

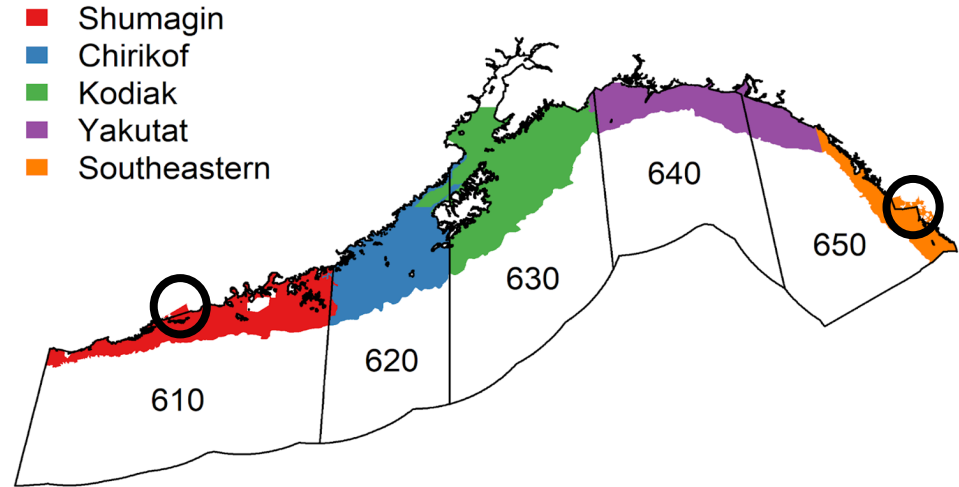
Gulf of Alaska Bottom Trawl Survey: Survey Area Footprint Changes

Ned Laman, Zack Oyafuso, and Stan Kotwicki
RACE Groundfish Assessment Program

Gulf of Alaska Plan Team
November 2024

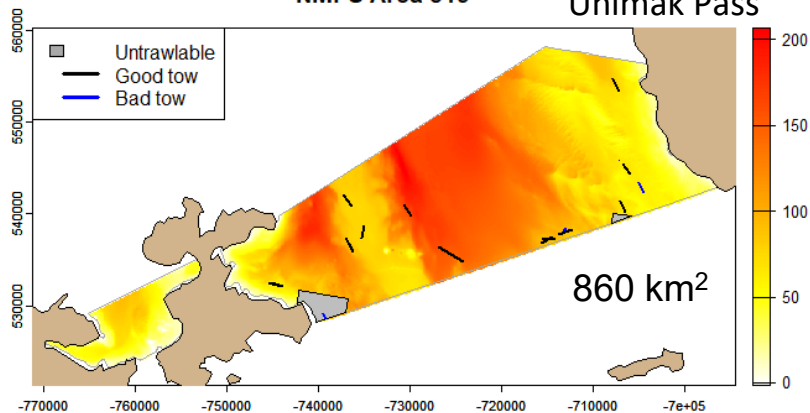
2025 GOA Restratification

- Historical GOA strata were aligned with INPFC Districts (colored shapes)
- The new GOA strata are aligned with NMFS Sampling Districts (numbered polygons)
- The historic INPFC survey footprint is not completely aligned with established NMFS Sampling Districts



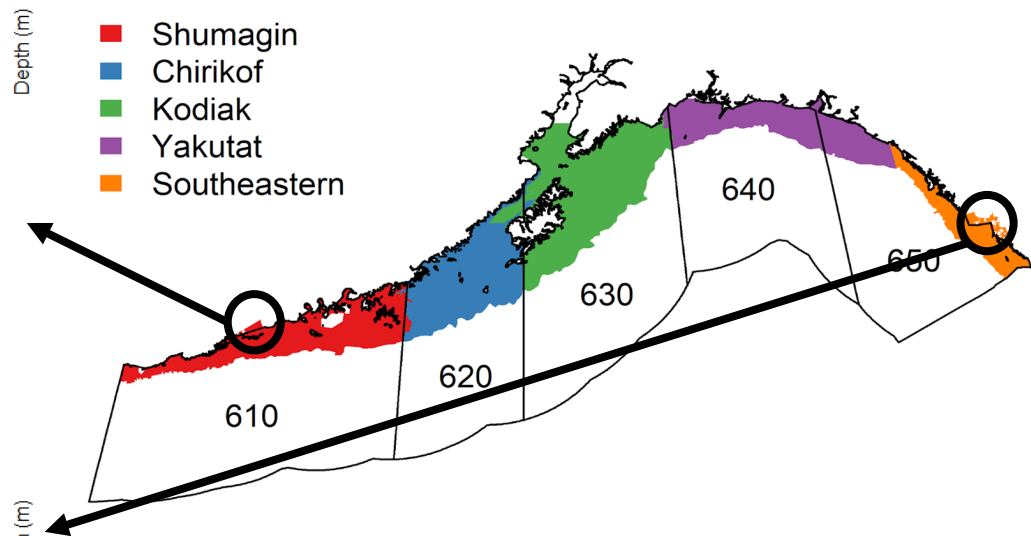
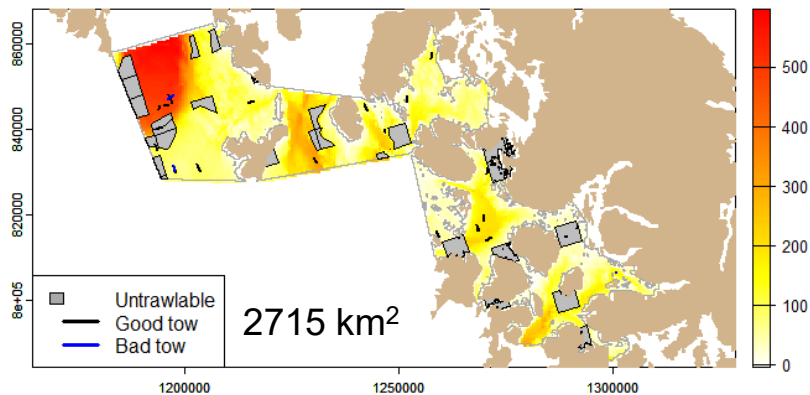
NMFS Area 519

Unimak Pass



NMFS Area 659

Southeast Inside



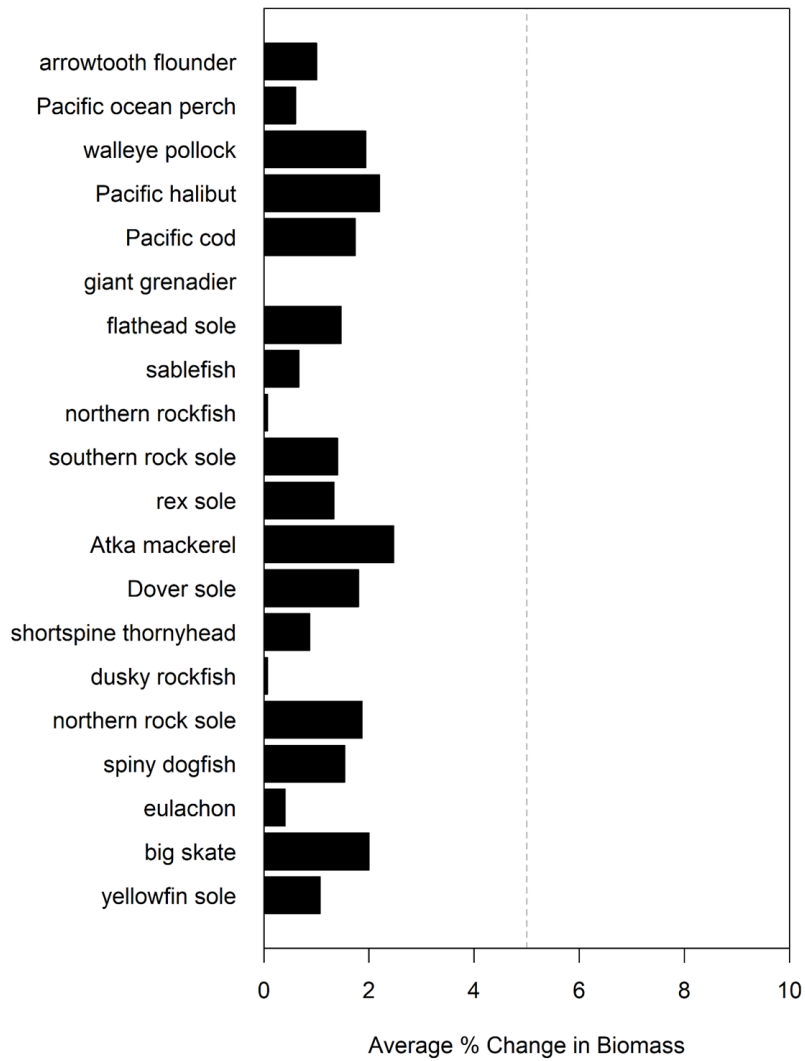
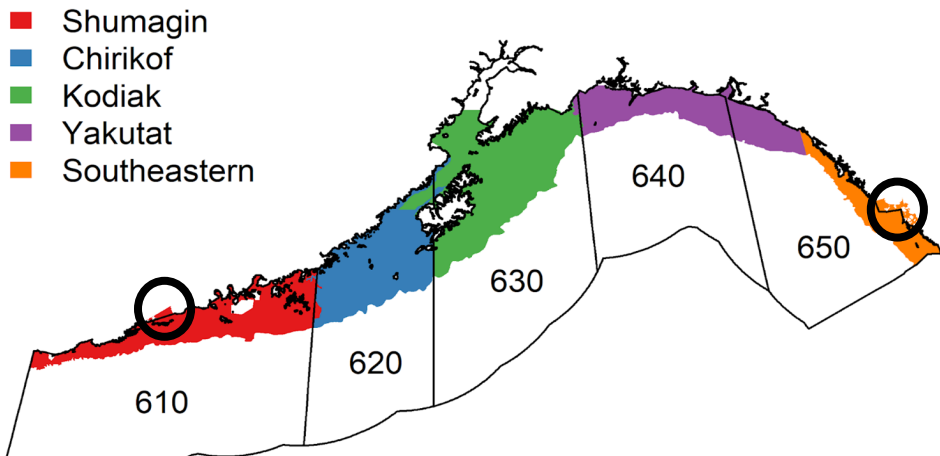
*Percent reduction of historic GOA survey sampling areas:
 Across entire GOA, ~ 1.4% reduction of area
 In the Western GOA regulatory area, ~1.3% reduction
 In the Eastern GOA regulatory area, ~3.2% reduction*

Optimized, Re-Stratified GOA BTS

- Re-Stratified Gulf of Alaska survey footprint defined by depth and NMFS Sampling Districts:
 - Shumagin District 610
 - Chirikof District 620
 - Kodiak District 630
 - Yakutat District 640
 - SE Alaska Outside District 650
- Remove two areas from historical Western and Eastern GOA Regulatory Areas
 - Part of NMFS District 519 (860 km²)
 - Part of SE Alaska Inside District 659 (2,715 km²)

Biomass Estimate Changes

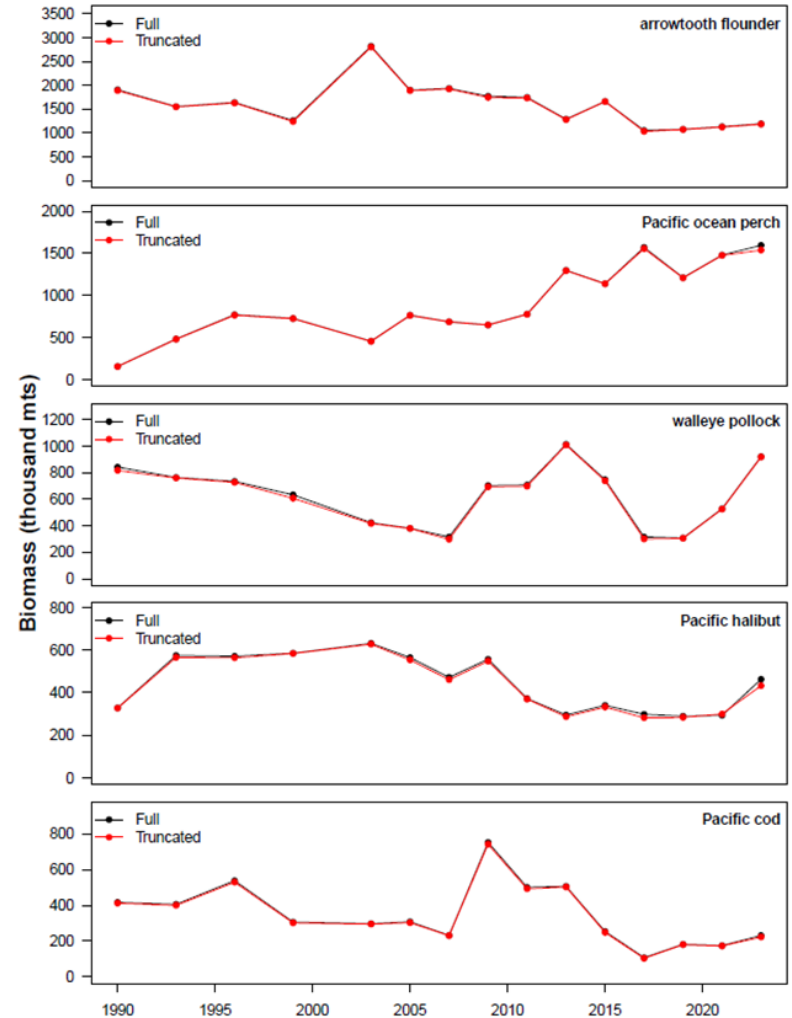
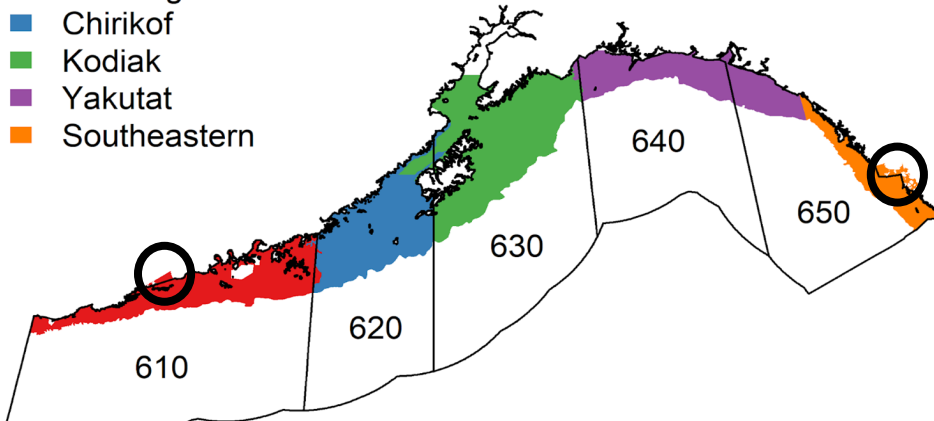
Gulf-wide absolute percent change in design-based biomass estimates from GOA BTS surveys (1990-2023) when removing historic areas that fall outside of NMFS Sampling Districts used in the restratified Gulf survey



Biomass Time Series

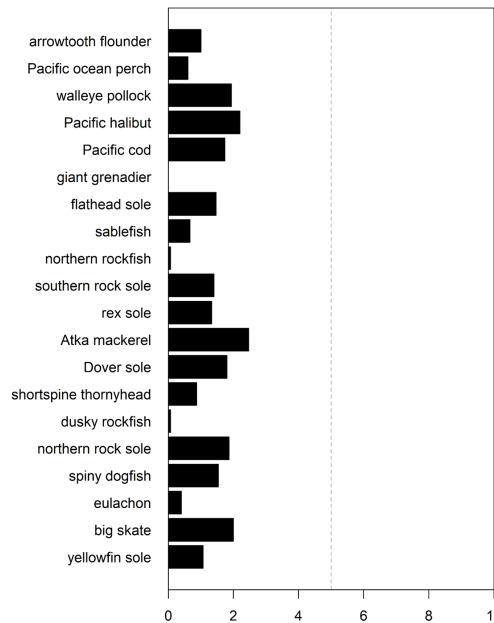
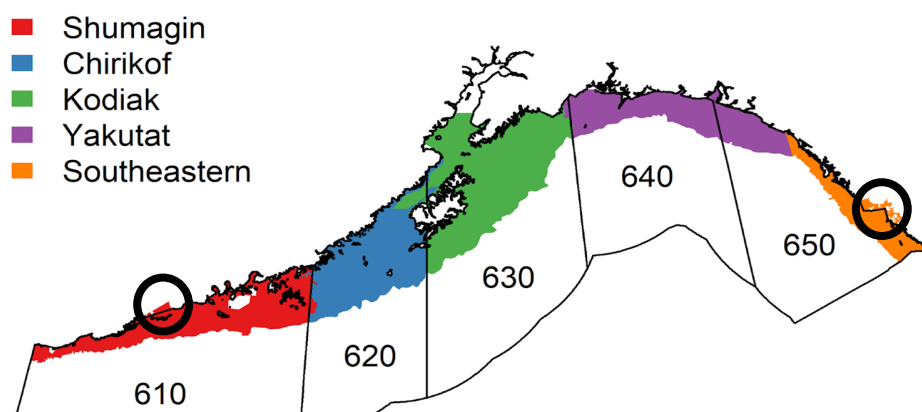
Gulf-wide biomass time series remain basically unchanged for the 5 most abundant species when removing the historic sampling areas that fall outside of NMFS Sampling Districts used in the restratified Gulf survey

- Shumagin
- Chirikof
- Kodiak
- Yakutat
- Southeastern



Conclusions

- ❖ Restratification aligns Gulf strata with NMFS sampling districts
- ❖ Two, relatively small, historically sampled areas are eliminated from restratified GOA survey area
- ❖ Minimal change to Gulf-wide biomass estimates
- ❖ Gulf-wide biomass time series largely unchanged



Average % Change in Biomass

