

Penn Cove's Life-Giving Waters

Zooplankton



Phytoplankton

Plankton – Base of the Marine Food Chain

Penn Cove and the nearby Skagit River are one large, life-giving system. The Skagit discharges fresh water into Skagit Bay and Saratoga Passage. This fresh water makes its way to Penn Cove and dilutes its salinity. The Olympic Mountains to the west wring moisture from approaching storms, leaving Penn Cove some of the sunniest skies and lightest rainfall in northwest Washington. This combination of geology, fresh water input and sunshine creates an extraordinary nutrient soup ideal for growing plankton, the base of the marine food chain.

Salmon, Forage Fish and Birds

Juvenile salmon find refuge and food in the eelgrass beds and fresh-water estuaries of this cove and the Whidbey Island shoreline. Look down from this pier and you may glimpse darting schools of forage fish – surf smelt, sand lance or Pacific herring. They are a staple for salmon and other food fish, and for many Penn Cove birds such as loons, grebes, cormorants, gulls, osprey, kingfishers and great blue herons. At low tide you may spot clumps of exposed eelgrass. Herring lay their eggs on this marine plant. Salmon take refuge from predators among its leaves and feed on the herring.



Cormorant

River Otters and Harbor Seals

Keep an eye out for river otters, harbor seals and their pups. Harbor seals often lounge on the shellfish aquaculture rafts visible to the west of this pier.

Harbor Seal



Moon Jellyfish

Ghost Shrimp

Gray Whale

Eelgrass

Pile Perch

Gray Whales and Ghost Shrimp

Gray whales visit this cove nearly every spring, from March through early June, and may be observed from this pier and from beaches to the east and west. They feed on ghost shrimp in the sandy shallows, scooping up bathtub-size mouthfuls of the muddy bottom, then using their tongue and baleen to sift out the four-inch-long shrimp.

Rockweed

Dungeness Crab

Sea Stars

Blue Mussels

Sea Anemone

Sea Urchin

Mussels – Filter Feeders

Bivalve shellfish such as clams, oysters, scallops and mussels filter plankton directly from the seawater. Mussels are the elongated, blue shellfish attached to pilings, rocks and other hard surfaces. The aquaculture rafts west of this pier are part of the largest shellfish aquaculture farm in the United States. The mussels grow on lines suspended from these rafts. Mussel farming requires no feeding. They filter everything they need directly from the water.



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