The spring meeting of the Atlantic Scientific Review Group was called to order at 9 am on May 20, 1998. The group was hosted by Mote Marine Laboratory, and Dr. Kumar Mahadevan, Executive Director and Senior Scientist, opened the meeting with his greetings. A list of attendees is appended.

Stock Assessment Reports

1. Review of revised Species Assessment Reports.

The primary purpose of the meeting was to review the stock assessment reports that NMFS had revised prior to our meeting. Dr. Phillip Clapham began with a review of the status of the large whales. Stock Assessment Reviews (SAR) for sei and blue whales were not updated. For all large whales, human interactions were updated through 1996. There were significant changes in the SAR for right, finback, and humpback whales.

**Right whales:** New genetic techniques applied to additional samples have revealed five maternal lines rather than three. Preliminary analysis indicates that Eastern and Western North Atlantic animals are not distinct.

Mortalities of right whales are a concern, with six in 1996. The mortality of the 1993 animal entangled in lobster gear and subsequently caught in swordfish driftnet gear was assigned to the lobster fishery only under the MMPA. It will continue to remain a take by the driftnet fishery under the ESA. The SRG agreed with this assignment after discussion. It was suggested that details of each take and assigned cause (for all large whales) should be available to help interpret situations such as this. A document separate from the SAR was recommended.

The population trend of right whales is not known, and previous analyses suggesting trend have problems. Given this, the SRG recommends that the potential rate of increase for right whales be changed to the default value of 0.04 for large whales when calculating PBR. The prior rate of 0.025 was a published estimate of realized rate, and that figure is old and the assumptions that lead to that rate have been questioned.

The SRG expressed concern regarding the number of ship strikes of right whales and other large whales. The number of takes from ship strikes is a significant fraction of the total takes, yet remains unregulated.

**Humpback whales:** The SAR reflects results of photo identification and genetics studies from project YONAH. There is a new PBR and new data on population growth rates. Humpback whales demonstrate maternally directed fidelity to specific feeding
injury categorization is under review. The SRG discussed the application of the serious injury guidelines to Risso’s dolphin takes.

**Pilot whales:** The SRG discussed the impact of the butterfish trawl fishery on pilot whales. The estimated mortality exceeds PBR. Effort in this case was based on landings and observed sets. The SRG re-iterated that the NMFS should establish an observer program for the trawl fishery. This fishery takes a variety of marine mammals, but it is not certain what species (squid, mackerel, or butterfish) is being targeted when bycatch occurs. The trawl fishery was discussed at length, with the SRG members encouraging NMFS to obtain more precise data on take and to evaluate whether to reclassify the trawl fishery or some segment (by species, in-shore or offshore) as a Category I fishery.

**White-sided dolphins:** Debra Palka presented the revised SAR. The SAR notes that takes have increased and the species is now a strategic stock. The SRG noted that there is no Take Reduction Team (TRT) for this species.

**Common dolphins:** Assessments from the Atlantic squid/mackerel/butterfish trawls has doubled the total mortality since the last assessment. The SRG noted that these fisheries should be invited to the existing TRT.

**Spotted dolphins:** The SRG for this species has only minor revisions.

**Striped dolphins:** One of the fisheries causing mortality is no longer operating. Mortality rates have declined.

**Spinner dolphins:** The SRG questioned how the mortality rates were pooled for this (and other species). The draft SAR was not clear. The SRG discussed, without resolution, how to consider and report information that a fishery historically may have had takes, but recently has not. The group also discussed how long historical information should be included in SARs.

**Bottlenose dolphins (offshore stock):** The estimation of mortality and the assignment of takes to either the offshore or coastal stocks were questioned by the SRG. The SRG recommended revision and clarity of the mortality table.

**Bottlenose dolphins (Atlantic coastal stock):** Discussion postponed until SRG members have had a chance to review.

**Harbor porpoise:** Debra Palka presented the revised SAR. The SRG spent considerable time (and enthusiasm) meticulously editing the draft SAR for harbor porpoise. The SRG recommended a separate section of the SAR to evaluate the success in meeting the harbor porpoise TRT recommendations.

**Harbor seals:** The SAR has been revised to include the 1997 population estimates. The SRG made editorial recommendations. A discussion centered on how shooting mortalities are determined and included in SAR.
Gray seals: The definition of stock for gray seals was discussed at length, as the population size used to calculate PBR may need to include gray seals in Canada. For both harbor seals and gray seals, genetic stock definition studies should be conducted.

Harp seals: There has been an increase in number of strandings and in fisheries bycatch. PBR has not been calculated.

Hooded seals: A member of the SRG noted that there are now stranding records from Puerto Rico.

Bottlenose dolphins (Atlantic coastal stocks): Dr. Steven Swartz led the presentation of these stock assessments. The SRG discussed at length whether to separate the Atlantic coastal stock from a bay, sounds and estuaries (BSE) stock, and how much the BSE stocks should be separated. For many of the BSE, there are no population estimates. Stock definition is a priority for SEFSC scientists. Most of the take was in the spring and fall in coastal fisheries in North Carolina and Virginia. Given the lack of definition, the SRG proposed that the coastal and BSE individuals be assigned to a "stock complex." Simulations of the implications of different stock definitions and management units were recommended.

Bottlenose dolphins (Gulf of Mexico shelf and slope stock): SARs for the gulf stocks were not updated prior to the meeting, with the focus of limited staff being on the mid-Atlantic coastal stock assessment. The SRG noted additional information from literature that should be included in the SAR.

Bottlenose dolphins (Gulf of Mexico coastal stocks): Information on along-shore movements of individuals is available. The SRG noted the menhaden fishery does take bottlenose dolphins, perhaps in significant numbers, and should therefore be reclassified. The SRG noted that the stranding data were not complete. They also recommended that recreational crab-pot fisheries be included in overall mortality estimates.

Bottlenose dolphins (Gulf of Mexico bay, sounds and estuary stocks): The SRG spent considerable energy discussing the status of the present stock structure for Gulf BSE stocks. The SRG noted that the NMFS and the SRG should move to consistency in stock definition between the Atlantic and the Gulf BSE stocks. The SRG encouraged the SEFSC to collect new and available information, then develop alternatives for consideration, perhaps with the aid of simulations. The SRG anticipates a presentation of progress at the fall meeting. The SRG recommended the present SARs for all Gulf of Mexico bottlenose dolphin stocks not be given a new date as only minor editorial corrections had been made.

2. Review of schedule for preparation of the SARs, including a review of the "rules" for data to be used in the LOF.

The Atlantic Species Assessment Reviews have been out of sequence with the other
SARs, resulting in less timely information being considered for generating the List of Fisheries (LOF). NMFS proposed to update the Atlantic SARs again this year by October. This allows NMFS to meet its statutory requirements and have more timely information for the preparation of the next LOF. The SRG recommended the fall SAR document include an executive summary outlining the changes from the previous document, with a discussion of the number of strategic stocks and the TRTs that are in place. This might be something the Pacific and Alaskan SARs would want to include.


**Manatees:** Billy Brooks, USFWS, presented information on the Manatees to the SRG. The Manatee Recovery Plan was reviewed. Human-caused mortality and harassment is still significant, with 1997 being the second highest mortality on record (behind the 1996 die-off). Assessment was difficult this past year due to lack of cold weather to drive manatees to springs and man-made warm water sites. Enforcement of watercraft speed zones is still not adequate. Deregulation of electricity may result in some older power plants in Florida to be shut down, thus no longer providing warm outflows for manatee wintering habitat.

**List of Fisheries**

4. Review of crab-pot fisheries interactions in Atlantic. - Swartz/Mantzaris/Brooks

The crab pot fisheries interact with both bottlenose dolphins and manatees. The group discussed possible means of reducing impact of entanglements, including breakaway gear similar to that being developed for NE lobster fishery.

5. Review of 1998 levels of takes in the Mid-Atlantic coastal gillnet fishery.- Palka

Takes in the mid-Atlantic coastal gillnet fishery were summarized. Extrapolation of observed takes of harbor porpoise to total take is difficult because it relies on landings by port and extrapolation from observed hauls. Hauls are not consistent because of weather. The number of northern boats participating in this fishery has declined.

6. Review of proposed changes to the list of fisheries. - Waring/Wang/PR (Eagle)

The LOF proposals for 1999 were presented by Waring. The Atlantic mid-water herring trawl fishery will be Category II. The group entered a discussion of the definition of this fishery. Although there is a difference between a mid-water and bottom trawl, and noted the same equipment could be used both ways. The definition of the butterfish, mackerel, and squid trawl fishery is also being determined.

Members of the SRG expressed frustration over the inability of the LOF to include timelier bycatch information. While recognizing the need for peer review of data,
basing the LOF for 1999 on data only through 1995 was considered an unnecessary bureaucratic delay. A fishery therefore has a delay in reclassification either to a more restrictive category or to a less restrictive category. The SRG encouraged streamlining peer review of fisheries interaction data so that it could be considered in determining management actions more quickly. The SRG members offered to be available for peer review throughout the year.

The pelagic longline fishery (swordfish, tuna, shark) is proposed to be classified category I.

Doug Beach presented an overview of serious injury and mortality guidelines that will be available for comment when published in the Federal Register.

**Take Reduction Teams and Plans**

7. Review of Atlantic Bottlenose dolphin research and mortality estimation programs - Swartz

Steven Swartz presented the plans for stock identification in mid-Atlantic. They have a coordinated photo-identification program at four sites, with a companion biopsy sampling effort. VHF and satellite transmitters will be attached. There will be a pelagic cetacean survey in Atlantic this summer that will include biopsy sampling in north and south ends of range.

Members of the SRG questioned why there would not be a coastal bottlenose survey in Atlantic at the same time as the pelagic survey. NMFS proposals for the coastal survey were not funded. The SRG stressed the need for both surveys and the biopsy sampling to be done at the same time. The SRG noted that much of the money for marine mammals is allocated to observer programs.

Mortality estimation of bottlenose dolphins was reviewed. Stranding response and gathering of samples is responsibility of the SEFSC. There are simultaneous beach and aerial surveys being conducted in NC and VA.

8. SRG input regarding the advisability of going ahead with a bottlenose TRT as currently scheduled for Jan. 1999 based on info projected to have by that time.

The SRG declined to comment, as this was not a scientific matter.


Regulations proposed as a result of the harbor porpoise Take Reduction Plans were presented by Doug Beach. There are area closures for fisheries effort reduction and
requirements to pingers for additional reduction in mortality of harbor porpoise. There will be workshops on pinger use in hopes of increasing pinger efficiency beyond 50%. For the mid-Atlantic area, there will be additional gear modifications and tie-down specifications. In the mid-Atlantic, the regulations will also incorporate the recommendations of the Large Whale TRTs.

International Issues

10. Review of recommendations from the IWC inter-sessional workshop on right whales. - Swartz/Clapham

Steve Swartz summarized the IWC right whale workshop held in Capetown, SA. The meeting reviewed right whale systematics, abundance and trends; status; potential for recovery; and the impacts of whale watching. The report of the workshop will be available soon. The Western North Atlantic population was classified as a relic population.

11. Review of relevant issues arising from the Oman IWC Scientific Committee meeting - Swartz/Clapham (Palka)

At the IWC meeting there was considerable discussion of means to reduce bycatch of harbor porpoise. Abundance estimators also received attention. Multidisciplinary (oceanographic, fisheries, and marine mammal) surveys were being designed in some areas. The Revised Management Procedures sub-committee is looking at new abundance estimators that incorporate temporal and spatial components. These methods will be tested against theoretical data. There also was a workshop on chemical contaminants.

12. Update of information on humpback whales. - Clapham/Swartz

There was a call to do a comprehensive Humpback assessment in the year 2000. There were questions about the discrepancy between the Northern and Southern hemisphere productivity rates. Stock issues discussed included whether there has been a shift in winter habitat from the Windward Islands to the area near the Dominican Republic, or if these are separate stocks. Funding and logistical support for these activities may be coming from NOAA. Disentanglement response approaches were discussed, especially whether to have a professional team, or to train volunteers.

13. Update on the status of ICES marine mammal activities. - Waring

Gordon Waring summarized the issues at the latest ICES meeting for the SRG. ICES is concerned primarily with ecological issues in the North Atlantic. Fisheries bycatch, contaminants and diseases are issues they do address. There are three working groups that focus on marine mammals. One is the joint NAFO/ICES Working Group on
Harp and Hooded Seals. This WG does review analytical assessments and provide management advice for harvested stocks in both the NW & NE Atlantic. In 1997, ICES established two new WG's, "Working Group on Marine Mammal Population Dynamics and Trophic Interactions" and "Working Group on Marine Mammal Habitats." The latter WG's are concerned with population dynamics, ecology, contaminants, and by-catch issues. They do not conduct stock assessments or provide assessment related management advice. Also, these groups evolved from the "Working Group on Seal and Small Cetaceans in European Seas," which was abolished when the new WG's were established. Reports of the 1997 WG on Harp & Hooded Seals, and 1998 WGMMPD and WGMMHA are available from Gordon Waring.

Research Plans

14. Update on planned NEFSC and SEFSC spring to summer 1998 surveys.- Palka (Waring/Clapham) /Swartz

Debra Palka summarized the planned surveys for this summer. There was a harbor porpoise survey in March from Georges Bank to Cape Hatteras. This summer there will be two months of shipboard effort on the Able J and six weeks in the NOAA twin otter to cover an area from Virginia to Halifax, including the southern part of Jeffery’s Ledge and the southern Gulf of Maine (but not the northern Gulf of Maine). The Delaware is available for July and August. If the drift gill net fishery is operating, the vessel will be used for biopsy surveys in August. If the fishery is not operating, the Delaware will be used to obtain biopsy samples from common and bottlenose dolphins and large whales. The SRG expressed concerns that there will not be enough lead-time to place observers on the drift gill net vessels.

Steve Swartz described the SEFSC component of the survey. The Relentless will use passive acoustics and observers to survey waters from shallows into pelagic waters. The surveys will run from June through August, beginning in the north in Virginia and extending to the Straits of Florida.

15. Seal studies in the NE (Review April meeting with the NE seal researchers).- Waring.

Gordon Waring summarized the discussions of a meeting at the New England Aquarium to determine the status of phocid research in New England. The number of seal strandings has increased dramatically over the last several years, swamping stranding networks. A coordinator for the stranding network in Maine is being sought. NMFS is funding a couple of graduate students and is conducting a study on the impact of acoustic harassment devices used to keep seals from salmon aquaculture pen sites. Plan is to develop correction factors for abundance surveys and monitor southern New England from December through May.

16. Review of SEFSC's and NEFSC's Draft Long-Range Strategic Plans for marine
Steve Swartz and Richard Merrick discussed their respective Center’s long term plans for marine mammal research. The SEFSC was following the recommendation of the Program Review for a long-range, integrated plan to cover marine mammals, sea turtles and biodiversity issues. These efforts of the Protected Species Branch will be interfaced with those of the Sustainable Fisheries Branch. The approach will be two-tiered, with a first tier of those issues that are regional, and a second tier of those issues in common with the NEFSC. These common issues will be coordinated through a steering committee and three working groups. The NEFSC is also developing a five-year plan by identifying functions (conduct and improve stock assessments, reduce human threats, implement TR Plans, reduce pinniped conflicts with fisheries, and address marine turtle issues). These plans will be made available to the SRG for review. A national plan integrating these and west coast plans is F/PR objective.

17. RPS (Recover Protected Species) funding for FY98 and proposals for FY99.-Swartz/Merrick

Richard Merrick and Steve Swartz summarized the RPS projects funded and identified the priority projects that will be proposed for funding this coming cycle. SRG members questioned priorities assigned to some of the projects, but also appreciated the opportunity to discuss these projects and see a planned approach to selecting projects for funding consideration. [not sure about need for more detail here, as notes on individual projects are spotty]. The SRG did not officially rank the proposed projects.

18. Review of Atlantic right whale 3-yr spending/research plan - PR (Eagle), Swartz (Wang), Clapham (Beach)

The right whale research plan was presented and discussed. Determining population number and trend is the number one priority. Photo ids, population analyses, distribution of animals, distribution and interactions with shipping are all information needs.

Other Business

19. Joint East-West SRG meeting. - Gilbert

The idea of a joint SRG meeting was discussed and supported. The idea agreed upon is to have a day devoted to joint concerns and then break into individual SRG meetings. The joint session would be to 1) address questions of stock definition and trans-boundary stocks, 2) determine the advisability of fine-tuning the Recovery Factor defaults for endangered species and developing guidelines for consistent application of alternate recovery factors among SRGs, 3) standardize the relationships and reports
between the SRGs and NMFS -standardize the recommendation process, 4) review the ZMRG definition by NMFS, 5) develop a common SAR revision schedule. October or November was agreed would be a logical time for this meeting. The meeting was adjourned after thanking Randy Wells and the Mote Marine Laboratory for hosting the meeting. James Tobias took notes throughout the meeting.

1. The ASRG recommends that the potential rate of increase for right whales be changed to the default value of 0.04 for large whales when calculating PBR. The prior rate of 0.025 was a published estimate of realized rate, and that figure is old and the assumptions that lead to that rate have been questioned.

2. The ASRG recommends that NMFS consider stock assessment for Humpback whales based only on the Gulf of Maine feeding stock. The NMFS should then add known mortalities outside US waters for assessment of NW Atlantic feeding stock. Mitochondria DNA studies indicate that, although this group is part of a larger breeding stock, the Northwest Atlantic feeding stock is one of several discrete stocks.

3. The ASRG endorses the IWC recommendation to consider the mortalities from ship strikes on right whales and other large whales in managing species. Because ship strikes are a significant fraction of human-caused mortality, recovery of these species will depend on minimizing these events.

4. The ASRG recommends that NMFS revise the Species Assessment Report for Kogia to account for new abundance surveys and low level of takes, possibly reclassifying the stocks as non-strategic after reviewing this data.

5. For beaked whales, the ASRG recommends 100% observer coverage in pelagic driftnet fishery due to high by-catch rates of these and other endangered species. The NMFS should evaluate the potential for variation in by-catch rate between observed and non-observed vessels. In an effort to move towards species-specific assessment, all samples of beaked whales taken should be identified to species using genetic methodology.

6. The ASRG urges that the 1996 long-line by-catch data should be included in the SARs.

7. The ASRG requests that NMFS consider reclassification of Atlantic squid, mackerel and butterfish fisheries to category I because estimated takes in these fisheries exceed PBR for two stocks of marine mammals.

8. The ASRG agrees that white-sided dolphins are strategic.

9. Many of the strategic stocks do not have a Take Reduction Team established.

10. The ASRG recommends that research should be conducted on stock structure of gray and harbor seals as relates to trans-boundary management issues.

11. The ASRG recommends a review and update information on stock structure for bottlenose dolphins. This revised stock structure should be consistent between the Gulf and Atlantic stocks. Progress on this question will be reviewed at the November ASRG meeting. We
emphasize the need for updated abundance survey and biopsy sampling in mid-coastal Tursiops as a matter of highest priority.

12. Because several (9) takes of bottlenose dolphins, including three mortalities and one likely mortality, were recorded in a limited number of observed trips in the Gulf of Mexico purse seine fishery for Gulf menhaden (3 of 127 sets in 1992 and 2 of 911 sets in 1994 and 1995 combined), the impact of this fishery on bottlenose dolphins is probably substantial and should be evaluated by NMFS.

13. The ASRG recommends that NMFS consider a means of expediting the categorization process for classification of fisheries so that it includes information on take levels on a more timely basis, perhaps incorporating interim peer review of material by SRGs.

14. The ASRG expresses concern regarding the expanding cost of observer programs, particularly given looming ZMRG requirements. The SRG notes that these observer programs also provide information critical to assessment of other protected species (e.g., turtles) and fisheries resources. The SRG recommends that NMFS ensure that the costs of these programs are borne equitably among different branches of the agency and further suggests that other sources of support (e.g., user fees from industry) be explored.

15. The ASRG supported the idea of a joint meeting of the three Species Review Groups next fall to 1) review trans-boundary issues in stock identification and management; 2) develop consistent stock definitions; 3) review NMFS recovery factor defaults for endangered species with the goal of developing guidelines for consistent application of alternate recovery factors; 4) review the proposed ZMRG definition; 5) standardize the recommendation process and the relationships between NMFS and the different SRGs; and 6) review the updated SAR schedule. The ASRG will want additional time to meet individually to review SARs and address other issues specific to the Atlantic and Gulf coasts.

16. The ASRG plans to review the next edition of the Species Assessment Reports at the fall meeting.