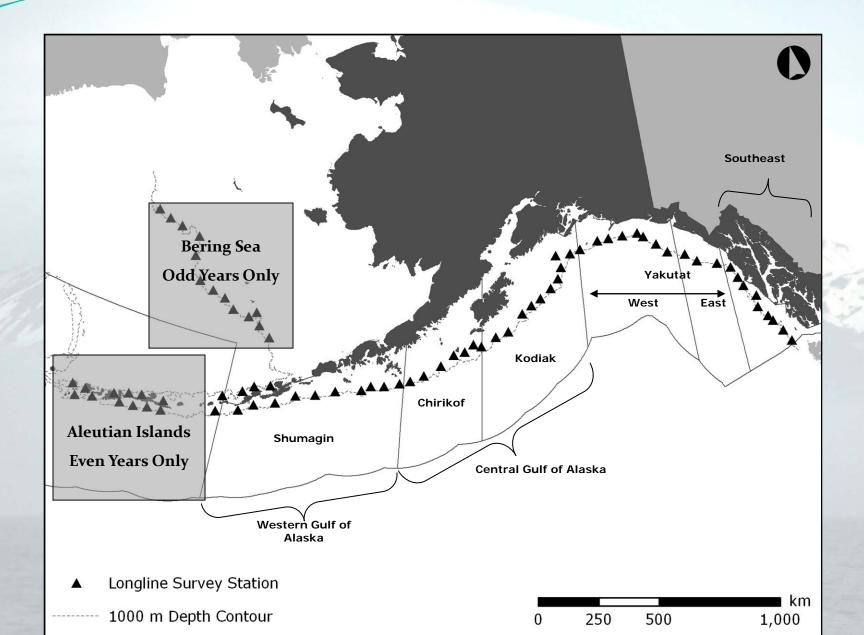


# Longline survey 2017

### Bering Sea year, Preliminary results

Chris Lunsford, Dana Hanselman, Cara Rodgveller, Pat Malecha Alaska Fisheries Science Center, Auke Bay Laboratories

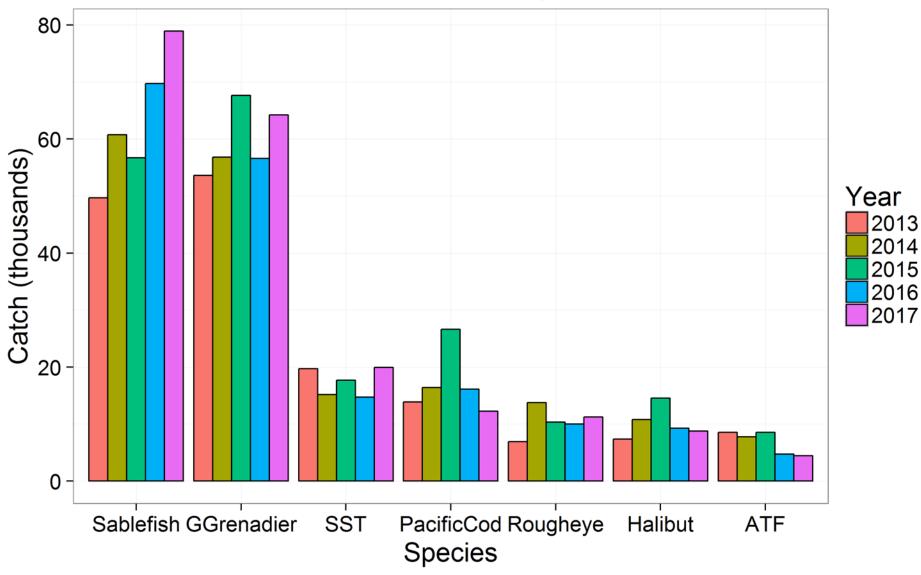
## Survey Geographic Coverage



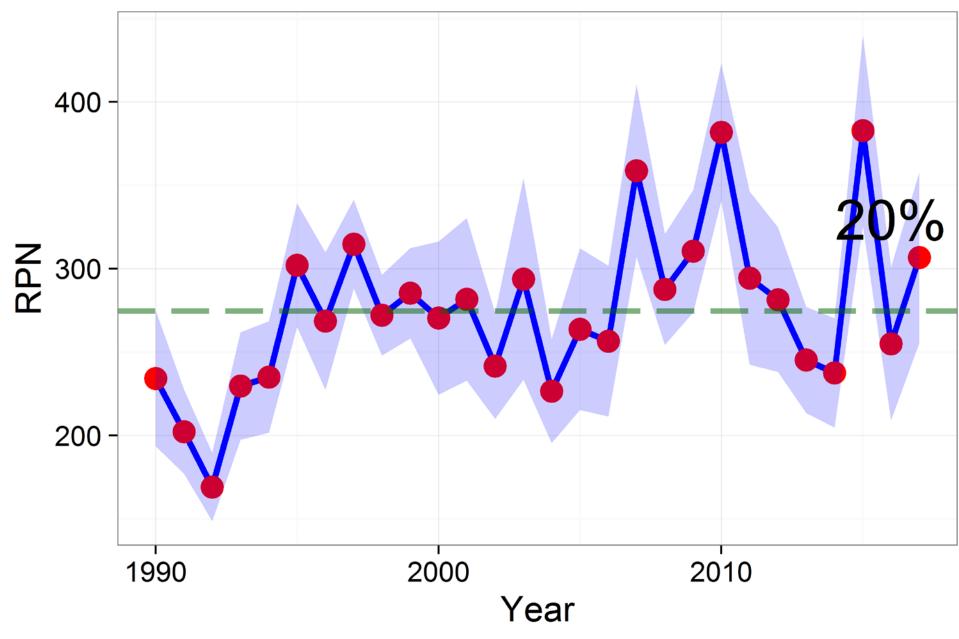
# **Preliminary results**

- Just compiled over the weekend so use caution
- Whale corrections have not been made
- These use the new area sizes calculated in Echave et al. (2013)
- These also use the 150-200 m depth strata allowed by using the new area sizes
- Ignore 1990-1992 for shortraker/rougheye

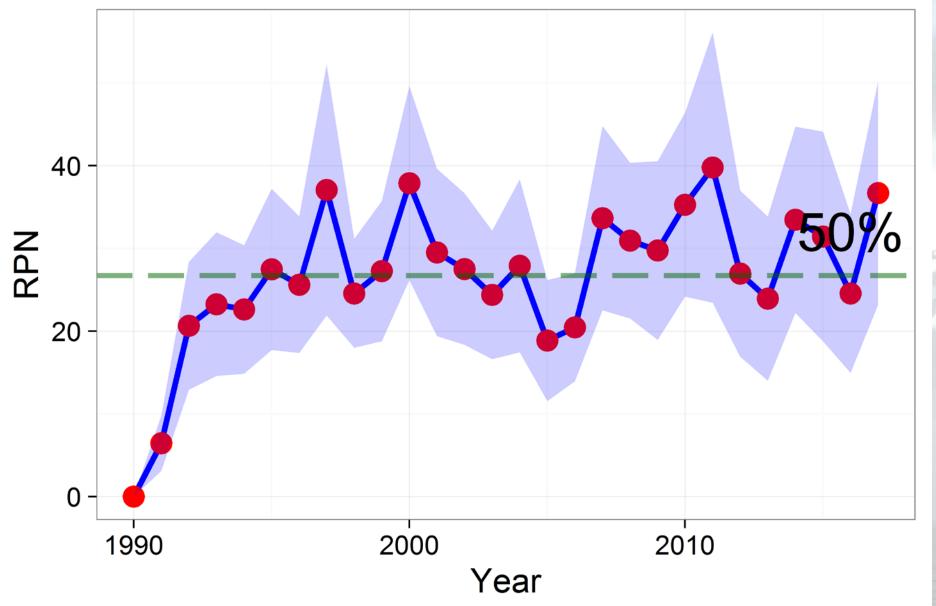
#### Recent raw catches by species



### GOA G.Grenadier longline survey RPNs



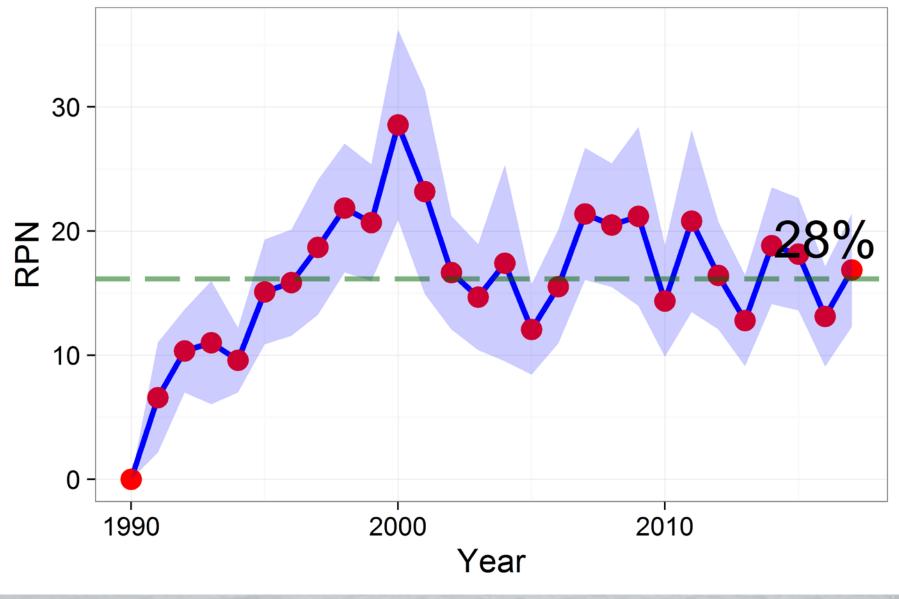
#### GOA Rougheye longline survey RPNs

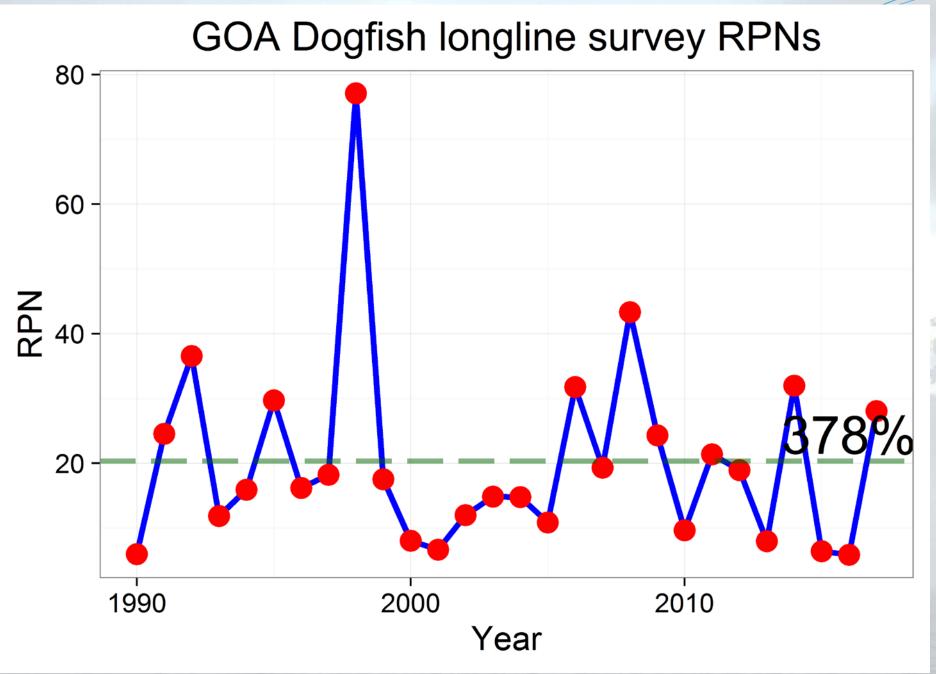


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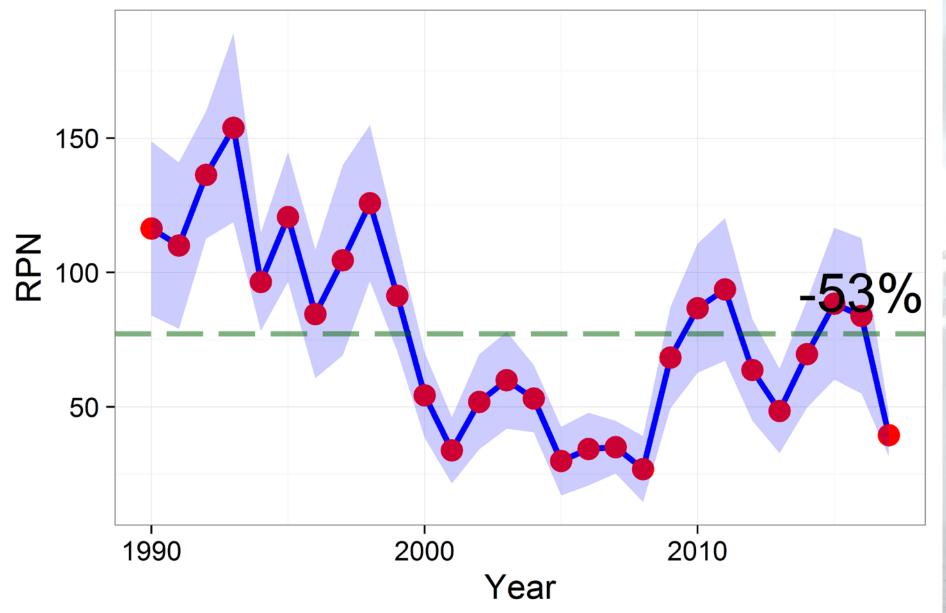
# GOA Thornyhead longline survey RPNs 100 RPN 75 -50 1990 2010 2000 Year

#### GOA Shortraker longline survey RPNs

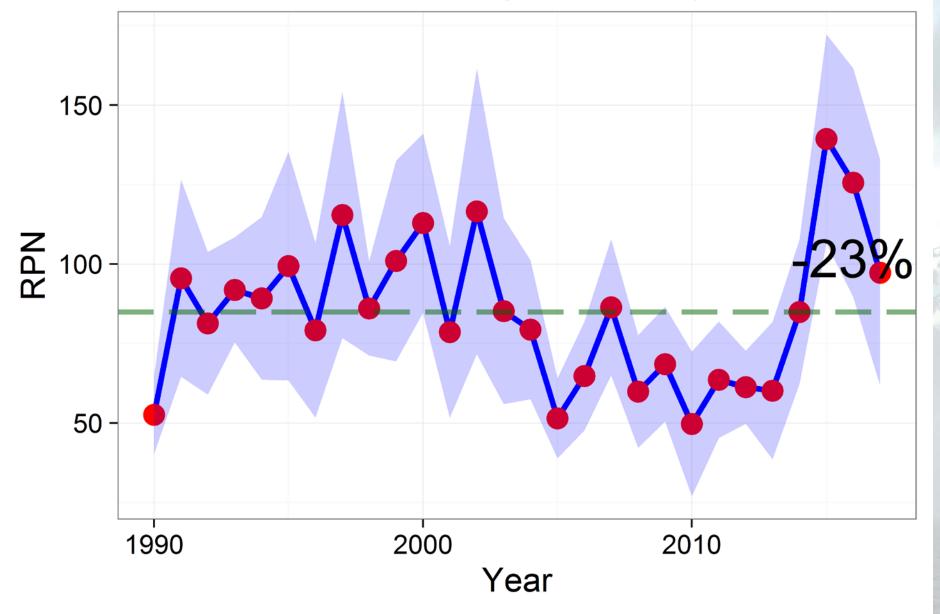


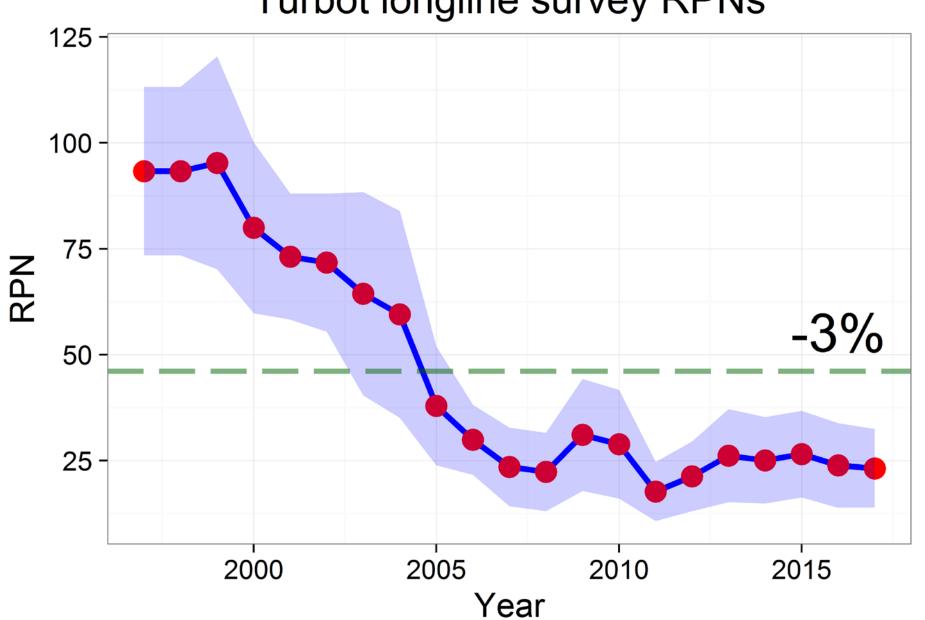


#### GOA Pacific cod longline survey RPNs



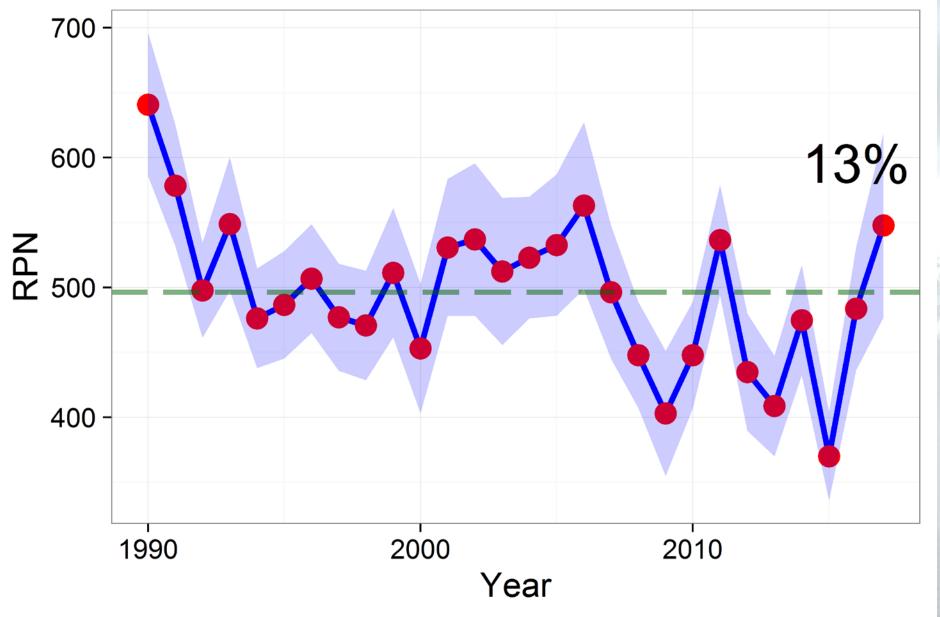
#### GOA Halibut longline survey RPNs





#### **Turbot longline survey RPNs**

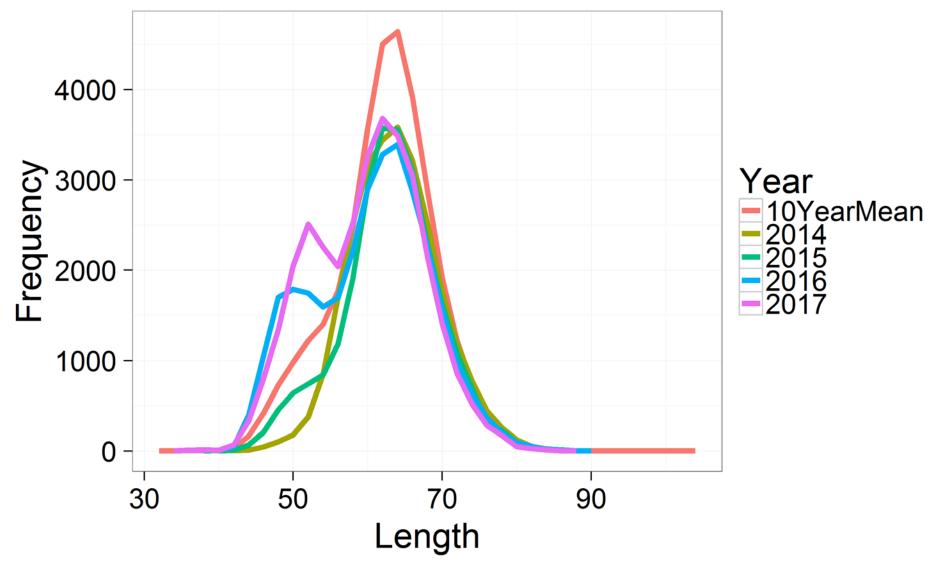
#### Sablefish longline survey RPNs w/ 95% CIs



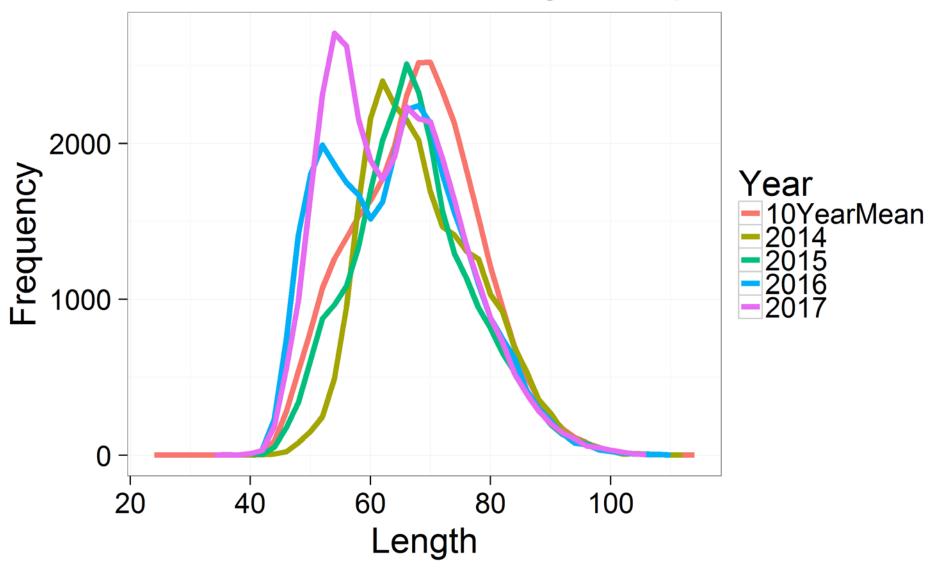
#### **Recent Pacific cod length frequencies** 0.12 -0.09 Frequency Year 10YearMean 0.06 -5 20 0.03 0.00 50 100 75 Length

#### 9/15/2017

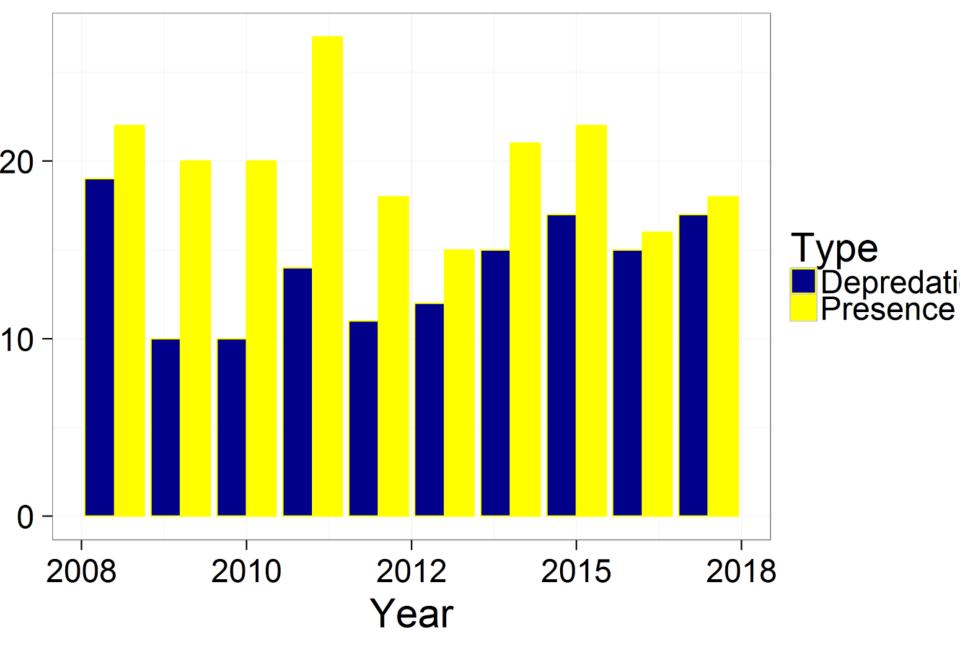
### Recent male sablefish length frequencies



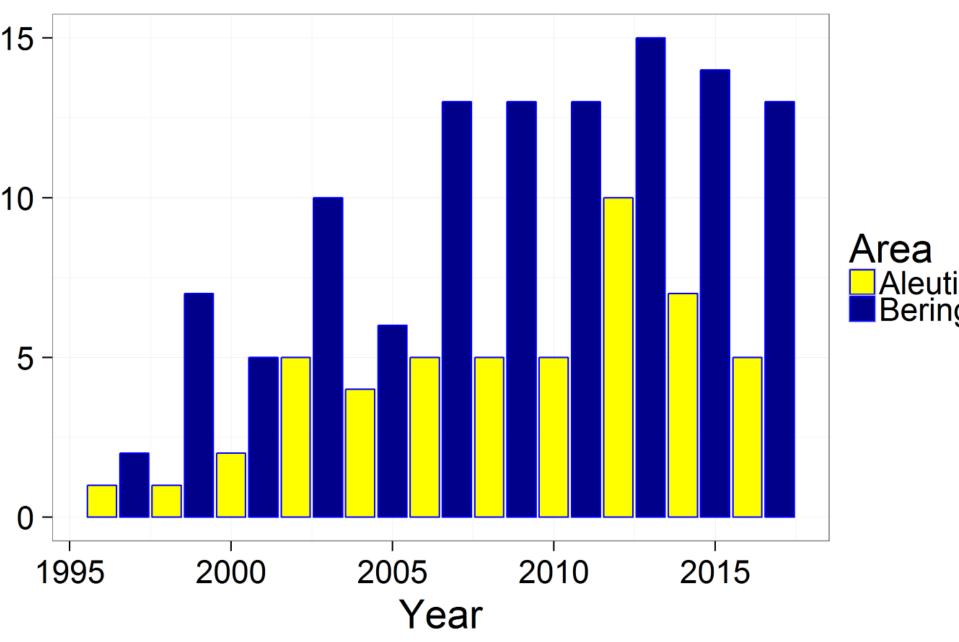
#### Recent female sablefish length frequencies



### Sperm whale interactions



### Killer whale depredation



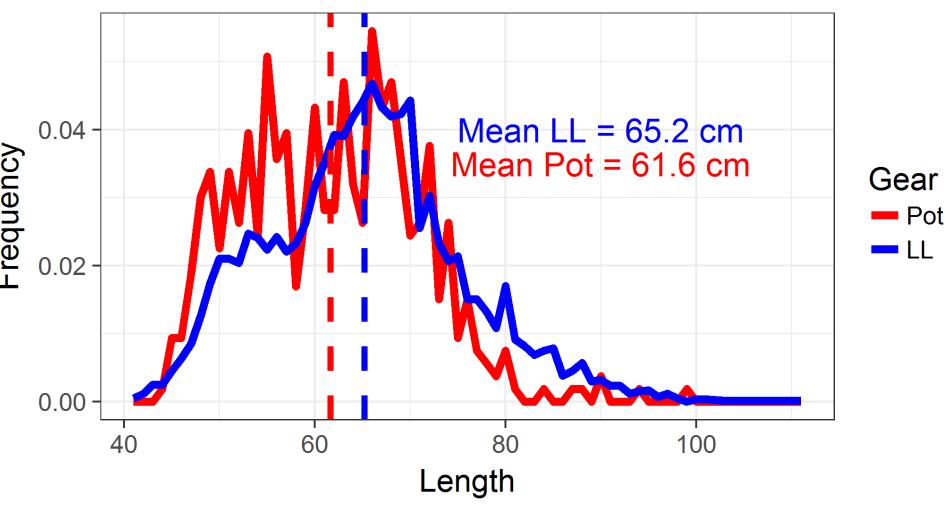
# LL Survey Observations

- Pyrosomes in Sablefish/Rockfish Stomachs
  - Southeast to Kayak Island
- Vessel Interactions
  - Increase in all regions
- Rare Sightings
  - Brown Booby
  - Masked Booby









9/15/2017