

Agenda Item F.7.a  
Supplemental USFWS Presentation 1  
November 2017

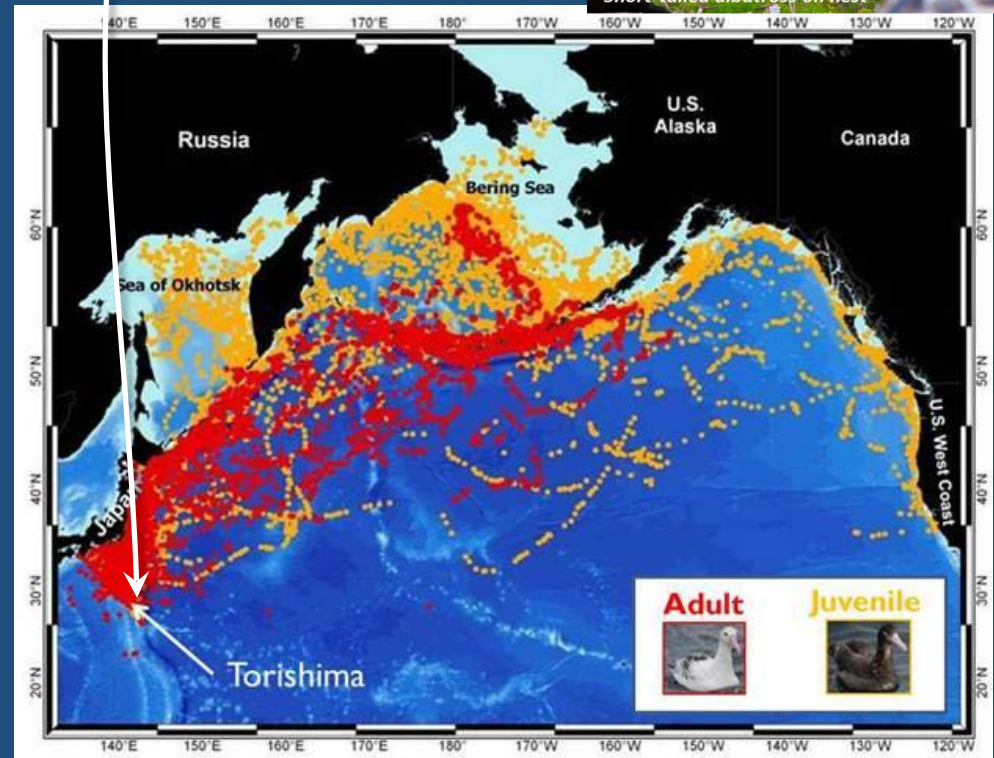
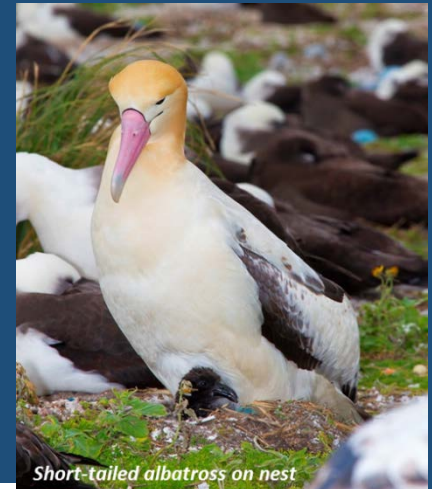


# Biological Opinion West Coast Groundfish Fishery for Short-tailed Albatross

Laura Todd  
U.S. Fish and Wildlife Service  
Newport Field Office

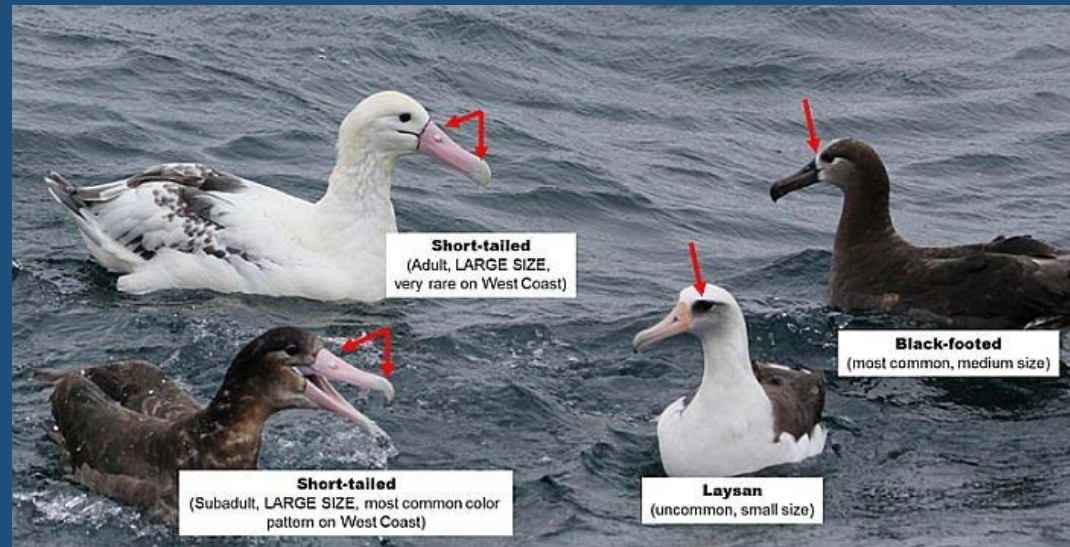
# Short-tailed albatross

- Population = 4,995
- ~69% of 1-3 year birds occur on US West Coast
- Injury and mortality from incidental catch on longlines or striking trawl cables



# Consultation History

- Take of one short-tailed albatross in 2011 in sablefish fishery
- Biological Opinion completed in 2012
- Based estimated take on observed black-footed albatross interactions
- Exceeded that estimate nearly every year following the opinion



# 2017 Formal Consultation

- Reinitiated consultation in December 2016
- NMFS replaced the black-footed albatross proxy with a Bayesian model to estimate short-tailed risk of take.
- NMFS provided additional information on trawl risks in the catcher-processor fleet.
- Previous opinion and regs remained in effect while consulting.



Streamer lines in use, as required in the 2016 biological opinion for short-tailed albatross





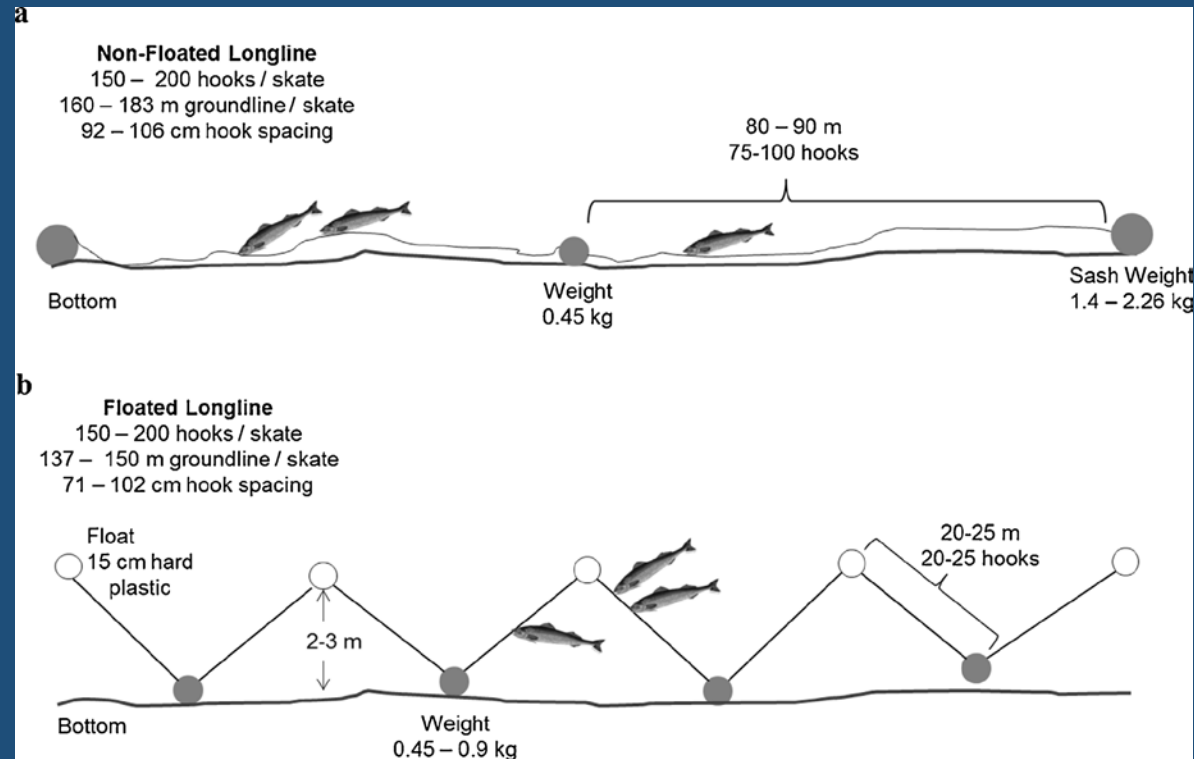
# Estimating Effects



- Direct Effects
  - Longline – hooking and drowning.
  - Trawl – difficult to observe and estimate
- Indirect Effects
  - Derelict gear, spills, offal discharge, food reduction – minor

# New Information on Effects

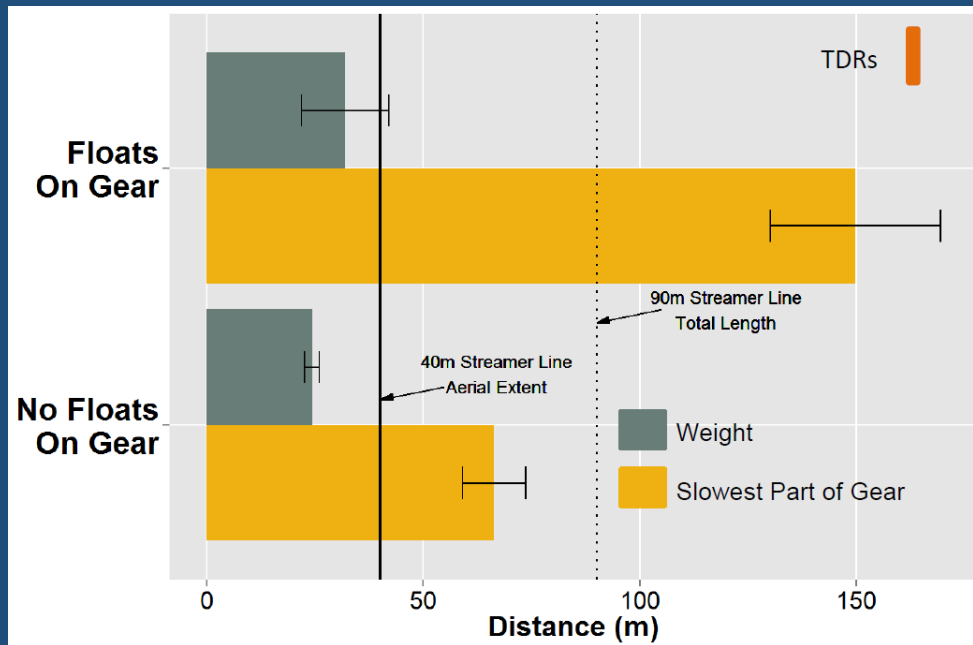
- Research
  - Floating gear
  - Night-setting
  - Vessel interactions
  - C-P Trawl interactions
- Methods for estimating take



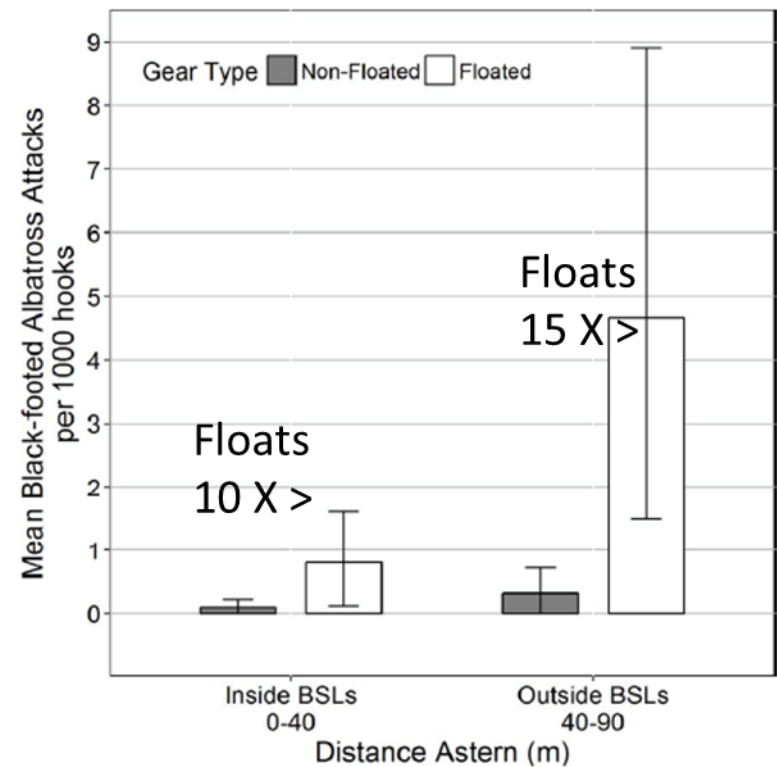
Top – Non-floated demersal longline gear.  
Bottom - Floated demersal longline gear.  
(Gladics et al 2017)



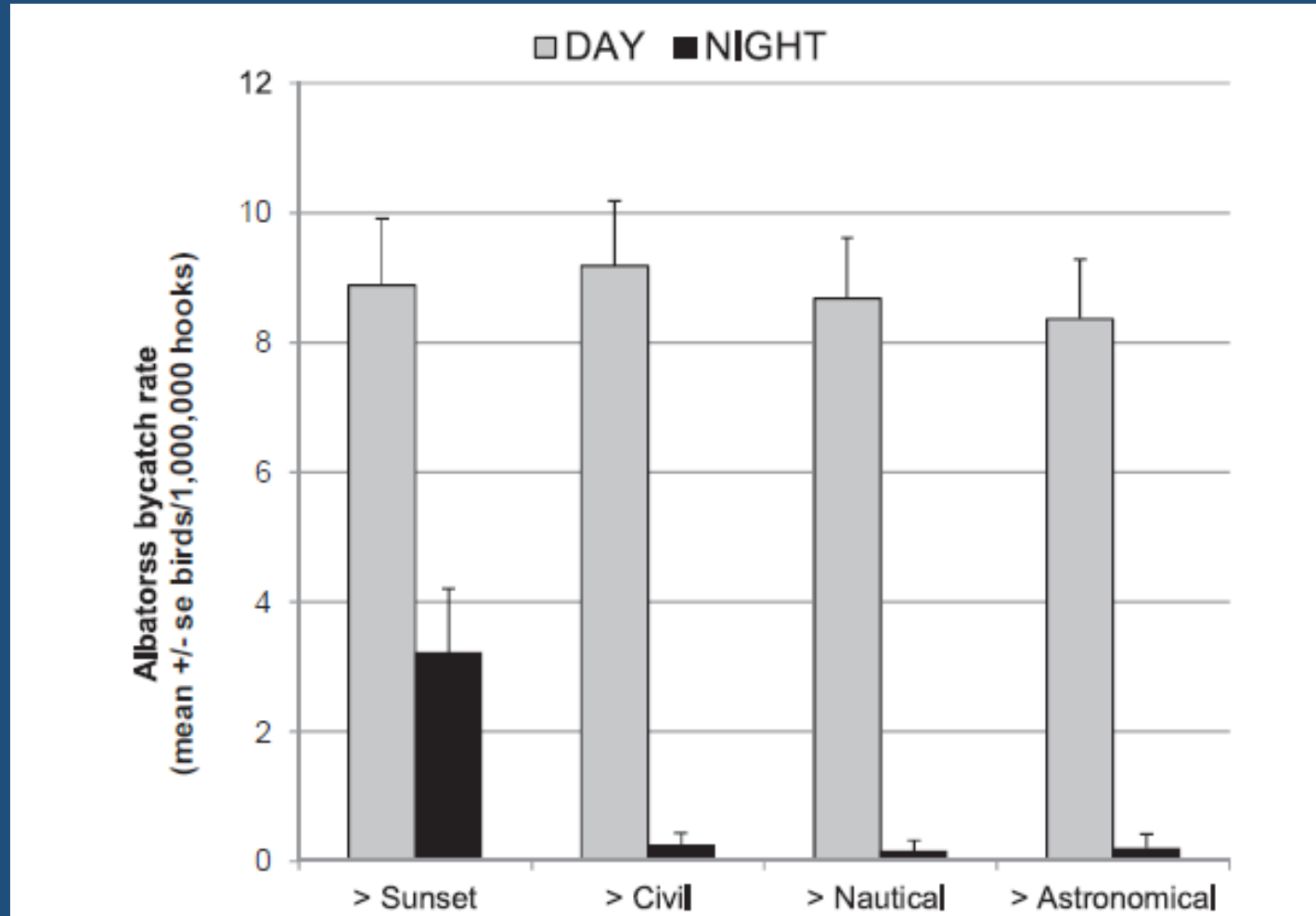
- Streamers are less effective with floating gear used by some vessels (Melvin 2015, Gladics et al 2017)



Albatross attack rates per 1000 hooks

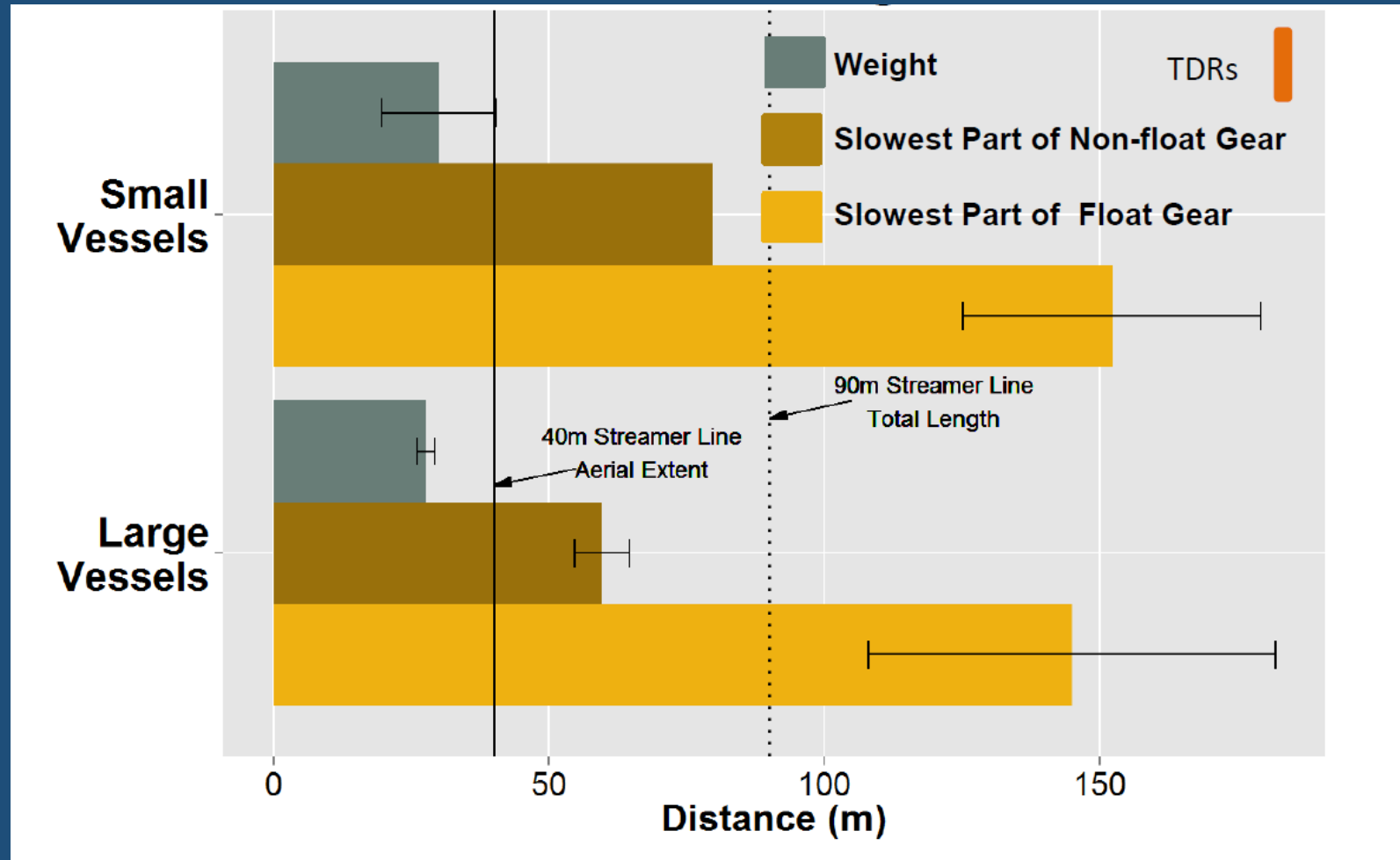


- Night-setting is an effective means of bird deterrent when using longline gear (Gladics et al 2017)

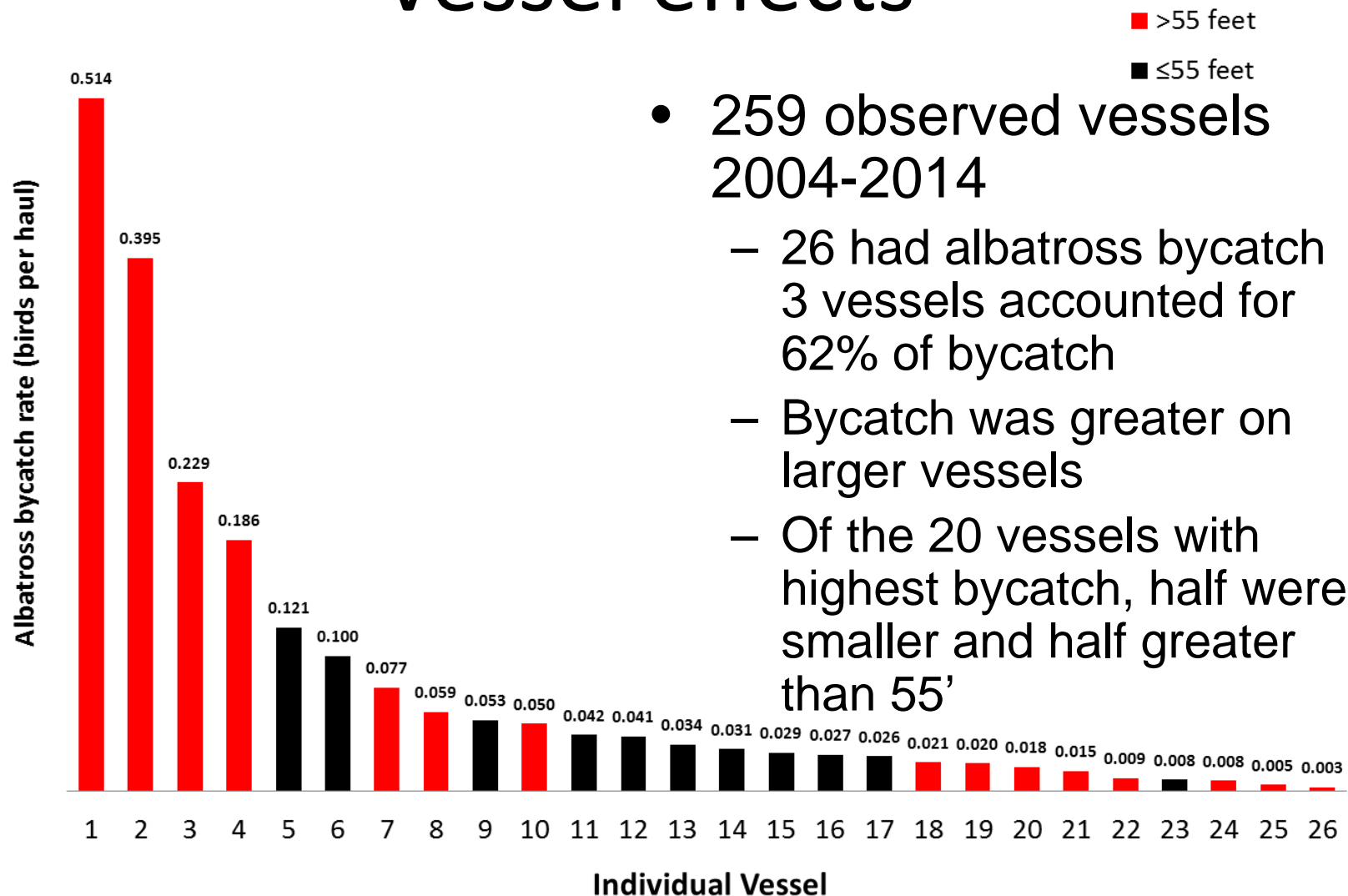




- Smaller boats have similar risk to seabirds as larger boats (Gladics et al 2017)

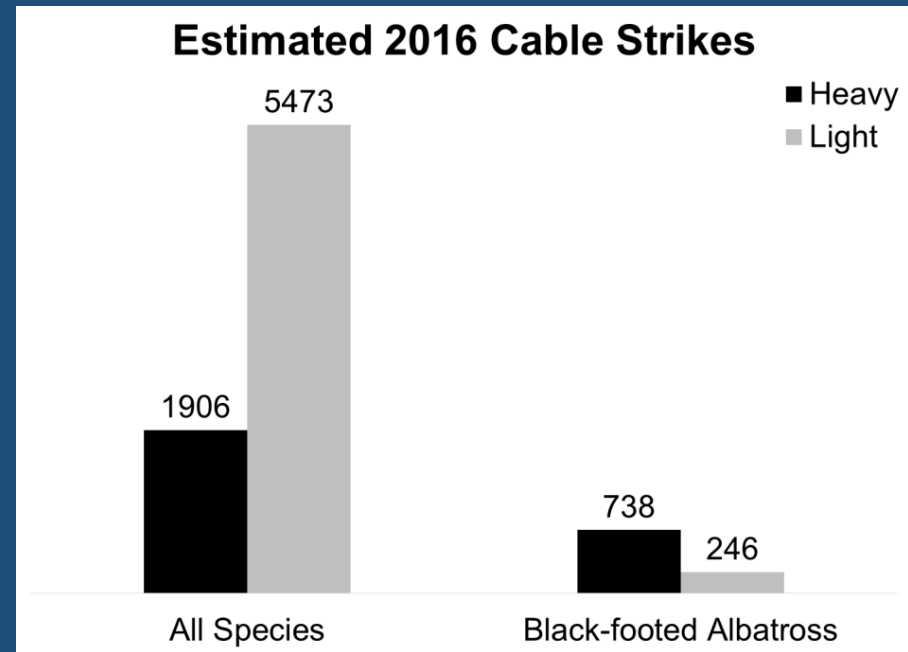


# Vessel effects



# Catcher-Processor Trawl Effects

- 2016 NMFS preliminary study
- Black-footed albatross
  - 738 heavy strikes
  - 2 carcasses
- Estimated 85 killed
- Compare to estimate annual maximum of 95 killed in sablefish 2002-2009



*Seabird strike observations in US West Coast At-Sea Hake catcher processor fleet (A-SHOP 2016)*



# Bycatch Risk Assessment

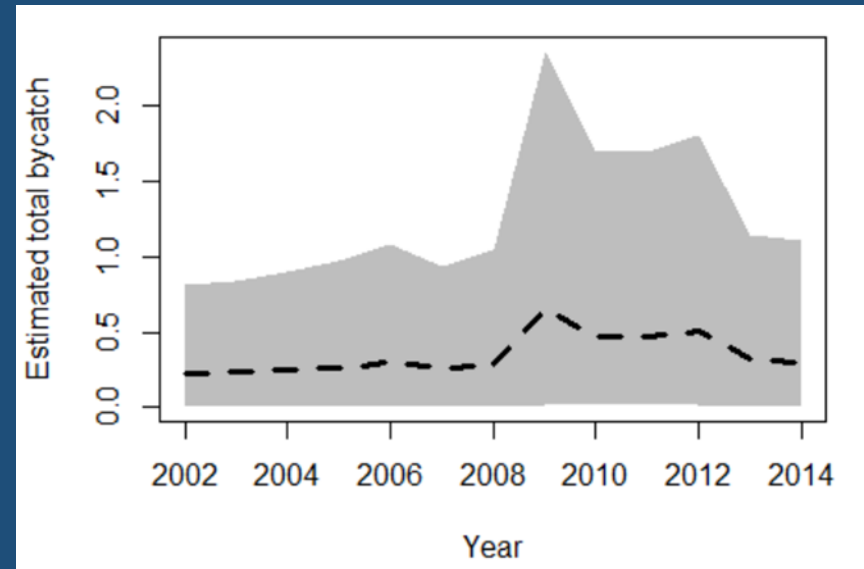
- Bayesian Model (NWFSC 2016)
  - Fishing effort (sets, hooks, catch)
  - Albatross population
  - Observed sector
- Extrapolated calculated risk to the fleet

Measure of Fishing Effort	Estimated Annual Bycatch	Upper Confidence Limit
Observed Sets	0.23 to 0.61	0.84 to 2.33
Observed Retained Catch	0.22 to 0.42	0.79 to 1.56
Observed Hooks	0.22 to 0.63	0.85 to 2.44



# Applying Risk Assessment to Take Estimate

- Median of the estimated bycatch  $\approx$  anticipated observed take = **0.425 birds/year**
- Highest confidence interval  $\approx$  calculated take estimate = **2.44 birds/year**
- Rounded up to account for other sources of potential take (e.g., trawl)



Fleet-wide bycatch of short-tailed albatross (effort = observed hooks) estimated for 2002-2014.





# Incidental Take Statement

- Described take (mortality or injury) in two ways:
  - Actual take of 1 bird/2 years**OR**
  - Estimated 5 birds/2 years
- NMFS will continue to track take with the estimate as well as any observed/reported take.



*Observer Program – NMFS-NWFSC*



# Reasonable and Prudent Measures

1. Minimize the risk of short-tailed albatross interacting with hooks and lines.
2. Minimize the risk of short-tailed albatross interacting with trawl cables.
3. Continue to convene Endangered Species Working Group
4. Monitor and report all take of short-tailed albatross and efficacy of avoidance and minimization measures.
5. Facilitate the salvage of short-tailed albatross carcasses taken in the PCGF.



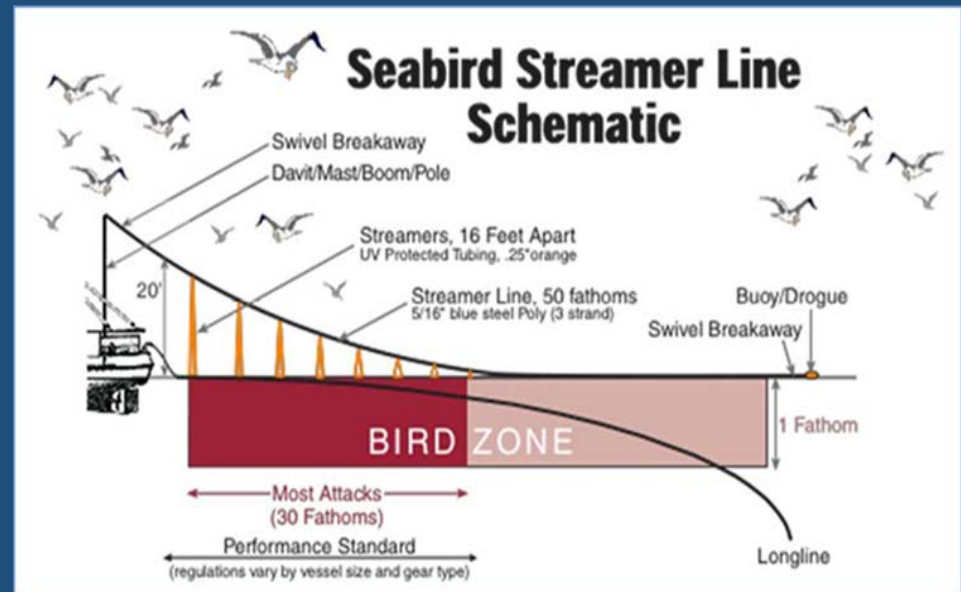
*Deployed single streamer line – Melvin, Washington Sea Grant*



# Terms and Conditions for RPM 1 – Minimize Longline Interactions

1. By April 2020, and streamer use regs to be consistent with the Alaska regs,
  - Includes use of single streamer lines on boats 26-55 feet in length,

OR
2. Set longlines after civil sunset
3. Research
4. Assist tribes in streamer use implementation
5. Conduct outreach on albatross

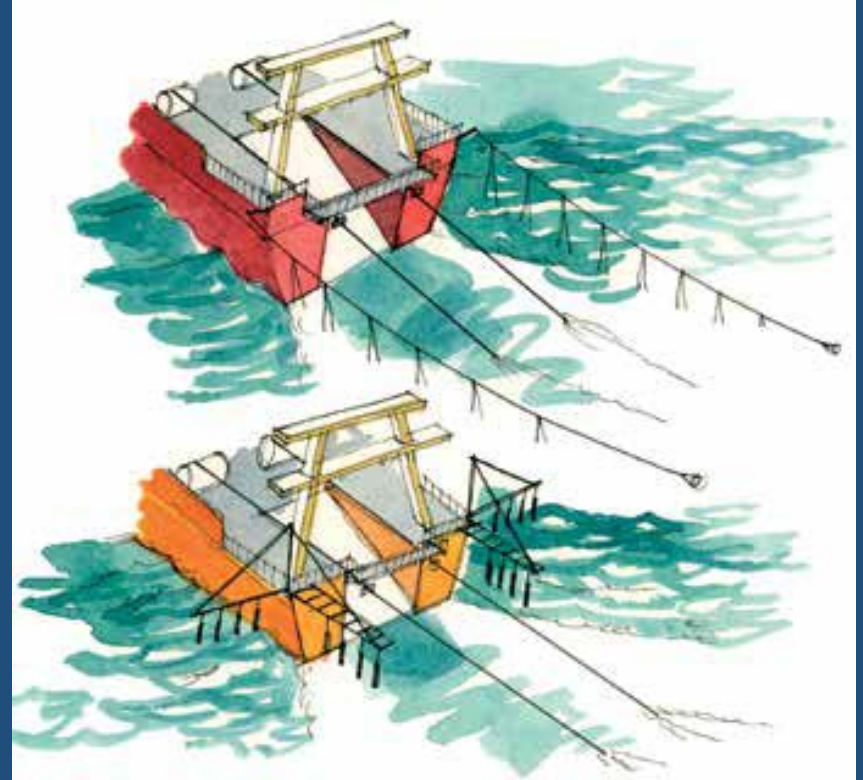


*Schematic of streamer line deployment – Melvin, Washington Sea Grant*



# Terms and Conditions for RPM 2 - Minimize Interactions in C-P Trawl Fleet

- Investigate extent of take associated with C-P trawl gear and management actions that minimize take, including
  - Streamer lines;
  - Minimizing aerial extent of trawl cables; and
  - Feasible offal management
- Implement measures that minimize interactions with trawl gear.



*Examples of streamers used in New Zealand on trawlers (ACAP 2014).*



# RPMs 3-5 – Administrative

- Minor changes from 2012 Opinion
- ESA workgroup
  - Formalize schedule
  - Update risk assessment
- Monitor and report to FWS
  - Interactions
  - Observer Program
    - time of set,
    - number of hooks,
    - gear type
  - Logbook with same info
- Disposition of injured birds or carcasses



*Short-tailed albatross rescued by recreational fishers, 2015.*





# Summary

- Primary Changes from 2012 to 2016
  - More robust methods to estimate take
  - Additional requirement to modify regs for streamers on smaller boats.
  - Allow night-setting in lieu of streamers
  - Research where initial investigations indicate that additional conservation may be needed (C-P trawl, individual vessel effects)
  - Reporting and monitoring, include need for logbook to improve fleetwide estimates of bycatch



# Questions?



*Short-tailed albatross in Sea of Othosk, 2010. - Artukhin, 2010.*

