Atlantic cod

Barents Sea

Fishery: Norway/Russia, Faroe Islands
Twin bottom otter trawls

IDENTIFICATION

SCIENTIFIC NAME
Gadus morhua

SPECIES NAME(S)
Atlantic cod

COMMON NAMES
Barents Sea cod, NE Arctic cod, Northeast Arctic cod, Norwegian-Russian cod

STOCK IDENTIFICATION
Genetic studies support the distinctness of different populations in the Atlantic Ocean (Bradbury et al. 2013), being two stocks identified in the Barents Sea: NE Arctic and Norwegian coastal waters. There is some overlap over the spawning season in the Norwegian coast but the stocks are assessed by ICES separately as cod in Subareas I and II (Northeast Arctic cod) and cod in Subareas I and II (Norwegian coastal waters cod). Haddock and saithe are also targeted in this fishery.

RELATED LINKS:
Joint Norwegian-Russian Fishery Commission (JNRFC)
International Council for the Exploration of the Sea (ICES)

ASSESSMENT

Strengths
- The stock assessment process incorporates many best practices features.
- Scientific advice is consistent with the management plan, which is regularly revised and found to be in accordance with the Precautionary Approach by ICES, such as the harvest control rule.
- Stock biomass is following a decreasing trend but remains in good condition, well above the target.
- Bycatch and discarding time-series are being updated.
- Illegal, unreported and unregulated fishing is considered to have been effectively addressed and is assumed null since 2009. The improvement is believed as a result of greater and remarkable cooperation between Russian and Norwegian authorities.
- There are several management measures in place such as spatial, temporal and real-time closures for the protection of juveniles; a discarding ban; technical measures in fishing gears. Some are harmonized within Russian and Norwegian EEZ waters.
- Longlines, hooks and lines and gillnets are considered to not cause irreversible harm to the seabed habitat, in temporal and spatial terms.

Weaknesses
- Uncertainties in the assessment regard the catch-at-age matrix and discontinuities of surveys in time and space coverage.
- Fishing mortality has been increasing and is slightly above the target. The spawning stock has been showing a decreasing trend.
- The agreed catch limit for 2019 is slightly above the scientific recommendation but has been approved in the past four years. ICES highlights the TAC is not established in accordance with the Harvest Control Rule in place for the second year. Catches are slightly above the set TAC, presumably due to quota swaps.
- Discarding levels are unknown but assumed to be negligible. Estimates are contradictory and fragmented and the new info is not included in the current assessment.
-ICES has been advocating since 2011 to keep bycatch of golden redfish as low as possible, stating that removals are above any sustainable catch level and that mitigation measures are essential to be applied. But catches have been rising, representing Norway and Russia 92% of total removals. The cumulative impacts of MSC certified fleets are unknown.
- There are limitations on the determination of quantitative impacts, monitoring and analysis of the fishing gears on retained species and on sensitive habitats.
- A comprehensive strategy to manage the interactions of the fishery with the ecosystem elements is lacking.

SCORES

Management Quality:

<table>
<thead>
<tr>
<th>Management Strategy</th>
<th>Managers Compliance</th>
<th>Fishers Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>≥ 8</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Stock Health:

<table>
<thead>
<tr>
<th>Current Health</th>
<th>Future Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>7.8</td>
</tr>
</tbody>
</table>

FIPS
No related FIPs

MSC
No related MSC fisheries

RECOMMENDATIONS

RETAILERS & SUPPLY CHAIN
- Contact decision-makers and request that benchmark stock assessments for both cod and haddock be conducted in 2020, including addressing retrospective patterns for haddock.
- Make urgent further efforts (e.g. via additional technical conservation...
measures as described here to substantially reduce the bycatch of golden
redfish and coastal cod.

- Implement an at-sea monitoring programme to improve data on bycatch,
especially endangered, threatened and protected species interactions,
and implement a comprehensive strategy to evaluate and manage
 cumulative impacts of the different gear types in this fishery on all types
 of bycatch.

- Participate in the ongoing efforts to investigate impacts of bottom trawls
 on the soft-bottom habitat of the Barents Sea and promote the use of
 new information to develop a comprehensive strategy for protecting all
 types of vulnerable marine ecosystems throughout the current and
 expected geographic extent of the fishery.

- Press regulators to set catch limits in line with scientific advice and the
 agreed harvest control rule.