Alaska Fisheries Science Center
FY23 State of the Center

Robert Foy
AFSC Research and Science Director

Presentation for North Pacific Fishery Management Council
October 5, 2023
Overview

- Staff updates
- Survey updates
- Survey Modernization Effort
Staff updates

Julie Keister  
RACE Recruitment Process Program Program Manager

Melissa Haltuch  
REFM SSMA Program Program Manager

Jason Jannot  
FMA Analytical Services Program Manager

Angela Doroff  
Auke Bay Laboratory Deputy Division Director
Acting positions

Julien Lartigue
AFSC
Acting Deputy Director

Chris Melary
Office of Fisheries Information Systems
Acting Director

Meaghan Bryan
AFSC
Acting Planning Officer

Marysia Szymkowiak
Economic and Social Sciences Research Program
Acting Program Manager
2023-2024 survey status update
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Survey modernization in the Bering Sea

- Need to adapt surveys to the new reality:
  - Design one survey for all 3 BS regions (EBS, NBS, Slope)
  - Increase survey efficiency, optimize effort allocation,
  - Design flexible survey that will be responsive to assessment data needs and adaptable to new technologies

- Need to redesign gear and change sampling methods
  - Gear is becoming obsolete (doors, floats, nylon mesh, bridles, etc)
  - Improve fishing methods (e.g. use autotrawl)
  - Need to decrease towing time from 30 to 15 min to reduce catch volume and number of tows with split catch.
Why survey modernization is necessary?

• Changes are happening despite our wishes: consistency through standardization is still important, but it can hinder the progress

• The challenges to standardization are common and difficult to overcome

- loss of traditional sampling ability: MPAs, wind farms, etc;

new survey technologies

survey gear becoming obsolete

changes in ecosystems, expansion of stocks into new areas

changes in survey objectives
More challenges

economy, politics, and social considerations

need to support subsistence and local communities

new statistical methods, AI

need for new data types, e.g. EBFM, EFH, climate change forecasting, etc
What does it take to change survey?

1. Money, time, and people (it may take few years and may require temporarily return to biennial sampling in the NBS).
2. Good planning.
4. Engagement from stakeholders.
5. Testing, a lot.
6. Transition period.
Why do we need to start now?

1. NOAA Fisheries mission: the stewardship of the nation's ocean resources and their habitat.
2. AFSC priorities: 1. Foster healthy and sustainable marine resources; 5. Improve organizational excellence.
3. Assure continuity of management advice in face of changes in ecosystem, technologies, and methods.
4. It will take a while, so the sooner we start the better.
5. We have the expertise (NOAA and stakeholders, we can do it together).
Project components and timeline

1. Sampling design – area, frequency, sampling density (work started in 2023)
2. Determining 15min vs 30min catchability/selectivity correction factors (work started, more data collections needed)
3. Combining slope/shelf data and determine calibration factors between current slope and shelf gears (work started in 2023)
4. Survey bottom trawl gear and fishing methods redesign (workshop with stakeholders planned for October 2023)
5. New survey gear calibration (no start date yet)
6. Survey time series calibration, transition design, and transition implementation (no start date yet)
Potential milestones

AFSC working group on EBS survey modernization (October 2023)
Projects:

1. Calibration factors derived for slope/shelf surveys (2025)
2. New bottom trawl gear designed and built (2025)
3. New Bering sea survey design proposed and agreed upon (2026)
4. 15min vs 30min catchability/selectivity correction factors derived (2026)
5. New survey gear calibration (2026)
6. Survey time series calibration (2026), transition design (2026), and transition implementation (2027)
Call for stakeholders engagement

Call for public and industry engagement in all projects, but especially in project (4) on survey bottom trawl gear and fishing methods redesign. Initial workshop is planned in late October (Date TBD).

Workshop coordinator: Nancy Roberson
nancy.roberson@noaa.gov

Project contacts:
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Nicole Charriere nicole.charriere@noaa.gov
Shawn Russell shawn.russell@noaa.gov
Thank You!