The Colquitz River Mud Flats

Estuaries and mud flats are highly productive because of the rich nutrients and fine sediments they contain, their variety of habitat, and the mixing of fresh and salt water. They are important nursery habitats for many kinds of fish and invertebrates.

Main Biological Features

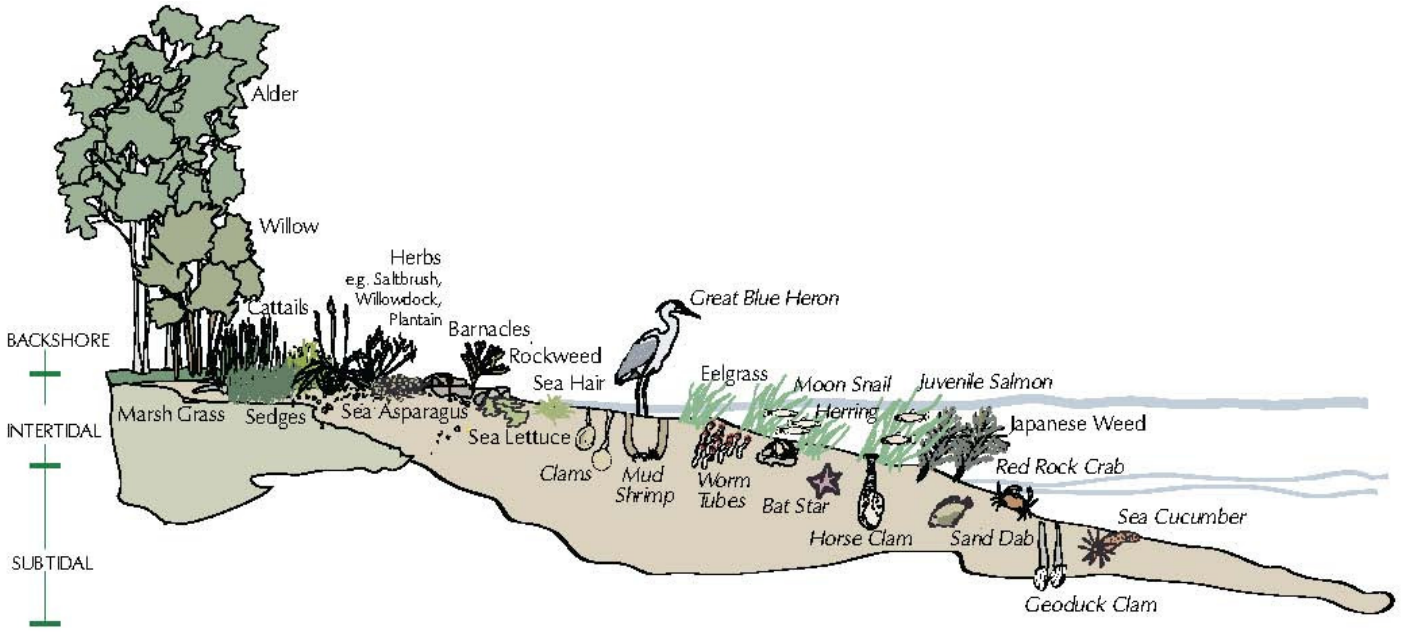
Estuaries and mud flats contain distinct vegetation communities (estuarine swamps and meadows) that adapt to seasonal flooding and salty soils. Their intertidal and subtidal biological communities can survive with rapid changes in temperature and salinity. They provide important rearing and feeding areas for many fish species including juvenile salmon as well as waterfowl.

Estuaries and mud flats contain:

- A variety of biological communities that can survive rapid changes in water temperature and salinity.
- Salt marshes and other brackish vegetation that provide cover, detritus and produce invertebrates used as food sources by fish and waterfowl.
- Important staging and overwintering habitat areas for waterfowl and shorebirds; feeding area for Great Blue Heron; and vital rearing area for juvenile fish and invertebrates.
- An osmotic transition zone where salmon can adapt from freshwater to seawater and back.
- Detrital sinks where land-based carbon sources accumulate and fuel the marine aquatic food web.

Eelgrass Beds

Intertidal and subtidal eelgrass beds, which often are found in these areas, are rooted in the sediment and are particularly sensitive to disturbances that may uproot them (propeller wash,dredging) or changes to the transport of sediment. It is difficult to compensate for losses to eelgrass habitat as recruitment processes and ideal growth conditions are not well known. (excerpts from 'Coastal Shore Stewardship' handbook)



Adapted from a sketch by Archipelago Marine Research Ltd.