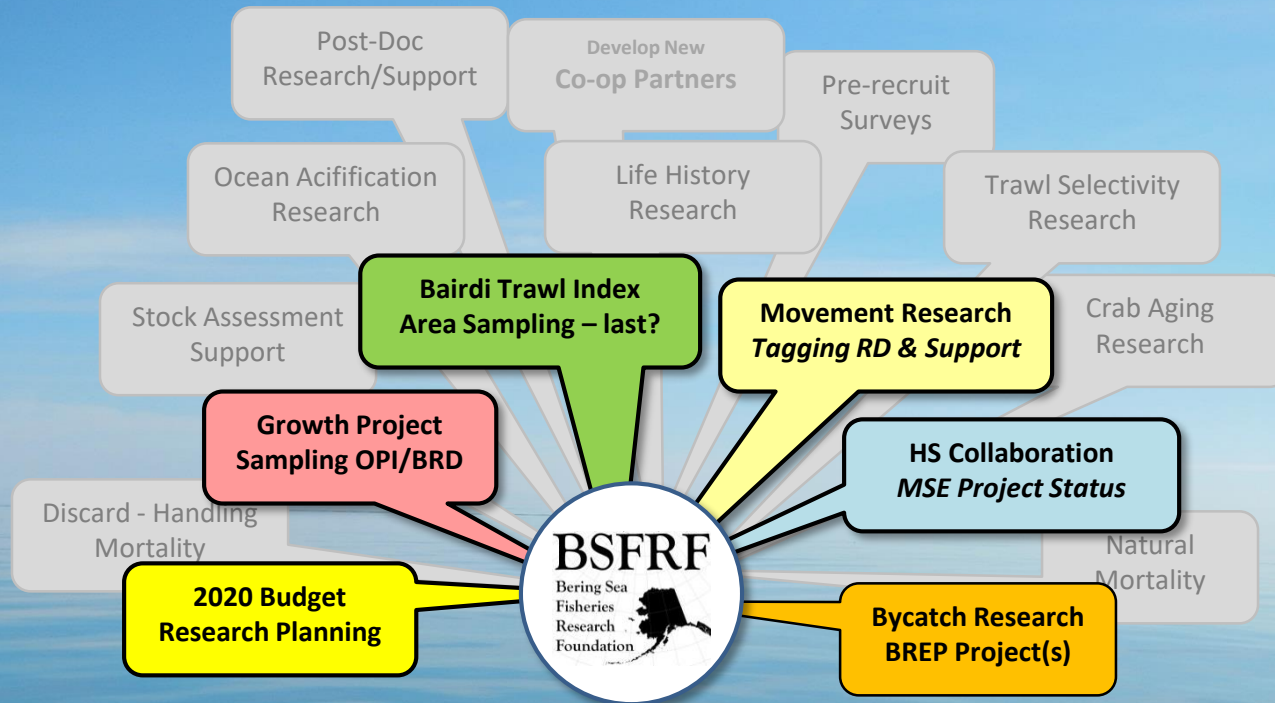


BSFRF Research Planning - 2020

Scott Goodman | Executive Director
CPT | 01.15.20



BSFRF Research



Who We Are...



Growth Studies – Sampling Update

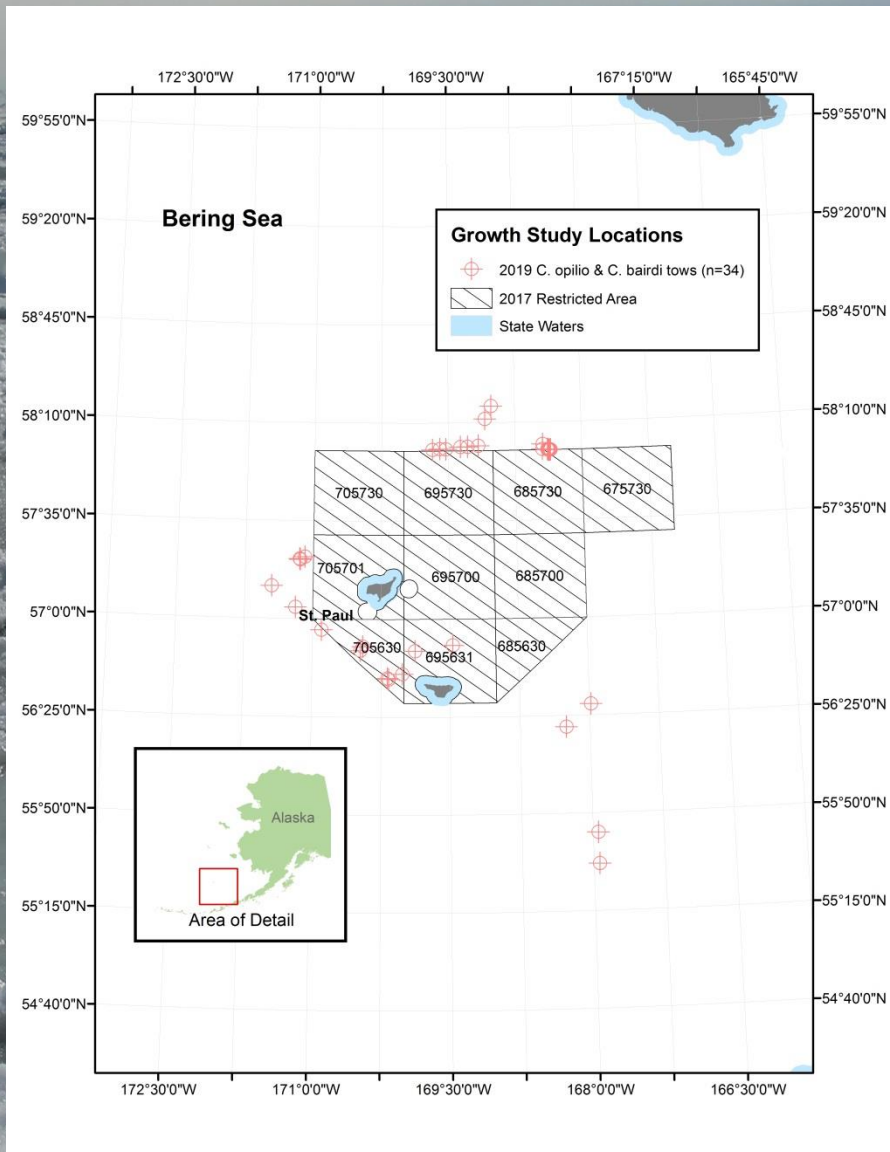
Bering Sea Sampling History

- 2011 Opilio Focus
- 2012 Opilio Focus
- 2013 Opi/Bairdi Focus
- 2015 Opilio Focus
- 2017 Opi/Bairdi Focus
- 2019 Opi/Bairdi Focus
- 2020 Opi Focus – Earlier?

April 2019 Sampling

- *F/V Half Moon Bay*
- Nephrops trawl <4 m/tow
- 6 days total, 4/7-4/12
- 464 study crab retained
- Brd 113/132, Opi 100/119
- Special boat ride to KOD
- <50 at sea mortalities
- 4/17 @ KOD – crab condos
- Fill gaps / increase samples
- About 35 so far...

Growth Studies – Sampling Update



Highlight ability to combine objectives
“Adding Projects”

- 1) OPI growth data
- 2) BRD growth data
- 3) OPI condition samples
- 4) OPI black eye samples
- 5) OPI <10 mm OA samples
- 6) Pollock juv. tissue samples

**FOR 2020, Coordinate w/
Erin, Cody & Buck, NMFS/ADFG
Kodiak, Sample Options?**

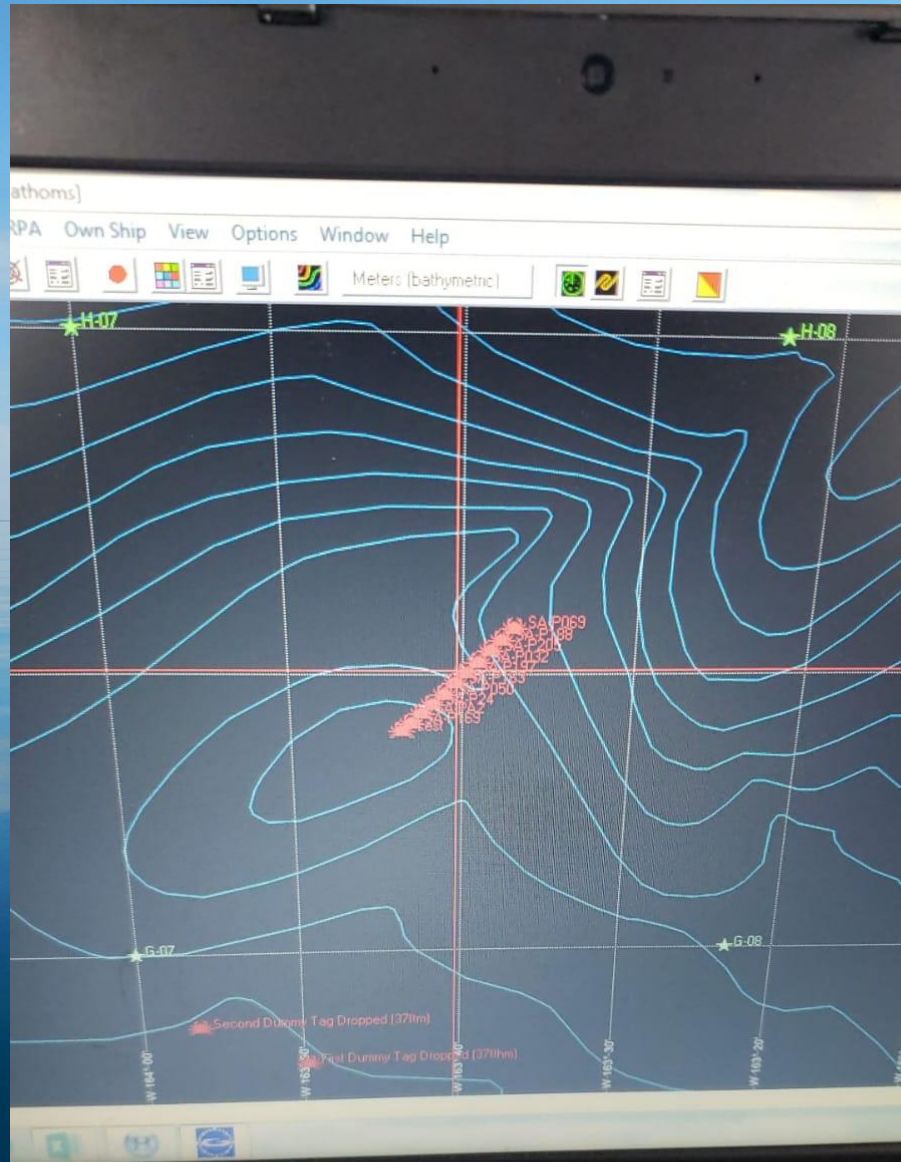
Growth Studies – Sampling Update



Movement Research – Tagging Crabs

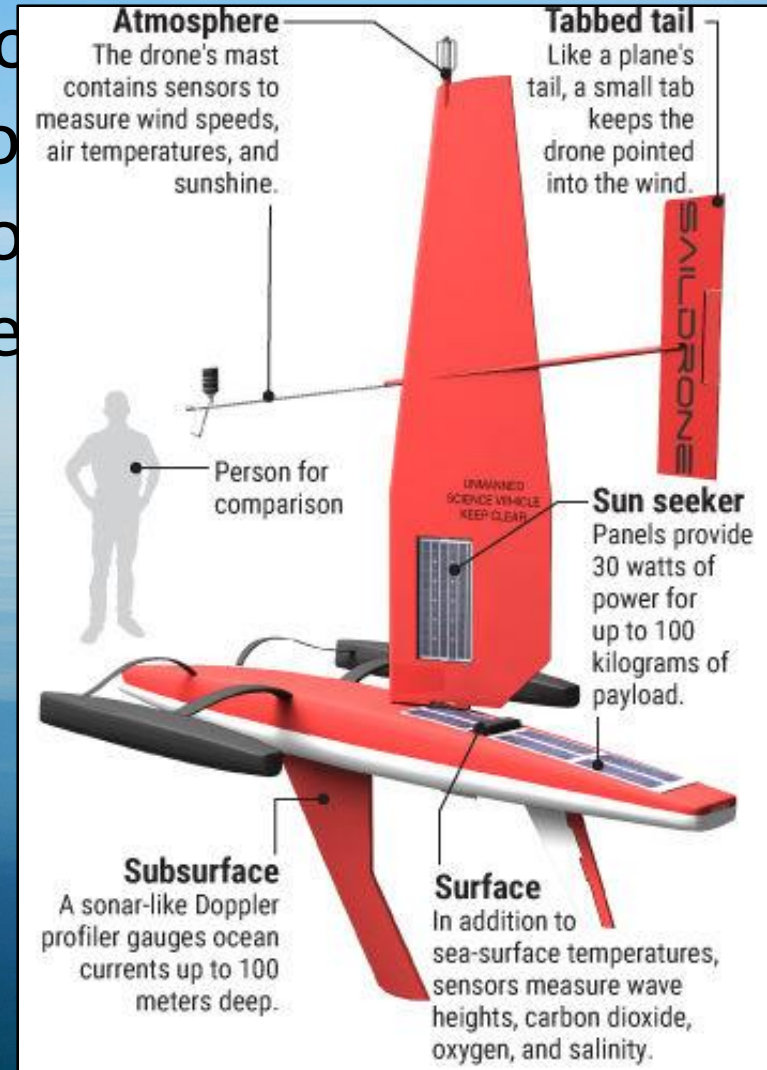
- Traditional Approach – Current Tech/Focused Project
 - Balancing effort on tags released and recovered
 - Overcoming challenges of low recovery
 - Leveraging existing resources and tech
- New Approach – Tags R&D, Acoustics /Focused Project
 - Focusing on acoustic tech for maximizing “recovery”
 - Getting more than 1 sample “ping” per recovery
 - Leveraging existing resources and tech
 - Multi-year remote sensing methods

Movement Research – Tagging Crabs



Movement Research – Tagging Crabs

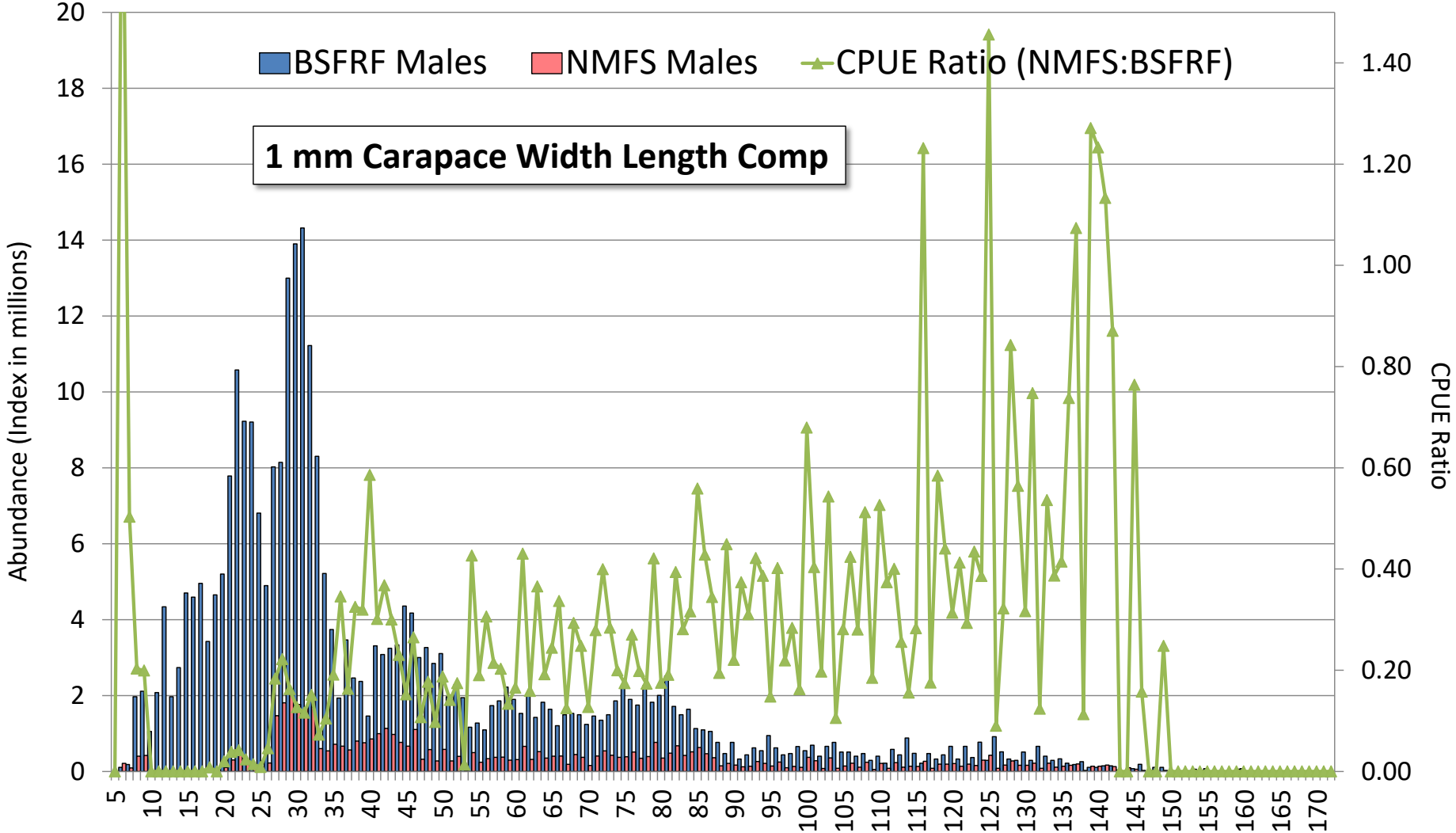
- New Approach – Tags R&D, Acc
- Focusing on acoustic tech for
- Overcoming challenges of lo
- Leveraging existing resource



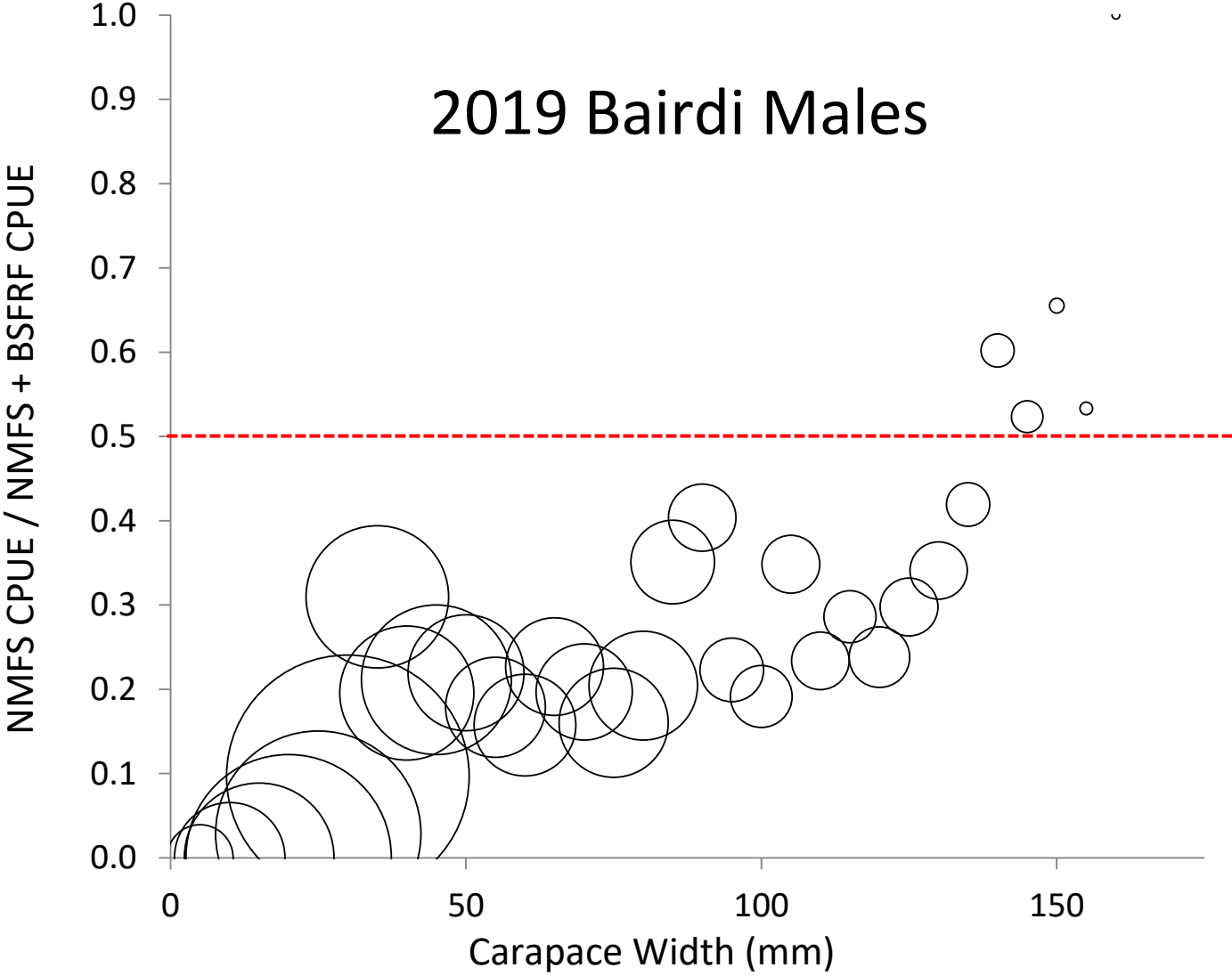
Spatial Research / index area sampling

- Focused on index area sampling in high abundance juvenile area for bairdi, some overlap with opilio
- Objective: capture third year snapshot of high abundance as selectivity/growth/mortality data
- One survey vessel chartered v. two from prior years
- Jun 5 – Jun 27 sampling period, earlier by 7-10 days
- Index sampling occurs “off center” in 4 quartiles of NMFS standard stations, semi randomly
- Sampling follows prior methods w/ Nephrops trawl
- Data to be included with prior years’ index area sampling – provided to and considered by the bairdi assessment model, ultimately

Bairdi Trawl Selectivity 2019 – Expanded Side by Side

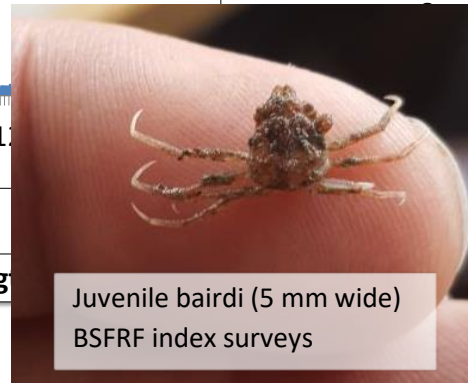
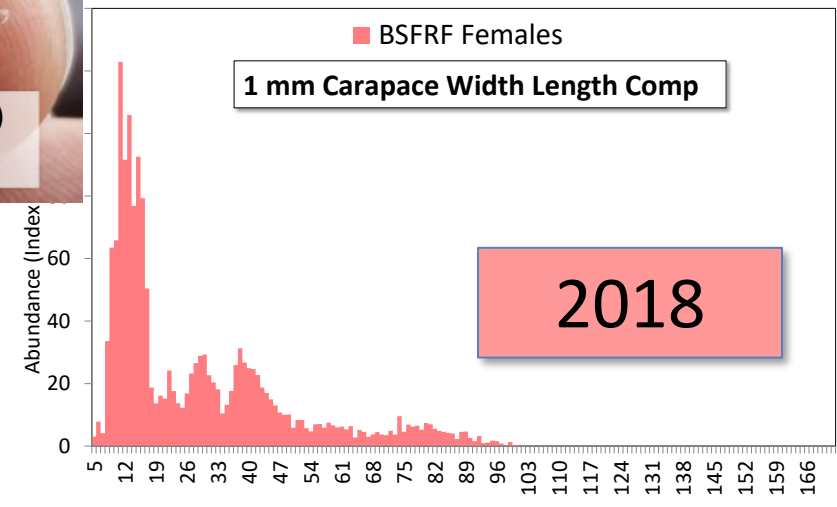
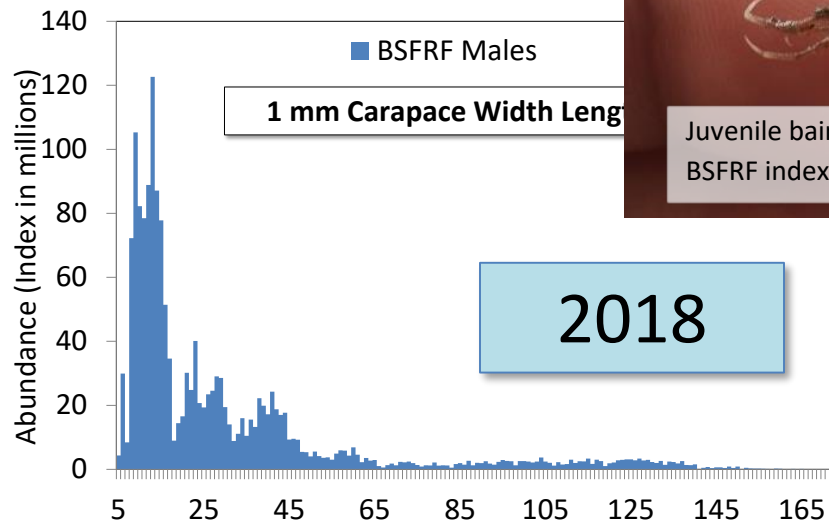
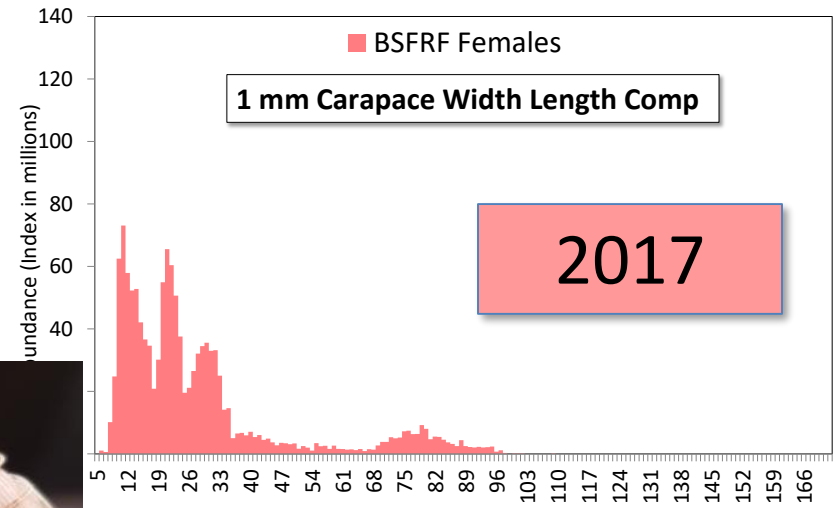
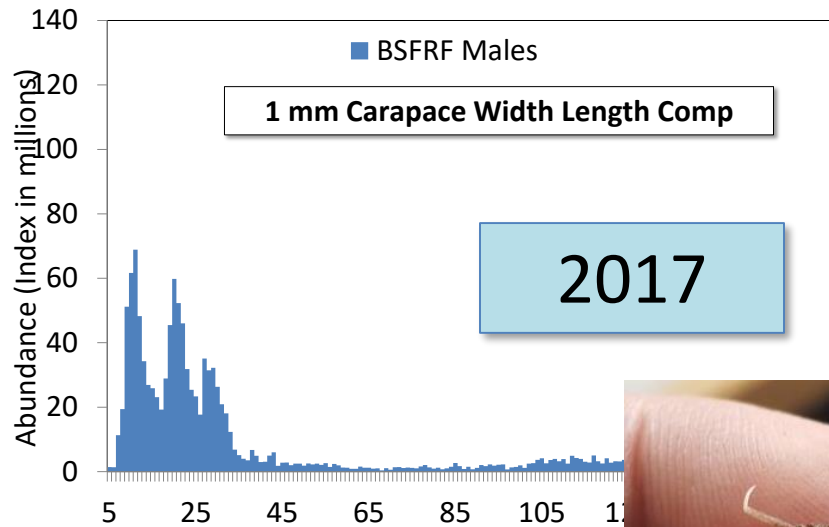


Bairdi Trawl Selectivity 2019 – Expanded Side by Side

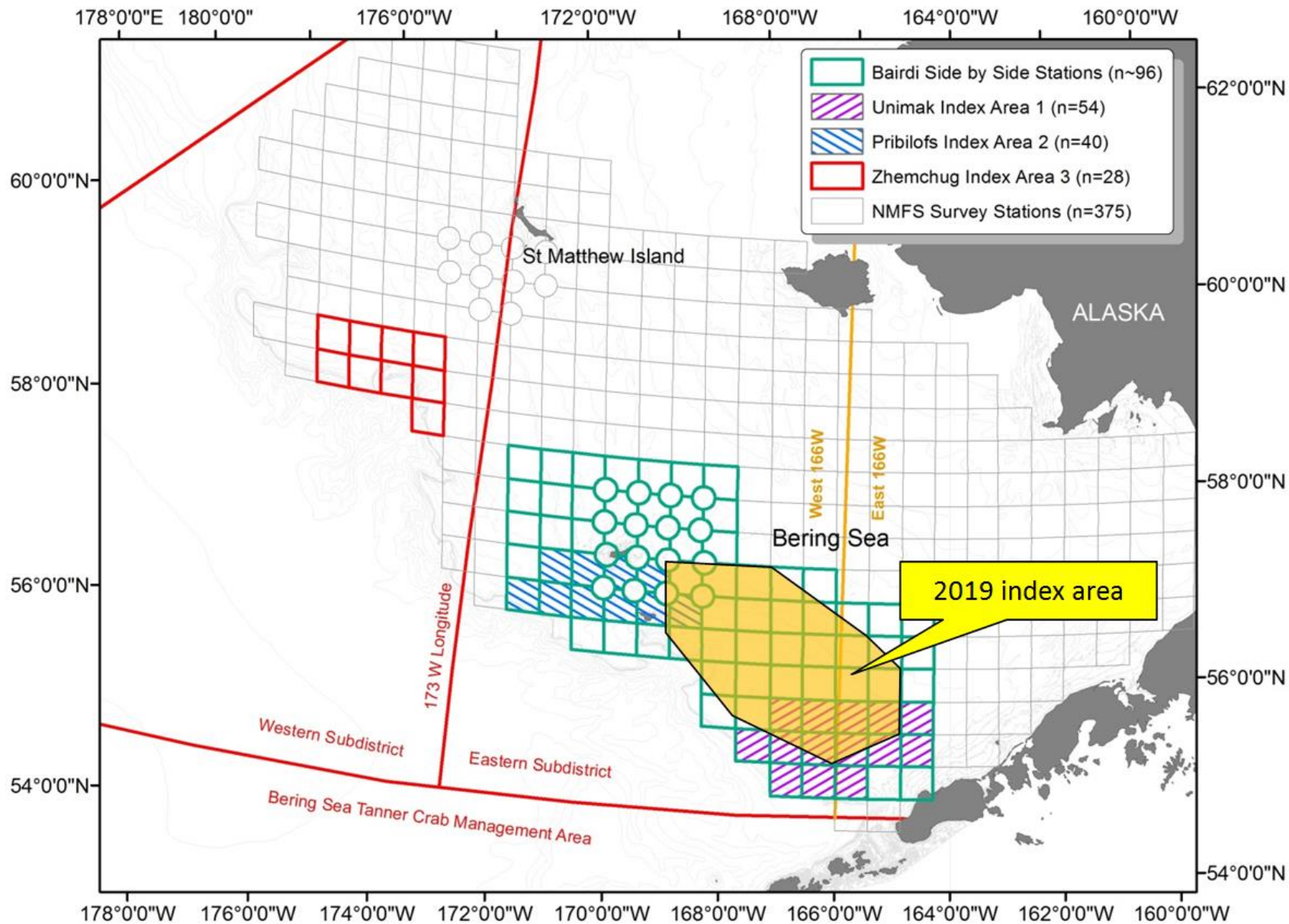


Bairdi Trawl Selectivity 2017/18

Two Surveys – Selectivity & Index Areas



Bairdi Survey Stations – Actual 2019



BSFRF Outlook & Focus

- Seeking input on other research options
- Broadening scope of projects
- Coordinating w/ CPT, Council, research priorities
- Board of Directors meets monthly, plans annually
- 2020 calendar year budget firmed up in next 30-45 days
- Current MOU with NMFS / AFSC, pending update
- Draft MOU with NPRB, reviewing scope & scale
- Flexible to new opportunities...



Testing Pot Gear Modifications to Reduce Crab Bycatch in Cod and Halibut Fisheries

With Bering Sea crab stocks at historic lows, bycatch of crab is a growing concern. The North Pacific Fishery Management Council and NOAA Fisheries plan to allow Pacific halibut fishermen in the Bering Sea and Aleutian Islands, who traditionally fish with longline gear, the use of pot gear as an option to help them avoid whale depredation. Additionally, the pot cod fishery in the Bering Sea is exploring ways to reduce crab bycatch in their fishery.

The Alaska Bering Sea Crabbers (ABSC), Bering Sea Fisheries Research Foundation (BSFRF), and Natural Resources Consultants (NRC), with the support of several partners (listed below), were granted an award from the NOAA Fisheries Bycatch Reduction Engineering Program (BREP) to conduct lab and field experiments to develop and test the effectiveness of crab bycatch reduction in a variety of pot gear modifications. **This project will test pot gear modifications by working with fishermen from the halibut, cod, and crab fisheries, as well as gear manufacturers, to utilize their knowledge and experience when coming up with the design and then applying a scientific protocol to rigorously test its effectiveness.**

To start this project, an industry gear committee meeting will be held (details below) where project partners and industry representatives will discuss gear modifications and determine which will be tested during lab experiments. Some initial ideas for pot gear modifications have been developed by industry representatives and are available on the backside of this flyer as a starting point for discussion.

Industry Gear Committee Meeting

September 16, 2019 6:00pm

Ivar's Salmon House

401 NE Northlake Way, Seattle, WA 98105

For more information contact:

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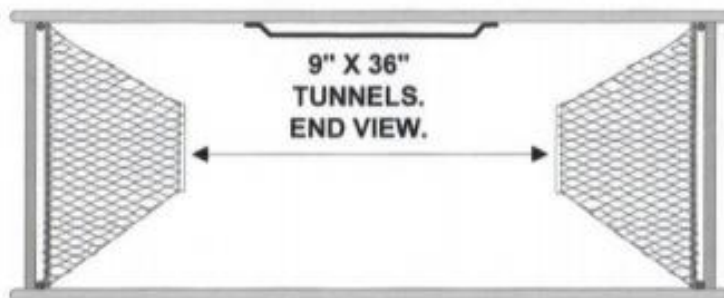
NOAA
FISHERIES



**Bering Sea
Pot Cod
Cooperative**



Some initial ideas for pot gear modifications to reduce crab bycatch



**COMMERCIAL POT WITH
TUNNELS RIGGED VERTICAL
FOR P-COD**

**DUAL TENSIONING BUNGY TO
EXCLUDE CRAB**



Tanner Crab MSE Update

Madison Shipley
Master's Research
January CPT 2020

Schedule

Update Operating Model and Run Simulations

Framework Place Holder for Board of Fish

White Paper Full Draft

Analysis and Preliminary Results and Write Up

Presentation of Results to ADFG and CPT

Selected HCR Presented to Board of Fish



Winter 2019

Spring 2019

Apr. 2019

Sep. 2019

Sep. 2019

Mar. 2020

BSFRF Research Planning - 2020

Scott Goodman | Executive Director
CPT | 01.15.20

