



# Strengths/Successes and Weaknesses/Challenges in Fish Stock Assessment

(from Day 3)

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External Review of Fisheries Stock Assessments

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(Day 3)

## Strengths/Weaknesses: Reef Fish Assessment (See specific powerpoint for SWOT)

- Not dependent on catch and effort
- Multiple sources of data
- Can compare diver survey sizes with sizes from catch data
- Could derive some management reference points
- Opportunity to use this data with Stock Synthesis model
- Catch and effort data unreliable
- Simple spawning potential ratio assessment with  $F$ ,  $M$  constant, recruitment assumed stable and independent
- This model cannot supply ACLs without reliable total catch
- Won't work for small species
- Need CFBS (biosampling) in HI
- Spawning potential ratio uncertainty unquantified

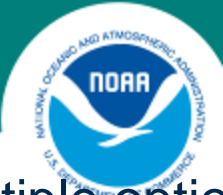
(Day 3)



## Strengths/Weaknesses: Reef Surveys

(See specific powerpoint for SWOT)

- Having the NOAA ship a huge benefit
- Fishery independent
- Surveyors well trained and calibrated, standard methods
- Results represent a broad domain indicating human population effects, habitat, etc.
- Size distribution useful
- Biomass abundance useful in a variety of applications, especially pooled taxa
- Ship time limited and becoming more limited. Can't provide for expansion of surveys
- Need to develop shore-based surveys
- Not good for cryptic or small hidden benthic species
- Need better habitat maps to help structure survey
- Limitations: Depth limited (30 m), daytime only, hard bottom only, diver influencing fish behavior



## Strengths/Weaknesses: Review Process

- Multiple options allows more local input when most needed
- WPSAR Uses SSC and CIE
- May have other independent participants in WPSAR
- PIFSC, PIRO, Council steering committee for WPSAR (this group could also take on assessment prioritization)
- Coordinator develops TOR for each review
- The Council greatly appreciates the openness of the process. The Council may participate at all stages, and finds the process a great benefit
- No funding and growing expense
- So far, useful mostly as providing passing grade on use in management, though suggestions are put into work plans (i.e. could be more useful)
- Growing pains, deviations from TOR - requires vigilance, discipline
- Could keep a long-serving panel with slow turnover
- Could involve panel at more formative stages of assessment
- Need protocols for contesting reviews