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Alaska Fisheries Science Center

# Mariculture research at the Alaska Fisheries Science Center

**Jordan Hollarsmith**
Mariculture and Macroalgae Lead Research Biologist
NOAA Fisheries, Alaska Fisheries Science Center
jordan.hollarsmith@noaa.gov
(415) 527-6484

- Project snapshots
  a. Research oyster hatchery in Juneau
  b. Oyster health and toxicity monitoring
  c. Herring deterrent strategies
  d. Habitat provisioning of kelp farms
  e. Mapping a century of kelp canopy change
  f. Education and outreach
  g. Pinto abalone as a mariculture species

# Research oyster hatchery in Juneau

## Objectives:

- Develop Alaska-specific Pacific oyster broodstock or conditioning methods for optimized growth in the Exxon Valdez oil spill region.
- Develop methods for spawning and rearing Pacific oyster larvae that are tailored to conditions in Alaska and are cost effective at scale.

Exxon Valdez Oil Spill Trustee Council

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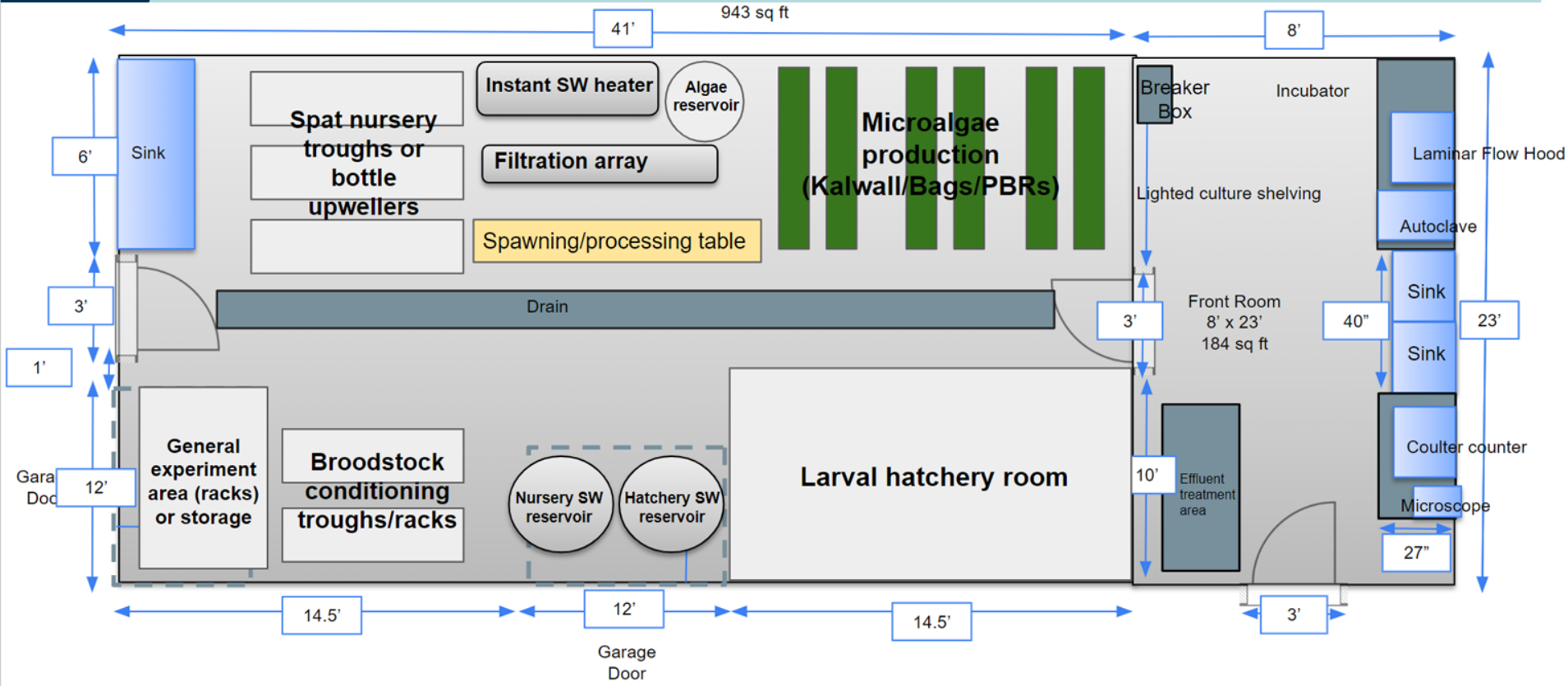
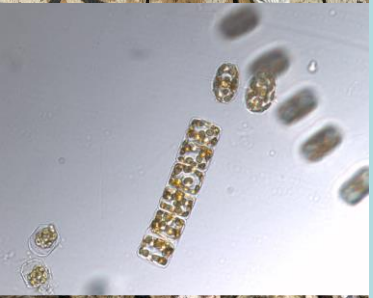
# Research oyster hatchery in Juneau





# Environmental drivers of oyster health and toxicity

- monitoring water column variables, phytoplankton species, oyster and water column toxins, and metrics of oyster health on an oyster farm to identify major environmental drivers of both HABs and tasty oysters

- Goal to enable oyster farmers to selectively harvest seafood, to minimize risks to human health, and reduce economic loss in Alaska during blooms; and improve siting of oyster farms

Salty Lady SEAFOOD CO. JUNEAU · ALASKA

Alaska HAB Network

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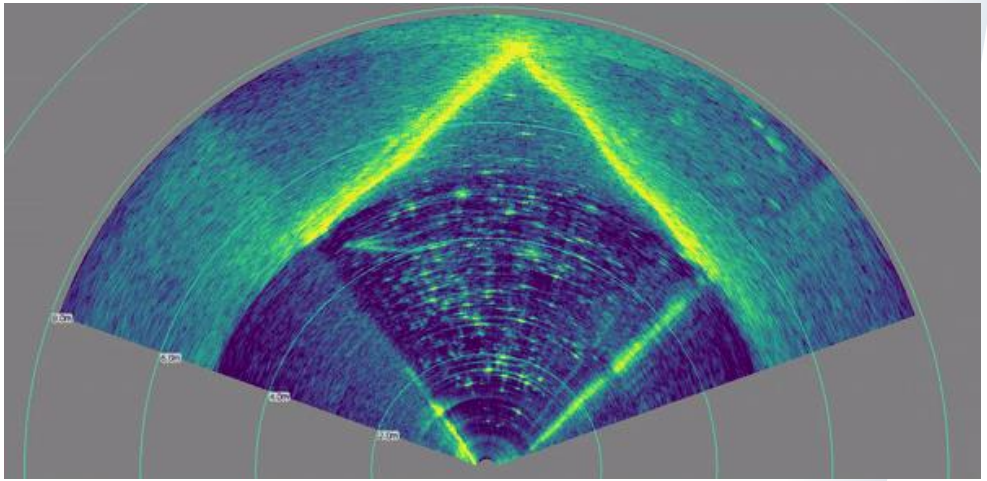
# Deterring spawning herring from kelp farms



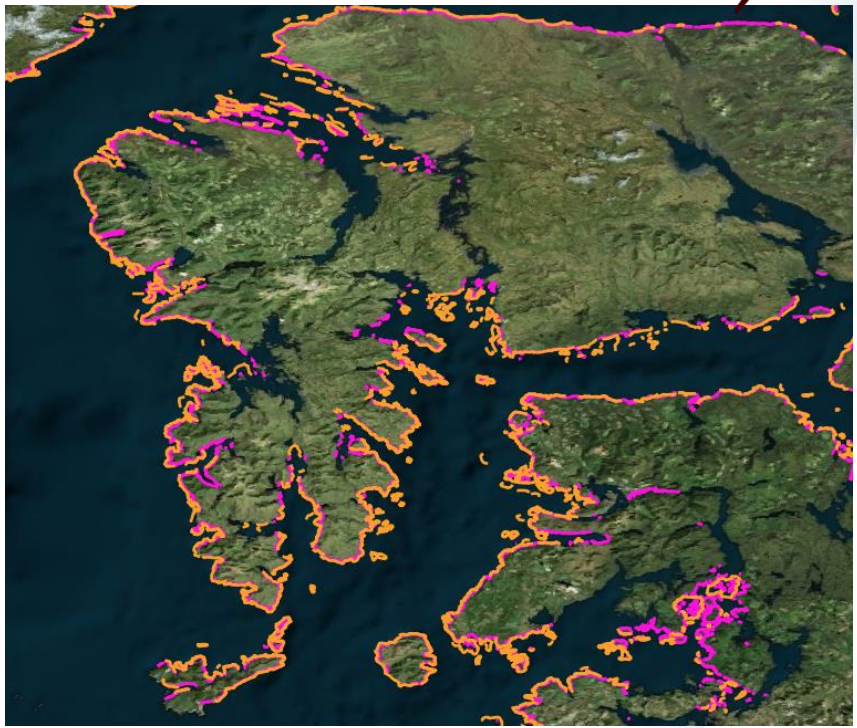
# Habitat assessment of kelp farms

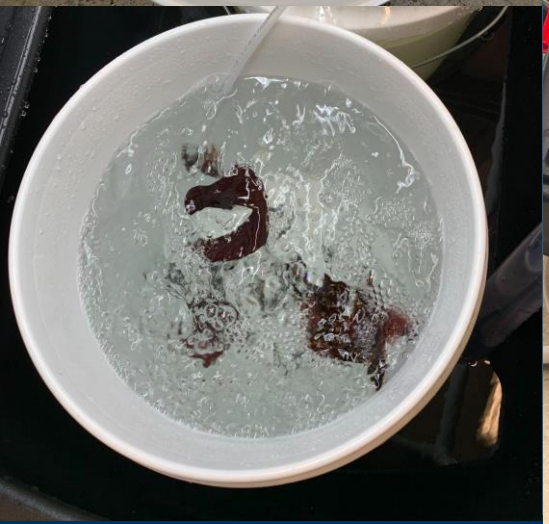
Project lead: Alix Laferriere, NOAA AFSC Kodiak Labs

- What species of fish aggregate around kelp farms versus natural kelp beds over the growing season?
- Collaborating with Alaska Ocean Farms
- Three method approach:

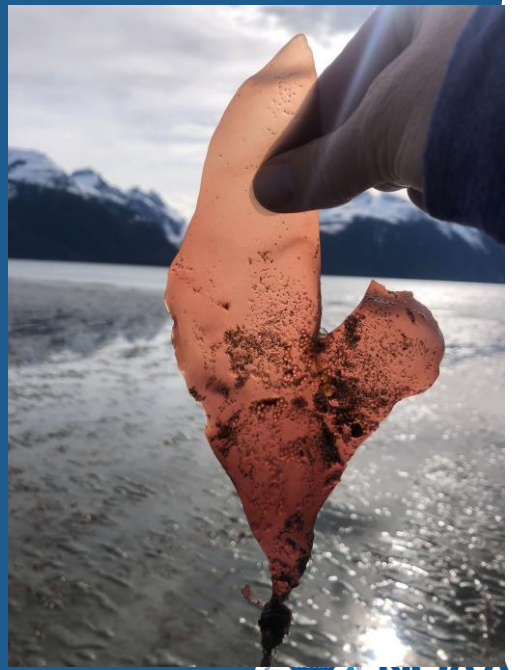
- Visual surveys with GoPro cameras
- E-DNA sampling
- Fish collection with SMURFS

# Mapping a century of kelp canopy change





# Education and outreach



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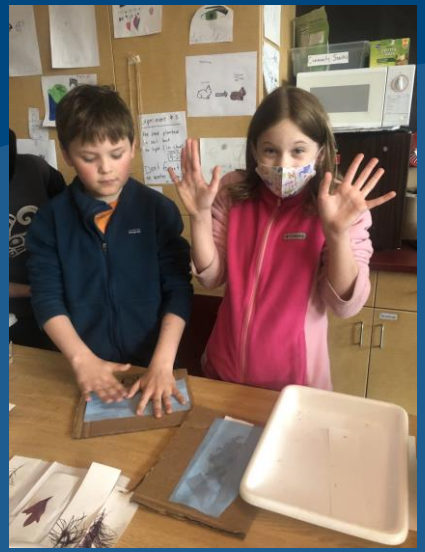

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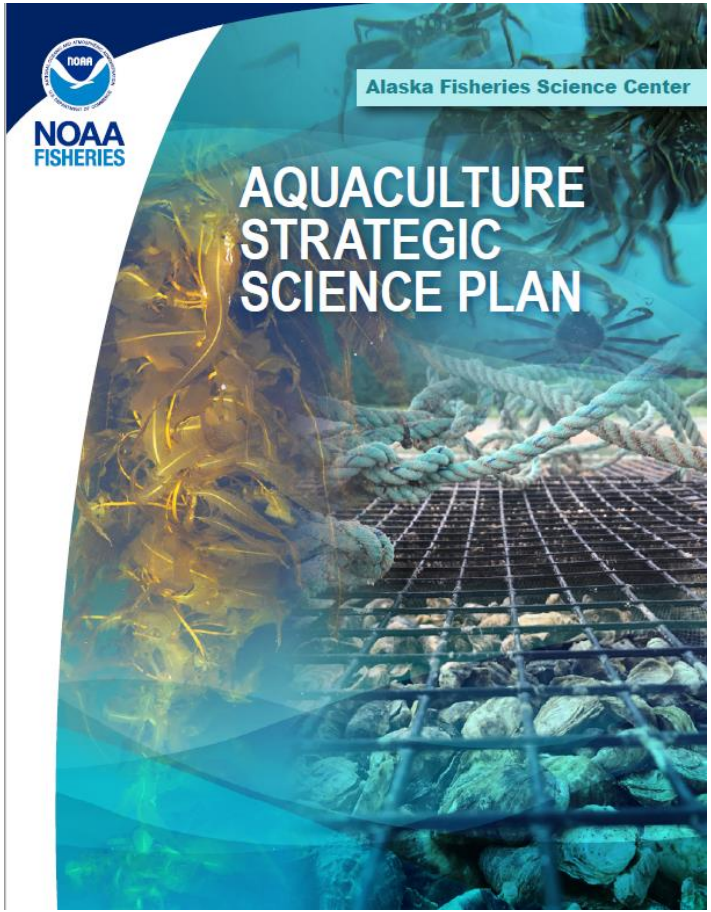
# Cultivation protocols for Pinto abalone

Background:

- Endemic to Alaska
- Important recreational and subsistence fishery
- Less susceptible to HABs
- Delicious

Project goals

- Spawn and rear abalone
- Determine growth rates under various feeding and temperature regimes




Access the plan here!

Jordan Hollarsmith
jordan.hollarsmith@noaa.gov
415-527-6484



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## Staff/fellows/postdocs

Rebecca Cates
Research technician/algologist

Veronica Farrugia Drakard
CICOES Postdoc

Henry Fleener
Hatchery manager

Juliana Cornett
AK Sea Grant Fellow

Alex Tugaw
UAS intern

## Interns

Ky Friedman
Hollings Scholar

Kelly Koehler
Hollings Scholar

Emily Evenson
CICOES intern



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