BSFRF Research Update - 2021

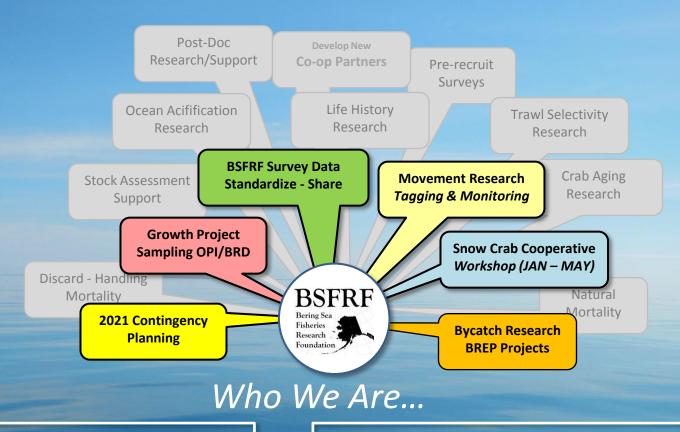
Scott Goodman | Executive Director CPT September | 01.12.21







BSFRF Research



Harvesters - Processors















Growth Studies – Sampling Update



Growth Studies

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 Cancelled
- 2021 Opi Focus Earlier?
 Planning is underway...

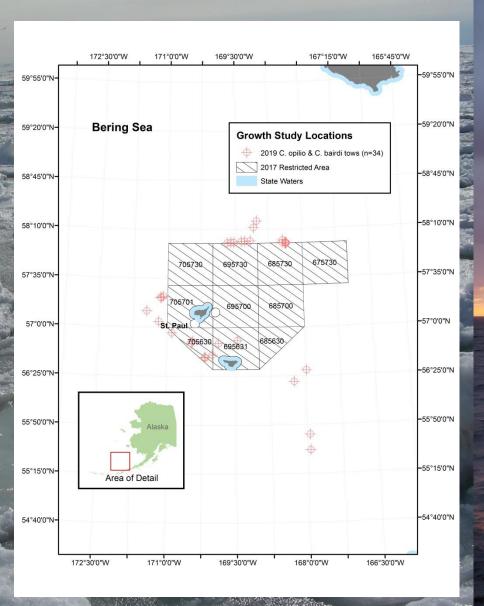
Sampling Update

Review - 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</p>
- 4/17 @ KOD crab condos
- Fill gaps / increase samples

"get stuff done in 2021"

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 2021, Coordinate w/ Cody & Buck, NMFS/ADFG Kodiak, Sample Options?

Movement Research – Tagging Crabs

- New Approach Tags R&D, Acoustics / Focused Project
 - Focusing on acoustic tech for maximizing "recovery"
 - Overcoming challenges of low recovery
 - Leveraging existing resources and tech
 - Coordinate/compare to satellite tags







Movement Research – 2021 Options

- Options for summer charter for tagging focus are underway – but may be coordinated with other efforts
- Research may include crab survey project work, with specifics TBD
- Working closely with NMFS surveys
- Collaborations with ADFG for new options
- Reaching out to cooperative partners FEBRUARY



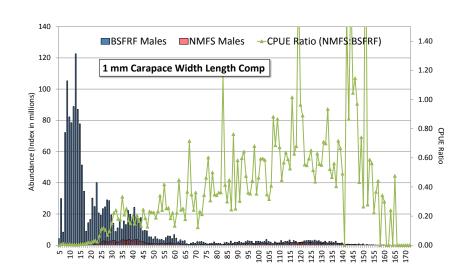
"get stuff done in 2021"

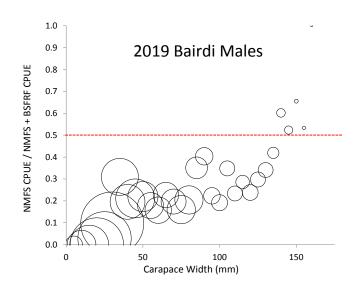


BSFRF Crab Survey Info

- Compiling BSFRF survey data into consistent format
- Providing updates/access to research partners
 - Bairdi survey data Buck Stockhausen
 - Opilio survey data Cody Szuwalski
 - BBRKC survey data Bob McConnaughey
 - Open to other inquiries...
- What are we working on?
 - cleaning up bairdi data -> recent SBS 2018
 - minor corrections to opilio data -> 2016-2018
 - simplified recalculation for RKC area swept, reviewing small relative changes...

BSFRF Crab Survey Info





High Priority
Focused on completing these tasks asap

"get stuff done in 2021"







BREP PROJECT UPDATE

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

LAB RESULTS & FIELD WORK

Jan 2021

Submitted for inclusion in NPFMC Executive Director written report for FEB























BREP Grant 1

Summer 2019 Awarded BREP grant

Industry Gear Committee workshop

Collected red king crab, tested in lab

Feb-Mar 2020 Collected snow crab, tested in lab

COVID delayed field work Jan 2021 Cod pot field test Mar 2021 Halibut pot field tests

BREP Grant 2

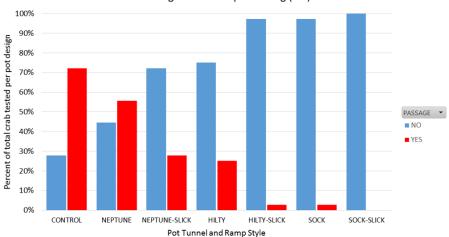
Summer 2020 Awarded BREP grant Fall 2020 Email coordination with Industry Gear

Oct-Nov 2020 Collected red king crab, tested in lab Feb-Mar 2021 Collected snow crab, tested in lab

Sep 2021 Cod pot field tests Halibut pot field

Red King Crab -- Cod pot testing (lab)

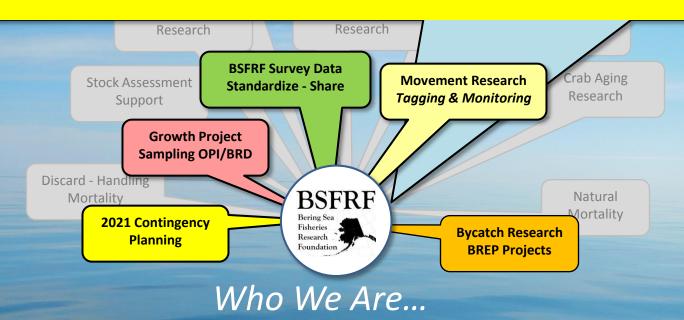






BSFRF Research

SNOW CRAB WORKSHOP



Harvesters - Processors



Cooperative Research Partners













BERING SEA FISHERIES RESEARCH FOUNDATION
ALASKA DEPARTMENT OF FISH & GAME
NATIONAL MARINE FISHERIES SERVICE

JANUARY 21 – 22, 2021

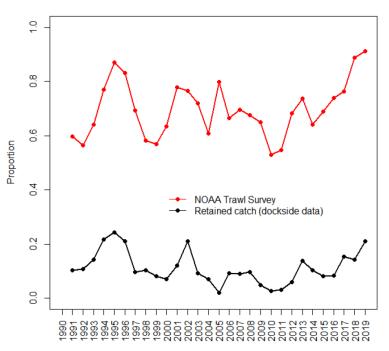
Virtual Workshop via ZOOM (Info Below)
Agenda & Materials Attached

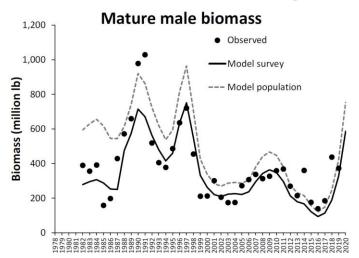
Goals

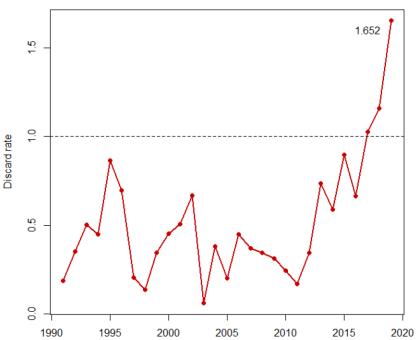
- 1. Consider population-level implications of a reduced male size at maturity.
- 2. Consider causes and effects of the high discarding rates seen in recent years in the fishery.
- 3. Refine eastern Bering Sea snow crab research priorities in the context of specific management improvements and recommendations.

- Why are we looking?
- What's going on?

Proportion sub-industry-preferred legal males







Based on abundance of legal (+3.1 inches) male crab

High discarding sub-industry preferred legal crab

- Review available information from research perspective (maturity, growth, etc., available data)
- Identify options for further research and next workshop steps (two workshops planned now)
- Won't try to answer too much (planning smaller steps first, won't try to address or answer all questions)
- Intended to build on Bairdi Workshop methods and outcomes as a pattern for successful collaboration -> this began in DEC 2017, led to MSE (UW Masters) project, extensive sharing w/ stakeholders, and was adopted into management MAR 2020

- Steering Committee; BSFRF, ADFG, and NOAA
- Via ZOOM, chaired by BSFRF w/ co-hosts
- Open to snow crab researchers and managers
- CPT and similar peers are welcome
- Stakeholder input is planned research focused
- Plans include 4 presenters; 2 from AK (Cody & Ben) and 2 from Canada (St.-Marie & Mullowney)
- There are some sensitive parts of this workshop –
 we'll stay focused on biological research (10p info)
- ➤ Please confirm with Scott Goodman your plans to attend and if you have questions (by email)

BSFRF Outlook & Focus

- Seeking input on other research options
- Broadening scope of projects
- Coordinating w/ CPT and public this week
- · Board of Directors meets monthly, plans annually
- Flexible to new opportunities...
- CONTINGENCY PLANNING...

BSFRF Research Update - 2021

Scott Goodman | Executive Director CPT Seattle | 01.12.21





