

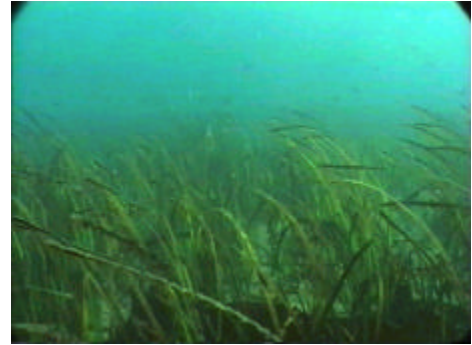
Marine Life in Whatcom County

?? Vegetation Series ??

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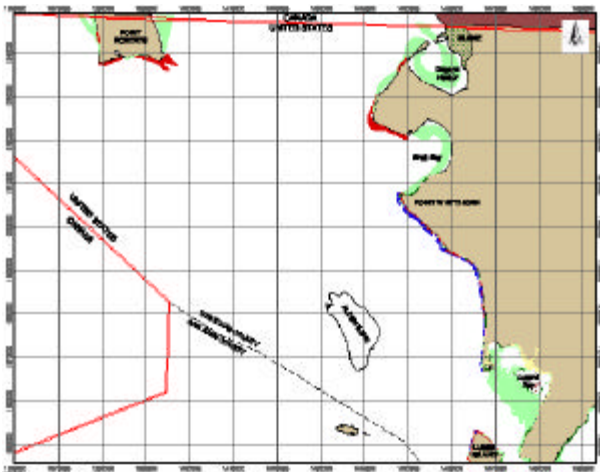
Common Eelgrass (*Zostera marina*)

Description: Eelgrass native to Whatcom County marine waters has green, grass-like blades about ½ inch wide and 3 feet long. Eelgrass is found submerged (underwater) or floating primarily in colonies. These colonies are referred to as eelgrass “beds”. Eelgrass is actually a flowering plant, not a seaweed.

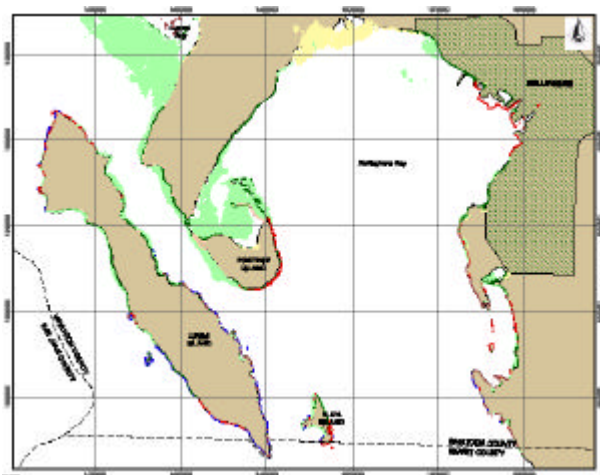


Zostera marina

Photo: King County, Randy Shuman



Distribution: Eelgrass grows in the muddy or sandy substrate of the shallow sub-tidal zone, down to a depth of approximately 22 feet in the Northwest. Eelgrass grows throughout the Puget Sound, the Pacific and Atlantic Coasts, and in Europe. In Whatcom County, eelgrass is found along much of the shoreline, particularly near Point Roberts, Drayton Harbor, Birch Bay, Lummi Bay and around Portage Island.



Reproduction: Eelgrass commonly reproduces by means of vegetative propagation. In this type of propagation, the plant sends out rhizomes (horizontal, underground stems) that send up new shoots of eelgrass. In this way, eelgrass spreads quickly over a small area, just like the grass in our lawns. Eelgrass can also spread by seed, which is a slower method of reproduction, but can broadcast offspring over a greater distance.

In the Whatcom County maps depicted above, eelgrass is indicated by light green shading. This data was provided by Washington State DNR and Whatcom County PDS. The maps were created by Anchor Environmental.



Spawned herring eggs on *Zostera marina*
Photo: WDFW

Ecology: Eelgrass provides valuable forage, spawning and refuge areas for a number of other marine species. Eelgrass fills an important function in the marine foodweb at two levels. Eelgrass is directly consumed by organisms such as waterfowl, urchins, worms, snails, and microorganisms. In addition, many other species (such as salmon, crabs, and heron) consume the organisms that live in the eelgrass colonies.

Eelgrass provides a spawning habitat for Pacific herring, which lay their eggs on the blades of eelgrass. Eelgrass beds are also a critical nursery area for juvenile salmon and cod which seek protection within the beds from predators.

Colonies of eelgrass provide a protected habitat for many marine species seeking refuge from potential predators. Eelgrass can also protect animals from overheating caused by exposure to solar rays in shallow water during low tides and in shallow areas. On tidelands, animals bury themselves underneath mats of eelgrass to avoid dehydration.

Economic Value: Eelgrass has historically been used for a variety of human needs such as food, basket weaving, compost, bedding, insulation and high-grade paper. Most industries stopped processing eelgrass in 1930-31 when the Wasting Disease nearly wiped out eelgrass populations along the Atlantic Coast of North America and Europe.

One of the most important current economic values of eelgrass in Whatcom County is the habitat provided for salmon, herring and shellfish, which are or have been commercially harvested in Whatcom County.

Sources:

Washington State Dept. Ecology
Port Townsend Marine Science Center
Snohomish County MRC

For More Information:

Whatcom County
Marine Resources Committee
(360) 676-6876

<http://whatcom-mrc.wsu.edu/MRC/index.htm>

Current Status

Approximately 33% of Washington State's native eelgrass beds have been lost. Some factors influencing this decline include:

- Dredging – removes plants and buries those nearby; deepens the water so eelgrass cannot grow.
- Construction of docks – blocks light needed for photosynthesis and disturbs eelgrass beds.
- Logging and development – increases turbidity, sedimentation, and nutrients in estuaries downstream.
- Invasive species – *Spartina sp.*, Japanese eelgrass, *Sargassum sp.* seaweed compete for optimum habitat.

It is important to protect our eelgrass beds. After the 1930-31 Wasting Disease, 90 to 100% of eelgrass was lost along the coasts of North America and Europe. In the absence of eelgrass, fish, crabs, scallops, lobsters and many other animals began to disappear. Fisheries closed and beaches and sand banks began eroding immediately. It took 20 years for eelgrass to recover.



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