	Harvested sustainably	B_{pa},B_{lim}	✓	✓	✓ Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	– Not applicable

hke 8c9a

EVOLUCION DEL STOCK

Presión pesquera por encima F_{MSY} pero por debajo Fpa y Flim
Biomasa del stock reproductor por encima MSY $B_{trigger}$ y B_{pa} B_{lim}

ICES stock data category	1 (ICES, 2016c)
Assessment type	Length–age analytical assessment (GADGET; ICES, 2018b) that uses catches in the model and in the forecast
	dings, disc… 1983 to 20… s (SP-COR… for natura…
Discards and bycatch	Included in the assessment since 1992 and considered negligible before. Data series from the main fleets raised to … effort.
Indicators	None
Other information	Benchmark … 2014 (ICES, 2014)
Working group	Working Gro… r the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)

PR pesqueros por encima del F_{RMS}

PR biológicos superiores a niveles de biomasa precautorios y RMS.

ESTADO DEL STOCK

		Fishing … sure				Stock siz…			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✗	Above	MSY $B_{trigger}$	✓	✓	✓ Above trigger
Precautionary approach	F_{pa},F_{lim}	✓	✓	✓	Harvested sustainably	B_{pa},B_{lim}	✓	✓	✓ Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	– Not applicable

hke 8c9a

CONSEJO DE ICES

ICES aconseja que aplicando el **ENFOQUE del RMS** la captura de este stock no debe superar las

8281 t

En 2019 ↓ 3 % 2018.

F2017 (0.44) > FMSY (0.25)

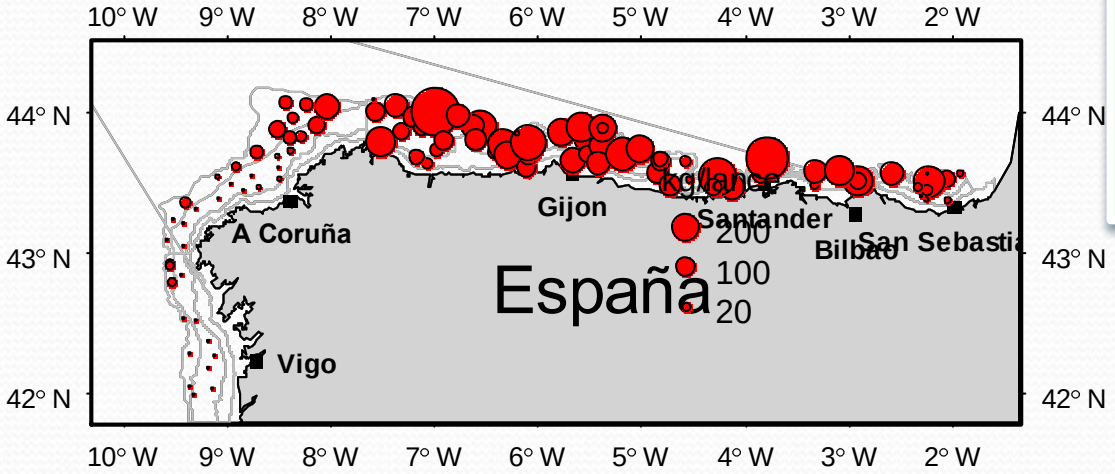
Consejo ICES 2018
8561 t

Gallos
(*Lepidorhombus* spp)

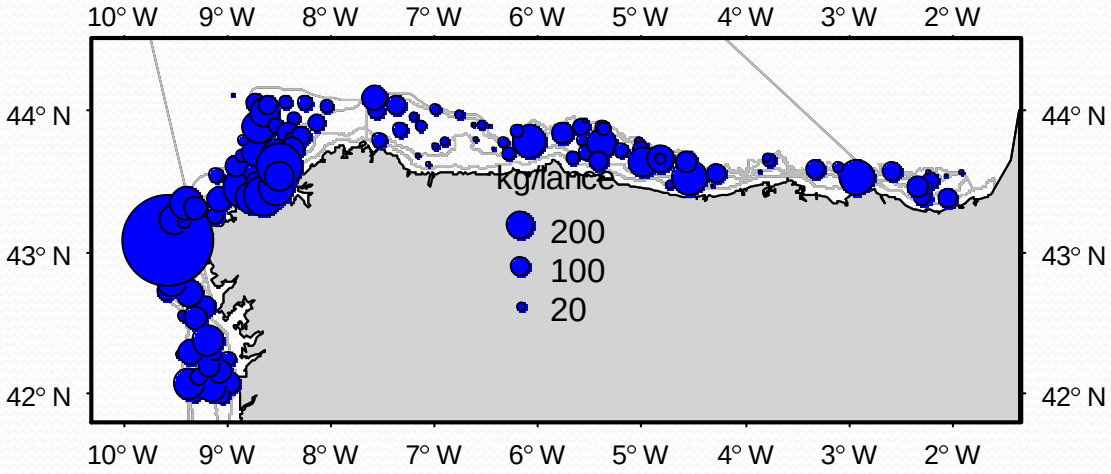
Consejo 2018 para 2019

whiffiagonis ***boscii***

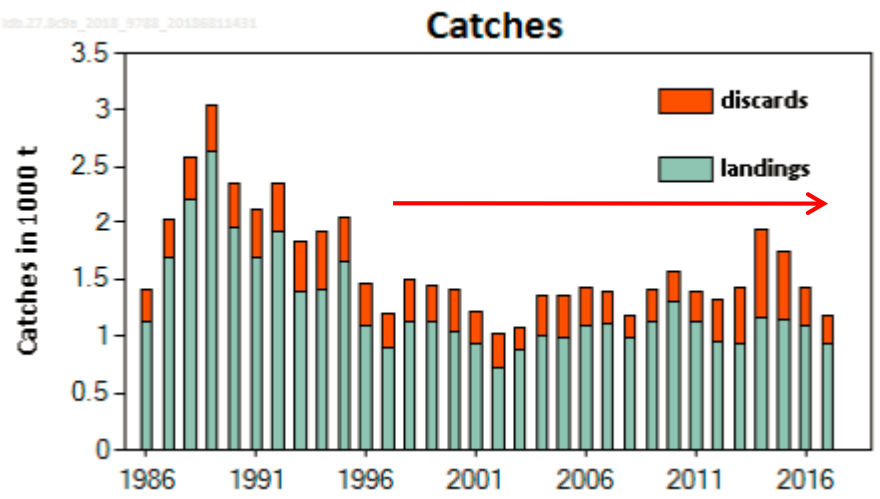
Lepidorhombus whiffiagonis

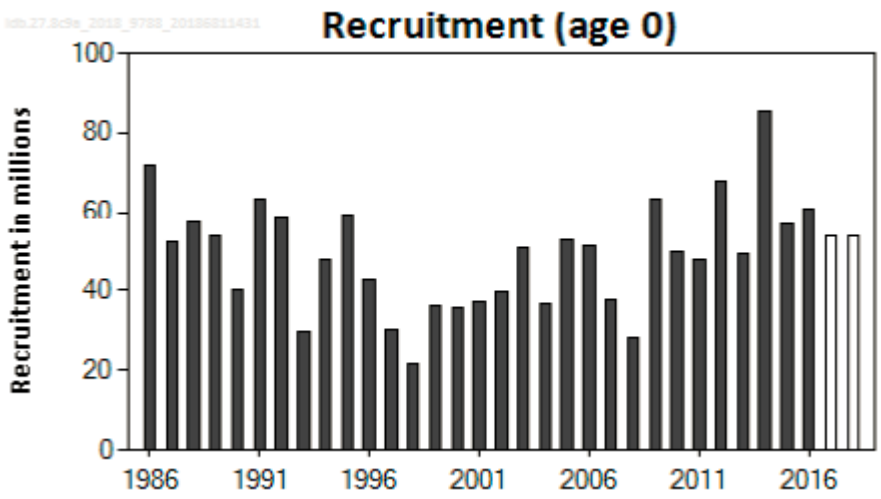


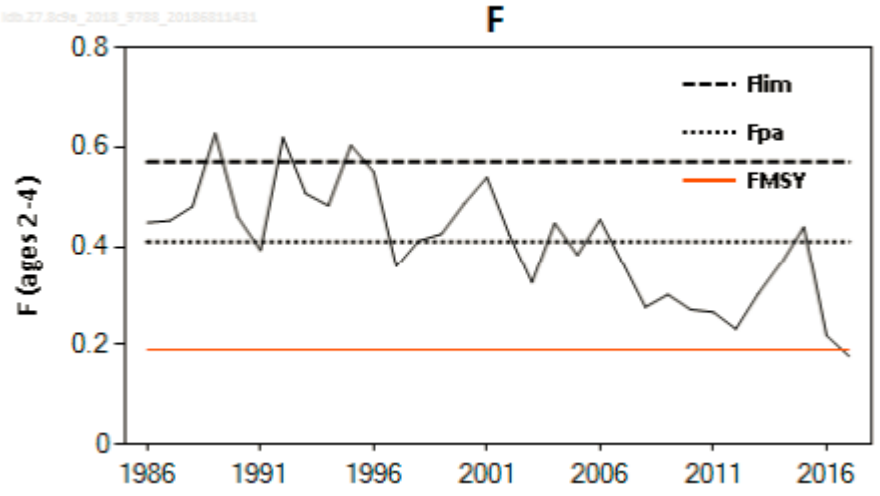
Lepidorhombus boscii

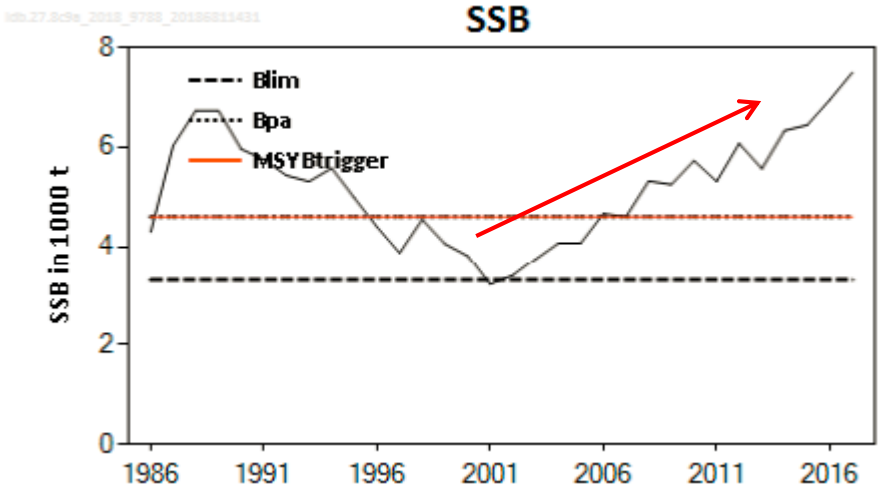


Idb 8c9a


Catches
Catches in 1000 t
discards
landings
0
0.5
1
1.5
2
2.5
3
3.5
1986
1991
1996
2001
2006
2011
2016


Recruitment (age 0)
Recruitment in millions
0
20
40
60
80
100
1986
1991
1996
2001
2006
2011
2016


F
F (ages 2-4)
Flim
Fpa
FMSY
0
0.2
0.4
0.6
0.8
1986
1991
1996
2001
2006
2011
2016


SSB
SSB in 1000 t
Blim
Bpa
MSY Btrigger
0
2
4
6
8
1986
1991
1996
2001
2006
2011
2016

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Idb 8c9a

Estado y EVOLUCION DEL STOCK

Capturas están estables y la SSB sube muy por encima de MSY

Actualmente el stock se encuentra en buena situación

ICES stock data category	1 (ICES, 2016b)
Assessment type	Age-based assessment (XSA; ICES, 2018a) that uses catches in the model and in the forecast
Input data	Commercial catches (international landings, ages and length frequencies from catch sampling); one survey index (SP-NSGFS-WIBTS-Q4) (1988–2017 excluding 2003 and 2013); two commercial indices (SP-LCGOTBDEF-1 (1986–1999) and SP-LCGOTBDEF-2 (2000–2017)); constant maturity ogive (Anon., 1998); assumed natural mortality of 0.2.
Discards and bycatch	Included in the assessment for all data series from the majority of the fleet
Indicators	None
Other information	This stock was benchmarked in 2014 (ICES, 2014)
Working group	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)

		Fishing pressure				Stock size			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✓	Below	MSY $B_{trigger}$ ✓	✓	✓	Above trigger
Precautionary approach	F_{pa},F_{lim}	○	✓	✓	Harvested sustainably	B_{pa},B_{lim} ✓	✓	✓	Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT} –	–	–	Not applicable

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Idb 8c9a

Estado y EVOLUCION DEL STOCK

Capturas están estables y la SSB sube muy por encima de MSY

Actualmente el stock se encuentra en buena situación

ICES stock data category	1 (ICES, 2016c).
Assessment type	Age-based assessment (XSA; ICES, 2017a) that uses catches in the model and in the forecast.
Input data	Commercial catches (international landings, ages and length frequencies from catch sampling); one survey index (SpGFS-WIBTS-Q4) (1988–2016 excluding 2003 and 2013); two commercial indices (SP-LCGOTBDEF-1 (1986–1999) and SP-LCGOTBDEF-2 (2000–2016)); constant maturity ogive (Anon., 1998); assumed natural mortality (0.2).
Discards and bycatch	Included in the assessment for all data series from the majority of the fleet.
Indicators	None.

PR pesqueros por debajo del F_{RMS}

PR biológicos superiores a niveles de biomasa precautorios y RMS.

		Fishing pressure				Stock			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✓	Below	MSY $B_{trigger}$	✓	✓	✓ Above trigger
Precautionary approach	F_{pa},F_{lim}	○	✓	✓	Harvested sustainably	B_{pa},B_{lim}	✓	✓	✓ Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	– Not applicable

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ldb 8c9a

CONSEJO DE ICES

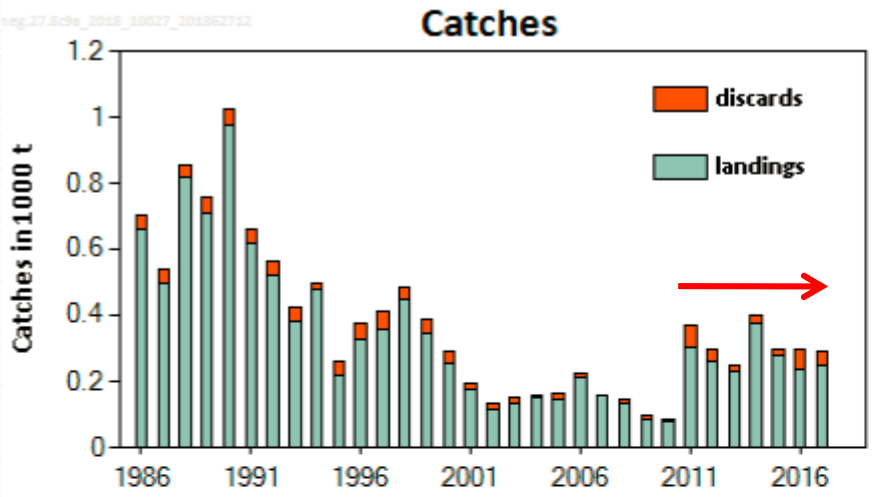
ICES aconseja que aplicando el **ENFOQUE del RMS** la captura de este stock no debe superar las

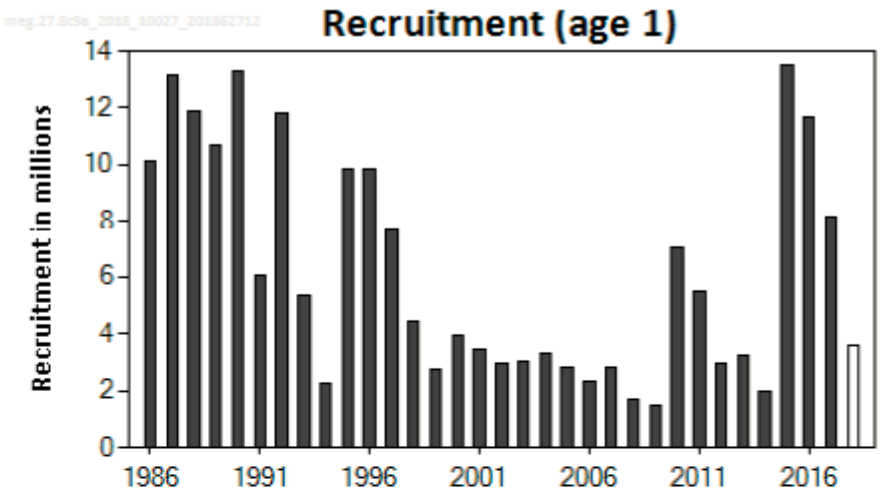
1633 t Capturados

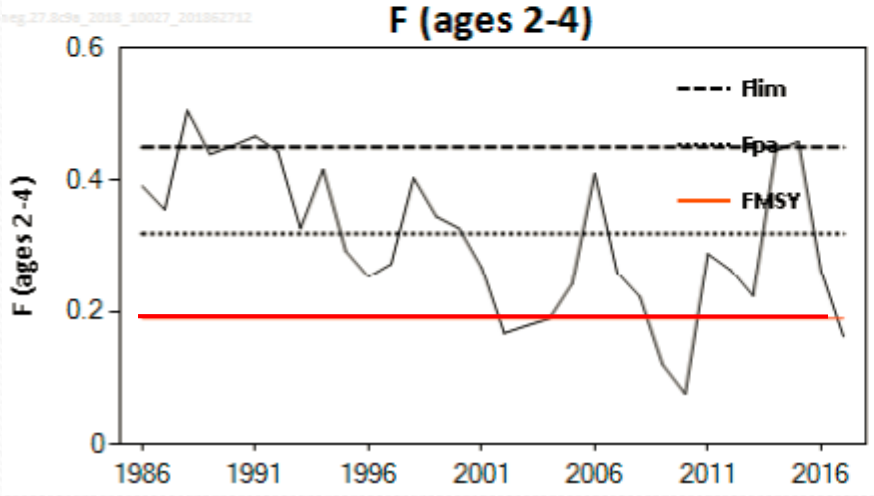
En 2019 ↑ 17 % 2018

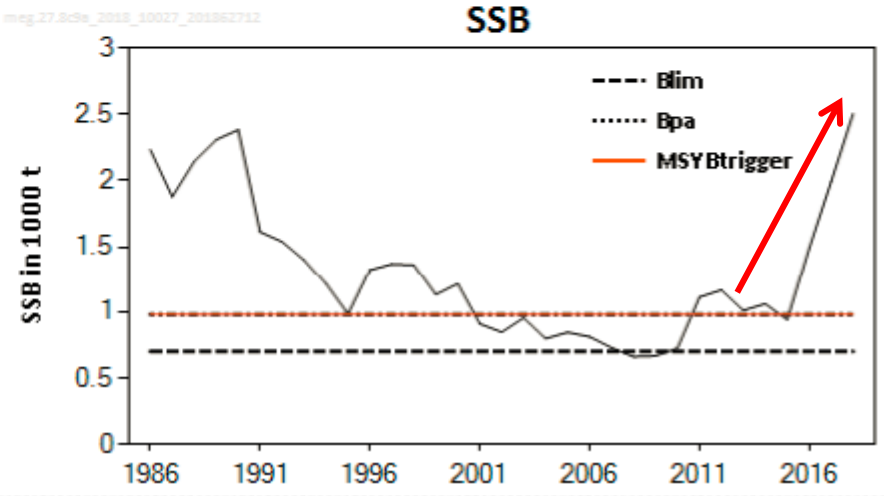
Consejo ICES 2017
1399 t

meg 8c9a


Catches
Catches in 1000 t
discards
landings
1.2
1
0.8
0.6
0.4
0.2
0
1986
1991
1996
2001
2006
2011
2016


Recruitment (age 1)
Recruitment in millions
14
12
10
8
6
4
2
0
1986
1991
1996
2001
2006
2011
2016


F (ages 2-4)
F (ages 2 -4)
Flim
Fpa
FMSY
0.6
0.4
0.2
0
1986
1991
1996
2001
2006
2011
2016


SSB
SSB in 1000 t
Blim
Bpa
MSY Btrigger
3
2.5
2
1.5
1
0.5
0
1986
1991
1996
2001
2006
2011
2016

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meg 8c9a

ESTADO Y EVOLUCION DEL STOCK

Capturas están estables y la SSB sube por encima de RMS

Actualmente el stock se encuentra en buena situación

ICES stock data category	1 (ICES, 2016c)
Assessment type	Age-based assessment (XSA; ICES, 2018a) that uses catches in the model and in the forecast.
Input data	Commercial catches (international landings, ages, and length frequencies from catch sampling); one survey index (SpNSGFS-WIBTS-Q4; 1988–2017, excluding 2003 and 2013); two commercial indices (SP-LCGOTBDEF (1986–2017) and SP-AVSOTBDEF (1986–2017)); constant maturity ogive (Anon., 1998); assumed natural mortality of 0.2.
Discards and bycatch	Included in the assessment for all data series from the majority of the fleet.
Indicators	None
Other information	This stock was benchmarked in 2014 (ICES, 2014).
Working group	Working Group for the Bay of Biscay and Iberian Waters Ecoregion (WGBIE)

PR pesqueros por debajo del F_{RMS}

PR biológicos superiores a niveles de biomasa precautorios y RMS.

		Fish. pressure 2015	2016	2017		Stock si. 2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✓	Below	MSY $B_{trigger}$	✓	✓	✓ Above trigger
Precautionary approach	F_{pa},F_{lim}	✗	✓	✓	Harvested sustainably	B_{pa},B_{lim}	✓	✓	✓ Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	– Not applicable

meg 8c9a

CONSEJO DE ICES

ICES aconseja que aplicando el ENFOQUE del RMS la captura de este stock debe ser

431 t capturas

En 2019 ⇧ 48 % 2018

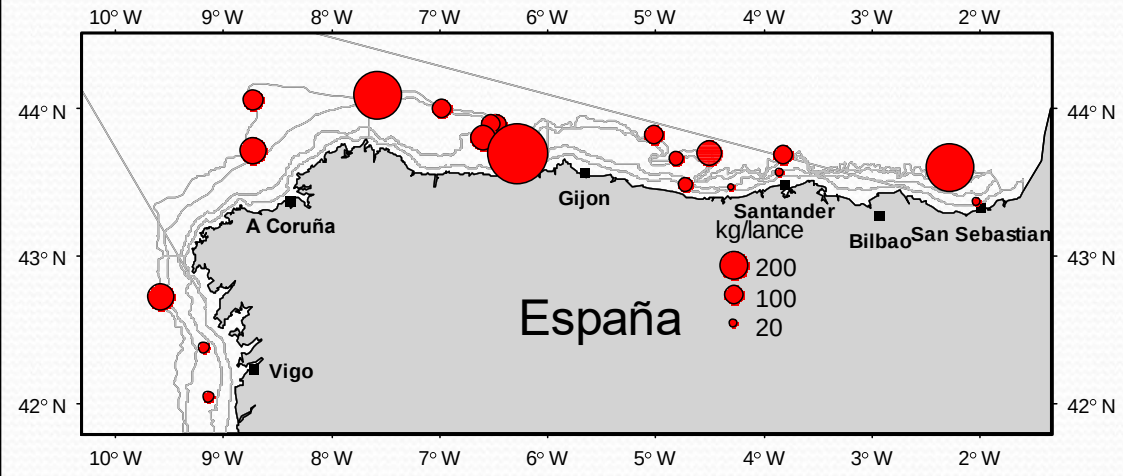
Consejo ICES 2018
292 t

Rapes
(*Lophius* spp)

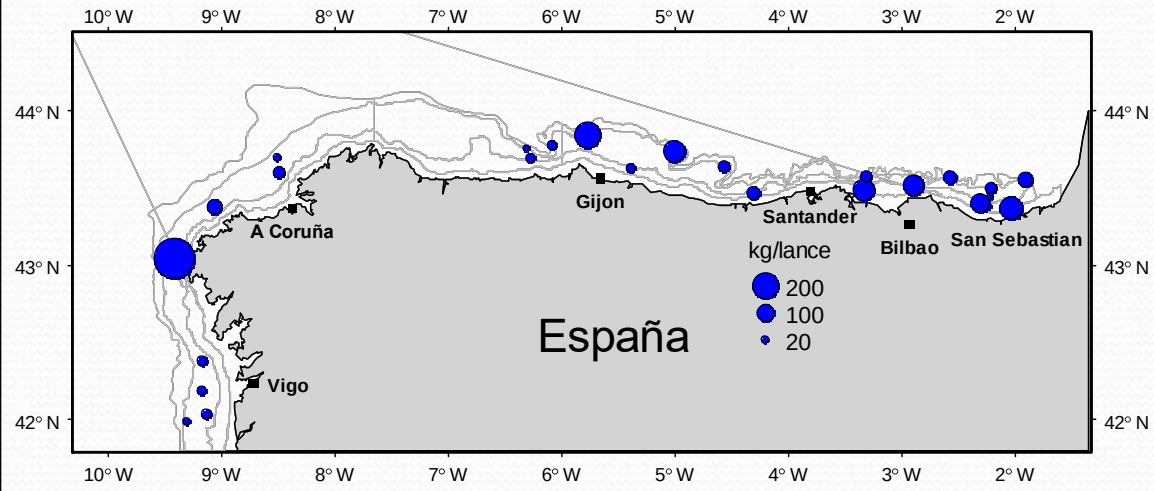
Consejo 2018 para 2019

piscatorius ***budegassa***

Lophius piscatorius



Lophius budegassa



Rape blanco

Rape negro

Rape blanco

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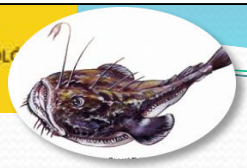
MINISTERIO PARA LA TRANSICIÓN ECOL



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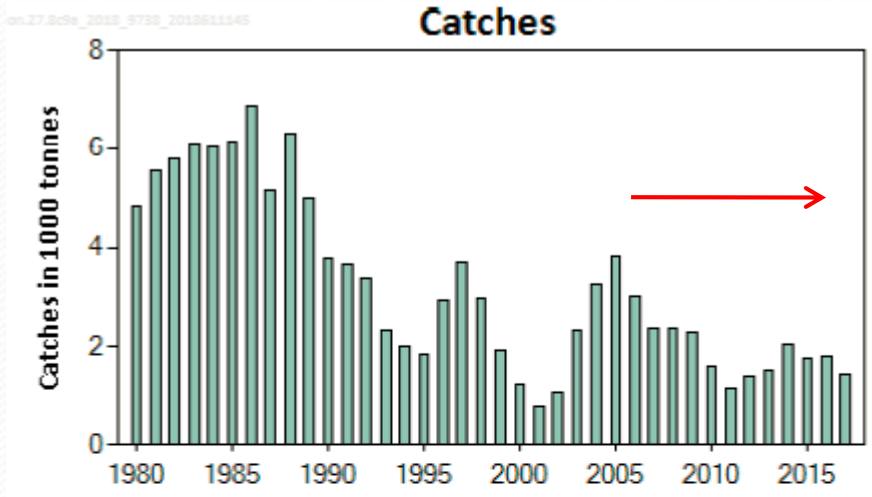
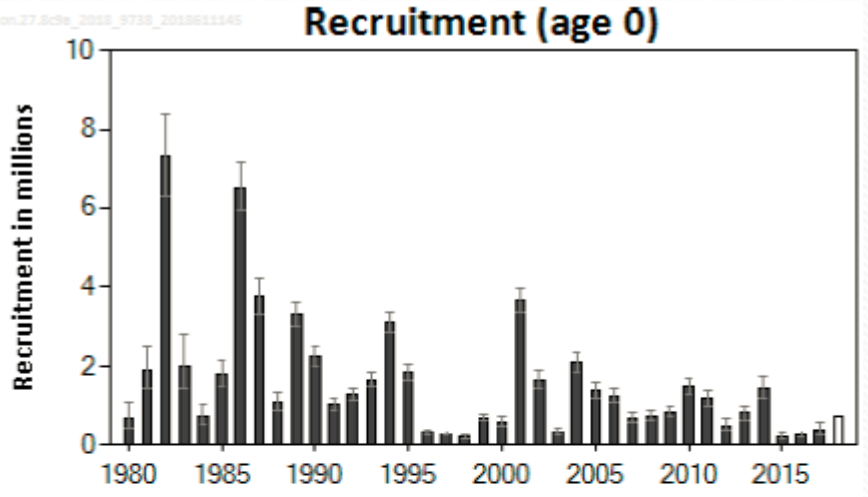
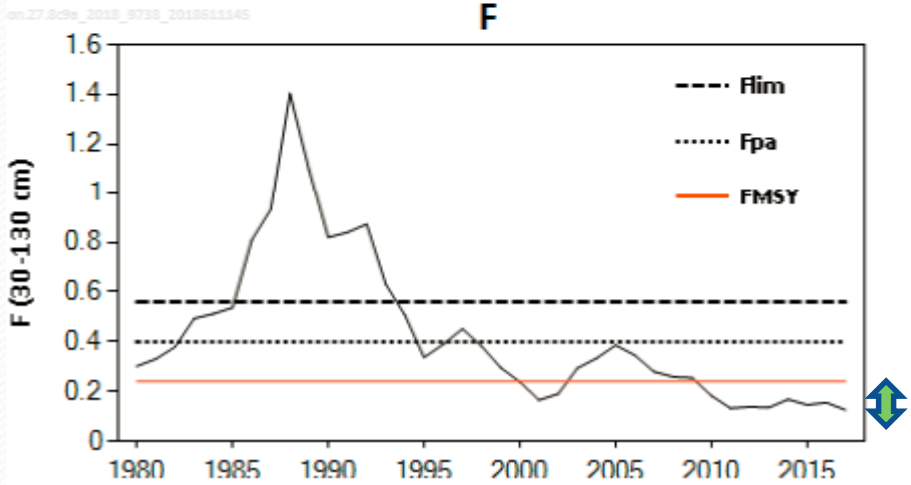
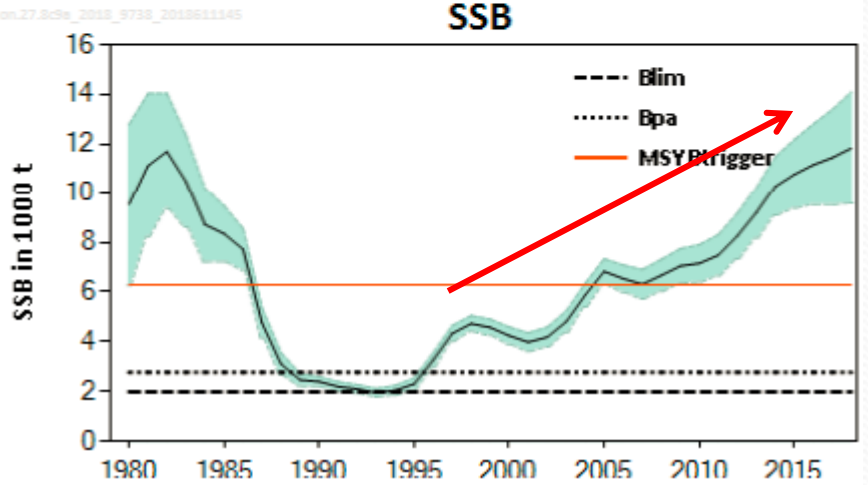
mon 8c9a

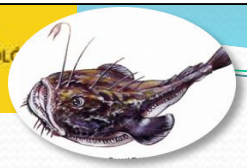








Rape blanco



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mon 8c9a

ESTADO Y EVOLUCION DEL STOCK

Capturas están estables y la SSB sube por encima de MSY

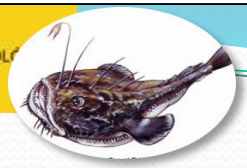
ICES stock data category	1 (ICES, 2016)
Assessment type	Length-based model (SS3; ICES, 2018a; b) that uses landings in the model and in the forecast.
Input data	Landings, length distribution; commercial catches (international official landings); one survey index (SP-NSGFS-WIBTS-Q4 1983–2017); two commercial indices (LPUE series from SP-CORUTR8c 1982–2012 and SP-CEDGNS8c 1999–2011); assumed constant natural mortality.
Discards and bycatch	Discarding is not quantified, assumed to be negligible.
Indicators	None
Other information	This stock was benchmarked in WKANGLER (
Working group	Working Group for the Bay of Biscay and the

PR pesqueros por debajo del F_{RMS}

PR biológicos superiores a niveles de biomasa precautorios y RMS.

	F[illegible]g pressure					Stock s[illegible]				
		2015	201[illegible]	2017			2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✓	✓	✓	Appropriate	MSY $B_{trigger}$	✓	✓	✓	Above trigger
Precautionary approach	F_{pa}, F_{lim}	✓	✓	✓	Harvested sustainably	B_{pa}, B_{lim}	✓	✓	✓	Full reproductive capacity
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	–	Not applicable

Rape blanco



mon 8c9a

CONSEJO DE ICES

ICES aconseja que aplicando el **ENFOQUE del RMS** la captura de este stock no debe superar las

2153 t

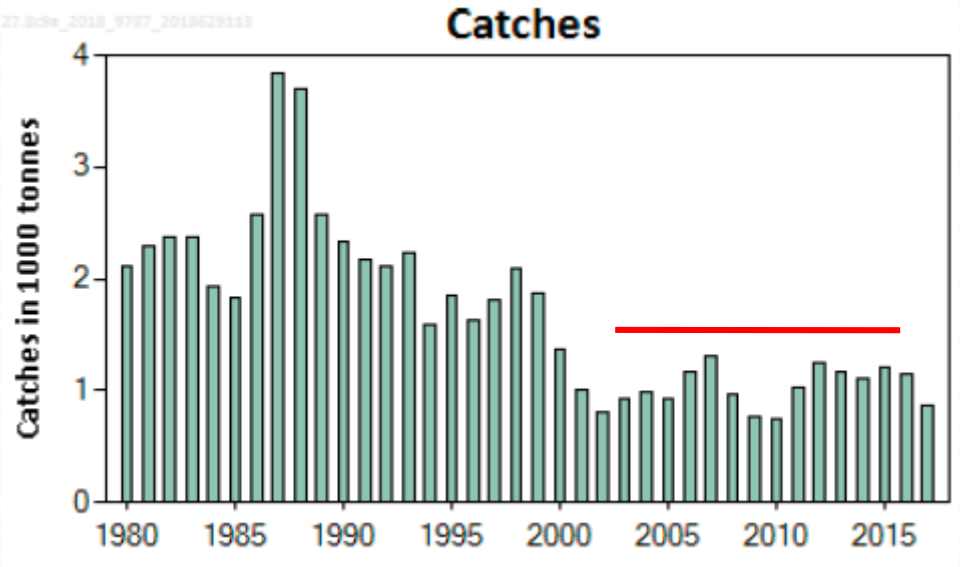
En 2019 ↓ 2 % 2018

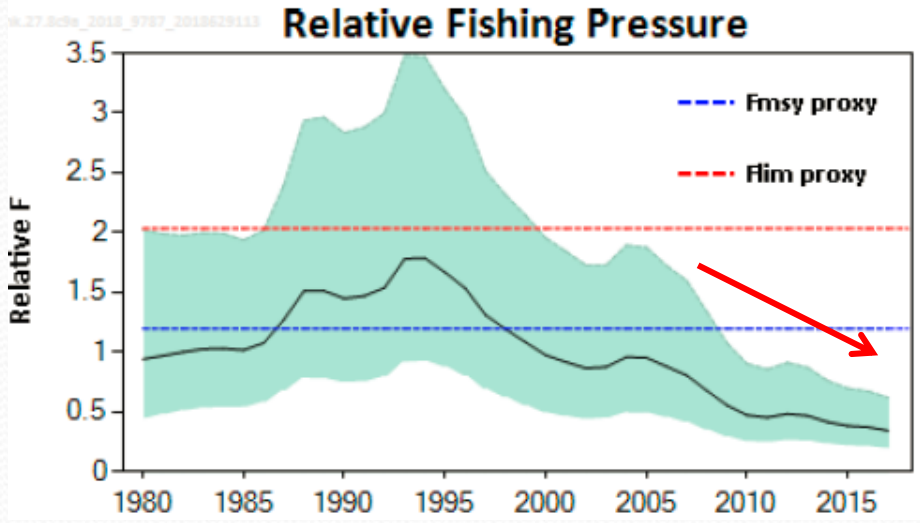
Recalculo de FMSY

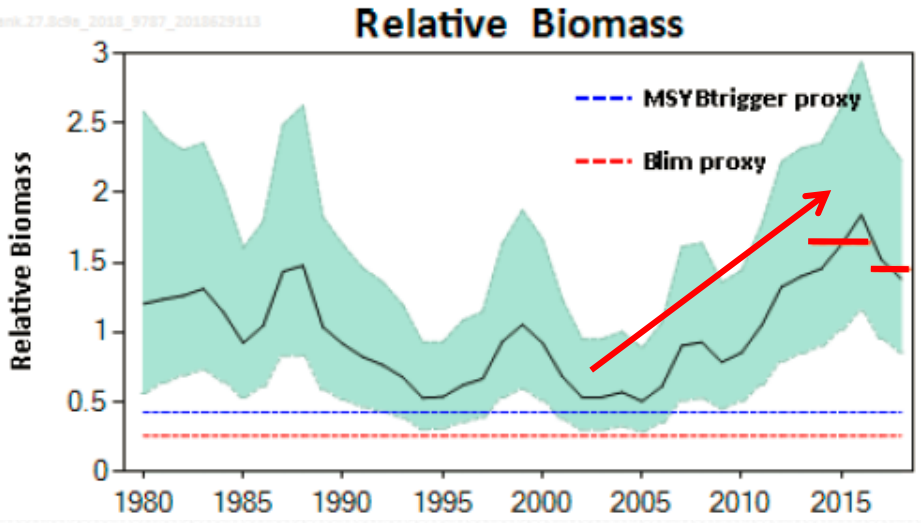
Consejo 2017
2197 t

Rape negro

ank 8c9a







Rape negro

ank 8c9a

ESTADO Y EVOLUCION DEL STOCK

Capturas estables y la SSB sube por encima de MSY

Categoría 3 con bajada en los últimos dos años respecto a 3 anteriores

ICES stock data category	3 (ICES, 2016b).
Assessment type	Relative results of surplus production model (SPiCT; ICES, 2018a, 2018b) that uses landings in the model and in the forecast.
Input data	Commercial catches (international landings); three commercial indices (SPCORTR8c 1982–2012, PT.crust.tr 1989–2017, and PT.fish.tr 1989–2017).
Discards and bycatch	Discarding is assumed to be negligible.
Indicators	None.
Other information	This stock was benchmarked in 2018 (ICES, 2018a).

PR pesqueros por debajo del F_{RMS}

PR biológicos superiores a niveles de biomasa precautorios y RMS.

		Fishing pressure				Stock size			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY} proxy	✓	✓	✓	Appropriate	MSY $B_{trigger}$ proxy	✓	✓	✓ Above trigger
Precautionary approach	F_{lim} proxy	✓	✓	✓	Harvested sustainably	B_{lim} proxy	✓	✓	✓ Full reproductive capacity
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	— Not applicable

Rape negro

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ank 8c9a

CONSEJO DE ICES

ICES aplicando el **ENFOQUE de Precaución** aconseja que la captura de este stock debe ser menor de

2062 t

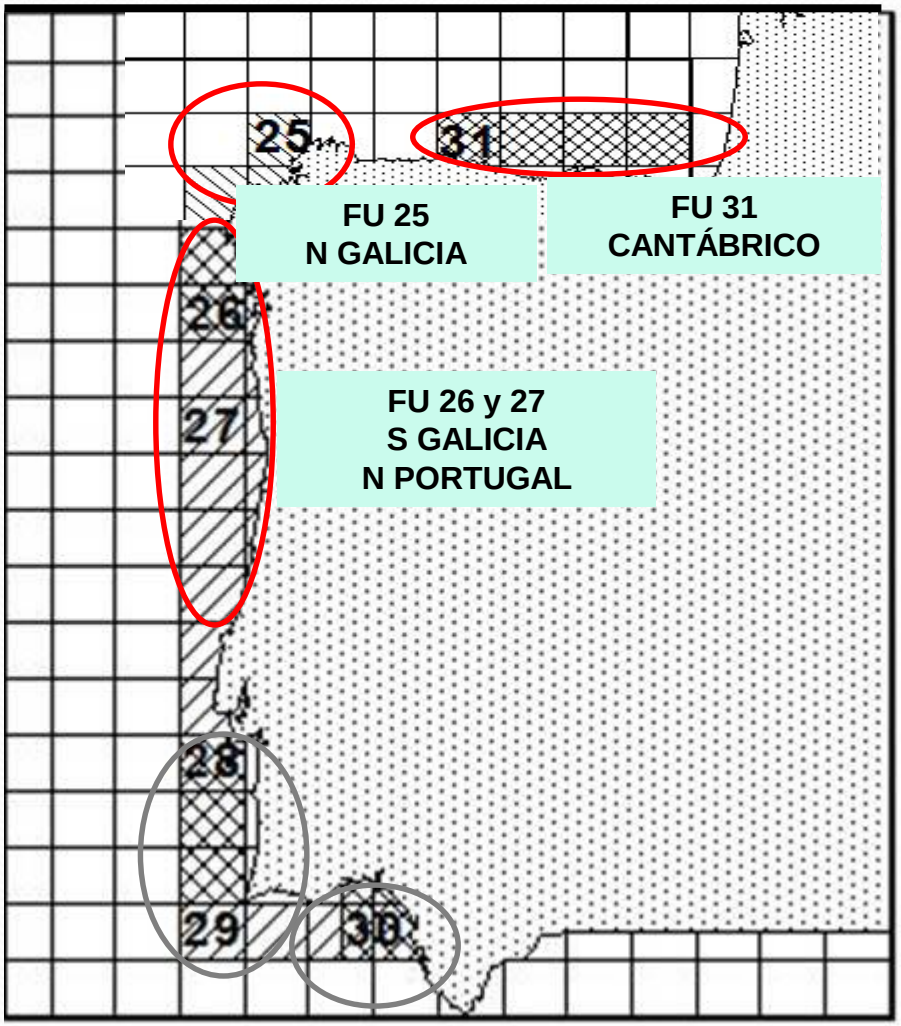
En 2019 ↓ 12 % 2018

Rebajado a categoría 3.
Aplicación de enfoque precautorio

Consejo ICES 2017
2349 t

CONSEJO DE ICES DEMERSALES IBERICOS (WGBIE)

Stock	Consejo ICES 2019	Consejo ICES 2018	% Variación consejos 2018/2019
hke 8c9a	8 281 t	8 561 t	**- 3 %**
ldb 8c9a	1 633 t	1 399 t	**+ 17 %**
meg 8c9a	431 t	292 t	**+ 48%**
ank 8c9a	2 062 t	2 349 t	**- 12 %**
mon 8c9a	2 153 t	2 197 t	**- 2 %**



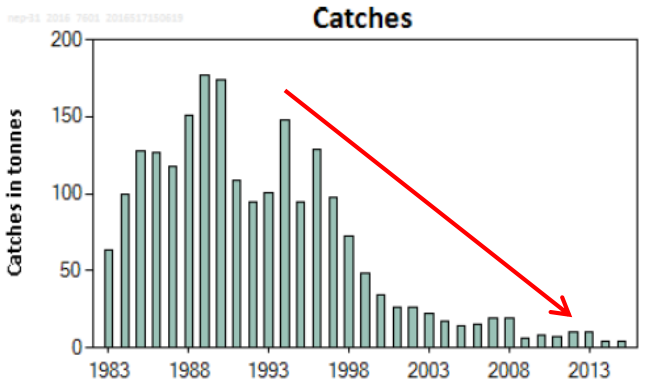
Cigala/ NEP

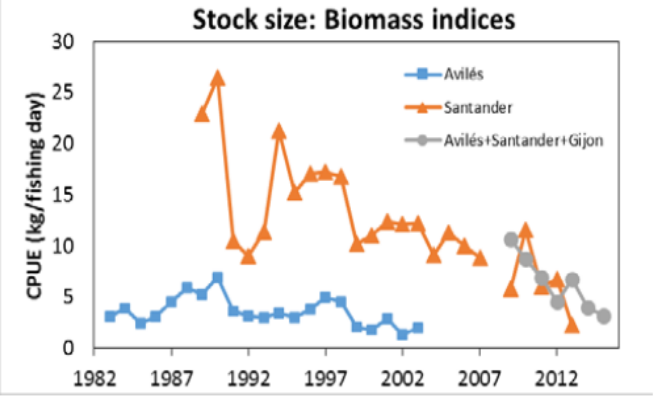
(*Nephrops norvegicus*)

Consejo 2016

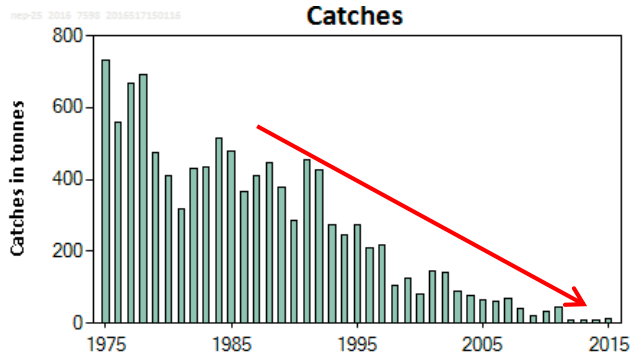
para 2017-18-19

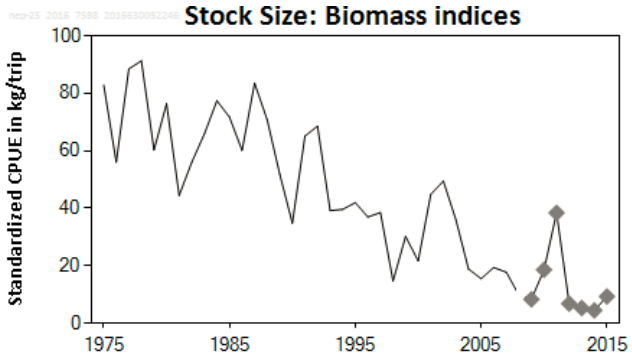
NEP31



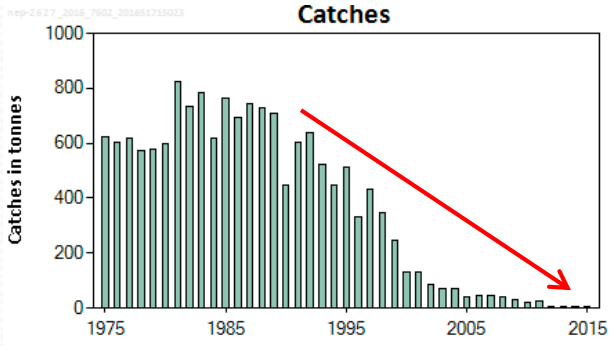


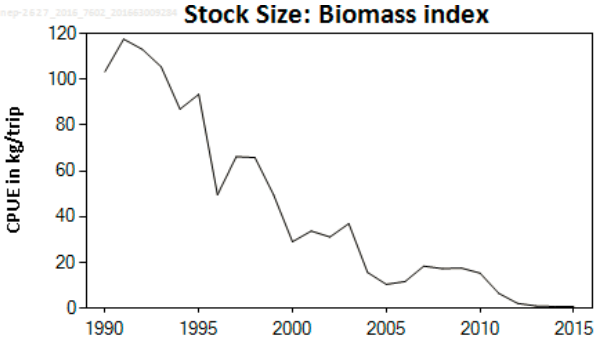
NEP25





NEP26-27





NEP UFs 31 – 25 – 26-27

ESTADO DEL STOCK

	Fishing pressure				Stock size			
		2013	2014	2015		2013	2014	2015
Maximum sustainable yield	$F_{MSY/proxy}$	✓	✓	? Unknown	MSY $B_{trigger}$	✗	✗	✗ Below
Precautionary approach	F_{pa}, F_{lim}	✓	✓	? Unknown	B_{pa}, B_{lim}	✗	✗	✗ Below
Management plan	F_{MGT}	-	-	- Not applicable	SSB_{MGT}	-	-	Not applicable
Qualitative evaluation	-				-			

PR pesqueros inciertos.

PR biológicos inferiores a niveles de biomasa precautorios y RMS.

NEP UFs 31 – 25 – 26-27

CONSEJO DE ICES

ICES aconseja que aplicando el **ENFOQUE DE PRECAUCION** la captura de este stock debe ser

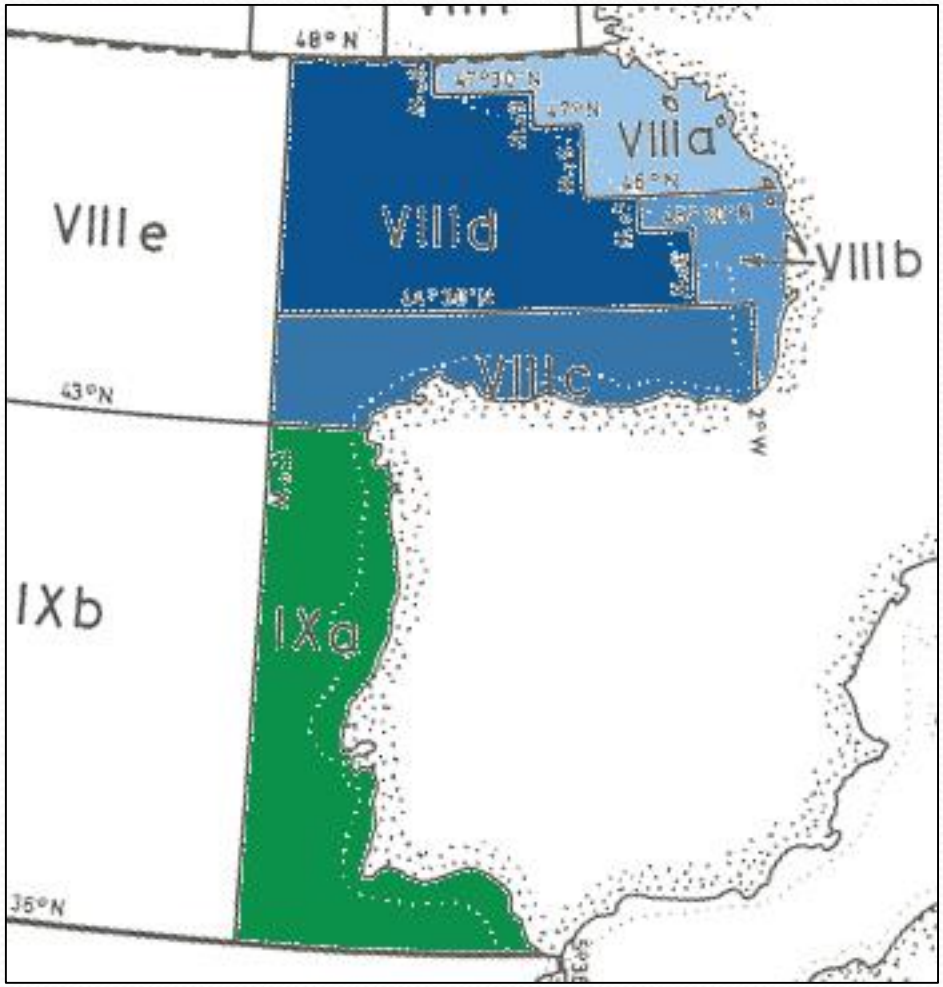
0 t

en los años 2017, 2018, and 2019.

Para proteger este stock deberían implementarse medidas de gestión a nivel de la Unidad Funcional.

Pesquería centinela
NEP25= 2 t.

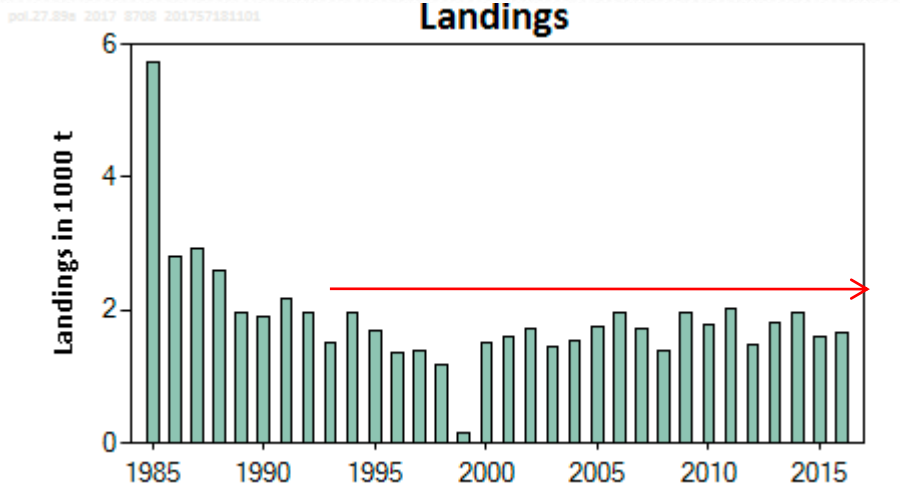
Consejo ICES 2016
0 t



Abadejo / POL
(*Pollachius pollachius*)

Consejo 2017
para 2018-2019

pol 89a



EVOLUCION DEL STOCK

Capturas muy estables.

La situación del stock y las capturas es desconocida

ICES stock data category	5 (ICES, 2016).
Assessment type	No assessment (ICES, 2017).
Input data	Commercial landings.
Discards and bycatch	Negligible.
Indicators	None.
Other information	None.
Working group	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)

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pol 89a

ESTADO DEL STOCK

	Fishing pressure				Stock size			
		2014	2015	2016		2014	2015	2016
Maximum sustainable yield	F_{MSY}	?	?	? Undefined	MSY $B_{trigger}$	?	?	? Undefined
Precautionary approach	F_{pa},F_{lim}	?	?	? Undefined	B_{pa},B_{lim}	?	?	? Undefined
Management plan	F_{MGT}	–	–	– Not applicable	SSB_{MGT}	–	–	– Not applicable
Qualitative evaluation	-	?	?	? Unknown	Qualitative evaluation	?	?	? Unknown

PR pesqueros inciertos.

PR biológicos desconocidos
Enfoque de **precaución**

pol 89a

CONSEJO DE ICES

ICES aconseja que aplicando el **ENFOQUE DE PRECAUCIÓN** la captura de este stock no debe superar las

1131 t

en los años 2018 y 2019 ↓ 14% 2017

Enfoque precautorio

Consejo ICES 2017
1316 t