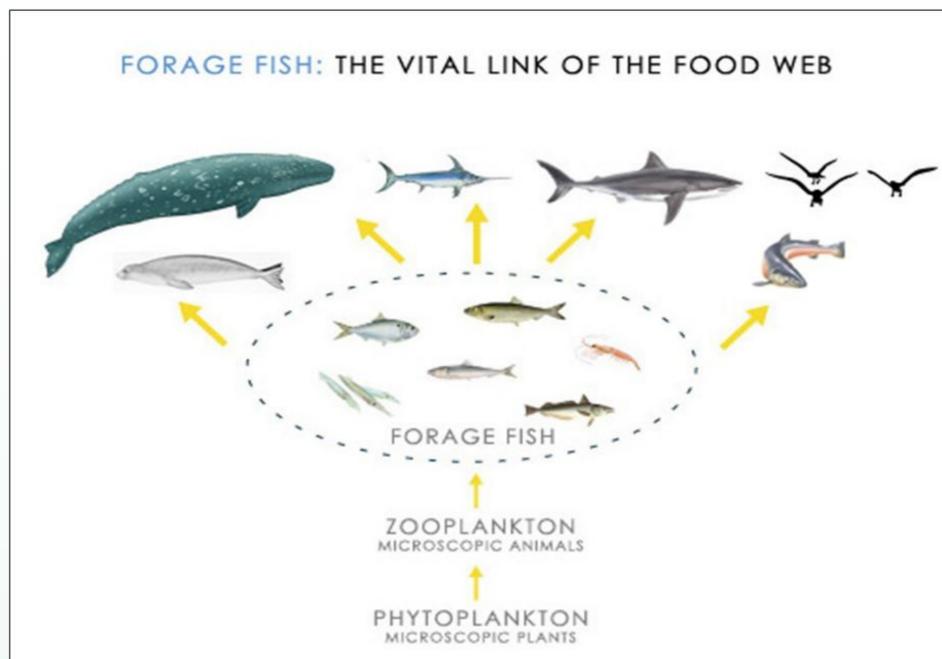


Forage Fish and our Shoreline

Campbell River's foreshore plan and our marine shoreline development permit guidelines recognize the importance of protecting the habitat of two important small forage fish: Pacific Sand Lance and Surf Smelt.

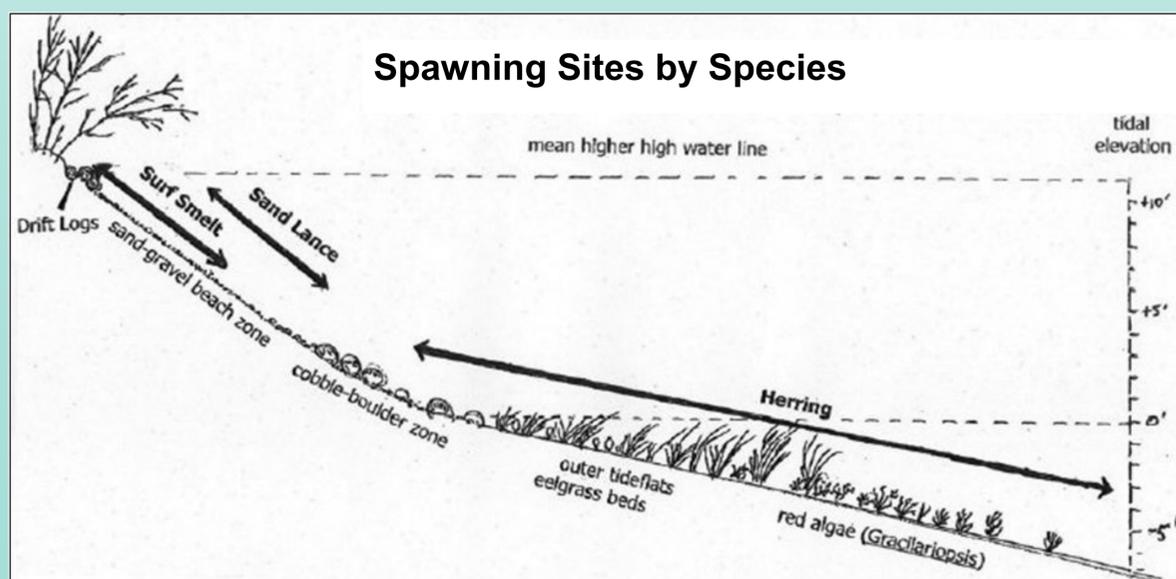
Forage fish also include herring, anchovy, sardine, capelin and eulachon and are the most important fish in the sea. Forage fish species aren't many, but they represent

thousands of metric tonnes of life in the ocean and are a vital part of the marine food web. Feeding on microscopic plankton, forage fish are eaten by everything from whales and diving birds to salmon. BC's Wild Salmon Policy recognizes that protecting Surf Smelt and Sand Lance spawning habitat supports recovering salmon stocks.



Largely due to lack of awareness, past land use practices did not protect Surf Smelt and Sand Lance spawning habitat located high on the beach:

- ★ Sand Lance spawn above the mid-tide in the upper intertidal area. They prefer sandy beaches, but will spawn in a mix of sand and pebbles. Many of the spawning sites appear to be associated with drift logs.
- ★ Surf Smelt lay their eggs within a few feet of the high tide line in sand and small pebbles. Shore-side vegetation helps shade eggs from direct sunlight.



Hardened shorelines such as rip rap and sea walls intensify wave energy which scours away spawning habitat, leaving no suitable fine material for forage fish to lay eggs. Where space permits, and under the advice of a qualified professional, Green Shores soft shore protection techniques help maintain spawning habitat.