

22 | Harvest Strategy in development

Norwegian Spring Spawning Herring



Management Authority:

North East Atlantic Fisheries Commission/ North-East Atlantic Coastal States

Expected Adoption Year:

2023

Management Objectives:

Aiming at ensuring harvest rates within safe biological limits, and consistent with the precautionary approach* and the maximum sustainable yield (MSY) approach.

*ensure with a high probability (95%) that the size of the stock is maintained above B_{lim}

Reference Points:

- **Interim Target Fishing Mortality Reference Point:** F_{mgt} (0.14F) / F_{MSY} (0.157F)
- **Interim Biomass Trigger Reference Points:** B_{pa}/MSY $B_{trigger}$ (3,184,000 tonnes)
- **Interim Limit Reference Points:** F_{lim} (0.291F) and B_{lim} (2,500,000 tonnes)

* B_{pa} = A stock size above which the stock is considered to have full reproductive capacity. Pa stands for precautionary approach.

Candidate Harvest Strategies:

A few harvest control rule (HCR) options were explored by ICES (2018). A HCR and Reference Points were adopted that set a total allowable catch (TAC) when biomass is above/below biological reference points (B_{pa} , B_{lim} , etc.)

- If $SSB \geq B_{pa}$, the TAC shall be fixed to a fishing mortality of F_{mgt} .
- Maximum TAC change: +25%, -20%
- If $B_{lim} < SSB < B_{pa}$, the TAC shall be fixed at a level that is consistent with a fishing mortality given by: Target $F = 0.05 + [(SSB - B_{lim}) * (F_{mgt} - 0.05) / (B_{pa} - B_{lim})]$
- If $SSB < B_{lim}$, the TAC will be fixed corresponding to a fishing mortality $F=0.05$.

Noted Constraints:

- There are mechanisms for banking up to 10% of unutilized quota and borrowing up to 10% beyond the quota allocated subject to stock status.
- Development of only an HCR, as opposed to a full harvest strategy.

Progress Update & Workplan:

- **2022:** The HCR based on ICES evaluation (2018) has been in place since 2019 and should be reviewed after 5 years (no later than December 2023).
- **2022:** The interim long-term management strategy may no longer be precautionary in the long term. There have been consistent deviations from the HCR (overshooting catch advice) due to an allocation dispute. During the evaluation of the management strategy, the implementation error in the form of a consistent overshoot of the TAC was not included.
- **2023:** Refine and further develop management strategy evaluation (MSE) and candidate harvest control rules in collaboration with ICES
- **2024:** Adopt a full harvest strategy or updated harvest control rule.

Link to relevant policy document or update:

- [Agreed record of conclusions of fisheries consultations between Iceland, the European Union, the Faroe Islands, Norway and the Russian Federation on the management of the Norwegian spring-spawning \(Atlanto-Scandian\) herring stock in the North-East Atlantic in 2019 \(https://www.pelagic-ac.org/media/pdf/2019%20CS%20agreement%20on%20ASH%20TAC%20and%20LTM%20plan.pdf\)](https://www.pelagic-ac.org/media/pdf/2019%20CS%20agreement%20on%20ASH%20TAC%20and%20LTM%20plan.pdf); Long-Term Management Strategy (2018):
- [Report of the Workshop on a long-term management strategy for Norwegian Spring-spawning herring \(WKNSSHMSE\) \(https://ices-library.figshare.com/ndownloader/files/34211912\)](https://ices-library.figshare.com/ndownloader/files/34211912); Long-Term Management Strategy Evaluation – ICES (2018):
- [NEAFC request concerning long-term management strategy for herring in the Northeast Atlantic \(Norwegian spring-spawning herring\) \(https://ices-library.figshare.com/ndownloader/files/33489986\)](https://ices-library.figshare.com/ndownloader/files/33489986); Long-Term Management Strategy Evaluation Summary Advice – ICES (2018):