Assessing Pacific Sand Lance Subtidal Habitats and Biomass in Regard to Salmon Foraging in the San Juan Archipelago

Pacific sand lance (PSL) is a critical forage fish in the Salish Sea and preyed upon by salmon and other marine fishes, mammals, and birds. To maintain a healthy salmon population, as well as an ecosystem dependent upon PSL for food, we need to understand where the PSL sub-tidal habitats for foraging are located in regard to salmon feeding and field check previously remotely mapped areas.

What we’re doing
PSL seek refuge and overwinter in deep-water sub-tidal sand wave fields. Salmon appear to be fished in areas where PSL are found. To determine and quantify salmon PSL feeding grounds we will:

- Exam salmon fish gut contents for PSL presence and numbers obtained from recreational fishers
- Map seafloor locations where salmon feed on PSL and sample habitat to determine habitat type

WHY IS THIS ISSUE IMPORTANT
Salmon appear to be in critical decline within the San Juan Archipelago and a valuable fishery. In addition, the resident pod of orcas solely feed on salmon and the decline of salmon would have an adverse impact on the pod. The reason for the decline of salmon is not fully understood but the more we can learn about the foraging nature of the fish the better we can assess their feeding habit and the preference to foraging areas.

WHAT YOU CAN DO
If you are a recreational salmon fisher in San Juan Islands, you can inform us of where you have caught salmon that contained PSL in their guts.

ABOUT US
The Center for Habitat Studies and the Tombolo Mapping Lab on Orcas Island, WA are marine research laboratories associated with the Moss Landing Marine Laboratories graduate oceanographic institute of San Jose University. Our oceanographic research is inter-disciplinary with a foundation in geology, biology, physics, and spatial imagery.

FOR MORE INFORMATION
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Project based on NTA 2018-0556