ASF's *State of Wild Atlantic Salmon* report

2025

Contents:

i. Glossary

Adult salmon: large and small salmon

Conservation limit: the number of spawning adult salmon required to sustain viable populations, accounting for fisheries.

***Large salmon*:** Atlantic salmon larger than 63 cm that have typically spent two or more winters at sea. These can also be referred to as *multi-sea-winter fish*.

***Small salmon*:** Atlantic salmon less than 63 cm that typically spend a single winter at sea before returning to freshwater to spawn.

Maiden spawner: an Atlantic salmon that returns to its natal river to spawn for the first time in its life.

Repeat spawner: an Atlantic salmon that survives its first spawning event, migrates back to the ocean, and then returns to its natal river to spawn again.

ii. Sources

1. ICES. 2025. Working group on North Atlantic Salmon (WGNAS).
ICES Scientific Reports. 7:44. 435 pp. https://doi.org/10.17895/ices.pub.28777226

iii. Executive summary

ASF's *2025 State of Wild Atlantic Salmon* report is a summary of North American population estimates and harvests from fisheries for 2024. The primary source used in this report is the 2025 ICES report on North Atlantic salmon, which is available here.

ICES reports that adult Atlantic salmon returns to North America in 2024 were among the lowest in more than five decades of monitoring. Small salmon returns were the lowest since 1973 and declined in every region (relative to the most recent five-year mean) except for the US which remained at low levels. Large salmon (multi-sea-winter fish including maiden and repeat spawners) returns fell to the lowest levels in the 55-year time series, with declines observed across all regions relative to the most recent five-year mean.

The sharp downturn in 2024 contrasts with the long-term trend of rebuilding that began after the closure of Canadian commercial fisheries in the early 1990s. Conservation measures remain essential, but they have not been sufficient to counteract broad marine pressures. ICES highlights large-scale marine stressors as drivers of these record-low returns.

These findings underscore the urgent need for continued and expanded conservation actions in freshwater and coastal environments, where management interventions can improve survival and stock resilience. Without such measures, the persistence of wild Atlantic salmon in North America will remain at risk in the face of worsening marine challenges.

iv. Analysis and Actions

ASF works on habitat restoration, applied research, advocacy, and long-term conservation projects. We work throughout Maine, Eastern Canada, and in Greenland.

Freshwater conservation measures continue to be critical, but they are insufficient to offset the widespread marine pressures observed in 2024. Of the 76 rivers assessed for adult spawner abundance and egg depositions, only 25 met or exceeded conservation limits, while more than half fell below 50% of their targets. No rivers in the Gulf of St. Lawrence, Scotia-Fundy, or the United States achieved conservation thresholds, highlighting the urgent need for expanded restoration efforts in these regions.

Habitat restoration and fish passage projects, particularly in Maine's Penobscot River and other U.S. watersheds, continue to show that populations can recover when barriers are removed and access to spawning grounds is restored. International agreements remain essential for supporting the return of adult salmon to North American rivers.

In 2024, we have expanded our freshwater programs (Headwaters and Wild Salmon Watersheds) to help rivers put out more, healthy, wild smolt to the ocean. Our Headwaters program focuses on shovel ready, partner-led projects focused on fish passage and cold-water enhancement. A freshwater restoration project was completed in each of the Eastern Canadian projects, and we have been working to expand Wild Salmon Watersheds into Quebec.

Wild Salmon Watersheds is a 100-year approach to large scale planning, research, and conservation. Both contribute to healthy, biodiverse, and climate resilient freshwater habitat. This past year, smolt wheels were deployed in all of the rivers included in the Wild Salmon Watershed program. Counting smolt will provide population estimates to help monitor the effectiveness of our work. These efforts are also enhancing our understanding of population dynamics and genetics, and will inform future conservation strategies.

ASF will continue to prioritize the expansion of freshwater habitat restoration, support Indigenous-led stewardship, strengthen monitoring and reporting, and advocate for policies that

address impacts on salmon habitats. We will also continue to advocate against the expansion of the open net-pen salmon aquaculture industry, which poses many threats to wild Atlantic salmon.

v. Estimated North American returns and sustainability

Median estimate of Atlantic salmon returns to North America

Adult salmon: 434,700 compared to the previous five-year average of 771,200

Large salmon: 92,000 compared to the previous five-year average of 159,000

Small salmon: 288,300 compared to the previous five-year average of 516,300

ICES Forecasted median estimate of returns to North America

	Small salmon	Large salmon	Total adults
2025	405,700	108,500	**576,700**
2026	485,000	135,200	**695,400**
2027	475,500	156,700	**714,300**
2028	427,900	159,700	**676,100**

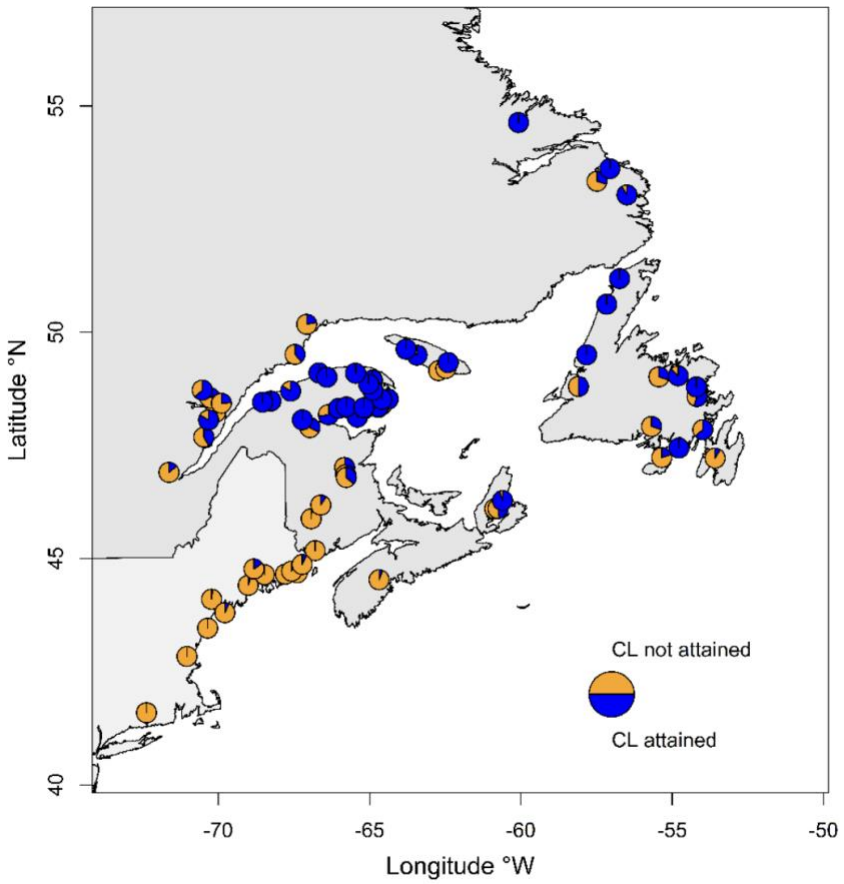
In 2024, ICES introduced a forecasting tool to predict Atlantic salmon returns, marking its first year of application. The tool predicted 386,100 small salmon and 147,400 large salmon—533,500 adult salmon in total—for North America. Actual returns were significantly lower, with 288,300 small salmon and 92,000 large salmon, for a combined total of 434,700. While predictions were closer in some regions than others, the overall accuracy was limited. Additional years of data are likely required to properly evaluate the reliability of these forecasts.

Conservation limits met

In 2024, adult spawners and egg depositions relative to conservation limits were assessed for 76 rivers in North America. Estimated spawning escapements met or exceeded the conservation limits in 25 of the assessed rivers (33%), while 39 rivers (51%) fell below 50% of their conservation limits. Large deficiencies of less than 10% of the conservation limits were observed in 18 of the assessed rivers (24%).

By region, conservation limits were met or exceeded in two of four assessed rivers in Labrador, six of 14 in Newfoundland, and 17 of 34 in Quebec. None of the assessed rivers in the Gulf (0 of 4) or Scotia-Fundy (0 of 7) regions reached their limits. In the United States, all 13 assessed rivers showed large deficiencies, with each falling below 25% of conservation limits.

The image below from ICES shows a clear south to north gradient for population health.



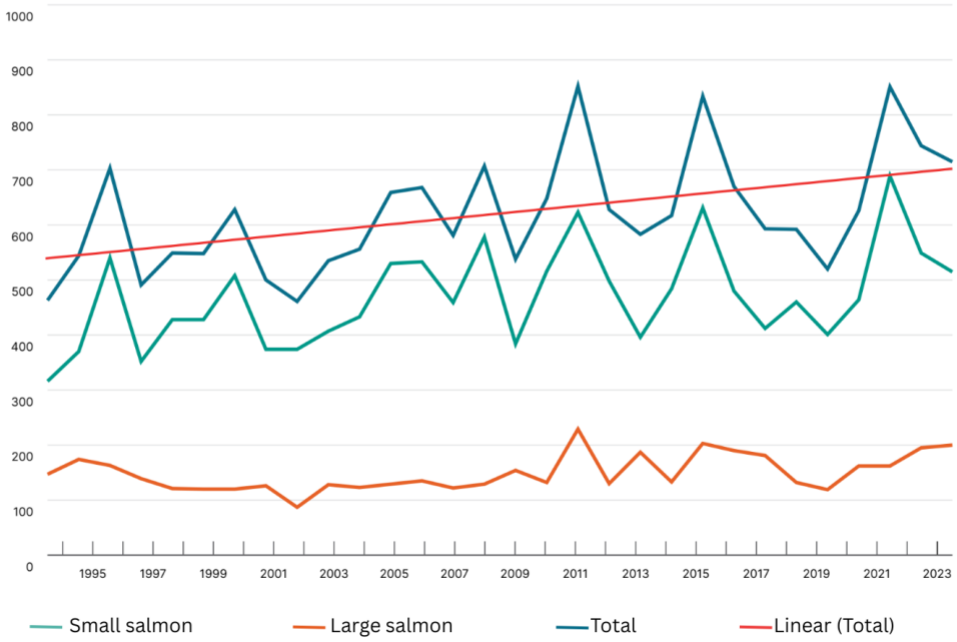
Source: ICES. 2025. Working group on North Atlantic Salmon (WGNAS).

vi. Graph North American returns 1993-2023

The graph below relies on ICES data to determine adult salmon returns to North America over the last 30-years. This includes small and large salmon.

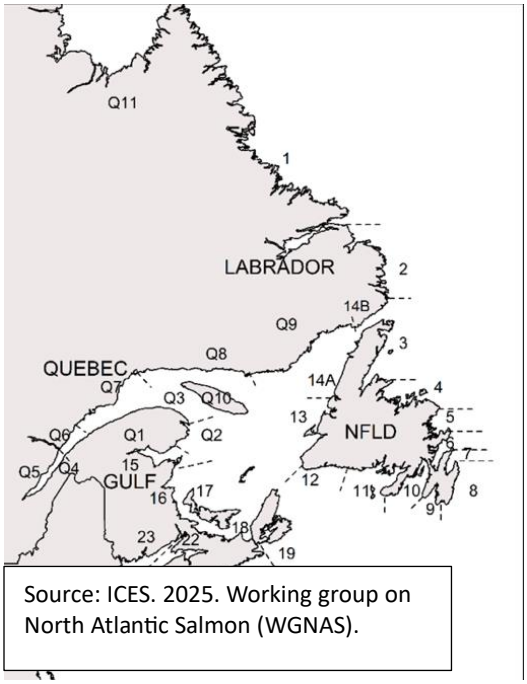
Since 1993, there have been a concerted effort by governments, communities, and individuals to conserve and restore wild Atlantic salmon. A sharp reduction in harvests in Greenland, the closure of Canadian commercial fisheries, extensive freshwater habitat restoration, and the widespread adoption of live release angling practices have all contributed to increasing adult salmon returns to North America.

Total adult salmon returns to North America 1994-2024
(thousands of fish)
Source: ICES Working Group on North Atlantic Salmon



vii. Regional returns and analysis

ICES uses six stock complexes for reporting and assessment, Labrador, Newfoundland, Quebec, the Gulf of St. Lawrence region, Scotia Fundy, and U.S.A.



Source: ICES. 2025. Working group on North Atlantic Salmon (WGNAS).

Labrador

Small salmon: In 2024, estimated median returns were 116,700, 51% lower than the 2019 to 2023 average of 238,000.

Large salmon: In 2024, estimated median returns were 34,500, 44% lower than the 2019 to 2023 average of 61,200.

Analysis: At first glance, the percentage decline in salmon returns in 2024 appears to be severe. However, this is partly because 2023 was an exceptionally strong year, well above recent averages. In 2023, estimated median returns of small salmon reached 354,000 (58% higher than the 2018–2022 average of 223,800) while large salmon returns reached 97,200 (92% higher than the five-year average of 50,700). While these year-over-year changes suggest a sharp downturn, they should be interpreted cautiously because the contrast is amplified by the unusually high returns seen in 2023.

ICES forecasted returns to Labrador

	Small salmon	**Large salmon**	**Total adults**
2025	141,100	37,300	**178,400**
2026	160,300	38,300	**198,600**
2027	180,900	43,700	**224,600**
2028	217,000	51,600	**268,600**

Newfoundland

Small salmon: In 2024, estimated median returns were 155,100, 33% lower than the 2019 to 2023 average of 232,500.

Large salmon: In 2024, estimated median returns were 21,700, 35% lower than the 2019 to 2023 average of 33,300.

Analysis: Newfoundland rivers saw notable declines in salmon returns in 2024. Small salmon returns were down by one-third compared to the most recent five-year average, while large salmon returns dropped by more than a third. These reductions reflect a broader pattern of lower returns observed across much of Atlantic Canada in 2024 and may point to challenging marine survival conditions or other environmental pressures.

ICES Forecasted returns to Newfoundland

	Small salmon	**Large salmon**	**Total adults**
2025	209,600	23,700	**233,300**
2026	250,400	34,300	**284,700**

2027	199,300	42,800	**242,100**
2028	134,100	34,300	**168,400**

Quebec

Small salmon: In 2024, estimated median returns were 12,100, 49% lower than the 2019 to 2023 average of 23,800.

Large salmon: In 2024, estimated median returns were 19,500, 41% lower than the 2019 to 2023 average of 33,100.

Analysis: Quebec rivers saw sharp declines in both small and large salmon returns in 2024. Small salmon returns were down nearly 50% from the recent five-year average, while large salmon were lower by more than 40%. These decreases are significant for a region that typically supports some of the strongest salmon runs in North America. Despite the drop, Quebec's river management framework and conservation measures remain strong, and continued assessments will be critical to track trends and guide sustainable harvests.

ICES Forecasted returns to Quebec

	Small salmon	**Large salmon**	**Total adults**
2025	15,800	20,600	**36,400**
2026	16,600	26,400	**43,000**
2027	16,500	26,600	**43,100**
2028	14,600	26,000	**40,600**

Gulf of St. Lawrence

Small salmon: In 2024, estimated median returns were 2,700, 86% lower than the 2019 to 2023 average of 19,100.

Large salmon: In 2024, estimated median returns were 13,900, 52% lower than the 2019 to 2023 average of 29,100.

Analysis: The Gulf of St. Lawrence region experienced some of the most pronounced declines in 2024. Small salmon returns were down more than 80% compared to the five-year average, among the lowest levels observed in recent decades. Large salmon also dropped by more than half, continuing the downward trend. These sharp reductions suggest challenging conditions during both freshwater and marine life stages and raise concerns for the sustainability of smaller Gulf populations.

ICES Forecasted returns to Gulf of St. Lawrence rivers

	Small salmon	Large salmon	Total adults
2025	8,300	15,800	**24,100**
2026	7,600	17,000	**24,600**
2027	7,500	14,600	**22,100**
2028	4,900	14,900	**19,800**

Scotia Fundy

Small salmon: In 2024, estimated median returns were 1,900, 25% lower than the 2019 to 2023 average of 2,500.

Large salmon: In 2024, estimated median returns were 1,200, in line with the 2019 to 2023 average of 1,200.

Analysis: It is important to note that the Scotia Fundy region is considered a poor assessment area, meaning the available data may not accurately represent the true status of salmon populations. Nonetheless, rivers that empty into the Bay of Fundy and the Atlantic Ocean along mainland Nova Scotia have critically low wild salmon populations. Returns represent coarse analysis of very small numbers.

ICES Forecasted returns to the Scotia Fundy region

	Small salmon	Large salmon	Total adults
2025	700	1,400	**2,100**
2026	800	1,400	**2,200**
2027	700	1,500	**2,200**
2028	400	1,200	**1,600**

U.S.A

Small salmon: In 2024, estimated median returns were 400, 37% higher than the 2019 to 2023 average of 300.

Large salmon: In 2024, estimated median returns were 1,100, in line with the 2019 to 2023 average of 1,200.

Analysis: Determined habitat restoration efforts by ASF and our partners, thanks to significant state, federal, and private funding has led to a major recovery of migratory fish species in Maine.

The Penobscot River stands out globally as an example of habitat restoration and ecosystem renewal. Between 1999 and 2016, ASF led a coalition of partners who removed two large dams and built a natural fish by-pass around a third. Since then, dozens of smaller fish passage projects in the watershed have also been completed.

ICES Forecasted returns to U.S.A.

	Small salmon	Large salmon	Total adults
2025	100	600	**700**
2026	200	900	**1,100**
2027	200	2,000	**2,200**
2028	100	1,500	**1,600**

viii. 2024 salmon harvests

North American Atlantic salmon are fished in Canada, Greenland, and the French islands of Saint Pierre and Miquelon, off the south coast of Newfoundland. There are no fisheries in the United States, where Atlantic salmon are listed under the *Endangered Species Act*.

2024 Canadian Atlantic salmon harvest

Overall: 66.6 tonnes of wild Atlantic salmon was harvested legally by all groups in Canadian waters. It is among the lowest figures on record, 30% less than the five-year average of 94.5 tonnes and far below the 1969 to 2000 average of 1,557 tonnes, when recreational and commercial fisheries were active.

> **Note:** Catch reporting in all Canadian Atlantic salmon fisheries is poor. ICES notes that outside of Quebec, there are no mechanisms in place to require anglers to report their catches. While logbooks are used to monitor the Indigenous fishery in Labrador, reports from Maritime First Nations are mostly incomplete or missing and Inuit in the Ungava Bay region of Quebec are not required to report. In all cases, ICES uses the best available data to estimate catches.

Anglers: 14.4 tonnes of wild Atlantic salmon was harvested by anglers, 97% of which were small salmon. This is 57% lower than the most recent five-year average and is the lowest in the ICES time series which dates to 1974.

> **Note:** Live release of Atlantic salmon caught in angler fisheries is mandatory in Nova Scotia, New Brunswick, and Prince Edward Island. In Quebec, anglers may keep up to four salmon per season, including one large salmon, from rivers open to retention. In Newfoundland and Labrador, anglers can keep a maximum of two small salmon per season.

Indigenous: 51 tonnes of wild Atlantic salmon was harvested by Indigenous groups, 11% less than the previous five-year average of 57.4 tonnes.

> **Note:** Indigenous fisheries in Canada occur primarily in coastal areas and estuaries.

Labrador resident: 1.3 tonnes, 19% less than the previous five-year average harvest was 1.6 tonnes.

> **Note:** The Labrador resident fishery for salmon is a legal by-catch fishery permitted by DFO. Participants use gillnets to target trout and Arctic charr but are issued three salmon tags. 219 licenses were issued in 2024.

Illegal and unreported fisheries: 13.0 tonnes, compared to the previous five-year average of 18 tonnes.

> **Note:** ICES states that reports of illegal and unreported Atlantic salmon fishing were not provided for all Eastern Canadian provinces and the 2023 estimate is based on best available data.

Live release fisheries: It is estimated that anglers caught and released 18,673 small salmon and 12,103 large salmon for a total of 30,776 fish, compared to the previous five-year average estimate of 55,500.

> **Note:** ICES does not provide an estimate of losses from live release fisheries.

2024 Greenland Atlantic salmon fishery

Overall: 20.8 tonnes with 19.9 tonnes harvested off West Greenland and 0.9 tonnes off East Greenland. The 2024 harvest is significantly lower than the previous ten-year average reported catch of 37.9 tonnes and is within the 30-tonne quota set by the Greenland government.

Catch composition: Samples collected and analyzed from the Greenland fishery showed that 60.3% of the catch in 2024 was of North American origin and 39.7% from European rivers. This is on par with the previous 10-year average where 74% of fish sampled were of North American origin.

Participation and reporting: There were 855 licenses issued in 2024. 315 of these licenses were commercial fishers while the other 540 were recreational fishers. 78% of license holders reported their catch to Greenlandic authorities.

Private license holders can use one net and use their catch for personal consumption. Professional license holders can set up to 20 nets and sell their catch within Greenland at 17 open air markets. Exports are prohibited.

2024 Saint Pierre and Miquelon Atlantic salmon fishery

Overall: 1.7 tonnes, or approximately 602 salmon, all North American origin. The reported catch is similar to the previous 5-year average of 1.5 tonnes but is 38% less than the previous 20-year average of 2.8 tonnes. 85 individuals participated in the fishery.