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# 2022 AFSC Longline Survey – Sept. Plan Team



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Cara Rodgveller – ABL/MESA

# 2022 Plan Team Update

- Preliminary Relative Population Numbers (RPNs) and Lengths (Sablefish/P. Cod)
  - Sablefish (AK-wide)
  - GOA
  - BS/AI
- Hooks (Bait vs. Empty vs. Catch)
- Whale Interactions
- Subsurface Temperature
- Experimental Slinky Pots (3-days)



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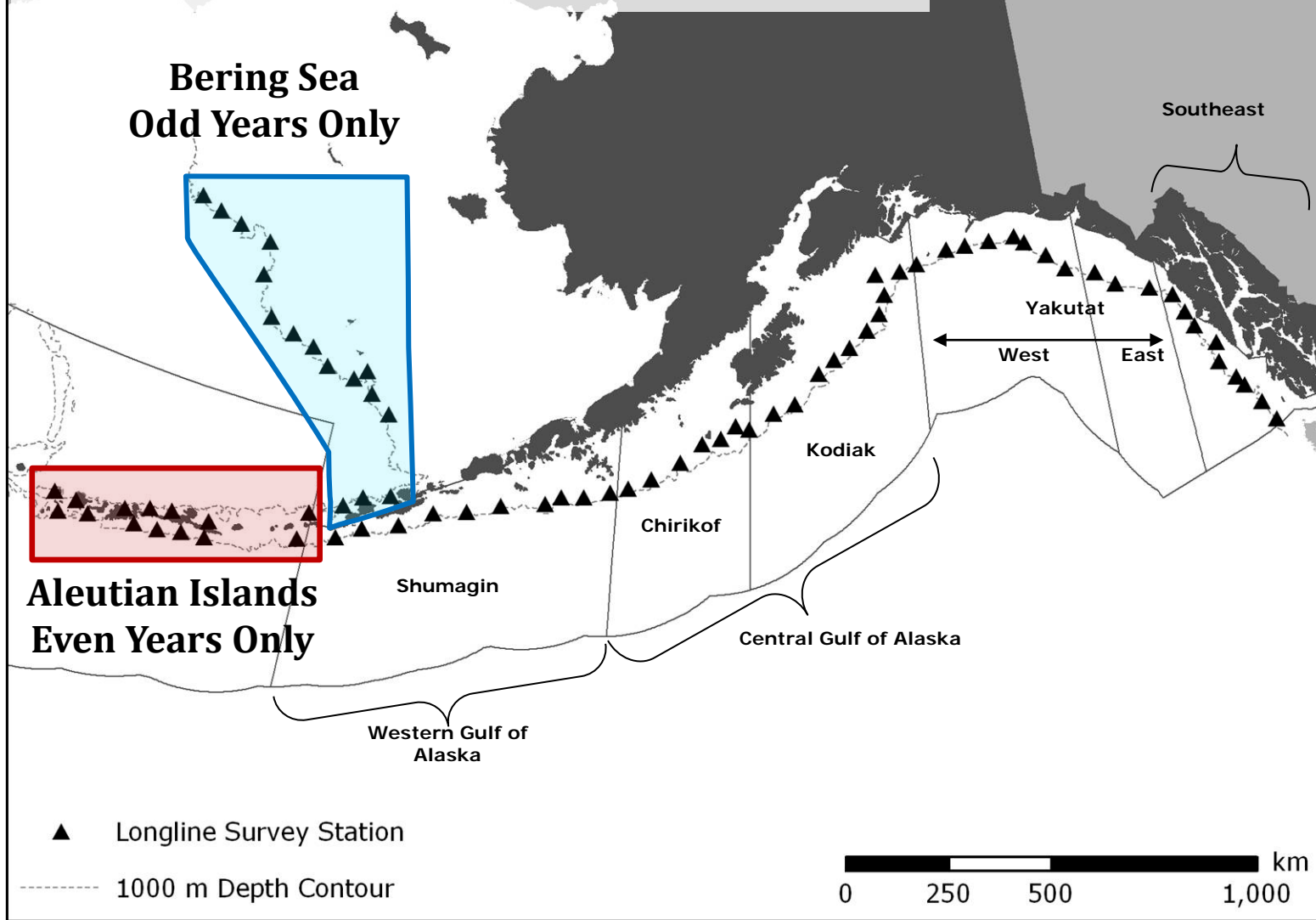


# Survey in Numbers

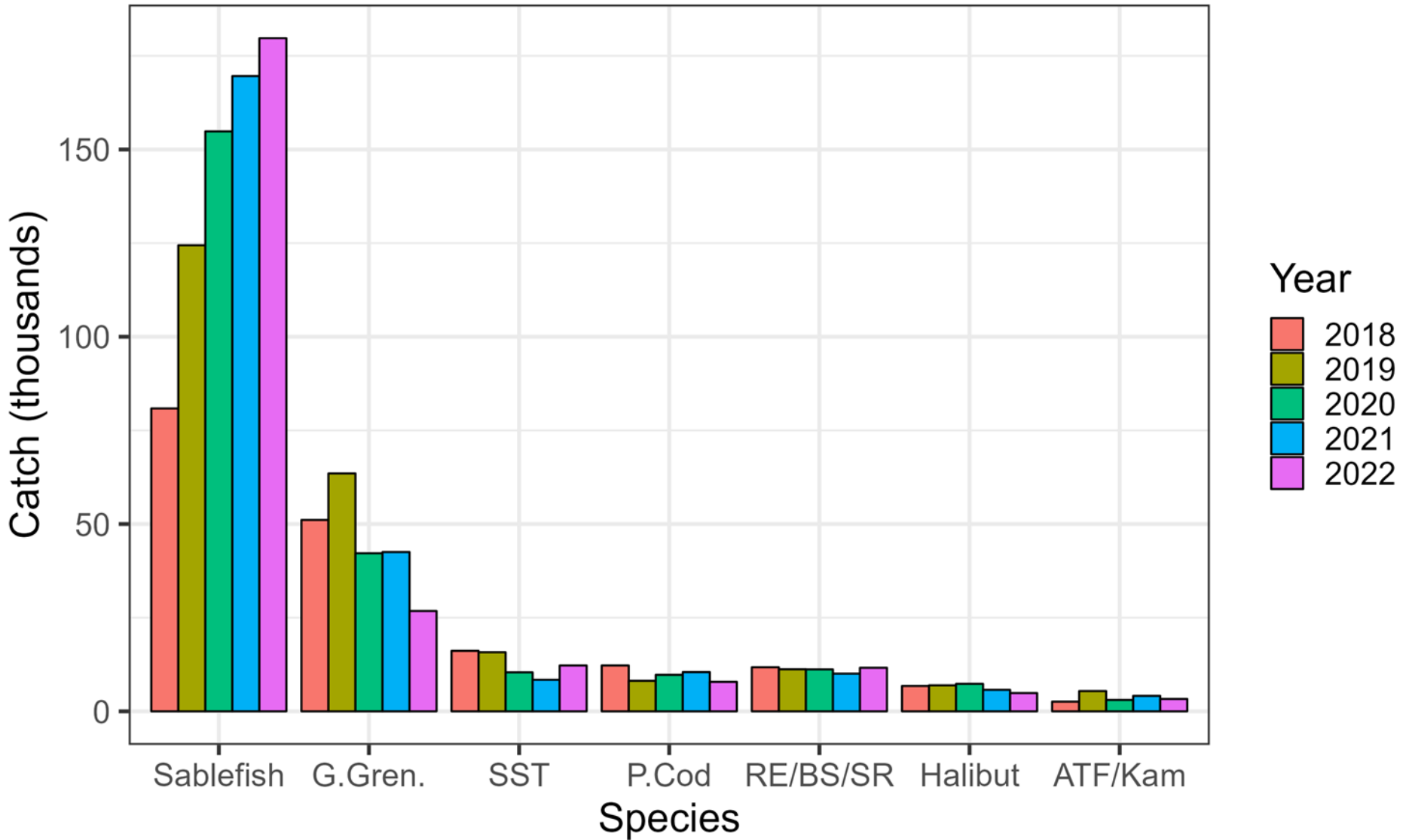
- 575,640 hooks fished in 73 days
- 179,709 sablefish caught
- Tagged:
  - 5,332 sablefish
  - 442 shortspine thornyhead
  - 3 Greenland turbot
- Recaptured 42 tagged sablefish (31-NMFS, 8-Canadian, & 3-ADFG)
- 3,787 sablefish otoliths collected
- 143 temperature-depth profiles
- Special Projects:
  - Eyeballs from sablefish for isotope analysis (Miller/Rogers)
  - Spiny dogfish spines and eyes (Tribuzio)
  - P. cod maturity (Neidetcher)



# Survey Geographic Coverage

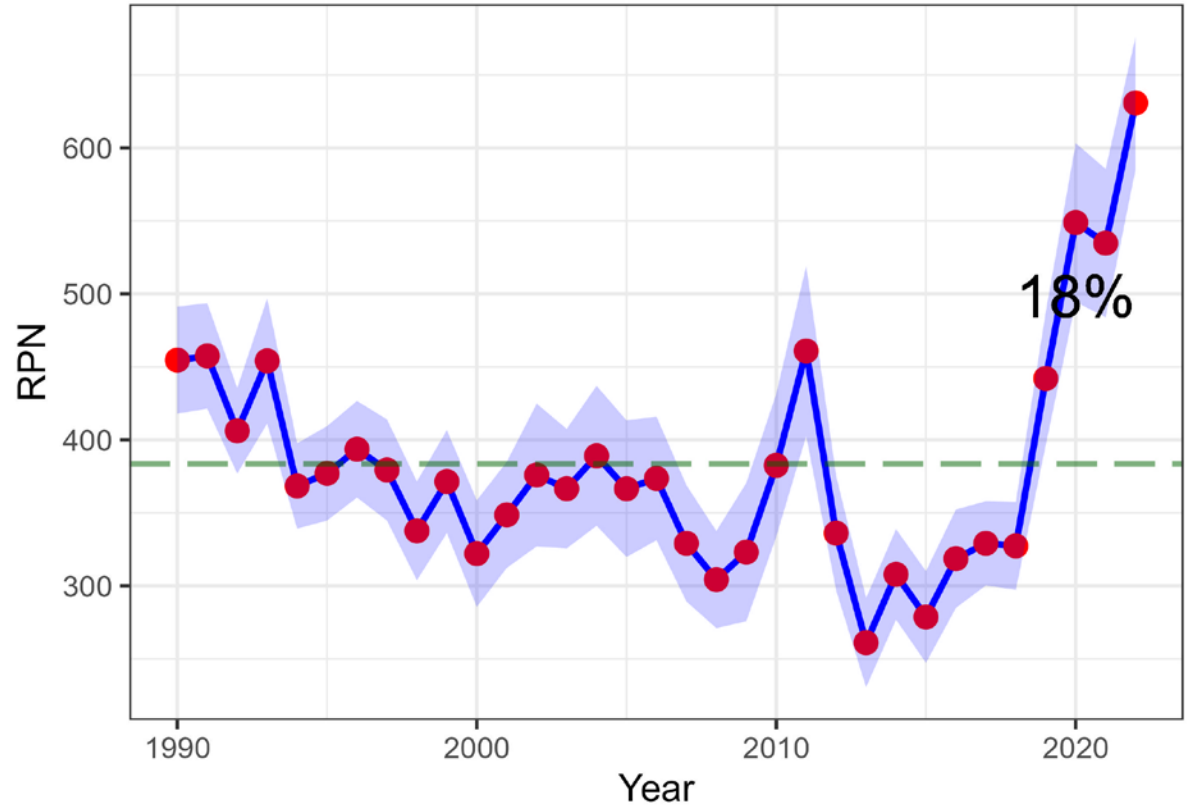


# Recent raw catches by species

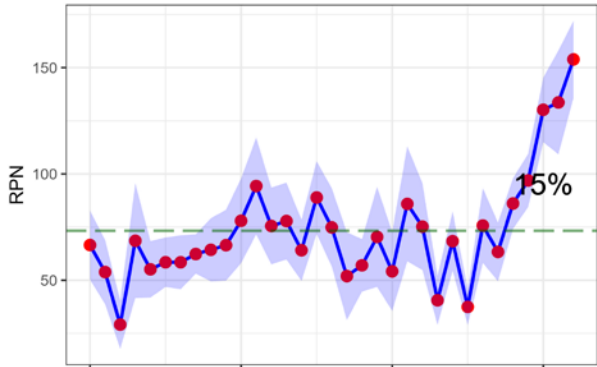


# GOA: Sablefish

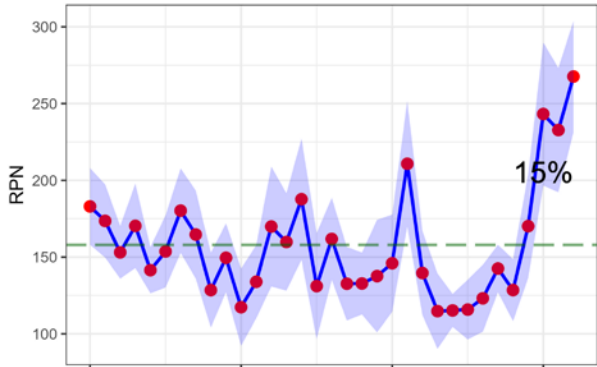
## GOA Sablefish longline survey RPNs



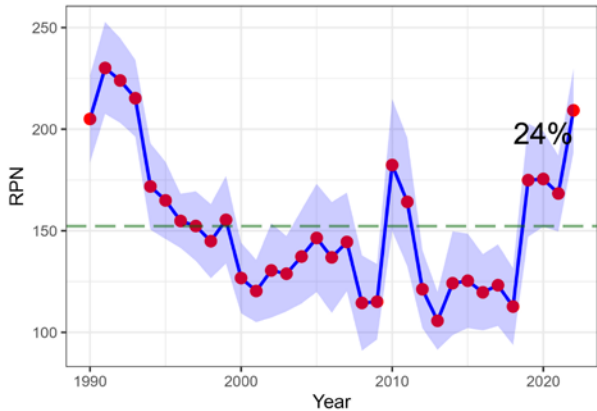
### Western Gulf of Alaska Sablefish longline survey RPN



### Central Gulf of Alaska Sablefish longline survey RPNs



### Eastern Gulf of Alaska Sablefish longline survey RPN:

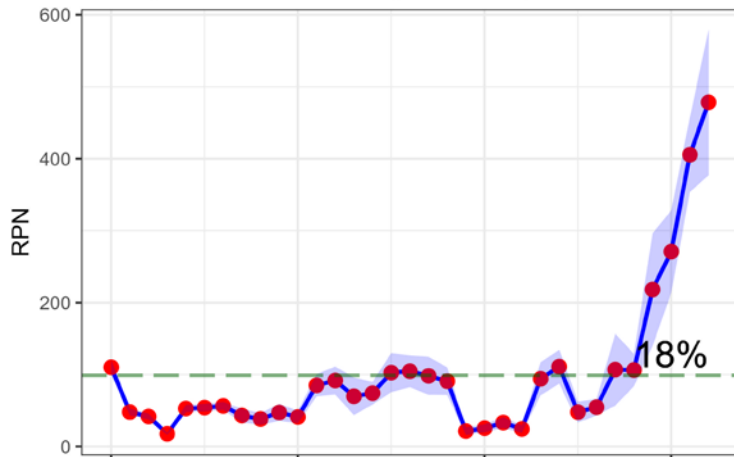


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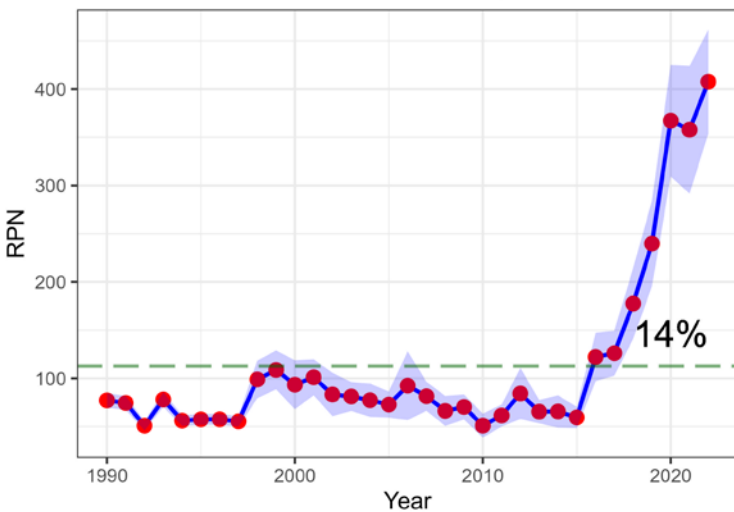


# BSAI: Sablefish

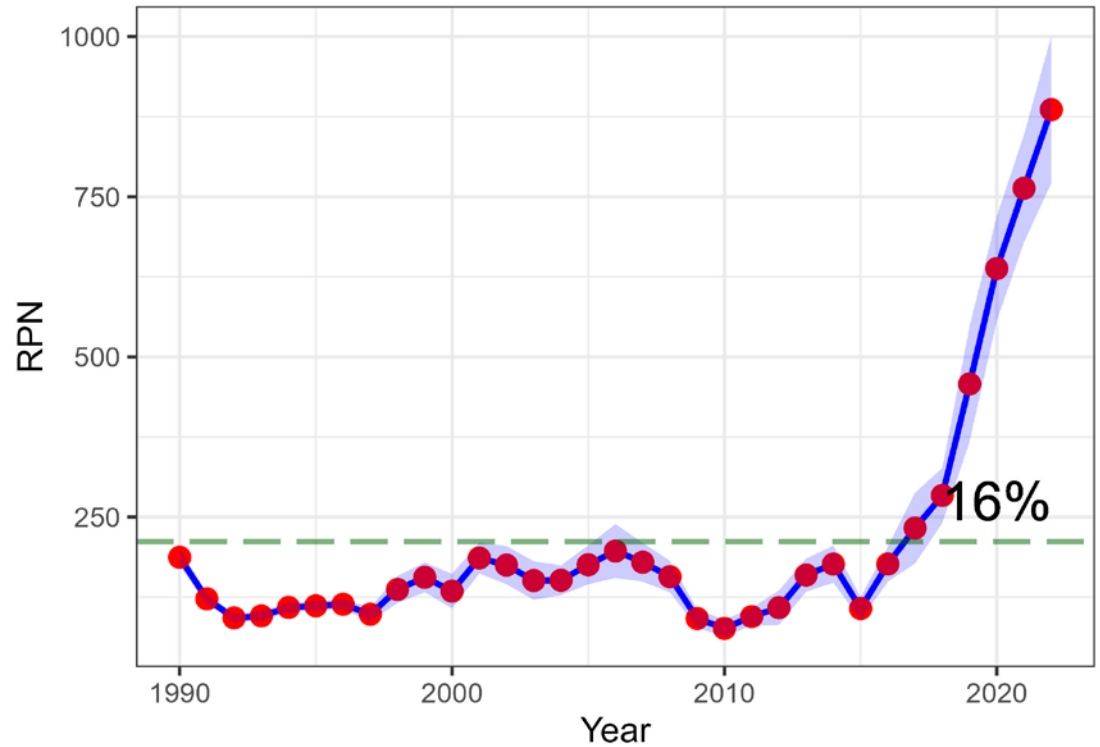
Bering Sea Sablefish longline survey RPNs



Aleutians Sablefish longline survey RPNs

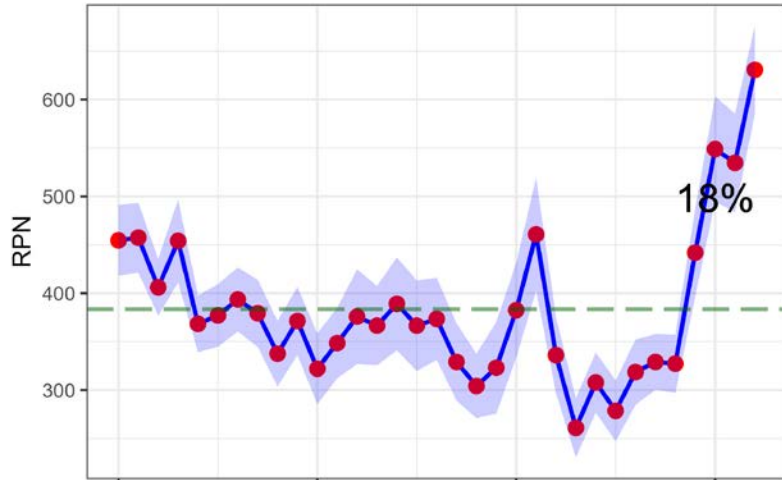


BSAI Sablefish longline survey RPNs

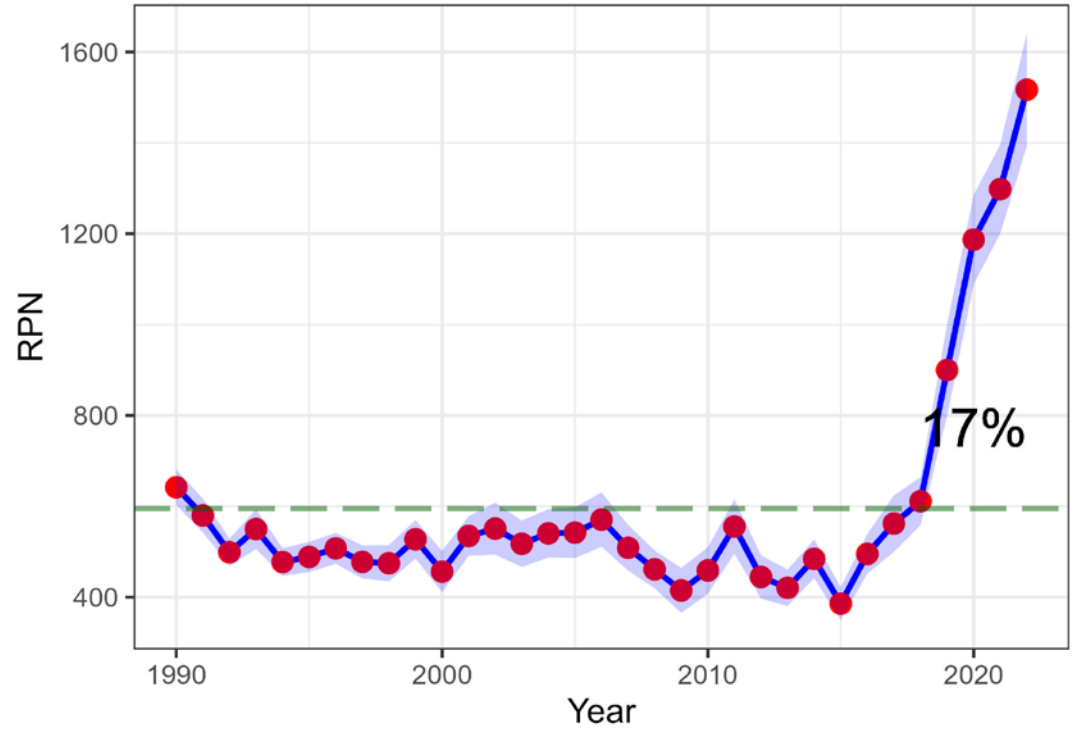


# AK-wide: Sablefish

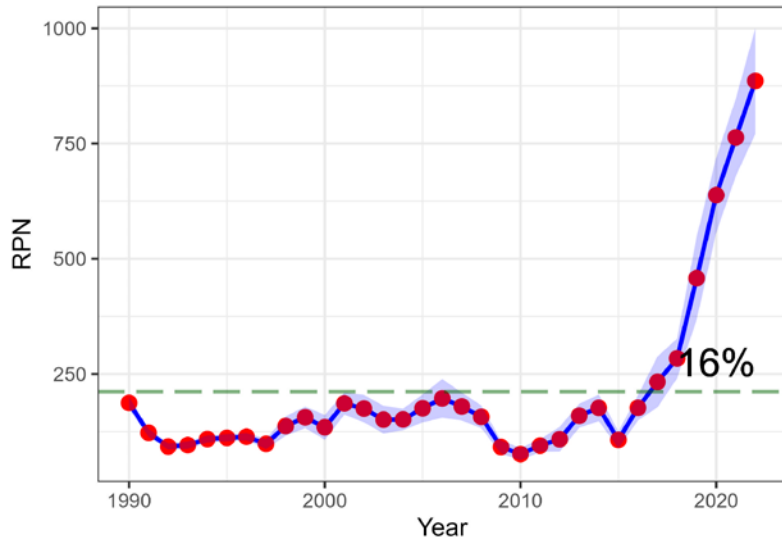
GOA Sablefish longline survey RPNs



Alaska Sablefish longline survey RPNs



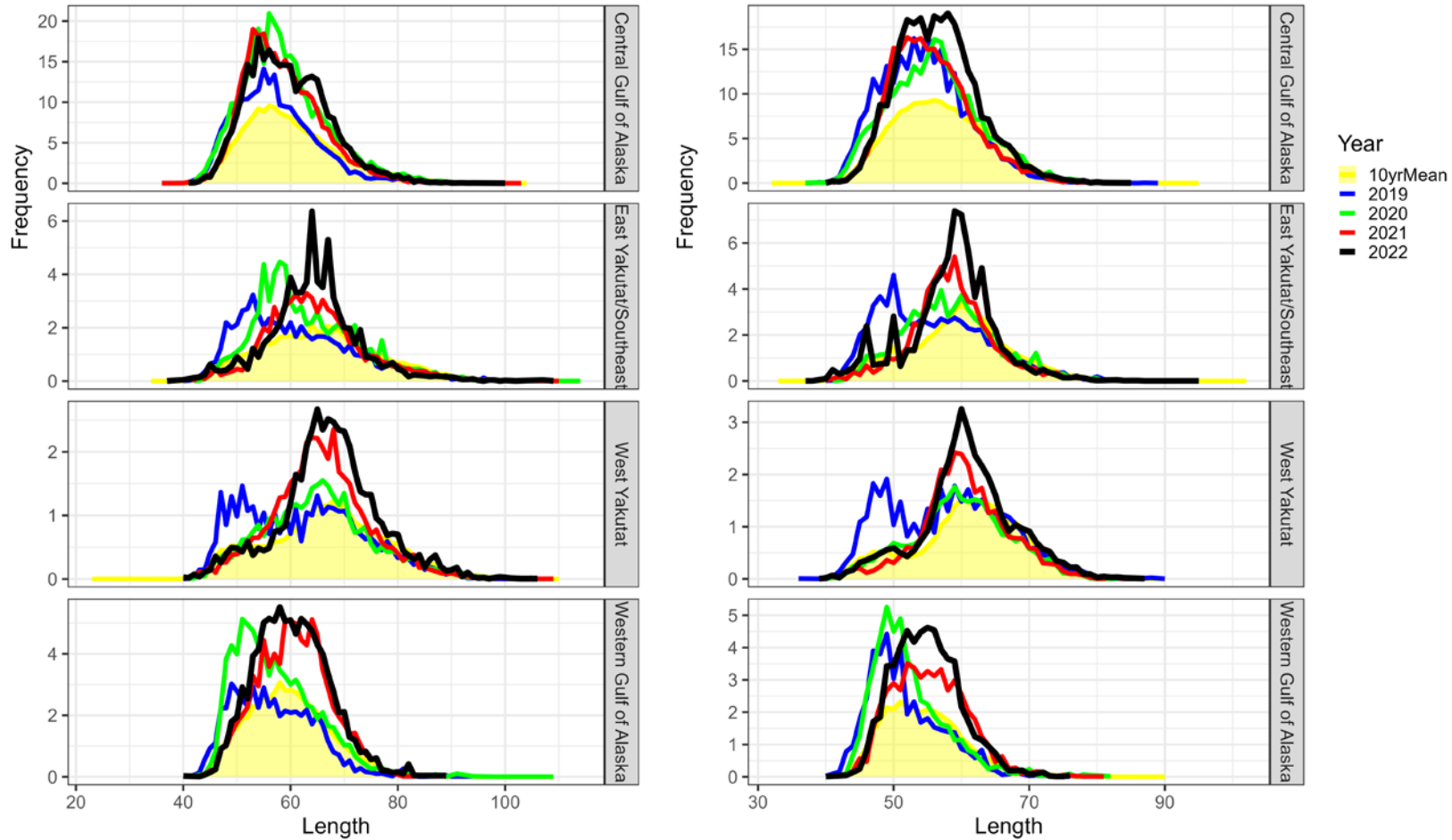
BSAI Sablefish longline survey RPNs



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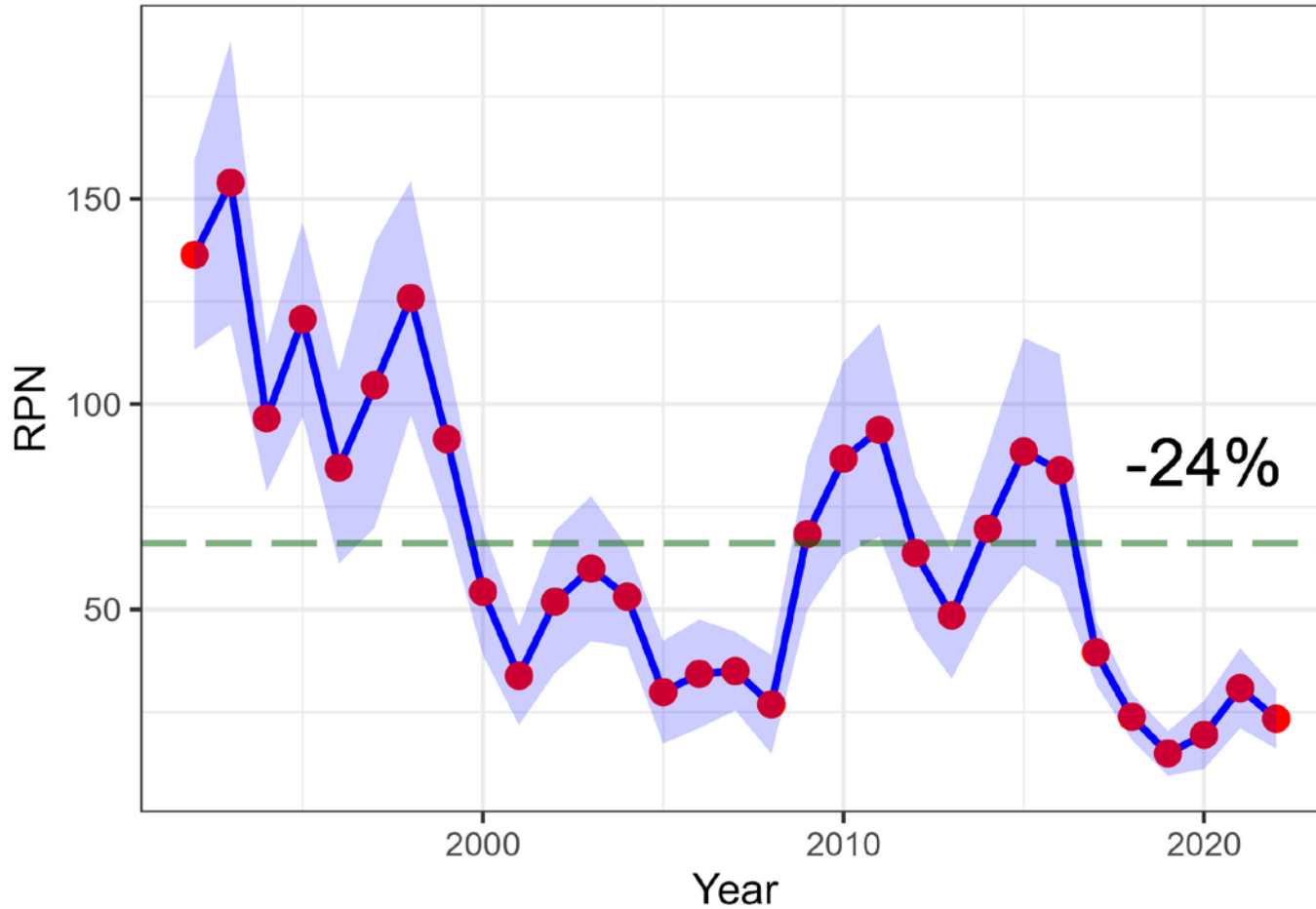
# AK-wide: Sablefish Lengths



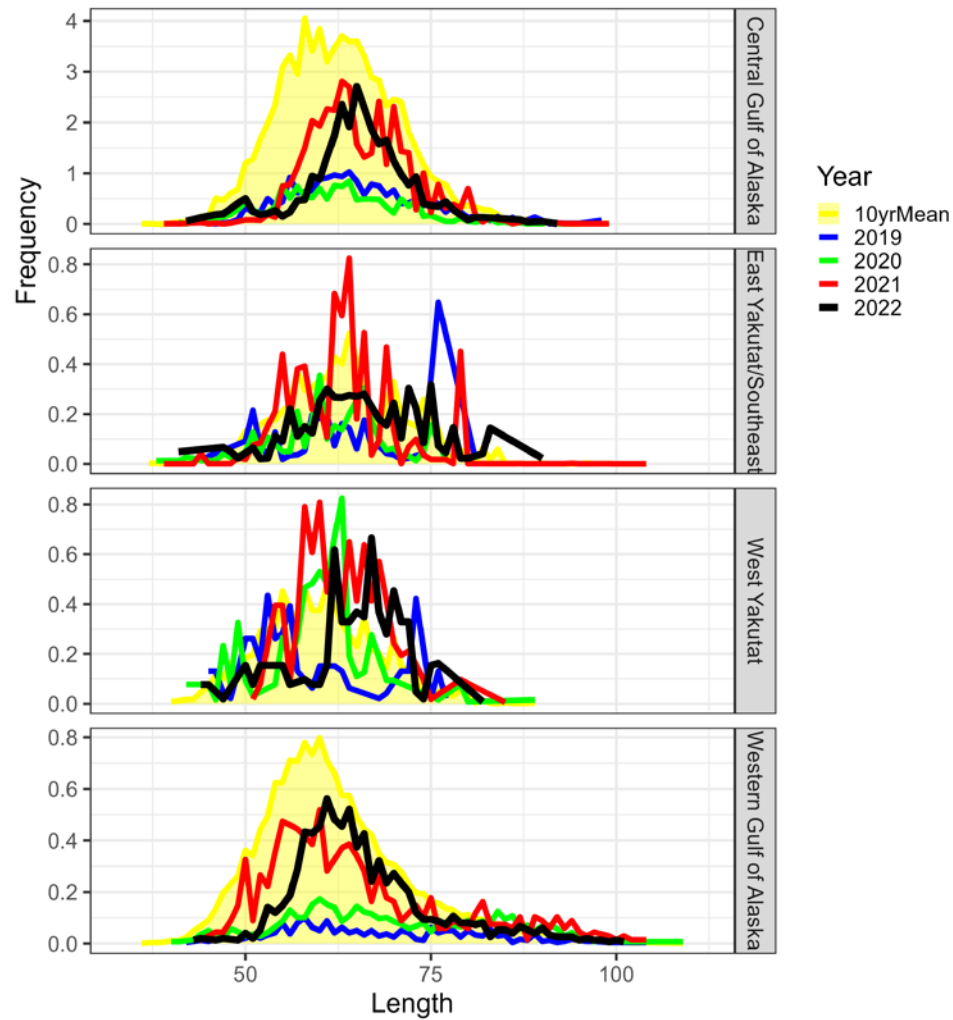
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# GOA: P. Cod

## GOA Pacific cod longline survey RPNs

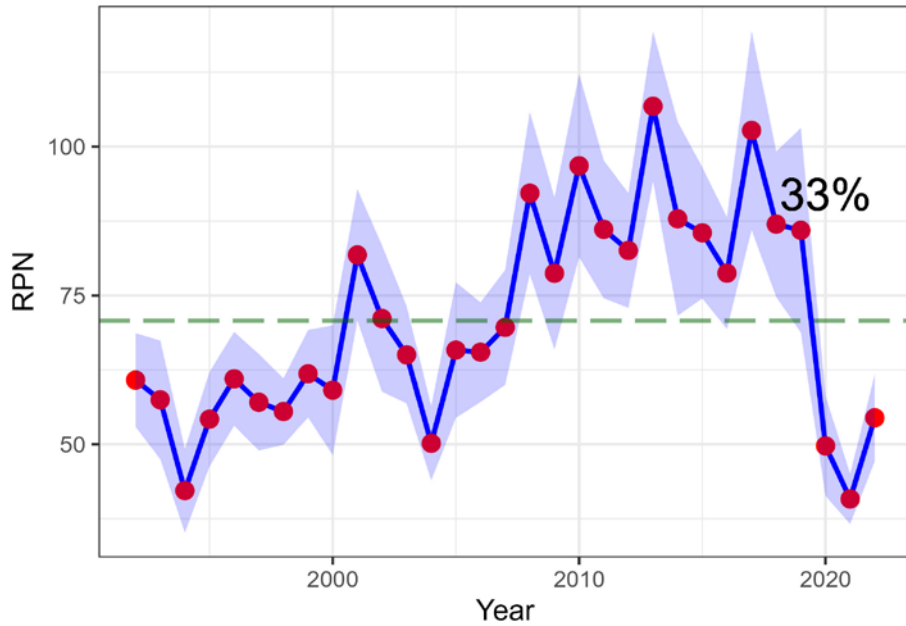


# GOA: P. Cod Lengths

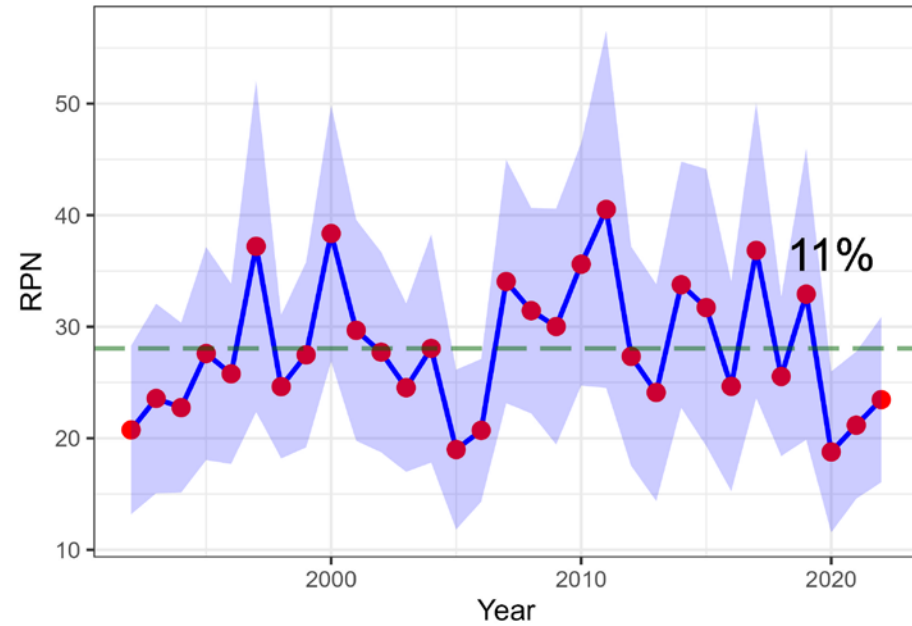


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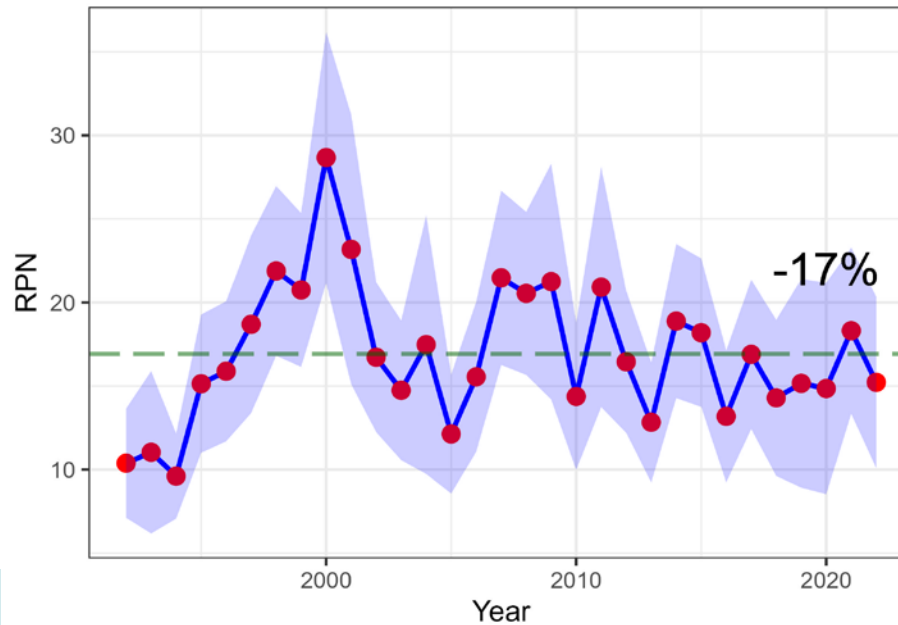
GOA Shortspine thornyhead longline survey RPNs



GOA Rougheye rockfish longline survey RPNs

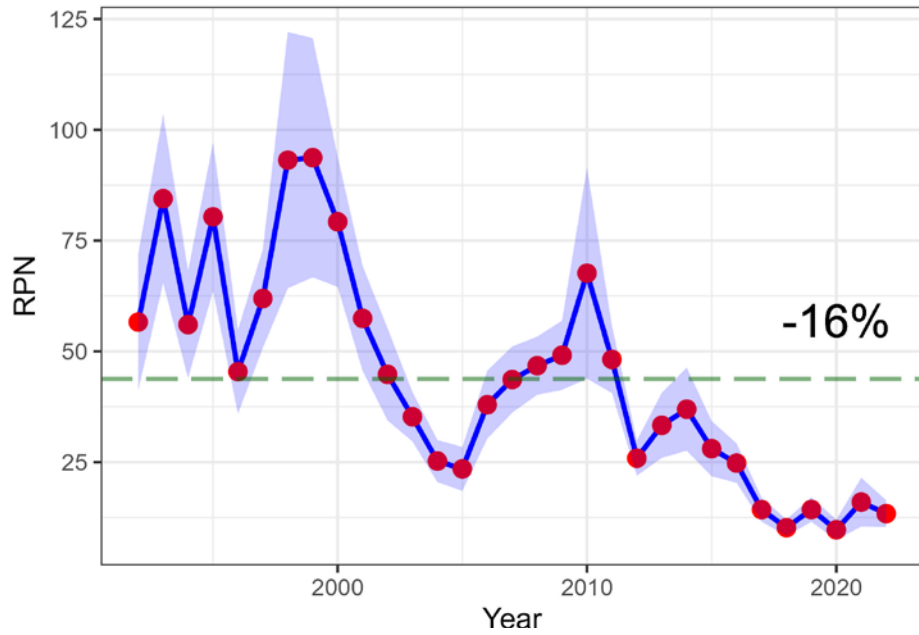


GOA Shortraker rockfish longline survey RPNs

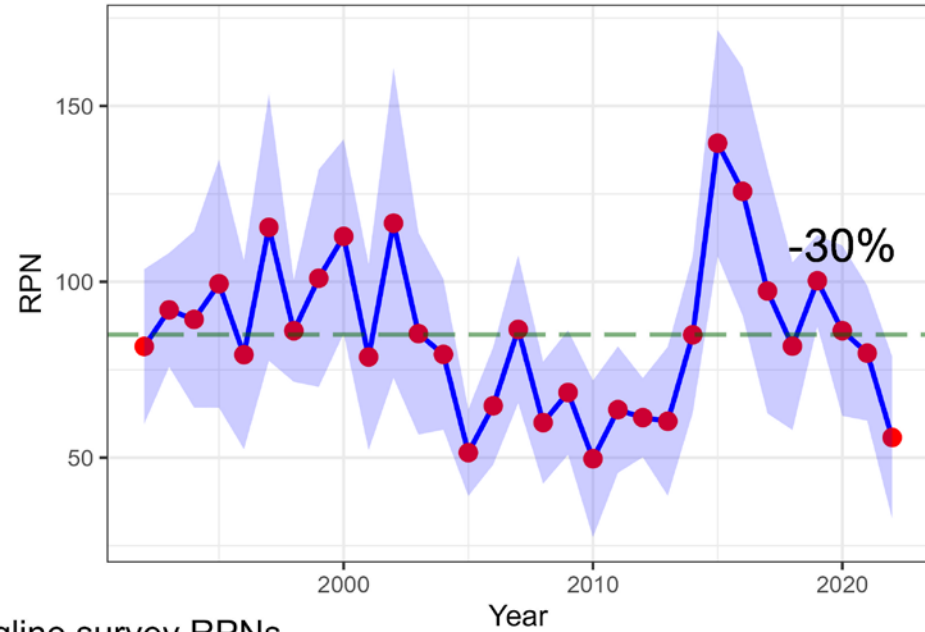


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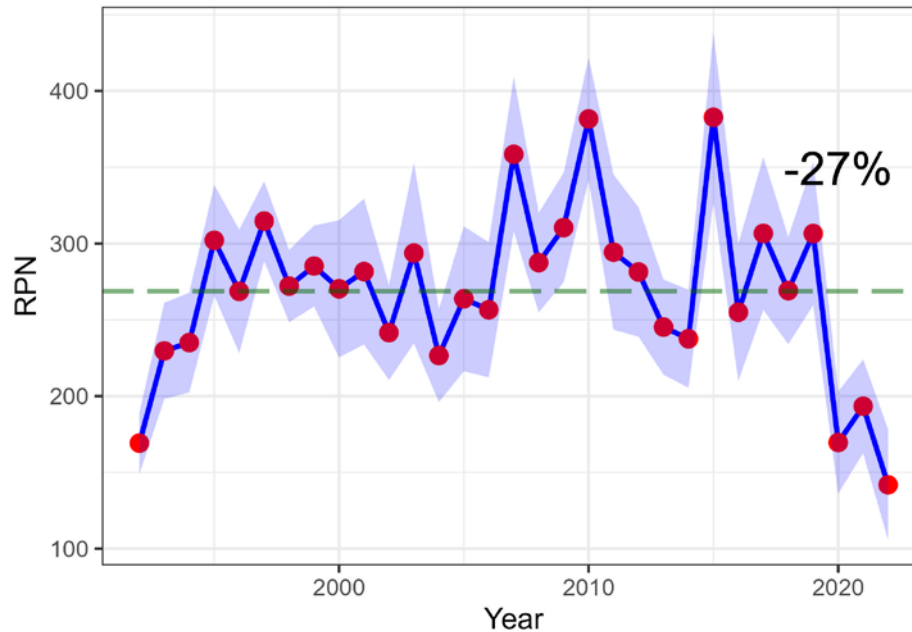
GOA KamATF longline survey RPNs



GOA Pacific halibut longline survey RPNs

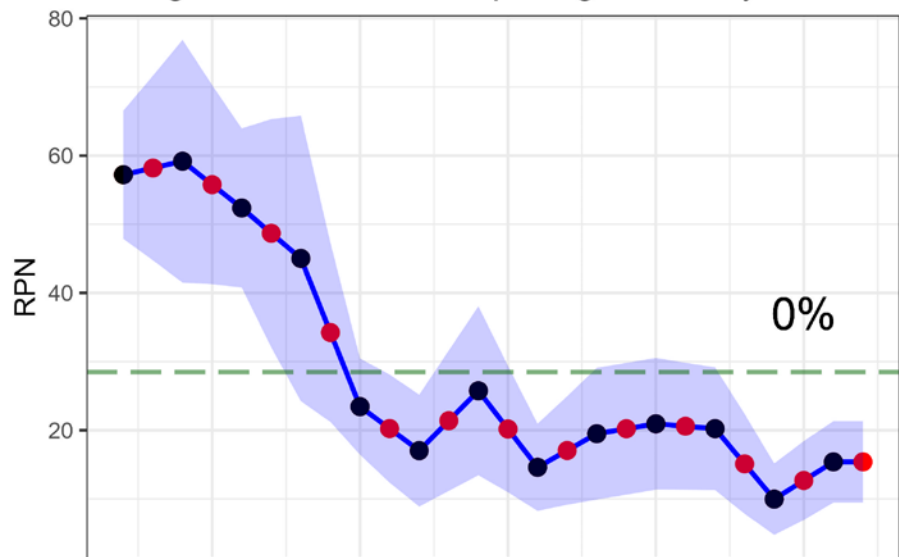


GOA Giant grenadier longline survey RPNs

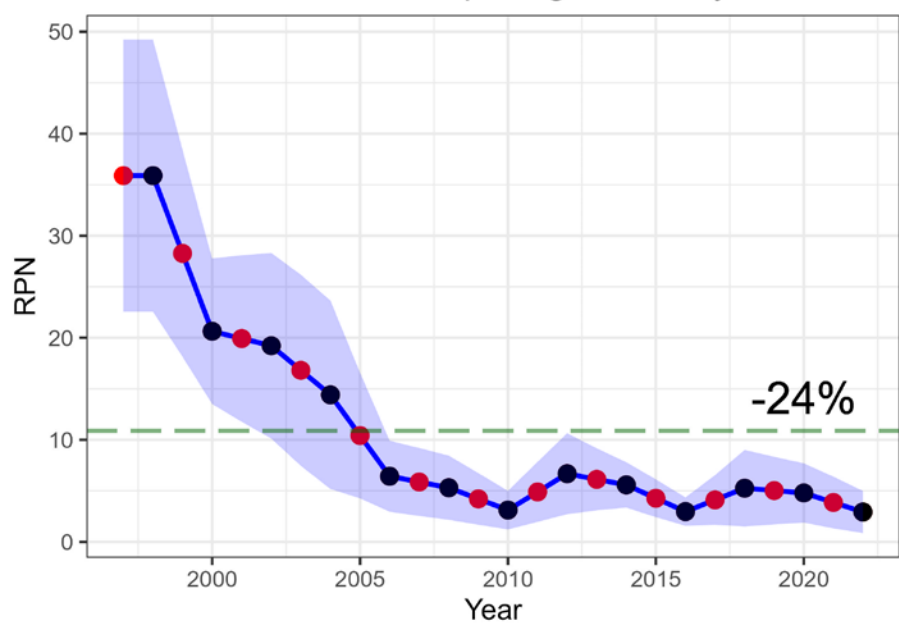


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Bering Sea Turbot lin. interp. longline survey RPNs

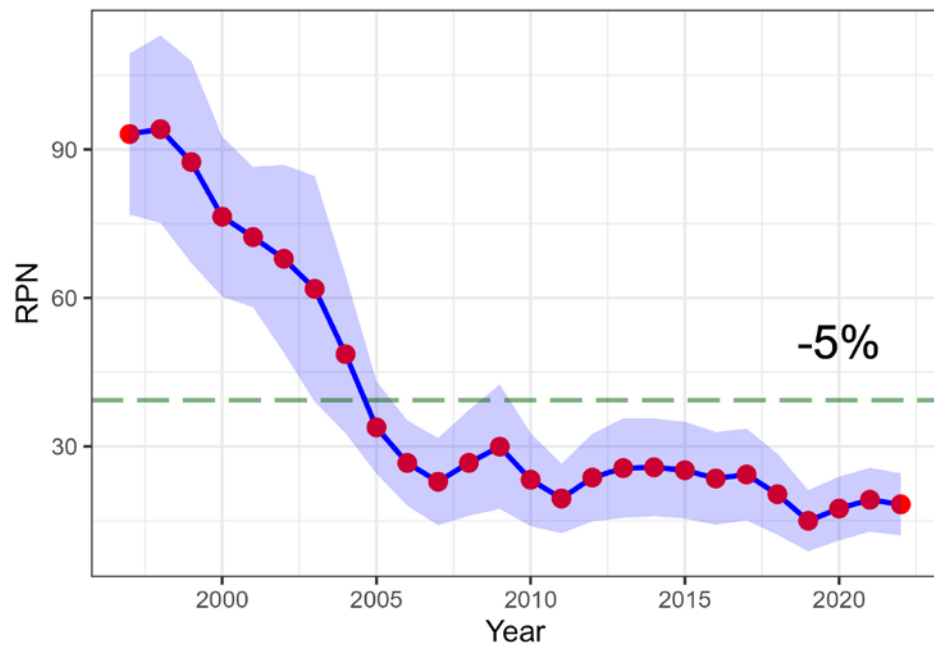


Aleutians Turbot lin. interp. longline survey RPNs



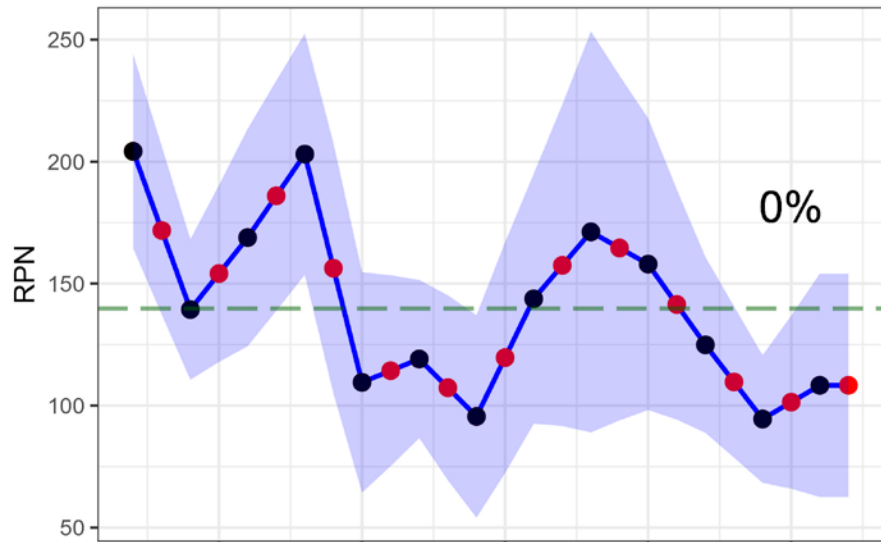
# BSAI: Greenland Turbot

BSAI Turbot lin. interp. longline survey RPNs

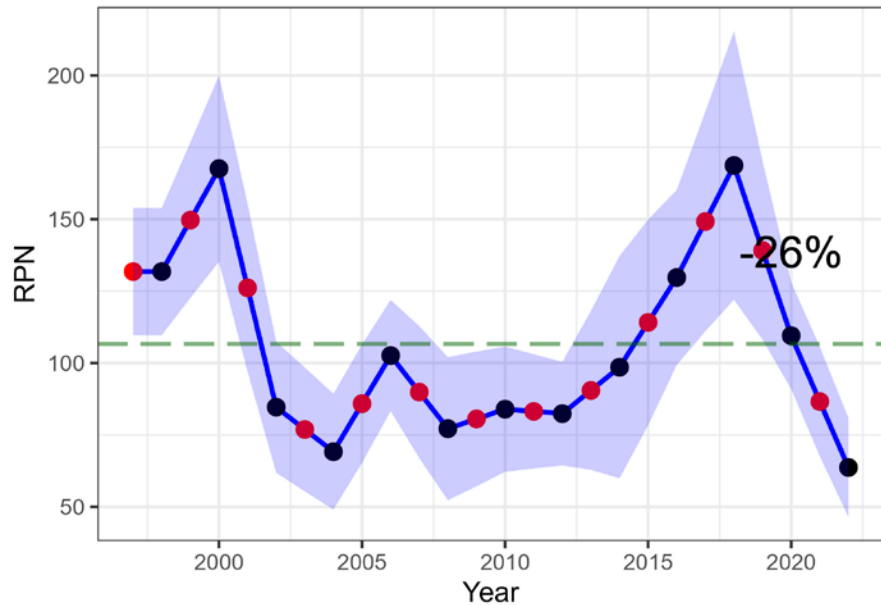




Bering Sea P. Cod lin. interp. longline survey RPNs

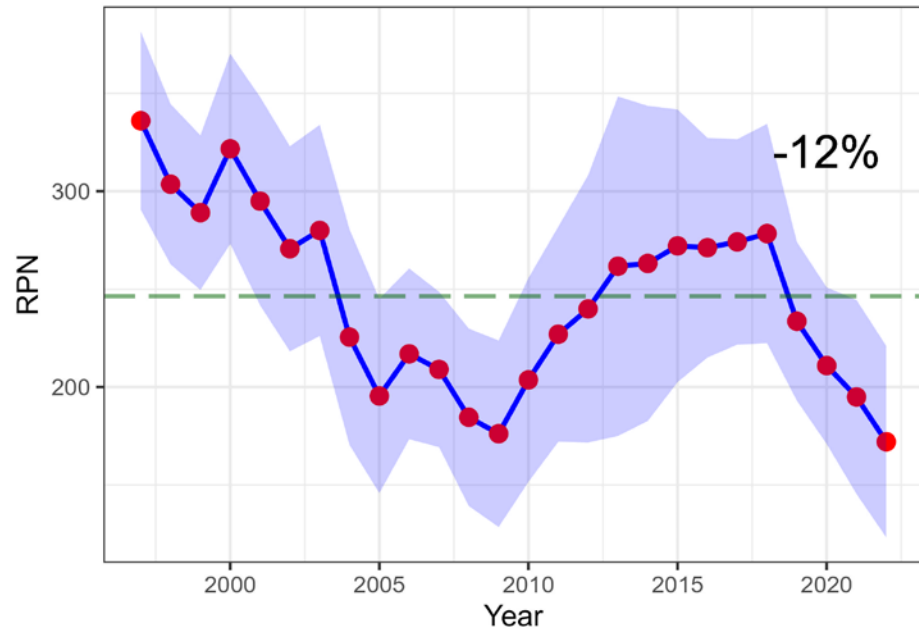


Aleutians P. Cod lin. interp. longline survey RPNs

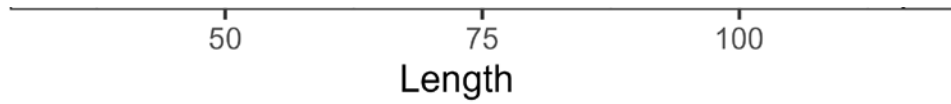


# BSAI: Pacific Cod

BSAI P. Cod lin interp. longline survey RPNs

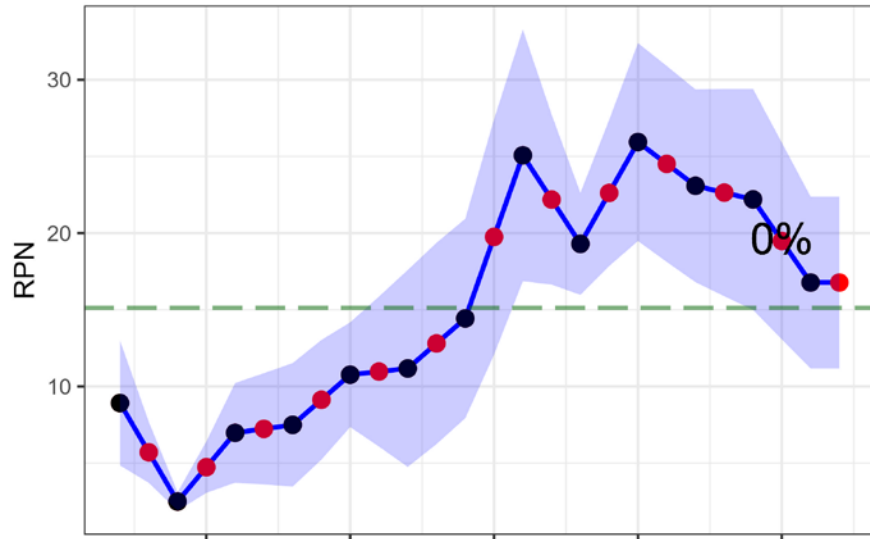


# BSAI: P. Cod Lengths

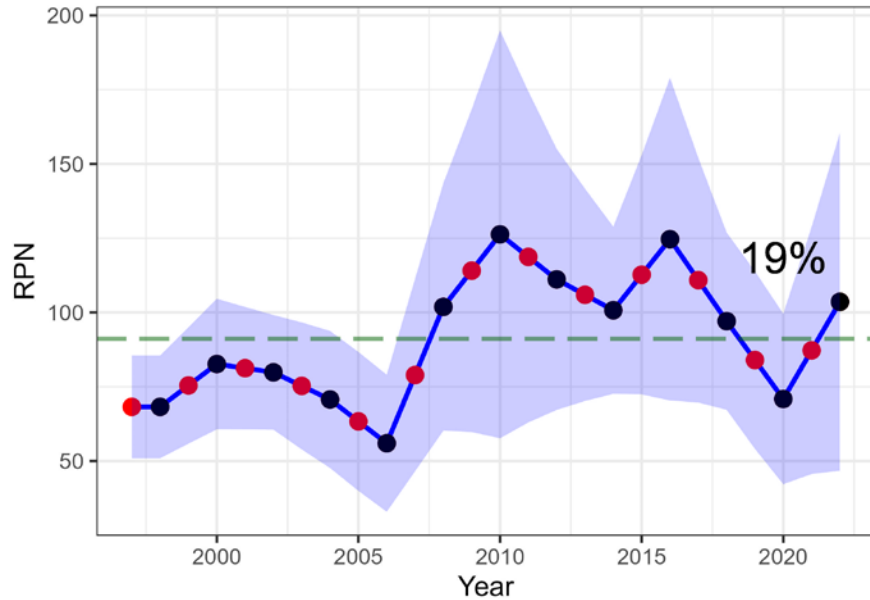


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Bering Sea SST lin. interp. longline survey RPNs

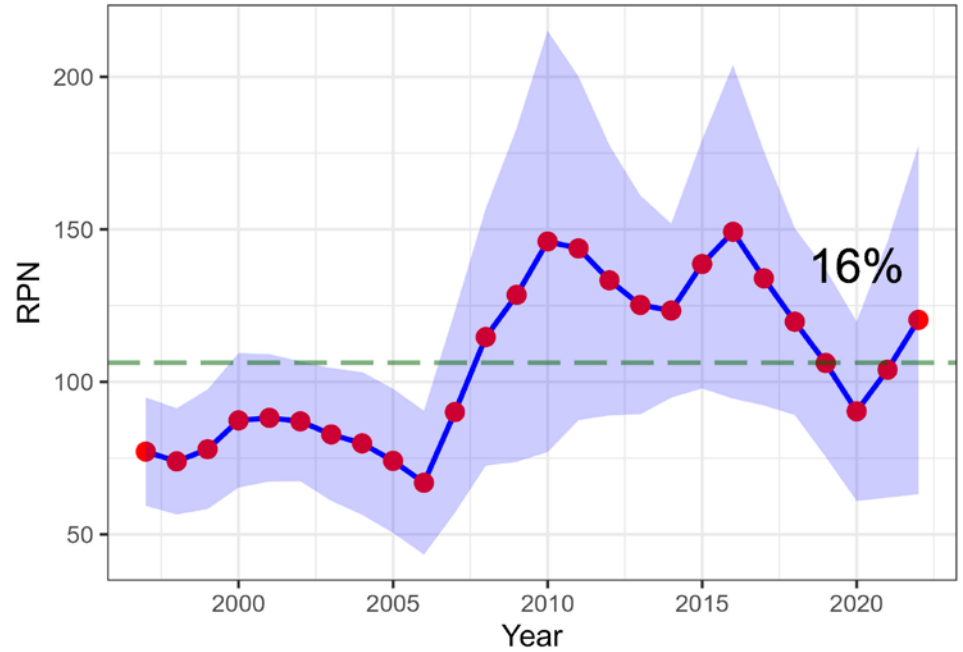


Aleutians SST lin. interp. longline survey RPNs



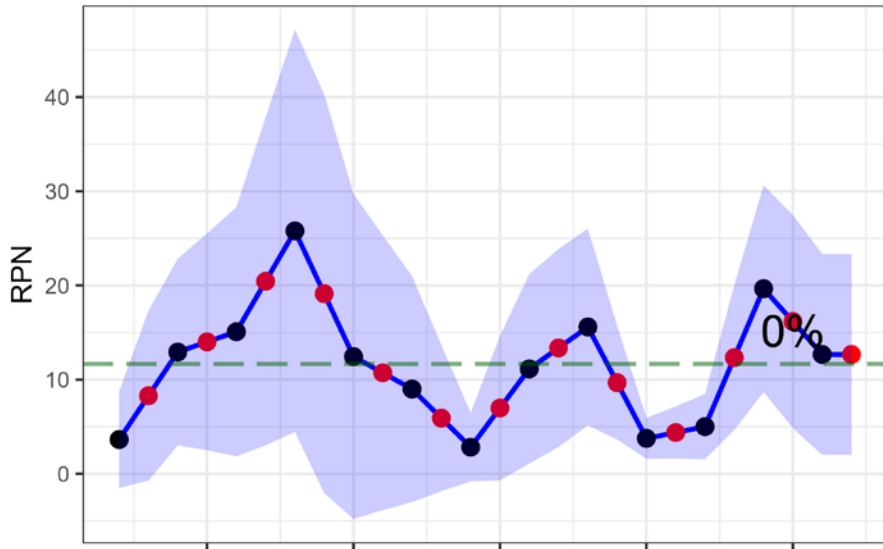
# BSAI: Shortspine Thornyhead

BSAI SST lin. interp. longline survey RPNs

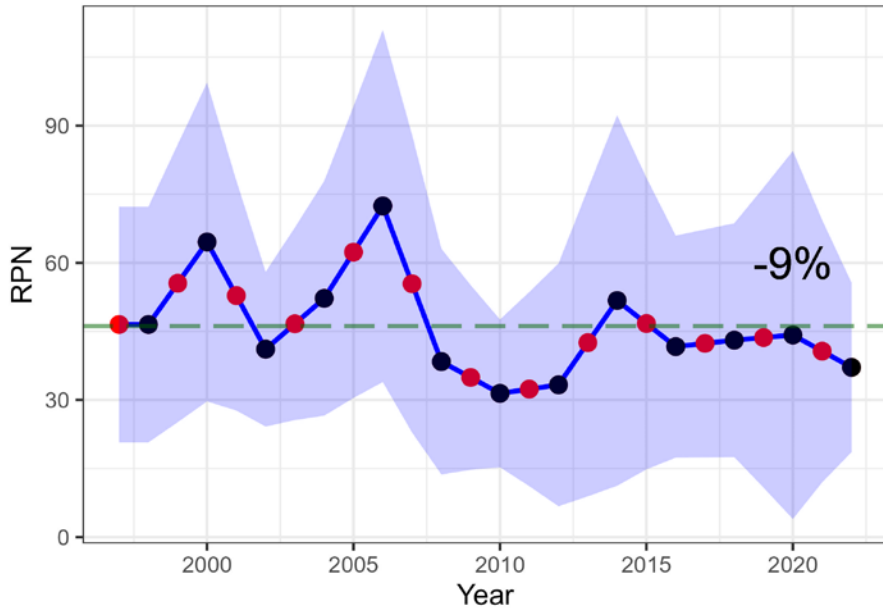


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Bering Sea Rougheye lin. interp. longline survey RPNs

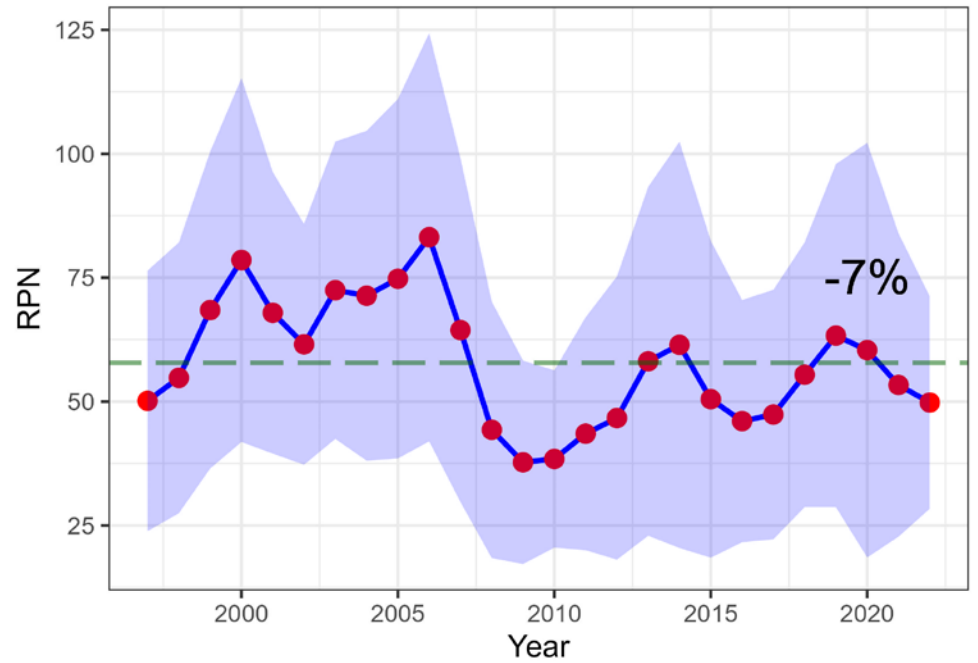


Aleutians Rougheye lin. interp. longline survey RPNs



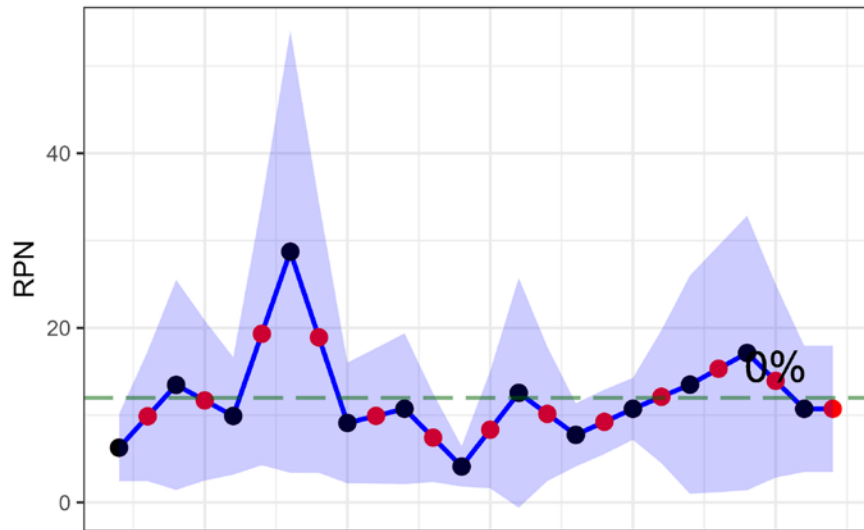
# BSAI: Rougheye Rockfish

BSAI Rougheye lin. interp. longline survey RPNs

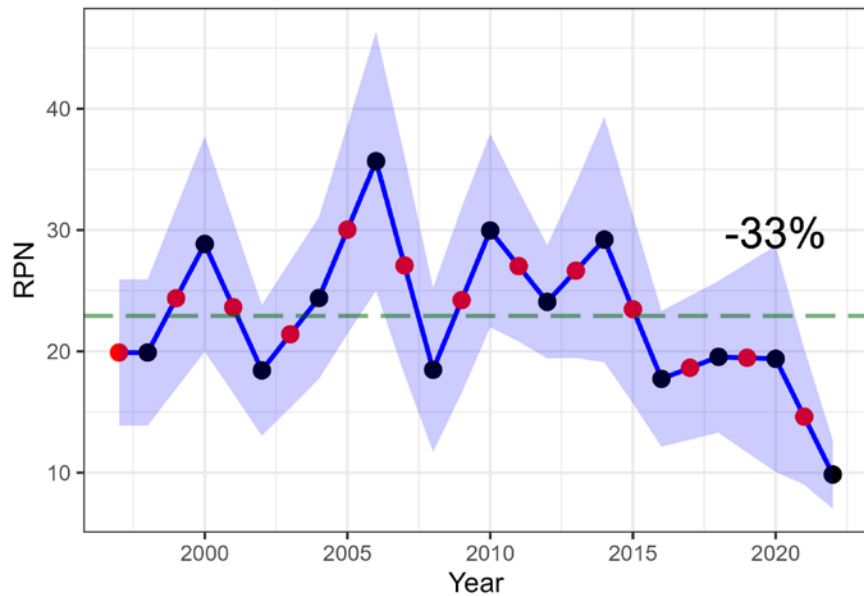


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Bering Sea Shortraker lin. interp. longline survey RPNs

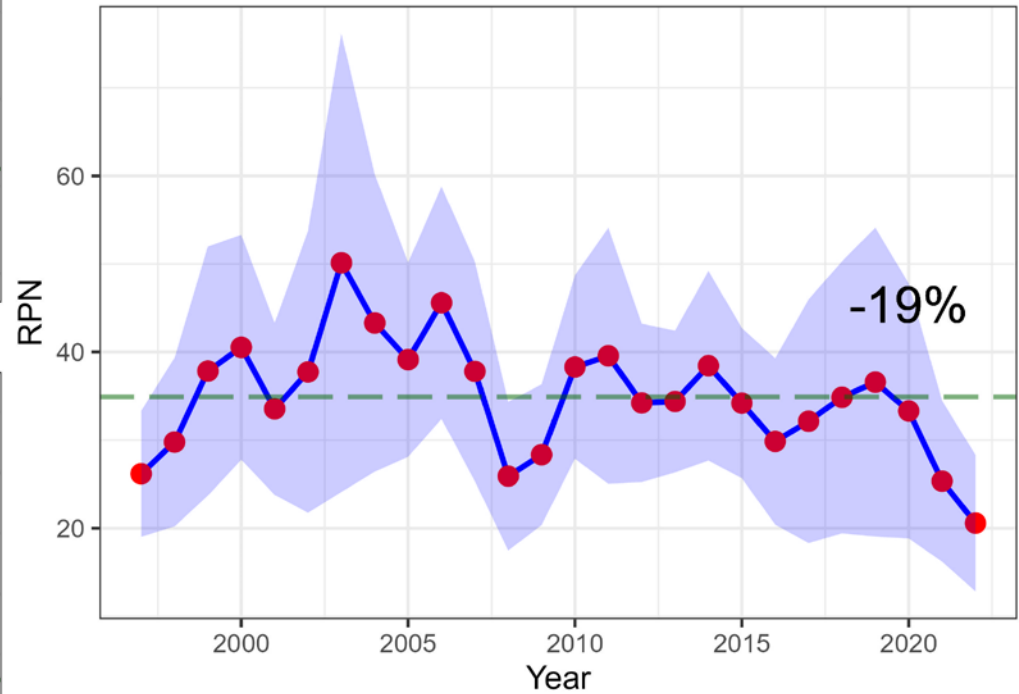


Aleutians Shortraker lin. interp. longline survey RPNs



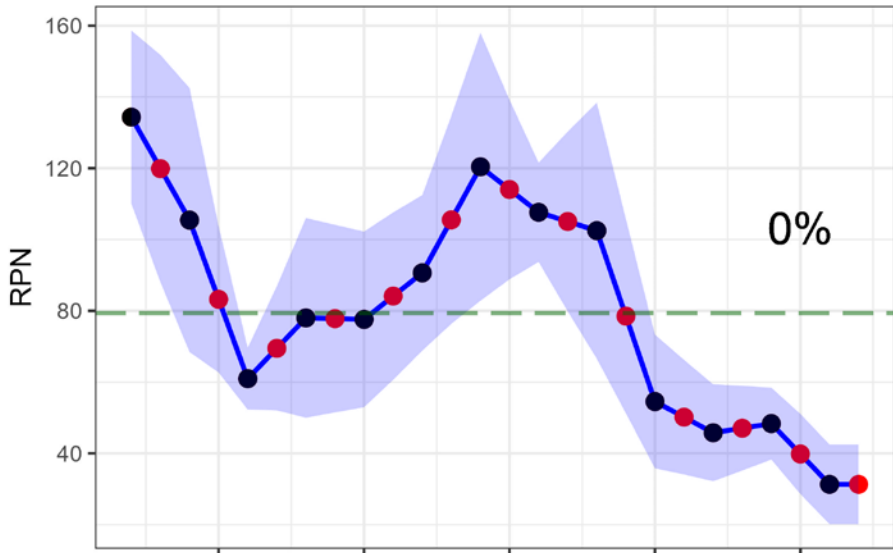
# BSAI: Shortraker Rockfish

BSAI Shortraker lin. interp. longline survey RPNs

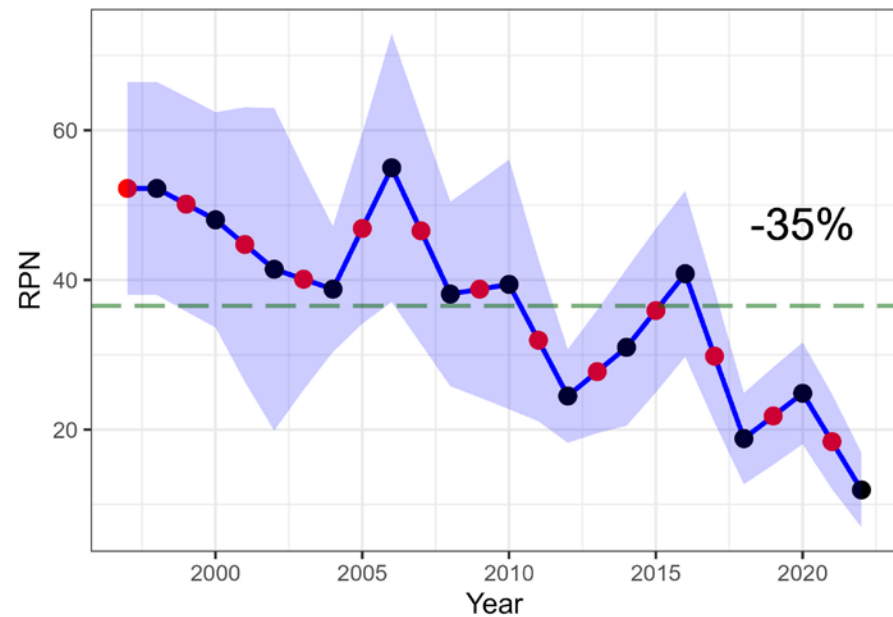


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Bering Sea KamATF lin. interp. longline survey RPNs

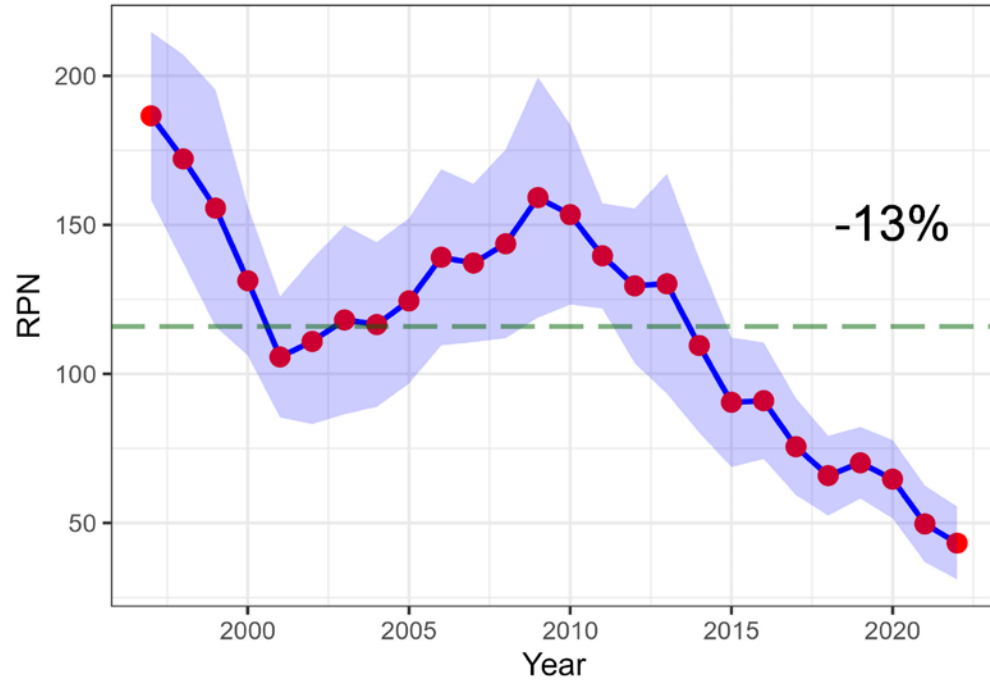


Aleutians KamATF lin. interp. longline survey RPNs



# BSAI: Kamchatka/Arrowtooth

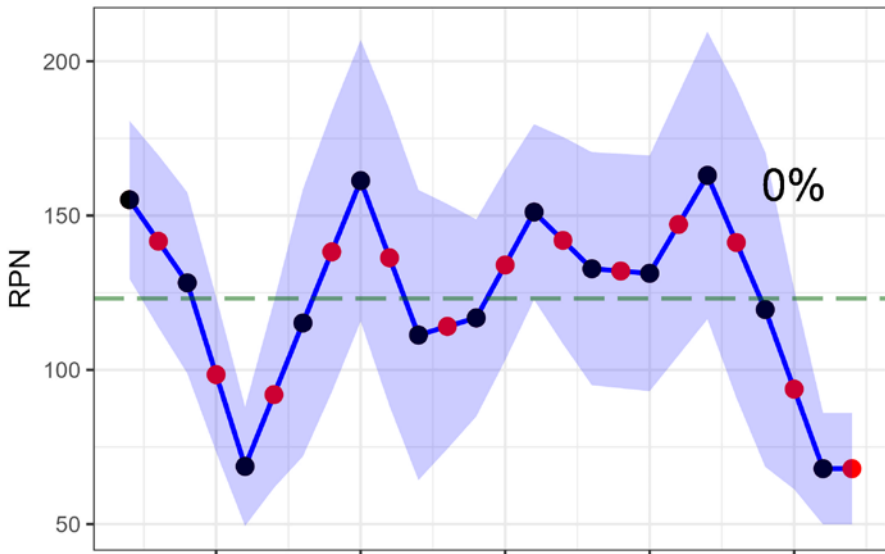
BSAI KamATF lin. interp. longline survey RPNs



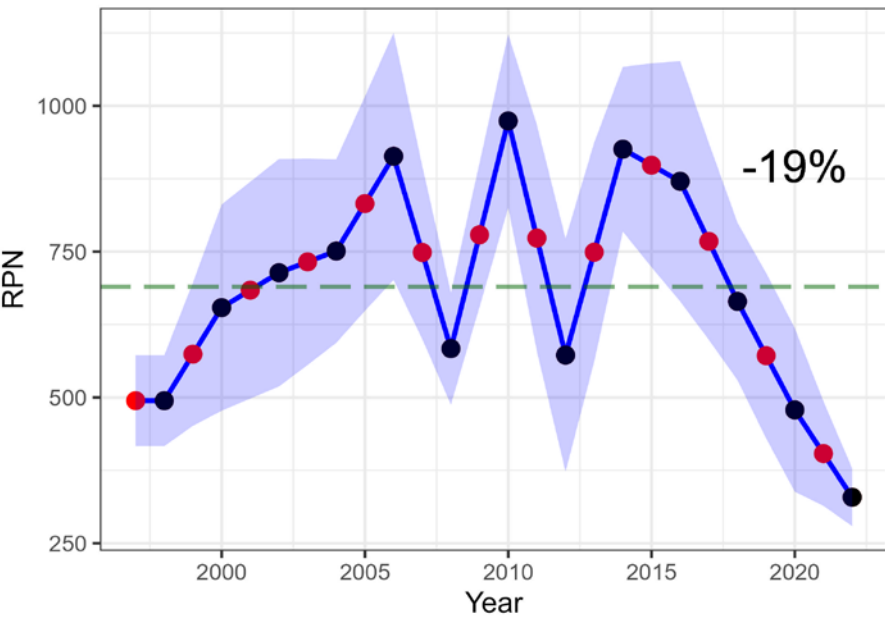
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Bering Sea G.Gren lin. interp. longline survey RPNs

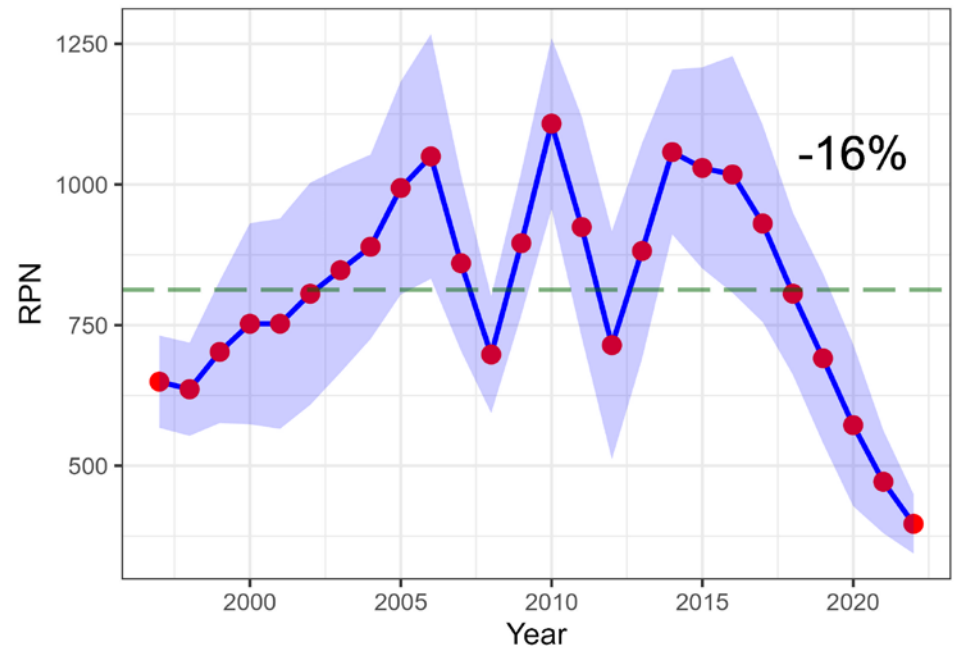


Aleutians G.Gren lin. interp. longline survey RPNs

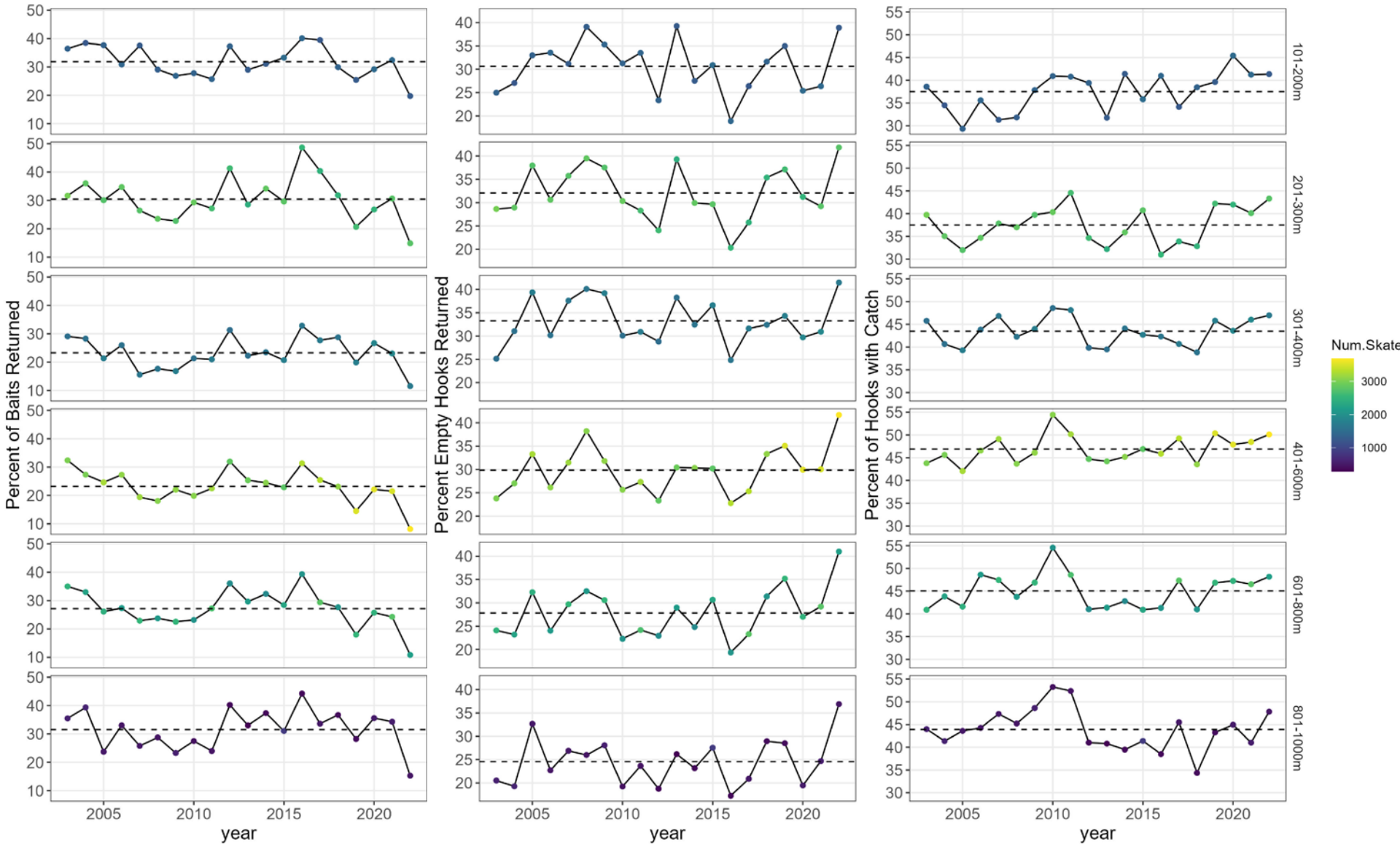


# BSAI: Giant Grenadier

BSAI G.Gren lin. interp. longline survey RPNs

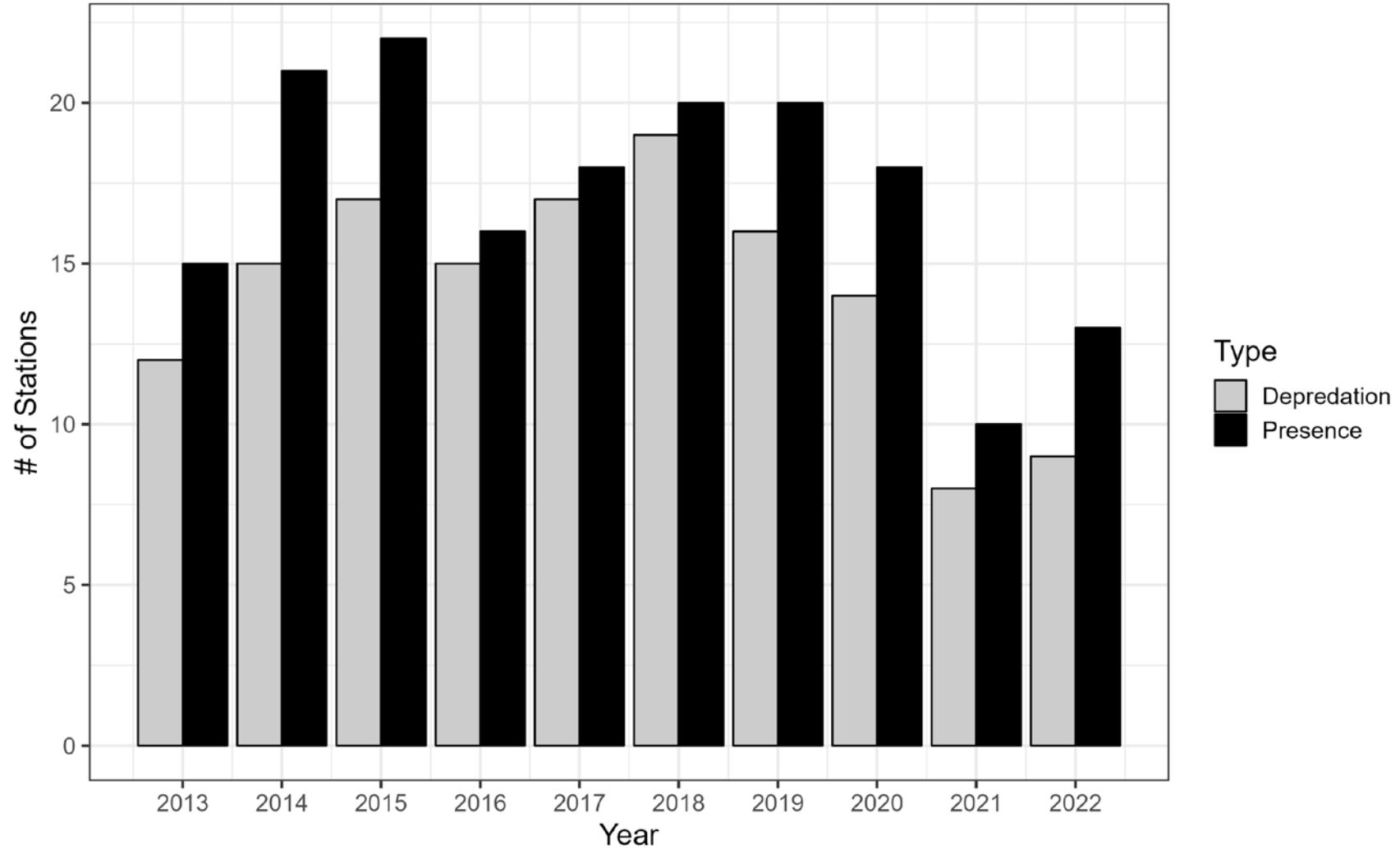


# Hooks (Bait vs. Empty vs. Catch)



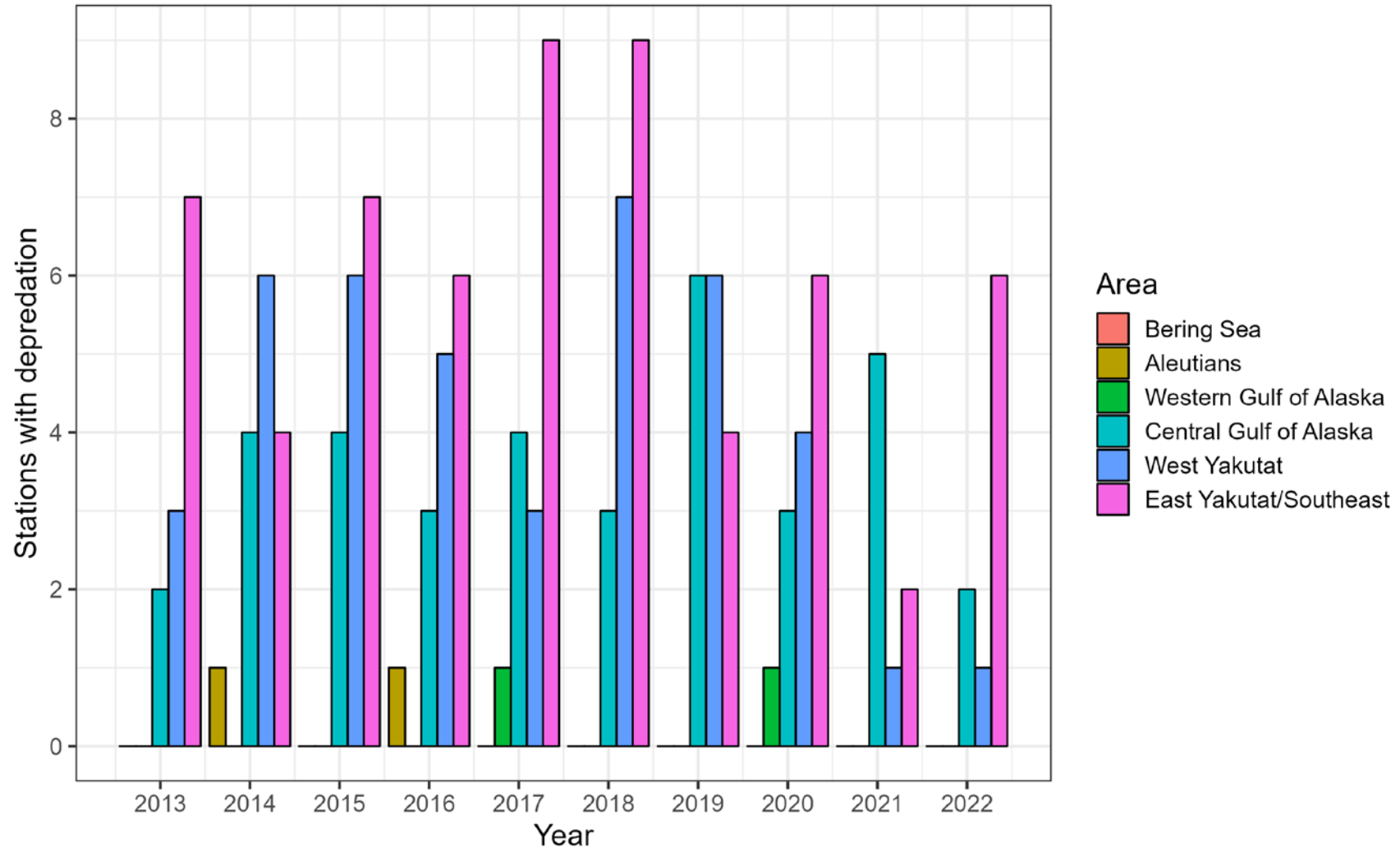
# Sperm Whales

## Sperm whale interactions



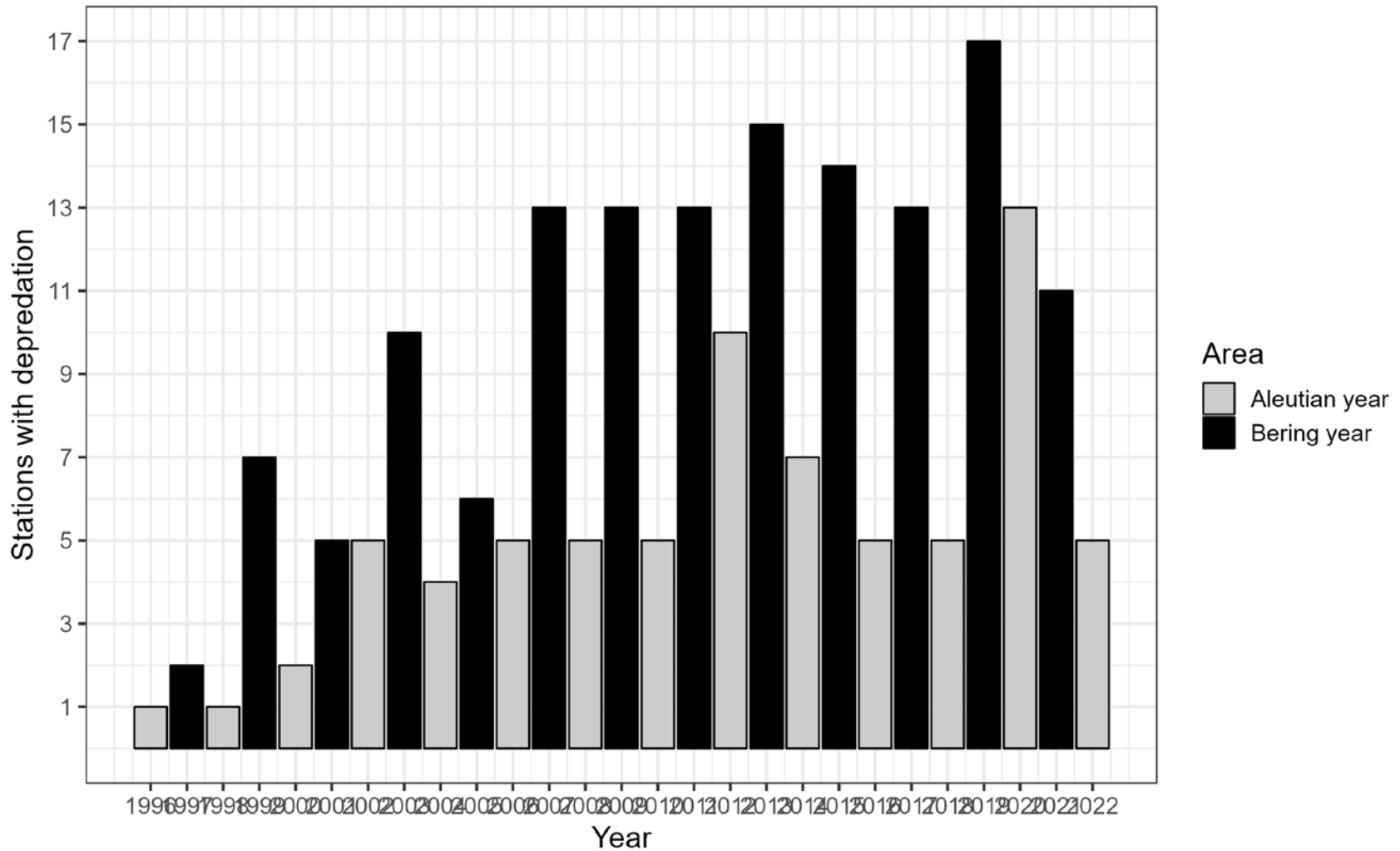
# Sperm Whales

## Sperm whale depredation



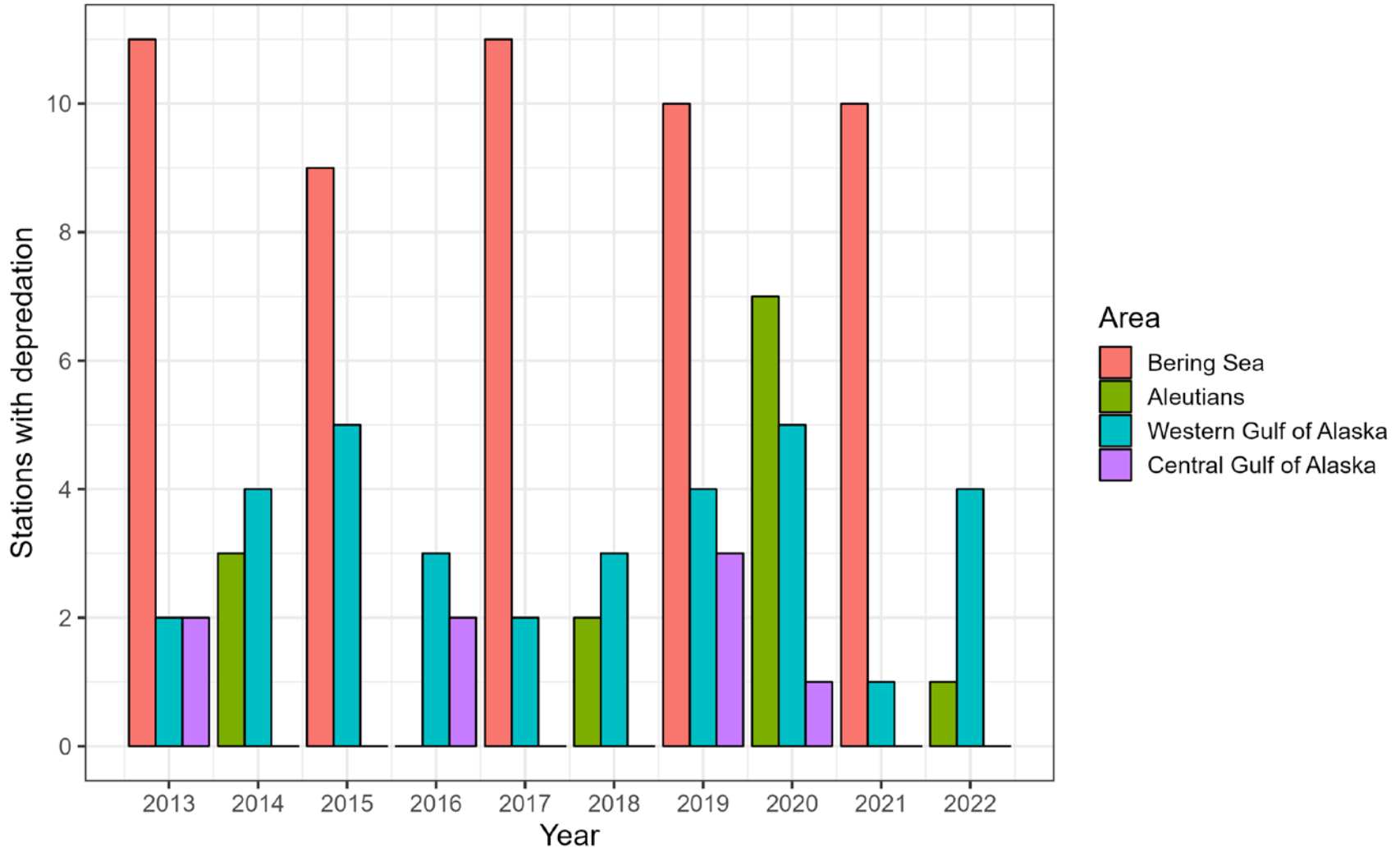
# Killer Whales

Killer whale depredation



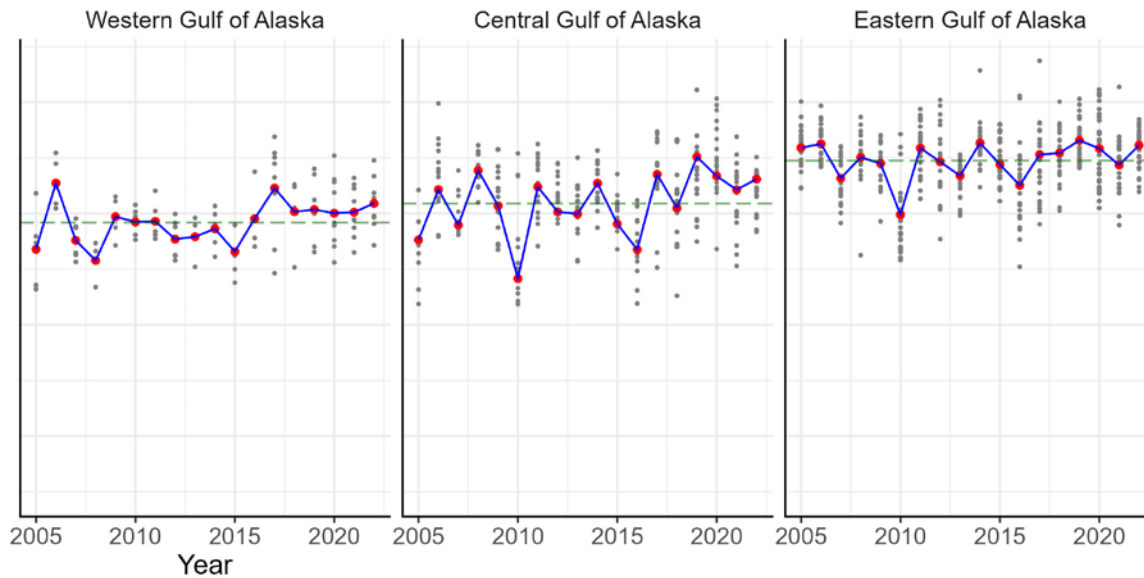
# Killer Whales

## Killer whale depredation



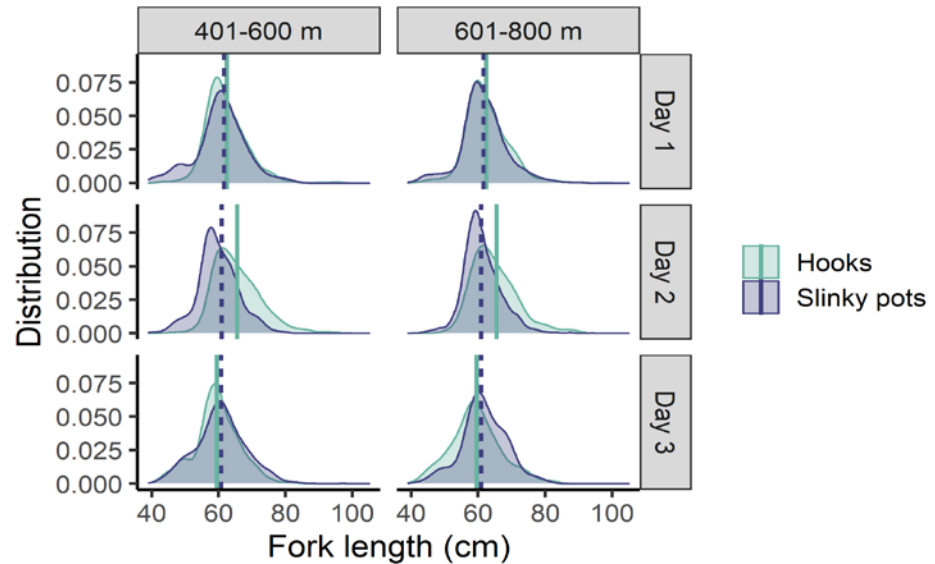
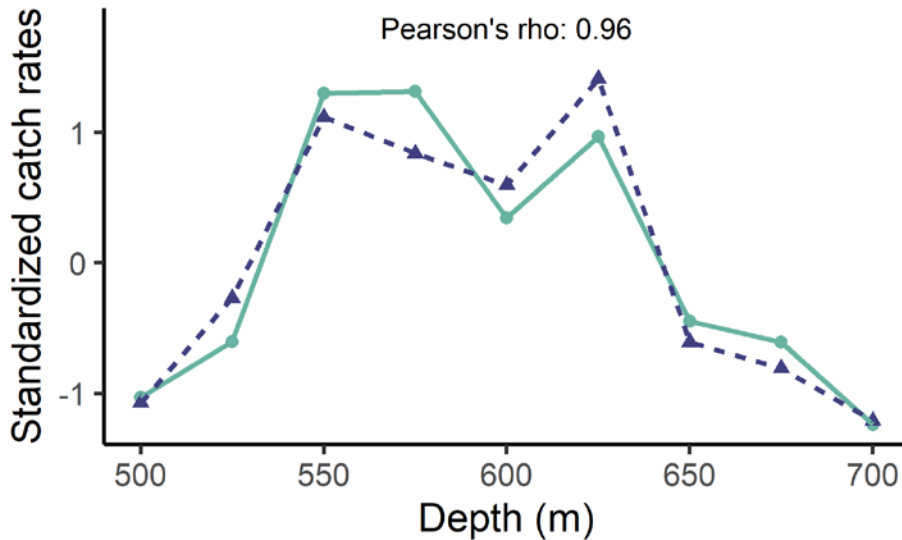


# Subsurface Temperature



# HAL/Slinky pot comparisons

- 3 days each comparing 90 skates (4,050 hooks) with 120 pots
- Total sablefish catch = 9,415
- Comparable catch rates and length comps for sablefish



# Acknowledgements



- Contractors: Jessica Miller, Akira Wong
- MESA field staff: Pete Hulson, Katy Echave, Jane Sullivan, Andrew Dimond, Dan Goethel, and Ben Williams
- Other field participants: Matt Cheng (UAF), Madison Bargas (ADF&G), and Sandi Neidetcher (AFSC)
- Logitistics: Pat Malecha
- Data-wrangling: Cara Rodgveller, Jane Sullivan
- FV Alaskan Leader captains, crew, and staff
- RACE Division assistance



# Questions?



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