ICES Advice on fishing opportunities, catch, and effort
Bay of Biscay and the Iberian Coast ecoregion
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Norway lobster (*Nephrops norvegicus*) in Division 9.a, Functional Unit 30 (Atlantic Iberian waters East and Gulf of Cádiz)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches in 2022 should be no more than 50 tonnes.

To ensure that the stock in Functional Unit (FU) 30 is exploited sustainably, management should be implemented at the functional unit level.

Stock development over time

ICES cannot assess the stock and exploitation status relative to MSY and precautionary approach (PA) reference points because the reference points are undefined.
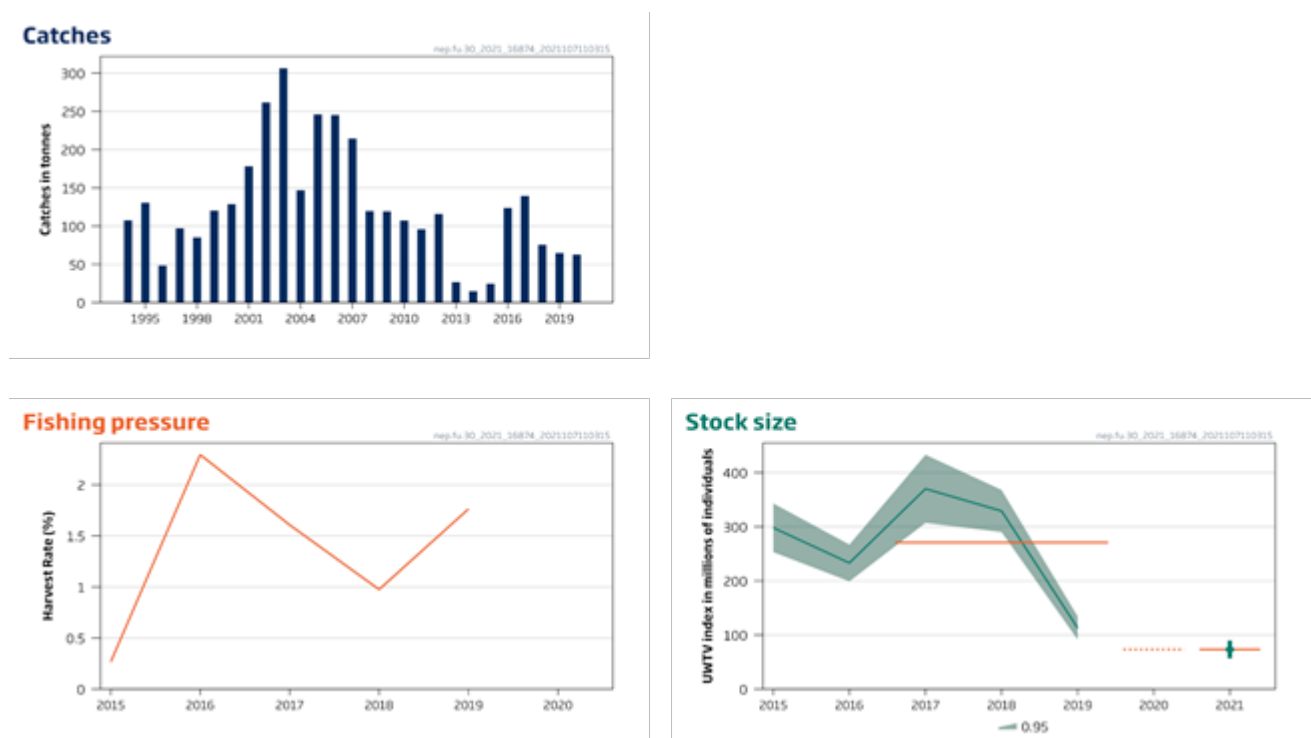

Figure 1   Norway lobster in Division 9.a, Functional Unit 30. Summary of the stock assessment. Catches, fishing pressure (catch in numbers divided by total abundance; 2020 value missing in the absence of a survey) and stock size (from underwater television [UWTV] survey, in millions, with 95% confidence intervals). The horizontal orange lines indicate the average of the most recent two years (with 2020 not available) and the previous three years.

Catch scenarios

The ICES framework for category 3 stocks was applied (ICES, 2012). The underwater television (UWTV) survey in FU 30 (U9111) was used as the index of stock development. This survey was cancelled in 2020 due to COVID-19. The advice is based on the ratio of the mean of the last two index values (Index A, with 2020 treated as missing) and the mean of the three preceding values (Index B) multiplied by the recent advised catch using the *Nephrops* abundance, estimated by UWTV surveys as the stock size index. This is equivalent to assuming that the 2020 value is equal to the 2021 abundance index. The index is estimated to have decreased by more than 20% and thus the uncertainty cap was applied.

The precautionary buffer was last applied in 2019 and its application has, therefore, not been considered again.

Discarding is considered negligible.

Table 1   Norway lobster in Division 9.a, Functional Unit 30, The basis for the catch scenarios.*

Index A (2020–2021; 2020 not available)		73 million individuals
Index B (2017–2019)		271 million individuals
Index ratio (A/B)		0.27
Uncertainty cap	Applied	0.8
Advised catch for 2021		62 tonnes
Discard rate		Negligible
Precautionary buffer	Not applied	-
Catch advice**		50 tonnes
% advice change^		−20%

* The figures in the table are rounded. Calculations were done with unrounded inputs, and computed values may not match exactly when calculated using the rounded figures in the table.
** [Advised catch for 2021] × [uncertainty cap].
^ Advice value for 2022 relative to the advice value for 2021 (62 tonnes).

The advised catch for 2022 is lower than the 2021 advice due to the decrease in the UWTV abundance estimate.

Basis of the advice

Table 2   Norway lobster in Division 9.a, Functional Unit 30. The basis of the advice.

Advice basis	Precautionary approach
Management plan	The EU multiannual plan (MAP; EU, 2019) for stocks in the Western Waters and adjacent waters applies to this stock. The MAP stipulates that when the F_{MSY} ranges are not available, fishing opportunities should be based on the best available scientific advice.

Quality of the assessment

The UWTV survey (U9111) for this assessment began in 2015 and is considered appropriate to be used as an indicator of the trend in stock abundance. No UWTV survey could be carried out in 2020 due to the COVID-19 pandemic; therefore, the stock-size indicator and the harvest rate is unknown for 2020. The collection of data from the commercial fishery during 2020 was affected by COVID-19 restrictions to a varying degree across ICES Member Countries. Landings in number in 2020 was based on the mean length composition of the last three years (2017–2019) raised to the total landings. The UWTV survey in 2021 was carried out one month later than in previous years due to external issues, which could have had an effect on the 2021 abundance estimates. For this stock, the impact of COVID-19 on the perception of the stock status and advice is considered medium.

Issues relevant for the advice

There is a UWTV survey for this stock, but since there is no defined F_{MSY} proxy, the advice is given according to ICES approach to data-limited stocks, category 3 (ICES, 2012).

A single TAC covers the entire ICES subareas 9 and 10 and EU waters of CECAF 34.1.1. ICES advises that the management area should be consistent with the assessment area (Figure 2).
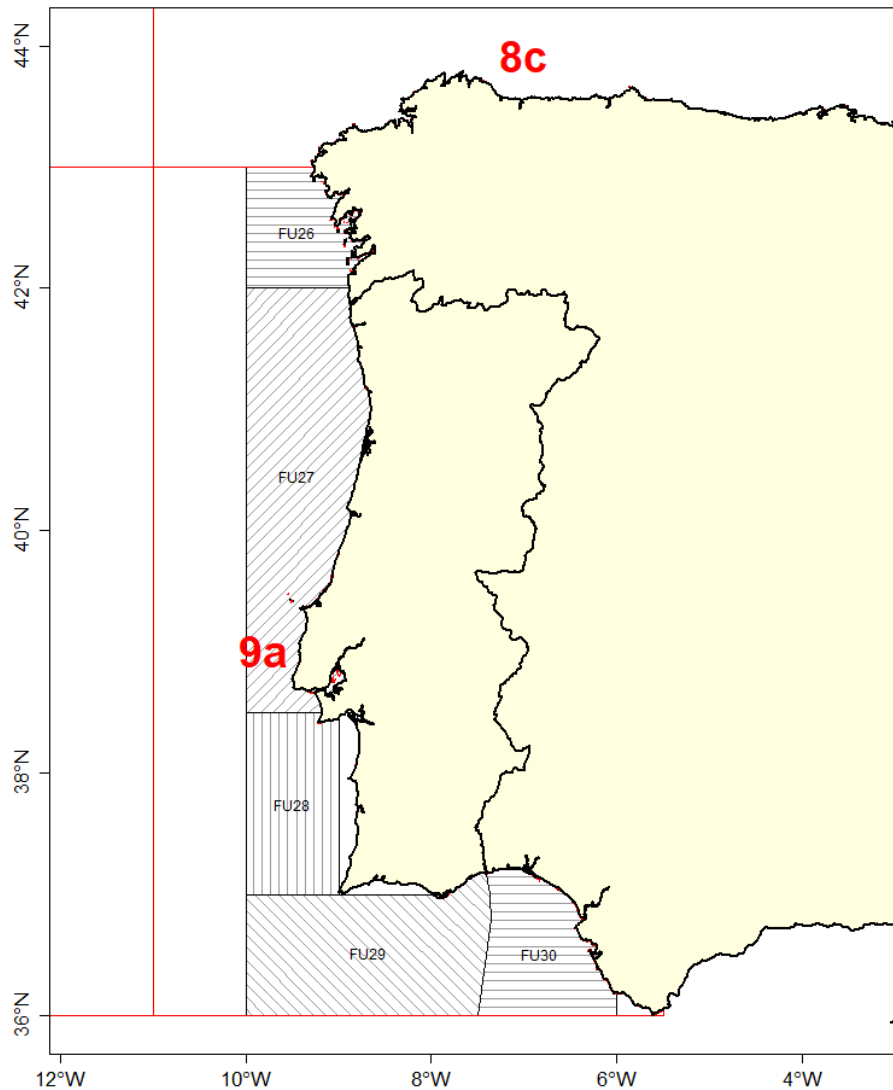
Figure 2   Norway lobster in Division 9.a, Functional Unit 30. Map of functional units in Division 9.a.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4   Norway lobster in Division 9.a, Functional Unit 30. Basis of the assessment and advice.

ICES stock data category	3 (ICES, 2021a).
Assessment type	Underwater television (UWTV) survey trends-based assessment (ICES, 2021b).
Input data	Survey index (UWTV-FU30 [U9111] 2015–2021; 2020 unavailable); commercial catches (Spanish 1994–2020 and Portuguese landings 2003–2020).
Discards and bycatch	Discarding is considered to be negligible.
Indicators	One abundance survey index (Spanish Gulf of Cádiz Bottom trawl survey WIBTS-Q1, [G7511] 1993–2020), mean length in commercial catches (2001–2020). One commercial index (directed *Nephrops* Gulf of Cádiz bottom trawl fleet, 1994–2020). Length-based indicators (LBI).
Other information	Last benchmarked in 2016 (ICES, 2017).
Working group	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE).

History of the advice, catch, and management

Table 5 Norway lobster in Division 9.a, functional unit 30. ICES advice, TAC, and landings. All weights are in tonnes.

Year	ICES advice	Catches corresponding to advice	Agreed TAC*	ICES landings
2003	Catch at the lowest recent level	< 50	600	307
2004	Catch at the lowest recent level	< 50	600	147
2005	Catch at the lowest recent level	< 50	540	246
2006	Catch at the lowest recent level	< 50	486	245
2007	Catch at the lowest recent level	< 50	437	214
2008	Catch at the lowest recent level	< 50	415	120
2009	Recent average catches (2005–2007)	< 200	374	119
2010	No new advice; same as for 2009	< 200	337	107
2011	See scenarios	-	303	96
2012	Reduce catch	-	273	116
2013	Reduce catch by 20%	90	243	27
2014	No new advice; same as for 2013	90	221	15
2015	Increase catch by no more than 20%	95	254	25
2016	No new advice; same as for 2015	95	320	124
2017	Precautionary approach	≤ 76	336	140
2018	Precautionary approach	≤ 100	381	76
2019	Precautionary approach	≤ 120	401	65
2020	Precautionary approach	≤ 77	386	63**
2021	Precautionary approach	≤ 62	374	
2022	Precautionary approach	≤ 50		

* Subareas 9 and 10; EU waters of CECAF 34.1.1.
** Preliminary

History of catch and landings

Table 6 Norway lobster in Division 9.a, Functional Unit 30 . Catch distribution by fleet in 2020 as estimated by ICES.

Catch	Landings	Discards
63 tonnes	Bottom trawl 100%	Negligible
	63 tonnes	

Table 7 Norway lobster in Division 9.a, Functional Unit 30. History of catch and landings; both the official and ICES estimated values are presented by country. All weights are in tonnes.

Year	Official landings		Total official landings	Misreported landings	ICES estimated catch
	Spain*	Portugal			
1994	108		108		108
1995	131		131		131
1996	49		49		49
1997	97		97		97
1998	85		85		85
1999	120		120		120
2000	129		129		129
2001	178		178		178
2002	262		262		262
2003	303	4	307		307
2004	143	4	147		147
2005	243	3	246		246
2006	242	4	245		245
2007	211	4	214		214
2008	117	3	120		120
2009	117	2	119		119
2010	106	1	107		107
2011	93	3	96		96

Year	Official landings		Total official landings	Misreported landings	ICES estimated catch
	Spain*	Portugal			
2012	115	1	116		116
2013**	26	< 1	27		27
2014**	14	< 1	15		15
2015**	25	< 1	25		25
2016	35	< 1	35	89	124
2017	38	< 1	38	101	140
2018	49	< 1	49	27	76
2019	65	0	65	0	65
2020	55	8	63	0	63

* Landings from the port of Ayamonte are included since 2002.
** Restrictions were imposed on the fishery during the years 2013–2015.

Summary of the assessment

Table 8   Norway lobster in Division 9.a, Functional Unit 30 . Assessment summary. All weights are in tonnes.

Year	Stock size			Total catch	Fishing pressure
	Number of individuals (millions)	CI-upper	CI-lower		
		95%	95%	tonnes	HR%
1994				108	
1995				131	
1996				49	
1997				97	
1998				85	
1999				120	
2000				129	
2001				178	
2002				262	
2003				307	
2004				147	
2005				246	
2006				245	
2007				214	
2008				120	
2009				119	
2010				107	
2011				96	
2012				116	
2013				27	
2014				15	
2015	298	343	253	25	0.27
2016	233	267	199	124	2.3
2017	370	433	307	140	1.61
2018	329	368	290	76	0.98
2019	113	134	91	65	1.76
2020*				63	
2021	73	90	57		

* Stock abundance in 2020 is missing due to COVID-19 disruptions with the survey.

Sources and references

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Download the stock assessment data and figures.

Recommended citation: ICES. 2021. Norway lobster (*Nephrops norvegicus*) in Division 9.a, Functional Unit 30 (Atlantic Iberian waters East and Gulf of Cádiz). *In* Report of the ICES Advisory Committee, 2021. ICES Advice 2021, nep.fu.30, https://doi.org/10.17895/ices.advice.7806.