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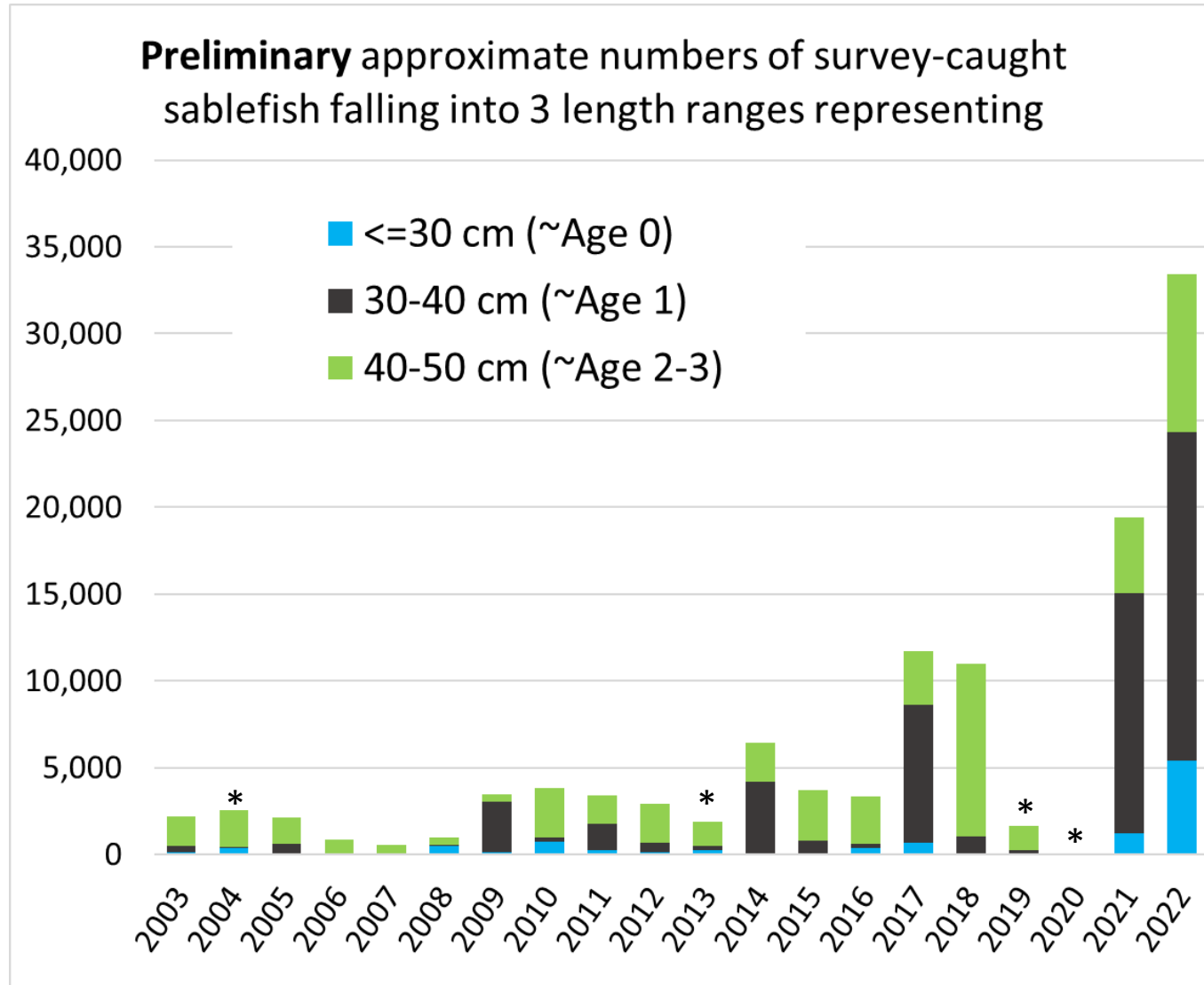
Update on ageing to support 2023 stock assessments and information related to a potential limited assessment update for sablefish in 2023

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NWFSC
April 2023 PFMC Meeting

Ageing to Support 2023 Stock Assessments

- The Cooperative Ageing Program (CAP) has read nearly 22,000 otoliths to support West Coast stock assessments since June 1, 2022:
 - Copper Rockfish
 - 1,258 read otoliths
 - A total of 4,000+ read to support the 2023 assessments in California since 2021
 - Black Rockfish
 - 2,137 read otoliths
 - ODFW and WDFW reading their respective state collected otoliths
 - Petrale Sole
 - 5,729 read otoliths
 - Canary Rockfish
 - 8,237 read otoliths
 - Rex Sole
 - 629 read otoliths to inform growth in the data-moderate assessment
 - Pacific Hake
 - 3,731 read otoliths

Preliminary summary of small sablefish caught in recent NWFSC WCGBT survey



Options for a sablefish assessment update review

- Currently, two SSC-GFSC meetings scheduled in August (14-15 and 28-29)
 - A mid-August review would necessitate a late-July draft document completion and an early June age data deadline
 - A late-August review would push the draft deadline two weeks to early August and a mid-June age data deadline
- New sablefish ageing will start around April 10
 - This will not affect ageing for other species – all planned ageing will be completed
- Sablefish otoliths and ageing:
 - 1,671 otoliths were collected by the survey in 2022 and 2,196 in 2021 for a total of 3,867 otoliths
 - Estimated Timeline for Ageing : All 2022 and ~10% of 2021 otoliths by end of May
 - An additional 2-3 weeks of ageing could allow half of the 2021 survey to be aged
 - Note that no new fishery age data will be added within this limited assessment update

Data and Modeling Issues

- While this is proposed to be a limited assessment update, we would plan on exploring alternative treatment of survey age data
 - The last full and update assessments used a conditional age-at-length approach for the survey ages.
 - Conditional age-at-length may not work as well when age data are dominated by young fish.
 - Due to growth throughout the period in which the survey is conducted and potential variable growth rates by year for youngest fish
 - Timing within the year of the few large tows dominated by age-0 or -1 sablefish will affect observed length-at-age

Potential Items for Consideration

- While the NWFSC WCGBT survey is a good tool to observe incoming recruitments, there is expected to be a high level of uncertainty around recent year-class strength estimates.
 - Our estimation of year-class strength becomes more informed with additional annual survey and fishery observations.
- Since this is a limited update assessment that will include recent age data only from the survey, coupled with the intrinsic uncertainty in recent year class strength, there may be a higher level of uncertainty associated with this assessment relative to either a full assessment or a traditional update assessment.
- In September 2022, the Council identified sablefish as a species likely to be selected for a full assessment in 2025.