



## **Final Scallop PDT Meeting and Joint Scallop-Groundfish PDT Meeting**

August 24, 2009

Mansfield, MA

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Members in attendance: Dvora Hart, Demet Haksever, Pete Christopher, Erin Kupcha, Deirdre Boelke, Jess Melgey, Emily Bryant, Kimberly Murray, Rula Deisher, Bill DuPaul; Carrie Upite via teleconference.

Audience: Jay Hermson (Statistics office), Peter Hughes, Kevin Stokesbury, Mark Buron, Gib Brogan, Drew Minkiewicz, John Pappalardo.

### **PURPOSE OF MEETING**

Summarize final projections for 2010 and beyond.

Discuss scenarios for FW 21 allocation alternatives.

Discuss how turtle analyses will be handled in FW21.

Meet with Groundfish PDT to discuss YT sub-ACL for 2010-2012

### **PDT UPDATES**

It is unlikely that we will be able to meet the deadline for FW21 final action in September, so the November Council meeting is the new target. In September we will be wrapping up A15 and bringing the DEIS to the November Council meeting to approve it and select preferred alternatives to present to the public.

### **UPDATE OF VIMS NLCA ESTIMATE**

Dr. Bill DuPaul presented the updated data from the VIMS cooperative dredge survey. They have looked further into dredge efficiency values for the survey using a split parameter method based on work by Millar. The previous biomass and density estimates used 45% efficiency but data from paired tows has allowed updated values. A value of 36% is used for the survey dredge. The analysis looked at 350 paired tows with four-inch rings and turtle chains and takes into account the differences in proportionalities from working with two dredges. Using this method, a value of just less than 50% was obtained. Analysis was completed with and without turtle chains, and turtle chains reduced efficiency by ~5%. There is a high confidence level based on large sample size. Bottom type and presence of sand dollars have shown an effect on efficiency. Biomass estimates were influenced by the SH:MW relationship – two values were used one from SARC 45 and one from the data collected on the cruise in July 2009 (area-specific). The estimates are 9,700 mt (SARC 45) or 11,000 mt (area-specific). This is a large biomass level, with many large scallops 120 mm or greater from the 2005 high recruitment event. These scallops will continue to grow and will be about 7 years old next year – ideal for harvest. This brings the VIMS data in line with the other surveys – difference is only 200 mt. Dr. DuPaul thinks that using commercial dredge data is very helpful in setting harvest levels for access areas.

### **FINAL SAMS RESULTS FOR 2010 – FW 21 PROJECTIONS**

Dr. Dvora Hart presented updated projections for FW21 including the SAMS model. Four alternatives were included:

1. No closure,  $F = 0.20$  (status quo)

2. No, closure,  $F = 0.24$
3. S. Channel closure,  $F = 0.20$
4. S. Channel closure,  $F = 0.18$

Dr. Hart believes the rotational closure in the Great South Channel would reduce habitat impact without the revenue impact of a long-term/permanent closure. Having a closure had unpredictable model effects on the overall  $F$ , so a lower value (0.18) was made an alternative instead of the previously discussed higher value of 0.24.  $F = 0.24$  was run to illustrate long-term effects for the no closure alternative.

The following table gives the four alternatives and the resulting landings and DAS for each.

<b>Option</b>	<b>2010 Landings</b>	<b>2010 DAS</b>
NoCl-0.20	18829	29
NoCl-0.24	21445	38
Cl-0.18	22299	42
Cl-0.20	24269	51

DAS are higher with the closure because the closure reduces  $F$ , and more DAS = higher landings. The No closure alternatives get the highest landings early on, but the closure alternatives pick up a little later.

The model predicts that if the closure does not happen the channel area will get fished heavily due to the large amount of scallops there. Currently, a lot of the open area effort is concentrated in the proposed closure area. This drives up early landings for the scenario, but when the model is run out to 2024 where all estimates converge, the higher  $F$  no closure option has the lowest mean landings.

Regarding groundfish closed areas on Georges Bank, the projections gave almost a full trip in NLCA and CAI (2600 mt/trip). CAII will be difficult based on yellowtail bycatch issues. There's a possibility of being able to reduce the possession limit so everyone can have one trip. The 600 mt in CA1 would be for the General category and 30 trips maximum. One PDT member suggested that providing some access in CA1 would be beneficial to harvest the larger scallops in that area and to gain some observer data from that area.

We will need an "if, then" inclusion for CAI and CAII opening in 2011 or 2012. One suggestion was that if NLCA closes due to YT, effort should be sent to CAII – different YT stock area and plenty of scallops. Another suggestion was made that the PDT should explore "CAII North" for future options (small triangle above existing cod HAPC within CAII). This area is currently closed as a habitat area in the Scallop FMP – but if A15 addresses that, a future action could consider access in other portions of CAII that are not habitat areas.

The Mid Atlantic access areas affect the projections quite a lot. The proposed trips are as follows:

- 2010 MA Access – 2 Elephant Trunk, 1 DMV
- 2011 MA Access – 1 ET, 2 DMV, 2 Hudson Canyon
- 2012 MA Access – 2 DMV, 2 Hudson Canyon

The following table was put together to illustrate the alternatives.

FY	GB Access			MA Access		Open Area
	#	Area	Options in GB	#	Area	
2010	1	NL	full trip in NL (18K or lower)	3	(2 in ET, 1 in DEL)	scenarios differ depending on channel closure and total F
	1	NL/CA2	full trip in NL, CA2 if NL closes	3	(2 in ET, 1 in DEL)	
	1	NL/CA2	most in NL some in CA2	3	(2 in ET, 1 in DEL)	
	1	NL/CA1	most in NL, about 30 in CA1	3	(2 in ET, 1 in DEL)	
2011	1	CA1	if extended	5	(1 ET, 2 Del, 2 HC)	
	1	CA2	if CA1 not extended	5	(1 ET, 2 Del, 2 HC)	
	1	Split NL and CA2	if CA 1 not extended			
2012	1	CA2	if CA1 extended in CA1	4	(2 DEL, 2 HC)	
	1	Split NL and CA2	if CA1 fished in 2011	4	(2 DEL, 2 HC)	

There are so many alternatives for 2010 at this point because of uncertainty in the yellowtail allocation, and some of these will go away once we have a better idea how much the fishery will get and where we are best off putting the effort. The alternatives are listed in order of preference.

The scenarios presented are based on GC allocation reducing from 10% to 5%, which should go into effect in 2010. Since A10, the LPUE at a given biomass level has increased based on crew and operations efficiency (previously presented) and other factors. Final CASA results indicate that  $F_{2009} = 0.3$  so it needs to be reduced. The PDT discussed potential reasons why actual F is so much higher than projected F of 0.20. It was explained that in FW19 we assumed there are 325 full-time equivalent vessels when we set allocations, and the actual number may be around 340 (to be used in FW21) which will have an effect on the model. A lower LPUE estimate was used in FW19 and the estimate has been updated in this projection.

2010 is lean because there are only four access area trips, but future years have five AA trips and higher landings, but with reduced DAS to accommodate Ftarget. In addition, LPUE function changes (higher) so the chance of exceeding Ftarget is lower. Recruitment assumptions are key to long-term projections – this work is to run it out until the effects of 2010 management are no longer felt (where projections converge). The PDT discussed that it will not be popular to close a new area and allocate fewer access area trips in the same year. However, it was also discussed that the growth rate in the Channel is ~80%, and not closing it will not allow the fishery to gain from that high growth potential. It was also discussed that closing this area will make managing YT bycatch easier because when the area reopens scallop catch rates will be higher, so time gear is fishing will be less compared to that area being fished as an open area.

### **CURRENT FW DOCUMENT REVIEW**

The PDT would like Carrie Upite to review the background and purpose (starting page 9) and page 25-26 to be sure the description of the recent biological opinion is accurate.

The PDT reviewed the management alternatives again and **clarified that the Channel closure alternatives should not be closed until June 15, open area fishing could occur there between March 1, 2010 and June 14, 2010.** The management scenarios currently in the document will need to be updated based on what happened during the joint groundfish portion of the meeting. The PDT also reviewed measures in FW19 and discussed if they needed to be in FW21 as well. Specifically, in FW19 there was an alternative to reduce derby fishing by gen cat vessels by allocating a smaller percentage of the total area TAC. **The PDT decided not to include that measure since the Council did not select it in FW19 (page 20).**

The PDT discussed whether there was any rationale behind changing the NGOM Hard TAC. We do not have the completed survey results yet. S Mast reports some high abundance in Phippines and Jeffrey's Ledge areas from a recent habitat survey. **The PDT consensus is to hold off on any changes and revisit the NGOM hard TAC with the next FW.**

The incidental catch mortality section (p 23) was discussed in terms of the need to update. It was determined that VTR data could reveal how many incidental catch permits have landed <40lbs/trip to make a more accurate estimate. A "quick and dirty" approach would be to look at total catch where the sum of all catches is less than 40 lbs then separate the results by permit category (will be mostly monkfish, fluke permits). Kimberly Murray has data from 2003-2008 already pulled and the PDT may try to describe the incidental catch permit group based on the information we have to update the document. Unless there is time to look into this, the PDT recommends the 50,000 pound estimate of catch from the incidental catch permit remain.

#### **UPDATE ON TURTLE ANALYSES**

The PDT reviewed the four alternatives settled upon at last PDT meeting for those who were not in attendance. Carrie Uprite noted that the actual range of observed takes is through October 27<sup>th</sup> – if takes from research trips are included. She informed the PDT that there was a take in a chain mat experimental trip in 2002 to the West of ETCA. Several PDT members were in favor of including an option that extended to the end of October, especially since the economic impact of extending two weeks further in October are not expected to be very large (late October is not a great time for scallop meat quality).

The PDT also discussed the beginning of the window (June 1 versus June 15). Ultimately, the PDT agreed that June 15 is more justified because it is based on observed takes in the fishery. We know it is not a zero probability of a take between June 1 – June 15, but it is less likely than later in the summer. So the potential benefits are lower from a closure in early June and the costs are considerable since that is an ideal time of year to harvest scallops, when meat weights are at their peak and quality is high. The PDT thinks it is best to leave the turtle window dates open to adjustment if takes are observed outside the window in subsequent years. In addition, the amount of trips going into Delmarva in Sept and Oct this year can be monitored based on observer data, since Council decisions will not be made until November.

The PDT further discussed the alternative to have a season closure in Delmarva. While there are not as many observed takes as in ETA, it is reasonable to assume that if the area is closed in Sept and Oct, or just October, some effort that would have taken place during those months will take

place in August and November, similar to results from the ET closure. It was noted that Delmarva poses a similar cost-benefit situation to that in the ET. One PDT member believes that a lot of people are saving their Delmarva trip for Sept or Oct when Elephant Trunk is closed, which is no good for either turtles or scallops (turtles are present and scallop meat weights are low). This is a good argument for closing Delmarva for these two months. Another PDT member wanted to clearly understand how a seasonal closure limits effort. It was explained that the ET 2-month closure under Magnuson was successful in reducing effort during the window of time in question. We can use the upcoming year's observer data to monitor how many trips may be taken during those months in Delmarva and see what kind of impact it would have on the fishery. The meat yield is less in Sept-Oct so they have to do roughly 20% more tows in those months to meet the quota in meat weight. While turtles could also be present in August in Delmarva, less tows would be needed to catch the quota in August so this likely reduces the chance for turtle takes compared to later in the fall. The overall feeling was that the effort shift caused by a Sept-Oct closure in Delmarva would have a negligible effect on scallops, and be positive for turtles, making the option favorable and would be a time/area limit in terms of complying with the RPM.

### **JOINT GF/SCALLOP PDT MEETING TO DISCUSS YT SUB-ACL**

Council staff provided a background about the issue at hand and what the PDTs needed to do. In a nutshell, the Council needs to identify an allocation of YT to the scallop fishery for 2010-2012. GF Amendment 16 specified that allocation can be adjusted based on a variety of factors including scallop area rotation. So the group discussed probably scallop fishery allocations for the next few years based on the Scallop PDT discussion in the morning. Next the group reviewed data on YT bycatch in the scallop fishery to identify if there are any trends in bycatch rates by area, permit category etc.

Observed scallop dredge landings and discards of yellowtail flounder were provided by the Northeast Fisheries Observer Program. The ratio of yellowtail flounder caught to kept scallops was calculated and examined by stock area, category (LA or GC), access area (or open area), and year. These results suggest the following when considering the amount of yellowtail flounder to allocate to the scallop fishery:

- There were consistently different discard rates between the open areas and the access areas from 2006 through 2008 though these differences are not always in the same direction. Which areas will be open in any given year should be considered when allocating yellowtail flounder to this fishery. In general, scallop dredge discard rates in 2006 through 2008 were higher in the GB yellowtail flounder stock area than in either the CC/GOM or SNE/MA yellowtail stock area. When examined based on type of trip, there are differences between the stock areas. In the CC/GOM YTF stock area, rates for general category trips were higher than rates for limited access trips in 2007 and 2008. For the one year (2007) a comparison can be made in the GB stock area the limited access ratio was higher than for general category trips. In the SNE/MA YTF stock area limited access trips had a higher ratio than general category trips in all three years.
- While there are often differences between general category and limited access trips, given the relative size of the scallop catch by these categories it may not be necessary to consider these differences when allocating yellowtail flounder to the fishery.

- There appear to have been seasonal differences in discard rates during 2006-2008. If the timing of scallop catches can be anticipated, it may be possible to better estimate the yellowtail flounder needed for the fishery to harvest the entire scallop ACL.

The PDT discussed that a major hurdle in this process could be that the restriction for YT bycatch in GB access areas is still 10% of the total YT TAC, regardless of what the scallop fishery is allocated for YT sub-ACL. So even if the scallop fishery is allocated more YT TAC, an access area will still close if 10% of the total YT TAC is harvested. Another point raised was that in recent years catch has been weighted to the Mid-Atlantic because there has been above average recruitment in that area, but results from the survey this year suggest that recruitment is not as strong in that area and may be improving on GB. Thus, future scallop catches are expected to be higher from GB than in recent years, which could be problematic in terms of YT interactions.

### **Initial findings of Joint PDT**

Initial plan is to project scallop catch by YT stock area. PDT will use most recent d/k ratio for each area and apply it to projected scallop catch. A projected YT catch will be determined. If that is more than 10% that amount will be considered and impacts on revenue loss will be analyzed if the scallop fishery is allocated an ACL below that. Projected increases in YT biomass will hopefully be integrated for future years (2011 and 2012) since bycatch rates expected to change as YT recovers. These analyses will hopefully be ready for the September Council meeting.