

Briefing Information on Stock Status of Atlantic Salmon to 2013

Overall summary of stock status

- Preliminary harvest estimate in 2013 was 136 t. Revised value for 2012 of 126 t (down from preliminary value of 135 t)
 - Aboriginal peoples: 58.6 t
 - residents fishing for food in Labrador: 2.1 t
 - recreational fisheries: 75.4 t
 - Commercial fisheries - closed
- Returns to North America in 2013 of large salmon were up slightly from 2012 but down from 2011 in all regions and remain low relative to the history of abundance.
- Returns of small salmon were comparable to the low returns of 2012 and much lower than 2011.
- Estimates of pre-fishery abundance (in the second summer at sea, prior to marine fisheries) for the 2012 year are down from 2011 but comparable to 2010, but remains low compared to abundance of the 1970s and mid 1980s
- In 2013, conservation requirements by all size groups of salmon were met in 67% of 66 assessed rivers, compared to 42% of 74 assessed rivers in 2012.
- Continued severe deficits to conservation requirements in the Scotia-Fundy area of the Maritime provinces, although improved in 2013 relative to previous years

Recovery Potential Assessments were conducted for the five Designatable Units of Atlantic Salmon assessed by COSEWIC (Committee on the Status of Endangered Wildlife in Canada) as threatened or endangered:

- **South Newfoundland (DU 4, Threatened)** – The DU has a low probability of extinction. Under contemporary marine survival rates, the probability of meeting or exceeding the recovery target within the next fifteen years was improved by reducing recreational fishery mortality rates.
- **Anticosti (DU 9, Endangered)** – The DU has a low probability of extinction. If survival and carrying capacity remain the same, the probability of meeting or exceeding the recovery target within the next fifteen years was improved by reducing sport fishery mortality rates.
- **Eastern Cape Breton (DU 13, Endangered)** – The probability of extinction for the two populations (considered to be two of the healthier populations) with enough information to model population dynamics is low if conditions in the future are similar to those in the recent past. Neither population is expected to reach and remain above conservation requirements unless overall productivity (including reproduction and/or survival) is improved.
- **Southern Upland (DU 14, Endangered)** – Significant ongoing declines and river-specific extirpations continue. High probability of extirpation in the absence of human intervention or a change in survival rates. Relatively small increases in either freshwater productivity or marine survival are expected to decrease extinction probabilities, although larger changes in marine survival are required to restore populations to levels above conservation requirements.
- **Outer Bay of Fundy (DU 16, Endangered)** – Populations are at risk of extinction. Increases in both freshwater productivity and marine survival are required to meet recovery targets with higher probabilities.

Catches and status of Atlantic salmon in Canada for 2013

Provisional catch in 2013 for Canada was 136 t, for St. Pierre & Miquelon 5.3 t, and at West Greenland 47 t.

Final catches for Canada for 2012 were 126 t, a decrease of 9 t from preliminary values for 2012.

Nominal catch of Atlantic salmon (t, round fresh weight) in the North Atlantic.

Data for 2012 are finalized values, data for 2013 are provisional and are taken from the ICES Working Group on North Atlantic salmon report for April 2014.

Year	NAC			Total	NEAC Total	High seas fisheries				Total North Atlantic
	Canada	USA	St.P. & M.			Faroes	East Gr	WestGr	Other	
1980	2,680	6	-	2,686	5,434	536	<0.5	1,194	277	10,127
1981	2,437	6	-	2,443	4,909	1,025	<0.5	1,264	313	9,954
1982	1,798	6	-	1,804	4,471	606	<0.5	1,077	437	8,395
1983	1,424	1	3	1,428	5,873	678	<0.5	310	466	8,755
1984	1,112	2	3	1,117	4,769	628	<0.5	297	101	6,912
1985	1,133	2	3	1,138	5,533	566	7	864	-	8,108
1986	1,559	2	3	1,563	6,183	530	19	960	-	9,255
1987	1,784	1	2	1,787	4,830	576	<0.5	966	-	8,159
1988	1,310	1	2	1,313	5,284	243	4	893	-	7,737
1989	1,139	2	2	1,143	4,060	364	-	337	-	5,904
1990	911	2	2	915	3,420	315	-	274	-	4,924
1991	711	1	1	713	2,822	95	4	472	-	4,106
1992	522	1	2	525	3,329	23	5	237	-	4,119
1993	373	1	3	377	3,296	23	-	-	-	3,696
1994	355	0	3	358	3,581	6	-	-	-	3,945
1995	260	0	1	261	3,278	5	2	83	-	3,629
1996	292	0	2	294	2,750	-	0	92	-	3,135
1997	229	0	2	231	2,074	-	1	58	-	2,364
1998	157	0	2	159	2,219	6	0	11	-	2,396
1999	152	0	2	154	2,073	0	0	19	-	2,246
2000	153	0	2	155	2,728	8	0	21	-	2,913
2001	148	0	2	150	2,876	0	0	43	-	3,069
2002	148	0	2	150	2,495	0	0	9	-	2,654
2003	141	0	3	144	2,303	0	0	9	-	2,456
2004	161	0	3	164	1,977	0	0	15	-	2,156
2005	139	0	3	142	1,999	0	0	14	-	2,155
2006	137	0	3	140	1,870	0	0	22	-	2,032
2007	112	0	2	114	1,409	0	0	25	-	1,548
2008	148	0	4	152	1,518	0	0	26	-	1,696
2009	126	0	3	122	1,151	0	1	26	-	1,313
2010	153	0	3	156	1,414	0	2	38	-	1,609
2011	179	0	4	182	1,420	0	<0.5	27	-	1,629
2012	126	0	3	129	1,229	0	0.5	33	-	1,411
2013	136	0	5	141	1,114	0	0.0	47	-	1,296

St. Pierre et Miquelon reported catch in 2013 was 5.3 t, the highest of the time series.

Year	NUMBER OF LICENCES		REPORTED LANDINGS (TONNES)		Total
	Professional	Recreational	Professional	Recreational	
1995	12	42	0.392	0.445	0.837
1996	12	42	0.951	0.617	1.568
1997	6	36	0.762	0.729	1.491
1998	9	42	1.039	1.268	2.307
1999	7	40	1.182	1.140	2.322
2000	8	35	1.134	1.133	2.267
2001	10	42	1.544	0.611	2.155
2002	12	42	1.223	0.729	1.952
2003	12	42	1.620	1.272	2.892
2004	13	42	1.499	1.285	2.784
2005	14	52	2.243	1.044	3.287
2006	14	48	1.730	1.825	3.555
2007	13	53	0.970	0.977	1.947
2008	9	55	Na	Na	3.54
2009	8	50	1.87	1.59	3.46
2010	9	57	1.00	1.78	2.78
2011	9	56	1.76	1.99	3.75
2012	9	60	1.05	1.75	2.80
2013	9	64	2.29	3.01	5.30

Sampling of the SPM fishery in 2013

Sampling of the salmon catches was conducted in 2013 with 71 samples for genetic stock identification and 74 samples for age analysis from a total of 79 salmon sampled.

The salmon sampled in 2013 were mostly two-sea-winter maiden salmon (49 samples) with fewer one-sea-winter maiden salmon (22 samples) and 3 repeat spawning salmon.

Samples were obtained from the fishery covering the period 17 May to 17 June, 2013. Based on the genetic data, analysis indicated that the sample (n = 71) contained 37% Gaspé Peninsula salmon (30 fish), 34% Newfoundland salmon (23 fish), 22% Maritimes salmon (13 fish), and 7% Upper North Shore Quebec salmon (5 fish). Contributions of the other seven regional groups were all negligible (i.e. <1%; n = 0).

Greenland catch was 47.0 t (including 0.0 t reported caught at East Greenland).

Year	NAFO Division							West Greenland	East Greenland	Total
	1A	1B	1C	1D	1E	1F	NK			
1995	+	10	28	17	22	5	-	83	2	85
1996	+	+	50	8	23	10	-	92	+	92
1997	1	5	15	4	16	17	-	58	1	59
1998	1	2	2	4	1	2	-	11	-	11
1999	+	2	3	9	2	2	-	19	+	19
2000	+	+	1	7	+	13	-	21	-	21
2001	+	1	4	5	3	28	-	43	-	43
2002	+	+	2	4	1	2	-	9	-	9
2003	1	+	2	1	1	5	-	9	-	9
2004	3	1	4	2	3	2	-	15	-	15
2005	1	3	2	1	3	5	-	15	-	15
2006	6	2	3	4	2	4	-	22	-	22
2007	2	5	6	4	5	2	-	25	-	25
2008	5	2	10	2	3	5	0	26	-	26
2009	0.2	6	7	3	4	5	0	26	1	26
2010	17	5	2	3	7	4	0	38	2	40
2011	2	4	5	8	4	5	0	27	+	28
2012	5	1	15	5	4	3	0	33	+	33
2013	3	2	18	13	6	4	0	47	0	47

+ small catch < 0.5 t

West Greenland Fishery Management in 2013

- Reported harvest in 2013 of 47.0 t, with no report of from east Greenland (not included in the assessment)
- Factory landings of 25.6 t were reported.
- 95 people reported catches in 2013, compared to 122 in 2011 and 117 in 2011.
 - Total of 553 reports were received by Greenland Home Rule government
 - Low catches in northern divisions 1A and 1B and highest catches in divisions 1C and 1D
- 82% of the samples from the fishery were of North American origin (82% in 2012, 92% in 2011).
- Adjusted catch in 2013 of 0.7 t due to samplers sampling more fish than reported.
- Weighted by catch 11,500 fish were of North American origin, 95% 1SW non-maturing (would have become 2SW salmon in 2014)

Sampling initiatives at West Greenland

- Samplers in 2013 were from Greenland Nature Institute, Canada (one from Quebec), Ireland, UK (Scotland), UK (England & Wales), and USA (one sampler).

- Canadian sampler – Denise Deschamps (MRNF Quebec), travel (\$12 K) paid by DFO Science
- Sampling coordination by USA
- Genetic analysis by USA
- Scale sample analysis and database coordination by Canada (DFO Newfoundland)
- No tag recoveries from the 2013 fishery by samplers, very unusual, one tag submitted by a fisherman

Estimate of unreported catch for 2013 for Canada = 24 t.

Year	location of unreported catches				total Canada	reported catch Canada	unreported as % of reported	USA	SPM	NAC total
	fw	estuary	marine	not speci- fied						
1987					234	1,784	13.1%			2,018
1988					161	1,310	12.3%			1,471
1989					174	1,139	15.3%			1,313
1990					111	911	12.2%			1,022
1991					127	711	17.9%			838
1992					137	522	26.2%			659
1993					161	373	43.2%			534
1994					107	355	30.1%			462
1995					98	260	37.7%			358
1996					156	292	53.4%			448
1997					90	229	39.3%			319
1998					91	157	58.0%			248
1999					133	152	87.5%			285
2000					124	153	81.0%	0		277
2001					81	148	54.7%	0		229
2002					82.7	148	55.9%	0		231
2003					118	141	83.7%	0		259
2004					101	161	62.6%	0		262
2005					85	139	61.4%	0		224
2006					56	137	41.0%	0		193
2007 ¹					-	112	-	0		-
2008 ¹					-	158	-	0		-
2009 ²				15.7	15.7	126	12.5%	0		142
2010 ²				15.2	15.2	153	9.9%	0		168
2011				48.9	48.9	179	27.4%	0		227
2012	9.9	5.4	0.1	15.3	30.6	126	24.2%	0		157
2013	6.8	3.2	0.2	13.8	23.9	136	17.5%	0		160

¹ no data for Canada

² incomplete data for Canada

Users and location of catches

- no commercial fisheries in Canada in 2013 (since 2000).
- Fisheries principally managed on a river-by-river basis and, in areas where retention of large salmon is allowed, it is closely controlled.
- Three user groups exploited salmon in Canada in 2013
 - Aboriginal peoples: 58.6 t
 - residents fishing for food in Labrador: 2.1 t
 - recreational fisheries: 75.4 t
- In 2013, most catches (93%) in Canada took place in rivers or in estuaries.
 - remainder (7%) of the catches which occur in coastal waters (9.6 t) are for the Labrador subsistence fisheries which are mainly located close to river mouths

In 2013 (prelim)						
Fishery / Pêche	In freshwater / en rivière		Estuary / en estuaire		Coastal / côtier	
	kg	% by location / par endroit	kg	% by location / par endroit	kg	% by location / par endroit
Recreational / récréative	75,434	100.0%				
Aboriginal and/or resident food fisheries Pêches autochtones et pêches d'alimentations des résidents du Labrador						
Nova Scotia / Nouvelle-Écosse	298	100.0%	0		0	
New Brunswick / Nouveau-Brunswick	1047	14.5%	6,176	85.5%	0	
Prince Edward Island / Île-du-Prince-Édouard	0		0		0	
Quebec / Québec	6,439	41.0%	9,266	59.0%		
Labrador	0		27,911	74.4%	9,614	25.6%
Subtotals / sous-totaux	7,784	12.8%	43,353	71.4%	9,614	15.8%
Total	83,218		43,353		9,614	
% by location / par endroit	61.1%		31.8%		7.1%	

Aboriginal Fisheries

In Québec and in DFO Gulf Region, Aboriginal peoples' food fisheries took place subject to agreements or through permits issued to the bands. In Labrador (SFAs 1 and 2), food fishery arrangements with the Labrador Inuit Association, the Innu First Nation, and the NunatuKavut Community Council (formerly the Labrador Metis Nation), resulted in fisheries in estuaries and coastal areas. The permits generally stipulate gear, season, and catch limits. Aboriginal fisheries occurred in rivers and estuaries where retention angling fisheries also occurred.

Harvests in 2013 are provisional and total 58.6 t. There continues to be incomplete reporting of aboriginal fisheries harvests even though reporting is a condition of licence.

Aboriginal harvests / récoltes autochtones			
Year / Année	Harvest / Récolte (t)	% large / % grands	
		By weight / par poids	By number / par nombre
2003	44.3	72	49
2004	60.8	66	44
2005	56.7	57	34
2006	61.4	60	39
2007	47.6	61	40
2008	62.4	66	43
2009	51.2	65	45
2010	59.3	59	38
2011	70.4	63	41
2012	59.6	62	40
2013	58.6	68	51

Residents fishing for food in Labrador

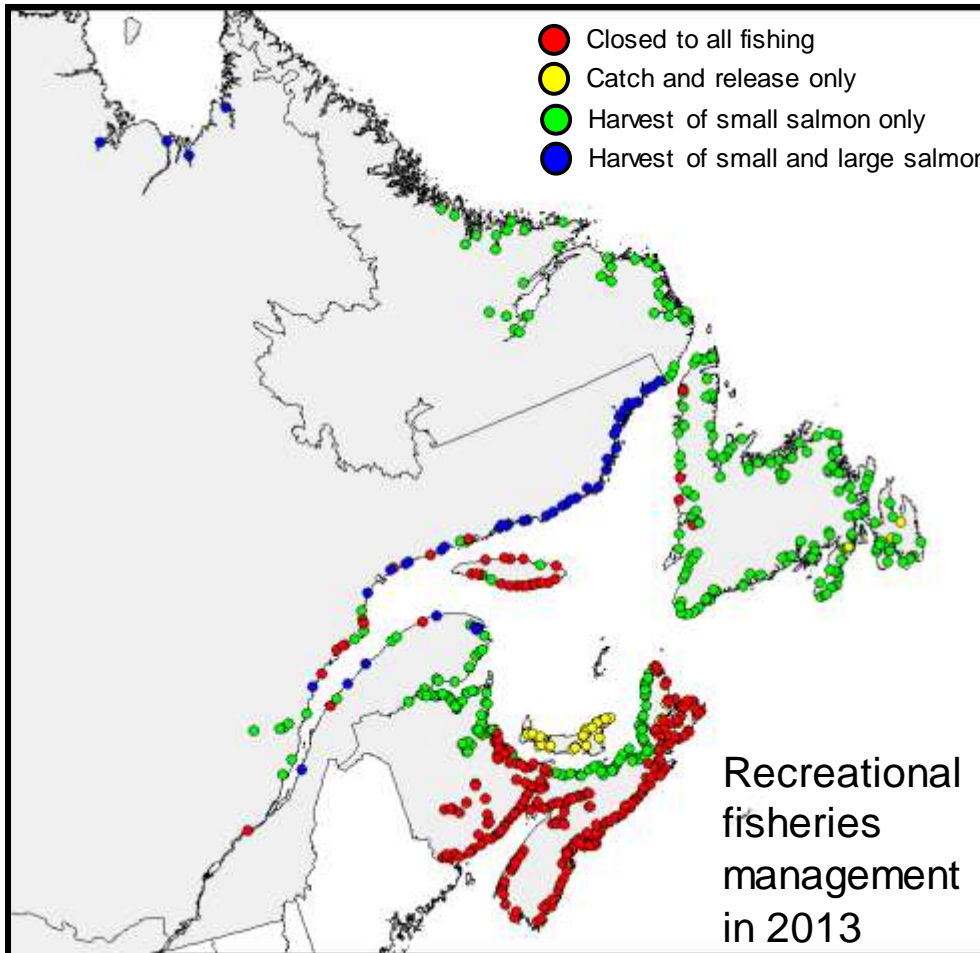
The resident food fishery occurs in Lake Melville and southern Labrador coastal communities from Cartwright to Cape St. Charles. The Labrador residents fishery includes non-aboriginal peoples and the fishery permitted a retention to a maximum of three salmon of any size while fishing for trout and charr in 2013. The fishery was initiated in 2000.

The 2013 reported catch of 2.1 t. Many people who declared themselves resident previously are likely reporting under the aboriginal designations.

Year / Année	Harvest / Prélèvement (t)	Number of fish / Nombre de poissons	% large by number / % grand par nombre
2000	5.6	2,300	21%
2001	5.0	2,100	24%
2002	5.9	2,700	17%
2003	6.8	3,000	21%
2004	2.2	880	25%
2005	2.7	1,150	20%
2006	2.6	1,052	27%
2007	1.7	733	13%
2008	2.2	830	25%
2009	2.9	1,119	28%
2010	2.3	990	25%
2011	2.1	51	37
2012	1.7	47	32
2013	2.1	67	52

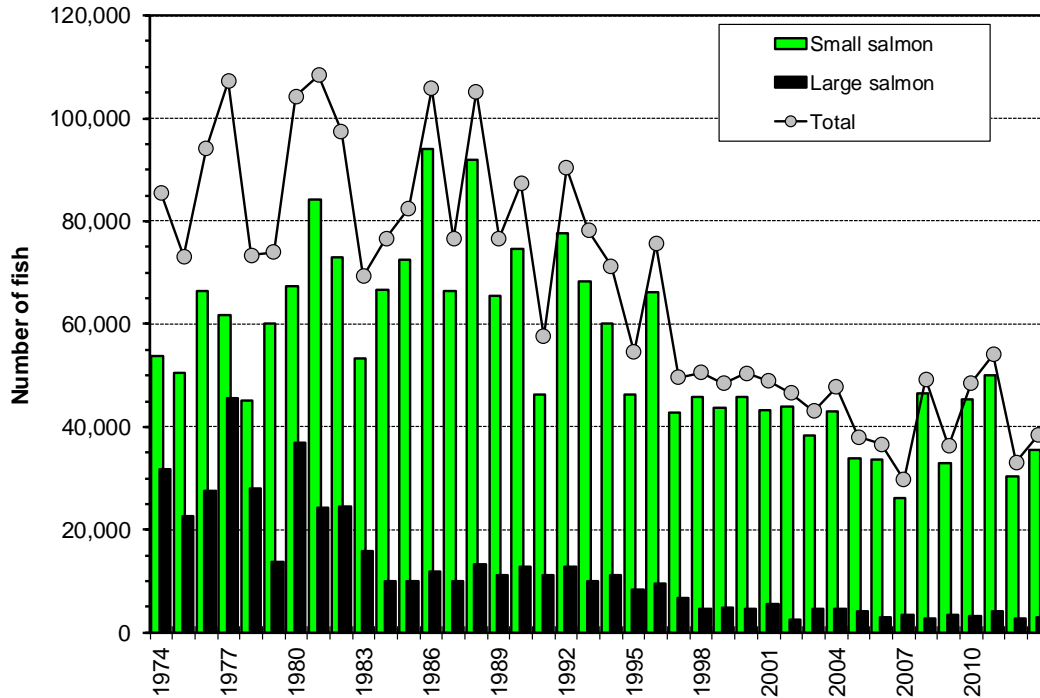
Recreational Fisheries

A large portion of the Maritime provinces and Anticosti Island were closed to salmon angling. Large salmon retention is only allowed in 42 rivers in Quebec. This management plan was similar to that of 2004 to 2012, with a few river-specific differences.



Catch and harvests in 2013 in recreational fisheries

- harvest (killed) was 75.4 t; 38,559 fish (35,627 small; 2,935 large)
- greater than the aboriginal fisheries harvests (by weight and number)



By province - recreational					
	small salmon				
	Catch / capturé	Retained / récolté	Released	% catch of total	
Nfld & Labrador	54,963	28,723	47.7%	75.6%	
Québec	5,996	2,896	51.7%	8.2%	
New Brunswick	10,425	3,888	62.7%	14.3%	
Nova Scotia	1,277	120	90.6%	1.8%	
Prince Edward Isl	46	0	100.0%	0.1%	
Total	72,707	35,627	51.0%	100.0%	
	large salmon				
	Catch / capturé	Retained / récolté	Released	% catch of total	
Nfld & Labrador	8,119	0	100.0%	21.8%	
Québec	12,259	2,932	76.1%	32.9%	
New Brunswick	12,466	0	100.0%	33.5%	
Nova Scotia	4,320	0	100.0%	11.6%	
Prince Edward Isl	46	0	100.0%	0.1%	
Total	37,210	2,932	92.1%	100.0%	

- 51% of small salmon angled were released
- 92% of large salmon angled were released

In terms of recreational catch, 61% of fish angled (retained plus released) were released

- 59,207 fish

Year / Année	Newfoundland & Labrador	Quebec	New Brunswick	Nova Scotia	Prince Edward Island	Canada		
						Small / petit	Large / grand	Total
1999	28,720	2,991	13,912	2,748	349	31,250	17,470	48,720
2000	36,184	4,453	15,379	1,710	147	37,347	20,526	64,482
2001	27,532	5,483	17,418	1,726	305	30,052	22,412	59,387
2002	27,063	5,770	12,700	1,929	238	32,310	15,390	50,924
2003	26,344	8,253	13,356	2,732	363	28,858	22,190	53,645
2004	28,598	8,746	15,617	3,167	203	33,201	23,130	62,316
2005	39,727	7,561	8,279	3,550	166	37,956	21,327	63,005
2006	36,185	7,276	9,724	3,422	170	36,910	19,867	60,486
2007	22,326	6,343	10,003	2,416	104	22,592	18,600	41,192
2008	30,233	9,074	12,491	3,077	12	33,967	20,920	54,887
2009	30,953	7,271	10,561	3,335	31	30,835	21,316	52,151
2010	32,714	9,039	11,390	2,683	69	35,101	20,794	55,895
2011	34,359	12,427	19,003	5,477	92	37,080	34,278	71,358
2012	25,029	8,300	7,834	2,032	92	25,955	17,332	43,287
2013	35,988	10,055	10,695	2,434	35	33,520	25,687	59,207

The practice of catch and release in rod fisheries has become increasingly common on both sides of the Atlantic

- 185,000 salmon (size groups combined) were reported released in North Atlantic in 2013 (partial estimate as not all countries reported as in previous years).

Specific to Labrador aboriginal and resident food fisheries

This fishery has been controversial, with substantial pressure from NGOs and angling groups to control and reduce it. It is considered to be a mixed stock fishery and is exploited with gill nets.

The subsistence fisheries are comprised of a larger component of aboriginal fisheries and a smaller resident food fishery component. Logbooks are completed by participants, participation rate remains very high (> 80%) which is greater than returns provided by anglers in Maritimes and Newfoundland.

In 2013, the Labrador subsistence fisheries harvested a reported 37.5 t, the second highest of the time series since 1999.

Labrador subsistence fisheries (aboriginal and resident)								
Year	Harvest by weight (t)			Harvest by number			% large	
	Small	Large	Total	Small	Large	Total	By weight	By number
1999	5.6	4.2	9.8	2,739	1,084	3,823	43.1%	28.4%
2000	10.4	5.3	15.6	5,323	1,352	6,675	33.7%	20.3%
2001	9.8	6.5	16.3	4,789	1,721	6,510	39.9%	26.4%
2002	11.6	6.0	17.6	5,806	1,389	7,195	34.1%	19.3%
2003	13.2	8.9	22.1	6,477	2,175	8,652	40.3%	25.1%
2004	17.4	14.3	31.6	8,385	3,696	12,081	45.1%	30.6%
2005	21.0	10.9	31.9	10,436	2,817	13,253	34.1%	21.3%
2006	21.2	11.5	32.7	10,377	3,090	13,467	35.2%	22.9%
2007	17.1	9.4	26.5	9,207	2,652	11,859	35.5%	22.4%
2008	19.4	17.0	36.4	9,835	3,909	13,744	46.7%	28.4%
2009	16.1	13.7	29.8	7,988	3,344	11,332	45.9%	29.5%
2010	20.5	15.1	35.6	9,867	3,725	13,595	42.3%	27.4%
2011	23.1	18.2	41.4	11,138	4,451	15,589	44.1%	28.6%
2012	18.7	17.8	36.6	9,977	4,228	14,204	48.7%	29.8%
2013	14.7	22.9	37.5	7,190	6,495	13,684	61.0%	47.5%

Below is a table that shows number of fish harvested from Aboriginal FSC, resident food fishery, and recreational fisheries in Labrador, between 2000 and 2013. The majority of the large salmon and small salmon by number are taken in the aboriginal food fisheries. Since 2011, no retention of large salmon in the recreational fishery was allowed.

Year	Small salmon harvest (by number) / Prélèvements de petits saumons (nombre)			Large salmon harvest (by number) / Prélèvements de grands saumons (nombre)		
	Aboriginal / autochtone	Resident / résidents	Recreational / récréatif	Aboriginal / autochtone	Resident / résidents	Recreational / récréatif
2000	3,993	1,330	2,561	1,054	298	262
2001	3,259	1,530	2,049	1,272	449	338
2002	3,457	2,349	2,071	990	399	207
2003	4,183	2,294	2,112	1,568	608	222
2004	7,733	652	1,808	3,472	224	259
2005	9,515	921	2,007	2,588	228	291
2006	9,608	769	1,656	2,807	283	227
2007	8,567	640	1,762	2,559	93	235
2008	9,215	619	1,688	3,699	210	200
2009	7,182	806	1,355	3,031	313	216
2010	9,135	731	1,477	3,470	255	197
2011	10,637	501	1,628	4,161	290	0
2012	9,542	435	1,376	4,022	206	0
2013	6,839	350	1,420	6,114	381	0

The majority of the Labrador subsistence food fisheries occur in areas classified as estuaries. The coastal catches represented about 9.6 t in 2013.

A sampling program of the subsistence fisheries in Labrador continued in 2013, conducted by the NunatuKavut Community Council (formerly the Labrador Metis Nation), aboriginal guardians, and Conservation Officers of the Nunatsiavut Government. Sampling in 2011 included collection of tissue samples for genetic analyses of stock origin.

In 2013, a total of 544 samples were collected from the Labrador subsistence fisheries, 160 from northern Labrador (SFA 1A), 84 from Lake Melville (SFA 1B) and 300 samples from southern Labrador (SFA 2). The majority of salmon sampled were river ages 3 to 6 years (99%). There were no river age 1 and few river age 2 (1%) salmon sampled, suggesting, as in previous years (2006 to 2012), that very few salmon from the most southern stocks of North America (USA, Scotia-Fundy) were exploited in these fisheries.

A collaborative project between the DFO, the Atlantic Salmon Federation, the Nunatsiavut Government and the NunatuKavut Community Council initiated in 2011 to examine the stock composition of the subsistence catch of salmon in Labrador has provided the first results of the regional origin of salmon from these fisheries.

- Genetic analyses of samples from the Labrador subsistence fisheries from 2006-2011 showed that 85-98% were of Labrador origin, with lower percentages from most other regional groups of North America, including USA origin salmon. Samples from 2012 and 2013 are currently being processed.

Outstanding issues

- The Labrador subsistence fisheries are considered to be mixed-stock fisheries which exploit salmon along the coast from all regions of eastern North America. In contrast to the fishery at West Greenland that harvests 1SW non-maturing salmon that would primarily have returned to Canada as 2SW salmon the next year, the Labrador subsistence fishery catches mostly small salmon which are 1SW of age and do not migrate to Greenland. Of the large salmon catch, it is estimated that about 65% are 2SW salmon which in 2013 represents about 3,800 fish. In 2012, Greenland captured the equivalent of 5,500 2SW salmon.

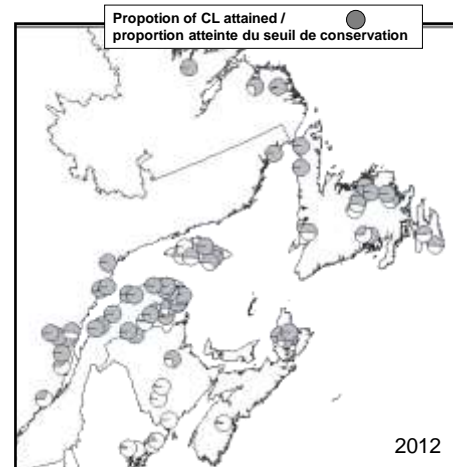
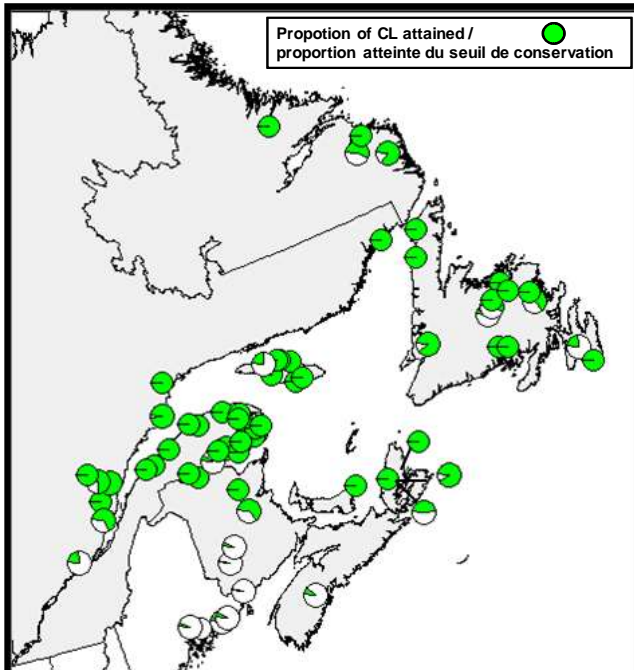
- The resident food fishery is not protected in the constitution. The fishery takes place with gillnets, salmon are a bycatch of a fishery directing for trout and arctic charr. Maximum retention of salmon was reduced to three in 2011, from four in 2010. It has characteristics similar to the salmon fishery in St Pierre et Miquelon (SPM), which is prosecuted by residents of SPM, with the exception that no local sales are allowed in Labrador (local sales are allowed within SPM; the same as in Greenland).

- There is very limited information on status of Labrador salmon populations. Only four rivers are assessed with counting fences. Two of the four rivers met or exceeded conservation in 2013, in contrast to 2012 when only one of three rivers exceeded conservation and in 2011 when all four rivers exceeded conservation requirement.
 - On average over the period 2007 to 2013, three of the four monitored rivers exceeded 100% of the conservation egg requirements and the fourth attained 85% of its requirements
 - It is very difficult to monitor more rivers, for both logistic and financial reasons
 - Effort are being made to use angling data for monitoring stocks

Summary of stock status for North America.

Attainment of conservation limits in Canada

- 66 rivers assessed in 2013
- 67% of rivers met or exceeded the conservation limits, an improvement from 2012 and similar to 2011
- 14% of rivers with less than 50% of conservation limits, mostly in southern part of Canada (Scotia-Fundy area) and in rivers under colonization or development (upper Exploits, Pabos, Jacques Cartier,...)



Canada

Rivers assessed / *Rivières évaluées*

Above CL / *Supérieur au SC*

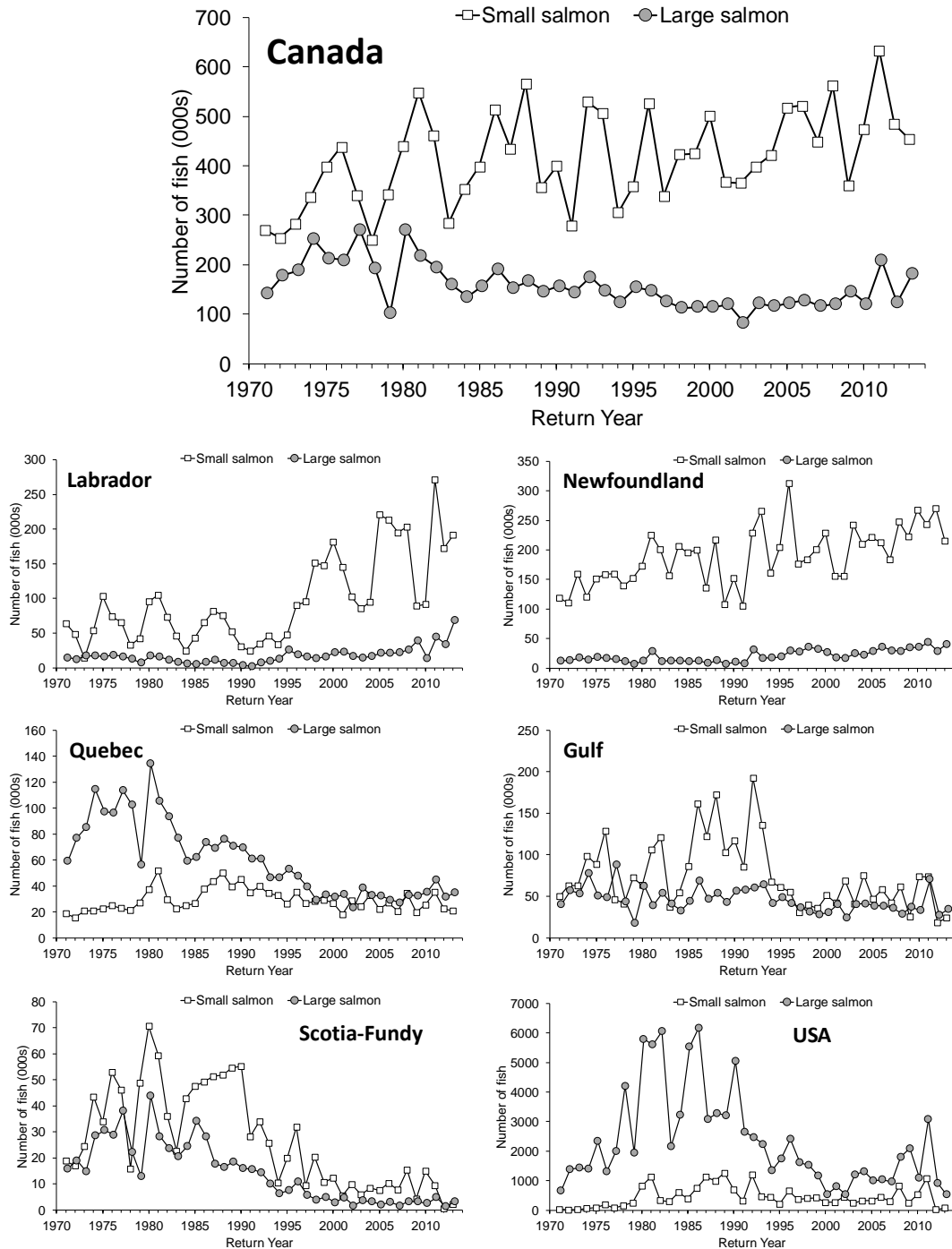
< 50% of CL / *du SC*

2013	2012	2011	2010	2009
66	74	67	65	64
67%	42%	67%	48%	44%
14% ¹	28% ¹	12% ¹	20%	27%

¹ absence of Magaguadavic (2011), St. Croix (2011 to 2013)

Returns to regions

- The abundances of large salmon (multi-sea-winter salmon including maiden and repeat spawners) improved from 2012 in all areas with the exception of the USA for which returns were among the lowest of the time series.
- Abundances of 1SW salmon remained at comparably low levels to those of 2012, and declined in Newfoundland and Quebec. Abundance was much lower than estimated in 2011.



The returns of 2SW fish in 2013 increased slightly from 2012 in four geographic areas, decreased in USA, and increased to the highest levels of the time series for Labrador.

The 2SW salmon returns and spawners in Labrador in 2013 exceeded the 2SW CL for the first time in the time series beginning in 1971. This increased abundance was not realized in the other areas of NAC.

Region	Rank of 2013 returns in 1971 to 2013, (43=LOWEST)		Rank of 2013 returns in 2004 to 2013 (10=LOWEST)		Median estimate of 2SW spawners as percentage of Conservation Limit (% of management objective)
	1SW	2SW	1SW	2SW	
Labrador	6	1	6	1	127
Newfoundland	14	28	7	8	85
Quebec	38	31	8	3	76
Gulf	42	31	9	5	80
Scotia-Fundy	42	33	9	3	12 (27)
USA	37	42	9	10	2 (12)

The estimated PFA of 1SW non-maturing salmon ranked 26th (descending) of the 42-year time-series and the estimated PFA of 1SW maturing salmon ranked 30th (descending) of the 43-year time-series. The continued low abundance of salmon stocks across North America, despite significant fishery reductions, and generally sustained smolt production (from the limited number of monitored rivers) strengthens the conclusions that factors acting on survival in the first and second years at sea are constraining abundance of Atlantic salmon

