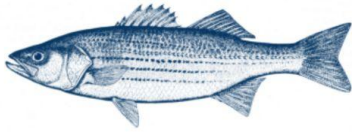


## Striped Bass (*Morone Saxatilis*) on PEI



### Key Characteristics

#### Overall Shape

They are a long and slim fish with a protruding lower jaw and many teeth. They can grow to be 1 meter or more!

#### Fins

They have two separate dorsal fins (the first is spiny!), a forked tail fin, an anal fin with spines and rays, and a set of pelvic fins towards the front of their belly.

#### Color

Striped bass are dark olive green or steel blue on top, silvery on the sides, with a white belly. They have 7-8 dark stripes on the sides that don't extend onto the head.

### Food Habits

Striped bass are important predators in their habitat. Their main food source are crustaceans, but they also eat worms, other fish, and decaying plants. Their diet changes as they grow; larger bass will eat bigger things. In coastal waters, they often swim in groups and chase schools of fish, such as herring!

### Habitat

Striped bass rely on many parts of our water systems to complete their life cycle. They are anadromous, which means their life cycle takes place in both saltwater and freshwater. They travel along coastlines, through estuaries and into freshwater streams to spawn.

### Life Cycle

#### Spring and Early Summer

All of the striped bass we see here on PEI are born in the Northwest Miramichi River! When waters warm up in late spring it is a signal that it is time to spawn. It takes three days for the eggs to hatch after being fertilized. The water conditions have to be just right for the eggs to survive this period. The water has to be moving fast enough to suspend the eggs in the water column, there needs to be just the right amount of dissolved oxygen and salt, and it can't be too hot or too cold. From there they develop into sac fry and then larvae.

#### Summer and Fall

Eventually, in late July, the larvae go through metamorphosis and grow towards adulthood. As the young fish grow, they move towards estuaries where they use the safety of eelgrass beds to feed, eventually traveling hundreds of kilometers in coastal waters. During this juvenile stage feeding is important - they need to grow as much as they can before winter sets in.

#### Winter

Striped bass can't feed when the water is too cold, so they rely on stored energy to get them through the winter. As winter approaches and water temperatures drop, striped bass will migrate throughout Atlantic Canada to overwinter inland in rivers and ponds where they are protected from freezing temperatures, pollution, and overfishing. Researchers are working to learn more about these overwintering sites. When winter turns back into spring, the cycle repeats. Striped bass can live up to 15-30 years, but it can take between -6 years before juveniles mature enough to spawn.

## Distribution

In Canada we have three populations of striped bass. PEI's waters are a part of the Southern Gulf of St. Lawrence Population.

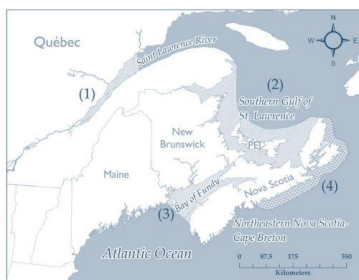


Photo credit: "Looking for Striped Bass in Atlantic Canada: The Reconciliation of Local, Scientific, and Historical Knowledge" by Samuel N. Andrews, Michael J. Dadswell, Colin F. Buhariwalla, Tommi Linnansaari, and R. Allen Curry. (2019)

## History of the Southern Gulf of St. Lawrence Population

### 1990s:

The striped bass population dropped to about 3,000 to 5,000 spawners.

### 1992:

The commercial fishery was partially closed and the first recreational fishing rules were introduced.

### 1996:

The commercial fishery was completely closed and the recreational fishery was catch and release only.

### 2000:

All forms of recreational fishing were stopped. First Nations' fishing for social and ceremonial purposes was suspended.

### 2004:

Striped bass were listed as "threatened".

### 2012:

Their status changed to "special concern" because the population increased. New management measures were put in place to help the population recover long-term.

### 2012-Today:

The population has steadily increased due to ongoing efforts to help striped bass recover and ensure sustainable fishing.

## Swimming Together: Are Striped Bass Harming Atlantic Salmon?

Recent studies in the Miramichi River show that striped bass are not harming the recovery of Atlantic salmon. In fact, these two species have coexisted since the last ice age! Let's take a closer look:

**A Long-Standing Relationship:** Since the end of the last ice age, Atlantic salmon and striped bass, along with other fish, have been living in Maritime rivers and evolving together.

**Salmon Face More Than Just Bass:** Salmon face many challenges besides being eaten by striped bass. Their survival is low because of factors like climate change, habitat loss, and fishing practices.

**Different Habitats:** While striped bass and Atlantic salmon live in the same waters, they usually prefer different habitats. They only really overlap during late May and early June when striped bass spawn, and salmon smolts are heading to the ocean.

**A Complex Predator-Prey Connection:** Striped bass and Atlantic salmon have a complex predator-prey relationship, especially in the spring when their habitats overlap. However, this connection isn't fully understood.

**Atlantic Salmon Are Declining Everywhere:** Atlantic salmon numbers are dropping across their entire range, even in rivers where striped bass aren't found. This shows that striped bass are not the main reason for the decline in salmon.

**Important to Remember:** The striped bass fishery is regulated to protect the species. Outside of the regulated fisheries, it is illegal to kill or harm striped bass.

## 2024 Fishing Regulations for PEI

This is a **summary** of the Fisheries and Oceans Canada Fishing Regulations. It's important to check the official regulations before heading out.

### Hours and Seasons

Tidal Waters: From April 15 to June 30, fishing can start 2 hours before sunrise and end 2 hours after sunset. From July 1 to October 31, fishing is allowed from 4:00 AM to midnight.

Inland Waters: Fishing is allowed from 2 hours before sunrise to 2 hours after sunset from April 15 to September 15.

### Daily Bag and Total Possession Limits:

You can keep up to four striped bass each day during the fishing season. You can't have more than four striped bass with you at any point during the season.

### Legal Sizes for Retention

You can keep striped bass that are between 50 cm and 65 cm long. Measure the fish from the tip of its nose to the tip of its tail.

### Authorized Gear

You have to use single barbless hooks when fishing with lures, bait, or flies. In tidal waters you can use up to five lines, with six single barbless hooks on each line. In inland waters, you can use one line with three single barbless hooks. It's also a good idea to use barbless non-offset circle hooks when using bait. These hooks help reduce fish mortality when doing catch and release.

### Licensing

To fish striped bass in tidal waters, no license is needed. For inland waters, you need a provincial angling license, which you can get through the Province of PEI.



**This information is provided by the Cornwall and Area Watershed Group for striped bass anglers on PEI. For more resources on the topic visit the Fisheries and Oceans Canada website.**

