

Pacific Herring Fact Sheet

Pacific Herring are an **important fish** for British Columbia. They play a major role in our ecosystem and First Nations culture.

Name: Pacific Herring
Description: Small, oily fish
Length: 15-25 cm
Weight: 70-200 g
Colour: Silver-grey
Life Span: 8-10 years



Ecology

Pacific herring are **forage fish**. This means that they eat the smallest organisms called plankton, while feeding large predators such as seals, humpback whales and Chinook salmon. Further up the food chain, Orca whales feed on these Chinook salmon. Herring can live for 8-10 years and a female herring can lay about **20,000 eggs** in a year.

First Nations

First Nations have a long history of sustainably harvesting herring roe for trade and consumption using a method that involves collecting eggs that have been deposited on kelp or hemlock branches suspended near the shore. The **spawn-on-kelp** harvesting method is **sustainable** because it allows the spawning herring to live on and spawn again or be eaten by predators, therefore maintaining the herring's critical ecosystem function.

Communication

Herring communicate with each other with underwater sounds and **bubbles** to warn off predators and to help each other navigate in the school. This form of communication is known as *Fast Repetitive Ticks* or *FRTs*.

Commercial Fishing

In the commercial fishery, herring are primarily caught in nets called **gillnets and seine nets**. These nets catch thousands of fish and bycatch. **Bycatch** are fish or animals caught accidentally. In the herring fishery, bycatch can even include seals and sea lions. British Columbia's herring **populations collapsed** in the 1960's due to overfishing. Following decades of rebuilding, herring declined again in the late 1990's. In 2022, 4 of the 5 herring fishing areas in British Columbia are closed due to overfishing, with the Strait of Georgia remaining the only region to remain open.

Did You Know?

Herring were once abundant along Victoria's shoreline and was harvested by the ləkʷəŋən people (known today as the Esquimalt and Songhees Nations). ləkʷəŋən translates to "**place to smoke herring**", which reveals how central herring are to ləkʷəŋən culture.

Herring eggs. A female herring can lay up to 20,000 eggs per year.



During the herring spawn, coastal waters turn a pale blue as male herring release their milt to fertilize the herring eggs.



A school of Pacific herring.



Herring are small silver coloured fish.



Many birds such as eagles, gulls and surf scoters depend on herring as a food source.



A black bear eats herring roe off of the shoreline.



Herring roe being harvested from kelp, a process known as “spawn-on-kelp”. This is a sustainable way of harvesting herring roe which has been practiced by coastal first nations for thousands of years.



A seine net hauls thousands of herring in commercial fishing activity. Many of these fish are only harvested for their roe, leaving much of the fish as waste product for lower value.

