NORDIC MARINE THINK TANK

www.nmtt.org

NMTT is a **network of Nordic experts in marine and fisheries issues** and international cooperation, established 30 January 2012

We have an elected board from Denmark, Faroe Islands, Iceland, Greenland, Norway and Sweden.

We are independent of public authorities and economic interests.

The NMTT works to support:

- Healthy oceans and ecosystems
- Sustainable exploitation of marine living resources
- Better public decision-making
- Better use of Nordic skills and solutions in marine environment and management issues

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Nordic Climate Change Forum for Fisheries & Aquaculture

the Climate Change Forum is financed by *The Nordic Council of Ministers*

www.nmtt.org/forum

The following slides (4,5,6) for the panel discussion

-Stopp kvoterådet på makrell for 2019

Fiskebåt, Norges Fiskarlag, Pelagisk Forening, og Sjømannsforbundet ber om at kvoterådet på makrell for 2019 stanses.

24 sep 2018

Næringen er kjent med den store usikkerheten i årets bestandsestimat, og ser det som spesielt alvorlig at merkedataserien har så stor effekt på bestandsvurderingen, uten at ICES er i stand til å forklare hva som er årsaken.

I et brev til Havforskningsinstituttet ber derfor organisasjonene om at kvoterådet stanses.

I brevet blir det vist til at ICES ikke har et godt nok grunnlag for å gi råd for makrell i 2019. Det blir blant annet pekt på følgene:

- Det er stor usikkerhet i estimert dødelighet av merket fisk (RFID)
- Næringen kjenner seg ikke igjen i utslag av modellbruk og nedskrivning av bestanden.
- Og det er stor usikkerhet knyttet til tråltoktet.

Foto: Frode Fuglseth /Norges Sildesalgslag.

https://fiskebat.no/nyheter/stopp-kvoteradet-pa-makrell-for-2019

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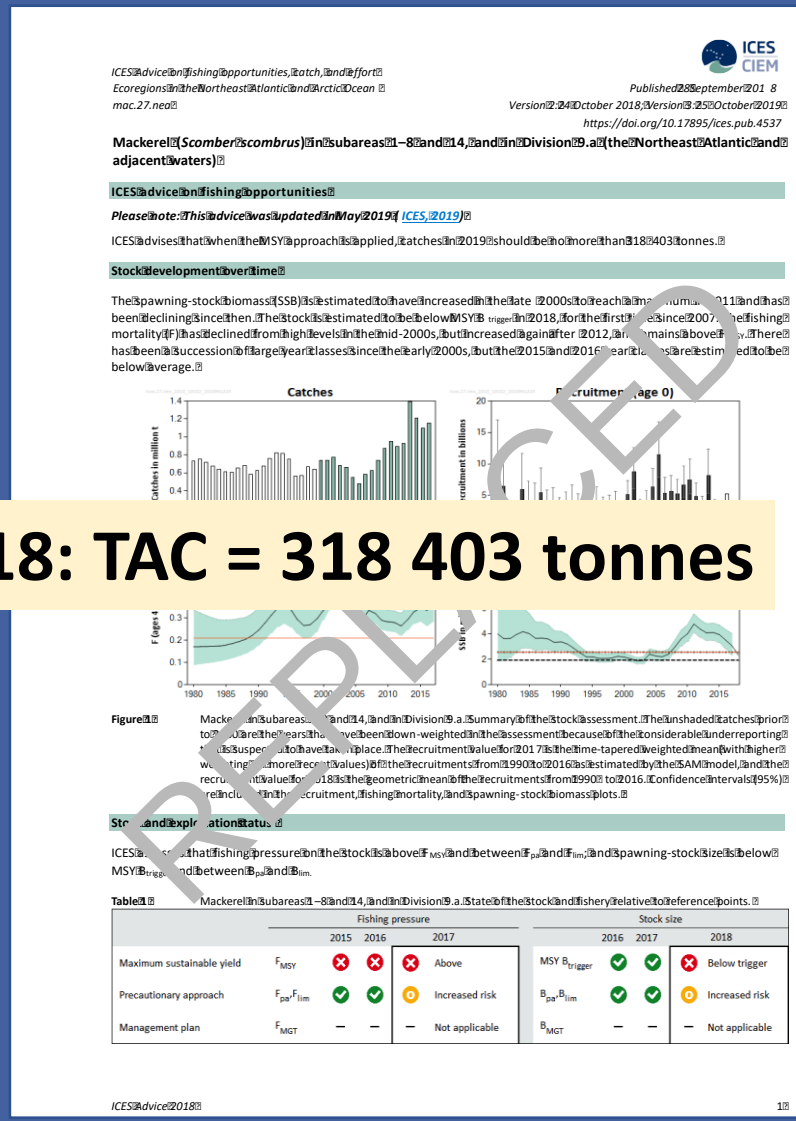
ICES Advice for Northeast Atlantic mackerel



ICES Advice on fishing opportunities, catch, and effort
Ecoregions in the Northeast Atlantic and Arctic Ocean
mac.27.nea

Published 28 September 2018
Version 2: 24 October 2018; Version 3: 25 October 2019
https://doi.org/10.17895/ices.pub.4537

Mackerel (*Scomber scombrus*) in subareas 1–8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters)

ICES advice on fishing opportunities

Please note: This advice was updated in May 2019 (ICES, 2019)

ICES advises that when the MSY approach is applied, catches in 2019 should be no more than 318 403 tonnes.

Stock development over time

The spawning-stock biomass (SSB) is estimated to have increased in the late 2000s to reach a maximum in 2011 and has been declining since then. The stock is estimated to be below MSY $B_{trigger}$ in 2018, for the first time since 2007. The fishing mortality (F) has declined from high levels in the mid-2000s, but increased again after 2012, and remains above F_{MSY}. There has been a succession of large year classes since the early 2000s, but the 2015 and 2016 year classes are estimated to be below average.

Figure 1 Mackerel in subareas 1–8 and 14, and in Division 9.a. Summary of the stock assessment. The unshaded catches prior to 2000 are the years that have been down-weighted in the assessment because of the considerable underreporting that is suspected to have taken place. The recruitment value for 2017 is the time-tapered weighted mean (with higher weighting on more recent values) of the recruitments from 1990 to 2016 as estimated by the SAM model, and the recruitment value for 2018 is the geometric mean of the recruitments from 1990 to 2016. Confidence intervals (95%) are included in the recruitment, fishing mortality, and spawning-stock biomass plots.

Stock and exploitation status

ICES assesses that fishing pressure on the stock is above F_{MSY} and between F_{pa} and F_{lim}, and spawning-stock size is below MSY $B_{trigger}$ and between B_{pa} and B_{lim}.

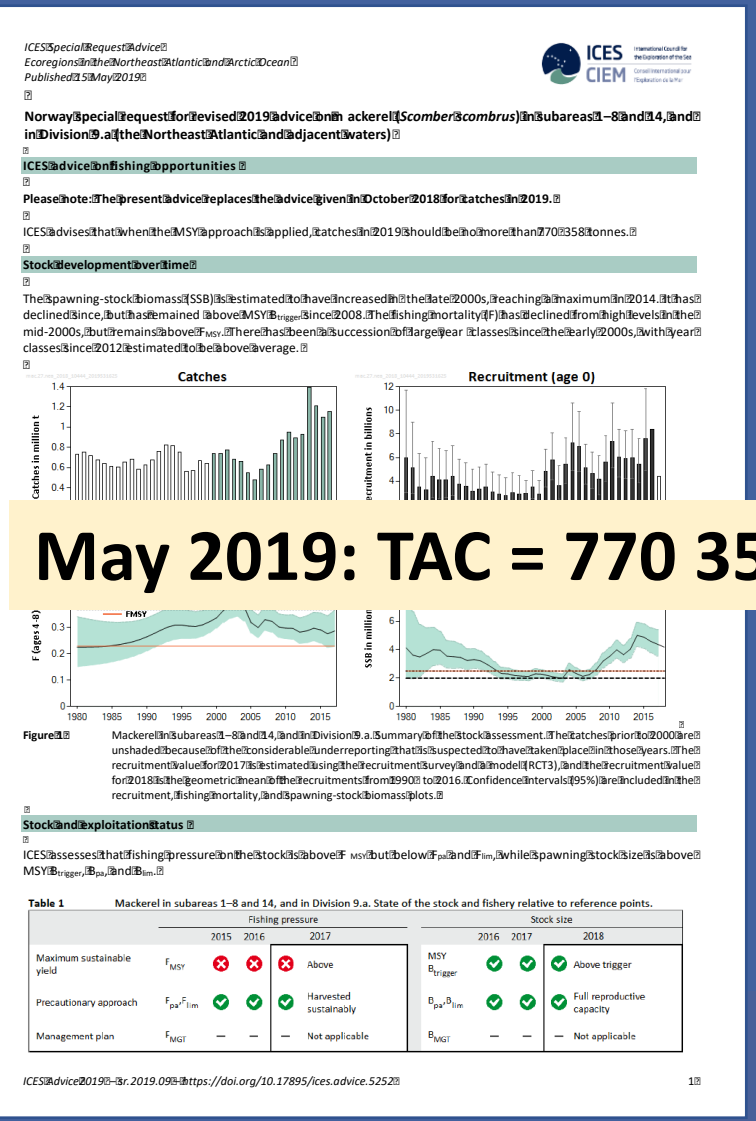
Table 1 Mackerel in subareas 1–8 and 14, and in Division 9.a. State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	F_{MSY}	✗	✗	✗	Above	MSY $B_{trigger}$	✓	✗	Below trigger
Precautionary approach	F_{pa}, F_{lim}	✓	✓	!	Increased risk	B_{pa}, B_{lim}	✓	!	Increased risk
Management plan	F_{MGT}	–	–	–	Not applicable	B_{MGT}	–	–	Not applicable

ICES Advice 2018

REPLACED

Oct 2018: TAC = 318 403 tonnes



ICES Special Request Advice
Ecoregions in the Northeast Atlantic and Arctic Ocean
Published 15 May 2019

Norway's special request for revised 2019 advice on mackerel (*Scomber scombrus*) in subareas 1–8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters)

ICES advice on fishing opportunities

Please note: The present advice replaces the advice given in October 2018 for catches in 2019.

ICES advises that when the MSY approach is applied, catches in 2019 should be no more than 770 358 tonnes.

Stock development over time

The spawning-stock biomass (SSB) is estimated to have increased in the late 2000s, reaching a maximum in 2014. It has declined since, but has remained above MSY $B_{trigger}$ since 2008. The fishing mortality (F) has declined from high levels in the mid-2000s, but remains above F_{MSY}. There has been a succession of large year classes since the early 2000s, with year classes since 2012 estimated to be above average.

Figure 1 Mackerel in subareas 1–8 and 14, and in Division 9.a. Summary of the stock assessment. The catches prior to 2000 are unshaded because of the considerable underreporting that is suspected to have taken place in those years. The recruitment value for 2017 is estimated using the recruitment survey and a model (RCT3), and the recruitment value for 2018 is the geometric mean of the recruitments from 1990 to 2016. Confidence intervals (95%) are included in the recruitment, fishing mortality, and spawning-stock biomass plots.

Stock and exploitation status

ICES assesses that fishing pressure on the stock is above F_{MSY} but below F_{pa} and F_{lim}, while spawning stock size is above MSY $B_{trigger}$, B_{pa}, and B_{lim}.

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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

ICES Advice 2019 – fr.2019.09 • https://doi.org/10.17895/ices.advice.5252

May 2019: TAC = 770 358 tonnes

https://www.ices.dk/news-and-events/news-archive/news/Pages/Northeast-Atlantic-mackerel.aspx

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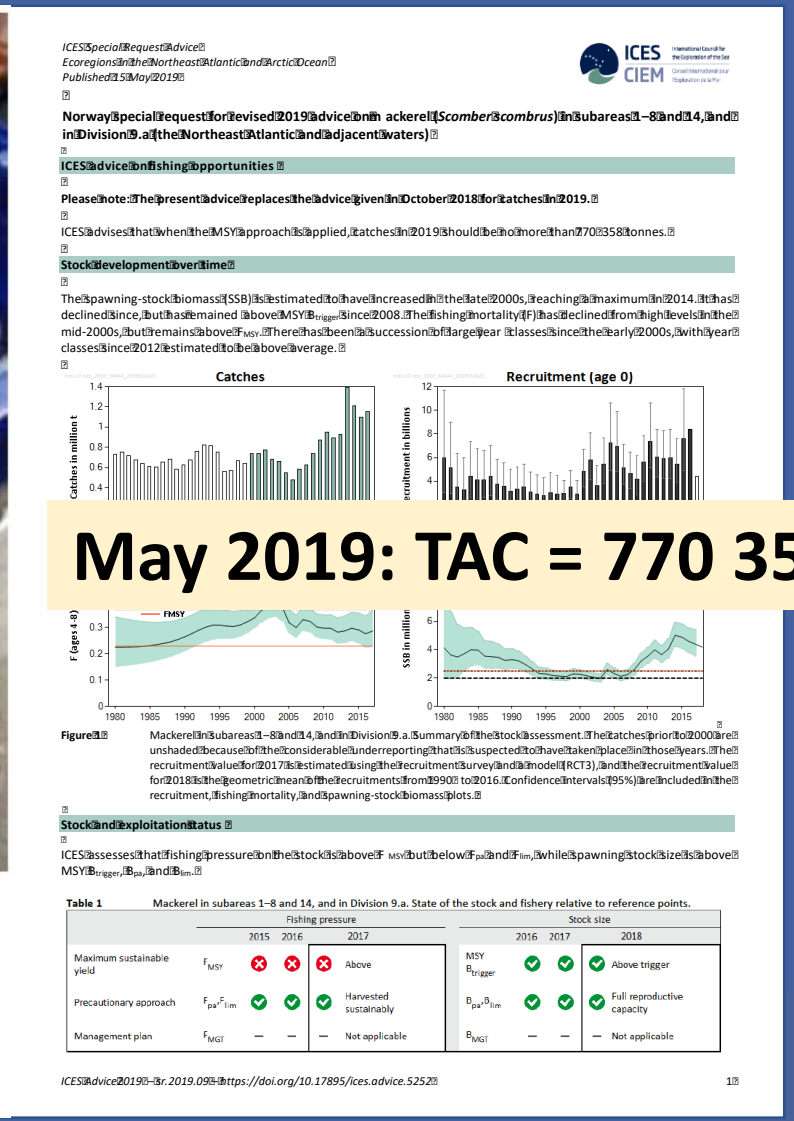
ICES Advice for Northeast Atlantic mackerel

in March 2019, the Interbenchmark Workshop on the assessment of Northeast Atlantic mackerel reviewed the current methods used to compile the Northeast Atlantic mackerel stock assessment.



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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

ICES Advice 2019 – sr.2019.09 • https://doi.org/10.17895/ices.advice.5252 1

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What are the ideals of fisheries science today, and what can we expect of the state-of-the-art of the science?

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