### SSC Report for SAFMC December 2014 Snapper Grouper Committee

SSC meeting October 28-30



# ABC Control Rule Workshop

- Held prior to SSC meeting
- Reviewed existing ABC Control Rule
- Lack of data at this time to adequately evaluate performance
- No major changes recommended
- SSC will continue discussions

### **SEDAR Activities**

- SSC reviewed and accepted the SEDAR assessment priorities and project schedule
- SSC recommended to involve state agency staff that regularly participate in SEDAR DW in the SEDAR Data Procedure Workshop
- SSC recommend devoting a SA assessment slot to workshop addressing several data poor stocks, and applying a suite of methods to assess these stocks

### National SSC meeting February 23-25, 2015 in Honolulu

### Theme:

"Providing ABC specifications in the face of uncertainty: from data to climate and ecosystems"

- Evaluating current ABC control rules,
- Setting ABCs in data limited situations, and
- Incorporating ecological, environmental, and climate change considerations into stock assessments.

### **Participants:**

Luiz Barbieri, Marcel Reichert, Steve Cadrin, Scott Crosson, and Mike Errigo (staff)

# Hogfish assessment



SSC reviewed Assessment

SSC accepted treating hogfish in the SA as two separate stocks: GA-NC and SE/FL Keys

#### **Concerns:**

- "Dividing line" not well defined (research recommendation)
- Uncertainty about origin of growth differences in "stock traits" or "fishing pressure" (or both?)





### Hogfish assessment GA/NC Stock



SSC agreed with CIE reviewers to <u>not consider assessment sufficient</u> to determine stock status and inform management decisions

Statistical catch-at-age not appropriate model to analyze available data => assessment is not considered the best available science

Applied ORCS method for SBC

Statistic	Value
Risk of Overexploitation	Moderately High
Associated Scalar	1.25
Range of Years	1999-2007
Year of Max Landings	1999
Catch Statistic	32,184 lbs ww
Not OFL	40,230 lbs ww
Council Risk Scalar (pref. amendment 29)	0.7
Proposed ABC	28,161 lbs ww

### Hogfish assessment SE/FL Keys Stock



Represents significant improvement from method previously used for ABC

Best available science and recommended for fisheries management? YES.

#### **Concerns:**

- Productivity not well estimated
- Observed growth rates are below that of the GA-NC stock
- Large variability in the input growth data, yet small CV's assigned to the growth model used internally by the model
- A likelihood profile on R<sub>0</sub> was unavailable => difficult to know how well R<sub>0</sub> is estimated
- Data weighting procedures were not used in assessment
- Estimated dome-shaped selectivity's seemed justified, but degree of doming was an additional concern

### Hogfish assessment SE/FL Keys Stock



Stock Status: overfished and overfishing occurring

OFL/ABC Basis: ABC Control Rule and Stock Projections

 $P^{\ast}$  of 27.5% and  $P_{\text{REBUILD}}$  of 72.5%

SSC recommends next assessment in 5 years and

- address SSC concerns noted
- explore the use of alternative, simpler models

### **Mutton Snapper**



- Assessment not complete
- Review in April 2015 SSC meeting

# S/G Reg. Amendment 16

Presentation was informative and approach of ranking alternatives on relative scale was supported

Inferring that analysis evaluates and quantifies risk to whale encounters was not supported

With some refinement (provide information on error associated with estimated scalar values for the alternatives), the analysis could allow Council to distinguish between different alternatives

# S/G Reg. Amendment 16

#### **Concerns/comments**

- Incomplete uncertainty characterization
- SSC cautioned that assuming model output of co-occurrence (BSB pot efforts and whale sightings) is a proxy for whale interaction or entanglement, overstates model and data capabilities
- Final estimated value is 'dimensionless scalar', and should not be characterized as *risk* or a *probability of encounters*

#### **Recommendations:**

- SSC sub-committee to provide guidance in improving uncertainty characterization
- Evaluate the relative scalar based on historic and current effort
- SSC request a presentation from staff from NMFS Prot. Res. Div. at the April SSC meeting to address questions and analyses used for the Biological Opinion and to guide management

## Bag limit analysis

The gag bag limit analysis is sound, and the general methodology was accepted as best scientific information

#### **Gag Analysis Recommendations:**

- Changes in angler behavior are not explicitly accounted for in the analysis
- Assuming that all trips reaching the current bag limit will also meet a higher bag limit is optimistic
- Future analyses explore alternative catch rate and success assumption

#### General (Bag Limit) Analysis Recommendations:

- Provide the SSC any comments from the SEFSC on analysis offered for review
- Supported *ad-hoc* SSC sub-committees reviewing management analyses outside of regular SSC meetings, when necessary to accommodate amendment project schedules
  - May be used when the general method has been explicitly accepted by the SSC

Thank you

# SSC Report for SAFMC December 2014 Mackerel Committee

### SSC meeting October 28-30





Some uncertainties and Concerns

- Geographical coverage of the SEAMAP-SA trawl survey
- Strong retrospective pattern, systematically over-estimates recruitment in the terminal year
- Bootstraps do not represent all uncertainty, and underestimate overall model uncertainty
  - Resultant pdf might lead to a small buffer between OFL and ABC
- Steepness fixed and therefore MSY is a proxy
  - SSC accepted SPR<sub>30%</sub> as a proxy for MSY
  - Steepness fixed at 0.99 for projections



Best Scientific Information? Yes

P\* 32.5%

Stock Status: Not overfished and overfishing not occurring OFL/ABC Basis: ABC Control Rule and Stock Projections

> цо. 0 F/F<sub>MSY</sub> 6.5 2011 0.0 0.5 1.0 15 2.0 2.5 0.0 3.0 SSB/SSB<sub>MSY</sub>



#### **SSC Recommendations**

- Projections for no more than 5-years
- Council consider a range of alternative projection scenarios
- Update assessment within 5 years
- Review landings and indices at least every 3 years
- Provide recent SEAMAP CPUE to help evaluate recruitment

3 ABC projections requested, covering high, medium and low possibilities for recent recruitment





SEAMAP-SA Coastal Trawl Survey



Thank you