Butterfish Research Track WG
March 23, 2021, 9-11am
Agenda

G-Hang link and phone number:
meet.google.com/kaw-boen-dos
(US) +1 252-423-4283
PIN: 636 054 125#

1. Technical difficulties (10 mins, Jon)
    a. WG roll call: Jon Deroba, Chuck Adams, Rob Vincent, Aly Pitts, Andy Jones, Kiersten Curti, Jason Didden, Laurel Smith, Brian Stock
2. Previous homework (60 mins)
    a. State Surveys (Chuck et al.)
        i. Proposal (Deroba, Chuck)
            1. No spring state surveys will be considered for use (resource offshore; NEAMAP and NEFSC considered because they sample offshore)
            2. No state surveys in the fall cover a spatial extent likely to make them indicative of stock wide abundance; won't use them individually
            3. Will try to combine fall state surveys, but which ones?
                a. Survey must occur Sept-November and
                b. Mean percent positive tows among years must be $\geq$50%
        ii. Percent positive for each survey (possible (ex)inclusion criteria) (Chuck)
            1. Time series
            2. Average among years
            3. Summary stats for each and compare to NEFSC
        iii. Length frequency comparisons among NEAMAP/NEFSC and states (might inform whether we can reliably extract just an age-0 index or inform assumed selectivity) (Stock)
    b. Spatial distribution of catch, this time with discards (Curti)
        i. Consider catch/discards within context of management and industry
3. Keeping tabs (10 mins)
    a. Unaccounted catch (not until March, Andy et al.)
    b. Outreach (Didden)
    c. TOR 7 – Research recommendations (revisit who and what sometime)
    d. TOR 8 – PlanB (revisit index methods work, who, and what sometime)
    e. TOR A1 – "Ecosystem" (spatial distribution, Chuck and Curti; Habitat, Laurel; Aging, Robillard; other?)
    f. TOR A2 – Consumptive Removals (keep on radar, Laurel, Rob, Chuck, Smith, Don Lyons?)
4. Good of the order and next meeting plan (10 mins, all)
    a. Calendar (Jon)
    b. VAST or Conn method for combining surveys at next meeting
    c. Catch to be covered in April

Notes

Butterfish Terms of Reference
2021 Research Track
(v. 10/01/2020)

1. Estimate catch from all sources including landings and discards. Describe the spatial and temporal distribution of landings, discards, and fishing effort. Characterize the uncertainty in these sources of data.

2. Present the survey data available (e.g., indices of relative or absolute abundance, recruitment, state surveys, age-length data, etc.), and describe the basis for inclusion or exclusion of those data in the assessment. Characterize the uncertainty in these sources of data.

3. Estimate annual fishing mortality, recruitment and stock biomass (both total and spawning stock) for the time series, and estimate their uncertainty. Include retrospective analyses (both historical and within-model) to allow a comparison with previous assessment results and projections, and to examine model fit.

4. Update or redefine status determination criteria (SDC point estimates or proxies for B_{MSY}, $B_{THRESHOLD}$, F_{MSY} and MSY) and provide estimates of their uncertainty. If analytic model-based estimates are unavailable, consider recommending alternative measurable proxies for BRPs. Comment on the scientific adequacy of existing BRPs and the "new" (i.e., updated, redefined, or alternative) BRPs.

5. Make a recommended stock status determination (overfishing and overfished) based on new modeling approaches developed for this peer review.

6. Define the methodology for performing short-term projections of catch and biomass under alternative harvest scenarios, including the assumptions of fishery selectivity, weights at age, and maturity.

7. Review, evaluate and report on the status of the Stock Assessment Review Committee (SARC) and Working Group research recommendations listed in most recent SARC reviewed assessment and review panel reports, as well as the most recent management track assessment report. Identify new research recommendations.

8. Develop a "Plan B" for use if the accepted assessment model fails in the future.

Additional Terms of Reference

1. Describe life history characteristics and the stock's spatial distribution, including any changes over time. Describe ecosystem and other factors that may influence the stock's productivity and recruitment. Consider any strong influences and, if possible, integrate the results into the stock assessment.
2. Evaluate consumptive removals of butterfish by its predators, including (if possible) marine mammals, seabirds, tunas, swordfish and sharks. If possible, integrate results into the stock assessment.