Capelin in Divisions 3NO

Advice June 2021 for 2022 - 2024

Recommendation for 2022-2024

No directed fishery.

Management objectives

No explicit management plan or management objectives defined by the Commission. General Convention Principles (GC Doc. 08-03) are applied. Advice is based on qualitative evaluation of biomass indices in relation to historic levels.

Convention objectives	Status	Comment/consideration		
Restore to or maintain at B_{msy}		B_{msy} unknown, stock at low level		OK
Eliminate overfishing	0	No directed fishery		Intermediate
Apply Precautionary Approach	0	Reference points not defined		Not accomplished
Minimise harmful impacts on living marine resources and ecosystems		VME closures in effect, no directed fishing	0	Unknown
Preserve marine biodiversity	0	Cannot be evaluated		

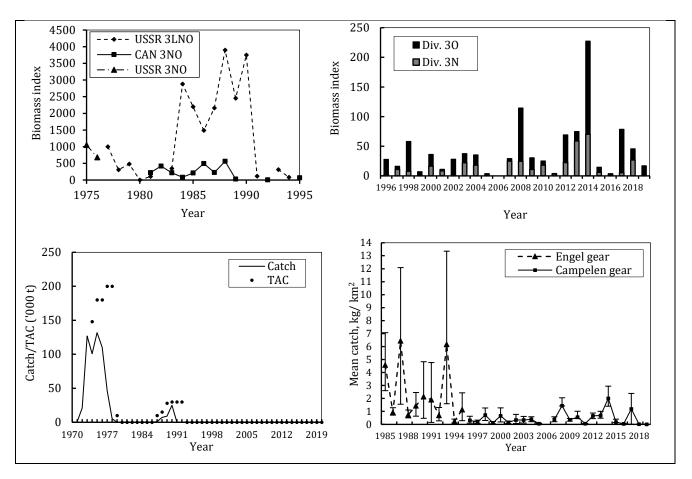
Management unit

The capelin stock is distributed in Div. 3NO, mainly on the Grand Bank.

Stock status

Acoustic surveys series terminated in 1994 indicated a stock at a low level. Although biomass indices have increased in recent years, bottom trawl surveys are not considered a satisfactory basis for a stock assessment of a pelagic species.





Reference points

Not defined.

Projections

Quantitative assessment of risk at various catch options is not possible for this stock at this time.

Assessment

Assessment was based on evaluation of trends in acoustic survey data (1975 – 1994) and bottom trawl surveys (1995 – 2019: upper figure - Canadian surveys; lower figure – EU-Spain surveys). Bottom-trawling is not a satisfactory basis for a stock assessment of a pelagic species. The assessment is only sensitive to large-scale fluctuations in biomass and abundance. Therefore, although the next full assessment is in principle scheduled for 2024, SC recommends that this stock be monitored in future by interim monitoring reports only, until such time conditions change to warrant a full assessment.

Human impact

Low fishery related mortality due to moratorium and low bycatch in other fisheries. Other sources (e.g., pollution, shipping, oil industry) are considered minor.

Biological and environmental interactions

Changes in growth, maturity and recruitment are linked to temperature on the Grand Banks. The Grand Bank (3LNO) ecosystem production unit is currently experiencing low productivity conditions and biomass has declined across multiple trophic levels and stocks since 2014.



Fishery

Capelin has been fished in a directed trawl fishery. There is low bycatch in other trawl fisheries. The directed fishery was closed in 1992 and the closure has continued through 2020. No catches have been reported for this stock from 1993 except one tonne of Spanish catch in 2014 and five tonnes Estonian catch in 2016.

Recent catch estimates and TACs (t) are as follows:

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TAC	ndf*	ndf*	ndf*	ndf*						
STATLANT 21	0	0	0	1	0	5	0	0	0	0
STACFIS	-	-	-	-	01	41	11 ²	22	22	12

^{*}ndf - no directed fishing

Effects of the fishery on the ecosystem

No fishery.

Special comments

Bottom-trawling is not a satisfactory basis for a stock assessment of a pelagic species. Investigations to evaluate the status of capelin stock should utilize trawl acoustic surveys to allow comparison with historical time series.

Source of Information

SCR Doc. 21/029, SCS Doc. 21/06



 $^{^1}$ Catch was estimated using STATLANT 21 data for Canadian fisheries and Daily Catch Records for fisheries in the NRA. 2 STACFIS Catches since 2017 are obtained from CESAG