# Project overview - Understanding fish communities across nearshore habitats in southeast Alaska

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## Goals and Objectives

- Goal
  - Understand fish community composition across nearshore habitats in southeast Alaska
- Objectives
- Build a statistical model to relate community structure (multivariate) to habitat characteristics
- Build a statistical model to relate juvenile abundance of harvested species/groups (e.g. Salmonidae, Gadidae) to habitat characteristics

## Background - Data

- Atlas of Nearshore Fishes of Alaska
  - **1998 2011**
  - ▶ 555 unique sites
  - ▶ Walleye pollock, Pacific herring, pink salmon, and chum salmon accounted for 55% of total catch
- Habitats
  - Bedrock
  - Eelgrass
  - Understory kelp
  - sand / gravel

#### Background - Analyses

- Previous Analyses
  - ► NOAA technical memoranda and a few peer-reviewed papers
  - Summary statistics, small geographic scale
  - ► Fish community appears to differ across habitats
- Data analysis in community ecology class project
  - Began to tackle this question of community composition as a function of habitat
  - Results later

#### Data

##	[1]	"Data_Events_SiteID"	"EventID"	"Date"
##	[4]	"Season"	"Mon"	"SeasonNo
##	[7]	"Year"	"Gear"	"Temp"
##	[10]	"Salinity"	"SpCode"	"LifeStag
##	[13]	"ForkLength"	"Unmeasured"	"AtlasID'
##	[16]	"Data_Sites_SiteID"	"Region"	"Locale"
##	[19]	"Location"	"SubLocale"	"Nickname
##	[22]	"Habitat"	"Habitat_LC"	"Habitat\
##	[25]	"Lat1"	"Long1"	