Tab I, No. 4

SouthEast Data, Assessment and Review (SEDAR)

NOAA FISHERIES
SEFSC

Clay Porch

Director SEFSC

With Kyle Shertzer, Erik Williams, John Carmichael, Shannon Calay, Cisco Werner and Richard Methot

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Pre-millennial Stock Assessments

- Agency scientists compiling data and running models.
- Council-appointed Assessment advisory panels for some species
- Models and data simpler
- Only SSC Review

Post-millennial Assessments: Rise of SEDAR

Benchmark Assessment

Data Workshop

Assessment Workshop

Review Workshop

- 3 CIE reviewers and 2-3 SSC reps

SSC Review

- Each step is open and transparent
- Exhaustive documentation
- Dozens of participants
- But very slow! (9-12 months)

What went wrong?

SEDAR not originally intended for use on all stocks: has created a systemic overload

- Data providers have difficulty meeting deadlines because key decisions made along the way can change what is required
- Frequent changes in scheduling induce inefficiencies as data providers must shift gears

Results often criticized by reviewers, but there is little time to address their concerns

Excessive reliance on slow "benchmark" assessments (implies "best" to many)

Victim of success: More data, more partners lead to more complex assessments and many potential failure points

New Approach

1. Research Assessent
   - Creates a robust tool
2. Operational Assessment
   - Applies the tool
3. Advance scheduling ('key' stocks)
   - Manages workload & expectations
4. Interim Analysis
   - Provides timely advice with latest data
   - Performed Outside SEDAR process

Benchmark assessment

Updates and Standard

Projection updates

Research assessments (Thorough and Transparent)

Like current Benchmark approach

Develops the tools (data and analytical methods)

Not used for providing management advice

- Deadlines flexible, but not open ended research projects
- Does not rely on most recent data
- Reduces load on data providers and allows project team flexibility to develop a feasible plan

Independent peer-review and SSC review

Expected to increase quality and, when cycled with a series of operational assessments, increase throughput by 10-20%

Operational assessments (Thorough and Timely)

Update the peer-reviewed tools with the latest data

Provides management advice (stock status, OFL, ABC)

Merges existing ‘Update’ and ‘Standard’ assessments

Review conducted by SSC

Clear and detailed TORS

- Developed by SSC and Cooperator (e.g., SEFSC)
- Defines scope of assessment (expectations)
- Must reflect review capacity of SSC

Expected to increase throughput by 10-20%

Scheduling

South Atlantic Team	Gulf/Caribbean Team	Shark team	HMS team	FWC and others
Cobia	East Red Snapper, Vermilion Snapper	Shark 1	Atlantic and Gulf King mackerel	Hogfish
Amberjack	West Red Snapper, Vermilion Snapper		Vice: Sharma	
Red Porgy	Gray Triggerfish, Gray Snapper, Cobia		*Reserved for ICCAT*	
	Red grouper, Scamp, Gag, Caribbean/DLM			
	Vacant: Vice Bryan			
Scamp	Amberjack, Caribbean/DLM		Gulf Spanish mackerel	
Snowy Grouper	Golden/Blueline Tilefish, Yellowedge grouper	Shark 2		Black Grouper
Gulf Menhaden, Atlantic Menhaden		Shark 3		Goliath Grouper
Red Snapper				
Spanish Mackerel				
Golden/Blueline Tilefish				

Rules:

1. Distribute a maximum of X boxes in the blank colored regions under each te
2. The area of the colored zones is proportional to the number of available ass
3. The color of the border on each box defines which team it corresponds to
4. In the case of the Gulf and Caribbean team, analysts are not interchangeable

Maximum number of assessments		
type	number	maximum
Benchmark	1	2.8
Standard	0	3.7
Update	3	8.5
Research track	1	6.5
Total	5	

maximum number of assessments of this type that can be accommodated given the number of other assessment types

Enter desired number of assessment in this column. Cells turn red when the selected number of assessments exceeds capacity

Total assessments determined by available days to process data

Hypothetical schedule with stock prioritization

Research (RT), Operational (O), and Interim (I) Assessments

Stock	Prioritization Score	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Red Snapper	6.6	RT + I	O	I	O	I	O
Greater Amberjack	6.4	I	RT + I	O	I	I	O
Gray Triggerfish	6.1	O	I	I	RT + I	O	I
Gray Snapper	3.7	O	I	I	I	O	I
Scamp	2.8	I	I	O	I	I	I
Red Grouper	2.5	O	I	RT + I	O	I	I
Gag Grouper	2.5	I	I	I	RT + I	O	I
King Mackerel	2.4	I	O	I	I	RT + I	O
Cobia	2.3	I	I	O	I	I	RT + I
Vermilion Snapper	2.2	I	O	I	I	RT + I	O
Spanish Mackerel	2.1	I	I	O	I	I	I
Yellowedge Grouper	1.5	RT + I	O	I	I	I	O
GULF DLM		DLM	I	I	I	I	I
Caribbean		I	I	I	DLM	I	I

SAMPLE

Interim Analyses (Timely and HighThroughput)

Updates of ABC advice based on recent trends in surveys of abundance and/or indices of mortality

- Uses near-real time data
- Fast turn around
- Outside SEDAR Process / SSC Review
- Increase throughput 50-100% (depending on how often they are implemented)

Interim Analyses

Other improvements

1. Right-size assessments, commensurate with quality of the data and value of the fishery (more complex models are not always better)

2. Research assessments for data-limited species are most efficient when methods are reviewed and vetted through previous processes, and then many (e.g., 15) species are addressed simultaneously

3. Reports of Operational assessments should be streamlined (citing research track documentation), but have more effective executive summaries (need to work with Councils on best format)

4. Proactive communications with stakeholders
   - Regular updates of key indices made publically available
   - Citizen science initiatives
   - Educating stakeholders (e.g. Marine Resource Educational Program)

Questions?

Pre-Millennial era

One person, one computer, one dark office

SEDAR: Post-Millennial era

Maximum transparency, uncover every stone, painstakingly slow

SEDAR: Generation Z?

Balanced, efficient, and prioritized