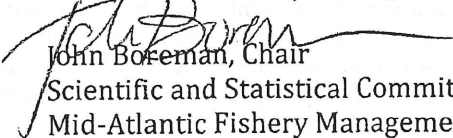


15 January 2010

Memorandum For: Richard Robins, Chair
Mid-Atlantic Fishery Management Council

From: 
John Boreman, Chair
Scientific and Statistical Committee
Mid-Atlantic Fishery Management Council

Subject: Outcome of Special SSC/MC Joint Meeting

On 8 January 2010 the Mid-Atlantic Fishery Management Council's (MAFMC's) Scientific and Statistical Committee (SSC) held a special joint web meeting with the Black Sea Bass Monitoring Committee (MC), immediately followed by special meeting of the SSC to address the following motion from the MAFMC's December 2009 meeting:

Move that as outlined by the Executive Committee at the October Council meeting, convene a joint meeting of the SSC and Monitoring Committee to share available data and relevant information as it pertains to the 2010 BSB recommendations for purposes of allowing the RA to consider whether it would be appropriate to move forward with an emergency action based on final SSC review.

Over 80 people attended the meeting, including 14 of the 18 SSC members and 14 MC members (Attachment 1).

The meeting began with an update of the available data and relevant information, provided by Jessica Coakley, chair of the MC (Attachment 2). After her presentation, members of the MC were invited to offer clarifying or additional comments to Jessica's presentation. Members of the public were then allowed to offer their comments, and a letter received by me the preceding day from the public (Attachment 3) was also noted for the record.

After a short break, the SSC convened to address the MAFMC motion (as well as to conduct other business not reported in this memo). The SSC meeting began with a presentation by Dr. Tom Miller (SSC lead for black sea bass), who summarized the issues-at-hand in a series of talking points (Attachment 4) to help organize the SSC's discussion of the motion. As the discussion progressed, the SSC refined the Council's motion into a series of questions (terms of reference), and proceeded to develop consensus agreement on the answers to all of them. All 14 SSC members in attendance were included in the consensus agreement on the response to the first question. Two of the members (Drs. Cynthia Jones and Michael Wilberg) had to leave the web meeting before a consensus could be reached on responses to the remaining questions.

The questions developed by the SSC related to the MAFMC motion, and the responses are as follows:

Question 1: Is the relevant new information sufficient to change the SSC's determination of the level of uncertainty?

No. Even though relevant 2009 catch and survey data, which may be incorporated into the next stock assessment update, were made available to the SSC, this information did not change the SSC's perception about the uncertainty inherent in the stock assessment and the calculation of biological reference points including estimation of the overfishing level (OFL). This information does, however, reduce uncertainty relative to perceived stock status in some areas, although the data may not be indicative of abundance throughout the stock range.

The available new information does not modify the assignment of this stock by the SSC to an ABC framework Tier 3 (Acceptable Assessment). In the future, improved characterization of sources of uncertainty through future assessment could modify the SSC perception of uncertainty with respect to the stock assessment and stock status (including biological reference points). Unaddressed major sources of uncertainty include: (1) the research surveys index age-0 to age-2 fish only; (2) knowledge of adult dynamics comes from fishery-dependent data; (3) fishery discards are substantial and poorly quantified; (4) the natural mortality rate (M) is poorly described, particularly given the protogynous, hermaphroditic life history of black sea bass; (5) a strong retrospective pattern exists in stock biomass in the assessment results; (6) the sensitivity of the new statistical catch-at-length (SCALE) model results have not been quantified; and (7) no exploration of the importance of different likelihood components of the assessment has been undertaken; (8) YPR reference points are calculated outside of the assessment model and do not reflect the uncertainty in parameter estimates or the species life history; and (9) increases in recruitment levels and reductions in fishing mortality in recent years have not appeared to have affected stock biomass levels, which is fluctuating around the B_{msy} level according to the most recent stock assessment update.

The new information does not reduce the SSC's characterization of uncertainty in any of these key areas.

Question 2: If the SSC had received input from the MC before recommending a quota, would its decision have been different?

2a. Would MC input have changed the assignment of the black sea bass stock assessment to an ABC framework Tier 3 - Acceptable assessment?

No. The additional input from the monitoring committee would not have changed the assignment of the stock to Tier 3.

2b. Was it appropriate for the SSC to: (1) apply a constant catch strategy when identifying the ABC for the 2010 fishing year; and (2) was the 2009 total allowable landings (TAL) an appropriate baseline, as opposed to maintaining a constant F in 2010 ($2009F=2010F$)?

(1) The SSC concluded that applying a constant catch strategy was appropriate versus maintaining a constant F given the uncertainty in stock abundance and the retrospective pattern in estimates of biomass from the assessment.

(2) The SCC concluded that basing its ABC recommendation on a catch level estimated from the average catch from the most recent years would not be appropriate given the retrospective pattern evident in the stock assessment. In addition, it is uncertain whether F is in fact below FMSY given the change from overfishing to not overfishing for some years, based on the 2009 assessment update.

2c. Is there sufficient information for the SSC to justify revision of their 2010 recommended ABC?

Yes. The SSC recommends revision of their 2010 ABC recommendation to be equivalent to the same catch level as 2008. The basis for this recommendation is as follows: (1) the 2009 catch level (associated 2.3 million lbs TAL) was based on an assessment that was not considered acceptable by the DPSWG peer review process; (2) the 2009 catch level set by the Council assumed that the stock was still in a rebuilding mode; (3) examination of black sea bass stock dynamics in response to the fishery indicate that stock removals at or below 4-4.5 millions lbs of total catch have resulted in stable to increasing stock biomass. Accordingly, the SSC recommends a revised ABC for black sea bass in 2010 of 4.50 million lb (2,041 mt).

The revised 2010 ABC recommendation for black sea bass of 4.5 million pounds (2,041 mt) is equivalent to a total allowable landings (TAL) level of 3.7 million pounds (1,680 mt). The TAL level was calculated by Jessica Coakley and confirmed by Gary Shepherd (Northeast Fisheries Science Center) subsequent to the SSC meeting last Friday, and was based on projections used by the Southern Demersal Working Group using the average proportion of landings/catch for 2000-2008.

The SSC wants to call your attention to the fact that its revised 2010 ABC recommendation for black sea bass does not incorporate management uncertainty, which the Regional Administrator may wish to take into account in the specification of a TAC/TAL under action that may be taken to revise the 2010 measures, especially in light of the anticipated recreational catch overage for 2009.

Please let me know if you need any additional information relative to our 8 January meeting and its outcome.

cc: MAFMC SSC members, BSB Monitoring Committee members

Attendees at joint SSC/MC web meeting, 8 January 2010

Attendee	SSC Member	MC Member	Attendee	SSC Member	MC Member
Ahrendt, Bob			Kerns, Toni		
Alkins, Randy			Kratowicz, Tony		
Anderson, Lee			Laney, Wilson		X
Armstrong, James			Larr, Don		
Arose, Rich			Latour, Rob	X	
Baldwin, Dave			Lipton, Douglas	X	
Batsavage, Chris		X	Loughran, Bryan		
Baum, Thomas		X	Loughran, Michael		
Berko, Joan			Mann, Jay		
Boreman, John	X		McCay, Bonnie	X	
Brady, Capt Paul			McNamee, Jason		X
Burns, Beth		X	Miller, Thomas	X	
Caruso, Paul		X	Moore, Chris	X	
Coakley, Jessica		X	Motyka, Tomasz		
Crann, Timothy			Nowalsky, Adam		
Crosson, Scott	X		O'Reilly, Robert		X
Dalik, Joe			Palmer, Anthony		
Dawson, Jim			Robins, Rick		
DeBolt, Walter E			Ruccio, Mike		
DePersenaire, John			Rush, Bob		
Desantis, Bob			Schafer, Steven		
Didden, Jason			Seagraves, Rich		
Doctor, Steve		X	Serchuk, Fred		
Fote, Thomas			Siciliano, Thomas		
Freeman, Bruce			Stauffer, Dan		
Frisk, Michael	X		Terceiro, Mark		X
Gabriel, Wendy	X		Terrell, Jim		
Gogan, Joe			Verdi, Fran		
Goldman, Edward			Wagner, Joseph		
Hawkins, Monty			Weber, Alice		
Heaton, Clay			Whitehead, Tom		
Himchak, Peter			Wilberg, Michael	X	
Hinman, Ken			Wojcik, Greg		X
Hodges, Art			Wong, Richard		X
Hodges, Mark			Yocco, Joseph		
Holliday, Mark	X		Zac, Joey		
Houde, Edward	X		Zeman, Christopher		
Jiao, Yan	X		Zoch, K		
Jones, Cynthia	X				
Kennedy, Carrie					

Black Sea Bass



SSC and BSBMC Joint Consultation

Call Agenda

- 9:00am Introduction and Roll Call (Boreman)
- 9:10am Joint MC and SSC Discussion (Coakley)
 - Presentation of 2010 recommendations
 - Presentation of new information
- 10:15 am Public Comment (Coakley)
- 10:45am SSC Convenes
 - Reconsideration of 2010 ABC recomm. for black sea bass (Miller)
 - SUN subcommittee ABC control rule framework (Wilberg)
 - Closing remarks and reminders (Boreman)

Click once on the green microphone icon next to your name to mute



Please mute yourself when you are not talking

Benchmark Stock Assessment (Dec. 08)

- Data Poor Stock Workgroup and Peer-review
- Analytical models:
 - Statistical Catch-at-Length (SCALE)
 - Yield-per-Recruit Analysis (YPR)
 - Internal projections
- Biological reference points:
 - $F_{40\%} = F_{MSY}$ proxy = 0.42
 - SSB_{MSY} proxy = 27.6 million lbs

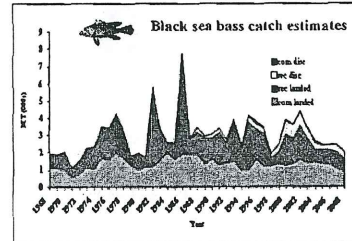
Benchmark Stock Assessment (Dec. 08)

- Review Panel recommended that, "the SSC recognize and allow for the sizable uncertainty in stock status when establishing catch limits".
- Despite the applied modeling approach (SCALE) which better integrates limited information to analyze the black sea bass population, it is still considered a "data poor" stock.
- Gaps exists in critical life history information and the current sampling gear may not be optimal to assess the population.

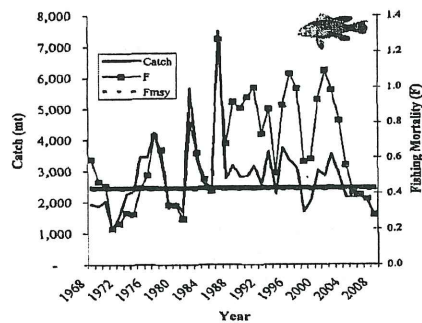
Stock Assessment Update (June 09)

- Updates include the most recent data, but apply the exact same methods that were validated by the peer-review (CRD 0916 published October 2009)

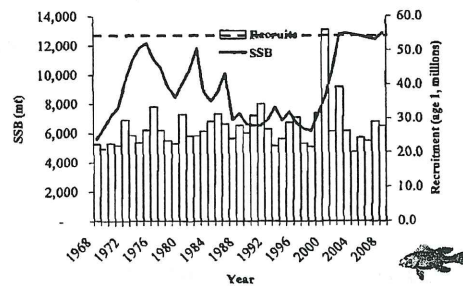
- 2008 Catch
- 2008 Surveys
- 2008 Lengths/Weights



Total Catch and Fishing Mortality



SSB and Recruitment



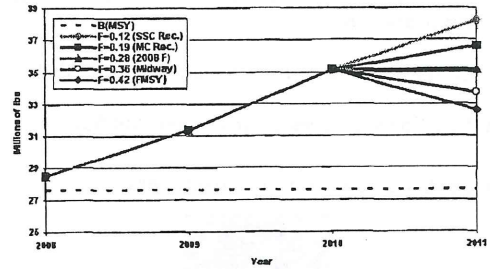
2010 Recommendations

- Staff - TAC/TAL of 5.80/4.80 mil lbs
- SSC – TAC/TAL of 2.71/2.30 mil lbs
- MC – TAC/TAL of 4.18/3.55 mil lbs

....based on extensive group discussion July 16 and 17. Discussion of basis will follow later.



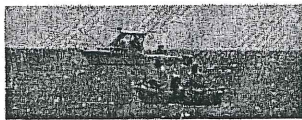
2010 Projections for Black Sea Bass



August 2009 Council Meeting

- After extensive debate, Council and Board 2010 recommendation was consistent with the SSC.

TAC/TAL of 2.71/2.30 mil lbs



December 2009 Council Meeting

Move that as outlined by the Executive Committee at the October Council meeting, convene a joint meeting of the SSC and Monitoring Committee to share available data and relevant information as it pertains to the 2010 BSB recommendations for purposes of allowing the RA to consider whether it would be appropriate to move forward with an emergency action based on final SSC review.



Information Available for Jan. 8

- Recreational landings (wave 1-4; Jan.-Aug.) and projections
- Commercial landings (week end Dec. 26)
- Additional papers on protogynous fishes
- Contributions from MC members



Process for Advice

- Previous process for advice (i.e. July 2008 and July 2009) had SSC meet Day 1 and BSBMC meet Day 2
- October 2009 Council decided to revise process to include SSC and BSBMC Consult
- Process was not identified in July 2009



Recreational Fishery History

Projected
Proposed

Rec Catch and Landings

Year	Catch ('000 fish)	Landings ('000 fish)	Landings ('000 lb)	% Released
2000	16,927	3,629	3,988	78.6
2001	13,869	2,841	3,421	79.5
2002	14,703	3,351	4,349	77.2
2003	12,128	3,251	3,289	73.2
2004	7,301	1,640	1,672	77.5
2005	6,935	1,248	1,889	82.0
2006	8,134	1,479	1,989	81.8
2007	10,078	1,745	2,250	82.7
2008	10,888	1,099	1,561	89.9
2009 *	11,002 *	2,295 *	3,311 *	79.1

* Projected using 2008 proportions by wave and 2009 waves 1-4.

Black Sea Bass Waves 1-4

- 2009 Recreational Harvest Limit = 1.14 m lb
- 2009 Projected Landings * = 3.31 m lb
- 2010 Recreational Harvest Limit = 1.14 m lb



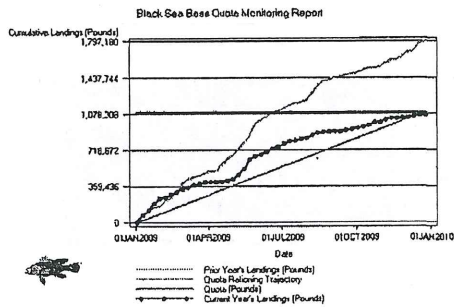
* Projected using 2008 proportions by wave and preliminary 2009 wave 1-4.

Commercial Landings

For week ending: Dec. 26, 2009 For data reported through: Dec. 30, 2009
Quota Period: 01/01/09 to 12/31/09

State	Previously Reported Landings (lb)	Previous Weeks' Update (lb)	Current Week's Landings (lb)	Cumulative Landings (lb)	Quota (lb)	Percent of quota (%)	RSA Annual Set-Aside (lb)
	0	0	0	0		0	
NH	0	0	0	0			0
MA	126,797	639	0	127,436			9,794
RI	123,127	0	0	123,127			16,416
CT	13,708	0	0	13,708			400
NY	81,457	0	16	81,453			23,276
NJ	201,322	0	0	201,322			3,083
DE	43,318	0	0	43,318			0
MD	110,581	0	0	110,581			0
VA	160,198	5,319	173	165,690			0
NC	194,146	0	0	194,146			0
Other	0	0	0	0			0
Total	1,654,654	5,958	189	1,660,801	1,093,190	97	52,971

Commercial Landings



Landings Information

- Commercial quota almost exactly taken
- Recreational harvest limit projected to be exceeded
- Indicates projection assumptions that TAL will be taken exactly in 2009 will be violated
- What does that mean biologically? F? R? SSB? Won't know until June 2010 update!



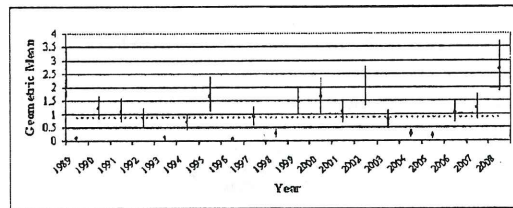
Points and Contributions from BSBMC

- 2009 quota was low as precautionary measure due to no analytical assessment
- Rapidly decreasing quotas from 2006-2009 response to decline in ratio of survey indices to catch – indices can be volatile
- 2010 quota is 1/3 MSY, when assessment indicates stock is at B(MSY) – overly precautionary even with DPSWG concerns?



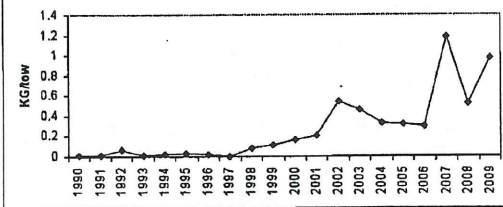
Maryland

16 Foot Trawl Juvenile Index



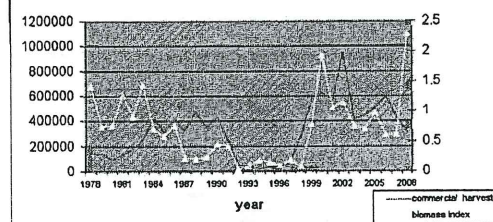
Rhode Island

Weight Per Tow June - Sept

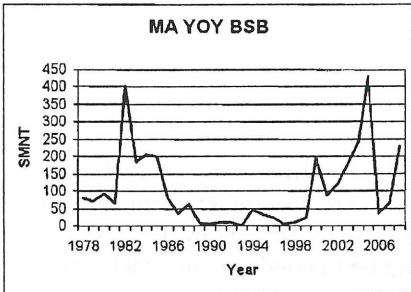


Massachusetts

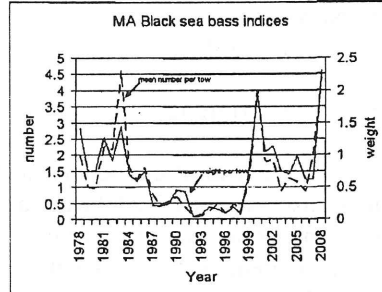
harvest vs biomass



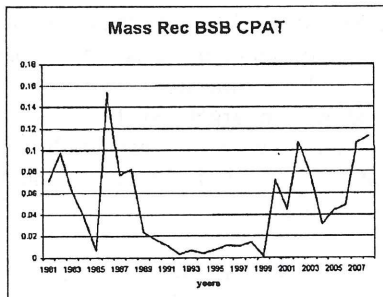
Massachusetts



Massachusetts



Massachusetts



Comments from the BSBMC and then Questions?

January 7, 2010

John Boreman, Chairman
Science and Statistical Committee
c/o Mid Atlantic Fishery Management Council
Suite 2115 Federal Building
300 S. New St
Dover, DE 19904-6726

Dear Chairman Boreman:

The makeup of the Science and Statistical Committee represents true experts in the academic assessment of fish health and population dynamics. The recommendations produced by its members now carry significant weight under new MSA mandates. However, fishery management demands a fine balance of a theoretical and applied knowledge that includes the acknowledgment of management history and current stock conditions.

Consistent with the recently approved procedure established to provide guidance to the SSC when revisiting recommendations based on new information, the following points warrant discussion during Friday's joint meeting with the Summer Flounder, Black Sea Bass and Scup Monitoring Committee and are relevant to the request of the Council to reconvene.

1. The SSC stated rationale for maintaining status quo for the 2010 quota from the 2009 quota for Black Sea Bass was uncertainty in the new stock assessment published in January of 2009. The Monitoring Committee, which has guided the MAFMC to be the leading regional fisheries management council with respect to not having any species that are experiencing overfishing and only a single species currently overfished, believed this low of a quota was unnecessary in accounting for scientific uncertainty. The demonstrated historical success of the MC validates the need for consideration of the MC's position.
2. The 2009 Black Sea Bass quota was reduced from 2008 levels based on the assumption that abundance of Black Sea Bass were in decline. The current stock assessment, based on the best scientific information currently available, indicates the stock is rebuilt and has maintained a Spawning Stock Biomass (SSB) at or above the target SSB for most of the past decade. If this information had been available only a few months earlier, the significant reduction in 2009 quota would likely not have occurred. Therefore, the 2008 quota should be used as a basis when discussing "status quo".
3. When faced with the question of quota reconsideration based on new information, the New England Fisheries Management Council's SSC recently revised a quota based on a "new approach" in reviewing existing information.

4. Information is now available that mitigates uncertainty in the current stock assessment declaring the Black Sea Bass stock as rebuilt and sustainable, including –
 - State trawl survey data that indicates high levels of abundance;
 - State commercial landings data that show quotas were quickly met; and,
 - Recreational landings data that show an increased CPUE.
5. The previously proposed SSC TAL of 2.3 million pounds equates to a fishing mortality rate (F) of 0.12, or just 27% of F_{msy} ($F=0.42$). TAL's recommended by the Council Staff (based on $F=0.28$) and Monitoring Committee (based on $F=0.19$) set fishing levels at 67% and 45% of F_{msy} respectively. By way of comparison, Amendment 15A for Black Sea Bass in the South Atlantic where the species is not rebuilt sets the annual target F (which is also defined as Optimum Yield in the Amendment) at 75% of F_{msy} .
6. Combined recreational and commercial landings since 2004 have been in the 4.5 – 5 million lb. range. The current stock assessment indicates no decline in SSB below target levels during this time frame, indicating that this level of harvest is sustainable.
7. The SSC charge from MSA to prevent overfishing and how this mandate relates to scientific precaution is understood, but National Standard 1 also mandates achieving optimum yield on an on-going basis. Unfounded precaution can create a significant departure between annual catch limits and optimum yield as seen with the current 2010 Black Sea Bass quota. The result is management that is inconsistent with MSA objectives and unnecessarily produces significant negative impacts on fishing communities.

We look forward to present and future joint efforts of the SSC and MC in providing recommendations to the MAFMC that continue to make it the leading regional fisheries management council in the country. This will be achieved by promoting management measures that prevent overfishing, maintain sustainability, and achieve optimum yield on an on-going basis as mandated by MSA.

Respectfully submitted,

Jim Donofrio, Executive Director
Recreational Fishing Alliance

Tony Bogan
United Boatmen

Jim Hutchinson, Jr., President
New York Sportfishing Federation

Captain Adam Nowalsky, Chairman
RFA New Jersey Chapter

Talking Points for SSC Discussion

Thomas Miller
SSC Lead, Black Sea Bass

Council motion

- "Move that as outlined by the Executive Committee at the October Council meeting, convene a joint meeting of the SSC and Monitoring Committee to share available data and relevant information as it pertains to the 2010 BSB recommendations for purposes of allowing the RA to consider whether it would be appropriate to move forward with an emergency action based on final SSC review".
- Q1. Is there relevant new information?
Q2. If the SSC had received input from the MC before recommending a quota, would its decision have been different?

Issues for consideration – new data

- July 16, 2009 decision based on an assessment using 1968-2008 data.
- Preliminary 2009 data are available, but have yet to be used in an assessment
 - Commercial harvest – quota & recreational harvest > quota – but these are management uncertainties, not scientific uncertainties, but might be indicative of stock abundance.
- Fishery-independent Y-O-Y surveys indicate strong 2008 and 2009 year classes.
- MA Recreational data indicate high CPUEs for 2009

SSC Discussion: Does this new information demand a revision of the quota?

Issues for consideration – revisiting quota decision

- Original quota decision was based on the Scientific Uncertainty Committee's guidelines on assessment quality and applied *ad hoc* ABC rule of constant catch
 - Was the assessment quality correctly defined?
 - Was the appropriate level of catch used as the foundation of the *ad hoc* ABC rule?

Data Poor Working Group

- DPWG review accepted a SCALE assessment for management of BSB
- Alternative models compared, and final model accepted based on assumptions that
 - long term average abundance was B_{MSY}
 - $M=0.4$
- DPWG accepted YPR based reference points, calculated outside of SCALE
- DPWG review noted "there remains considerable uncertainty with respect to stock status. The lack of fit between model estimates and the recent survey is an important source of uncertainty..."

SSC Discussion – July 16, 2009

- Updated assessment (1968-2008 data) using a model averaging approach
- Model showed $SSB \sim SSB_{msy}$, but with substantial and increasing uncertainty
- SSC discussion focused on the following sources of uncertainty in understanding of status of the stocks
 - Research surveys index age-0 – age-2 fish only
 - Knowledge of adult dynamics comes from fishery-dependent data
 - Discards are substantial and poorly quantified
 - M is poorly described, particularly given life history
 - Strong retrospective pattern in stock biomass in assessment results
 - Sensitivity of new SCALE model results have not been quantified. No exploration of importance of different likelihood components has been undertaken. Model averaging approach not reviewed.
 - YPR reference points are calculated outside of the assessment model and do not reflect the uncertainty in parameter estimates or the species life history
- SSC characterized the assessment as "Level 3: Acceptable assessment"

SSC Discussion: Is this the appropriate category for the 2009 BSB assessment?

Ad hoc ABC rule

- Because the assessment was deemed acceptable, the SSC used a constant catch policy
 - Was a constant catch level compatible with the then available SUN committee report?
 - Was the 2009 level the appropriate standard?

