

Stock Assessment and 2024 Forecast Sitka Sound, Alaska

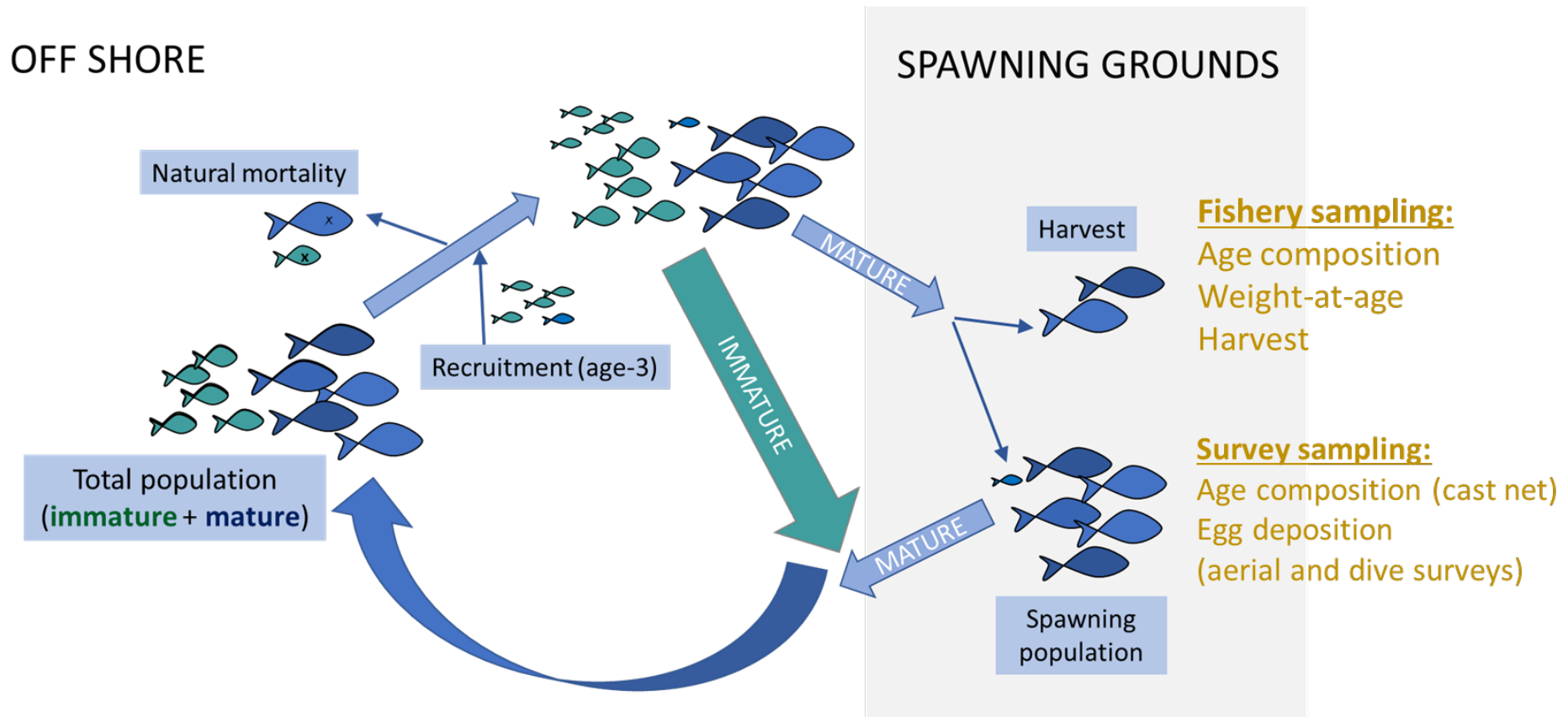
Sara Miller and Sherri Dressel

Alaska Department of
Fish and Game

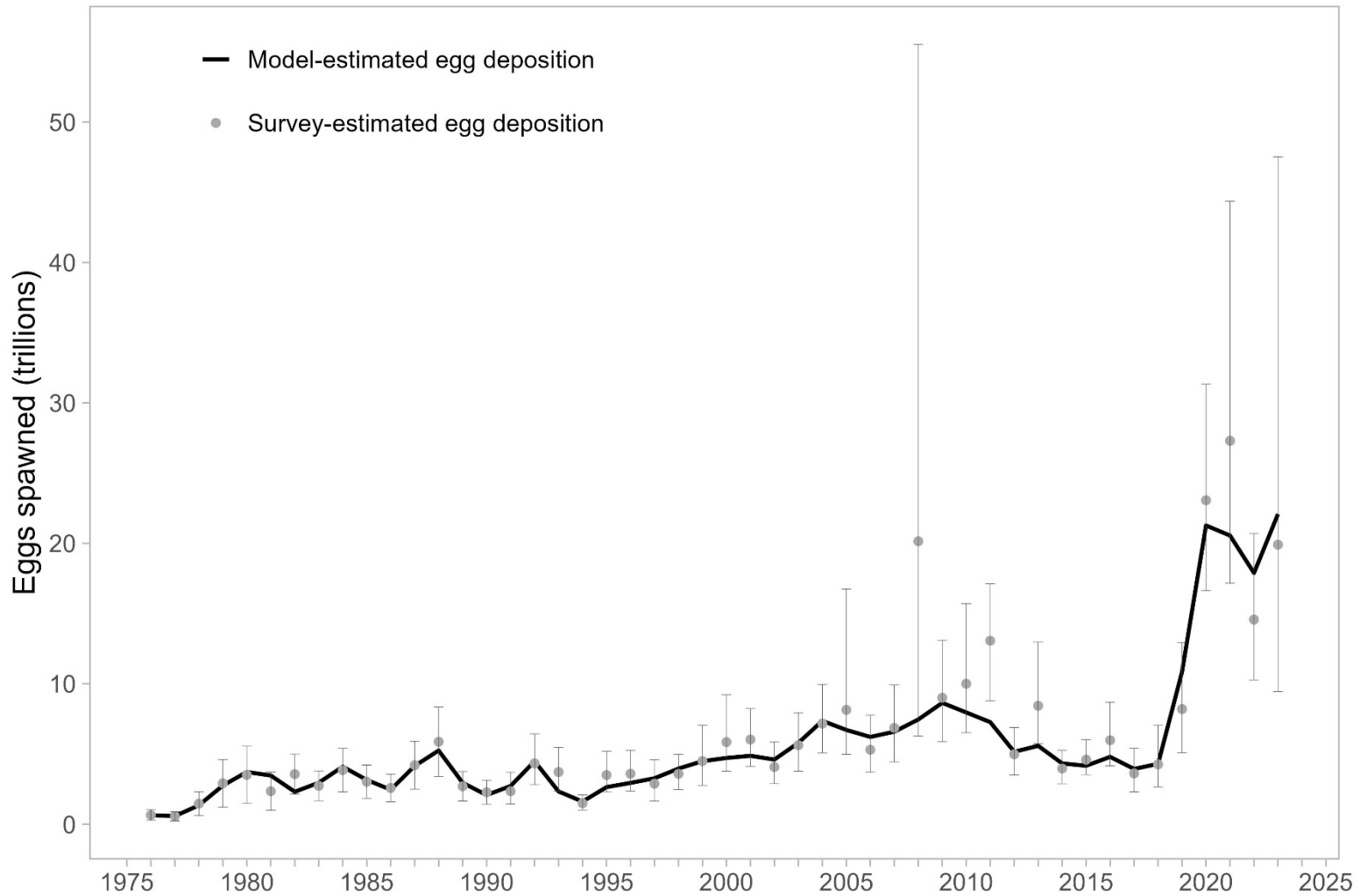
March 19, 2024



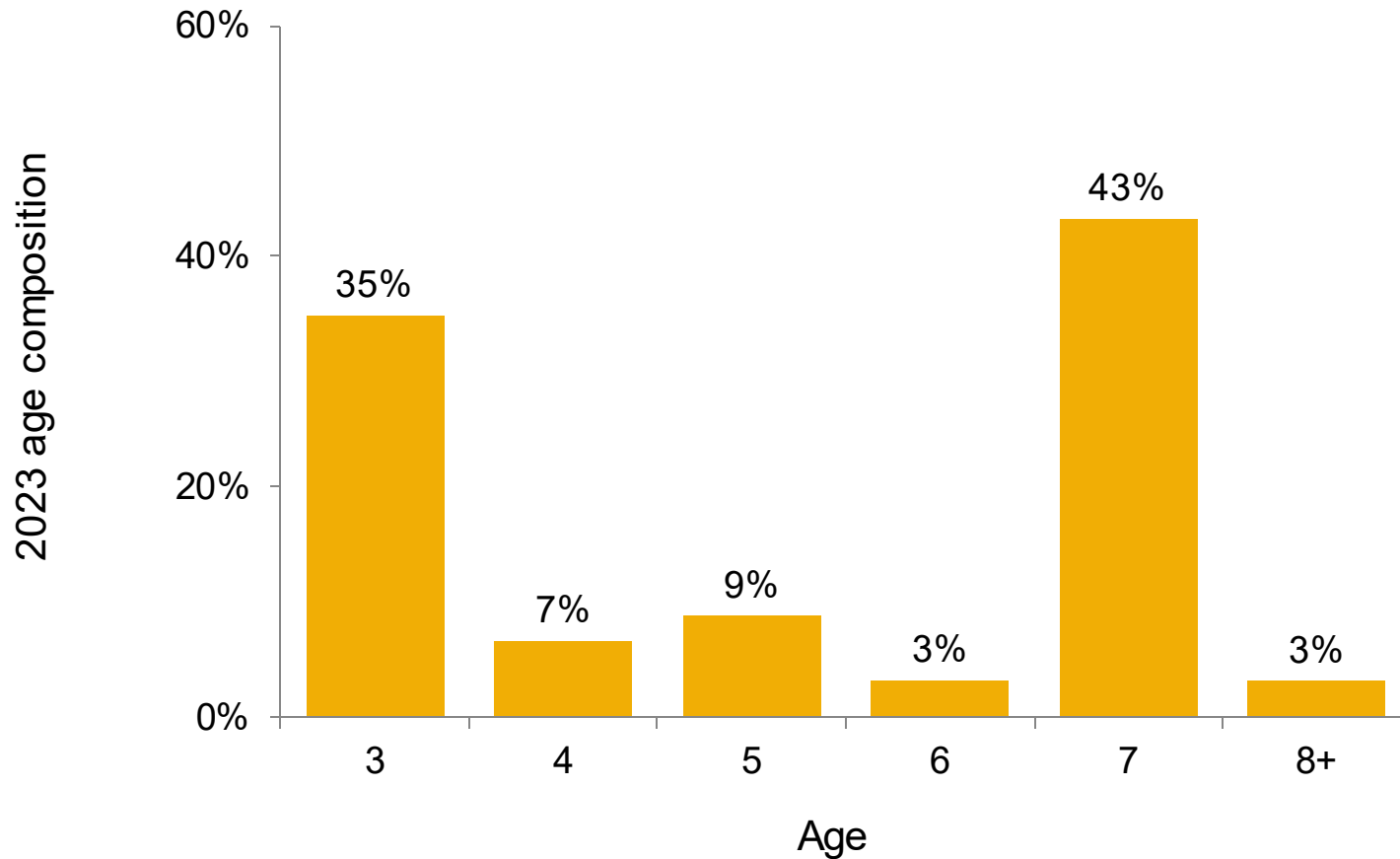
Data collected annually for modelling



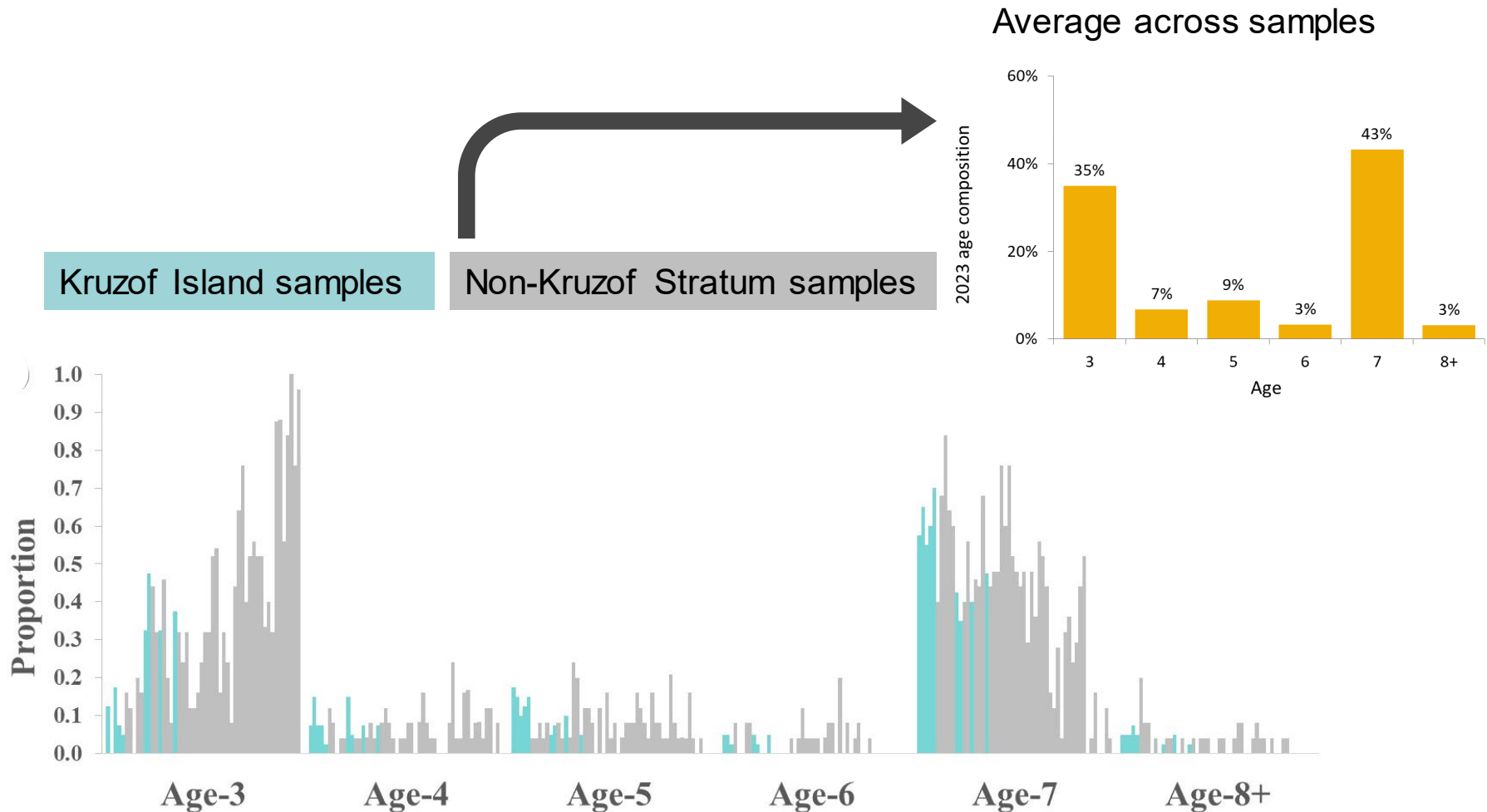
Spawn deposition survey estimates with 95% confidence intervals and model fit



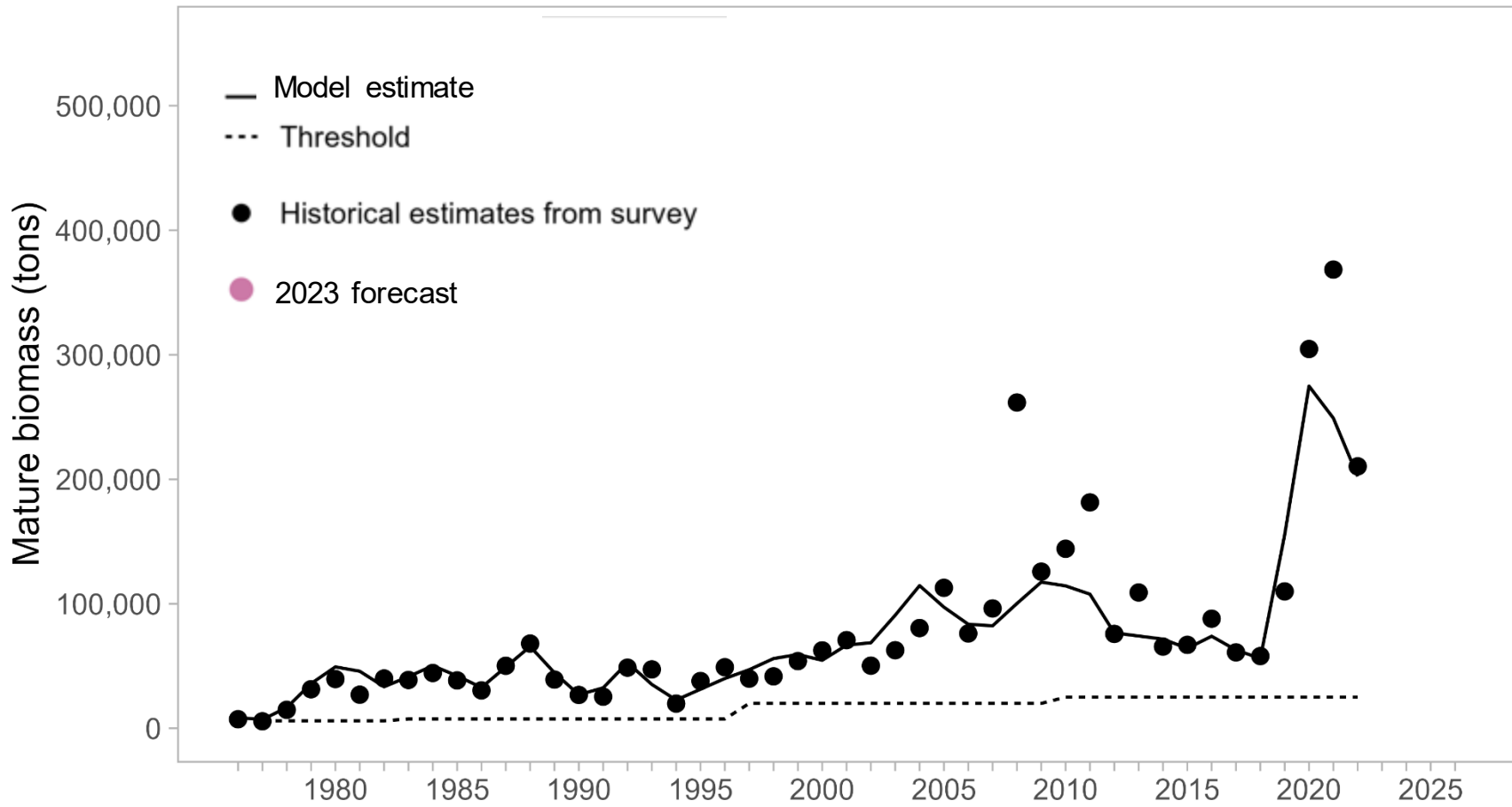
Observed survey age composition (average across individual samples)



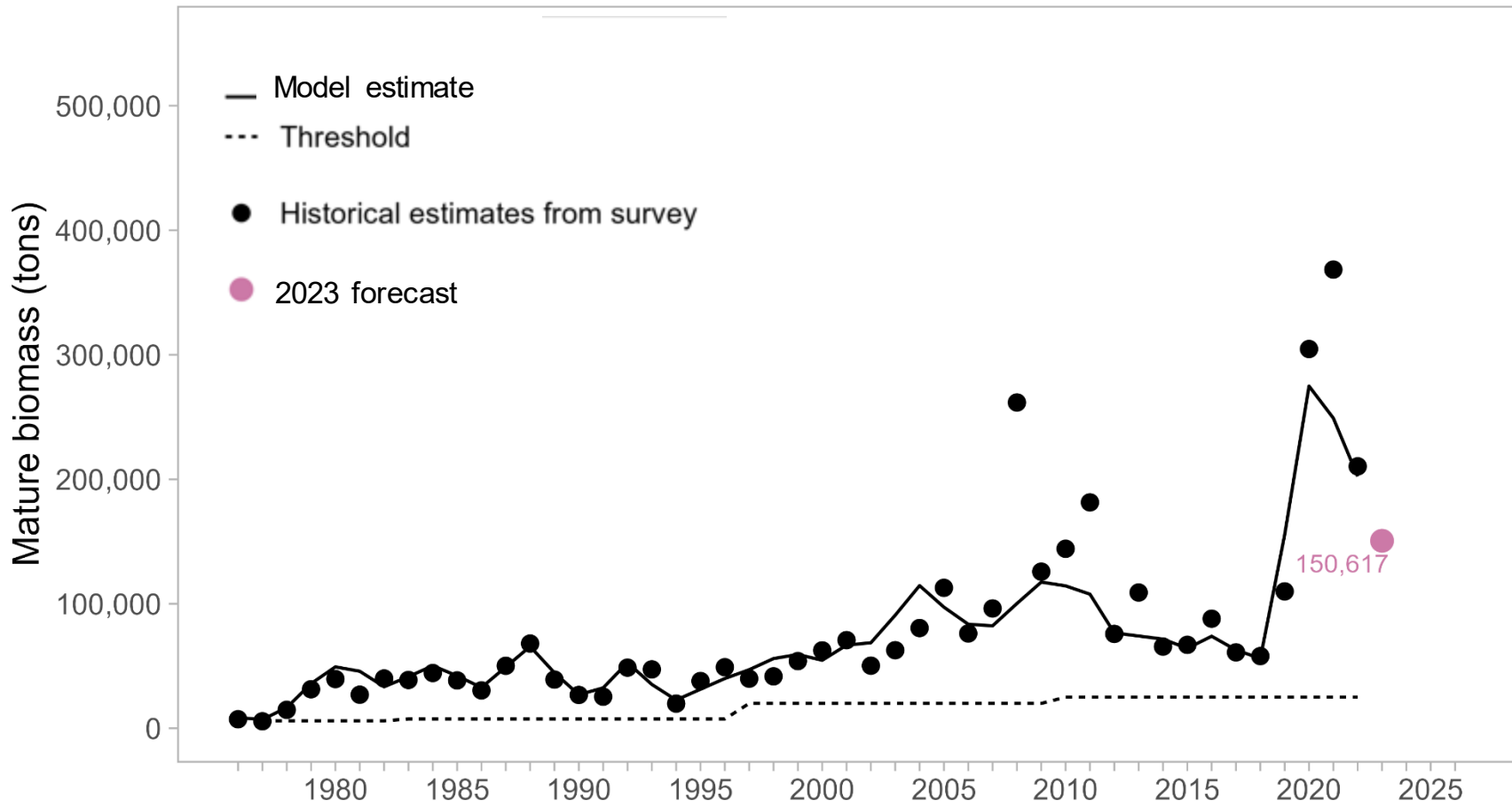
Trend in observed survey age composition (54 individual samples)



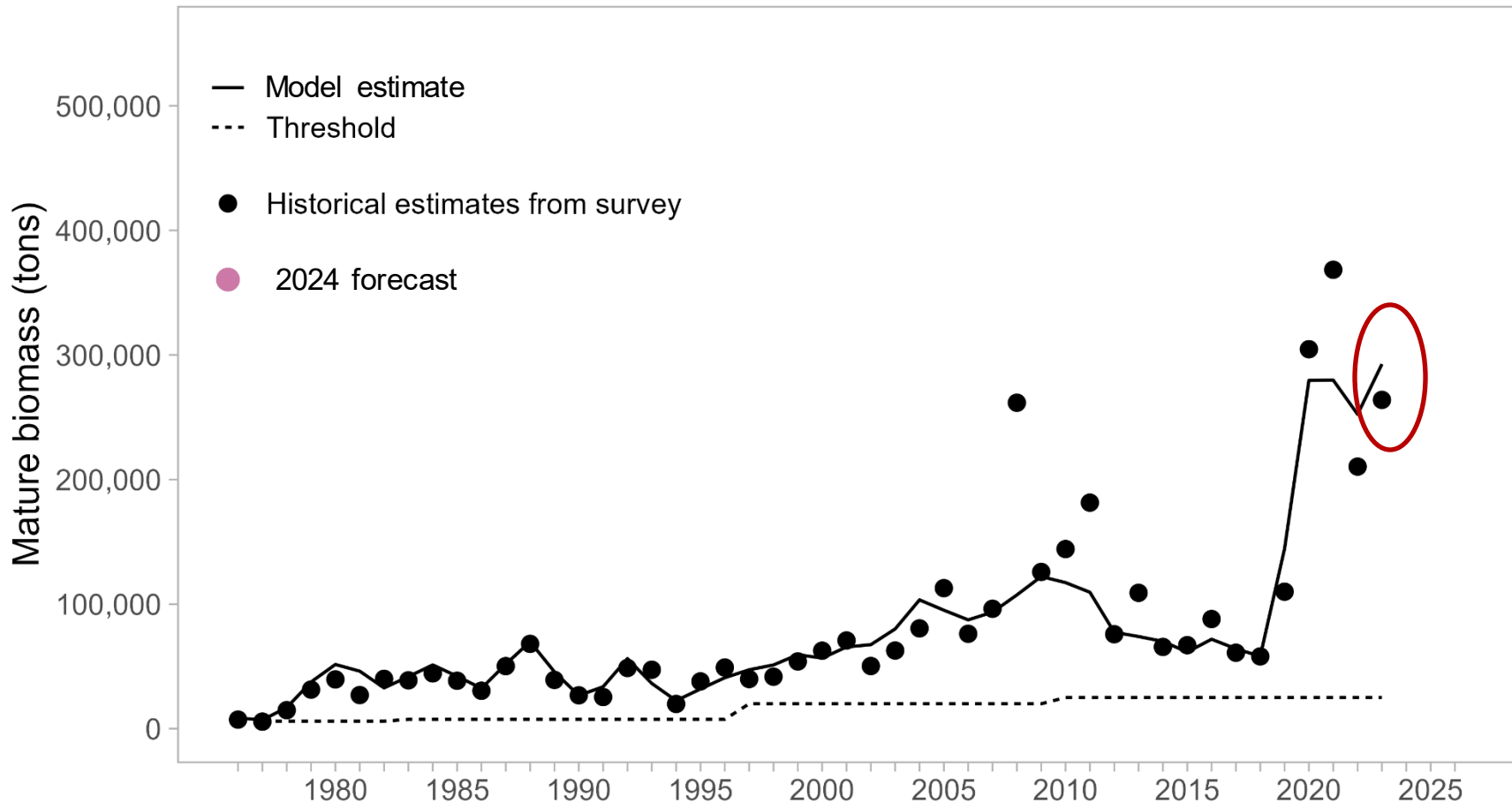
Sitka Sound mature biomass and 2023 forecast



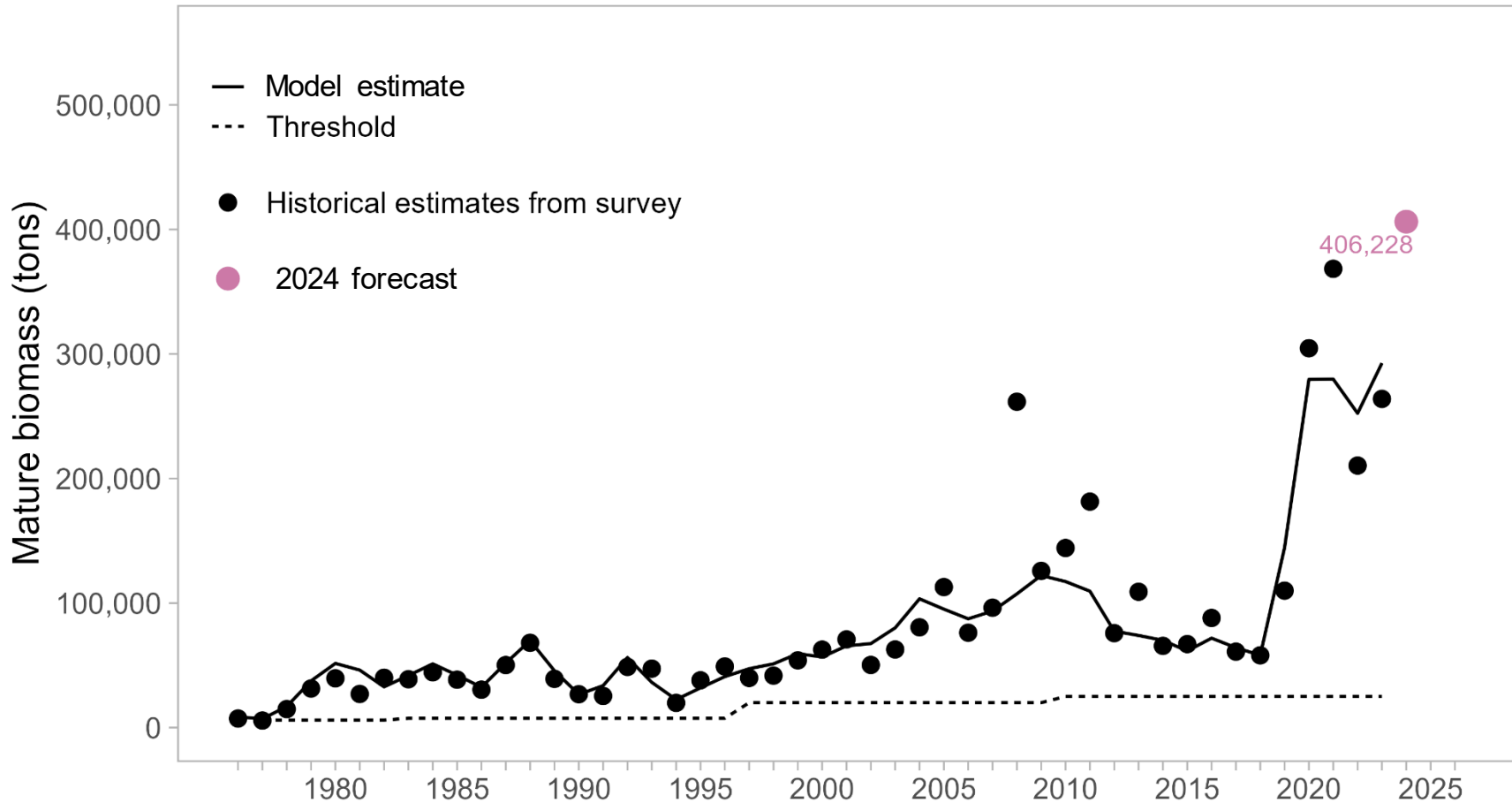
Sitka Sound mature biomass and 2023 forecast



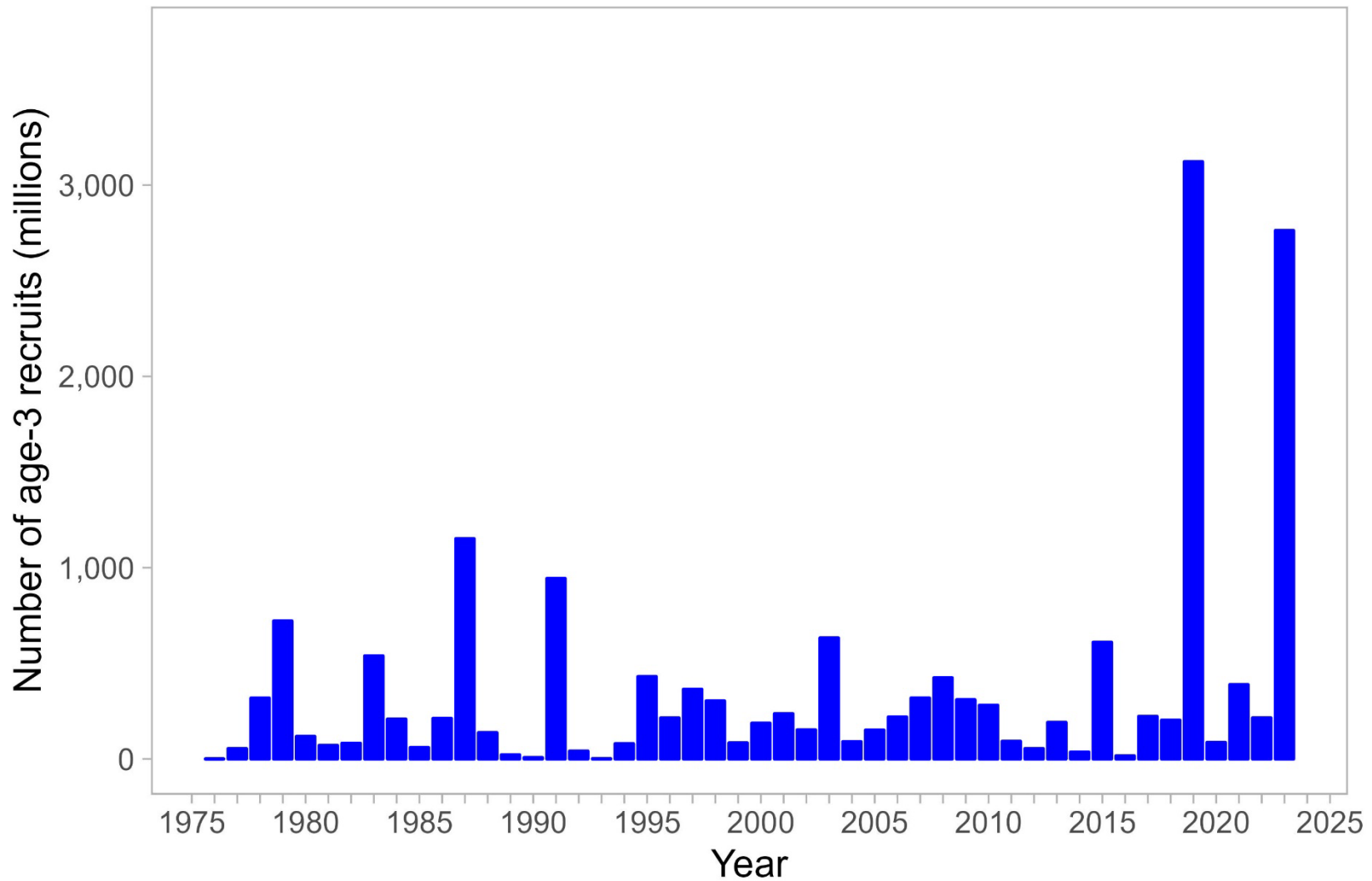
Sitka Sound mature biomass and 2024 forecast



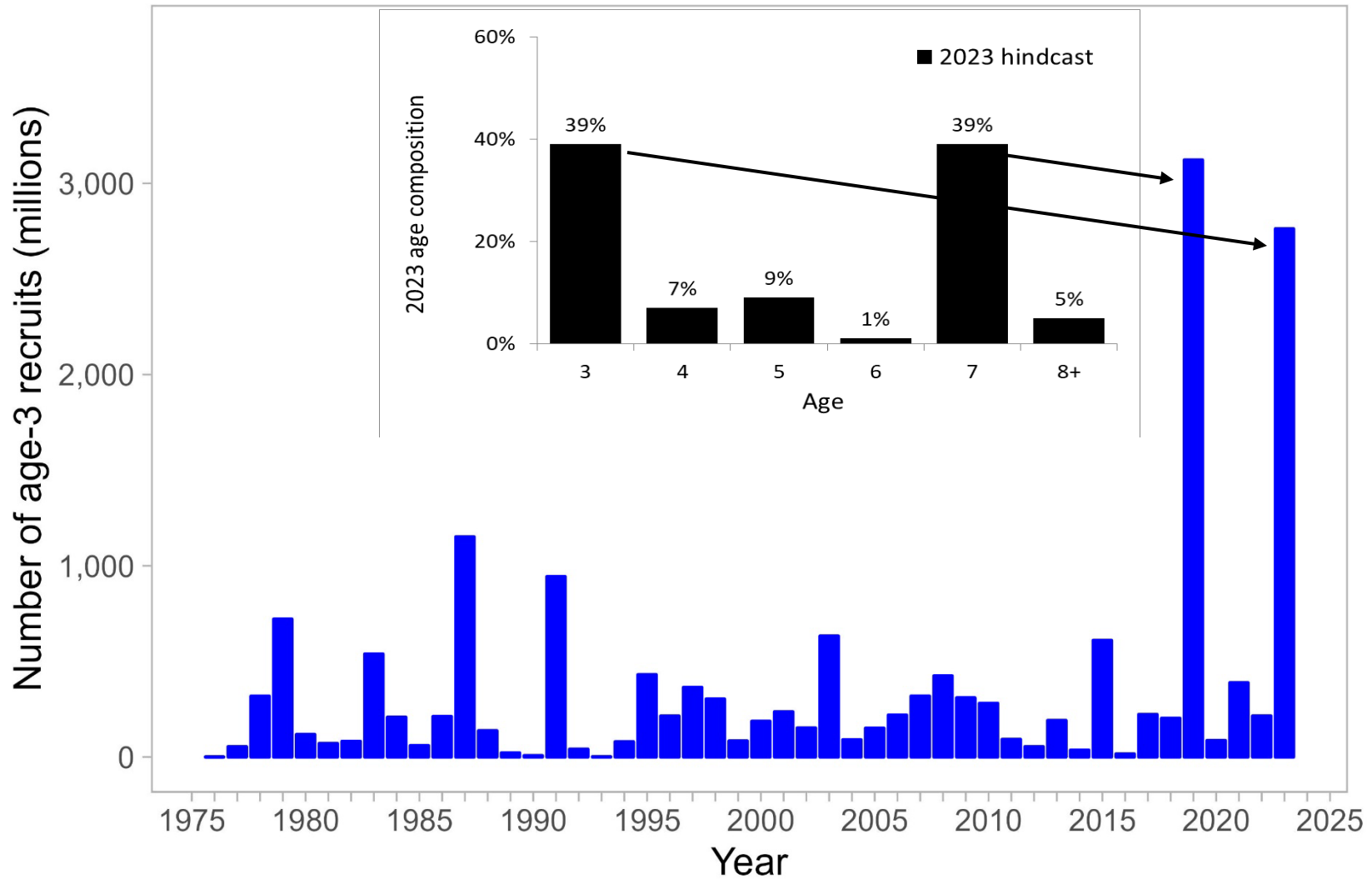
Sitka Sound mature biomass and 2024 forecast



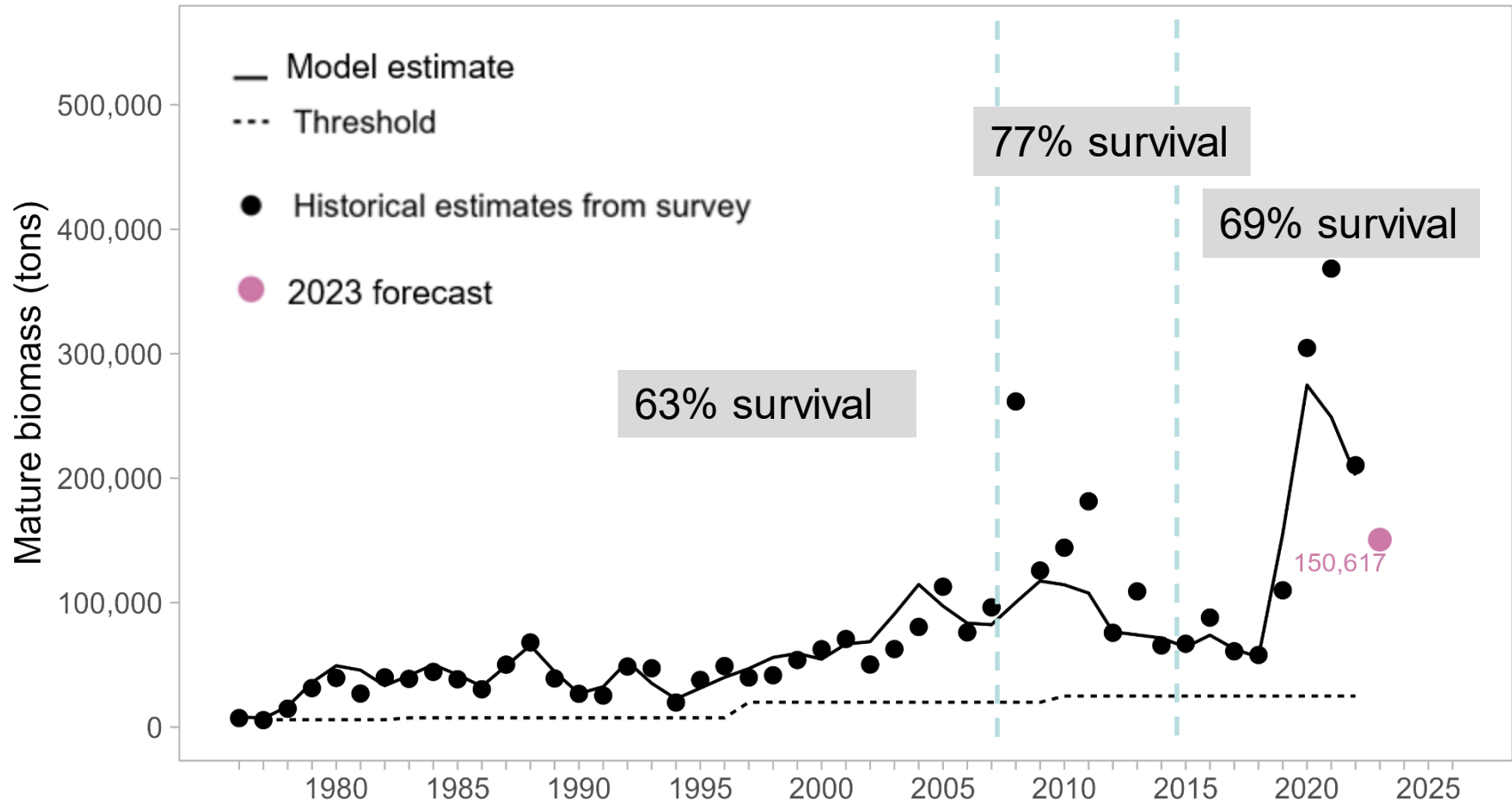
Sitka Sound recruitment (mature and immature age-3 fish)



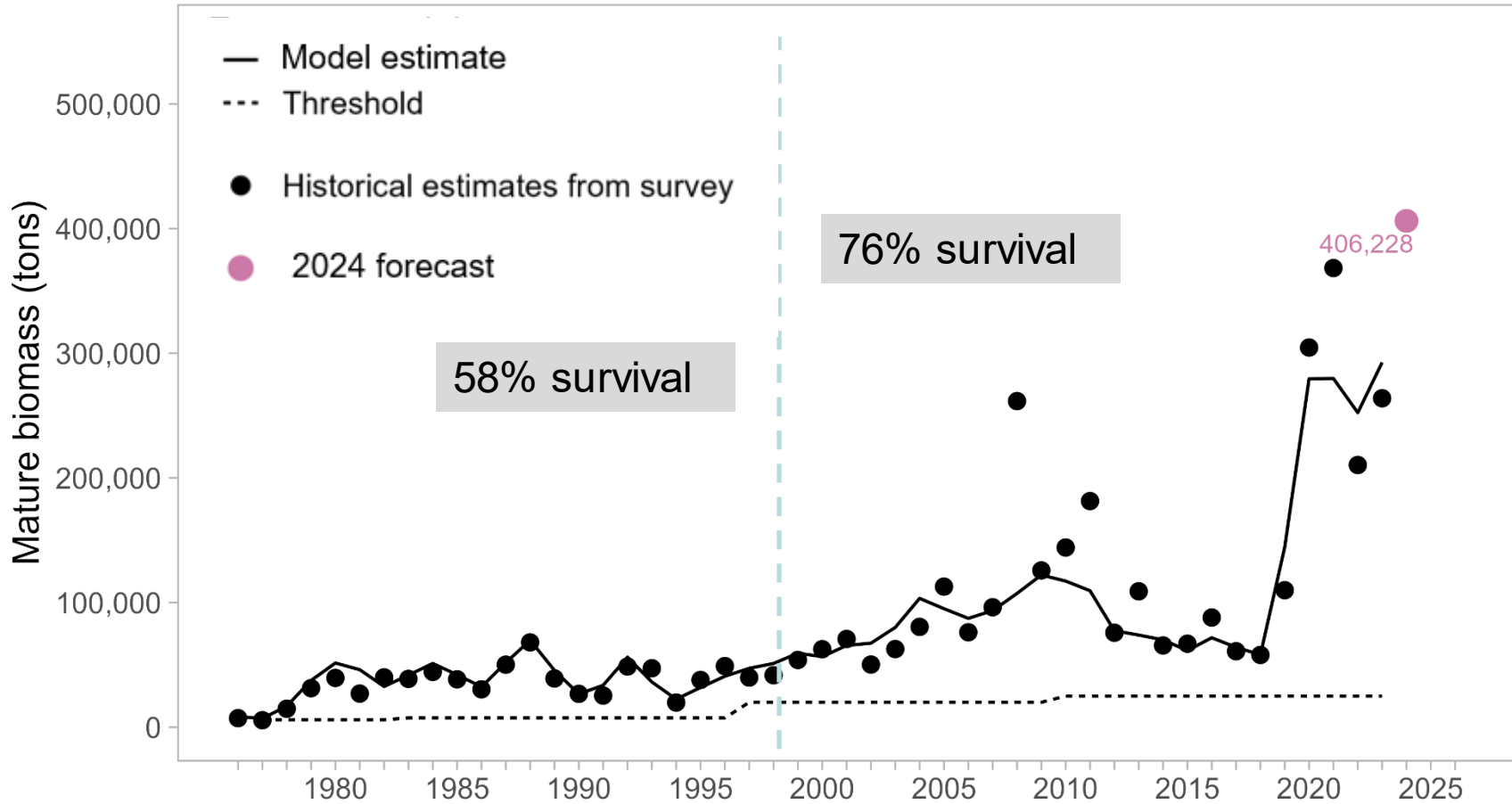
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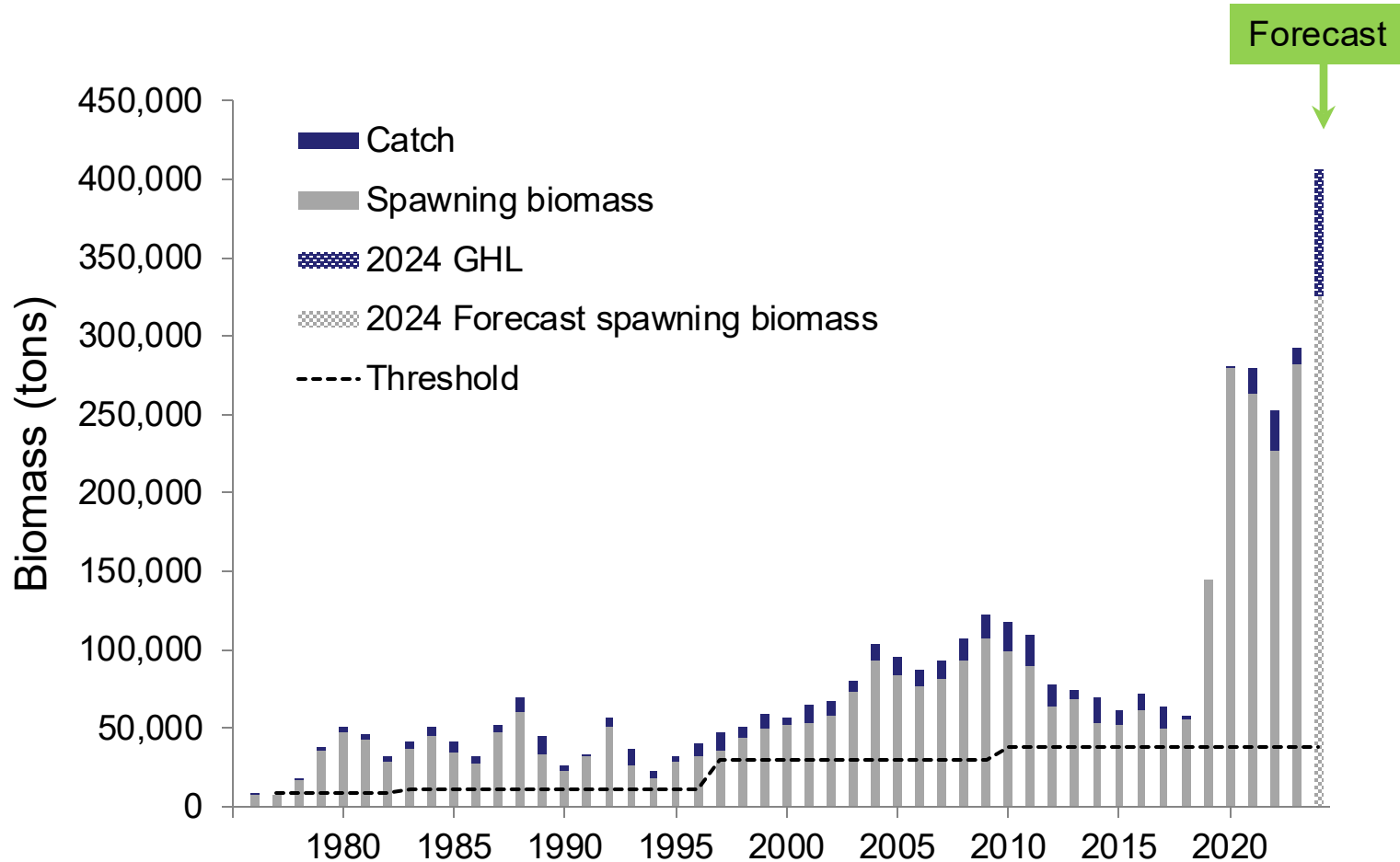
Survival time blocks used for 2023 forecast



Best fit model for 2024



Sitka Sound spawning biomass and harvest (2024 is forecasted biomass and GHL)

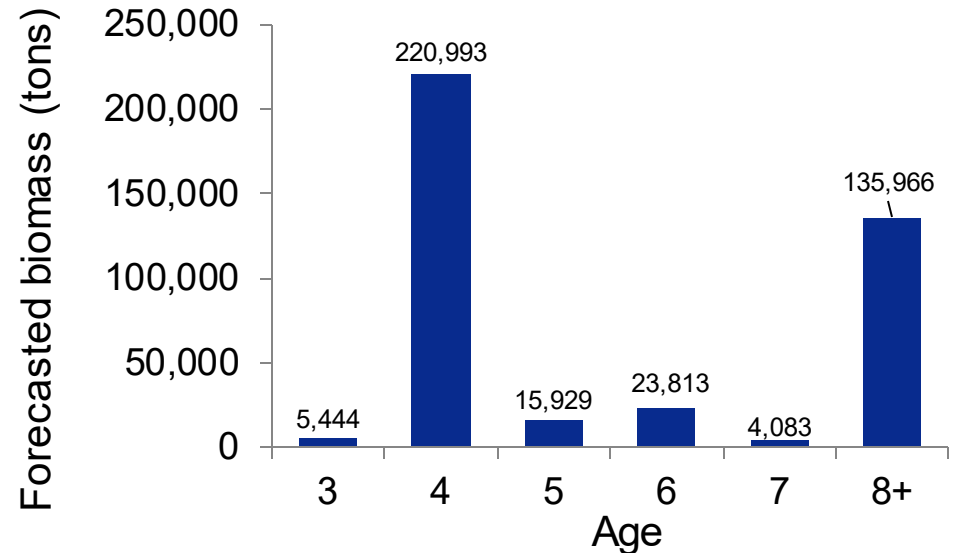
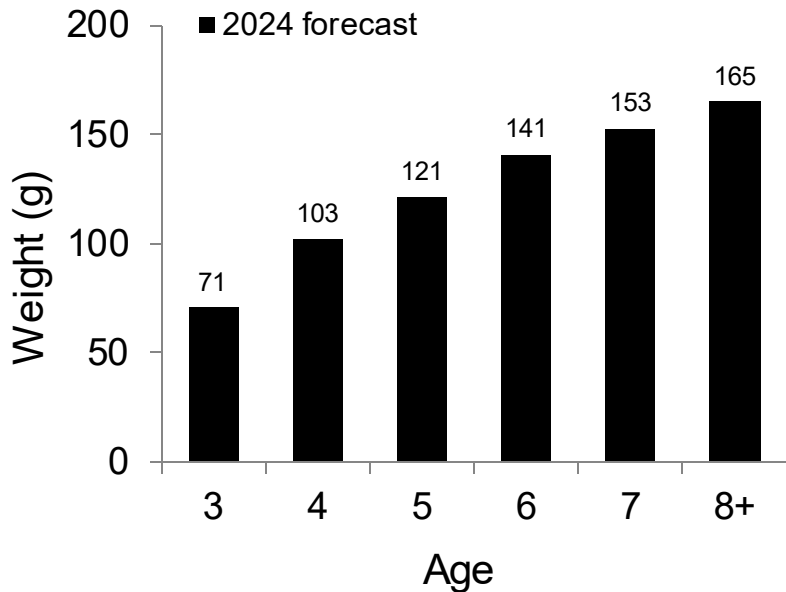


2024 forecast biomass and weight at age

2024 Forecast = 406,228 tons

GHL = 81,246 tons

Forecast average weight = 120 grams



2024-forecast weight at age based on the 2023 spring commercial purse seine

Acknowledgements

Kyle Hebert (Research project leader)

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ADF&G Sitka staff

ADF&G Mark Tag Age Laboratory

ADF&G Dive team and Kestrel crew

