

Stock Assessment and 2023 Forecast

Sitka Sound, Alaska

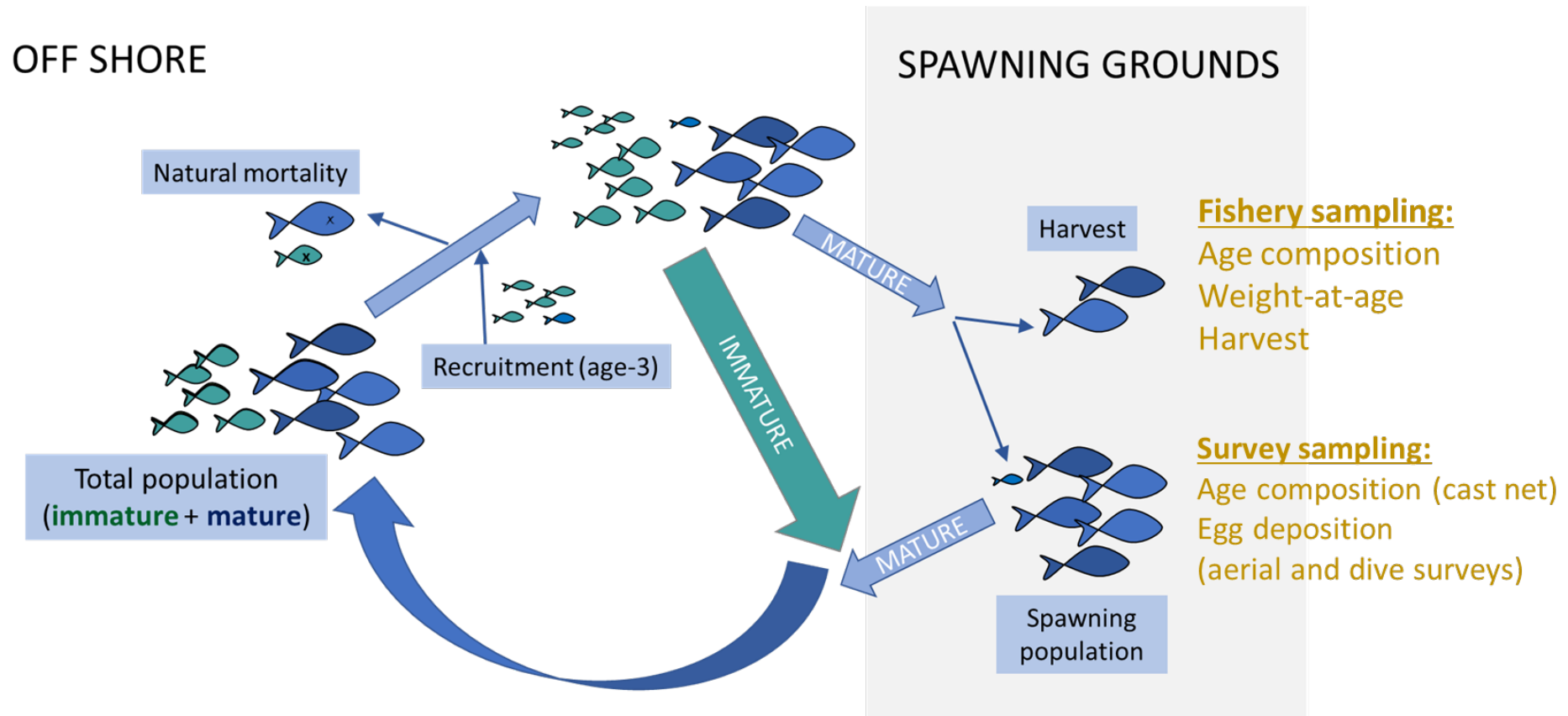
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Alaska Department of
Fish and Game

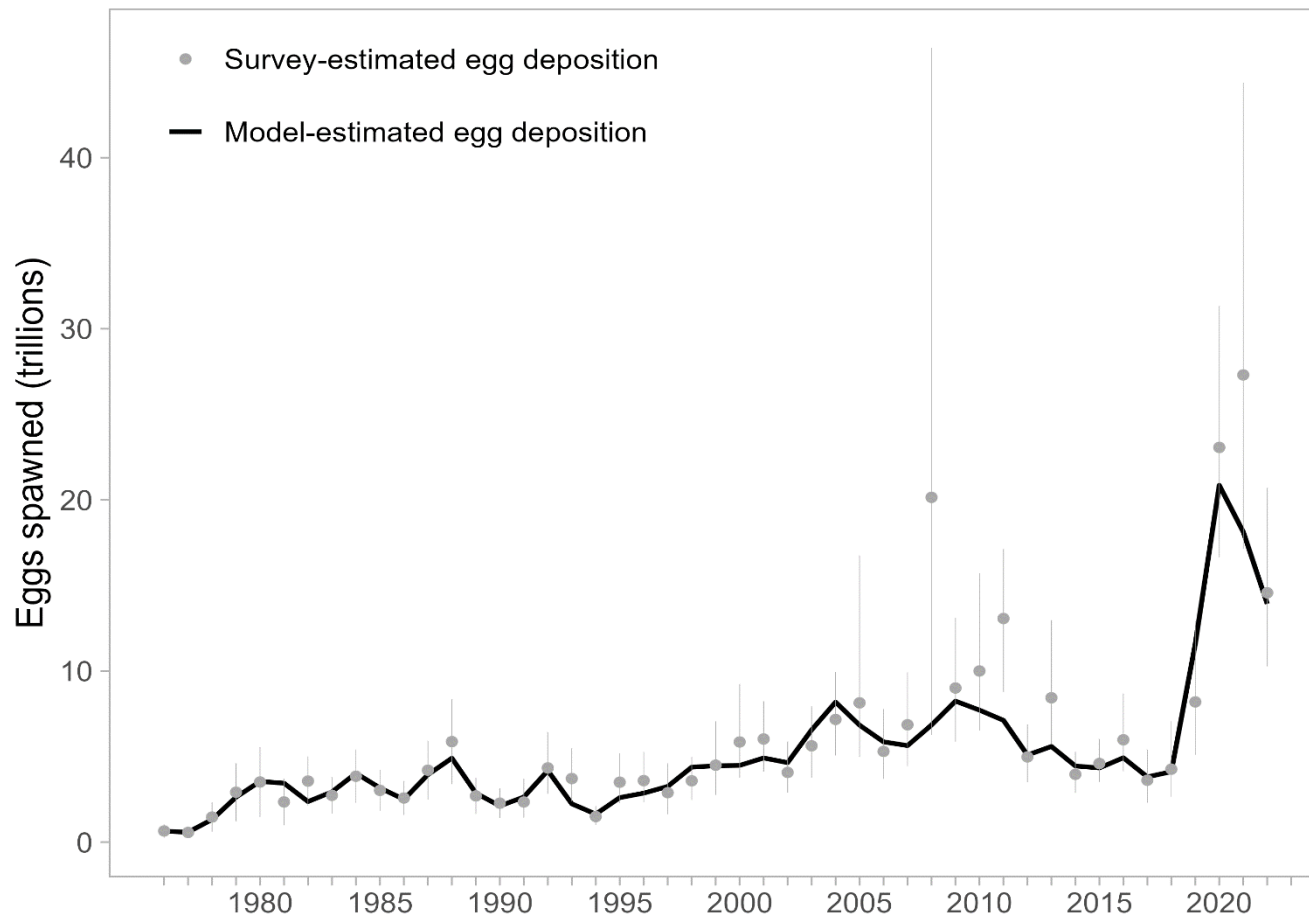
March 21, 2023



Data collected annually for modelling

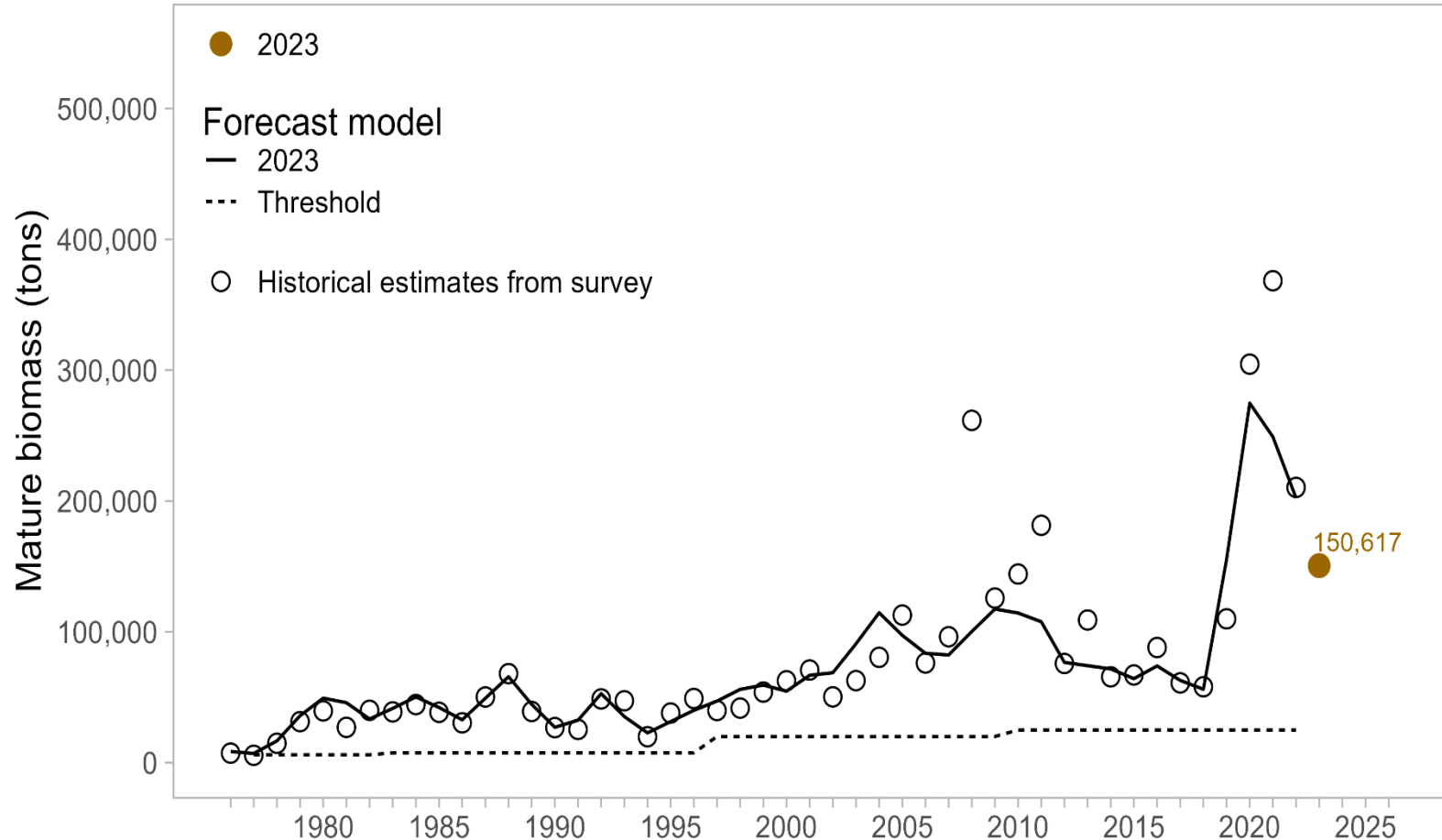


Spawn deposition survey estimates with 95% confidence intervals and model fit

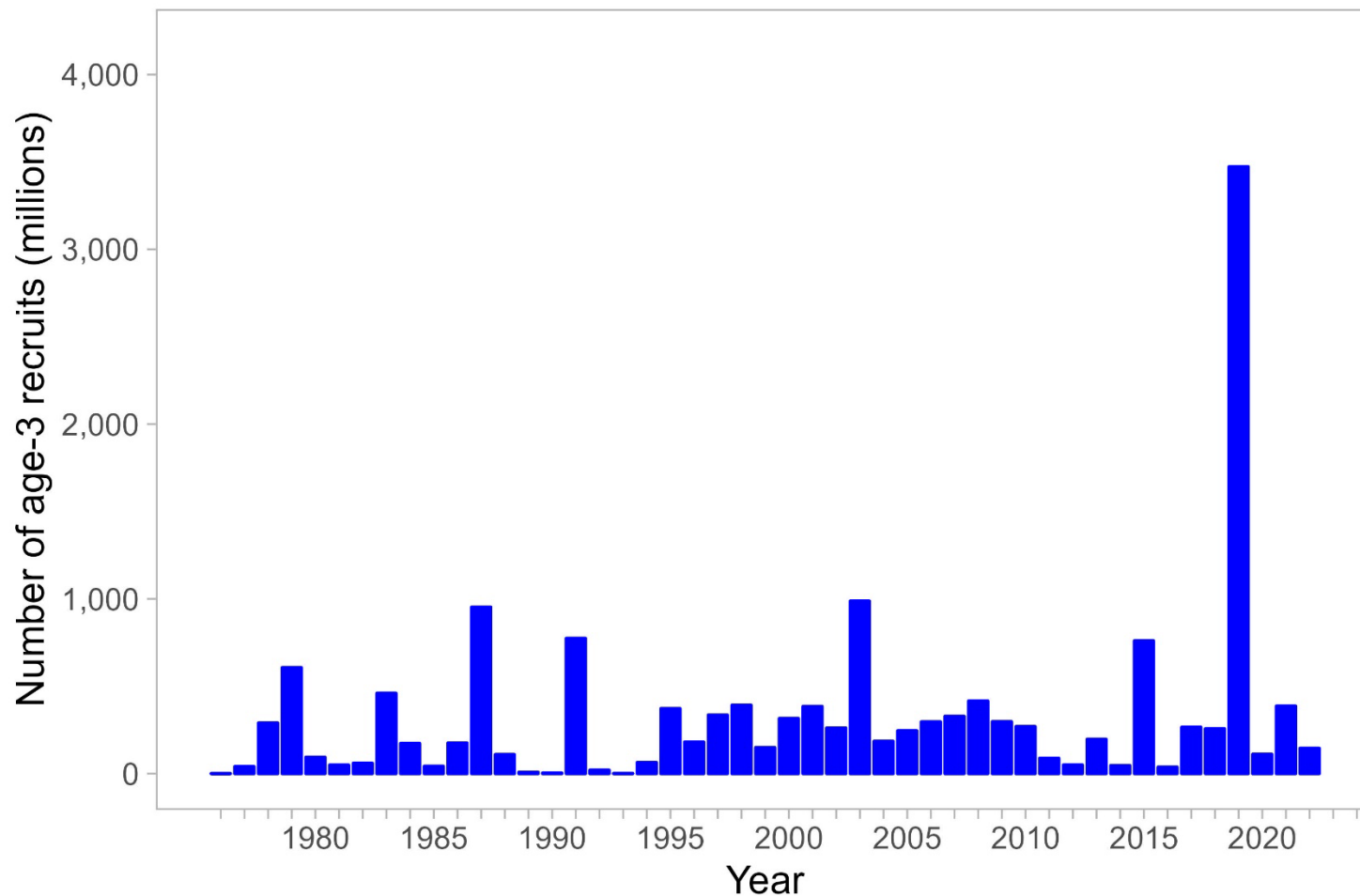


* 2008 upper confidence interval cut off for presentation

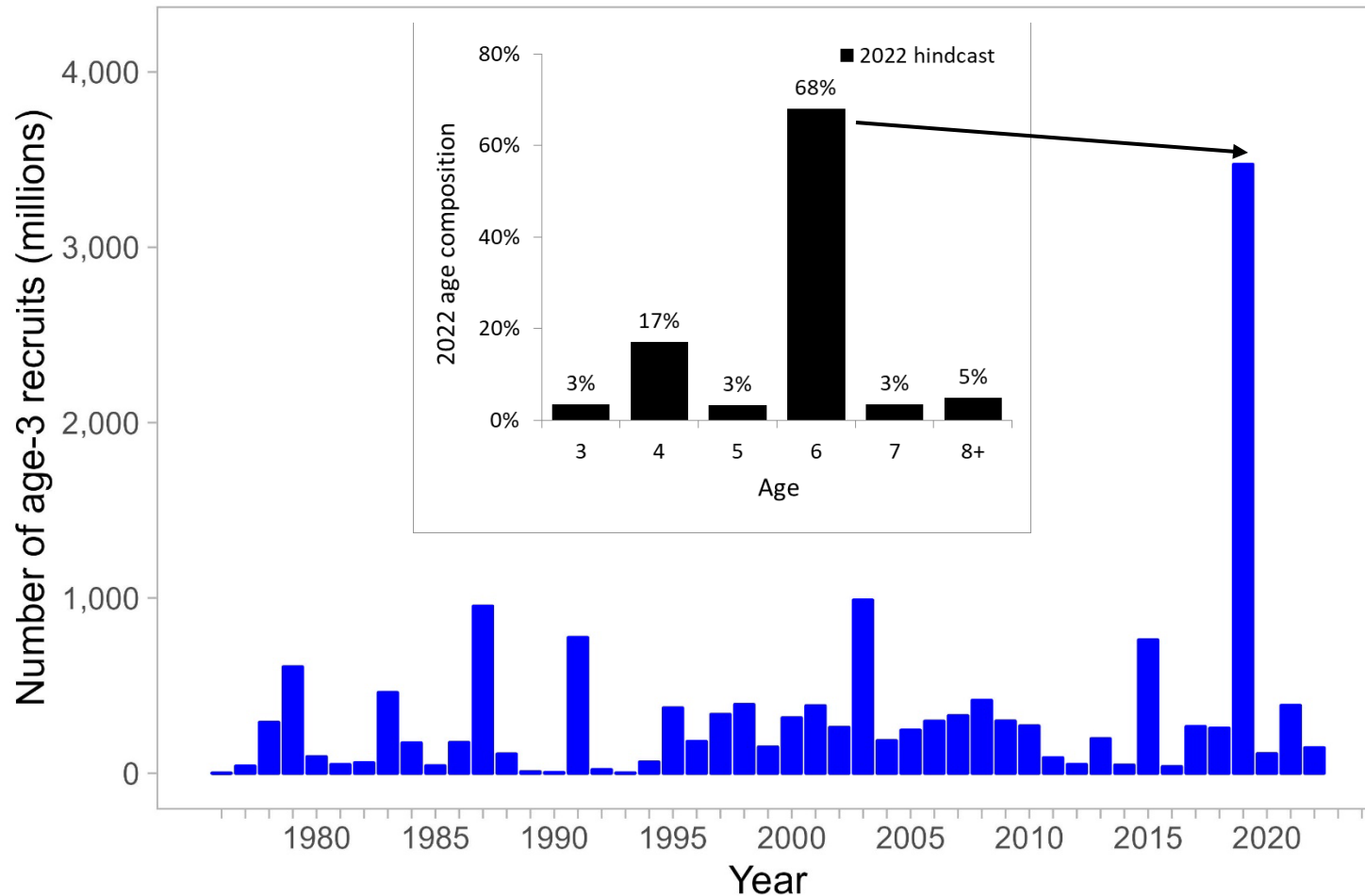
Sitka Sound mature biomass and 2023 forecast



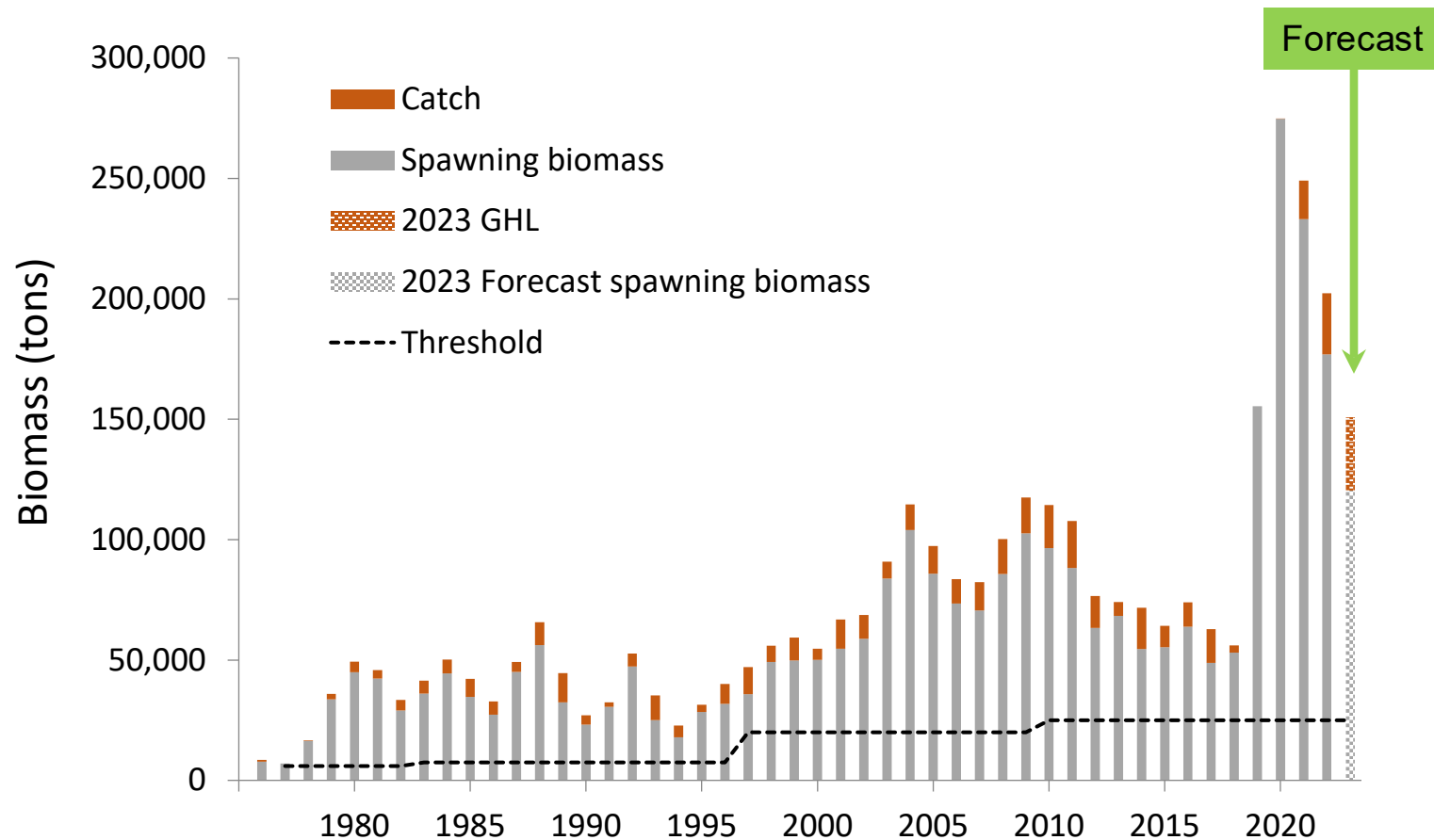
Sitka Sound recruitment (mature and immature age-3 fish)



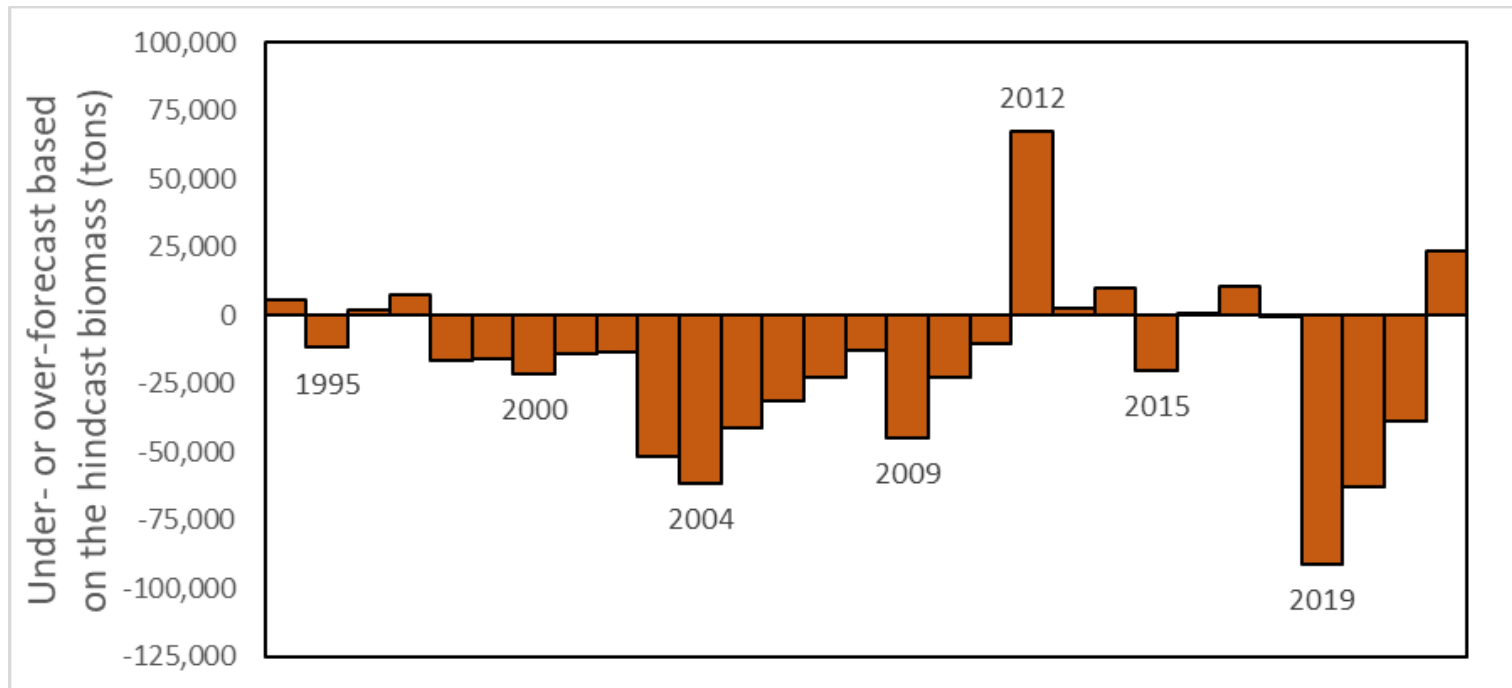
Sitka Sound recruitment (mature and immature age-3 fish)



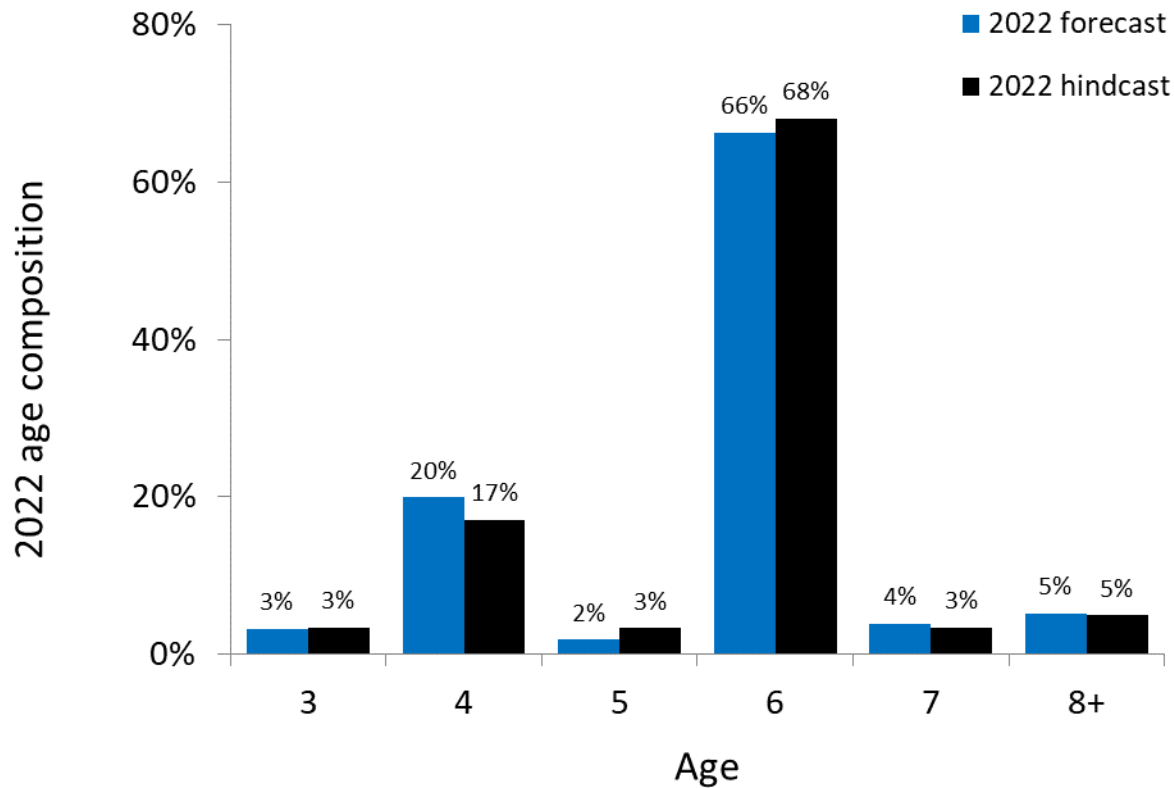
Sitka Sound spawning biomass and harvest (2023 is forecasted biomass and GHL)



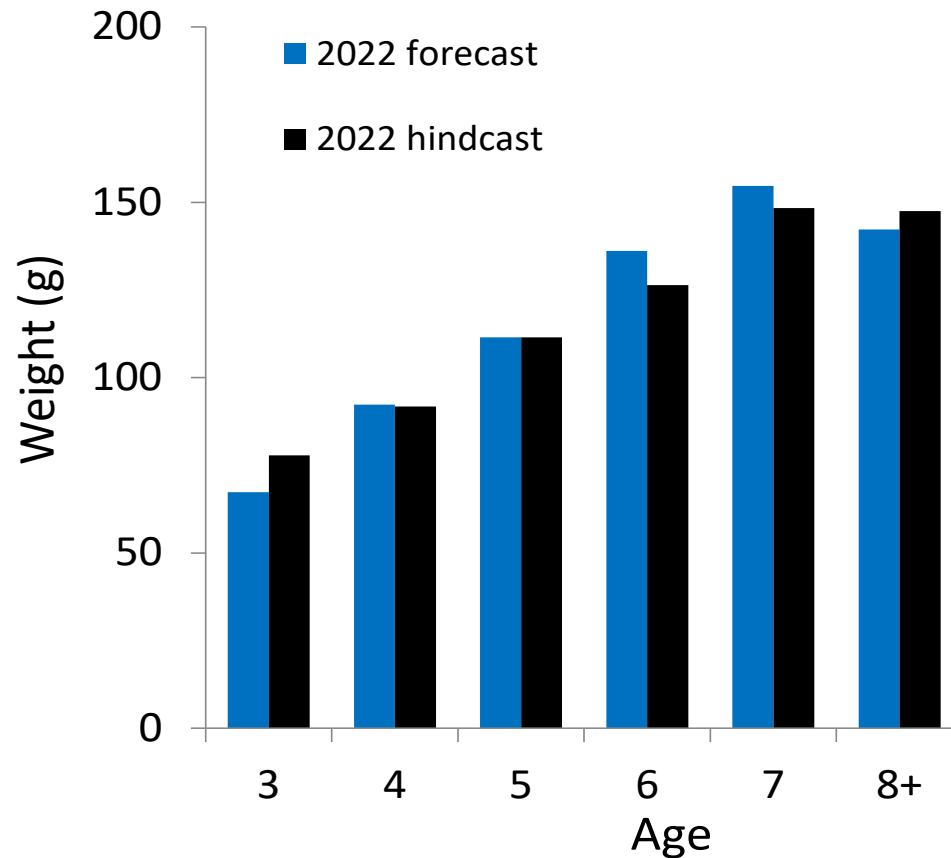
Sitka Sound model performance (1994-2022)



Comparison of model-forecast and model-hindcast 2022 age composition



Comparison of model-forecast and model-hindcast 2022 weight at age



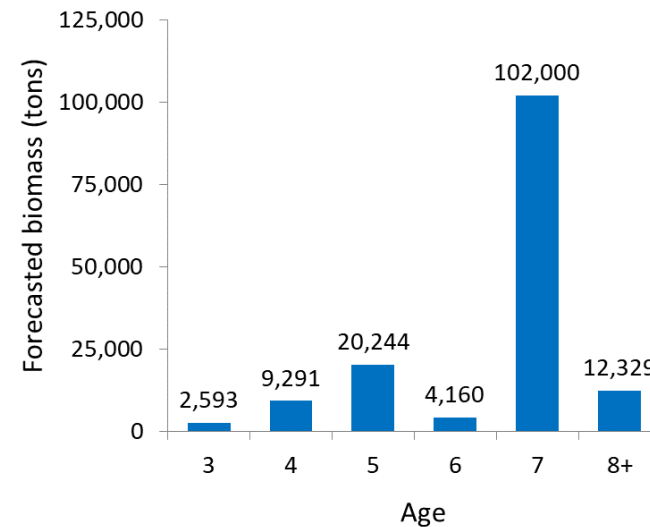
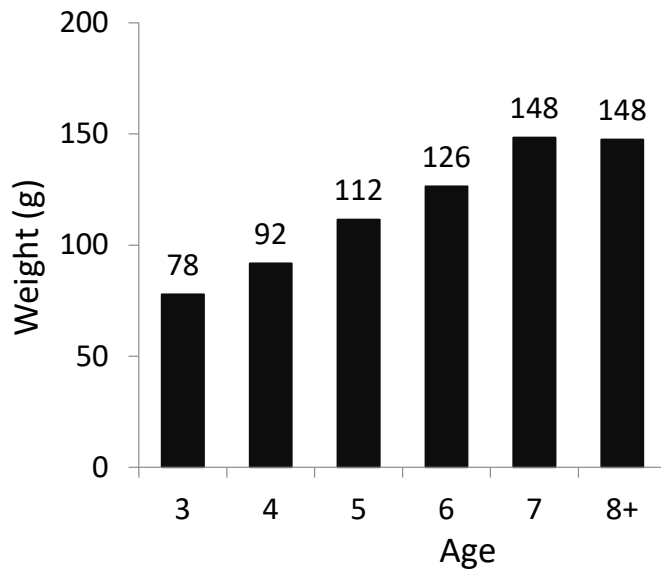
Forecast weights are the 2021 spring commercial seine average
Hindcast weights are the 2022 spring commercial seine average

2023 forecast biomass and weight at age

2023 Forecast = 150,617 tons

GHL = 30,124 tons

Forecast average weight = 134 grams



2023-forecast weight at age based on the 2022 spring commercial purse seine

Acknowledgements

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- ADF&G Sitka office staff

