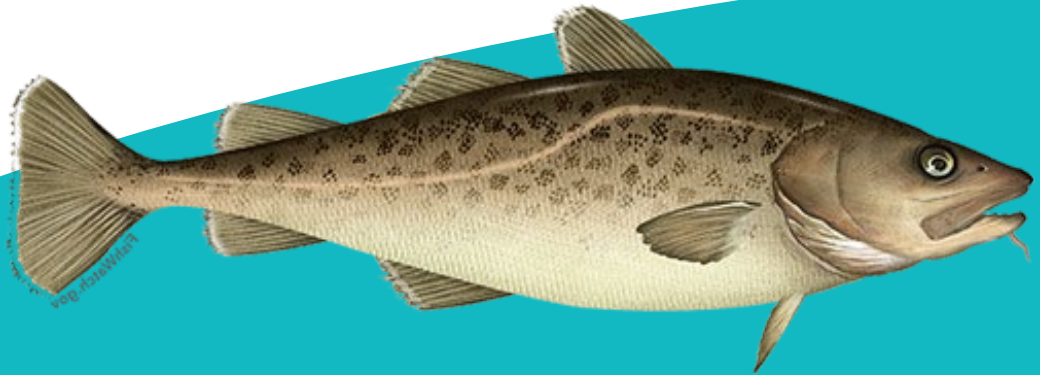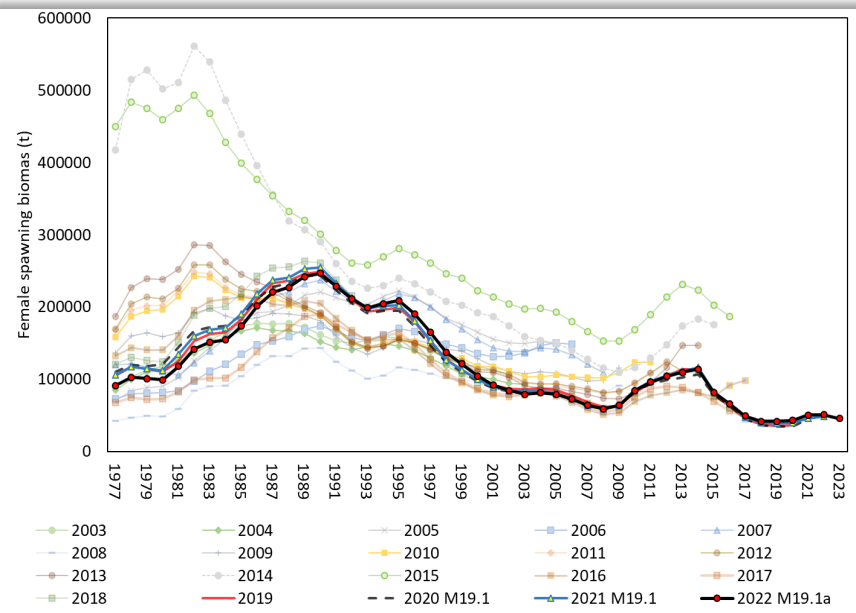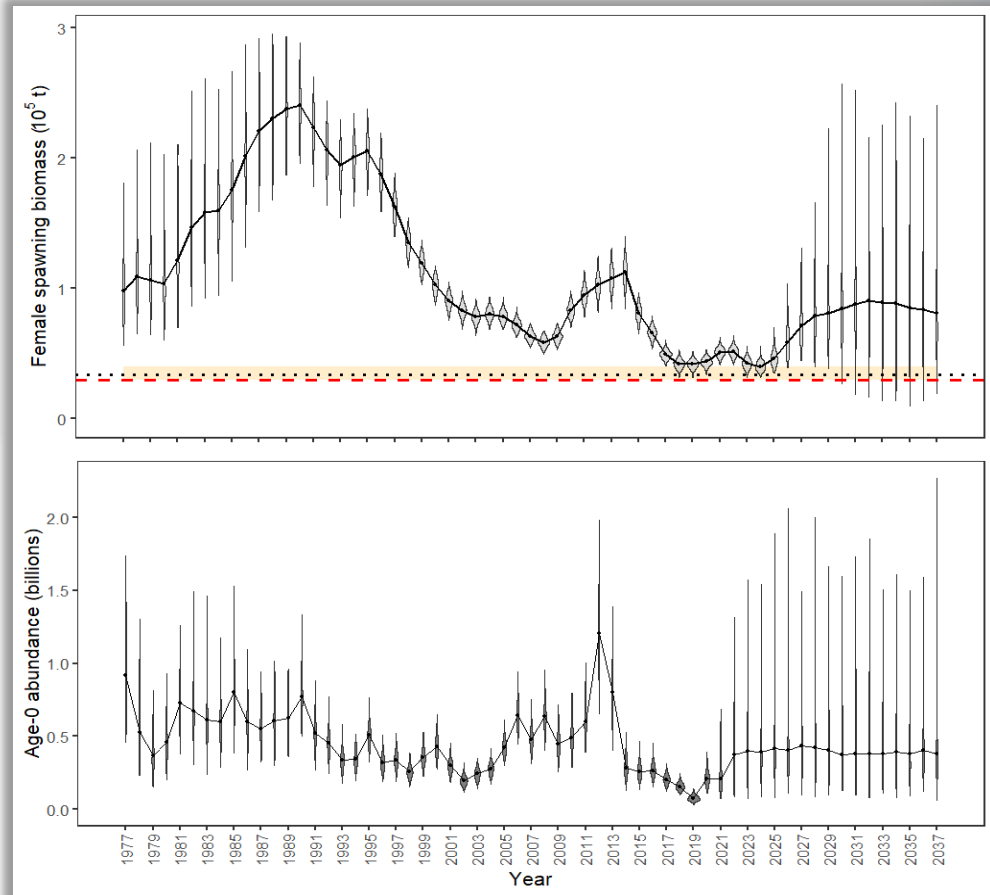# Gulf of Alaska Pacific cod

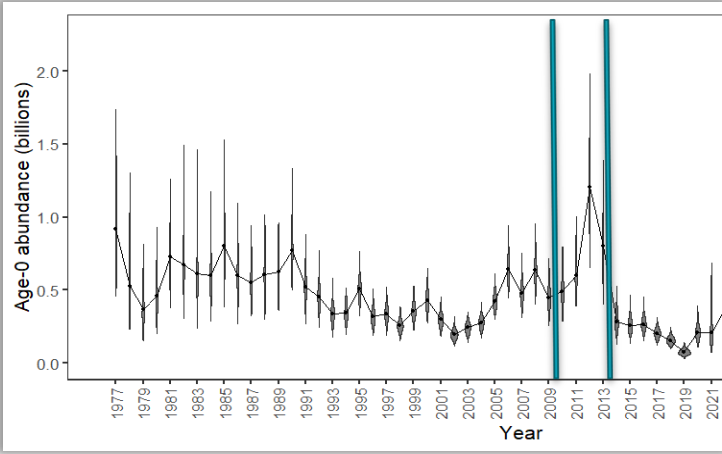Pete Hulson, Steve Barbeaux, Bridget Ferriss, Susanne McDermott, and Ingrid Spies

- Model consistent with past ~6 assessments
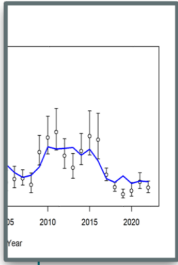
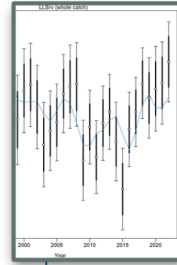- Spawning biomass projected to increase, but…

2022 Assessment recap

- Spawning biomass projected to increase, but...

- Is highly dependent on what magnitude of mean recruitment is used in projection
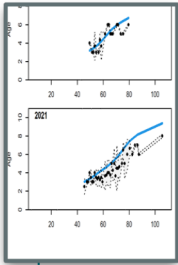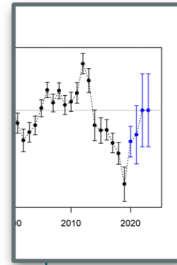

2022 Assessment recap

Model fitting bottom trawl, consistently expecting larger RPNs than what has been observed
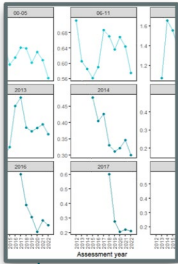

Fitting comp data relatively well, not fitting increase in mean length
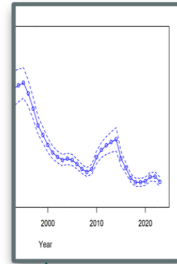

Conditional age-at-length fit degrading with new data

Estimating below average year-class strength since 2014

Large retrospective pattern in estimated year-class strength, continues to decrease with each assessment

Projecting spawning biomass to decrease through 2024, then increase (if average recruitment realized from 2022 on)

2022 Assessment recap

- Take another look at fit to longline survey

- Pick up and investigate environmental link to growth again

- Implement 2 index REMA model for apportionment (bottom trawl with longline survey)

- Continue to evaluate impact of recruitment in projections

2023 Outlook

Number CPUE by Year for GOA Jan-Feb

Fishery CPUE through 2023

Mixed and variable signal on CPUE but overall seems consistent with 2022 so far