

**Butterfish Research Track WG**  
**December 17, 2020 Agenda**

G-Hang link:

[meet.google.com/jhu-arwr-huq](https://meet.google.com/jhu-arwr-huq)

Phone number:

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1. Introductions and technical difficulties (10 mins, Jon)
2. Review previous meeting to-do list (15 mins)
  - a. Chuck to check with Eric Robillard about aging
  - b. Can we develop an alternative to the existing habitat index? Revisit.
  - c. Rob will talk to John Logan (Walt Golet) about tuna
  - d. Jon will see if Sarah Gaichas has any other good leads on butterfish consumption
3. Review some previous assessment decisions, e.g., start year of assessment and gear codes (5 mins, Chuck).
4. Review updated spatial distribution data having relevance to TOR 2 and A1 (30 mins, Chuck)
5. Discuss splitting the Bigelow survey time series (30 mins, all)
  - a. Consequences of this decision?
6. Interest in industry perspective on some TORs (10 mins, all)
7. Good of the order and next meeting plan (10 mins, all)

**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.