



North American Commission

NAC(20)09

***Presentation of the ICES Advice on
Atlantic Salmon to the North American Commission***

sal.nac.all

Atlantic salmon from North America



Terms of Reference



3. With respect to Atlantic salmon in the North American Commission area:

- 3.1 describe the key events of the 2019 fisheries (including the fishery at Saint Pierre and Miquelon);
- 3.2 update age-specific stock conservation limits based on new information as available, including updating the time-series of the number of river stocks with established CLs by jurisdiction;
- 3.3 describe the status of the stocks, including updating the time-series of trends in the number of river stocks meeting CLs by jurisdiction;



- ICES advises that when the Framework of Indicators (FWI) was applied in early 2020, a full reassessment was not required and the 2018 ICES advice remains valid
- no mixed-stock fishery options on 1SW non-maturing and 2SW salmon components from North American stocks in 2020
- 2020 marks the final year of NASCO's three year multi-annual regulatory measure for fishing Atlantic salmon at West Greenland

3.1 Key Events 2019 Fisheries: Catch



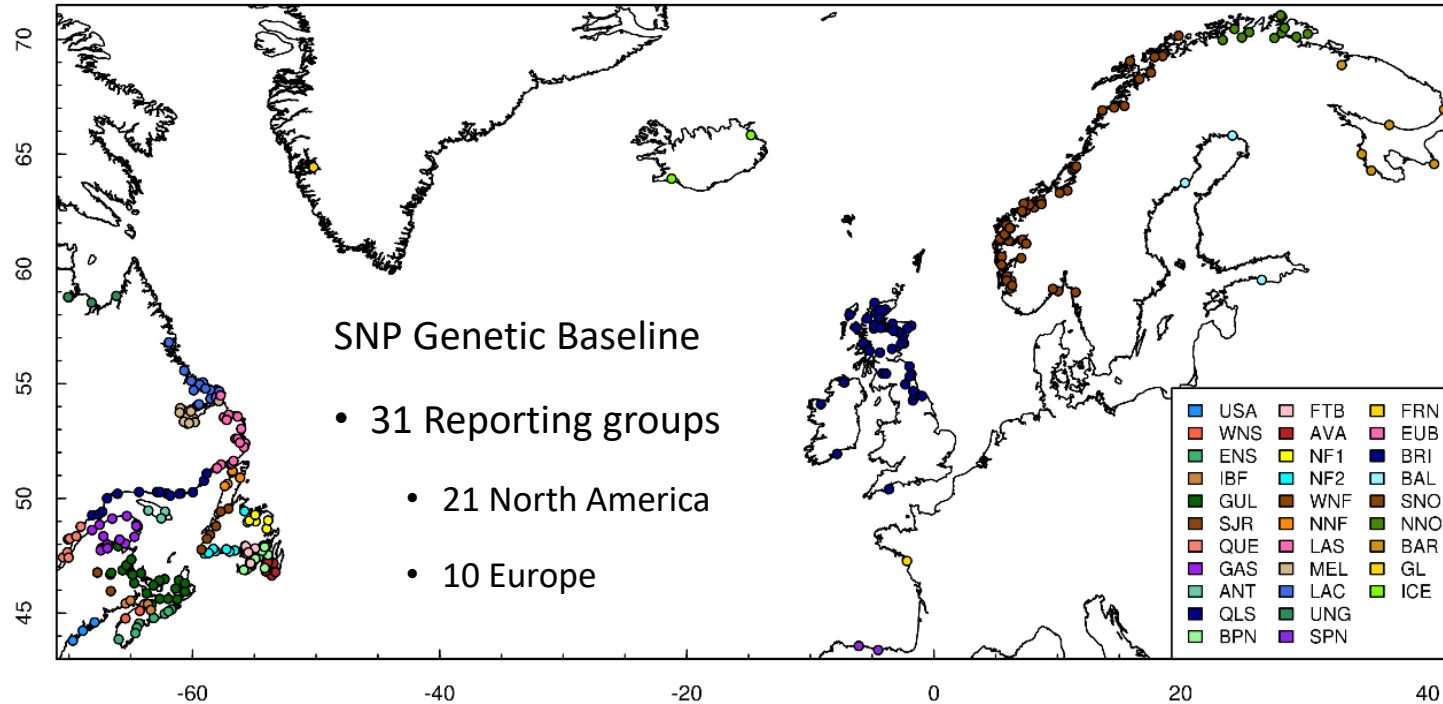
- North America: 95.1 t
 - 93.8 t Canada - 2nd lowest in time-series
 - 1.3 t Saint Pierre and Miquelon (France) - 4th lowest in time-series
 - 0 t USA

Table 1: sal.nac.all

2019	Canada					Saint Pierre & Miquelon (SPM)	USA	North America
	Commercial	Indigenous (FSC)	Labrador Resident	Recreational	Total			
Reported Catch (t)	0	54	2	38	94	1	0	95
% of NAC total	-	57%	2%	40%	99%	1%	0%	
Unreported catch (t)					12	-	0	12
Location of catches								
% in-river					52%	0		52%
% in estuaries					41%	0		40%
% coastal					7%	100%		8%

3.1 Origin and Composition of Catches

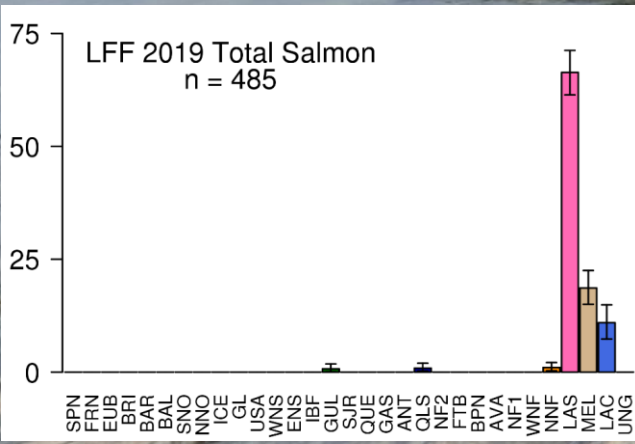
Figure 4: sal.nac.all



3.1 Origin and Composition of Catches: Labrador



Figure 5: sal.nac.all



2019:

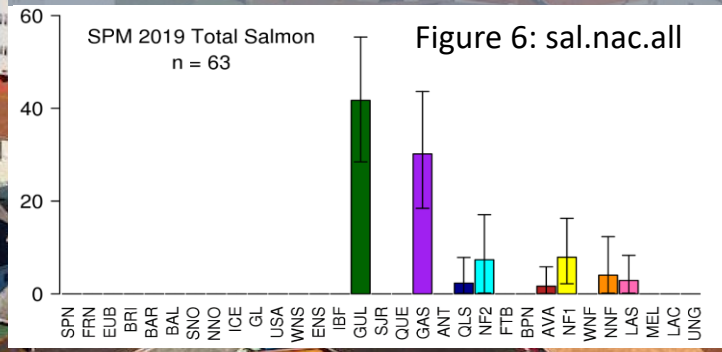
- 867 scale and tissue samples collected
- 6% of harvest by number
- 485 samples with genetic origin
- emphasis on samples from coastal areas where interception of non-local stocks more prevalent
- > 98% assigned to Labrador genetic groups
- no USA origin salmon detected in 2018 and 2019

3.1 Origin and Composition of Catches: Saint Pierre and Miquelon



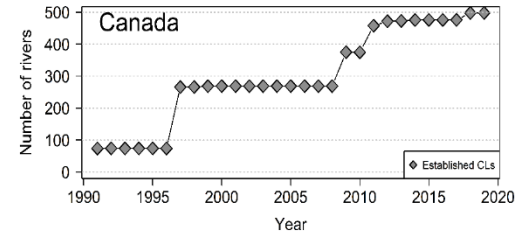
2019:

- 63 scale and tissue samples
- 12% of harvest by number
- 96% to 3 reporting groups
 - 42% Gulf of St. Lawrence
 - 30% Gaspé Peninsula
 - 24% Newfoundland

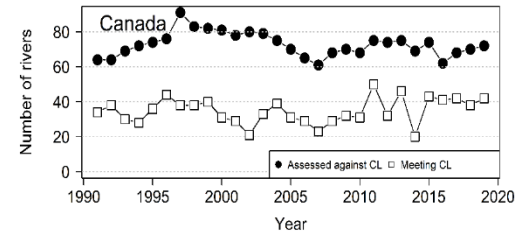


3.2 Stock Conservation Limits (CLs)

Figure 7: sal.nac.all

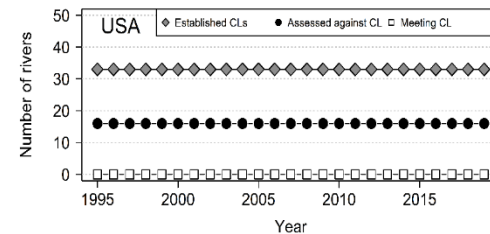


498



72

42



33

16

0

3.3 Salmon Returns



Small Salmon (1SW)

- 332,100
- 22% lower than 2018
- 8th lowest in time-series
- 87% to Newfoundland and Labrador

Large Salmon (MSW and repeats)

- 103,900
- 15% lower than 2018
- 3rd lowest in time-series
- 75% to Labrador, Quebec and Gulf

2SW Salmon (subset of Large)

- 59,900
- 28% lower than 2018
- 2nd lowest in time-series
- 92% to Labrador, Quebec and Gulf

Figure 8: sal.nac.all

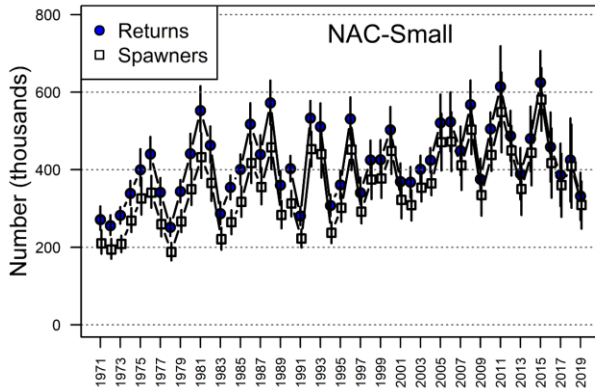


Figure 9: sal.nac.all

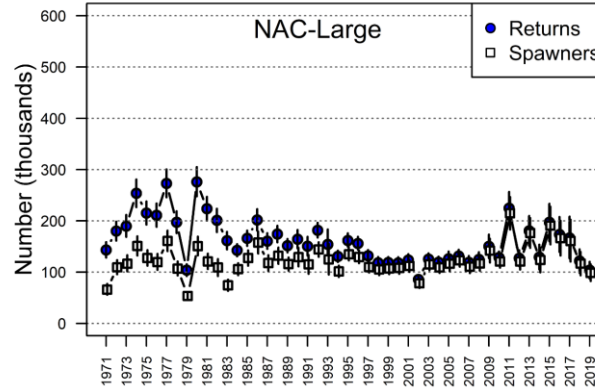
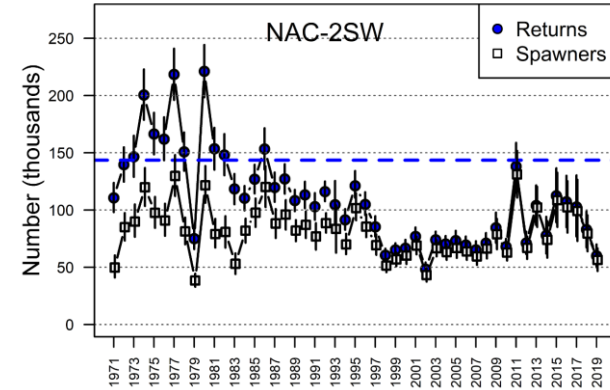


Figure 10: sal.nac.all



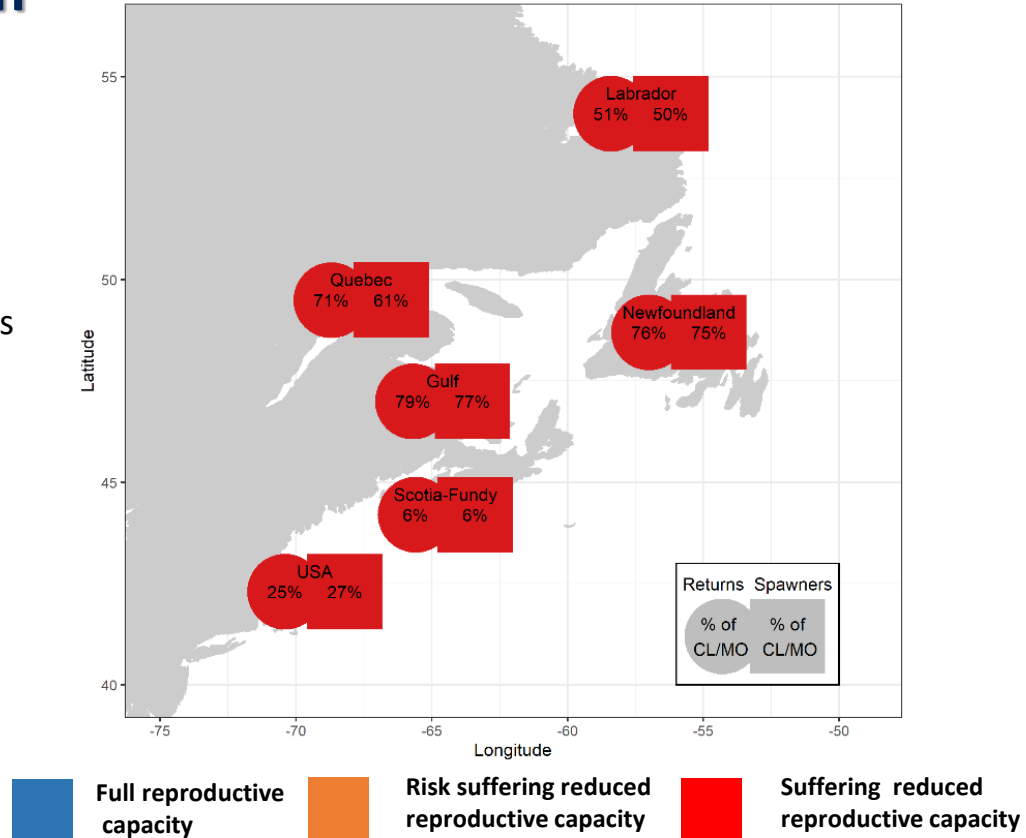
3.3 Status of Stocks: By Region

2019:

- 2SW returns and spawners suffering reduced reproductive capacity in all six assessment regions
- Particularly large deficits are noted for Scotia-Fundy (6%) and USA regions (27%)

Figure 11: sal.nac.all

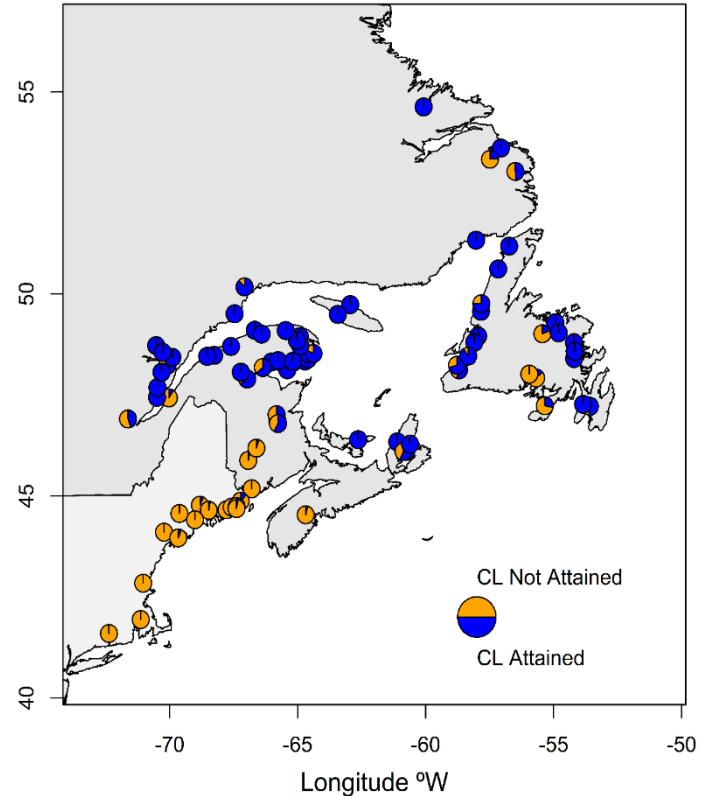
2SW returns and spawners by regions



3.3 Degree of CL Attainment

- Proportion CL Attained = egg deposition / CL
 - 42 of 86 (49%) achieved or exceeded CLs
 - 28 of 86 (33%) were at, or less, than 50% CL
- Canada
 - 1991-2019 CL time-series
 - Number of rivers assessed ranged from 61 to 91
 - percentage rivers achieving CL ranged from 26% to 67% (59% in 2019)
- USA
 - None of the assessed rivers have achieved CLs

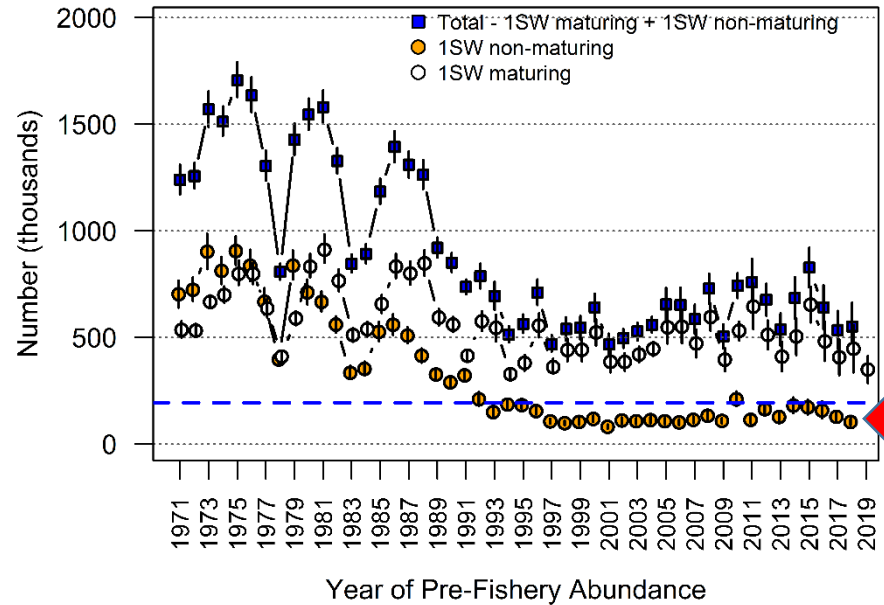
Figure 12: sal.nac.all



3.3 Pre-Fishery Abundance (PFA)

- PFA: salmon at sea prior to all marine fisheries (1 August second summer at sea)
 - Two components:
 - 1SW maturing (return as 1SW)
 - 1SW non-maturing (return as MSW)
- 2018 PFA year was 551,700 fish
 - declined 66% over the time-series
 - suffering reduced reproductive capacity

Figure 13: sal.nac.all



3.3 Stock Status Summary

- Atlantic salmon returns remain near historical lows
- all USA and Scotia-Fundy populations at risk
- factors acting on survival at sea are constraining the abundance of salmon
- smolt production declines may be contributing to lower returns in some rivers

