



Council

CNL(20)49

***Presentation of the ICES Advice on
North Atlantic Salmon Stocks to the Council***



sal.oth.nasco

North Atlantic Salmon Stocks

Photo by Nick Hawkins

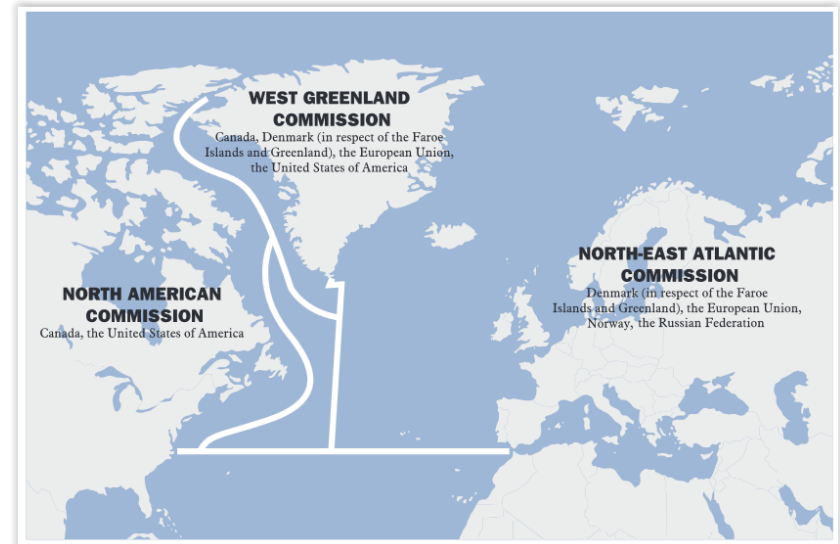


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Background



- NASCO Commissions: North American (NAC), West Greenland (WGC) and North-East Atlantic (NEAC)
- Management framework for Atlantic salmon in the North Atlantic



ICES Working Group on North Atlantic Salmon (WGNAS)



- Web Conference
- 24 March–02 April 2020
- 33 participants
- 14 jurisdictions
- 25 working documents

Terms of Reference



1. With respect to Atlantic salmon in the North Atlantic area:

- 1.1 provide an overview of salmon catches and landings by country, including unreported catches and catch and release, and production of farmed and ranched Atlantic salmon in 2019
- 1.2 provide a compilation of tag releases by country in 2019

ICES WGNAS 2020 Report

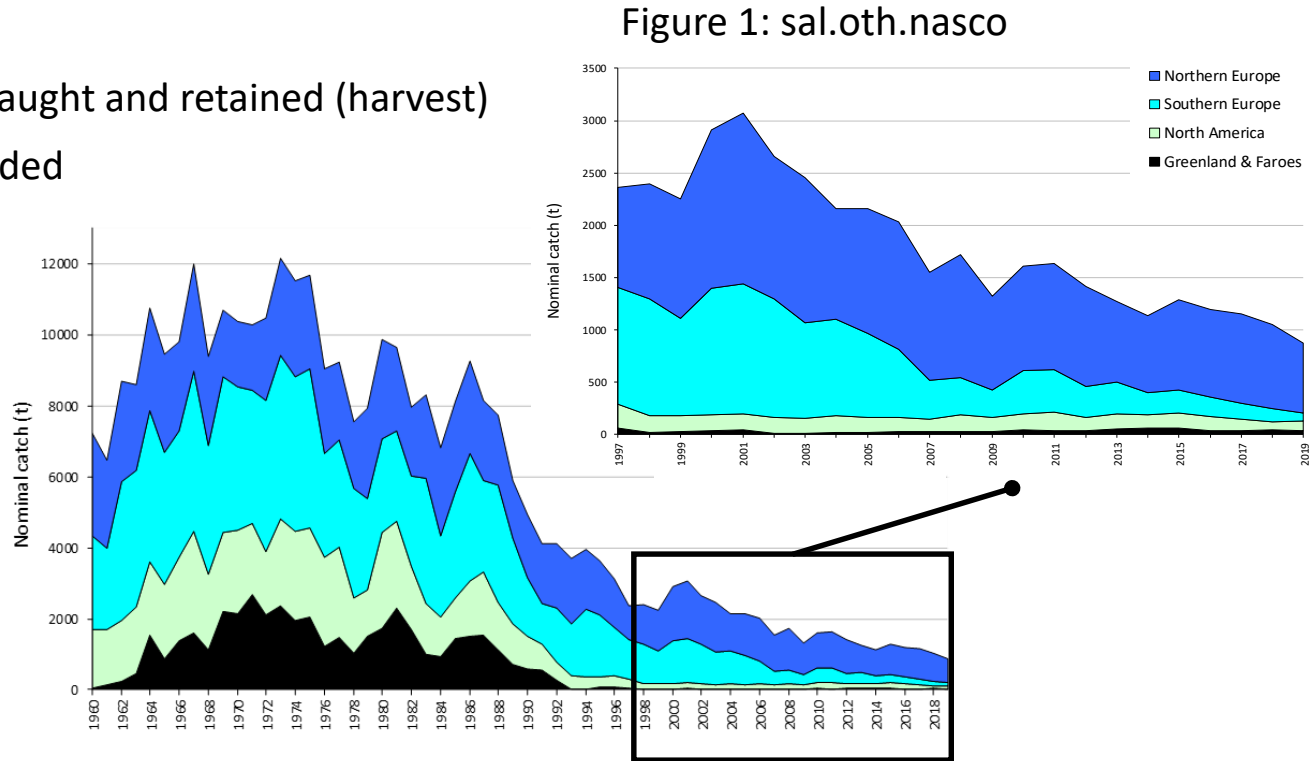
- Report on significant new or emerging threats to, or opportunities for, salmon conservation and management
- Identify relevant data deficiencies, monitoring needs and research requirements

1.1 Nominal Catch



- 868 t
 - whole weight of fish caught and retained (harvest)
 - released fish not included

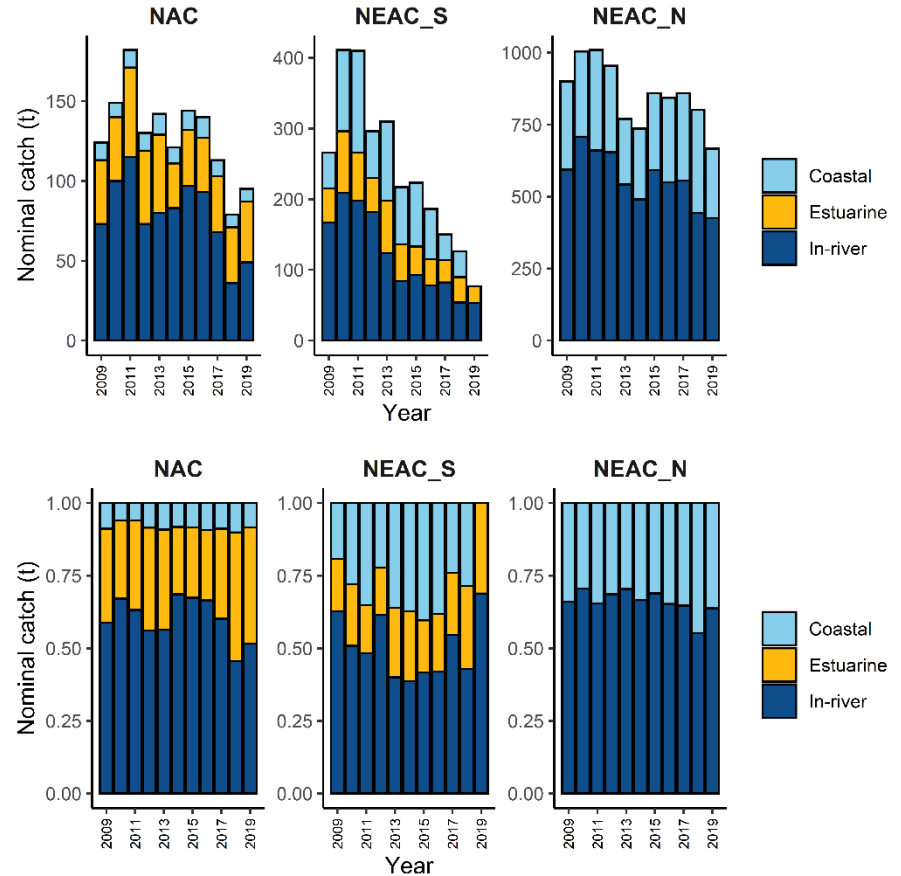
Area	Catch (t)	
	2018	2019
NEAC	927 (88%)	743 (86%)
NAC	80 (8%)	95 (11%)
WGC	40 (4%)	30 (3%)
Total	1047	868



1.1 Location of Catches

- Coastal Catches
 - N-NEAC: 30% - 40% since 2008
 - S-NEAC: 0%
(2019 change in management measures)
 - NAC: 8% (< 10% since 2007)
- location of catches by country presented in Figure 3: sal.oth.nasco

Figure 2: sal.oth.nasco



1.1 Unreported Catches

- 258 t
 - Legal under-reporting, non-reporting and illegal catch
 - 29% of total nominal catch
 - no estimate: Russia, France, Spain, and Saint Pierre and Miquelon

Table 3: sal.oth.nasco

Year	2018	2019
NEAC	279 t	237 t
NAC	24 t	12 t
WGC	10 t	10 t
Total	313 t	258 t



1.1 Catch-and-Release (C&R)

- 162 000 salmon released
(Table 8: sal.oth.nasco)
- Percentage released ranges from:
 - 20% in Sweden
 - 92% in UK (Scotland)
- Reflects varying management practices and angler attitudes
- Practice of C&R generally increasing

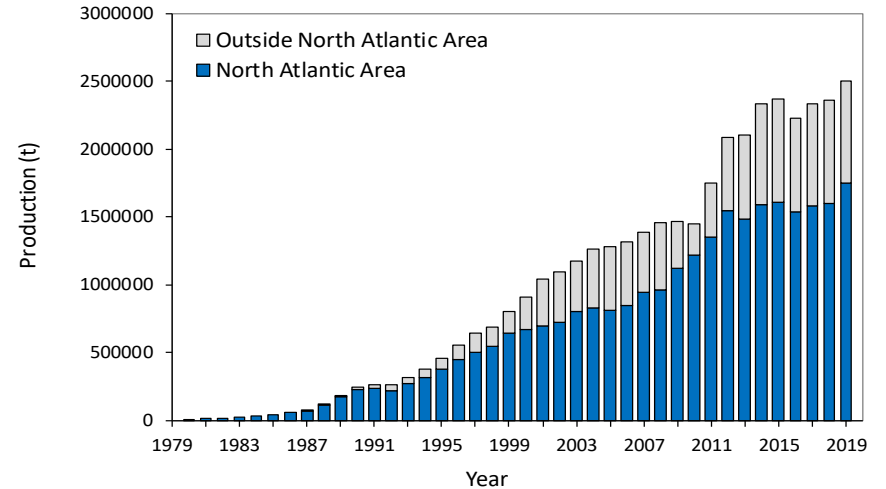


1.1 Production Farmed Salmon



- 1750 kt: Norway (78%) and UK (Scotland) (11%)

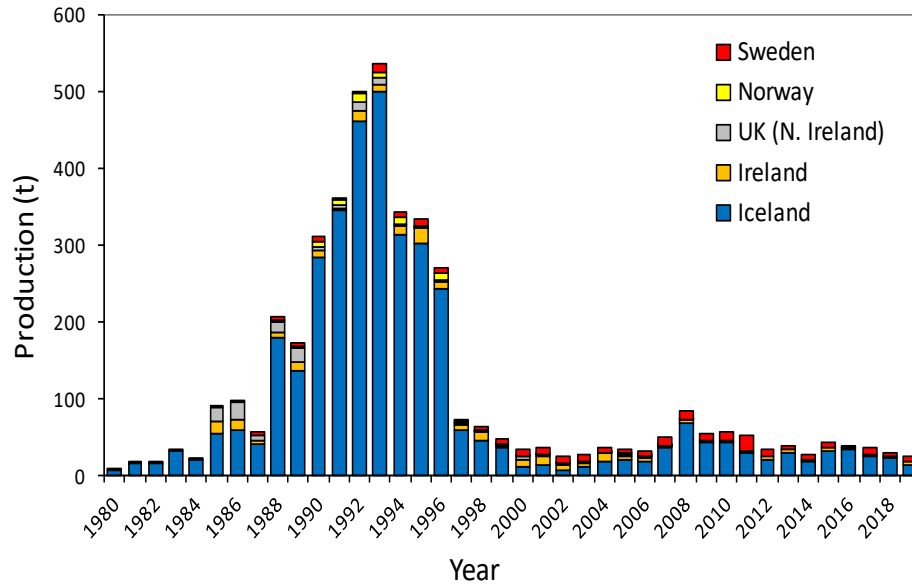
Figure 4: sal.oth.nasco



1.1 Production Ranched Salmon

- 26 t: Iceland 14.8 t, Sweden 7.7 t, Ireland 3.6 t

Figure 5: sal.oth.nasco



1.2 Tag Releases

- Data on tagged or marked salmon are compiled as a separate report (ICES, 2020b)
- Summary in Table 4: sal.oth.nasco
 - 2.2 million salmon were marked in 2019 (2.7 million in 2018)
 - Hatchery: ~ 2 million juveniles and 14 000 adults Wild: 93 000 juveniles and 6600 adults
 - adipose clip (1.7 million) and coded wire microtags (CWT) (280 000)
 - 162 000 internal electronic tags (PIT, DSTs, radio, acoustic)



ICES WGNAS 2020 Report:

Report on significant new or emerging threats to, or opportunities for, salmon conservation and management

2.3 Diseases and Parasites - Red Skin Disease

- external haemorrhaging on returning salmon noted in at least five European countries
- associated mortality due to secondary fungal infections
- workshop hosted by the Norwegian Institute for Nature Research (NINA) concluded that, despite extensive investigations, no attributable cause could be established

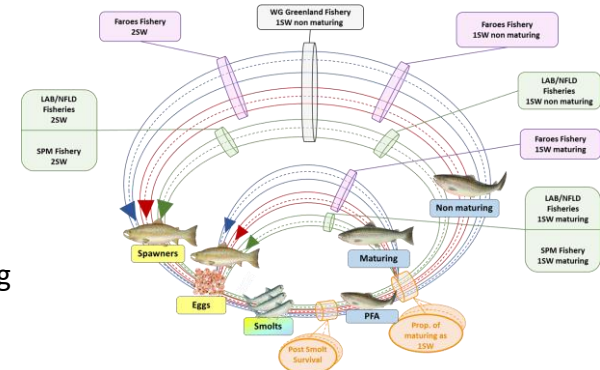


2.4 Data Call Review and Update

- The 2019 Data Call for Atlantic Salmon catch data from the North Atlantic to ICES Member Countries was reviewed and updated for clarity and consistency for the 2020 Data Call.

2.5 Progress in stock assessment models

- Life Cycle Model – one model that includes all stock units and provides catch options for West Greenland and Faroes salmon fisheries simultaneously has been developed
- Next step: a workshop of jurisdictional experts is required to formalise the new modelling framework prior to applying and comparing model outputs during the 2021 WGNAS annual meeting



ICES WGNAS 2020 Report – Annex 7

Identify relevant data deficiencies, monitoring needs and research requirements



The ICES WGNAS Working Group recommends:

1. Creation of a ICES coordinated PIT tag database to facilitate the identification of tagged fish taken in marine fisheries or surveys.
2. Complete and timely catch statistic reporting from Canadian fisheries.
3. Improved catch statistics and sampling of the Labrador subsistence and Saint Pierre and Miquelon fisheries.
4. Consideration be given to additional monitoring in Labrador to estimate stock status for that region.
5. Continued effort by the Government of Greenland to improve the reporting system of catch in the Greenland fishery.
6. Consideration be given to expanding the West Greenland sampling programme to provide improved spatial and temporal coverage.
7. Conducting a modelling workshop with jurisdictional experts of the WGNAS ahead of the 2021 WGNAS meeting to formalize the workflow of the proposed life cycle modelling framework and train participants.



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Photo by Nick Hawkins