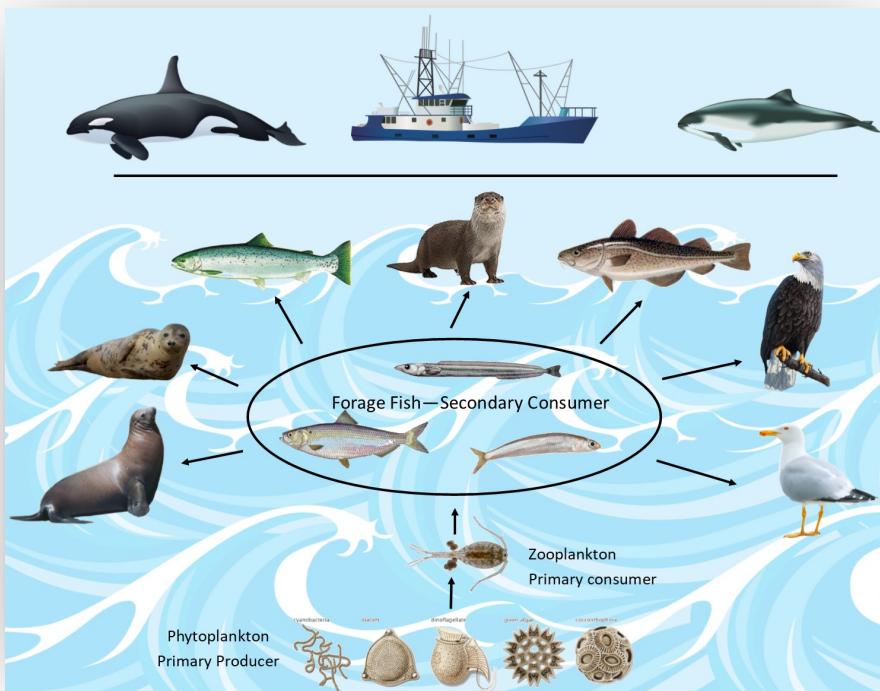


## The Puget Sound Food Web

### Forage Fish: It's not always easy being the little guy

Often overlooked, forage fish play a vital and expanding role not only in the oceanic ecosystem, but for the future of humanity itself. Pacific Herring, Surf Smelt, and Sand Lance provide sustenance to larger fish, seabirds, marine mammals, even humans and their domesticated house pets. Unfortunately, for the last several decades, Puget Sound forage fish populations have mysteriously been on the decline.



Until recently, Pacific Herring, Surf Smelt, and Sand Lance have been largely understudied and much of their habits are still unknown. Without prior data, it makes it difficult to determine how and why their populations are suffering. Right now, it is crucial to make sure their known spawning grounds are protected so that their populations have a chance to remain sustainable for the rest of the marine food web.

### Have You Noticed Any Changes to Your Beach?

In the winter, there are typically stronger winds and waves. This makes sediment move around, which could expose some interesting finds!

With all the wind we have been getting, it is common for trees, shrubs, and other greenery to fall into the ocean. Often, they end up getting carried away by the waves and washed up on shore.



If you have a chance, take a walk outside and see if you notice anything different! Be sure to snap a few photos so you can compare the changes once the weather changes again.



The "blue vortex" part of processing sand for fish eggs

### Protecting Forage Fish Habitat

Surf Smelt and Sand Lance utilize the shoreline to spawn. This area is called the intertidal zone and is a mixture of sand and gravel. Shoreline projects may disturb their very delicate habitat.

To help protect forage fish spawning areas, forage fish surveys are conducted prior to construction in or near the water. The purpose of this survey is to determine if the beach has actively spawning forage fish or not.

For construction to proceed, the survey must come back showing no signs of spawning activity. It only takes these guys roughly two weeks to spawn and making sure they have the ability to do so gives them a much better chance of survival. Check out the links below for more info!

Surf smelt eggs under a microscope



### About Shore Friendly Kitsap

*Shore Friendly Kitsap is your waterfront partner.*

**Our mission is to empower Puget Sound waterfront landowners to create beautiful, environmentally friendly shorelines for themselves and generations to come.**

*Join our new Facebook group! Link below...*

**Contact us:** 360.307.4242 or shorefriendly@co.kitsap.wa.us

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