Atlantic Scientific Review Group
Meeting Agenda – March 19-21 2013
SERO, St. Petersburg, FL

Tuesday, 19 March, 2013 (0830)

Gordon Waring (NEFSC) called the meeting to order at 8:40. Housekeeping issues were taken care of and Andy Read appointed Randy Wells acting chair, as Read's physical presence was delayed.

Bottlenose Dolphin Take Reduction Plan (BDTRP) Updates - Erin Fougeres (SERO) presented an overview of the bottlenose dolphin take reduction plan with 2012 updates. In 2010 and 2011 NMFS was able to achieve observer coverage in inshore waters of North Carolina for the first time. However, limited resources in 2012 reduced overall coverage and the ability to allocate coverage inshore. Between April 2012 and March 2013, a total of 105 sea days were allocated in NC coastal state and federal waters. This was an overall 50% reduction from coverage in 2011. 97 days were allocated for both coastal state and federal waters and 8 days were allocated to alternative platform trips in coastal waters. 85 (81%) of the 105 allocated trips were accomplished to date. A team webinar was held last March to provide updates to the team on their 2009 consensus recommendations, specifically related to the amendments to the BDTRP and scientific research. No consensus recommendations came from this webinar as it was meant to be an update for the team. An in-person BDTRT meeting is scheduled for June 5-7 in Wilmington, NC. The general meeting purpose is to monitor the BDTRP's effectiveness, provide updates on stock structure and related information, and discuss any potentially needed conservation measures for the NNCES stock and other bay, sound, and estuary stocks with trap/pot gear interactions. A Complete Monitoring Plan is being implemented for all TRTs as a General Affairs Office (GAO) recommendation and will serve to evaluate the effectiveness of management measures and identify areas that need to be addressed**.**

Pelagic Longline Take Reduction Plan Updates- Fougeres presented the summary of PLLTRP accomplishments to date, including, most recently, a team meeting that was held in St. Petersburg, FL August 21-23, 2012. The Southeast regional office is working on addressing compliance and sent out a certified mailing in July 2012 reminding fishermen of PLTRP requirements, especially mainline length. They are also working with enforcement to ensure increased compliance with mainline length restrictions. Other future steps include better understanding which species of pilot whales are impacted by longline fishing through biopsy sampling and genetic analysis and/or passive acoustics (SEFSC), finalize the monitoring plan (currently draft), updating the team membership to include northern MAB fishermen, and updating the PLLTRP research priorities.

Wells asked what the consequences are for non-compliance in mainline length. Fougeres answered that SERO is working with enforcement to send out Community Oriented Policing and Problem Solving (COPPS) letters and reminders. She pointed out that fishermen are self-reporting out-of-compliance lengths. NMFS didn't want to do NOVAs (notices of violation). There is no good way to measure or enforce at sea. Observers have no enforcement responsibilities. Lance Garrison (SEFSC) said that research bears out that shorter lines result in lower bycatch. It is not just a result of a reduced number of hooks or total effort in the water. Read wondered whether anybody is tracking individual compliance over time. Fougeres said it is clear which vessels are not in compliance and SERO will look at those data. Wells asked if it would be useful for the SRG to make a recommendation to support this research. Read suggest bookmarking this and prioritizing later. David Gouveia (NERO) noted that the New England Aquarium's Consortium for Wildlife Bycatch Reduction, lead by Tim Werner still had some funding remaining in its current grant from NMFS. Gouveia suggested that researchers consult with Tim Werner about future funding opportunities. Read said the consortium is holding a workshop in Woods Hole this September. They will be looking at weak hook and other bycatch mitigation measures.

Atlantic Large Whale Take Reduction Plan Updates – Gouveia discussed recent actions by the ALWTRT which included a January 2012 meeting at which stakeholders presented proposals and NMFS provided preliminary analysis of the proposals. During the course of the meeting the ALWTRT further developed/revised proposals, discussed gear marking/gear characterization reporting, and discussed the monitoring strategy. Proposals received included increasing trawl lengths, closures, exemptions for state waters, exemptions for small vessels, exemptions due to trap reductions, increased reporting, increased gear marking, a cap on the breaking strength of line, and weaker weak links. Closures were proposed in Cape Cod Bay, Jeffreys Ledge and Jordan Basin. In April 2012 a webinar was convened where NMFS presented the results of the analysis of proposals and requested comments on

proposals from Team members by April 27, 2012. Since that time steps taken have included: 1) development and analysis of alternatives, 2) use of Team's proposals and comments as building blocks for alternatives, 3) a peer review of the model through the Center of Independent Experts (CIE), 4) sensitivity analysis to account for uncertainty in model, and 5) continued work on drafting a Proposed Rule and DEIS. In the Summer/Fall of 2013 NMFS expects to publish a proposed Rule and hold public hearings. A final Rule could be published in early 2014. Gouveia said they have worked with Bob Kenney (URI) on the sensitivity analysis. Industry prefers trawling up options to closures. Sharon Young asked if the CIE review has been completed. Gouveia said yes and it will be shared with the TRT and/or included as part of the DEIS. Gouveia further stated that the NMFS is addressing the concerns about data deficiencies in the model. David Laist (MMC) asked if NMFS is already using the model to do the analysis. Gouveia said yes. Lawson asked if there was any plan to implement any of this in Canadian waters. Gouveia said that is up to the Department of Fisheries and Oceans (DFO). Young asked if the agency has considered a separate regulatory action for gear marking since the rulemaking process is so protracted. Gouveia said that both the gear marking and vertical line measures are contained in one single action. He noted that the Team did not suggest or request that the actions be separated. Young said it just seems like it would be a less controversial process and it would help inform the other measures. Gouveia said NMFS didn't get much from the team for ideas on gear marking. To split it now would not have any benefit. Young asked what has changed the acceptance of gear marking now. Laist said he thought the change came about when the fishermen asked how they were doing on the groundline issue and NMFS said they didn't know because they didn't know who was setting what where. The industry wants evidence to see if they are making progress.

Harbor Porpoise Take Reduction Plan Updates – Gouveia described how the bycatch rate threshold was exceeded for Coastal Gulf of Maine Consequence Closure Area that resulted in the consequence closure being triggered. The closure was for the October/November period annually and was to remain effective until long-term goals were met or the NMFS/Team developed new conservation measures. The bycatch rate threshold was not exceeded in Southern New England. On August 15, 2011, NMFS sent a letter informing gillnet fishermen that preliminary data suggested harbor porpoise bycatch rates exceeded the target rate in the Gulf of Maine. Following that, NMFS sent a letter in April 2012 informing gillnet fishermen that the Coastal Gulf of Maine (CGOM) Consequence Closure was triggered after monitoring 1 year of harbor porpoise bycatch data. Year 2 had not yet been completed; however, the two year average could not be reduced below the bycatch rate trigger. NMFS convened a teleconference with the HPTRT and interested parties on April 26 to discuss these results.

On August 10, 2012, the Northeast Seafood Coalition (NSC) submitted a request to reduce the size of the CGOM closure area and shift the timing from Oct. & Nov. to February 15 through March 31 for 1 year. The proposal requested that NMFS make the change under the authority of the following HPTRP provision: **(f)** ***Other special measures***. The Assistant Administrator may revise the requirements of this section through notification published in the Federal Register if:

> (1) NMFS determines that pinger operating effectiveness in the commercial gillnet fishery is inadequate to reduce bycatch below the stock's PBR level; or
> (2) NMFS determines that the boundary or timing of a closed area is inappropriate, or that gear modifications (including pingers) are not reducing bycatch to below the PBR level.

The proposal was not submitted through the existing process for requesting exemptions to the Take Reduction Plans, which requires TRT approval. NMFS response and decision to deny the request was delivered to NSC on September 6. NMFS determined that the shift was not warranted because 1) the conservation benefit was neutral when examining takes from 2008-2012 after removing illegal closed area takes and takes in areas addressed by the 2010 HPTRP amendment, and 2) the NSC economic impacts analysis did not analyze Feb/Mar, assumed no displacement, and included significant indirect shoreside impacts.

On September 21, NER Regional Administrator and NMFS staff met with NSC staff and members in Gloucester. Topics discussed included the NSC proposal to shift the closure, the proposal's conservation benefits, and difficulties fishermen have had with ensuring that pingers are functioning. NMFS committed to re-analyzing the potential conservation benefit of the shift by extrapolating bycatch based on past bycatch rates. Fishermen committed to purchasing new LED pingers, using extra pingers, submitting to voluntary pinger inspections, and using pingers one month earlier than required in the Mass. Bay and Stellwagen Bank Management Areas.

Following the meeting, NMFS estimated and compared the conservation benefit of each closure period based on

past bycatch estimates, rather than number of takes, that occurred within the CGOM closure area boundaries. The results indicated that shifting the closure to February/March will provide a slightly higher conservation benefit. With this considered, NMFS announced on September 26 that the closure was shifted. NMFS shared these results with the HPTRT by teleconference and at the NEFMC meeting that day.

The current status of CGOM closure is as follows:

- The CGOM closure area began on February 1 and will end on March 31.
- The size of the CGOM closure area has not been reduced
- NMFS used its authority under the "*Other Special Measures*" provision of the HPTRP
- All legal and other analyses were conducted in support of this action
- This shift is for 1 year only – the CGOM closure will be in effect for 4 months in 2013 (February 1 through March 30, 2013 and October 1 through November 30, 2013).

A meeting was held in November 2012 at which the team reviewed the monitoring strategy and year 1 and 2 of the consequence closure strategy data. The team was updated on the new harbor porpoise abundance estimate based on a 2011 abundance survey and harbor porpoise bycatch analysis for 2011. There were discussions on how to improve compliance and enforcement and on changes in fishing practices, upcoming fisheries related activities, and research related updates. The team developed proposals to address the following:

1) Consequence Closure Strategy
    - Should it be eliminated or modified?
    - Is the current area and time of year appropriate?
2) Trigger for the Consequence Closure Strategy
    - Is the current one ok? Should we add new data to the trigger calculation to update the time series?
    - Should we use a compliance rate instead of a bycatch rate?
3) Special Provision Measure
    - Should it be eliminated or modified?
4) How should we address poor compliance and poor enforcement?

In February 2013 a webinar was convened to discuss proposals and analysis of proposals, discuss whether the Team wanted to modify full TRP or just focus on the Consequence Closure Strategy, and to evaluate the potential of a new trigger linked to PBR or ZMRG. Gouveia said the webinar format was not very useful in building consensus. The Team plans to meet in April to continue discussions.

Young said the entire scientific team and one third of the environmentalists boycotted the November meeting because they were not consulted on the shift. It was a debacle. Scott Kraus resigned and the rest of the science team boycotted. Moore offered that if something was billed as a conference call rather than a webinar it could make a difference. Young said the webinar was also recorded by a media source and that was problematic. Snippets have been taken out of context. It was not helpful to the dialog. She is hoping the agency can control that. Read said there are three areas the SRG will want to weigh in on: 1. Process. (how the shift was handled – undermined trust, established bad precedent) 2. Issue of compliance (lack of functional pinger use) and 3. How to go forward. There is no hope of getting consensus over a webinar. The stakeholders need to sit together in a room. Gouveia said NMFS has pitched to the team to remove the provision that the industry used to challenge the closure. Management measures taken shouldn't be able to be carried out independent of the team. Nicole LeBoeuf (NMFS F/PR) said there was a NMFS high-level meeting and NMFS is working on a policy statement. They want to re-establish that NMFS still has faith in the value of the teams. The policy statement won't be able to address the recording issue. One quick thought she added with regard to the SRG weighing in, is that the SRG might think about the value of SRGs and if they feel they have made an impact on how science is used or not. The processes (TRP/SRG science review) are linked. Young said NMFS revised the stock assessments without SRG review. We now have 3 different abundance estimates generated from the same 2011 survey and that is something the SRG has to be involved with. Changing was inappropriate and was not responsible. The SRG should recommend that issues where we see that compliance is a significant problem are thoroughly reviewed. Gouveia said the SRG did get a chance to review the change in abundance. It just fell through the cracks. The question is if SRG feels that they should have reviewed the data that caused the trigger. Read said it was the decision that stunk not the data that went into it. Gouveia said if the SRG feels slighted that was not his or anybody's intent. Young said the fact that the public comment process

caught something that the SRG missed is an issue. It was not an insignificant change. It was worth bringing back to us. Read agreed with Young's point. The SRG needs to make sure we do a better job if that was the problem. SRG review of the closure trigger takes is a grayer area. In cases like that NMFS should feel free to use the SRG. Debi Palka (NEFSC) said she would very much like to use the SRG more for reviews, but that also means that the SRG members will have more work and will have to have fast turnarounds. In the past when we asked for mid-year reviews on something there was not much response. We also need to look at the skills that the SRG has. Wells said nobody in the SRG is afraid of more work; they should at least be given a chance. Read said we might talk more about finding other outside experts. Palka said she personally would like to use the SRG more. LeBoeuf said she would like to see more scientific input from the SRGs and management input from the TRTs. The SRG might do well to opine on the fact that in the harbor porpoise process the value was not there.

Northeast Stranding Program Updates/Unusual Mortality Events – Gouveia provided a presentation of the harbor seal UME. It was officially declared on November 2, 2011 and extended from June 1, 2011 – Nov 15, 2012, covering the coasts of Southern ME, NH, and northern MA. The species affected was harbor seal young of the year (<12 months). This UME pointed out serious deficiencies in the data collection and response process. It could have been a big problem if it had been a different strain of influenza. Response was too slow. Data were not entered soon enough. NMFS is now working on procedures to react faster and for basic reporting and entry of level A data to be expedited. The next steps are: 1). to continue review of archived specimens; 2). to submit "control" specimens for retrospective testing (ongoing); and 3). to conduct influenza survey of archived serum samples to better understand the presence of the virus in harbor seals.

Waring mentioned that Teri Rowles' group had provided sampling equipment that was used during the 2012 live captures. Moore said that as a result of Prescott funding issues there was a hiatus in the stranding response coverage in Maine. The fundamental problem is we rely too much on the vagaries of volunteer programs. There is a lack of a national sampling program that focuses on public health and stranding issues. There is no science on a national, stable standard. Wells said that even at the federal level the stranding program is struggling for budget and recognition. Fougeres said that the SE region administrators get a stranding report every day. Waring asked what the protocol is for establishing a UME. Gouveia said that administrators look at the information and if it looks like an abnormality it is flagged. Moore said he is on the working group. In an example from the West Coast, a decision was made approximately two months after the event started. Read said the SRG should think about drafting a recommendation regarding this issue. There is a problem with relying on volunteer, underfunded stranding programs. Moore said there is a split personality of stranding programs between science and most but not all rehab programs. With limited core support for diagnostics this is important issue.

Southeast Stranding Program Updates/Unusual Mortality Events – Fougeres summarized recent stranding events in the SE. There were 4,327 strandings in the SE during 2007-2012. On average, there have been 721 strandings/year, with the majority of strandings occurring in FL, NC, and TX.

Recent events include a South Carolina UME (2011), the ongoing Northern Gulf of Mexico (TX/LA border through Franklin County, FL) UME for bottlenose dolphins/small cetaceans (February 2010-present) and the Texas bottlenose dolphin UME (November 2011-March 2012). Details were presented for each of these UMEs.

There have also been an increase in the number of human interactions, including multiple cases of bottlenose dolphins found with gunshots as well as a bottlenose dolphin observed swimming with a screwdriver impaled in its head on June 21, 2012 in Perdido Bay, Alabama. It was found dead the next day.

Read said the extent and magnitude of the upper Gulf UME is concerning. He asked which stocks were involved. Garrison said it included at least the Barataria Bay, Mississippi Sound, Western Coastal and Northern Coastal bottlenose dolphin stocks. The Gulf of Mexico Continental Shelf bottlenose dolphin stock is also likely impacted. They have no ability to assign animals to genetic stocks. Rosel said they are working on that capability. Wells asked if it is safe to say that Deepwater Horizon (DWH)-related research is a high priority? Garrison said yes. Data collected through the Natural Resource Damage Assessment (NRDA) will flow into the SARs. Once data are validated through the NRDA process they become public so they can be used in SARs. What validation means may be a bit up in the air. The cooperative work plan work will be public but some of the UME work is not part of the cooperative work plan and may be more held up in legal proceedings. Moore said it wouldn't hurt for the SRG to urge the process toward maximum transparency in the shortest time possible.

Discussion of 2012 abundance estimates – Palka explained that the first set of available abundance estimates from the NE 2011 surveys were in the draft 2012 SARs seen last year at the SRG meeting. At that point she requested help because the models that were tried were not fitting in the cases when the detection functions from the two teams on the 2011 aerial survey were shaped differently. She did not receive any guidance from the SRG, thus contacted Jeff Laake (NMML) for help. Laake pointed out a way to deal with this type of data. Following Laake's advice, Palka added an interaction term to the detection function model, at which point the models fit the data well. Because of that change in the analysis of the 2011 aerial survey data some of the estimates were revised. The change affected the harbor porpoise estimate to the greatest extent. Those estimates with the corrected detection function were the ones that went out to public review. After public review, Palka found a coding error that had resulted in the use of the wrong effort set for the aerial survey. Fixing this error, the subsequent corrected estimates now included the correct detection function (as developed before) multiplied by the correct effort data for the aerial survey. In addition, Palka said after the public review she also checked for responsiveness to the ship, which then resulted in a change in the Risso's abundance estimate because there was an indication of responsive movement of only this species. Palka noted that these issues were largely due to rushing the analysis process. She noted that it is difficult to get abundance estimates completed by December when the survey ends in August/September. Thus in the future, estimates will be more thoroughly reviewed before being presented, which means the estimates will mostly likely be available later and so may not be available to be reviewed at a February SRG meeting. Read noted the miscommunication between the SRG and Palka regarding her request for advice. Read stated that the bigger issue is timing, and we need to recognize the consequences of that. Garrison said there is the recognition that if NMFS is asking for a more thorough review, there is a lot of documentation they would have to add, which would also add time. Read said it would also require more time and expertise on the SRG. Palka said a related issue is the timing needed to thoroughly review the annual bycatch estimates. In order to get these reviewed the SRG needs the expertise and NMFS needs to present more documentation. Read said he would be happy to devote more time in the meeting to the analytical details. Moore said there is a need for adequate quantitative expertise on the SRG.

Status of 2012 SAR – Bettridge (NMFS F/PR) said she expects the 2012 SAR (minus the ten stocks that are now out for a second public comment period) to be finalized this week. They will be available electronically. Palka asked if it is now the standard operating procedure that all changes in numbers need to go out to a second review. Bettridge said that change was seen as significant. Some of the stocks were subject to TRPs. We would like to avoid this in the future. Young said nobody wants to micromanage the science but if a change is going to affect PBR, especially when a fishery is involved, then it probably is worth at least sending a notice of change out. Garrison said there could almost be a submission for SRG review by September so things can be reviewed prior to having to put the numbers in the SARS. Palka said NMFS would like to have SRG review of the bycatch and abundance estimates before they go into the SARs. Wells said "I see that as part of our mandate". Moore said it might help to identify a subcommittee structure so Palka and other SAR authors and contributors know who to turn to for certain issues. Read said that would be something worth talking about.

Harbor Seal Abundance estimates – Waring presented a summary of the fieldwork and analysis that went into the 2012 harbor seal abundance estimate. A reference document detailing the methodology is under review. The 2012 estimate of 70,142 was 29% below the 2001 estimate (99,340). Four hypotheses were presented to account for the decline. 1). The number of seals out of the water and available to be counted was estimated in 2012 as opposed to complete counting in 2001; 2). The estimates differ because the correction factor was different in the two surveys, being 2.54 in 2001 and 2.27 in 2012. The number of radio-tagged seals was nearly the same, but in 2001 we used information from 10 juveniles and 9 adults, while in 2012 we used information from 5 juveniles and 13 adults. We expect different haulout behaviors between juveniles and adults during the pupping and mating seasons; 3). We did not sample where part of the population was during the survey. The percentage of pups in the surveys has increased from 6.4% in 1981 to 24.4% in 2001. In 2012, pups constituted 32.1% of the count. The percent of pups is extremely high, even for an increasing population. It is likely that there were some parts of the population that were not available to be counted either because they remained farther south in New England or were more northerly in Canada; and 4). A final possible reason the 2012 estimate is lower is because the population is no longer growing and has, in fact, declined. Read wondered if there is anything short of complete survey to test the hypotheses of decline. He has concern because of the decline of harbor seals in Scotland. Waring said the counts from NMFS's SE Massachusetts surveys may help. Moore asked if gray seals could be preying on harbor seals. Waring said a master's student had looked at inter-species interactions and saw no aggression. Lawson contributed that aggressive interactions between harbor and grays have not been observed in Canada. Lawson said he was interested that the

proportion of pups increased so much between the two surveys. Wells tasked Lawson and Moore with a way to move forward.

Review of Serious Injury determinations – Tim Cole and Allison Henry from the NEFSC called in to explain the new large whale serious injury determination report table. These determinations had been done under the new serious injury guidelines developed by NMFS which went into effect this year. Most discussion centered more on how these data were incorporated in the SARs than on review of the determination process. Young said she would like to see all the serious injury cases for each species in the reports for those species rather than having to refer to the serious injury document for the details. Both Gouveia and Patrice McCarron (Maine Lobstermen's Association) said they appreciated having the nationality of an injury or mortality case be presented as unassigned if the gear or event could not be identified to country instead of the current practice of assigning those cases to the nationality where they were first documented. Young said she was concerned that the unassigned nationality cases would get lost in the accounting.

Waring discussed the procedures followed in drafting the small cetacean and pinniped serious injury determination report and how those determinations were used in the 2013 SARs. Garrison presented the Southeast Fisheries Science Center's determination process, which has not resulted in a formal report at this point, but the new guidelines were applied to assess SI of strandings with human interaction and those evaluations are included in the 2013 SARs.

Moore said that the SRG should make the point that disentangled animals should not count as 0 against the fishery, with disentanglement resulting in the removal of the onus for entanglement. Wells asked how serious injury determiners are taking into to account the possibility of resighting and double counting of entangled animals. Garrison said there is that potential but they compare time and area of the reports. If the entangled animal is attributable to a fishery where there is an observer program in the same time and area it will not be included in the determinations in order to avoid double-counting.

Review of SAR appendices – Jessica Powell reviewed the few changes in the Fishery Descriptions appendix. The SRG had no comments on that or other appendices.

Spotted dolphin genetics – Patty Rosel (SEFSC) reported that genetic work from her lab continues to indicate significant differentiation between Gulf of Mexico and Atlantic spotted dolphins. In addition, significant genetic differences have been found in the Northwest Atlantic between animals in shelf vs. oceanic waters. These genetic differences are in line with anatomical differences described by Perrin. She suggested that NMFS should at least consider splitting the Atlantic spotted dolphin into two stocks, shelf and oceanic. Maybe the Gulf of Mexico stock should be 2 stocks as well. Wells said he would be supportive of that differentiation.

Review of 2013 SARs

Wells said that overall he was impressed with the SARs this year, and that NFMS has been responsive to SRG comments. In particular, he appreciated the increases in discussion of contributing mortality factors and possible cumulative effects. New stocks are appreciated. There has been progress on the potential for trend analysis.

North Atlantic Right Whale – Moore had no comments. Powell had no comments. Young said one right whale missing for the tables #3911 – the 2009 calf of #2611 from 12/25/2010. Wells read a comment from Nowacek who asked what 'moderately variable' means in the productivity rate section. Also, since 2001 there really is no appreciable increase in number of calves per year. Gouveia, in an attempt to make sure we didn't forget points brought up in the earlier discussion, mentioned that some language should be put in each of the large whale SARs that clarifies that the serious injury numbers have been recalculated using the new guidelines. Also the issue of the nation of origin of mortality and injury should be clarified and consistent. There is lots of old text in the report and it is hard to make the connection that there has been positive progress. Bettridge said that on a national level there will be an effort to slim the SARs down and eliminate out-of-date language. McCarron said it was mostly a matter of emphasis. There is too much focus on a time when the calving rates were so low. The text could be refreshed a little without losing its essence. Young said she would prefer to see all the serious injuries listed with the mortalities in Table 2.

Humpback Whale – Gouveia said he appreciated that this report has eliminated of some of the old information and

that it now reads a bit better. Moore pointed out that there has now been a match between a humpback sighting in Franz Josef Land and one on Silver Bank. This can be cited as Moore pers. comm. Young said the tables are missing an animal from July 10, 2008 that was seen off Chatham. Moore asked why there were still no MoNAH results. He also was interested in the statement "Because it has never been shown that serious injuries and mortalities related to ships or to fisheries interactions are equally detectable, it is unclear as to which human source of mortality is more prevalent". That depends on how hard you look. Should someone look into this? Does it impact the process to know the answer to that? It is an interesting question but we don't ask for other species so maybe it doesn't belong in here. Lawson said photographic records from Newfoundland have shown a number of adult humpbacks remain year-round, particularly on the island's north coast. In collaboration with colleagues in the French islands of St. Pierre and Miquelon, a new photographic catalogue and concurrent matching effort is being undertaken for this region. He also thought the annual SI&M number seemed low. Mortalities in the Canadian crab and whelk pot fisheries are probably underreported. Moore said there is now an update on the 2003 UME. A final report has now been submitted to the working group.

Fin Whale – Read had commented that the SI value does not make sense. Moore said each report needs the explanation about the SI value. Young asked why the Canadian Trans North Atlantic Sighting Survey (TNASS) estimate was the best estimate. Palka said the SRG recommended it in 2012. Palka stated that the TNASS number is probably more representative of the whole stock, and that there is no way we can proportion how the animals use the US waters.

Sei whale – Moore, Lawson and Wells were reviewers. There were no substantial comments.

Sperm Whale – Read , Wells, Moore and Lawson were reviewers. There were no substantial comments.

Minke Whale – Read had no comments. Moore posed a philosophical question – if we knew as much about minkes as we did about humpbacks, would we be more worried about mortality? Are we doing our best management because we are acting out of ignorance? He also had concerns regarding the stock definition. Palka noted that the more we learn about minkes around the world, the more it looks like their stock structure is similar to that of bottlenose dolphins. They may be very localized. It would be good to have a recommendation that we need more information on stock structure on all species for which we know too little. Moore said we can take advantage of existing samples.

Risso's Dolphin – Read said it might be helpful to describe the nature of the responsive movement (away or towards vessel). Young suggested using the trend language that is found in the SE reports. Wells had only editorial comments.

Common Dolphin – Read and Lawson were reviewers. Read asked why the TNASS estimate was not used as the best abundance estimate. He recommended using TNASS number. The SARs should be consistent. Rosel stated that genetics shows a large population, at least historically.

White-sided Dolphin – Read wondered why NMFS had the caveat about recent or future abundance surveys.

Striped Dolphin – Lawson had editorial comments only. Young said the better language (the SE version) about trend analysis should go here.

Harbor Porpoise – Read asked why there was no estimate of bycatch for bottom trawl in 2011. Palka explained it was because there were so few takes. Also, she put forward that NMFS would like to do the bycatch estimates on more of a rotational basis. Moore said it should be noted that it is low compared to gillnet bycatch. Why did the same number of observed gillnet takes result in lower bycatch. Palka said we talked about that in the team. Some of the analysis was redone because of misrepresentation of pinger use in the data. She said she would have to get back to the SRG with the full explanation. It was mentioned that the sentence about the closure trigger could be clarified.

Cuvier's Beaked Whale – Read and Wells had only editorial comments. Lawson pointed out that the language should be more consistent about the ability to distinguish species at sea.

Blainville's Beaked Whale – Read said there was a discrepancy between the table and the text. Moore had no

comments. Wells said it might be good to clarify when species are lumped and when they are not.

Gervais Beaked Whale – Wells said the reports should clarify when Ziphius are included and when not. Also, the section about European strandings does not seem appropriate here.

Sowerby's Beaked Whale – There were no substantial comments.

True's Beaked Whale - There were no substantial comments.

Harbor Seal – Read asked why unidentified seals are not prorated to species in bycatch estimates. Garrison said NMFS has not partitioned unidentified animals in abundance estimates. Palka said NMFS doesn't prorate unidentified dolphins for any other bycatch. Read also said it would be good to list the four hypotheses about the decline in the abundance estimate. Lawson pointed out there was a decline of a population in the islands of St. Pierre and Miquelon off the south coast of Newfoundland. He also said it was interesting that in Canada there was a die off of harp seals during same time period as the harbor seal UME.

Gray Seal – Read said it seems difficult to conclude that annual removals of 4,978 are insignificant given there is no estimate of abundance for U.S. waters.

Harp Seal – Read and Lawson were reviewers. There were no substantial comments.

Dwarf sperm Whale – There were no substantial comments.

Pygmy sperm Whale – There were no substantial comments.

Pilot whales – These reports are pending.

Atlantic Spotted Dolphin – There were no substantial comments.

Pantropical Spotted Dolphin – Lawson agreed that he likes the trends paragraph. Moore wondered how can the SRG focus resources toward increasing the capability to develop trends. Garrison said it would be nice to do surveys every 2 years. Moore said one can't subsample. Palka said especially now with so many changes in distribution. Garrison said if we have back to back surveys every 5 years then we can do trend analysis. Palka pointed out that NMFS is trying to get at population trends from the modeling direction as well.

Rough-toothed Dolphin – There were no substantial comments.

Clymene Dolphin – There were no substantial comments.

Spinner Dolphin – There were no substantial comments.

Offshore Bottlenose Dolphin – Read pointed out that the recovery factor needs to be changed.

Bottlenose Dolphin Coastal Northern Migratory – Wells commented on the "text forthcoming here" section. We know interactions are happening but we just don't have observed takes. Young said the 'other mortality' section second paragraph about habitat should maybe be in a habitat section instead of other mortality section. Rosel said she thought NMFS decided to put it here because the GAMMS III was going to talk about habitat sections. Read said it would be helpful to hear some explanation of the difficulties encountered in analyzing the 2010 and 2011 aerial surveys and particularly the problem of left-truncation. He also commented that with PBR = 86 and SI/M 3.4 to 5.0 why is this not ZMRG?

Bottlenose Dolphin Coastal Southern Migratory – Wells made the same comment about the forthcoming text.

Bottlenose Dolphin Coastal SCGA –Moore pointed out that there is a hidden text index tag here for spotted dolphin.

Bottlenose Dolphin N FL – There were no substantial comments.

Bottlenose Dolphin NNCES – Read thought the research take had been matched to the catalogs but he will check.

Bottlenose Dolphin SNCES – Read commented that Urian et al. in review provides an abundance estimate. That paper was cited in the NNCES report.

Bottlenose Dolphin NSCES (new SAR) –Wells asked what we do with animals that fall into the gaps. Rosel replied that unclassified animals are mentioned in stocks to the north and south. Wells suggested perhaps putting some text in the introduction to the whole document. Moore commented that there is a lot of boilerplate overlap. Why do we need all the duplication? Garrison said there are differences in terms of surveys used for abundance estimates and other things.

Bottlenose Dolphin Charleston – Wells commented that there is extensive discussion about health assessment but nothing that gives perspective to other stocks.

Bottlenose Dolphin NGSSCES –Powell wondered about the discussion of jet skis and reactions–is that something peculiar to this stock? Maybe it should be explained that the study was done on this population.

Bottlenose Dolphin SGES – There were no substantial comments.

Bottlenose Dolphin Jacksonville – There were no substantial comments.

Bottlenose Dolphin IRLES – There were no substantial comments.

Bottlenose Dolphin Biscayne Bay – There were no substantial comments.

Bottlenose Dolphin Florida Bay – There were no substantial comments.

Risso's Dolphin GMex – There were no substantial comments.

Bottlenose Dolphin Gmex Oceanic – Wells made a comment about the whistle studies mentioned at the bottom of the stock definition paragraph. He commented that genetics studies would be stronger than whistle studies, and it might just say that samples are available and the genetics work will be done.

Wednesday, March 20, 2013

Opening Remarks, Introductions (Jim Valade, USFWS)

> *USFWS did not provide ASRG members with draft manatee SARs this year. The previous draft manatee SARs just completed the solicitor's office reviews and the Service expects that the NOA will be going out shortly.*
>
> *The Service's plans to propose a reclassification of the West Indian manatee are under review and the status of this effort is currently on hold.*

State Manatee Research Program: Background, Research Priorities (Leslie Ward-Geiger, FWC/FWRI)

> *Mission, Florida manatee management plan, goals, funding, research focus.*

Manatee Population Assessment (Julien Martin, FWC/FWRI)

> *Manatee abundance estimation, photo-id, genetics id, and fractions of mortality.*

Q: What is the quasi-extinction level for Florida manatees?

- Policy/management issue, not a research issue.
- The Service looked at several scenarios for Florida manatees when drafting its 2007 Status Review. The agency highlighted a quasi-extinction level of 250 animals on either coast within 100 years.

Q: Are the new population estimates available, if not, when will they be?

- FWC is currently working to improving the analytical methodology needed to estimate abundance. We are still analyzing data collected during last year's survey and we anticipate being done with the analysis before the end of the summer.
- In general, once survey and analytical methods have been developed, it shouldn't take as long to provide results in the future.

Q: Do you intend to use a single model or multiple models? If you use multiple models, will you average results?

- Yes, we will use multiple models and are considering using model averaging methods.

Q: Does FWC plan to continue with the usual synoptic surveys?

- We planned to fly the traditional survey this year; however, the weather was too warm and we did not meet the survey criteria. After evaluating the new methodology, we will consider replacing the existing synoptic survey methods. For now, we will fly the traditional survey until we can replace it with improved methods.
- The new methods are more challenging to implement, complex, and expensive.
- Need to consider if the new methods are practical to implement and acceptable levels of precision can be achieved.

Q: Please compare costs of the old surveys with the new survey methodology.

- It costs approximately three times more to fly one coast. The old survey method covers both coasts; as such, flying both coasts with the new methods will cost six times the cost of the old surveys.
- The new survey method may require flying one coast per year, given costs.

Comment: Suggest conducting old method surveys annually, new method surveys once every five years.

Q: Your new survey method appears to be similar to what's being done in Puerto Rico: do you have confidence in the Puerto Rico survey methodology?

- The Puerto Rico surveys differ in scale and require greater circling effort to estimate group sizes.
- What works in Puerto Rico may not work in Florida.
- Per JP Zegarra, the Puerto Rico surveys use hot spots and detection probabilities are calculated for these spots. Methods are being developed for areas away from the hot spots (including the entire island). The survey methods are being tested; there are three more test surveys to be flown.

Q: Do the new methods duplicate John Reynolds's survey methods at the power plants (dependent on weather, etc.)? How do drone surveys compare with Reynolds' methods?

- Don't know, would like to coordinate with Reynolds, work in conjunction with him.

Q: When will the survey results be analyzed?

- Hope to have analyzed by this summer.

Q: In regards to drones and aerial photography, how do you get around the FAA?

- UF doesn't have approvals from the FAA, difficult to fly drones around power plants, in regulated areas.
- Have placed camera in a box on plane, have tested on ground, seems to be working.
- Can't use drones at present, new legislation being reviewed in Tallahassee might change current situation.

Comment: Suggest attaching camera to plane, might be more practical, will provide vertical perspective. (Practice works well with Canadian harp seal surveys.)

Regional estimates of manatee survival and breeding probabilities (Catherine Langtimm, USGS)

Regional estimates of mean and temporal variance in adult survival and breeding probabilities, adult survival estimates during years of extreme cold, red-tide events, and hurricane strikes, and newly developed mark-recapture models that address issues of bias and precision specific to Florida manatees.

Q: Do regional survival estimates vary independently?

- Yes, they do vary independently.

Q: Do you have new regional survival estimates?

- Yes, we have new survival rate estimates for the Northwest and the Upper St Johns River through last year.

Q: What effect does red tide have on survival rates?

- Red tides have a strong effect on survival rates, manatees come back after these events.
- Survival rate estimate of .97 when no event, decline by .042 during event.
- Need to remember that adult survival rate estimates are not an indicator of population status, should include other variables and population models.

Q: What criteria are used to identify a major red tide year/event?

- Spatial and temporal criteria, carcass counts, and expert elicitations are considered when identifying an event.

Manatee Genetics (Margaret Hunter, Robert Bonde, USGS)

Overview of manatee genetics with a review of recent findings relative to manatee populations and stocks, genetic research priorities and future capabilities and research.

Q: How does the genetically determined population structure correspond to the identified management units?

- Genetically, we didn't see significant differentiation between management units and there was significant, although subtle, difference between the two coasts. The manatee population in Puerto Rico was very genetically distant to the manatee population in Florida.

Q: The genetics seem to support two stocks, one on either coast. Would more markers show greater resolution and possibly differentiation between management units?

- You might, but with the current markers, you won't get much finer scale resolution. The number of microsatellites, 11 and 18, is acceptable for genetic studies and should provide resolution at a fine-scale.
- FWC, in a preliminary/early assessment, saw increased relatedness among units when looking at seasonal carcass samples, (USGS didn't see this, used both biopsies and carcass samples)

Q: If there's low allelic diversity, what are the reasons for it, what are the concerns?

- Florida manatees experienced a founder effect and/or a bottleneck at some point in their history during the last 10,000 years. Smaller population sizes and fluctuations in those sizes over time can also keep diversity low.
- At times, low levels of allelic diversity are adequate to sustain populations, but may not provide much protection against catastrophic events.
- Low mtDNA diversity is unusual compared to other species, such as elephant seals, pilot whales, etc.
- Coastal marine species often have lower genetic diversity, fewer barriers, may allow for interbreeding.

Q: You mentioned that a hypodermic poker is used to collect samples. Please elaborate.

- The poker is a biopsy needle equipped with a dental broach. When inserted, the needle grabs tissue and retains skin cells when the needle is withdrawn.
- It's an effective tool and has been used several hundreds of times to take samples with little effect on the target animal.

Manatee Mortality and Rescue (Martine deWit, FWC/FWRI)

Overview of manatee mortality and rescues, including death and rescue categories.

Q: Please describe trends in the percentage of watercraft-related manatee deaths in recent years.

- The number of reported carcasses with watercraft-related cause of death has been consistent and generally is about 80 to 90 reported deaths per year.

Comment: The percentage seems to have plateaued, even with increasing numbers of carcasses. (Looked at stacked histograms for past 5-years versus all years.) *Per FWRI, may want to re-evaluate comment: the percent watercraft in 2008 was 27% and in 2010 it was 11%.*

Q: Have you seen changes in fat layers over time?

- Fat is measured in a couple of ways: we make general observations of mesenteric fat, etc. (small, abundant, etc.) and measure fat layer thickness along mid-lines.
- In one study we observed changes in subcutaneous fat coinciding with changes in reproductive status and condition.

Q: How much of a threat is exertional myopathy?

- It doesn't appear to be a significant threat, it's probably something that's been there awhile.

Q: How long does it take to show up in a manatee?

- This was first observed in female manatees monitored for rescue response. They were pursued for at least five days before dying.

Q: Is this a population density issue?

- It's hard to say. There are more males now, it can be problematic and will likely become an increasing concern in the future.

Q: Does this involve large adult females or smaller ones?

- It mostly involves large females and may be related to prolonged estrus and longer mating periods.

Manatee Entanglements and Ingestion (Tom Reinert, FWC/FWRI)

Manatee entanglements and ingestion of fishing gear and anthropogenic debris.

Q: There appears to be a decrease in the number of monofilament rescues since 2005. Is this correct?

- Not sure, the decrease may be more of an artifact associated with data collection.

Q: When did the monofilament education program begin?

- FWC's efforts began in 2000 when John Cassidy was hired on grant funds to promote the program in Florida.
- The program is now a cooperative effort that involves FWC and other entities.
- The program took off and is now internationally renowned.
- Messages include don't discard monofilament, use monofilament recycling bins, etc. (The bins are emptied by volunteers and shipped to recyclers.)

Q: Do you see many braided fishing line entanglements?

- We've only seen a couple. We have seen occasional pieces ingested by manatees.
- With increasing use, we may see an increase in the number of amputations.
- However, it's designed not to break as often as regular fishing line and may be less of a threat.

Q: Are most of the trap entanglements related to the blue crab fishery?

- Seemingly. We've never seen known lobster trap gear entanglement. Gear is described as "crab trap" to include possible stone crab traps but majority seem to be blue crab trap. May be explained by fished habitats (e.g., lobster traps are near reef systems whereas blue crab traps are near seagrasses).
- In Sarasota County, there are about 300 blue crab traps being fished. During stone crab season, up to 8,000 stone crab traps are deployed. We haven't seen any additional manatees caught in these traps despite the increase in number of traps.

Q: Can you grab tissue samples for genetics when you assist and release gear-entangled manatees?

- Yes, it's possible.

Q: How likely are disentangled and released manatees to die?

- When possible, these animals are photographed and identified for future identification.
- Mortality data suggests that most of these animals probably would have survived if we hadn't intervened.

Q: If you didn't disentangle these animals, how many would die?

- We don't know. We see manatees in the wild that have one or both flippers amputated, possibly from fishing gear, flukes amputated, etc. and they seem to be okay.

Q: Is there a derelict crab trap removal program in Florida?

- Yes, the State maintains a trap removal program,
- During certain times, fishers must remove all traps from an area. After their traps have been removed, derelict traps are removed.

Q: Have you observed any sub lethal effects associated with gear entanglements (loss of body condition, etc.)?

- Manatees with self-amputated limbs or flukes seem to resolve fairly quickly.
- If we find any animals with significant entanglements, we rescue them.
- Continued untreated entanglement may have long-term sub-lethal effects on fitness (e.g., locomotion, feeding, mating, and nursing).

Q: Of the manatees that have been rescued due to entanglements, how many of these die?

- The only ones that have died are ones that ingested gear. All of the others were treated and released.

Managing Warm-water Habitat (Carol Knox, FWC/ISMS)

Q: How quickly do manatees recolonize restored warm water sites?

- It's hard to say. During restoration activities in the lower Suwanee River, manatees were observed checking out things during construction. They appeared frequently and seemed to constantly check out options.

Q: What's going on at Wakulla Springs?

- Manatees "re-discovered" this spring several years ago and use has been increasing each year.

Comment: Manatees aren't always quick to recolonize, their appearance at sites may be gradual.

Q: As power plants go away, are there enough springs to replace them?

- This is a big challenge, especially on the east coast where there aren't any springs (there may be some passive alternatives, but not much more).

Comment: In Kings Bay, most manatees originally used the Main Spring. Because flows have been reduced at this site, manatees are now using Three Sisters Springs.

Comment: There are some lost opportunities (springs that should be accessible to manatees). These include Silver Spring and Rainbow Spring, first order magnitude springs that are now above dams originally created for the Cross Florida Barge Canal. The barge canal was never completed and these potentially critical sites are mostly inaccessible to manatees; Rainbow Springs is inaccessible.

Managing Warm-water Habitat (Julien Martin, FWC/FWRI)

A decision support tool to be used for managing the manatees' warm-water habitat.

Comment: SDM users generally really like or dislike this approach, it will be interesting to see the outcome. Users don't necessarily like being pinned down by outcomes which quantify risk and uncertainties.

Comment: This initiative will address the loss of warm water in each Florida region, will characterize each region and identify regional options for the future.

Manatee Core Biological Model Update (Mike Runge, USGS Patuxent)

Preliminary results, updated manatee CBM analyses.

Comment: Concerned about the increasing frequency of cold fronts and front lines that move farther south, not sure captured in model.

Q: Warm water carrying capacity will likely decline over time. It's assumed that we're going to lose a number of power plants and that there will likely be improved access to springs. Does the warm water carrying capacity assessment consider sites not currently in use today but possibly in use the future?

- The carrying capacity assessment did consider some currently dammed and inaccessible sites. However, not all were considered and, as such, some aren't addressed in the model.
- There's no regulatory assurance that warm water will stay and it's considered likely that it will go away. There are also no assurances that dams will be removed. SDM should address these concerns.

Q: Does the model look at the effect of increasing numbers of watercraft-related manatee deaths on the population, increasing risks to the population?

- Haven't done this yet, need to remember that the overall percentage of watercraft-related deaths isn't increasing and that warm water flows haven't changed much.
- Still, if you have twice as many manatees or twice as many boats, you would expect more manatee deaths to occur. If you were to increase the number of watercraft-related deaths you would increase the likelihood of extinction.

Comment: Fifty years ago we were seeing an increase in the growth of exotic plants, an increase in industrial warm water discharges, and fewer watercraft-related manatee deaths. Now we're seeing a decrease in available forage, the number of power plant outfalls, declining spring flows, salt water intrusion, etc. In Brevard County algal blooms are responsible for significant SAV losses. We need to be concerned about how frequently this will occur. The system is changing and declining in quality. We need to consider the frequency at which these occur and their overall effects on manatees. We expect to see more changes and not necessarily in a positive way. Did you look at combinations of changes?

- Didn't think hard about this, what you describe is more complicated, there could be more problems out there that we didn't anticipate (i.e., density effect, exertional myopathy, etc.)

Q: In regards to cold stress-related mortality, you said that you weren't concerned about density effects. If this is true, are manatees at capacity?

- If this is true, it's only true on the east coast and in the southwest. We assume that manatees can take advantage of optimal capacity. There are also fidelity effects – as distribution changes, we see carrying capacity at sites but not at the regional level. We didn't see as much mortality during the second winter.

Q: In regards to the likelihood of quasi-extinction, what's an appropriate population level to manage, a single population, two coastal populations, four management units?

- The CBM doesn't allow for movement between regions. Movements are rare between coasts. From a biological standpoint, can argue for coastal populations (supported by genetics) and think that these would constitute significant portions of the range.
- Coastal populations may be the better unit for assessing stocks.
- Management units are demographically identifiable and management strategies are different between units (and most significantly, warm water management).

Comment: There are four regions and manatee use of warm water sites varies in each region. For example, there's a big difference in the number of manatees using power plants in the different regions. On the east coast, 80% of the manatees use power plants, on the southwest coast manatees use power plants, springs, and passive warm water sites. With the loss of warm water in the southwest, there's a greater chance that manatees will find northwest Florida's springs. On the east coast, the only chance that manatees will have is to move to Biscayne Bay. Recognizing that the CBM doesn't capture movements between regions, it would seem that the probability of extinction is twice as high on the east coast which has 45% of the population.

Thursday, March 21, 2013

NEFSC Fieldwork Updates – Palka explained that NEFSC conducted two aerial surveys in 2012 - Spring and Fall. In 2013 there will be a ship survey in summer. She should be able to get new abundance estimates for the northern species. Read asked why there was no plane for the summer survey. Palka said it was a funding issue. She said that the estimate might be a habitat-driven abundance estimate. NEFSC has hired a contractor dedicated to doing the AMAPPS modeling and they are looking for another modeler for the SEFSC. The goal is to eventually turn habitat models into full abundance estimates. Moore mentioned that New England Aquarium (NEAq) has been doing aerial

surveys in the BOEM area south of the Vineyard and wondered if there was going to be any combining of the data. Palka said yes, NEFSC has been coordinating with NEAq. Lawson asked if there would be an acoustic component to the summer cruise. Palka said yes, both a passive towed array and the EK60 for active acoustics. Erin LeBreque has been working up the 2011 EK60 data. Read said it will be interesting to see how the EK60 data fits together with the rest of the data. Palka said she also has a student who is looking at spatial autocorrelation with some of the survey data and went into some of the details of the modeling work.

Peter Corkeron and Sofie Van Parijs (NEFSC) called in on the phone to present updates, respectively, on the right whale and acoustics programs. Corkeron said there were financial constraints but NEFSC managed to get enough money to overcome most of the problems. 64 surveys were flown in 2012, amounting to 275 hours. Teams sighted 279 right whales (including repeats of individuals). There were no surveys flown during Aug-Oct 2012. This was an odd year for right whale movements and sea surface temperatures. Read asked where he thought the whales were. Corkeron said he had no idea maybe further offshore. Mark Baumgartner had gliders out in November and December in Jordan Basin, Gulf of Maine. He detected right whales and then found them by ship, but NEFSC flew and didn't see anything. Other work included a ship survey in May during which the team identified a new calf for 2012. Fieldwork on the southeast calving grounds is ongoing. 17 of the 19 calves born in the SE this year have been sampled for genetics. They have not been finding much mom/calf vocalization. David Laist (MMC) asked if researchers can distinguish between a calf and an adult. Van Parijs said yes. The right whale sightings webpage now includes the SE, with the page being mirrored on the NE and SE websites. For 2013, flights are reduced and the May cruise has been cancelled pending budget review.

Van Parijs made a presentation on the NEFSC acoustic research. One of the projects underway is the Cetsound project. Progress on this project included holding a Cetsound symposium on May 23 & 24th in DC (symposium report available online at http:\\cetsound.noaa.gov); finalizing CetMap (Arctic and Western Atlantic density models) and SoundMap projects; and working on the frame work for a NOAA Cumulative Noise Strategy. Acoustic work on cod spawning habitat included analyzing spawning activity of cod throughout line array for data collected on 9 Marine Autonomous Recording Units (MARUs) from April through August 2012 as well as looking at multi-year data archives for the presence of spawning cod grunts throughout the southern Gulf of Maine. Multi-year MARU data are being analyzed for seasonal and diel occurrence of blue, fin, humpback, minke, and right whales. Towed array research has resulted in a description of Sowerby's beaked whale echolocation, as well as the development of three dimensional tracking of North Atlantic right whales and beaked whales. Methods for passive acoustic tracking of marine mammals: estimating calling rates, depths and detection probability for density estimation were published in a. DCLDE book chapter. Using autonomous acoustic technology there has been a successful real-time testing of a detection system for baleen whales. NEFSC is currently looking for more funding to carry out glider surveys for fish and baleen whales at larger scale. Planned MARU deployments in 2013 include:1). mid-Atlantic North Atlantic right whale migration corridor with Duke; 2). possible mid-Atlantic & Georges Bank seasonal occurrence of sei whales, 3). continuous acoustic soundscape monitoring in SBNMS; 4). possible MARU deployments to overlap AMAPPS FY13; and 5). 1 MARU in a cod spawning area to continue long term monitoring.

Waring provided an overview of seal work. In December, live captures were conducted in Moriches Bay, NY. The haulouts were small and animals were skittish. One seal was captured. A full suite of samples was collected and the animal was satellite-tagged, but the tag is not transmitting. In May 2013 NEFSC is planning a live-capture of gray seal adults on Cape Cod. Safe handling of adult seals requires sedating the animals. Mike Hamill (DFO), who has expertise in the use of sedation on gray seals, will assist in the work. NEFSC is also working with Dave Johnston (Duke) whom is providing Sea Mammal Research Unit (SMRU) GPS cell phone tags. There are a lot of management issues surrounding seals these days. Gray seals are being blamed for many things (e.g., reducing fish populations, degredation of coastal beaches and water quality, and attracting white sharks to Cape Cod. Massachusetts Division of Marine Fisheries researchers have satellite tagged white sharks and they are interested if gray seals and white sharks have overlapping offshore habitat. NEFSC may also attach satellite tags on the gray seals. Read asked how many tags will be put out. Waring said he was not sure how many of the cell phone tags Johnston will have, but NEFSC has one SMRU satellite tag from the turtle program. Lisa Sette (Center for Coastal Studies) may also provide sonic tags. Read commented that the cell phone tags work great.

Bettridge said that local citizens have expressed an interest in culling or other measures, but the lack of funding for research is impeding NMFS assessment of seal populations and the agency does not have any approved dispersal devices for this species. Moore said an animal photographed on Great Point, Nantucket showed up on his necropsy

table full of buckshot and lures. He said a recommendation the SRG might make is that funding to support more research is overdue. Waring also discussed how the source of bycaught animals has dried up, and NEFSC is trying to find a mechanism for fishermen to bring in carcasses. Read said we had the same discussion with gillnetters in the Gulf of Maine 15 or so years ago. It never worked. Read agreed we need to push harder on this. SRG will make a recommendation.

SEFSC Fieldwork Updates – Garrison explained that in 2012 SEFSC conducted Spring and Fall AMAPPS aerial surveys. They were broadscale surveys with finer scale tracklines in designated windfarm areas. In addition, SEFSC has projects with BOEM studying sperm whales and estuarine bottlenose dolphins in the Gulf of Mexico. The first field sessions for each species were conducted in summer 2012. A summer cruise in 2012 focused on Gulf of Mexico sperm whales. There were some problems with satellite tag anchors and they only achieved a 3 month maximum deployment. BOEM-funded bottlenose dolphin work focused on stock structure, with field-work in several Texas estuaries. Right whale acoustic arrays are in place on the calving grounds - 2 arrays of 6 units each. SEFSC is expecting to continue this work for at least 2 more years in same pattern unless there is reason to change. They will be evaluated after this year. Deepwater Horizon NRDA field work has dropped off. Some photo-id for health assessment is still going on. An aerial survey under the AMAPPS project is going on right now. The summer 2013 shipboard survey may be severely reduced but this is still in flux. If SEFSC end ups with 41 days they will do another sperm whale cruise in Gulf, if more days are reinstated than they will go to the Atlantic as originally planned for AMAPPs. If they go to the Atlantic then a ship will be chartered for the sperm whale work. Also, a short pilot whale biopsy cruise is planned in the northern mid-Atlantic. Laist commented that the passive acoustic work along the east coast should consider different types of arrays that can pick up the right whale migration. Garrison said last year SEFSC talked about evaluating the aerial survey configurations. They have done that and will try to figure out how to take advantage of those results. The deployments will probably involve pop-ups, the goal is to pull it off in this fiscal year. The arrays in the calving area now will stay there, but corridor work will be in addition to that. We need to understand the vocalization behaviors further. Read said his lab has been talking with VanParijs about deploying an array off North Carolina. Moore suggested the mid-Atlantic corridor as a right whale habitat, and that habitat should be mentioned in the SAR. Garrison said the right whale Southeast Implementation Team (SEIT) has been talking about that. The focus is on the south part of the mid-Atlantic. Laist said there is interest in the distance offshore that the Seasonal Management Areas need to go. Managers need more information to support where the offshore boundary should be. Read said theye fly monthly surveys out to 70-80 miles offshore and have been doing that for the last few years and they have had only a handful of sightings. Duke has had a High-frequency Acoustic Recording Packlage (HARP) out there too and there weren't many vocalizations detected. Garrison said he has been working on some analysis of right whale aerial sightings and should have some information to inform the SMAs the next time they need to be re-upped. The Cape Hatteras area is a choke point.

Garrison said the right whale calving season update is 20 calves, including the one born in the northeast. Only 15 non-breeding whales were seen in the SE this season. Three of the moms were animals that had been previously disentangled. There was one dead right whale, one self-reported collision, and one calf photographed with prop wounds.

HQ Updates –Bettridge (F/PR) said that the Protected Resources office now has an acting office director. In the next couple months a director should be announced. Nicole LeBoeuf (Chief, Marine Mammal and Sea Turtle Conservation Division F/PR) plans to attend all three SRG meetings. Bettridge is now officially in the position that was held by Tom Eagle. Waring pointed out that Bettridge had developed a nice plaque for retired SRG members. Bettridge said that NMFS really appreciates the time and effort of SRG members.

Ship Strike Rule. Bettridge said a new proposed ship strike reduction rule is currently with the Office of Management and Budget (OMB) (as the current rule is scheduled to expire in December 2013). Read asked who OMB consults with during the inter-agency review. Bettridge replied that OMB consults with the Coast Guard, Navy, Dept. of Interior, etc. LeBoeuf added they will also share it with the Council on Environmental Quality (CEQ). Bettridge said other groups may request an audience with OMB.

GAMMS III – Bettridge reported that after the well-attended and productive workshop in La Jolla in 2011 many comments were received during the public comment period. NMFS is in the process of responding to those. Most of the comments pertained to the issue of the old abundance estimates. We are hopeful to have them finalized by draft 2014 SARs. That will provide an opportunity to do some spring cleaning on the SARs. The MMC is working

on a review of the SARs, comparing them across regions. The agency may see a preview of that report, but it will be a report to Congress. Read requested that the SRG receive a copy of that report. Rosel said when the new guidelines are in effect we should talk about priorities for doing updates. Bettridge said the new guidelines will have a different impact on each region and we will talk about how we will implement them. Read said we could have a conversation after they are approved to help NMFS prioritize. It will probably be important to do strategic stocks first.

FY13 budget status – Everyone is hopeful to have a continuing resolution for the rest of FY2013. LeBoeuf said NMFS has run a lot of drills to figure out how to deal with sequestration. Garrison said they are not talking about backfilling any lost positions. LeBoeuf said the SRG should feel free to let NOAA know if you (e.g. universities and other partners) are feeling impacts. There should be an accounting of impacts. Read said Duke is doing just that.

SRG membership and Terms of Reference – Bettridge reiterated that NMFS is extremely grateful to the SRGs. We have recently had necessity to establish transparency of appointments, etc. Without a Terms of Reference many people misunderstand the role of the SRGs. The version the SRG has been presented for review is still very much in draft form. Some sections need fleshing out. She asked the SRG to please provide comments by April 5. Read said he had only gotten comments back from one member so far. Wells asked for clarification on the term limits, graded implementation process, and how would that work with the current membership. Bettridge said it had been left open to chairs to develop a process. LeBoeuf said her preference is for the SRGs themselves to develop a transition plan. Moore said the document should recognize that there is a limited population both able and willing to serve. Read added that there is a remarkably small pool of people even to replace Joe DeAlteris at this point. He said he is personally happy with the language as it stands but will check with the others. Institutional memory is also very important. LeBoeuf said NMFS recognizes the need to balance turnover with continuity. It is possible for members to stay on if new replacements are not available.

Other items - Laist announced that Tim Regan is retiring in May. The Commission has selected Rebecca Lent as new Executive Director.

ASRG Business and Wrap-Up – Read said the SRG needs to discuss replacement ideas for Joe DeAlteris. What are important areas of expertise? Garrison suggested someone with a focus on Caribbean issues, the offshore Gulf of Mexico habitat, oil and gas issues in the Gulf of Mexico, line transect & habitat modeling, statistics, etc. LeBoeuf said there is also the option to bring in an invited expert. Waring said NEFSC has been hearing the need to bring in representatives from the fishing industry. Some problems with that however are that they are focused on one fishery, and have a hard time giving up income to come to meetings. DeAlteris had broader experience on fishing technology. Palka suggested Ron Smolowitz as idea potential candidate. Read said there is a need for a geneticist. Moore added distance sampling as a needed skill. Read said the SRG will think more about this.

Venue, timing and structure for 2014 meeting – Waring noted that NEFSC wants to reduce travel costs for SRG meetings, and a webinar meeting format was mentioned. Read said the SRG will not participate in webinar format meeting, based on members' recent experience with a TRT webinar. Wells offered Chicago as a venue choice and Garrison offered Miami. Read said he thought the manatee update was helpful. Moore agreed that topics are helpful and proposed seals for 2014. Moore said that in contrast to the case with manatees, state level support for seals is low. NEFSC, Woods Hole Laboratory was suggested as venue.

Read thanked the participants for their contributions, and noted that Doug Nowacek will chair the 2014 meeting. The SRG also supported publishing the 2013 SARs solely in electronic format.