



# Workshop on Unavoidable Survey Effort Reduction 2020 Agenda



**AFSC**  
**Seattle**  
January 13–17,  
2020



**NOAA**  
**FISHERIES**

# ICES Workshop on Unavoidable Survey Effort Reduction

13-17 January 2020

NOAA Fisheries -- Alaska Fisheries Science Center Building 4, Traynor Room

## AGENDA

### Monday, January 13<sup>th</sup>

10 am – 1:00 pm	<b>Registration</b>
1:00 -- 1:10 pm	<b>Stan Kotwicki, AFSC</b> Opening Remarks, Terms of Reference
1:10 – 1:15	<b>Wayne Palsson, AFSC</b> Orientation to the Facility
1:15 – 1:30	Introductions
1:30 – 2:00	<b>Sven Kupschus, CEFAS</b> Key Note Message: European Perspective
2:00 – 2:30	<b>Rick Methot, NMFS</b> Key Note Message: United States Perspective
2:30 -- 3:00	<b>Stan Kotwicki, AFSC</b> Challenges and priorities for WKUSER and beyond
3:00 – 4:00	Discussion on challenges and priorities (including examples of experiences and outcomes, defining extend of the problem across ICES countries)
4:00 – 4:30	Discussion on specific topics to work on during workshop (e.g. approaches to effort reduction, simulations, modeling, capturing true uncertainty in stock assessment, advice approaches). Start thinking about breakout sessions and sub-working groups to tackle specific issues.
4:30 – 5:00	Group Leader Discussion
After 5 pm	<b>No-Host Social Event at Magnuson Brewery (7801 62<sup>nd</sup> Ave NE)</b>

### Tuesday, January 14<sup>th</sup> Contributed talks -- European and American surveys

9 am – 9:15 am	<b>Sven Kupschus, CEFAS</b> An overview of European surveys.
9:15 – 9:30 am	<b>Rick Rideout, DFO</b> An Overview of Fisheries and Oceans Canada's Multispecies Bottom Trawl Surveys in the Newfoundland and Labrador Region: Survey Coverage Issues and Implications for the Provision of Science Advice.
9:30 – 9:45 am	<b>Michael Martin, AFSC</b> An overview of NOAA Fisheries Surveys.
9:45 – 10:00 am	<b>Anne Hollowed, AFSC</b> SSC perspective on trade-offs among trawl survey schemes in federal waters off Alaska under varying funding scenarios

10:00 – 10:15            **Kotaro Ono, IMR**            A spatiotemporal operating model for simulation testing Alaskan bottom trawl survey effort and design.

10:15-10:30            **BREAK**

**TOR I. Current Processes: The current processes used in dealing with unavoidable reductions in survey effort and examine the existing coping strategies (e.g. spatial coverage, survey frequency, or sampling density) and their qualitative consequences.**

10:30 – 10:45 am        **Kristin Marshall, NWFSC** Understanding trade-offs with survey frequency using Management Strategy Evaluation (MSE): a Pacific Hake case study.

10:45 – 11:00            **Owen Hamel NWFSC**    The effect of survey frequency and intensity on U.S. West Coast groundfish stock assessments.

11:00 – 11:15            **BREAK**

11:15 -- 11:30            **Ned Laman, AFSC**        Effects of sampling density changes on biomass estimates from stratified random bottom trawl surveys in the Gulf of Alaska.

11:30 – 11:45            **Gwladys Lambert, CEFAS** Reducing effort in a stratified fixed station survey – impact on survey indices and assessment of a data rich and data-limited stock.

**TOR II. “Survey Uncertainty”: Develop key quality metrics that can be used to describe “total survey uncertainty” for survey derived indices of abundance for common survey designs.**

11:45 – 12 noon          **Jim Thorson, AFSC**        Measuring the impact of increased ageing effort: theory and case-study demonstration.

12:00 – 12:15            **Stan Kotwicki, AFSC**      The effect of variable sampling efficiency on the reliability of observation error as a measure of uncertainty in abundance indices from scientific surveys.

12:15 – 1:15 pm            **LUNCH**                                **NOAA Cafeteria**

1:15 – 1:30                **Elaina Jorgensen, AFSC** Systematic reduction in survey effort and the effect on variance of fish abundance.

1:30 – 1:45 pm            **Peter Munro, AFSC**        Comparing three estimators of change in trawl survey mean catch per unit effort (CPUE) the Mean Squared Error (MSE) of the estimate under different simulated scenarios.

1:45 – 2:00                **Paul Spencer, AFSC**        Variance propagation from fishery-independent surveys to the stock assessment outputs.

**TOR III. “Survey Continuity”: Define “changes to survey designs” that require inter-survey calibration and what changes can be resolved by a model-based approach to index generation.**

2:00 -- 2:15 pm          **Paul Von Szalay, AFSC**    A Comparison of Bottom Trawl Sampling Strategies in the Gulf of Alaska: Design vs. Model-Based Approaches.

2:15 – 2:30	<b>Kresimir Williams, AFSC</b> Cameras vs Catch: potential effects of implementing open codend tows for acoustic midwater fish surveys.
2:30–2:45	<b>Jason Conner, AFSC</b> Impact of reducing sample density on the accuracy and precision of design-based estimators of an abundance index for a bottom trawl survey in the eastern Bering Sea.
2:45 – 3:00	<b>Jennifer Blaine, WDFW</b> WDFW Puget Sound scientific bottom trawling: sampling design changes and consequences.
3:00 – 3:15	<b>BREAK</b>
<b>TOR IV. “Decision-making Tools”: Develop methods that can provide quantitative decision-making tools describing the impacts on the quality of the survey deliverables and advisory products.</b>	
3:15 – 3:30 pm	<b>Meaghan Bryan, AFSC</b> The Impact of survey frequency and intensity on detecting environmental anomalies and shifts in abundance.
3:30 – 3:45	<b>Curry Cunningham, UAF</b> Implications of changes in bottom trawl survey effort on the quality of stock assessment results.
3:45 – 4:00	<b>Sven Kupschus, CEFAS</b> An empirical approach to predicting the effects of fisheries independent survey effort reductions on biases and precision characteristics of stock dynamic metrics used in the management of fisheries. An example for three gadoid species in the North Sea.
4:00 – 4:15	<b>Lauren Rogers, AFSC</b> Evaluation of a survey with an adaptive sampling domain to capture climate-driven shifts in larval fish distributions.
4:15 – 4:30	<b>Jon Richar, AFSC</b> Considering changes in sampling density and survey frequency, and their effects on eastern Bering Sea crab population time series.
4:30 – 4:45	<b>Chris Rooper DFO</b> Accounting for habitat variables to improve abundance indices in Alaska trawl surveys with an emphasis on results from averaging multiple modeling methodologies.
4:45 -- 5:00	<b>Nicola Walker, CEFAS</b> Is the North Sea IBTS oversampled – computer-based study of the effects of reduced sampling on stock assessments?
5:00 – 5:15	<b>Cynthia Yeung, AFSC</b> Survey Effort Reduction Impacts on the Assessment of the Thermal State of the Bering Sea Ecosystem.
5:15 – 5:30 pm	Discussion, formulating specific topics for sub-working groups. Dividing into sub-working groups
5:30 pm	Adjourn
6:00 pm	No-host Social and Welcome

## Wednesday, January 15<sup>th</sup>

9:00 – 12 noon	Work on specific problems in break out groups	
12 noon – 1:00 pm	Lunch	NOAA Cafeteria
1:00 – 5:00	Work on specific problems in break out groups	
5:00	Adjourn	
6:00	No-host Dinner Social	

## Thursday, January 16<sup>th</sup>

9:00 – 10:30 am	Working groups presentations, discussion	
10:30 – 12 noon	Work on specific problems in break out groups	
12 – 1:00 pm	Lunch	NOAA Cafeteria
1:00 – 5:00	Writing break out groups reports	
5:00	Adjourn	

## Friday, January 17<sup>th</sup>

9:00 – 10:00 am	<b>Bill Karp &amp; Chris Rooper</b> Plenary: Synopsis: What did we learn and where do we go from here?
10:00 – 11:00	<b>Stan Kotwicki AFSC</b> Challenges and priorities remaining. What's next, practical matters?
11:00 – 12:00 noon	Writing final report.
12:00 noon	Closing Remarks