

# Atlantic Salmon

*Salmo salar* (Four Populations)

**STATUS**



Special Concern

Endangered

Endangered

Endangered

\* Not Listed by NS ESA

Inner Bay  
of Fundy  
Population

Gaspé-Southern Gulf  
of St. Lawrence  
Population

Eastern  
Cape Breton  
Population

Nova Scotia  
Southern Upland  
Population

**Population Range**

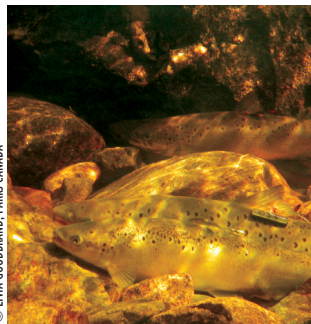
All four populations of  
Atlantic Salmon in  
Nova Scotia are at risk.

## Habitat

Found in freshwater rivers and streams that are clear, cool, and well-oxygenated, with gravel, cobble, or boulder bottoms. They spend their first two to three years in the riffles, runs and pools, after which they travel to the sea. After one to four years in the ocean, they return to spawn in the fall in the same areas where they hatched.



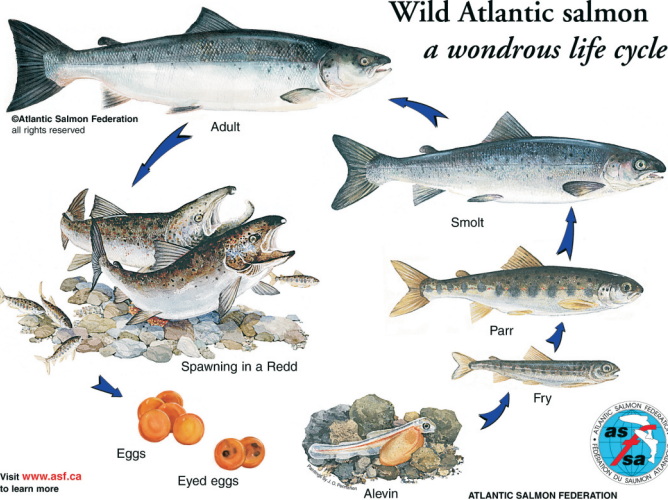
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Atlantic Salmon are most abundant in fast moving, cool streams with abundant food sources such as aquatic insects and small fish. If you catch one, let it go!

## Wild Atlantic salmon *a wondrous life cycle*

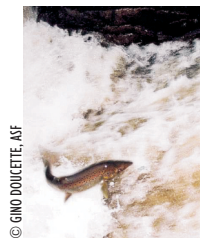


## Species Description

The Atlantic Salmon life cycle has many stages and includes both freshwater and marine phases. Adults are dark on the back and silvery on the lower sides and belly. When spawning in freshwater both males and females become a bronze-purple colour, usually with reddish spots on the head and body. Young Atlantic Salmon are called parr and have 8-11 pigmented bars along each side alternating with a row of red spots. Parr lose these markings, become silvery, change into smolts and migrate to sea in the spring of their second year.

## Interesting Points

- The name *salar* comes from the Latin *salio* which means “to leap” - the Atlantic Salmon can leap as high as 3.4 m!
- Inner Bay of Fundy salmon are genetically unique from other Atlantic Salmon and stay mainly within the Bay of Fundy area, compared to other populations which migrate to the north Atlantic.
- DFO is leading a “Live Gene Bank” program to maintain population persistence and the species genetic uniqueness.



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## Similar Species

### Rainbow Trout:

Colour varies; black spots on body (not coloured); spots on tail in rows.



© NSFA

### Brown Trout:

Reddish colouring on the adipose fin (just in front of tail on top of body).



© USFWS

### Speckled (or Brook) Trout:

Bluish speckled markings on side; brownish back; white or red belly; white edges on the lower fins.



© NSFA

## Threats to Survival

- Poor marine survival.
- Direct fishing (contribution to the observed declines).
- Water passage obstruction (culverts, dams, etc.).
- Land management activities (land clearing, contaminants).
- Acidification of fresh water.
- Salmon aquaculture interactions (interbreeding, disease/parasite transmission).
- Invasive or introduced species.



© AMY WESTON

Stream bank erosion and water siltation

## How You Can Help

Learn to recognize salmon (parr especially), and if you catch one, set it free! Join an organization such as the Atlantic Salmon Federation, or participate in the NSLC Adopt-a-Stream Program (contacts below). Become an advocate for clean water and healthy habitats that will support many species.



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Adopt-a-Stream volunteers rehabilitate a stream

## Contacts, Information, Sighting Reports & Stewardship Opportunities

**Contact:** DFO Species at Risk 1-866-891-0771 or [xmarsara@mar.dfo-mpo.gc.ca](mailto:xmarsara@mar.dfo-mpo.gc.ca)  
Nova Scotia Department of Fisheries and Aquaculture, [inland@novascotia.ca](mailto:inland@novascotia.ca)

**Info:** Atlantic Salmon Federation: [www.asf.ca](http://www.asf.ca)

**Sighting Reports:** 1-866-727-3447 or [www.speciesatrisk.ca/sightings](http://www.speciesatrisk.ca/sightings)

**Stewardship:** NSLC Adopt A Stream — Nova Scotia Salmon Association:  
(902) 644-1276, [www.nssalmon.ca](http://www.nssalmon.ca), <http://adoptastream.ca>