

Marine Life in Whatcom County

?? Fish Series ?

Forage Fish

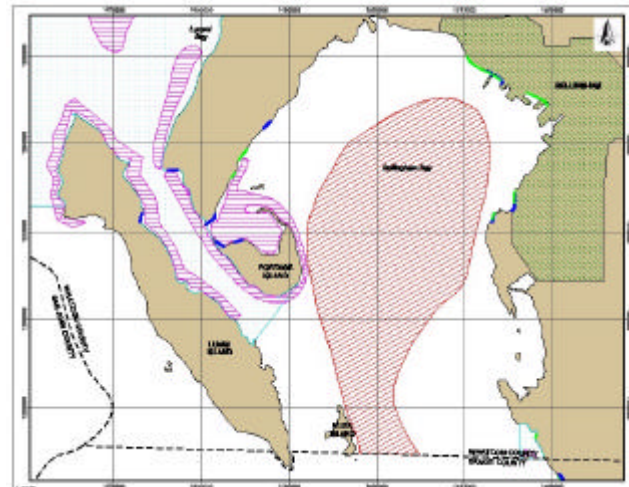
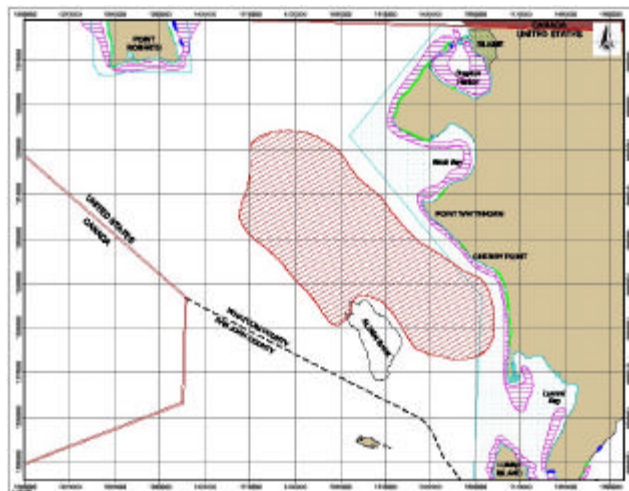
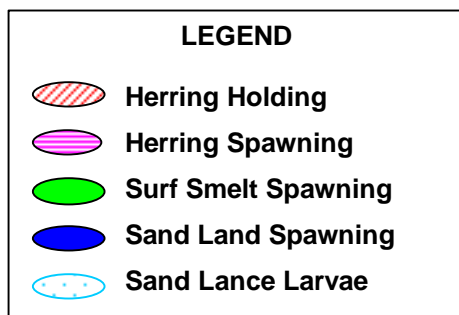
Forage fish are typically small, schooling fish that are an important food source for other marine fish, mammals, and birds. Common forage fish species found in Whatcom County include the Pacific herring (*Clupea pallasii*), surf smelt (*Hypomesus pretiosus*), and sand lance (*Ammodytes hexapterus*).



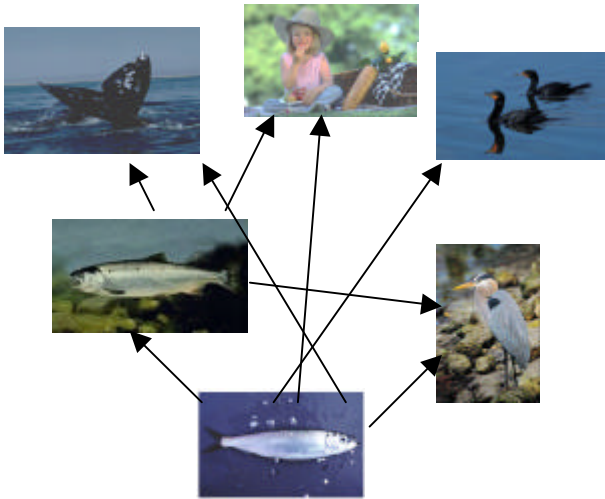
Pacific herring (*Clupea pallasii*)
Photo: WDFW

Distribution:

The Whatcom County nearshore environment provides important habitat for forage fish spawning and larvae refuge from predators. The distribution of these fish in Whatcom County is illustrated on the maps to the right.



In the Whatcom County maps depicted to the right, forage fish holding and spawning areas are illustrated. This data was provided by Washington State Department of Fish and Wildlife. The maps were created by Anchor environmental.



Simplified local marine foodweb.

Ecology:

Forage fish play a critical role in the local marine food web, as their name suggests. These fish are the food source for a variety of other marine species higher in the foodweb, such as salmon, seals, ducks, and wading birds. The condition of forage fish populations are vital to the health of other marine species populations that rely on forage fish for a primary food source. Therefore, the condition of forage fish populations can also be an indicator of the health and productivity of the local marine environment as a whole.

Economic Value:

Forage fish play an important economic role in the Whatcom County community. Forage fish are a popular bait for recreational fishing, thus often are referred to as "baitfish". In addition, forage fish are harvested by commercial fisheries and used for tribal subsistence. Therefore, the status of forage fish populations can affect recreational, commercial, and tribal fisheries either directly or indirectly through other fish species that are dependent on forage fish for food.

Sources:

Washington Department of Fish and Wildlife
<http://www.wa.gov/wdfw/fish/forage/forage.htm>

Marine Resources of Whatcom County, Anchor Environmental

For More Information:

Whatcom County Marine Resources Committee
 (360) 676-6876
<http://whatcom-mrc.wsu.edu/MRC/index.htm>

Current Status

Pacific herring- Populations of Pacific herring can fluctuate on a yearly basis due to environmental conditions. Yet, over the past 20 years, an overall decline has been seen in the Cherry Point Pacific herring stock. There are a number of factors that could be affecting this decline.

Surf smelt- Recent studies of surf smelt spawning habitat in the Puget Sound area have indicated that surf smelt are more abundant than previous assumptions. Surf smelt spawn year round, but have spawning peaks. Commercial and recreational harvests are opened one month after the peaks in spawning activity.

Sand lance- The sand lance is dependent on the upper intertidal zone for spawning habitat. Thus, this species is particularly vulnerable to changes and impacts to the nearshore environment through shoreline development.



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