

Capelin (*Mallotus villosus*) in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)

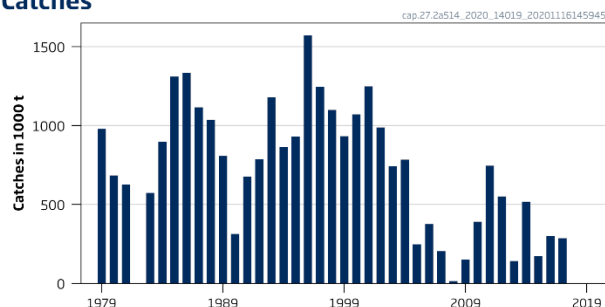
ICES advice on fishing opportunities

ICES advises that when the harvest control rule agreed in 2015 by the Coastal States is applied, the initial TAC for the fishing season July 2021–March 2022 should be 400 000 tonnes.

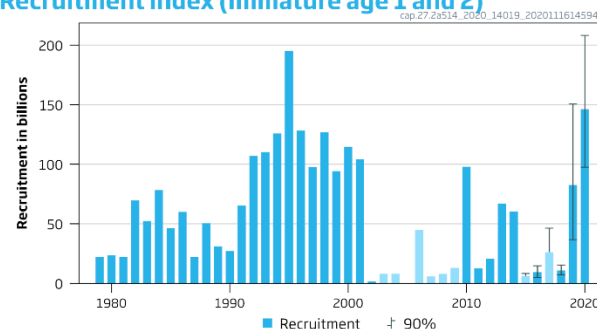
Note: This advice sheet is abbreviated due to the COVID-19 disruption. The previous advice issued for July 2020–March 2021 is attached as Annex 1.

Stock development over time

Catches



Recruitment index (Immature age 1 and 2)



SSB

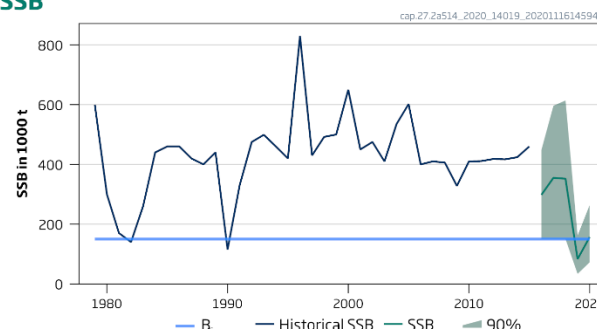


Figure 1 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Summary of the stock assessment. Catches by fishing season (July–March of the following year), recruitment as acoustic index from autumn surveys (bars with lighter shading indicate incomplete spatial coverage, which is likely to result in notable underestimation), and SSB at spawning time (March–April). Note that the SSB values for 2016 and onwards are not directly comparable to historical values, because they are based on different assumptions about natural mortality.

Stock and exploitation status

Table 1 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. State of the stock and fishery relative to reference points.

| | | Fishing pressure | | | Stock size | | |
|---------------------------|------------------------|------------------|------|----------------|-------------------|------|--------------------------------|
| | | 2017 | 2018 | 2019 | 2018 | 2019 | 2020 |
| Maximum sustainable yield | F_{MSY} | ? | ? | ? | MSY $B_{trigger}$ | ? | ? |
| Precautionary approach | $F_{pa} \cdot F_{lim}$ | ? | ? | ? | B_{lim} | ✓ | ✗ |
| Management plan | F_{MGT} | — | — | — | B_{MGT} | ✓ | ✗ |
| | | | | Undefined | | | Increased risk* |
| | | | | Not applicable | | | Not above with 95% probability |

* B_{pa} is undefined for this stock; however, based on confidence intervals, the SSB in 2020 will likely be below any possible B_{pa} .

Catch scenarios

Table 2 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Assumptions made for the interim year and in the forecast.

| Variable | Value | Notes |
|----------------------------------|--------|---|
| Immature age 1 (2019 year class) | 139.79 | Index from the autumn acoustic survey 2020; billions. |
| Immature age 2 (2018 year class) | 6.47 | Index from the autumn acoustic survey 2020; billions. |

Table 3 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. The catch scenarios.

| ICES advice basis | Catches in 2021/2022 (tonnes) | % advice change* |
|---|-------------------------------|------------------|
| Harvest control rule agreed by the Coastal States (precautionary approach for initial TAC). | 400000 | +136 |

* The initial advice for 2021/2022 relative to the initial advice for 2020/2021 (169 520 tonnes).

The initial advice for 2021/2022 is higher than the initial advice for the 2020/2021 fishing season, because the estimated number of immature fish was higher after the autumn survey in 2020.

Basis of the advice

The basis of the advice is the harvest control rule (HCR) agreed by the Coastal States (Greenland, Norway, and Iceland) in 2015 (Anon., 2015). This implies applying the advice rule established by ICES in 2015 (ICES, 2015) for setting an initial TAC on the basis of immature abundance (ages 1–2) in the autumn acoustic survey (Figure 2). For the fishing season July 2021–March 2022, this implies that the initial TAC is capped at 400,000 tonnes. ICES recommends that the initial TAC is revised based on acoustic survey information in autumn 2021 (intermediate TAC), with the final TAC being set based on the results of the winter survey in 2022.

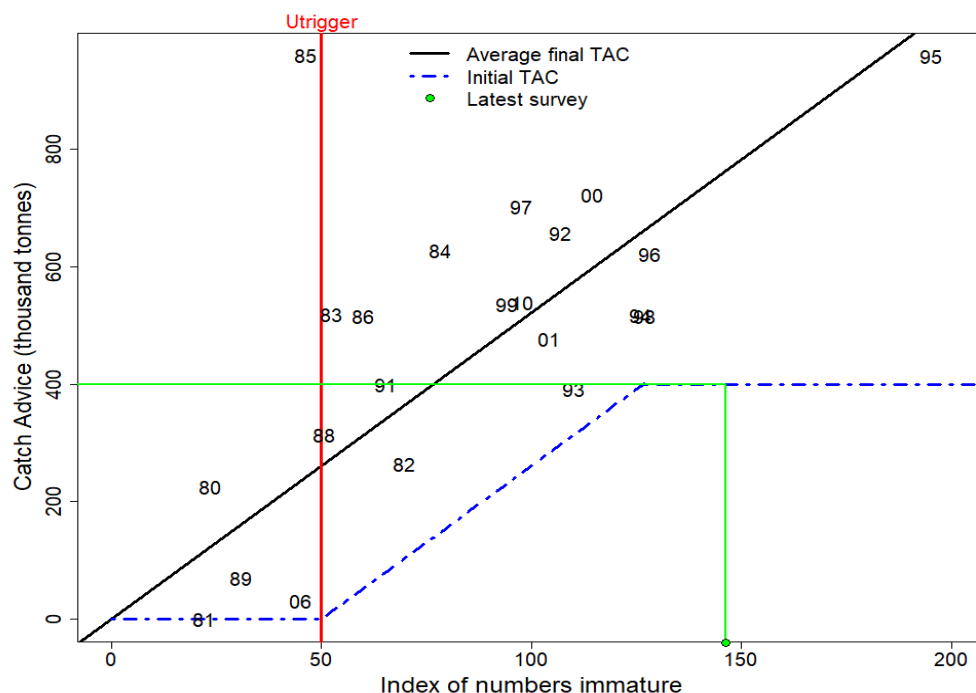


Figure 2 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Catch advice (initial TAC), according to the rule developed by ICES, based on the measured number of immature capelin the previous autumn (about 16 months earlier than the winter survey used for the final TAC; ICES, 2015). The predicted final TAC is shown as a black solid line (based on immature index and the final TAC for the period 1980–2006) and the initial TAC as a blue dashed line. The latter is set using an index abundance trigger point ($U_{trigger}$; red vertical line) of 50 billion immature fish, with a cap on the initial TAC of 400 000 tonnes. The green circle indicates the index value from the autumn acoustic survey in 2020, with the corresponding initial TAC for 2021/2022 shown on the y-axis.

History of the advice, catch, and management

Table 4 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. ICES advice and catch. All weights are in tonnes.

| Season | ICES advice | Initial TAC advice [^] | Agreed final TAC ^{^^} | ICES catch ^{^^^} |
|-----------|---|---------------------------------|--------------------------------|---------------------------|
| 1986/1987 | TAC | 1100000 | 1290000 | 1333400 |
| 1987/1988 | TAC | 500000 | 1115000 | 1115800 |
| 1988/1989 | TAC | 900000 | 1065000 | 1036500 |
| 1989/1990 | TAC | 900000 | 900000 | 807800 |
| 1990/1991 | TAC | 600000 | 250000 | 313600 |
| 1991/1992 | No fishery pending survey results | 0 | 740000 | 677100 |
| 1992/1993 | Precautionary TAC [^] | 500000 | 900000 | 787700 |
| 1993/1994 | TAC | 900000 | 1250000 | 1178700 |
| 1994/1995 | Apply the harvest control rule | 950000 | 850000 | 863900 |
| 1995/1996 | Apply the harvest control rule | 800000 | 1390000 | 929300 |
| 1996/1997 | Apply the harvest control rule | 1100000 | 1600000 | 1570900 |
| 1997/1998 | Apply the harvest control rule | 850000 | 1265000 | 1244900 |
| 1998/1999 | Apply the harvest control rule | 950000 | 1200000 | 1099400 |
| 1999/2000 | Apply the harvest control rule | 866000 | 1000000 | 932700 |
| 2000/2001 | Apply the harvest control rule | 650000 | 1090000 | 1071300 |
| 2001/2002 | Apply the harvest control rule | 700000 | 1300000 | 1249000 |
| 2002/2003 | Apply the harvest control rule | 690000 | 1000000 | 987700 |
| 2003/2004 | Apply the harvest control rule | 555000 | 900000 | 741400 |
| 2004/2005 | Apply the harvest control rule | 335000 | 985000 | 784000 |
| 2005/2006 | Apply the harvest control rule | No fishery | 235000 | 247000 |
| 2006/2007 | Apply the harvest control rule | No fishery | 385000 | 376800 |
| 2007/2008 | Apply the harvest control rule | 207000 | 207000 | 203400 |
| 2008/2009 | Apply the harvest control rule | No fishery | 0 | 15100 * |
| 2009/2010 | Apply the harvest control rule | No fishery | 150000 | 150700 |
| 2010/2011 | Apply the harvest control rule | No fishery | 390000 | 390600 |
| 2011/2012 | Set the TAC at 50% of the initial quota in the HCR | 366000 | 765000 | 746500 |
| 2012/2013 | Precautionary approach | No fishery | 570000 | 551000 |
| 2013/2014 | Precautionary approach | No fishery | 160000 | 141700 |
| 2014/2015 | Set the initial quota at 50% of the predicted quota in the harvest control rule | 225000 | 580000 | 517400 |
| 2015/2016 | Precautionary approach ** | 53600 | 173000 | 173600 |
| 2016/2017 | Precautionary approach ** | 0 | 299000 | 299800 |
| 2017/2018 | Harvest control rule agreed by Coastal States ** | 0 | 285000 | 286500 |
| 2018/2019 | Harvest control rule agreed by Coastal States ** | 0 | 0 | 0 |
| 2019/2020 | Harvest control rule agreed by Coastal States ** | 0 | 0 | 0 |
| 2020/2021 | Harvest control rule agreed by Coastal States ** | 169520 | | |
| 2021/2022 | Harvest control rule agreed by Coastal States ** | 400000 | | |

[^] Advised for the early part of the season.

^{^^} Final TAC recommended by national scientists for the fishing season (July–March).

^{^^^} July–March of the following year.

* Scientific fishing was allowed in the latter half of February 2009.

** Initial TAC advice, based on low probability of the advised catch being higher than the final TAC.

Summary of the assessment

Table 5 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Assessment summary. Weights are in tonnes. For a fishing season Y/Y + 1 the recruitment (in thousands) refers to the autumn of year Y, and SSB columns refer to the spring of Y + 1.

| Fishing season | Recruitment index (immature ages 1 and 2) | Recruitment 95th percentile | Recruitment 5th percentile | SSB* (median value) | SSB* 95th percentile | SSB* 5th percentile | Historical SSB estimates | Catch |
|----------------|---|-----------------------------|----------------------------|---------------------|----------------------|---------------------|--------------------------|---------|
| 1979/1980 | 22000000 | | | | | | 300000 | 980100 |
| 1980/1981 | 23500000 | | | | | | 170000 | 683600 |
| 1981/1982 | 22100000 | | | | | | 140000 | 626200 |
| 1982/1983 | 69700000 | | | | | | 260000 | 0 |
| 1983/1984 | 52300000 | | | | | | 440000 | 573000 |
| 1984/1985 | 78400000 | | | | | | 460000 | 897000 |
| 1985/1986 | 46400000 | | | | | | 460000 | 1311500 |
| 1986/1987 | 60000000 | | | | | | 420000 | 1333400 |
| 1987/1988 | 22000000 | | | | | | 400000 | 1115800 |
| 1988/1989 | 50600000 | | | | | | 440000 | 1036500 |
| 1989/1990 | 31000000 | | | | | | 115000 | 807800 |
| 1990/1991 | 27200000 | | | | | | 330000 | 313600 |
| 1991/1992 | 65300000 | | | | | | 475000 | 677100 |
| 1992/1993 | 106900000 | | | | | | 499000 | 787700 |
| 1993/1994 | 110200000 | | | | | | 460000 | 1178700 |
| 1994/1995 | 125900000 | | | | | | 420000 | 863900 |
| 1995/1996 | 195100000 | | | | | | 830000 | 929300 |
| 1996/1997 | 128300000 | | | | | | 430000 | 1570900 |
| 1997/1998 | 97600000 | | | | | | 492000 | 1244900 |
| 1998/1999 | 126900000 | | | | | | 500000 | 1099400 |
| 1999/2000 | 94200000 | | | | | | 650000 | 932700 |
| 2000/2001 | 114600000 | | | | | | 450000 | 1071300 |
| 2001/2002 | 104200000 | | | | | | 475000 | 1249000 |
| 2002/2003 | 1500000 | | | | | | 410000 | 987700 |
| 2003/2004 | 8000000 | | | | | | 535000 | 741400 |
| 2004/2005 | 8000000 | | | | | | 602000 | 784000 |
| 2005/2006 | 0 | | | | | | 400000 | 247000 |
| 2006/2007 | 45000000 | | | | | | 410000 | 376800 |
| 2007/2008 | 5800000 | | | | | | 406000 | 203400 |
| 2008/2009 | 7900000 | | | | | | 328000 | 15100 |
| 2009/2010 | 13000000 | | | | | | 410000 | 150700 |
| 2010/2011 | 97900000 | | | | | | 411000 | 390600 |
| 2011/2012 | 12600000 | | | | | | 418000 | 746500 |
| 2012/2013 | 20500000 | | | | | | 417000 | 551000 |
| 2013/2014 | 67000000 | | | | | | 424000 | 141700 |
| 2014/2015 | 60300000 | | | | | | 460000 | 517400 |
| 2015/2016 | 6200000 | 8250000 | 4120000 | 298000 | 447828 | 150338 | | 173600 |
| 2016/2017 | 9400000 | 14750000 | 4930000 | 355000 | 596320 | 150190 | | 299800 |
| 2017/2018 | 26100000 | 46310000 | 10420000 | 352000 | 614000 | 150000 | | 286500 |
| 2018/2019 | 10800000 | 15360000 | 7240000 | 82790 | 161480 | 33200 | | 0 |
| 2019/2020 | 82600000 | 150650000 | 36620000 | 156770 | 263990 | 72260 | | 0 |
| 2020/2021 | 146260000 | 208130000 | 97490000 | | | | | |

* These values are based on the predation model in the current advice rule, and are thus not directly comparable to historical SSB values based on different natural mortality assumptions.

Sources and references

Anon. 2015. Agreed Record of Conclusions of Coastal State consultations on the management of the capelin stock in the Iceland–East Greenland–Jan Mayen area. Reykjavík, Iceland. 7–8 May 2015. <https://www.regjeringen.no/contentassets/37b66bdf33d84e99924bb27553641719/samledokument-lodde-mai-2015---agreed-records---bilateral-avtale.pdf>. Accessed 22 November 2020.

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ICES. 2015. Report of the Benchmark Workshop of Icelandic Stocks (WKICE), 26–30 January 2015, ICES Headquarters, Copenhagen, Denmark. ICES CM 2015/ACOM:31. 325 pp. <https://doi.org/10.17895/ices.pub.5679>.

ICES. 2020a. North-Western Working Group (NWWG). ICES Scientific Reports, 2:51. 431 pp. <http://doi.org/10.17895/ices.pub.6051>.

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Annex 1

ICES Advice on fishing opportunities, catch, and effort
Greenland Sea and Icelandic Waters ecoregions
Published 29 November 2019

Capelin (*Mallotus villosus*) in subareas 5 and 14 and Division 2.a west of 5°W (Iceland and Faroes grounds, East Greenland, Jan Mayen area)

ICES advice on fishing opportunities

ICES advises that when the harvest control rule agreed in 2015 by the Coastal States is applied, the initial TAC for the fishing season July 2020–March 2021 should be 169 520 tonnes.

Stock development over time

The spawning-stock biomass (SSB) was estimated at 127 000 tonnes at the time of spawning in March 2019, which is below B_{lim} (150 000 t). The recruitment (the immature 1- and 2-year-old capelin) estimate from the acoustic survey in autumn 2019 is above the average of the time-series.

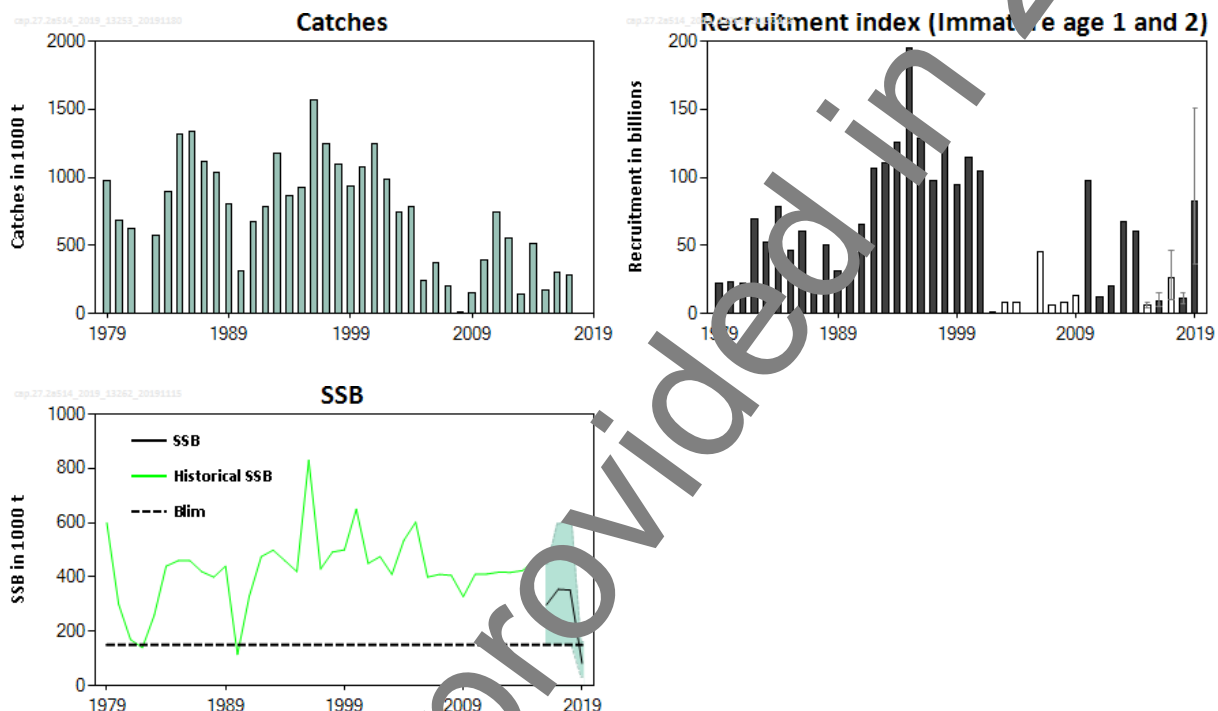


Figure 1 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Summary of the stock assessment. Catches by fishing season (July–March of the following year). Recruitment as acoustic index from autumn surveys (unshaded bars indicate incomplete spatial coverage likely resulting in notable underestimation), and SSB at spawning time (March–April). From 2016, 90% confidence intervals are shown for R and SSB. Note that the SSB values for 2016 and onwards are not directly comparable to historical values, because they are based on different assumptions about natural mortality.

Stock and exploitation status

ICES assesses that spawning stock size is below B_{lim} and B_{mgt} . No reference points for fishing pressure have been defined for this stock.

Table 1 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. State of the stock and fishery relative to reference points.

| | | Fishing pressure | | | | Stock size | | | |
|---------------------------|-------------------|------------------|------|------|----------------|-------------------|------|------|---------------------------------|
| | | 2016 | 2017 | 2018 | | 2017 | 2018 | 2019 | |
| Maximum sustainable yield | F_{MSY} | ? | ? | ? | Undefined | $MSY B_{trigger}$ | ? | ? | ? |
| Precautionary approach | F_{pa}, F_{lim} | ? | ? | ? | Undefined | B_{pa}, B_{lim} | ✓ | ✓ | ✗ Reduced reproductive capacity |
| Management plan | F_{MGT} | — | — | — | Not applicable | B_{MGT} | ✓ | ✓ | ✗ Below |

Catch scenarios

Table 2 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Assumptions made for the interim year and in the forecast.

| Variable | Value | Notes |
|----------------------------------|--------------|---|
| Immature age 1 (2018 year class) | 81.5 billion | Index from the autumn acoustic survey 2019. |
| Immature age 2 (2017 year class) | 1.1 billion | Index from the autumn acoustic survey 2019. |

Table 3 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. The catch scenarios.

| ICES advice basis | Catches in 2020/2021 (t) | % advice change* |
|---|--------------------------|------------------|
| Harvest control rule agreed by the Coastal States (precautionary approach for initial TAC). | 169 520 | 100% |

* Initial advice for 2020/2021 relative to initial advice for 2019/2020 (0 tonnes).

The initial advice for 2020/2021 is higher than the initial advice of zero tonnes for the 2019/2020 fishing season, because of a higher number of immature fish estimated by the autumn survey in 2019.

Basis of the advice

The basis of the advice is the harvest control rule agreed by the Coastal States in 2015 (Anon., 2015). This implies applying the advice rule established by ICES in 2015 (ICES, 2015) for setting an initial TAC on the basis of immature abundance (ages 1–2) in the autumn acoustic survey (Figure 2). ICES recommends that the initial TAC is revised based on acoustic survey information in autumn 2020 (intermediate TAC), with the final TAC being set based on the results of the winter survey in 2021.

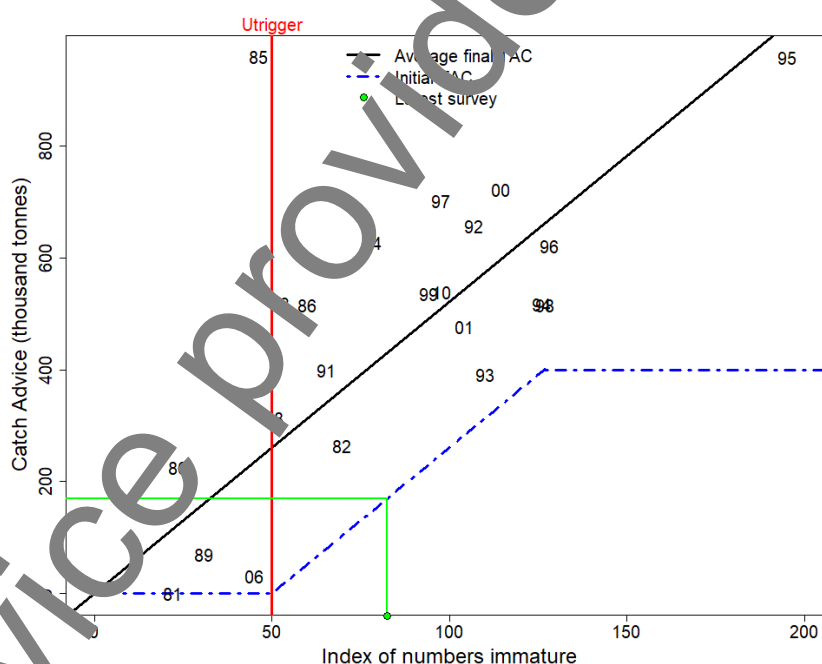


Figure 2 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Catch advice (initial TAC), according to the rule developed by ICES based on the measured number of immature capelin the previous autumn (about 16 months earlier than the winter survey used for the final TAC; ICES, 2015). The predicted final TAC is shown as a black solid line (based on immature index and the final TAC for the period 1980–2006) and the initial TAC as a blue dashed line. The latter is set using an index abundance trigger point (U_{trigger} ; red vertical line) of 50 billion immature fish, with a cap on the initial TAC of 400 000 t. The green circle shows the index value from the autumn acoustic survey in 2019, with the corresponding initial TAC for 2020/2021 shown on the y-axis.

Table 4 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. The basis of the advice.

| | |
|-----------------|--|
| Advice basis | Harvest control rule agreed by the Coastal States (precautionary approach for initial TAC) |
| Management plan | The Coastal States (Iceland, Greenland, and Norway), have agreed (Anon., 2015) to use the following harvest control rule as the basis for management: an initial TAC is set for the next fishing season following the rule developed by ICES (2015), with a very low probability of the initial TAC being higher than a regression estimated final TAC. This is followed by an intermediate TAC set in the autumn and a final TAC set in winter during the fishing season, which will lead to >95% probability of SSB being greater than or equal to B_{lim} at spawning time in the following spring. |

Quality of the assessment

The autumn survey in 2019 had sufficient spatial coverage. The uncertainty around the abundance estimate of immatures is high, due to a patchy distribution of the stock.

Issues relevant for the advice

This initial catch advice (TAC advice) is for the period between July 2020 and March 2021. ICES is only requested to provide initial catch advice using a rule based on having a low probability that the catch advised by ICES for the initial TAC will be higher than the final TAC (ICES, 2015). The Marine and Freshwater Research Institute in Iceland is expected to provide updated catch advice which will lead to > 95% probability of SSB being greater than or equal to B_{lim} based on acoustic survey information in autumn 2020 and winter 2021; this will form the basis for the final TAC for 2020/2021.

Reference points

Table 5 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Reference points, values, and their technical basis.

| Framework | Reference points | Value | Technical basis | Source |
|------------------------|-------------------|----------|-----------------|--------------|
| MSY approach | MSY $B_{trigger}$ | | | |
| | F_{MSY} | | | |
| Precautionary approach | B_{lim} | 150000 | B_{loss} | ICES (2015) |
| | B_{pa} | | | |
| | F_{lim} | | | |
| | F_{pa} | | | |
| Management plan | B_{mgt} | 150000 t | B_{lim} | Anon. (2015) |
| | F_{mgt} | | | |

Basis of the assessment

Table 6 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Basis of the assessment and advice.

| | |
|--------------------------|---|
| ICES stock data category | 1 (ICES, 2018). |
| Assessment type | The initial TAC advice is set by applying an advice rule designed to ensure a low risk of advised catch being higher than the final TAC (see WKICE; ICES, 2015). The final TAC advice is produced by Iceland, based on a model which takes into account uncertainty in surveys and predation from cod, haddock, and saithe on capelin to ensure that the advised catch will result in a less than 5% chance of SSB going below B_{lim} (ICES, 2019a). |
| Input data | The abundance estimate of immature capelin of ages 1 and 2 from acoustic surveys in autumn; preliminary cruise report (ICES, 2019b). |
| Discards and bycatch | Not included, considered negligible. |
| Indicators | None. |
| Other information | Last benchmarked in 2015 (ICES, 2015). |
| Working group | North-Western Working Group (NWWG) |

Information from stakeholders

No additional information is available.

History of the advice, catch, and management

Table 7 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. ICES advice and catch. All weights are in tonnes.

| Season | ICES advice | Initial TAC advice ^ | Agreed final TAC ^^ | ICES catch ^^^ |
|-----------|---|----------------------|---------------------|----------------|
| 1986/1987 | TAC | 1100000 | 1290000 | 1333400 |
| 1987/1988 | TAC | 500000 | 1115000 | 1115800 |
| 1988/1989 | TAC | 900000 | 1065000 | 1036500 |
| 1989/1990 | TAC | 900000 | 900000 | 807800 |
| 1990/1991 | TAC | 600000 | 250000 | 313600 |
| 1991/1992 | No fishery pending survey results | 0 | 100000 | 677100 |
| 1992/1993 | Precautionary TAC^ | 500000 | 900000 | 787700 |
| 1993/1994 | TAC | 900000 | 250000 | 1178700 |
| 1994/1995 | Apply the harvest control rule | 950000 | 850000 | 863900 |
| 1995/1996 | Apply the harvest control rule | 800000 | 1390000 | 929300 |
| 1996/1997 | Apply the harvest control rule | 1100000 | 1000000 | 1570900 |
| 1997/1998 | Apply the harvest control rule | 850000 | 1265000 | 1244900 |
| 1998/1999 | Apply the harvest control rule | 950000 | 1200000 | 1099400 |
| 1999/2000 | Apply the harvest control rule | 866000 | 1000000 | 932700 |
| 2000/2001 | Apply the harvest control rule | 650000 | 1090000 | 1071300 |
| 2001/2002 | Apply the harvest control rule | 700000 | 1300000 | 1249000 |
| 2002/2003 | Apply the harvest control rule | 690000 | 1000000 | 987700 |
| 2003/2004 | Apply the harvest control rule | 555000 | 900000 | 741400 |
| 2004/2005 | Apply the harvest control rule | 330000 | 985000 | 784000 |
| 2005/2006 | Apply the harvest control rule | No fishery | 235000 | 247000 |
| 2006/2007 | Apply the harvest control rule | No fishery | 385000 | 376800 |
| 2007/2008 | Apply the harvest control rule | 207000 | 207000 | 203400 |
| 2008/2009 | Apply the harvest control rule | No fishery | 0 | 15100* |
| 2009/2010 | Apply the harvest control rule | No fishery | 150000 | 150700 |
| 2010/2011 | Apply the harvest control rule | No fishery | 390000 | 390600 |
| 2011/2012 | Set the TAC at 50% of the initial quota in the HCR | 366000 | 765000 | 746500 |
| 2012/2013 | Precautionary approach | No fishery | 570000 | 551000 |
| 2013/2014 | Precautionary approach | No fishery | 160000 | 141700 |
| 2014/2015 | Set the initial quota at 50% of the predicted quota in the harvest control rule | 225000 | 580000 | 517400 |
| 2015/2016 | Precautionary approach** | 53600 | 173000 | 173600 |
| 2016/2017 | Precautionary approach** | 0 | 299000 | 299800 |
| 2017/2018 | Harvest control rule agreed by Coastal States** | 0 | 285000 | 286500 |
| 2018/2019 | Harvest control rule agreed by Coastal States** | 0 | 0 | 0 |
| 2019/2020 | Harvest control rule agreed by Coastal States** | 0 | | |
| 2020/2021 | Harvest control rule agreed by Coastal States** | 169520 | | |

^ Advised for the early part of the season.

^^ Final TAC recommended by national scientists for the fishing season (July–March).

^^^ July–March of the following year.

* Scientific fishing was allowed in the latter half of February 2009.

** Initial TAC advice based on low probability of advised catch being higher than the final TAC.

History of the catch and landings

Table 8 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Catch distribution by fleet in 2018/2019 as estimated by

| Catch | Landings | Discards |
|-------|----------|------------|
| 0 | 0 | Negligible |

Table 9 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. History of commercial catch and landings; official values are presented by season and country. All weights are in tonnes.

| Year | Winter season | | | | | Summer and autumn season | | | | | | Total (calendar year) |
|------|---------------|--------|--------|-----------|--------------|--------------------------|--------|--------|-----------|-------|--------------|--------------------------|
| | Iceland | Norway | Faroes | Greenland | Season total | Iceland | Norway | Faroes | Greenland | EU | Season total | |
| 1964 | 8600 | - | - | - | 8600 | - | - | - | - | - | - | 8600 |
| 1965 | 49700 | - | - | - | 49700 | - | - | - | - | - | - | 49700 |
| 1966 | 124500 | - | - | - | 124500 | - | - | - | - | - | - | 124500 |
| 1967 | 97200 | - | - | - | 97200 | - | - | - | - | - | - | 97200 |
| 1968 | 78100 | - | - | - | 78100 | - | - | - | - | - | - | 78100 |
| 1969 | 170600 | - | - | - | 170600 | - | - | - | - | - | - | 170600 |
| 1970 | 190800 | - | - | - | 190800 | - | - | - | - | - | - | 190800 |
| 1971 | 182900 | - | - | - | 182900 | - | - | - | - | - | - | 182900 |
| 1972 | 276500 | - | - | - | 276500 | 0 | - | - | - | - | - | 276500 |
| 1973 | 440900 | - | - | - | 440900 | - | - | - | - | - | - | 440900 |
| 1974 | 461900 | - | - | - | 461900 | - | - | - | - | - | - | 461900 |
| 1975 | 457100 | - | - | - | 457100 | 3100 | - | - | - | - | 3100 | 460200 |
| 1976 | 338700 | - | - | - | 338700 | 114400 | - | - | - | - | 114400 | 453100 |
| 1977 | 549200 | - | 24300 | - | 573500 | 259700 | - | - | - | - | 259700 | 833200 |
| 1978 | 468400 | - | 36200 | - | 504600 | 497500 | 154100 | 3400 | - | - | 655000 | 1159600 |
| 1979 | 521700 | - | 18200 | - | 539900 | 442000 | 124000 | 23000 | - | - | 588000 | 1127900 |
| 1980 | 392100 | - | - | - | 392100 | 367400 | 118700 | 24200 | - | 17300 | 527600 | 919700 |
| 1981 | 156000 | - | - | - | 156000 | 484600 | 91000 | 16200 | - | 20800 | 613000 | 769000 |
| 1982 | 13200 | - | - | - | 13200 | - | - | - | - | - | - | 13200 |
| 1983 | - | - | - | - | - | 133400 | - | - | - | - | 133400 | 133400 |
| 1984 | 439600 | - | - | - | 439600 | 425000 | 114600 | 10200 | - | 8500 | 548500 | 988100 |
| 1985 | 348500 | - | - | - | 348500 | 148000 | 293000 | 65900 | - | 16000 | 919700 | 1268200 |
| 1986 | 341800 | 50000 | - | - | 391800 | 552500 | 149700 | 65400 | - | 5300 | 772900 | 1164700 |
| 1987 | 500600 | 59900 | - | - | 560500 | 311300 | 82100 | 65200 | - | - | 458600 | 1019100 |
| 1988 | 600600 | 56600 | - | - | 657200 | 114000 | 11500 | 48500 | - | - | 371400 | 1028600 |
| 1989 | 609100 | 56000 | - | - | 665100 | 53900 | 52700 | 14400 | - | - | 121000 | 786100 |
| 1990 | 612000 | 62500 | 12300 | - | 686800 | 83700 | 21900 | 5600 | - | - | 111200 | 798000 |
| 1991 | 202400 | - | - | - | 202400 | 56000 | - | - | - | - | 56000 | 258400 |
| 1992 | 573500 | 47600 | - | - | 621100 | 213400 | 65300 | 18900 | 500 | - | 298100 | 919200 |
| 1993 | 489100 | - | - | - | 489100 | 450000 | 127500 | 23900 | 10200 | - | 611600 | 1101200 |
| 1994 | 550300 | 15000 | - | - | 565300 | 210700 | 99000 | 12300 | 2100 | - | 324100 | 891200 |
| 1995 | 539400 | - | - | - | 539400 | 175500 | 28000 | - | 2200 | - | 205700 | 745500 |
| 1996 | 707900 | - | 10000 | 5700 | 723600 | 474300 | 206000 | 17600 | 15000 | 60900 | 773800 | 1497400 |
| 1997 | 774900 | - | 16000 | 6100 | 797100 | 536000 | 153600 | 20500 | 6500 | 47100 | 763600 | 1561500 |
| 1998 | 457000 | - | 11700 | 9600 | 481300 | 290800 | 72900 | 26900 | 8000 | 41900 | 440500 | 921800 |
| 1999 | 607800 | 14800 | 13800 | 22500 | 658900 | 83000 | 11400 | 6000 | 2000 | - | 102400 | 761300 |
| 2000 | 761400 | 14900 | 32000 | 22000 | 830300 | 126500 | 80100 | 30000 | 7500 | 21000 | 265100 | 1095400 |
| 2001 | 767200 | - | 10000 | 29000 | 806200 | 150000 | 106000 | 12000 | 9000 | 17000 | 294000 | 1061200 |
| 2002 | 901000 | - | 28000 | 26000 | 955000 | 180000 | 118700 | - | 13000 | 28000 | 339700 | 1294700 |
| 2003 | 585000 | - | 40000 | 23000 | 648000 | 96500 | 78000 | 3500 | 2500 | 18000 | 198500 | 846500 |
| 2004 | 478200 | 15800 | 30800 | 17500 | 542900 | 46000 | 34000 | - | 12000 | 0 | 92000 | 634900 |
| 2005 | 594100 | 69000 | 19000 | 10000 | 692000 | 9000 | - | - | - | - | 9000 | 701100 |
| 2006 | 193000 | 30000 | 30000 | 7000 | 238000 | - | - | - | - | 0 | - | 238000 |
| 2007 | 307000 | 18000 | 19000 | 12800 | 376800 | - | - | - | - | - | - | 376800 |
| 2008 | 209000 | 37600 | 10100 | 6700 | 203400 | - | - | - | - | - | - | 203400 |
| 2009 | 15100 | - | - | - | 15100 | - | - | - | - | - | - | 15100 |
| 2010 | 110600 | 28300 | 7700 | 4700 | 150700 | 5400 | - | - | - | - | 5400 | 156100 |
| 2011 | 311800 | 30800 | 19500 | 13100 | 385200 | 8400 | 58500 | - | 5200 | - | 72100 | 457300 |
| 2012 | 576200 | 46200 | 29700 | 22300 | 674400 | 9000 | - | - | 1000 | - | 10000 | 684400 |
| 2013 | 454000 | 40000 | 30000 | 17000 | 541000 | - | - | - | - | - | - | 541000 |
| 2014 | 111400 | 6200 | 8000 | 16100 | 141700 | - | 30500 | - | 5300 | 9700 | 45500 | 187200 |

| Year | Winter season | | | | | Summer and autumn season | | | | | | Total (calendar year) |
|------|---------------|--------|--------|-----------|--------------|--------------------------|--------|--------|-----------|----|--------------|--------------------------|
| | Iceland | Norway | Faroes | Greenland | Season total | Iceland | Norway | Faroes | Greenland | EU | Season total | |
| 2015 | 353600 | 50600 | 29900 | 37900 | 471900 | - | - | - | 2500 | - | 2500 | 474400 |
| 2016 | 101100 | 58200 | 8500 | 3300 | 171100 | - | - | - | - | - | - | 171100 |
| 2017 | 196800 | 60400 | 15000 | 27400 | 299800 | - | - | - | - | - | - | 299800 |
| 2018 | 186300 | 74500 | 14300 | 11400 | 286500 | - | - | - | - | - | - | 286500 |
| 2019 | - | - | - | - | - | - | - | - | - | - | - | - |

Advice provided in 2019

Summary of the assessment

Table 10 Capelin in subareas 5 and 14 and Division 2.a west of 5°W. Assessment summary. Weights are in tonnes. For a fishing season Y/Y + 1 the recruitment (in thousands) refers to the autumn of year Y, and SSB columns refer to the spring of Y + 1.

| Fishing season | Recruitment index (immature ages 1 and 2) | Recruitment 95th percentile | Recruitment 5th percentile | SSB* (median value) | SSB* 95th percentile | SSB* 5th percentile | Historical SSB estimates | Catch |
|----------------|---|-----------------------------|----------------------------|---------------------|----------------------|---------------------|--------------------------|---------|
| 1979/1980 | 22000000 | | | | | | 200000 | 980100 |
| 1980/1981 | 23500000 | | | | | | 170000 | 683600 |
| 1981/1982 | 22100000 | | | | | | 140000 | 626200 |
| 1982/1983 | 69700000 | | | | | | 260000 | 0 |
| 1983/1984 | 52300000 | | | | | | 440000 | 573000 |
| 1984/1985 | 78400000 | | | | | | 460000 | 897000 |
| 1985/1986 | 46400000 | | | | | | 460000 | 1311500 |
| 1986/1987 | 60000000 | | | | | | 420000 | 1333400 |
| 1987/1988 | 22000000 | | | | | | 400000 | 1115800 |
| 1988/1989 | 50600000 | | | | | | 440000 | 1036500 |
| 1989/1990 | 31000000 | | | | | | 115000 | 807800 |
| 1990/1991 | 27200000 | | | | | | 330000 | 313600 |
| 1991/1992 | 65300000 | | | | | | 475000 | 677100 |
| 1992/1993 | 106900000 | | | | | | 499000 | 787700 |
| 1993/1994 | 110200000 | | | | | | 460000 | 1178700 |
| 1994/1995 | 125900000 | | | | | | 420000 | 863900 |
| 1995/1996 | 195100000 | | | | | | 830000 | 929300 |
| 1996/1997 | 128300000 | | | | | | 430000 | 1570900 |
| 1997/1998 | 97600000 | | | | | | 492000 | 1244900 |
| 1998/1999 | 126900000 | | | | | | 500000 | 1099400 |
| 1999/2000 | 94200000 | | | | | | 650000 | 932700 |
| 2000/2001 | 114600000 | | | | | | 450000 | 1071300 |
| 2001/2002 | 104200000 | | | | | | 475000 | 1249000 |
| 2002/2003 | 1500000 | | | | | | 410000 | 987700 |
| 2003/2004 | 8000000 | | | | | | 535000 | 741400 |
| 2004/2005 | 8000000 | | | | | | 602000 | 784000 |
| 2005/2006 | 0 | | | | | | 400000 | 247000 |
| 2006/2007 | 45000000 | | | | | | 410000 | 376800 |
| 2007/2008 | 5800000 | | | | | | 406000 | 203400 |
| 2008/2009 | 7900000 | | | | | | 328000 | 15100 |
| 2009/2010 | 13000000 | | | | | | 410000 | 150700 |
| 2010/2011 | 97900000 | | | | | | 411000 | 390600 |
| 2011/2012 | 12600000 | | | | | | 418000 | 746500 |
| 2012/2013 | 20500000 | | | | | | 417000 | 551000 |
| 2013/2014 | 67000000 | | | | | | 424000 | 141700 |
| 2014/2015 | 60300000 | | | | | | 460000 | 517400 |
| 2015/2016 | 6200000 | 8250000 | 4120000 | 298000 | 447828 | 150338 | | 173600 |
| 2016/2017 | 9400000 | 14750000 | 4930000 | 355000 | 596320 | 150190 | | 299800 |
| 2017/2018 | 26100000 | 46310000 | 10420000 | 352000 | 614000 | 150000 | | 286500 |
| 2018/2019 | 10000000 | 15360000 | 7240000 | 82790 | 161480 | 33200 | | 0 |
| 2019/2020 | 23600000 | 150650000 | 36620000 | | | | | |

* Based on predation model in current advice rule; not directly comparable to historical SSB values because it is based on different natural mortality assumptions.

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