



## A Backgrounder from

### Atlantic Salmon Federation

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## State of the Atlantic Salmon Populations North America - May 2011

The 2011 Status Report by the International Council for the Exploration of the Sea (ICES) for Atlantic salmon numbers shows the large component of Atlantic salmon struggling to rebound in numbers, while harvests continue to take a toll both in Canadian and in Greenland waters. A special concern must be expressed for increased risk to endangered or threatened populations of wild Atlantic salmon in the southern portions of their North American range.

### Scientific information for Large Salmon\*

- Overall status in North America: all areas are below their conservation limits
- 62,470 is the estimate of TOTAL number of these 2SW salmon returning to North America's rivers.
- Return number is 12% lower than previous 10-year-average
- Return number is second lowest in the past 40 years

### Regional Perspective 2010 – 2-sea-winter (Large) Atlantic salmon

Region	Rank of 2010 salmon returns**	Comparison of Returns to 2009
Labrador	29	Down 65%
Newfoundland	37	Down 51%
Québec	31	Up 7%
Gulf	34	Down 14%
Scotia-Fundy	37	Down 11%
USA	33	Down 21%

\*\*In the 40 years of data from 1970, the number 40 represents the worst year, and 1 represents the best year.

### Grilse Returns:

- 2010 had good returns of grilse in some regions, especially in Newfoundland (5th best returns in 40 years of data), in Labrador (15th best) and in Gulf Region (16th best).

### Labrador of Special Concern:

#### Factors Impacting Atlantic salmon in Labrador:

Assessments conducted by DFO in three rivers only - insufficient to monitor the populations of 310 salmon rivers

- Some fisheries taking place in coastal waters target mixed-populations of salmon. While scale sampling has taken place, it cannot conclusively prove endangered salmon migrating to the rest of Canada and the USA along the coast are not being taken
- ICES recommends that genetic analysis (not now being conducted) is needed to identify the origin of harvested fish. It suggests this take place in 2011.
- Estimated 4% of Canada's Atlantic salmon harvest occurs in coastal waters. This is principally on the Labrador coast, where salmon from populations at critically low levels are returning towards home rivers in Maine, NB and NS. Genetic testing would assist understanding of the issue.

### \*Atlantic Salmon Life Cycles

Atlantic salmon have two types of populations based on life cycles:

- **Grilse** are small salmon that return as mature fish to their rivers after a single winter at sea having travelled to ocean feeding grounds a few hundred km. distant
- **Large Atlantic salmon** that travel to distant feeding grounds, usually near Greenland, and return after two or more winters, are able to lay thousands more eggs when compared to the smaller grilse.
- Each plays a part in ensuring the survival of our Atlantic salmon runs, but the large egg-bearing females returning from Greenland waters are critical to the future of this species.

## Canadian Kill of Wild Atlantic Salmon in 2010

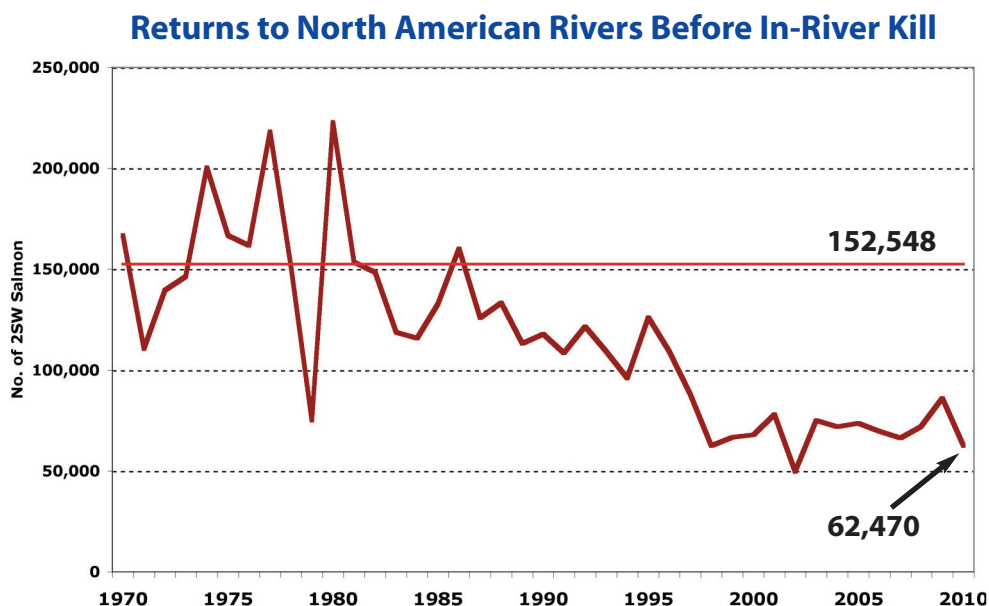
- **Total harvest** 146 tonnes, 17% larger than 2009, and 30% above latest 5-year average
- Includes 10,988 large salmon, a decline in harvest of 2% from 2009 and 54,116 grilse, an increase of 26%
- **Recreational anglers** took 84.3 t.:
  - 3,200 large salmon
  - 40,900 grilse
- Anglers released 62% of catch (22,714 large, 35,564 grilse)
- 2011: Large salmon will no longer be harvested by anglers in Labrador, a significant measure of conservation leadership.
- **First Nations Food Fishery**
  - 59.3 tonnes, a 16% increase over 2009. The number includes 33.5 tonnes in Labrador.
- **Labrador Resident Food Fishery:** 2.3 tonnes in 2010
- **Total Fishery (First Nations & Resident)** impacting Labrador: 35.8 t. (3,700 large salmon & 10,000 grilse)

## Greenland

- At NASCO, Greenland fishermen have agreed since 2003 to forego their right to a commercial salmon fishery and limit themselves to an internal consumption fishery (ICF). The ICF has risen dramatically.
- 2010: 43.0 tonne harvest in West Greenland, 80% of North American origin
- 2010 harvest is a 54% increase over 2009 harvest of 28 tonnes
- 2010 harvest is a 258% increase over the ICF of 12 tonnes in 2003
- 10,000 Large Salmon from North America harvested in 2010

## Multiple Stresses on Atlantic salmon

- Stresses on wild Atlantic salmon do not act singly. In addition to overfishing, Atlantic salmon are subject to competition, disease and parasites and genetic degradation from escaped farmed salmon, inadequate passage past dams, habitat loss, and environmental influences.



*Estimated number of 2SW Atlantic salmon returning to rivers in North America. The numbers of returns are after mortality at sea and harvest in coastal areas of Labrador, but before in-river harvests. The Conservation Limit (CL), the number required for sustainability, is 152,548 (ICES data)*