

Norway lobster (*Nephrops norvegicus*) in Division 9.a, functional units 26–27 (Atlantic Iberian waters East, western Galicia, and northern Portugal)

ICES stock advice

ICES advises that when the precautionary approach is applied, there should be zero catch in each of the years 2020, 2021, and 2022.

To ensure that the stocks in functional units 26–27 are exploited sustainably, management should be implemented at the functional unit level.

Stock development over time

Catches and CPUE have fluctuated along a marked downward trend and are currently very low. Available information indicates that the stock is at a very low abundance.

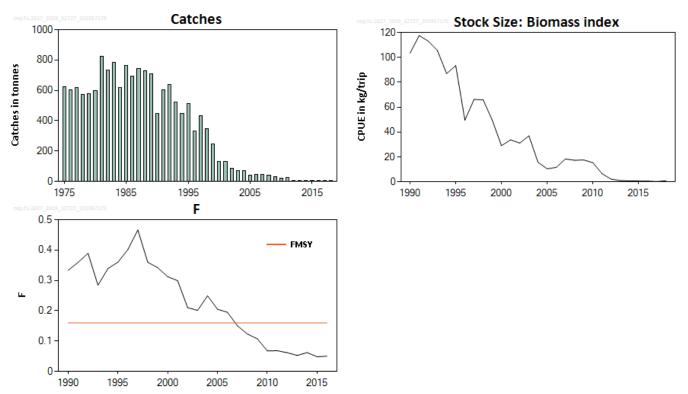


Figure 1 Norway lobster in Division 9.a, functional units (FUs) 26–27. Top left: Official catches. Top right: Stock size indicator, CPUE SP-MATR. Bottom left: Fishing mortality.

Stock and exploitation status

ICES cannot assess the stock and exploitation status relative to maximum sustainable yield (MSY) and precautionary approach (PA) reference points because the stock size reference point is undefined and current exploitation is unknown. Qualitatively, the spawning stock size is below any possible biomass reference point.

Table 1 Norway lobster in Division 9.a, FUs 26–27. State of the stock and fishery relative to reference points. The fishing pressure evaluation is based on reference point proxies for 2016 (ICES, 2019), and no update analysis is available for 2017 and 2018. The stock size evaluation is based on CPUE information.

| | Fishing pressure | | | | Stock size | | | | |
|---------------------------|-----------------------------------|----------|------|---|------------|-----------------------------------|------|------|---------------------------------|
| | | 2016 | 2017 | | 2018 | | 2016 | 2017 | 2018 |
| Maximum sustainable yield | F _{MSY} proxy | • | 3 | ? | Unknown | MSY B _{trigger} | 3 | 3 | ? Undefined |
| Precautionary approach | F _{pa} ,F _{lim} | ? | ? | 3 | Undefined | B _{pa} ,B _{lim} | ? | 3 | 2 Undefined |
| Management plan | F _{MGT} | • | 3 | 3 | Unknown | B _{MGT} | ? | 3 | ? Undefined |
| Qualitative evaluation | - | ⊘ | 3 | 3 | Unknown | - | × | × | Below possible reference points |

Catch scenarios

The 2018 stock biomass indicator (SP-MATR commercial index) is at a historical low value, below possible reference points, and therefore the advice is for zero catch for each of the years 2020, 2021, and 2022.

Table 2 Norway lobster in Division 9.a, FUs 26–27. The catch scenarios. For stocks in ICES data categories 3–6, one catch scenario is possible.

| Recent advised catch | | 0 |
|----------------------|-------------|------------|
| Discard rate | | Negligible |
| Precautionary buffer | Not applied | - |
| % advice change* | | 0 |
| Catch advice | | 0 tonnes |

^{*} Catch in 2020–2022 relative to advice for 2017–2019.

Basis of the advice

Table 3Norway lobster in Division 9.a, FUs 26–27. 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

Fishery-independent information is not available.

Issues relevant for the advice

The proxy reference point was updated in 2019 (ICES, 2019), with additional data only for 2015 and 2016 (data for the last two years are not available). This resulted in an update to the F_{MSY} proxy values (0.16). However, owing to the lack of length frequency data in 2017–2018, the exploitation status is unknown.

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).

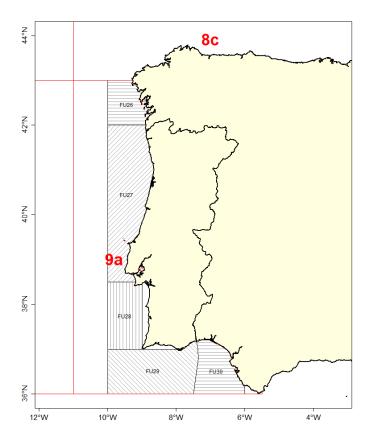


Figure 2 Norway lobster in Division 9.a, FUs 26–27. Map of functional units.

Reference points

Table 4Norway lobster in Division 9.a, FUs 26–27. Reference points, values, and their technical basis.

| Framework | Reference point | Value | Technical basis | Source |
|---------------|--------------------------|-------------|---|-------------|
| MSY | MSY B _{trigger} | Not defined | | |
| approach | F _{MSY proxy} | 0.16 | F _{0.1} from yield-per-recruit analysis. | ICES (2019) |
| | B _{lim} | Not defined | | |
| Precautionary | B _{pa} | Not defined | | |
| approach | F _{lim} | Not defined | | |
| | F _{pa} | Not defined | | |
| Management | SSB _{MGT} | Not defined | | |
| plan | F _{MGT} | Not defined | | |

Basis of the assessment

Table 5 Norway lobster in Division 9.a, FUs 26–27. The basis of the assessment.

| ICES stock data category | 3 (<u>ICES, 2018</u>). |
|--------------------------|--|
| Assessment type | Trends from commercial CPUE. |
| Input data | Commercial landings (Spanish 1975–2018 and Portuguese 1984–2018); one commercial index (SP-MATR) for the period 1990–2018. |
| Discards and bycatch | Not included and considered negligible. |
| Indicators | Mean-length Z analysis of exploitation using size in commercial catches. |
| Other information | SPNGFS-IBTS-Q4 for FU 26. |
| Working group | Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE). |

Information from stakeholders

There is no additional available information.

History of the advice, catch, and management

Table 6 Norway lobster in Division 9.a, FUs 26–27. History of ICES advice, the agreed TAC, and ICES estimates of landings. All weights are in tonnes.

| Year | ICES advice | Predicted catches correspond. to advice | Agreed TAC * | ICES landings |
|------|-------------------------------------|---|--------------|---------------|
| 2003 | Zero catches | 0 | 600 | 73 |
| 2004 | Zero catches | 0 | 600 | 71 |
| 2005 | Zero catches | 0 | 540 | 43 |
| 2006 | Zero catches | 0 | 486 | 44 |
| 2007 | Zero catches | 0 | 437 | 47 |
| 2008 | Zero catches | 0 | 415 | 42 |
| 2009 | Zero catches | 0 | 374 | 31 |
| 2010 | No new advice, same as for 2009 | 0 | 337 | 21 |
| 2011 | Zero catches | 0 | 303 | 20# |
| 2012 | No new advice, same as for 2011 | 0 | 273 | 8 |
| 2013 | Zero catches | 0 | 246 | 3 |
| 2014 | No new advice, same as for 2013 | 0 | 221 | 4 |
| 2015 | Zero catch and reduce bycatch | 0 | 254 | 2 |
| 2016 | No new advice, same as for 2015 | 0 | 320 | 5# |
| 2017 | Precautionary approach (zero catch) | 0 | 336 | 3 |
| 2018 | Precautionary approach (zero catch) | 0 | 381 | 2** |
| 2019 | Precautionary approach (zero catch) | 0 | 401 | |
| 2020 | Precautionary approach (zero catch) | 0 | | |
| 2021 | Precautionary approach (zero catch) | 0 | | |
| 2022 | Precautionary approach (zero catch) | 0 | | |

^{*} Subareas 9 and 10; EU waters of CECAF 34.1.1.

^{**} Preliminary.

[#] Updated by WGBIE (ICES, 2019).

History of catch and landings

Table 7 Norway lobster in Division 9.a, FUs 26–27. Catch distribution by fleet in 2018 as estimated by ICES.

| Catch (2018) | Landings | Discards |
|--------------|--------------------------------------|------------|
| 2 tonnes | 100% mixed Nephrops/demersal fishery | Nogligible |
| 2 tolliles | 2 tonnes | Negligible |

Table 8 Norway lobster in Division 9.a, FUs 26–27. History of commercial catch and landings; both the official and ICES estimated values are presented by area for each country participating in the fishery. All weights are in tonnes.

| value | s are presented by area for | Official landings | _ | |
|-------|-----------------------------|---------------------|----------|-----------------------|
| Year | Spain | Official fariatings | Portugal | Total ICES landings** |
| Teal | FU 26* | FU 27 | FU 27 | FUs 26–27 |
| 1975 | 622 | . 0 2/ | | 622 |
| 1976 | 603 | | | 603 |
| 1977 | 620 | | | 620 |
| 1978 | 575 | | | 575 |
| 1979 | 580 | | | 580 |
| 1980 | 599 | | | 599 |
| 1981 | 823 | | | 823 |
| 1982 | 736 | | | 736 |
| 1983 | 786 | | | 786 |
| 1984 | 604 | | 14 | 618 |
| 1985 | 750 | | 15 | 765 |
| 1986 | 657 | | 37 | 694 |
| 1987 | 671 | | 71 | 742 |
| 1988 | 631 | | 96 | 727 |
| 1989 | 620 | | 88 | 708 |
| 1990 | 401 | | 48 | 449 |
| 1991 | 549 | | 54 | 603 |
| 1992 | 584 | | 52 | 636 |
| 1993 | 472 | | 50 | 522 |
| 1994 | 426 | | 22 | 448 |
| 1995 | 501 | | 10 | 511 |
| 1996 | 264 | 50 | 17 | 331 |
| 1997 | 359 | 68 | 6 | 433 |
| 1998 | 295 | 42 | 8 | 345 |
| 1999 | 194 | 48 | 6 | 248 |
| 2000 | 102 | 21 | 9 | 132 |
| 2001 | 105 | 21 | 6 | 132 |
| 2002 | 59 | 24 | 4 | 87 |
| 2003 | 39 | 26 | 8 | 73 |
| 2004 | 38 | 24 | 9 | 71 |
| 2005 | 16 | 16 | 11 | 43 |
| 2006 | 15 | 17 | 12 | 44 |
| 2007 | 20 | 17 | 10 | 47 |
| 2008 | 17 | 12 | 13 | 42 |
| 2009 | 16 | 5 | 10 | 31 |
| 2010 | 3 | 14 | 4 | 21 |
| 2011 | 8 | 8 | 4 | 20# |
| 2012 | 3 | 4 | 1 | 8 |
| 2013 | 1 | 0 | 1 | 3 |
| 2014 | 1.16 | 0.95 | 1.43 | 4 |
| 2015 | 0.57 | 0.13 | 0.83 | 2 |
| 2016 | 2.54 | 0.45 | 3.31 | 5# |

| | | Official landings | Tatal ICFC landings** | |
|---------|--------|-------------------|-----------------------|-----------------------|
| Year | Spa | ain | Portugal | Total ICES landings** |
| | FU 26* | FU 27 | FU 27 | FUs 26–27 |
| 2017 | 0.76 | 0.00 | 2.09 | 3 |
| 2018*** | 0.70 | 1.31 | 0.00 | 2 |

^{*} Prior to 1996, Spanish landings recorded in FU 26 include landings in FU 27.

Summary of the assessment

Table 9 Norway lobster in Division 9.a, FUs 26–27. Assessment summary. Weights are in tonnes.

| Table 9Norway lobster in Division 9.a, FUs 26–27. Assessment summary. Weights are in tonnes. | | | | | | |
|--|-------------------------------------|-------|------|--|--|--|
| Year | Stock size: Biomass index (kg/trip) | Catch | F | | | |
| 1975 | | 622 | | | | |
| 1976 | | 603 | | | | |
| 1977 | | 620 | | | | |
| 1978 | | 575 | | | | |
| 1979 | | 580 | | | | |
| 1980 | | 599 | | | | |
| 1981 | | 823 | | | | |
| 1982 | | 736 | | | | |
| 1983 | | 786 | | | | |
| 1984 | | 618 | | | | |
| 1985 | | 765 | | | | |
| 1986 | | 694 | | | | |
| 1987 | | 742 | | | | |
| 1988 | | 727 | | | | |
| 1989 | | 708 | | | | |
| 1990 | 103 | 449 | 0.33 | | | |
| 1991 | 118 | 603 | 0.36 | | | |
| 1992 | 113 | 636 | 0.39 | | | |
| 1993 | 105 | 522 | 0.28 | | | |
| 1994 | 87 | 448 | 0.34 | | | |
| 1995 | 93 | 511 | 0.36 | | | |
| 1996 | 50 | 331 | 0.40 | | | |
| 1997 | 66 | 433 | 0.47 | | | |
| 1998 | 66 | 345 | 0.36 | | | |
| 1999 | 49 | 248 | 0.34 | | | |
| 2000 | 29 | 132 | 0.31 | | | |
| 2001 | 34 | 132 | 0.30 | | | |
| 2002 | 31 | 87 | 0.21 | | | |
| 2003 | 37 | 73 | 0.20 | | | |
| 2004 | 16 | 71 | 0.25 | | | |

^{**} Includes unallocated landings.

^{***} Preliminary.

[#] Updated by WGBIE (ICES, 2019).

| Year | Stock size: Biomass index (kg/trip) | Catch | F |
|------|--|-------|-------|
| 2005 | 10 | 43 | 0.21 |
| 2006 | 12 | 44 | 0.195 |
| 2007 | 18 | 47 | 0.151 |
| 2008 | 17 | 42 | 0.123 |
| 2009 | 18 | 31 | 0.108 |
| 2010 | 15 | 21 | 0.068 |
| 2011 | 6 | 27 | 0.068 |
| 2012 | 2 | 8 | 0.062 |
| 2013 | 1 | 3 | 0.053 |
| 2014 | 1 | 4 | 0.062 |
| 2015 | 1 | 2 | 0.048 |
| 2016 | 1 | 6 | 0.051 |
| 2017 | 0 | 3 | |
| 2018 | 1 | 2 | |

Sources and references

EU. 2019. Council Regulation (EU) 2019/472 of the European Parliament and of the Council of 19 March 2019 establishing a multiannual plan for stocks fished in the Western Waters and adjacent waters, and for fisheries exploiting those stocks, amending Regulations (EU) 2016/1139 and (EU) 2018/973, and repealing Council Regulations (EC) No 811/2004, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007 and (EC) No 1300/2008. Official Journal of the European Union, L 83: 1–17. http://data.europa.eu/eli/reg/2019/472/oj.

ICES. 2018. Advice basis. *In* Report of the ICES Advisory Committee, 2018. ICES Advice 2018, Book 1, Section 1.2. https://doi.org/10.17895/ices.pub.4503.

ICES. 2019. Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE). ICES Scientific Reports. 1:31. 692 pp. http://doi.org/10.17895/ices.pub.5299

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