# 2011 ATLANTIC SCIENTIFIC REVIEW GROUP (SRG) MEETING
# February 9-11, Boston Hilton
# Meeting Minutes

***Wednesday, 9 February, 2011 (0830)***

**1. Introduction**

• Gordon Waring (NEFSC) welcomed everyone and thanked Andy Read for agreeing to step into the chairperson position. Read asked about the most efficient way to give comments on the draft stock assessment reports. Waring said edits should be given to Beth Josephson for the Northeast reports or for manatees, and to Keith Mullin (SEFSC) for Southeast reports. Read noted that three active SRG members would not be present at this meeting – Don Baltz, Rich Seagraves and Joe DeAlteris.

**2. Take Reduction Plan Updates**

• **Bottlenose Dolphin Take Reduction Plan. (Fougeres, SERO).** SERO has been working on a proposed rule to amend the BDTRP based on consensus recommendations made during a 2009 BDTRT meeting. In 2009, the BDTRT recommended that current sea turtle modified-leader requirements be extended geographically to extend out past the Chesapeake Bay Bridge into Virginia coastal waters. In addition, the BDTRT recommended that the timeframe for use of modified leaders be extended to year-round in the new geographic area, and that the definition of inshore pound net leader be changed to help prevent loopholes. Finally, the proposed rule will change regulations to include the same pound net inspection program as is currently required in sea turtle regulations. The second major regulatory consensus recommendation made at the 2009 BDTRT meeting pertains to the spiny dogfish medium mesh gillnet fishery operating in North Carolina state waters in winter. Due to increasing quotas for spiny dogfish, the BDTRT recommended that the current regulation (slated to expire in May 2012) prohibiting the use of medium mesh gillnets at night in North Carolina from Nov 1 – April be made permanent. The proposed rule will be a joint rulemaking with the ESA for the Virginia pound net fishery because the proposed changes may affect current sea turtle regulations. The goal is for the final amendment to be finished prior to the 2012 pound net fishing season.

Several non-regulatory amendments are also being made including updating the list of Category I and II fisheries affected under the BDTRP and updating the new bottlenose dolphin stock names arising from changes to stock structure. The state of Virginia has also enacted some state regulations that provide additional protection for bottlenose dolphins and sea turtles but they do not completely mirror the BDTRT's 2009 consensus recommendations. The BDTRT also recommended several research priorities. First, they recommended that the distribution of the Northern North Carolina Estuarine System (NNCES) stock be better delineated. To this end, the SEFSC conducted biopsy sampling for genetic and stable isotope analyses in Pamlico Sound in the summer of 2010 - a time when only the NNCES stock is thought to be present. In addition, through the North Carolina Sea Grant program, Duke University will examine the distribution of the Southern Migratory and NNCES stocks in coastal waters through biopsy sampling and photo-ID analysis. During this work, dolphin behavior around Spanish mackerel gillnets will also be documented. Second, a project to compare catch differences between modified pound net leaders with vertical lines composed of hard lay versus soft lay lines will be conducted in summer 2011 to address concerns that modified leaders do not maintain catch efficiency. The BDTRT also recommended that observer coverage should be increased for the North Carolina inshore Spanish mackerel fishery in Pamlico Sound. Federal observer coverage subsequently has increased with 137 observer-days allocated between March 2010 and April 2011. In addition, efforts were renewed to improve coordination with the state of North Carolina on observer coverage data collection and sharing, and improve consistency between State and Federal observer logs and protocols for estimating bottlenose dolphin mortality. Additional monitoring efforts took place during summer 2010 for the Virginia pound net fishery. Monitoring included characterization of pound nets and the modified leaders to determine whether leaders are fishing as intended and to document and quantify sea turtle and dolphin entanglements. No dolphins were observed and 2 sea turtles were observed. In 2011, the main priority is to finish the proposed rule to amend the BDTRT and to continue implementing non-regulatory consensus recommendations. SERO will also update the stranding analysis performed for the 2009 BDTRT meeting to track trends in bottlenose dolphin strandings.

The SRG expressed dissatisfaction at the length of time it has taken to amend the BDTRP stating that it is a disincentive for take reduction teams to work together and reach consensus recommendations and that it undermines the TRT process as it allows industry to continue with the status quo for years while the Rule gets made. Gouveia

explained that delays occur at multiple stages due to the many agencies involved in approving a rule making.

• **Pelagic Longline Take Reduction Plan (Fougeres, SERO).** In 2010, the PLTRT met via webinar to provide research updates to the team. The regulatory components of the PLTRP [reduction in mainline length to 20nmi, establishment of the Cape Hatteras Special Research Area (CHSRA) and posting of marine mammal handling and release placards] and non-regulatory [increased observer coverage to 12-15% throughout all Atlantic longline fisheries that interact with pilot whales or Risso's dolphins, updated marine mammal handling and release guidelines, additional research, and improved captain's communications] were reviewed during the meeting. In 2010, observer coverage ranged from 2.5% to 20.8% when subdivided by quarter and geographic region, and did not meet the 8% target in every season and region due in part to a lack of resources and in part due to changes in fishing practices. Through the third quarter of 2010, 15 marine mammals were caught and released alive and 2 were caught and seriously injured. Currently, mortality estimates are still combined for long-finned and short-finned pilot whales, but NMFS has secured funding for a survey to collect biopsy samples to help partition mortality across the two stocks. The survey was originally scheduled for fall 2010, but the ship was diverted due to the BP/Deepwater Horizon MC252 oil spill in the Gulf of Mexico. NMFS plans to conduct this cruise in the fall of 2011.

After the final rule went into effect in June 2009, compliance with the CHSRA call-in requirement was initially low but by July 2010 many vessels were calling in. As of September 2010, 220 notification calls had been logged. Compliance checks for the call-in requirement have been run four times since October 2009. A total of 24 vessel/trips were identified as fishing in the CHSRA during these checks; two were verified as non-compliant. However, compliance with the 20nmi mainline length has been low and SERO plans to work with law enforcement to improve this. However, it should be recognized that the PLTRT knew that enforcement of this regulation would be very difficult.

Duke University was funded to better characterize the interactions between pilot whales and longline gear in the mid-Atlantic Bight as recommended by the PLTRT in July 2010. In addition, research on weak hooks was conducted in the mid-Atlantic Bight in the summer and fall of 2010, and funds were provided through North Carolina Sea Grant to develop a quantitative framework for the analysis of interaction probabilities for pilot whales and longline gear off North Carolina. Outreach efforts continued in 2010 to educate pelagic longline fishermen on the PLTRP, including mandatory HMS certification workshops. For 2011, NMFS will continue monitoring compliance with the Rule in coordination with the observer program, Office of Law Enforcement and the U.S. Coast Guard, will continue to provide the PLTRT with quarterly bycatch updates, and will conduct the joint SEFSC/NEFSC cruise to biopsy pilot whales in the mid-Atlantic to provide information for partitioning mortality.

Read asked why compliance with the CHSRA reporting regulations could not be done in real time rather than retrospectively. Fougeres replied that the checks for compliance include both whether they called in and whether they were deploying pelagic longline gear, which could not be determined until catch was verified. Read also questioned whether non-compliance with mainline lengths could also mean compliance with CHSRA regulations was low and suggested compliance be further examined. Fougeres replied that this could be done, but the pelagic observer program did believe that compliance with CHSRA regulations was high. Read also underscored the need for the mid-Atlantic biopsy cruise.

• **Atlantic Trawl Gear Take Reduction Strategy (Gouveia, NERO)** Gouveia reminded the SRG that based on the fact that serious injuries and mortalities of the affected Trawl Gear TRT species were below the affected species' PBR levels prior to convening the TRT NMFs received a legal opinion that an official TRP would not be needed at this time. Therefore, the Atlantic Trawl Gear Take Reduction Plan is technically a Strategy, not a Plan and is currently in monitoring mode. Marine mammal takes are mostly in the Mid-Atlantic. Managers have been working closely with the Mid-Atlantic Fisheries Management Council (MAFMC) and, with less success, with the New England Fisheries Management Council (NEFMC). Young (SRG) commented that takes of pilot whales are of concern. The House Natural Resources Committee has put out a white paper expressing their interest in investigating fisheries with great deficiencies in data. Merrick (NEFSC) said that committee's concern is really focused on turtles. Young agreed that the turtle issues may be driving the issue but there is interest in mammals too. Read asked if the fact that white-sided dolphins are now over PBR will affect the TRT. Palka (NEFSC) said the status of white-sided dolphins has gone back and forth in the past. It will need to be monitored.

• **Harbor Porpoise Take Reduction Plan (Asaro, NERO).** The Final Rule was published 19 February 2010. The Rule expanded seasonal closure areas, expanded pinger and other gear modification requirements, and implemented a consequence closure strategy. If bycatch exceeds a threshold over 2 consecutive periods (seasons), closures go into effect. A monitoring strategy was finalized in April 2010 and is available at

www.nero.noaa.gov/hptrp. Data on the management season will be out before the start of the second management season. Orphanides (NEFSC) explained how the monitoring will be reported and when it will be available. Read pointed out that getting the first year of data out on a timely basis is crucial. Merrick said implementation of a 30-day data turnaround will be tough for the first year, but NEFSC will be prioritizing it. Merrick also stated that the NEFMC has not been actively involved in this issue. He suggested that the SRG should request NEFMC to assign a member. Read asked about monitoring the functionality of the pingers. Asaro said that the Observer Program is just about to put out some new open-air pinger testers. Gouveia said they also have some in-water testers for enforcement. The cost of those in-water units is approximately $5,000 each. Disposal of batteries at sea is not really an issue because the fishers don't like to open the pingers at sea.

- **Atlantic Large Whale Take Reduction Plan (Gouveia, NERO)**. To streamline discussions on the development of potential conservation measures aimed at reducing serious injury and mortality of large whale species that interact with vertical lines (endlines) associated with commercial trap/pot and gillnet gear, NMFS planned to convene two small-scale subgroup meetings rather than convening one full-scale ALWTRT meeting. The Northeast Subgroup met Nov 30-Dec 3, 2010 and the Mid-Atlantic/Southeast Subgroup was scheduled to meet Apr 5 – 8, 2011. At the Northeast Subgroup meeting, NMFS provided an overview of its new vertical line model. The model is a three-pronged computer-based program that evaluates three specific strategies that managers can utilize toward addressing serious injuries and mortalities of large whale species that interact with endlines. The three components of the model allow mangers to make management decisions based on: 1) when and where the highest volume of endlines is located; 2) when and where the highest large whale sightings per unit effort (SPUE) are located; or 3) when and where the highest co-occurrence of gear and whale SPUE are located.

The Northeast Subgroup discussed the summary gear characterization, SPUE and co-occurrence information. Based on the discussions, the Northeast Subgroup has chosen to focus their management efforts in the Northeast on the co-occurrence data. Discussions have been productive and based on the feedback from the Northeast Subgroup, NMFS convened a smaller working group to further refine the components of the vertical line model. Specifically, the group asked that other data from the University of Rhode Island (URI) large whale data base be incorporated into the model and that the data landward of the Maine exemption line be included into the model. NMFS has a second meeting of the working group scheduled for March to further refine the northeast component of the model. NMFS is convening the Mid-Atlantic/Southeast Subgroup in early April. This meeting was originally scheduled for late 2010. However, the Gulf of Mexico oil spill interrupted the SPUE data flow from the southeast. Nowacek had questions about the SPUE calculations that are generated from the NEFSC right whale aerial surveys: he asked where the nearshore survey starts. As gear is densest nearshore, not having that data is a significant gap. Simpkins (NEFSC) clarified that broadscale surveys go from beach and the SPUE analysis uses data from the broadscale surveys. Gouveia said that the both the SPUE and gear characterization information was collected within the exemption area, but it was not shown in the original analysis provided to the Northeast Subgroup because that area was exempt under the ALWTRP. Young said that NMFS had exempted that area during the sinking line rule process. Gouveia said that based on the Northeast Working Group comments, they plan on modifying the model to show the nearshore SPUE, gear characterization and co-occurrence data. Young said it would be excellent to revisit that, whether or not it is managed. Gouveia said that the data within the Maine exemption area will be done by the next Northeast Working Group meeting, which was set for March 9. Nowacek asked if the State gear density data are being used. Gouveia replied that it was. Young pointed out that the problem with only using NMFS data is that, for instance, the Center for Coastal Studies surveys Cape Cod Bay, so that area isn't included if you only look at NMFS data. Gouveia said NMFS is performing a sensitivity analysis as well as examining other sets of data, (e.g., buoy density data). The Plan has an aggressive timeline, which is currently on schedule, of achieving an endline proposed rule in 2013 and final rule in 2014.

Gouveia stated that in addition to the January Northeast Working Group meeting, NMFS is convening additional working groups and subgroups meetings in March and April. The goal for April is to finalize the baseline data for the Northeast – areas and species to be managed – and to start the process in the mid-Atlantic and Southeast regions in April. Once the general areas and species are selected by the Northeast and Mid-Atlantic/Southeast Subgroups, NMFS intends to develop a straw document to share with the general public through a series of scoping meetings beginning in July. NMFs will compile the information received through the scoping process and solicit proposals on potential management options for reducing risk of entanglement in vertical line from the TRT membership. At the end of 2011, the full team will convene with everything on the table, including all areas to manage, targets, and proposals from industry and strive for a recommendation to move forward.

Young commented that Pace (NEFSC) has done a new population viability analysis (PVA) for right whales. The NMFS regional office has used that to construct a biological opinion that says the fisheries as

prosecuted today do not pose a hazard to the right whale population. She is therefore concerned about the schedule of implementation of management in the political court. Young suggested that fishery representatives may use this new PVA to argue against change. Merrick argued that the distinction is that the MMPA requirement is still a legal mandate which is not being met. There are also requirements under the ESA. NMFS is just as vulnerable as before Pace's PVA. Gouveia said he fully expects this rulemaking process to be more difficult than the sinking groundline issue. Monitoring is another key. Nowacek (SRG) asked if there is a document to look at on these issues including the working group meeting summary. Gouveia answered that all background documents are on the Northeast Regional Office website (http://www.nero.noaa.gov/whaletrp/trt/meetings/index.html).

Gouveia said that progress working with Canadian Department of Fisheries and Oceans (DFO) is ongoing but the pace has been slow. DFO has not yet addressed the entanglement issue. However, they are actively trying to address the entanglement issue by completing an action plan to address gear entanglement with large whales species. Gouveia mentioned that DFO is hoping to finalize and publish their action plan by the end of 2011. Read asked if there is a recent summary of gear recovered from animals and origin of that gear. Gouveia said that NMFS publishes an annual report on all entanglements including a complete gear analysis for all gear recovered. Gouveia added that although the vast majority of the gear recovered does not reveal the gear type or origin of the gear, NMFS does have some entanglements with gear identified. The most recent annual report is 2008 and it is available on the NERO web site along with preliminary data for 2009 to present (http://www.nero.noaa.gov/whaletrp/). Young said WWF Canada is working with fishermen on voluntary measures that don't help the situation since the voluntary measures being used are actually the current fishing practice for most Canadian fishermen in that area. Therefore, there is little conservation benefit since the voluntary measures are merely what the current fishing practices are in Canada. Lawson said a letter with a request for actual data would be useful to clarify the Canadian approach.

Kenney (SRG) brought up a question about the risk model. Industrial Economics has forced all the datasets to an artificial index of 1-1000. An index of zero for grids where there is no effort and no sightings should not be used, so maybe there should be a floor index since there is never a zero risk. Gouveia said they had discussed having another layer that shows that.

**3. Proposed List of Fisheries**

• **Northeast Region (Rosner, NERO).** For the 2012 Proposed List of Fisheries, NMFS has made several modifications to the List of Fisheries for the northeast. Risso's dolphins and offshore bottlenose dolphin have been added to the list of species incidentally killed or injured by northeast bottom trawl due to takes observed in 2010. Some of the trawl boundary definitions have been clarified. The numbers of permit holders for each fishery have been updated.

• **Southeast Region (Fougeres, SERO).** In the 2011 Final List of Fisheries, NMFS made four additions. The Atlantic spotted dolphin and Gulf of Mexico bottlenose dolphin Northern Coastal Stock were added to the list of species incidentally killed or injured by the Atlantic, Gulf of Mexico shrimp trawl fishery. The bottlenose dolphin NNCES Stock was added to the list of species incidentally killed or injured by the mid-Atlantic mixed species stop seine/weir/pound net fishery. The stock names for bottlenose dolphins interacting with Category I, II and III fisheries were updated to reflect changes in stock names. Finally, SERO determined the Southeast U.S. Atlantic, Gulf of Mexico Shrimp Trawl Fishery to have "occasional" interactions with marine mammals therefore warranting an elevation from Category III to II; there have been 12 observed dolphin takes since 1993, with 11 of them occurring since 2002. In addition, there have been 10 reported takes of both bottlenose dolphins and Atlantic spotted dolphins in research and relocation trials since 2002. Other factors used included a 2002 self-report of a dolphin take from a South Carolina shrimp fisherman, a 1994 report from a Georgia fisherman, and the reporting in 2009 SARs of observer reports of occasional interactions with the shrimp fishery. Three public comments were received, two of which related to the shrimp trawl fishery. The Marine Mammal Commission (MMC) recommended that NMFS increase observer coverage in the Southeastern U. S. Atlantic, Gulf of Mexico shrimp trawl fishery and conduct the stock assessments necessary to estimate reliable potential biological removal (PBR) levels for the affected marine mammal stocks. NMFS agreed with the MMC. As resources become available, observer coverage and stock assessments, especially in the Gulf of Mexico, are priorities. Furthermore, as a result of the BP/Deepwater Horizon MC252 oil spill response and restoration efforts, NMFS is working to strengthen infrastructure and increase the capacity of the stranding network which is now critical in monitoring the health of marine mammal stocks in the Gulf of Mexico and which will also be useful for assessing the extent of fishery interactions. In other public comments, the Department of the Interior requested removal of the Florida subspecies of West Indian manatee from the list of species incidentally killed or injured in the Southeastern U.S. Atlantic, Gulf

of Mexico shrimp trawl fishery. However, there have been 2 confirmed deaths of manatees in the fishery (in 1987 and 1997) and the bait shrimp fishery was suggested to have caused three unconfirmed manatee mortalities in 1990. So due to extremely low observer coverage, confirmed and unconfirmed takes by the fishery, and the spatial and temporal co-occurrence of the shrimp trawl fishery and the Florida manatee, NMFS believed there was at least a remote likelihood of incidental mortality and serious injury for the Florida subspecies of the West Indian manatee in the Southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fishery and therefore did not remove the Florida manatee from species affected by the shrimp fishery. DOI also recommended that NMFS remove the Antillean subspecies of the West Indian manatee from the list of species incidentally killed or injured in the Caribbean gillnet and Caribbean haul/beach seine fishery. NMFS agreed, citing prohibitions on haul/beach seine nets and gill and trammel nets in Puerto Rico as well as a lack of stranding data and removed the Antillean manatee as an affected species by these fisheries. In the 2012 Proposed List of Fisheries, SERO staff will 1) work to better characterize fishery effort and interactions with marine mammals in the Caribbean to support new Caribbean SARs; and 2) work with SEFSC staff to ensure all stocks listed in the LOF are appropriately described in the SARs and vice versa. Stocks listed in the LOF that have no record of recent interaction with a fishery based on information in the SARS are being analyzed for possible for de-listing in 2012; 3) work to better characterize fishery effort for listed fisheries in the LOF to account for reduced fishing effort due to economic downturn and fisheries regulations (i.e., Individual Fishing Quotas); and 4) analyze stranding data in the Gulf of Mexico to determine whether interaction rates of crab pot and spiny lobster fisheries and bottlenose dolphins warrant uplisting from Category III to II in the 2010 LOF.

Engleby (SERO, by phone) also reported that funding for observer coverage of the Gulf of Mexico menhaden fishery was obtained to provide 50 sea days of coverage between April and November 2011. Read asked whether there were plans to increase shrimp trawl fishery observer coverage, including monitoring for TED compliance. Engleby replied that limited funding precludes increased observer coverage for this fishery. It was also noted that the MMC recommended NMFS should include in the LOF the rationale for including those fisheries listed as Category III. It was unclear whether NMFS planned to follow up on that recommendation.

**4. Stranding Programs**

• **Southeast Region (Fougeres, SERO).** There are currently 19 Stranding Agreement holders, 5 designees and 23 109h organizations in the Southeast stranding network. Two recent additions were the Jacksonville Zoo and Gardens, and the Chicago Zoological Society (CZS) (as a designee of Mote Marine Laboratory). Twelve facilities are authorized to perform rehabilitation. Two Unusual Mortality Events (UMEs) were declared in 2010. One for bottlenose dolphins in the St. John's River, FL occurred between July and September 2010. The cause of this UME is under investigation, but was associated with fish kills and a dredging project. The process for closing the UME is underway. The second UME was declared for the northern Gulf of Mexico (TX/LA border to Apalachicola, FL) for bottlenose dolphins and other small cetaceans. This UME consists of several events starting with the finding of 25 dead bottlenose dolphins in Lake Pontchartrain, LA between February and May 2010, and culminating in a significant increase in the number of stranded small cetaceans in the northern Gulf of Mexico overall starting in February or March 2010. Consultation with the Working Group on Marine Mammal UMEs (WGMMUME) was initiated in March 2010 after the Lake Pontchartrain mortalities but was put on hold in April in order to gather additional data on cetacean mortalities throughout the northern Gulf of Mexico. However, staff and resources were reallocated in late April 2010 as a result of the BP/Deepwater Horizon MC252 oil spill. In October 2010, consultation with the WGMMUME was reinitiated and in December 2010 this group determined that the high cetacean mortalities in the northern Gulf of Mexico constituted a UME or perhaps multiple UMEs.

In 2010, a live humpback whale stranded in North Carolina in May 2010 and was euthanized and three entangled bottlenose dolphins were successfully disentangled and released.

The SRG requested more detail on what the NRDA (Natural Resource Damage Assessment) process entails and Engleby provided a summary of the three phases (pre-assessment, injury assessment and restoration) and noted that funding for research NMFS is statutorily mandated to conduct cannot be requested from the responsible party (RP). Read suggested other avenues of research that might be pursued with funding from the RP, for example estimates of vital rates. It was also noted that tissue banks from strandings could provide useful baseline information, but that few such tissues exist from the northern Gulf of Mexico, although tissue samples from Texas may serve as reference source materials for comparative purposes. Information was also provided on a right whale that was found entangled in northern Florida in early January 2011 and successfully sedated at sea so some gear could be removed. This animal was found floating dead in February 2011. Preliminary necropsy results suggest the animal, weakened due to gear wadded up in the back of its mouth, died of blood loss due to a shark bite and that the sedation was not involved in the mortality. Necropsy data are still being examined. Kenny asked how these two

large whale mortalities will be dealt with in the upcoming SARs. These animals were entangled in gear but the proximate causes of death were not the gear but rather euthanasia or shark bites. Will they be considered fisheries takes?

- **Northeast Region Stranding Programs (Gouveia, NERO).** One of the changes to the disentanglement program in the Northeast is that NMFS now gives money to state partners up front for disentanglement response. PCCS is still heavily involved in the northeast as they now work as a subcontractor for Massachusetts and serves as NMFS's lead trainer for disentanglements. NMFS is currently working on expanding the disentanglement database that is being curated by PCCS and intends to expand the database by including stranding and vessel interaction data. This new database will be a human interaction database. In time, NMFS is planning to take on the disentanglement database responsibility from PCCS to help offset the cost of PCCS's program. The database is just about completed and NMFS hopes to assume this role by the end of 2011. The new database will be queryable and password protected with various layers of access. Gouveia provided a quick summary of the recent entanglements to date—in 2010 and to date there were 25 new entanglement cases that have been completely or partially disentangled. Of the 25 cases, 5 were right whales, 15 were humpbacks, 4 were minkes and 1 was unknown. Gouveia also noted a live humpback stranding that occurred on Long Island in 2010, noting that it was a very good learning experience in that it was the first of its kind (high profile live stranding of a large cetacean with difficult sedation and euthanasia circumstances) in the Northeast. The NE and SE regions both did well on Prescott grants for 2010 with the NER Stranding Network receiving funding for 11 of the 21 proposals that they submitted totaling a little under $1 million. Gilbert (SRG) requested that pinniped pups without evidence of human interaction be removed from the stranding data table in order to get a better understanding of true strandings.

**5. Right Whales**

Nowacek had organized some thoughts about the NMFS right whale program. Read explained that the SRG wants to help the Agency do more strategic thinking and planning and wants to start a process of engaging on one or two issues with concentrated strategic thinking. Nowacek asked what metrics have been developed to assess the efficacy of the ship strike rule. He has concerns that there is no funding for necropsy work in the FY11 spending plan. There was discussion of work done in the SE and at headquarters on tracking vessel Automatic Identification System (AIS) data, and development of a tool that generates email to shipping companies notifying them of compliance or non-compliance. Read asked how those data indicate if the rule is effective. Eagle (F/PR) said that Pace has developed a biological monitoring metric.

[The following conversation with Richard Pace (this paragraph) occurred the following day, but was inserted here in the minutes for continuity.] Pace (NEFSC, on phone) explained his metric for the ship strike speed rule biological evaluation. The data are already here for the first analysis. Nowacek asked if there are data from all the ports. Pace replied that small changes in effort won't be a large difference since there are so many existing filters reducing the amount of data we get. There are more whales struck than we ever know about. Read said we need to maintain consistency as we go forward. Young asked if the fact that the rules are designed for right whales affects the efficacy of measurement of the rule when species are lumped together. Pace said he looked at the effect if there was a 50% decline in right whale mortalities and zero for fin whales and it had good power. Therefore that is not an overwhelming concern. There are not enough data in this first analysis to change the distributions. Eagle observed that with the time pressures and only 20% compliance in the first year suggests that it will be hard to get a meaningful analysis completed. Pace agreed. Read said that is helpful for the SRG to know. Cole said they have expanded survey effort into the winter since 2004 but that won't change things much because most of the determinations are done on the beach anyway. Pace said it is the time between occurrences that is important. Nowacek asked if dead whales offshore that did not get struck in the speed zone enter into the analysis. Pace said those data don't occur [what he meant was, we rarely know where the actual strike occurred]. Simpkins pointed out that we want to know also if the zones are in the right place so we shouldn't ignore any data outside the zone. Pace said he doesn't have the prior data from which a deflection might be detected for those strikes. Cole (NEFSC) said there are two components—the detection and the determination. Nowacek said we should talk about this next year.

[This paragraph also out of order]. Shannon Bettridge (F/PR) on the phone was asked about monitoring the ship strike rule. She explained that there was a workshop held in 2008 to come up with the monitoring scheme. Conclusions reached included 4 basic parameters: 1) biological data—number of animals struck (Pace metric), 2) human behavior—compliance (AIS data), 3) mariner awareness and outreach, and 4) economics. The workshop report is available. The rule is set to expire in 2013. It will take the agency up to 2 years of work to reissue the rule. Therefore, the Agency is looking to get an efficacy report completed soon; they are not waiting until December 2011 to examine these issues. They are finding compliance lower than they would like. For 2009, compliance with the

speed rule was at about 20%. Nowacek asked if non-compliance would constitute a basis for reinstating the rule. Merrick said the rule has to happen no matter what. Non-compliance may trigger ramping up the rule. Bettridge said eight notices of violation were sent out this fall. The report on that will be available publicly sometime after December 2011.

Nowacek asked what has happened with the Northeast Implementation Team (NEIT), which was set up to function as a continuation of the former Northeast Large Whale Recovery Plan Implementation Team's Ship Strike Committee. Gouveia said the problem with the NEIT was the membership. The team was not productive and NMFS funding declined. He suggested that a monitoring team would be more beneficial than an implementation team, or even just a workshop. Young said a recovery team is needed and an independent, overarching group would be useful, and should be composed of scientific experts rather than only stakeholders or agency staff.

Nowacek expressed concern that many areas of the 2007 Right Whale Research Matrix were not being funded. Gouveia said he thought the problem is that the Agency does not do a good job of telling the consortium and others what it does and what it funds. Many programs are funded from various sources besides the right whale fund. He suggested that it might be helpful to put information on NERO's website about all the programs they are funding. The consortium doesn't credit NOAA where NOAA is actually providing the funding. Nowacek said very little basic research has come out of right whale grants since 2005 where there was a lot before. Read said research is only one component. There should be some mechanism for a long-term view.

Nowacek asked about the programmatic EIS in order to streamline permitting process. Eagle replied that resources were shifted. Nowacek asked what are the priorities and how are those being addressed? Gouveia said the Agency does have partial funding for necropsies in FY11 (up to April 2011) and also limited funding for research in FY11. The important issue is not where the funding is coming from (or from which program) but what research areas are we missing.

Kenney asked if there is a risk that the right whale money will be called an earmark and cut by congress. Merrick said it is more likely that it will be reduced. He stated that we have a bottom line, and that is where we are now. It is hard to do anything strategic when all you have funding for is the bottom line. Read asked what level of surveys is required. Could you get by with less than you do now? Merrick replied that NMFS's survey effort is now less than half what it was two years ago. Read pointed out that there is limited evidence that the surveys in the southeast are preventing ship strikes. Merrick said the glider technology is being developed to tell us more about where right whales are without aerial survey, but this approach will not be implemented for some time yet.

Merrick said the program review that the Agency went through with the Marine Mammal Commission was useful. Perhaps we should we do something similar with the SRG. Read agreed that that would be helpful.

**9. NEFSC Updates**

• **NEFSC 2010 Fieldwork (Palka, NEFSC).** Palka explained that the Atlantic Marine Assessment Program for Protected Species (AMAPPS) is a multi-year collaboration project sponsored by NMFS, the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE), US Fish and Wildlife Service (FWS) and the US Navy. Its aim is to develop models and associated tools to provide seasonal, spatially-explicit density estimates incorporating habitat characteristics of marine mammals, turtles and seabirds in the western North Atlantic Ocean. Underlying these will be the collection of broad-scale data over multiple years on the seasonal distribution and abundance of these taxa using direct aerial and shipboard surveys conducted by scientists from NOAA Fisheries and the US Fish and Wildlife Service. The AMAPPS program will coordinate the data collection and analysis efforts of the NEFSC, SEFSC, and the U.S. Fish and Wildlife Service Division of Migratory Birds to accomplish six primary objectives: 1) Collect broad-scale data over multiple years on the seasonal distribution and abundance of marine mammals (cetaceans and pinnipeds), marine turtles, and sea birds using direct aerial and shipboard surveys of coastal U.S. Atlantic Ocean waters; 2) Collect similar data at finer scales at several (~3) sites of particular interest to NOAA partners using visual and acoustic survey techniques; 3) Conduct tag telemetry studies within surveyed regions of marine turtles, pinnipeds and seabirds to develop corrections for availability bias in the abundance survey data and collect additional data on habitat use and life-history, residence time, and frequency of use; 4) Explore alternative platforms and technologies to improve population assessment studies; 5) Assess the population size of surveyed species at regional scales; and 6) Develop models and associated tools to translate these survey data into seasonal, spatially-explicit density estimates incorporating habitat characteristics.

The 2010 shipboard portion of the AMAPPS abundance survey was postponed until the summer of 2011 due to the oil spill in the Gulf. The 45-day aerial portion was able to be completed by leasing a plane from outside the Agency, turtle tagging portions of the project, as well as grey seal monitoring flights, went forward. The NE aerial survey completed 9210 km of trackline and used the circle-back method to estimate g(0). Loggerhead turtle abundance estimation is underway.

• **NEFSC 2011 Fieldwork Plans (Palka, NEFSC).** The AMAPPS plans in 2011 include NE and SE ship and aerial surveys , a harbor seal abundance survey, seal monitoring flights, and a turtle tagging study. The winter aerial survey started on 24 January and is scheduled to be completed by 9 March. A summer aerial survey will be from the 1st through 31st of August and the ship survey will be from the 2nd of June through 8th of August. A harbor seal abundance survey will be conducted in May and grey seal monitoring surveys are ongoing.

Merrick pointed out that the 2010 and 2011 surveys would not have happened if it wasn't for BOEMRE. Deborah Epperson of the BOEMRE said that the Department of Energy (DOE) is also putting out proposals for some finer-scale surveys. She presented a map put out by her agency of areas under consideration for wind energy. Young expressed concern about the plethora of projects proposed by the DOE and said the Agency should hold a strong line about getting the background data.

Eagle pointed out that NOAA Corps has been reducing days at sea nationally. Palka also pointed out that NMFS needs ship time in order to meet MMPA requirements.

## *Thursday 10 February, 2011 (0830)*

**6. Review Draft Manatee Stock Assessment Reports**

• **Puerto Rican SAR (Zegarra, USFWS).** Information on the Antillean manatee was provided by Jan Zegarra (USFWS). In the last year, USFWS has made manatees in Puerto Rico a priority species. They developed agreements with several agencies to design and perform aerial surveys and analyze data for abundance estimation and performed two aerial surveys in 2010. They also organized a workshop to analyze where best to create manatee protection areas around Puerto Rico. Future plans include updating a recovery plan for manatees in Puerto Rico. The SAR contains information from one of the 2010 aerial surveys used to create an estimate of $N_{min}$. It was noted that the List of Fisheries in the SAR needs updating to include some of the Caribbean fisheries that interact with manatees in Puerto Rico.

The SRG noted that the Puerto Rico manatee SAR and the Florida manatee SAR are inconsistent in information content and format and should be edited for consistency between them – for example the stock identification sections should be identical between the Puerto Rican and Florida SARs except for the final paragraph. In addition, the Puerto Rico manatee SAR contains too much detail and should be substantially shortened and the SRG provided a variety of suggestions on where such reductions could occur, such as the inclusion of tables in place of text. The map should include the U.S. Virgin Islands since it is part of this stock's range. The SRG was also concerned with how $N_{min}$ was estimated from the 2010 aerial survey data and wanted an opportunity to review the analysis. Kenney explained that the regression analysis done in Figure 2 is incorrect.

• **Florida SAR (Valade, USFWS)** provided an update on Florida manatee issues. In 2010, the January synoptic surveys to count manatees in Florida saw an all time high in counts. In addition, there was a manatee UME event of a magnitude never seen before associated with a severely cold winter. More than 700 manatee deaths were reported. Although this number is still "not verified," due to its magnitude, the USFWS felt it was appropriate to include in this year's SAR. Also during 2010, progress was made on combining multiple photo-ID catalogs and should be completed sometime this year. Vital rates information is expected to be estimated from the catalog as well as OSP determinations. Aerial surveys will be conducted again in 2011. The SRG also noted discrepancies in PBR calculations, use of growth rates for the overall stock versus the management units, and how minimum population estimates are provided for each management unit. Valade (FWS) replied he would rectify these problems in the draft.

The SRG noted that for any cetacean species, this SAR would be broken up into multiple SARs representing each of the manatee management units as recognized in other publications.

**7. NMFS Stock Assessment Program (NMFS Staff)**

• **Status of 2010 SARs (Eagle, F/PR)** Eagle explained that the comment period closed in late October 2010, though comments from west coast have not yet been received yet, but should be available after the GAMMS (Guidelines for Assessing Marine Mammal Stocks) III workshop in mid-February. Eagle would like to get the notice of availability of this SAR out in late March, which is on track with prior years.

• **Status of Serious Injury & Mortality Guidelines (Eagle, F/PR).** Eagle indicated the draft compiled

by the SI-M team has been sent to the field offices for review, with comments due January 31. He is still awaiting a few more comments that should be available by late February. The Agency will send the draft guidelines to the SRG for comments before opening these guidelines for public comment.

Cole reviewed the work the SI-M team was involved with to draft this report. New criteria are being developed to address clarification of the "greater than >50% chance" that a mortality would result from fishery interactions. The primary data source is different between large whales, pinnipeds and small cetaceans; though some of the Serious Injury criteria are the same across taxa. Read indicated he was encouraged to see that an objective, quantifiable approach was being developed. As a result of the workshop, Eagle indicated that the SI-M team from each region will be looking over the other regions determinations to ensure consistency among regions.

Simpkins brought up an issue that had arisen with minke whales observed in trawl gear. NEFSC has drafted a white paper outlining protocols for dealing with determining whether animals that are caught in trawls are attributed to the fishery. The minke whale SAR will be reviewed relative to an issue of whether two animals were killed by the gear or were dead prior to this interaction.

**8. Review Draft Odontocete & Pinniped Stock Assessment Reports**

- **Appendices** (All SRG Members reviewed)

Labels should be put on the observed haul and take figures to indicate each fishery. The hooded seal data should be removed from Appendix I.

- **Fin Whale** (Reviewed by Nowacek, Kenney & Lawson)

There was a discrepancy between the number of animals for which there was sufficient information to determine mortality – 9 whales were found to have sufficient data, but only 8 listed in the table. Kenney inquired about the status of the Canadian population estimates. Lawson replied that the population estimates have not been analyzed, but will be done in the next few weeks. Lawson also indicated that they are still trying to get the large whale entanglement records from Nova Scotia.

- **Humpback Whale (**Reviewed by Nowacek, Kenney & Lawson)

Nowacek suggested the addition of a reference to the Friedlander paper confirming nighttime feeding. The paragraph on scarification that was deleted should be put back in. Mention should be made of the ongoing status review. The sentence "Finally, female humpbacks showing evidence of prior entanglements produced significantly fewer calves, suggesting that entanglement may significantly impact reproductive success" should be removed. Lawson said he will provide more humpback data to NMFS.

- **Right Whale** (Reviewed by Kenney & Young)

A suggestion was made to add some discussion about midwinter aggregations in Jordan Basin. Also the Pace and Merrick 2008 reference document should be discussed. The numbers in the population size section were not updated. The mortality section summary numbers don't match those at the top of the section. The language in the PBR section should be changed so it is consistent with other SARs. Young asked how the right whale strike in 2009 by a Sanctuary vessel gets reported. Gilbert pointed out that there is no map for this species, and also asked about the habitat section. Gouveia thought adding a habitat section might cause confusion between habitat and critical habitat, although it may be helpful for non-listed species. Nowacek suggested just calling it "ecological background." Read thought the section is useful but maybe it should just be for strategic stocks. Gouveia suggested just putting how animals utilize the range in the range section and asked if there is a definition of habitat in the SAR guidelines.

- **Minke Whale** (Reviewed by Kenney & Gilbert)

There is a typo in table 3 –an 8 for 2009 where there should be a zero. The change in determination for the 2 minkes found in trawl gear in 2008 was briefly discussed. The SRG was comfortable with attributing those to the trawl fishery, and changing that in the 2010 SAR as well. In the "other mortality" section there is some older language about whaling that can come out.

- **Sei Whale** (Reviewed by Kenney & Lawson)

Editorial comments only.

**General Discussion Prior to continuing SEFSC SARs:**
Rosel informed the group that the SEFSC is planning to draft 3-5 Caribbean SARs each year with priority given to the species with the most available data. In situations when data are presented which cannot be separated to the species level (i.e., given as *Kogia* spp. or *Mesoplodon* spp.), for consistency the SEFSC is proposing not to draft SARs at the genus level, but rather to draft several similar SAR chapters for each of the species that are difficult to differentiate. The SRG was asked if they would concur with that approach. Read and Wells responded that if there is not enough data to substantiate working up separate SARs, it might not make sense to do so. There was a discussion initiated by Mullin (SEC) relative to being "penalized" for combining species into one chapter. Eagle suggested we may be able to accommodate both concerns by wording or grouping things differently in Table 1 of the SAR. The SRG's preference was to review combined species SAR thereby minimizing the number requiring review, but indicated that if the Agency needs to draft separate species chapters, that is acceptable.

Wells was concerned that some of the Caribbean species were not considered strategic stocks (i.e., bottlenose dolphin). When data are lacking, GAMMS indicates the listing can go either way, though he thinks we should take the more precautionary approach and say it is strategic stock. Rosel questioned if this would hold true for all the Caribbean stocks – as there is so little information on them. Eagle stated that in the past SARs, there usually was some reason to determine a stock was not strategic. If we have any inkling that there may be a low level of mortality, the determination was made that the stock was strategic. There are fisheries for pilot whales and other species in the Caribbean, which could make such species strategic. The forthcoming GAMMS III workshop may address how to handle this situation. Young was asked to highlight this at the workshop, so perhaps she or others attending may be able to advise how to address this.

Rosel informed the group that the SEFSC is drafting SARs for each of the bay, sound and estuary (BSE) bottlenose dolphin stocks in the Gulf of Mexico. A header indicating this approach has been added to the SAR chapter that includes all the BSE bottlenose dolphin stocks, and this larger chapter will persist until most of the individual SARs have been written. The SRG would be pleased to see these separate stock chapters being written. It was suggested that we consistently compare PBRs in the individual chapters with those stated in the overall Gulf of Mexico BSE chapter for consistency.

- **LF Pilot Whale - Atl** (Reviewed by Young & Read)

Reviewers asked what the progress was on separating mortalities for long-finned and short-finned pilot whales. Rosel indicated that summer biopsy and habitat modeling has been used to separate the abundance estimates for each species but these data cannot be used to separate morality estimates because most mortality occurs in fall and winter. A planned fall 2011 biopsy survey should provide data needed to apportion the mortality data. NMFS would like to have biopsies provided by fisheries observers, but pilot whales are not brought near fishing vessels when entangled due to risk to humans and animals.

- **SF Pilot Whale – Atl** (Reviewed by Young & Read)

The same comment given above on separating mortality by species pertains to the short-finned pilot whale. The information in the SAR relative to Canadian waters needs to be deleted, as we now know this species is not found there. The Garrison (in prep.) reference needs to be removed, as this information has still not been published and as such should not be included in a SAR.

- **Bryde's Whale – Gulf of Mexico (Reviewed by Kenney & Odell)**

Rosel informed the group that this species is now listed as a strategic stock. This listing was based on: annual mortality from ship strikes being twice PBR combined with consistently low abundance estimates; the species' apparent distributional confinement to specific habitats in the Gulf of Mexico; new evidence indicating extraordinarily low genetic diversity (lower than many other cetacean species).

- **Pan-tropical Spotted Dolphin – N. Gulf of Mexico** (Reviewed by Lawson & Baltz)

Lawson indicated that the 2003 and 2004 surveys have been combined and he was not sure that was the proper approach. Mullin indicated he would provide Lawson with a copy of the report that details the approach and the combined 2003 and 2004 cetacean abundance estimates (Mullin 2007).

- **SF Pilot Whale – Caribbean** (Reviewed by Young & Odell)

As with all the Caribbean SARs, there was concern that the data are old. Given that some of the Caribbean species are still being hunted, Young questioned whether the World Council of Whalers might have exact figures for each species taken, though such specifics to date have not been made available. Young also questioned whether Natalie Ward might know how to obtain this information. For this particular SAR chapter, it would be good to determine the level of take in the Caribbean.

- **Spinner Dolphin – Caribbean** (Reviewed by Baltz & Lawson)

No discussion.

- **Spotted Dolphin – Caribbean** (Reviewed by Baltz & Odell)

No discussion.

- **Cuvier's Beaked Whale – Caribbean** (Reviewed by Young & Nowacek)

Nowacek noted that there were few Cuvier's beaked whale sightings in the stock area.

- **Bottlenose Dolphin – Barataria Bay** (Reviewed by Wells & Odell)

A suggestion was made to begin mentioning the Deep Water Horizon Incident in a habitat section in this and other appropriate SARs. It was suggested that NMFS compare PBRs in the individual chapters with those in the overall Gulf of Mexico BSE chapter for consistency. The stranding data are needed.

- **Bottlenose Dolphin – Choctawatchee Bay** (Reviewed by Wells & Nowacek)

It was suggested that NMFS compare PBRs in the individual chapters with those in the overall Gulf of Mexico BSE chapter for consistency. The stranding data are needed. See individual reviewer comments available from Josephson for specific comments. Nowacek indicated that under the population size section, the term "super population" is unnecessary terminology to include and should be replaced by the terms resident/transient. Under the "Estimating abundance from photo-id/mark recapture" section: Nowacek questioned what racetrack and zigzag designs are, and whether they are an appropriate survey design. The analysis did not appear to account for portion of population with unmarked fins – why? The mark-recapture estimate appeared to be averaged over all fins, without respect to the population model being open or closed. Mullin said he would provide the manuscript by Conn et al. (in press) that describes the methodology used to estimate abundance for the Choctawhatchee stock and that is discussed in the SAR. Nowacek also questioned whether it was appropriate to average an estimate over all models, as opposed to determining the best model and using that estimate. Palka explained that this can be done if the estimate is weighted by the CV when several models fit appropriately. That is, if the AIC are very close in number of units, then all models may be equally appropriate. The methodology for this approach is given in Anderson et al. (2002).

- **Bottlenose Dolphin – St. Joseph's Bay** (Reviewed by Wells & Nowacek)

The stranding data are needed. Under the section "Other mortality," Wells suggested including a sentence on health assessment and one on human provisioning (see his specific comments). Nowacek may be able to provide a publication by Bouveroux to cite on human provisioning impacts.

- **Bottlenose Dolphin – Caribbean** (Reviewed by Baltz & Wells)

See Wells' concern about whether this should be a strategic stock or not given under the general section above.

- **Bottlenose Dolphin – Bays, Sounds & Estuaries** – Gulf of Mexico (Reviewed by Baltz & Wells)

Wells included several corrections we should make in the stock range section as indicated in his individual comments (i.e., subsuming Little Sarasota Bay). In Table 1, a correction is needed on Barataria Bay $N_{min}$ and PBR for consistency with the overall Gulf of Mexico BSE chapter. In bays B20 and B25 the $N_{best}$ estimate of 160 has been updated, as described in his specific comments. (These changes were made in the 2010 SAR. There was a mix-up on the version being reviewed.) In the 'Gillnet fishery' section, first sentence, we should add "… in recent years" to first part of sentence, as there were some mortality reported in the past. The stranding data are needed. Inclusion of the latest UME was discussed, though the determination was made to add this to the next year's SAR.

- **Bottlenose Dolphin – Oceanic Gulf of Mexico** (Reviewed by Baltz & Wells)

Under the "Other mortality" section, Baltz suggested including a sentence with a reference by Greg Gitschlag at NOAA Galveston Lab on how and what is monitored during rig decommissioning.

- **Gray Seal** (Reviewed by Gilbert & Lawson)

Gilbert pointed out that there is now pupping on Matinicus Island in Maine. Lawson said there may be a larger total allowable catch (TAC) in Canada that he can provide.

- **Harbor Seal** (Reviewed by Gilbert & Lawson)

Lawson mentioned the St. Pierre breeding colony (French islands just to the south of the island of Newfoundland) in Canada which should be incorporated.

- **Harp Seal** (Reviewed by Lawson & Gilbert)

Lawson said he can provide some new Canadian estimates which should go into Table 1. He will also supply new TACs and actual catches. He will find out if fishery bycatch information is broken out in a recent publication.

- **Harbor Porpoise** (Reviewed by Read & Young)

Young asked for more clarification on the research takes. Read said the phrase "cause of death not being evaluated" needs to come out. Lawson said he is working on more recent Canadian data.

- **Risso's Dolphin** (Reviewed by Odell & Read)

Minor editorial comments only.

- **Atlantic White-Sided Dolphin** (Reviewed by Gilbert & Read)

It was noted that this stock is now strategic. Lawson said they have not sighted white-sided dolphins in eastern Canada during surveys and research trips as often as they used to either. Read made a comment about summing estimates over years. A more conservative approach would be not to sum.

- **Short-beaked Common Dolphin** (Reviewed by Read & Young)

It was pointed out that the description of the NE sink gillnet fishery is different here than elsewhere in the document. Also, UME information should be obtained directly from the NEC, not from the MMC report.

**9. NEFSC Updates (cont.)**

- **Acoustic Research and Applications**

Cholewiak (NEFSC) summarized the NEFSC passive acoustic program. The four main research projects are: the Stellwagen Sanctuary Ocean Noise Project (2007-ongoing), the acoustic behavior of marine mammals and fish (2007 – ongoing), the acoustic abundance estimation of marine mammals (2007 – ongoing), and autonomous acoustic technology.

The objectives of the Stellwagen Sanctuary Ocean Noise project are to map the ocean noise budget within the sanctuary, characterize various contributing noise sources (biological and anthropogenic), and evaluate the noise impact, masking and shrinkage, on the communication area. Communication ranges for 89 right whales were modeled over the course of one month (April 2008) with the conclusion that 72-84% of the communication space has been lost to calling right whales under present-day conditions. Work on communication masking has now been expanded to multiple species and call types, integrating sound fields from multiple types of vessels.

The acoustic behavior project aims to elucidate basic acoustic behavior of different species, validate passive acoustic results with respect to other monitoring platforms, and evaluate the effectiveness of passive acoustics as a tool for both monitoring and mitigation. Part of the project focuses on the acoustic behavior of right whale mom-calf pairs. This research is being carried on in collaboration with Dr. Susan Parks (Penn. State University). Fieldwork in the Bay of Fundy, Cape Cod Bay, and on the Southeast calving grounds involves making recordings with a towed hydrophone from a small boat. Also falling in the category of acoustic behavior, is a project exploring variation in right whale calling activity. Patterns and behavioral ecology at different spatial and temporal scales are being analyzed. Researchers are finding high call rates for shorter bouts in the winter and lower call rates for longer bouts in the spring. Gunshot call activity peaked in January, while upcalls are more predominant in spring. The occurrence and movement of singing humpback whales is also being examined. Movement patterns of the humpbacks tracked acoustically are being compared in pre- and post-migration seasons.

Anthropogenic impact on singing humpbacks on the foraging grounds is another area of research. Decreases in singing activity have been detected in response to acoustic transmissions at distance of over 200 km (Risch et al. in review).

The aim of the acoustic abundance estimation project is to develop protocols for monitoring spatial and temporal trends in relative abundance, work towards absolute acoustic abundance estimates for cetaceans, and integrate acoustic abundance estimates with visual abundance estimates. Protocols were developed for the 2010 abundance survey off the northeast US coast but that cruise was cancelled. Several researchers participated in the 2010 SWFSC cetacean survey (HICEAS 2010) to extend training in real-time detection and localization of cetaceans. Preparations are being made for the 2011 Atlantic marine mammal stock assessment survey.

The autonomous acoustic technology project is looking a glider technology to record low and mid-frequency marine mammal vocalizations; detect, classify and remotely report vocalizations of interest; and collect oceanographic data. Three gliders were deployed in the Great South Channel in 2010, with transect locations chosen based on encounter rates with baleen whales during previous shipboard surveys. Analysis is underway on those data. The next deployment is planned in conjunction with the May 2011 right whale survey.

Several acoustic working groups—the Passive Acoustic Marine Ecology Group, the Ocean Noise Working Group, and the Cetacean Hotspot Working Group—have been established to facilitate communication between science centers, other NOAA groups and collaborators outside NOAA. Educational outreach programs the acoustic group is working on include an ocean noise kiosk in the Woods Hole Science Aquarium, and several student mentor programs.

Gouveia asked how close we are on abundance estimation by passive acoustics. Cholewiak said it works well for some species, sperm whales for example. We still have a lot of questions.

- **NEFSC staff changes**

Mike Simpkins is the new Protected Species Branch Chief.

**10. SEFSC Updates**

- **2010 SEFSC Fieldwork (Mullin, SEFSC).** Work in 2010 was primarily related to the oil spill that resulted from the BP/Deepwater Horizon MC252 explosion and well blowout on 20 April 2010 in the north-central Gulf of Mexico. In collaboration with the National Ocean Service (NOS) and CZS, small-boat photo-ID mark-recapture and biopsy effort took place in Barataria Bay, LA, Chandeleur Sound, LA, Mississippi Sound, MS, and St. Joseph Bay, FL. Fieldwork started in May, one month after the well blowout and covered areas in Louisiana and Mississippi prior to the arrival of oil, and continued to the end of 2010. A fourth site in St. Joseph Bay, FL served as a comparative site with no oil. Photo-ID data are being collected for abundance estimation as well as to follow fecundity and survivorship in these populations. Biopsy samples were collected for planned analyses of PAH exposure, stock identification, hormonal levels and stable isotopes. During the oil spill, helicopter overflights were conducted between 28 April and 31 July 2010 over the spill area to document marine mammals and sea turtles. In addition, synoptic aerial surveys were conducted from 28 April through 2 September between Atchafalaya Bay, LA and Pensacola, FL. Approximately two surveys were conducted per month with a total of 30 survey days, covering ~17,000km of trackline. Finally during the summer of 2010, an oceanic marine mammal assessment survey was conducted in the northern Gulf of Mexico. Visual and passive acoustic survey data were collected and 25 sonobuoys were deployed to provide 200 days of continuous recordings of marine mammal vocalizations. Effort focused on sperm whales and Bryde's whales; 12 satellite tags were deployed on sperm whales. During the fall of 2010, a second oceanic marine mammal assessment survey was conducted with a focus on visual and acoustic effort in Bryde's whale habitat combined with mid-water trawling to further sample and characterize sperm whale prey.

Prior to the spill, the SEFSC conducted a cruise in collaboration with BOEM ("MMS") to identify and quantify sperm whale prey in the northern Gulf of Mexico. The survey included visual and passive acoustic surveys for sperm whales, biopsy sampling, mid-water trawling and active acoustics for determining prey distribution.

In the Atlantic, the SEFSC flew summer aerial surveys from Florida to central New Jersey from the shore to the 200-m isobath for marine mammals and sea turtles as part of the AMAPPS project, which is run in conjunction with the NEFSC.

Finally, small boat biopsy effort was carried out in Pamlico Sound, NC and Cedar Key, FL. The former was designed to collect biopsy samples from the NNCES stock while it resides within Pamlico Sound in the summer for stock structure work. In Cedar Key, bottlenose dolphin biopsies were collected for a PhD student for stable isotope and fatty acid analysis, and for NMFS stock structure work.

- **2011 SEFSC Fieldwork Plans (Mullin, SEFSC).** During winter and summer 2011 the SEFSC will

conduct aerial surveys in the Atlantic (from southern Florida to central New Jersey) in conjunction with the NEFSC for the AMAPPS program. In addition, the SEFSC will conduct seasonal aerial surveys in the Gulf of Mexico continental shelf waters from the Florida Keys to the Texas-Mexico border, as well as over the shelf break to cover waters favored by sperm and Bryde's whales. The SEFSC plans two vessel surveys in 2011 in the Atlantic. The first is planned for summer 2011 covering waters from the 50-m isobath to the EEZ between central Florida and Delaware, in conjunction with the NEFSC for the AMAPPS program. The second survey, planned for fall 2011 will focus on collecting pilot whale biopsy samples along the shelf break between Delaware Bay and the southern flank of Georges Bank. These samples will be used to inform spatial models used to apportion fishery mortality between the two pilot whale species. Finally, in 2011 the SEFSC has deployed two auto-detection buoys, one near the Jacksonville, FL shipping lanes and the 2nd off Savannah, GA for real-time detection and notification of right whale calls. Both sites lay beneath aerial survey tracklines to provide direct comparison of acoustic and visual detections. Detections are monitored daily and notifications will be made over the EWS when aerial surveys are not active over the buoy sites. In collaboration with the NOS during summer the SEFSC will conduct a health assessment of bottlenose dolphins in Barataria Bay, LA. The SEFSC will also continue to conduct biopsy and photo-ID sampling of bottlenose dolphins in bays, sounds or estuaries in the northern Gulf of Mexico.

• **Other 2011 Work (Rosel, SEFSC).** With partial funding from the MMC, the SEFSC convened a workshop in January 2011 in Atlanta, Georgia. The focus and goals of the workshop were to develop agreed upon best field and analytical practices and methodologies for estimating abundance for estuarine bottlenose dolphin populations in the southeast United States using capture-recapture techniques. The workshop focused on establishing consistent definitions and terminology of resident and transient animals, defining best practices in capture-recapture (CMR) survey design, improving understanding of design constraints for different estuarine environments, evaluating CMR analytical tools for their appropriateness for these complex environments and practical considerations for both field work and photo analysis. Participants included experts in the fields of capture-recapture statistics, bottlenose dolphin photo-ID fieldwork and photo analysis, and bottlenose dolphin ecology and population biology. A workshop report will be forthcoming as a NOAA technical memorandum.

**11. GAMMS III**

Eagle (F/PR) said a high priority for the upcoming GAMMS III meeting will be the outdated PBR discussion. Read said we need guidance as to whether a stock should be strategic with no $N_{min}$ if it is a new SAR. Gilbert said some of the model-based estimates might be good for more than 8 years. There also should be a way to get something on the depleted list is there is a subdivision of stock. Kenney stated that there was some talk at the last joint SRG meeting that the CVs should become bigger as the population estimate ages. Simpkins said one of the reasons NMFS received funding for surveys this year was because of the argument that the estimates were expiring. Young is the only SRG representative going to the GAMMS III meeting, so she said if anyone has anything that she should bring up at the meeting, tell her by Monday. Also on the agenda for the GAMMS meeting will be PBR for very small stocks—the issue of smoothing. Wells said smoothing would dull the ability to respond to problems. Rosel said it's possible that the metric of PBR is wrong for these small stocks. Young said there is a growing sentiment in the general public that animals protected by the ESA might not also need protection under the MMPA.

**12. SRG Membership Status**

The SRG has two vacancies that it is hoping to fill. Waring discussed the process used to attempt to fill one vacancy with someone knowledgeable and working in the Caribbean. Three researchers were contacted to discuss their interest in serving on the SRG. Ultimately only one person remained interested, although in the end no selection was made to fill this vacancy. The SRG argued that this position needs to be filled with someone with knowledge of Caribbean marine mammal research and will provide a list of quantitative researchers working in this area for consideration. They expressed frustration over the lack of progress on this issue.

**13. Update on IACUC**

Jim Bohnsack (SEFSC) joined the meeting via conference call to explain the status of the IACUC, which was formed in the end of 2009. Bohnsack will serve as the chairperson this year, while someone from the NE will take over this responsibility next year. Members include a veterinarian representative, filled by Ruth Ewing (SEFSC), a marine mammal representative filled by Gordon Waring (NEFSC), and the outside representative is Mendy Garron (NERO). The Administrative assistant is Charles Turner (SEFSC). A website has been set up, and includes the five permit applications currently under review, as well as any other documentation pertaining to the functioning of this committee. Read expressed his concern that this group may be open to jeopardy for using a

NMFS person as the "outside" member, and the SRG will likely comment on this aspect. Gilbert asked how the committee would handle a conflict between the MMPA and the IACUC, specific to having to euthanize an animal during handling. Bohnsack indicated the issue has not yet arisen. For turtles, the committee refers to a standards manual, and the permit is approved if there is no deviation from these standardized methods. The clarification was made that this process is just directed at government research. The only modification to a permit that has been reviewed by this committee is the SEFSC's Bryde's whale modification. Another issue before the committee is the requirement to train PIs, which is a weakness they are trying to address.

**14. FY11 Budget status**

Eagle explained that the government is still working under a continuing resolution which will end in early March. At this point, no one can tell if an operating budget will be approved by the time the continuing resolution expires. The AMAPPS funding is in hand, but the right whale money was decreased to the 2008 funding levels. Mullin added that a majority of the fieldwork conducted by the SEFSC in FY11 may be conducted with funding from NRDA and BOEMRE.

Appendix 1. Meeting Agenda

**Atlantic Scientific Review Group**
**Draft Meeting Agenda – February 9-11**
**Boston, MA**

***Wednesday, 9 February, 2011 (0830)***

**1. Introduction (Read & Waring)**

- Welcome & Introductions
  - Housekeeping
- Travel Reimbursement
- Appointment of Rapporteurs
  - Minutes
- Review Agenda
- Review Documents

**2. Take Reduction Plan Updates (NMFS Staff)**

- BDTRP (SERO)
- PLTRT (SERO/SEFSC)
- ATTRP (NERO/NEFSC)
- HPTRP (NERO)
- ALWTRP (NERO)

**3. Proposed List of Fisheries (NMFS Staff)**

- Regional Changes (SERO/NERO)

**4. Stranding Program (NMFS Staff)**

- Northeast Region (NERO)
- Southeast Region (SEFSC/SERO)

**5. Right Whales (Nowacek)**

- Speed Rule
- Implementation Teams
- Research Program

***Thursday 10 February, 2011 (0830)***

**6. Review Draft Manatee Stock Assessment Reports (SRG)**

- Puerto Rico Stock (Odell, Nowacek & Read)
- Florida Stock (Odell, Wells & Read)

**7. NMFS Stock Assessment Program (NMFS Staff)**

- Status of 2010 SARs (NEFSC/SEFSC)
- Status of Serious Injury & Mortality Guidelines (F/PR)
- SAR-Related Topics (Stock ID Work; PBR Issues, *etc*.)

**8. Review Draft Odontocete & Pinniped Stock Assessment Reports (SRG)**

- Appendices (All SRG Members)
- Fin Whale (Nowacek, Kenney & Lawson)
- Humpback Whale (Nowacek, Kenney & Lawson)
- Right Whale (Kenney & Young)
- Minke Whale (Kenney & Gilbert)
- Sei Whale (Kenney & Lawson)
- Bryde's Whale (Kenney & Odell)
- Gray Seal (Gilbert & Lawson)
- Harbor Seal (Gilbert & Lawson)
- Harp Seal (Lawson & Gilbert)
- Harbor Porpoise (Read & Young)
- LF Pilot Whale (Young & Read)
- SF Pilot Whale (Young & Read)
- Risso's Dolphin (Odell & Read)
- White-Sided Dolphin (Gilbert & Read)
- Common Dolphin (Read & Young)
- Pan-tropical Spotted Dolphin – Caribbean (Lawson & Baltz)
- SF Pilot Whale – Caribbean (Young & Odell)
- Spinner Dolphin – Caribbean (Baltz & Lawson)
- Spotted Dolphin – Caribbean (Baltz & Odell)
- Cuvier's Beaked Whale – Caribbean (Young & Nowacek)
- Bottlenose Dolphin – Barataria Bay (Wells & Odell)
- Bottlenose Dolphin – Choctawatchee Bay (Wells & Nowacek)
- Bottlenose Dolphin – St. Joseph's Bay (Wells & Nowacek)
- Bottlenose Dolphin – Caribbean (Baltz & Wells)
- Bottlenose Dolphin – Bays, Sounds & Estuaries (Baltz & Wells)
- Bottlenose Dolphin – Oceanic Gulf of Mexico (Baltz & Wells)

**9. NEFSC Updates (NMFS Staff)**

- NEFSC 2010 Fieldwork
- NEFSC 2011 Fieldwork Plans
- Acoustic Research and Applications
- NEFSC Staff Changes

**10. SEFSC Updates (NMFS Staff)**

- 2010 SEFSC Fieldwork
- 2011 SEFSC Fieldwork Plans
- Acoustic Research and Applications
- SEFSC Staff Changes

***Friday, 11 February, 2010 (0830)***

**11. GAMMS III (Read & Young)**

**12. SRG Membership Status (Read)**

**13. Update on IACUC (NMFS Staff)**

**14. FY11 Budget status (NMFS Staff)**

**15. Other Business**

**16. SRG Business & Wrap-Up (Read)**

- Finalize Recommendations
- Venue and Timing for 2012 Meeting
- Adjourn at Noon

Appendix 2. Contact List

| Firstname | Lastname | Organization | StreetAddress | City | State | Zip | email | Phone |
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