

**ATLANTIC SCIENTIFIC REVIEW GROUP**  
**22-23 May 1997**  
**New Orleans, LA**  
**Meeting Summary**

The Atlantic Scientific Review Group (ASRG) convened at the offices of the Minerals Management Service in New Orleans, LA on 22nd and 23rd May 1997. Gordon Waring of the NEFSC served as NMFS liaison to the SRG. SRG members attending were: Donald Baltz, Joe DeAlteris, James Gilbert, Bob Kenney, Jim Mead, Dan Odell, Andy Read, Randall Wells and Graham Worthy. In addition, Robyn Angliss (NMFS/FPR), Bridget Mansfield (NMFS/SER), Keith Mullin (NMFS/SEFSC), Debbie Palka (NMFS/NEFSC), Steve Swartz (SEFSC), Jim Valade (USFWS), Paul Wade (NMFS/FPR), and Sharon Young (HSUS) attended the meeting. Andy Read served as chair. Robyn Angliss, Bridget Mansfield and Debbie Palka assisted as rapporteurs.

### **1. Overview of Serious Injury Workshop**

A workshop on serious injuries occurring during the course of commercial fishing operations was held April 1-2, 1997. The 25 attendees included: NMFS scientists, veterinarians, academics, commercial fishermen, and representatives from environmental and animal welfare groups. The goal of the workshop was to define serious injury in an objective and useful manner for the purpose of stock assessments. Robyn Angliss described progress made at the workshop. The ASRG will review the workshop report in its fall meeting, and provide NMFS with formal comments on proposed guidelines at that time.

### **2. Review of Marine Mammal Health and Stranding Program**

A workshop was also held recently to review the Marine Mammal Health and Stranding Program. Eighteen participants reviewed national biomonitoring programs and regional stranding programs. The ASRG will review the report of this workshop at its fall meeting.

### **3. Right Whale Status and Conservation Actions**

#### **3.1 Northeast Early Warning System**

Gordon Waring reviewed recent NMFS actions designed to reduce anthropogenic mortality of right whales in New England. These actions include fisheries closures in critical right whale habitat, broadcast notices to mariners, and surveys designed to identify potential areas of conflict. For example, NMFS personnel co-ordinated with the US Coast Guard to use their helicopters to survey for right whales in Cape Cod Bay and Great South Channel between January and June. Sightings of right whales were relayed to mariners and fishers via marine radio and fax. Sightings data from these surveys are being archived at NEFSC. All photos of right whales are sent to the photo-ID catalog at NEA. One of the primary benefits of this program was to increase public awareness of the status of right whales in New England. The EWS will rely on opportunistic right whale sightings from whalewatch naturalist and others for the remainder of 1997. Plans for 1998 include year round surveillance with most effort placed on the January-June period.

The ASRG recommended that: (1) sightings and effort data generated from these early warning surveys be archived in an accessible format and made available to interested researchers; (2) efforts be made to obtain similar data on the occurrence of right whales collected by other agencies, such as the Navy and MMS; and (3) spatial analyses be undertaken using these data to refine our understanding of right whale critical habitat.

#### **3.2 Research and Management Recommendations**

The ASRG reviewed briefly recommendations from various organizations that were directed towards the conservation and management of right whales. The ASRG recommended that: (1) research and conservation efforts directed towards right whales along the US east coast be co-ordinated more closely, to maximize the benefits gained from scarce resources; and (2) as soon as is practical, NMFS/FPR fill the position of large whale coordinator to

assist in these tasks. The ASRG will seek advice from the Marine Mammal Commission on how these various research, management and conservation actions can best be co-ordinated.

#### **4. Takes of Wild Bottlenose Dolphins in the SE US Arising from Feeding and Swim-with Programs**

The ASRG received a copy of a letter from the Human Society of the US to the Assistant Administrator for Fisheries. The letter expressed concern over the growing number of commercial feeding and swim-with operations involving wild bottlenose dolphins in the SEUS. NMFS has recently undertaken a public education program outlining potential problems arising from this type of harassment, but no recent enforcement actions have been taken against these commercial operations. Randy Wells reviewed the scope of these operations and their recent growth in the SEUS for the ASRG. The ASRG views these commercial operations as clear violations of the MMPA and recommends that: (1) NMFS should enforce the pertinent provisions of the MMPA to prevent harm to dolphins and/or humans from these interactions; and (2) research should be conducted on potential harassment of marine mammals in the SE US from the growing number of small watercraft in these waters.

#### **5. Review of Longline Fishery Mortality Estimates**

The ASRG was presented with copies of 'Estimates of marine mammal and marine turtle by-catch by the US Atlantic pelagic longline fleet in 1994-1995', authored by G.P. Scott and C.A. Brown of the SEFSC. The manuscript presents estimates of total mortality and serious injury that will eventually be incorporated into stock assessment reports (SARs). The ASRG did not have time to review the manuscript at this meeting, but will review the paper at its fall meeting.

#### **6. Computation of Average Bycatch Mortality**

Paul Wade led a brief review of how average bycatch mortality should be calculated when data are available over several years. This topic is addressed in the new guidelines report (Wade and Angliss 1997). In general, an unweighted mean of annual mortality estimates should be used, as the true by-catch might vary from year to year and is thus not stationary. The guidelines suggest that annual mortality estimates be averaged over as many years as necessary to achieve a CV of less than or equal to 0.3, but that data from more than five years should not be used, except under exceptional circumstances.

#### **7. Estimating Techniques to Determine Appropriate Survey Interval**

Paul Wade also discussed a recent analysis of techniques to determine appropriate survey intervals for marine mammal stocks. In large part, the appropriate survey interval is a function of the CV of resulting abundance estimates. Imprecise estimates will obviously often lead to errors in stock assessments, no matter how frequently they are generated. A useful rule of thumb is that surveys should be conducted for each stock every four years.

#### **8. SEC Marine Mammal Program Review Recommendations**

Steve Swartz reviewed recommendations from the Review of the SEFSC Marine Mammal Program. The ASRG welcomed the recommendations and encouraged NMFS to implement them as soon as possible.

#### **9. NEFSC FY98 Research Proposals**

Debbie Palka reviewed the list of potential NEFSC FY98 research proposals to the NMFS MMPA Funding Review Panel to allow the ASRG to comment informally on their scope and content. These proposals were in the early stages of formulation and their titles and contents are not reported here.

Several Atlantic TRTs have recommended that NMFS investigate improved methods of fishing effort for use in bycatch estimation. The ASRG supports these proposals and recommended that NMFS improve measures of fishing effort used in bycatch estimation. Debbie Palka noted that personnel at NEFSC were investigating the use of logbooks for estimating fishing effort. The ASRG also recommended that NEFSC examine logbooks from the Gulf

of Maine sink gillnet and pelagic driftnet fisheries and groundtruth these data with independent information collected by fisheries observers, tracking days at sea, and weighout data.

## **10. SER/SEC FY98 Research Proposals**

Steve Swartz and Keith Mullin reviewed proposal topics that are likely to be submitted from the SER/SEFSC to the NMFS MMPA Funding Review Panel for consideration for FY98 MMPA funds. The SER/SEFSC will coordinate with the NER/NEFSC to ensure duplicate proposals are not submitted for the same topics.

Keith Mullin requested advice from the ASRG regarding abundance survey intervals in the Gulf of Mexico. The last abundance survey was completed in 1993, and the GOMEX survey will not be performed in 1998. It will be some time before the GOMEX surveys are reinitiated. According to the GAMMS workshop document, data more than eight years old should be discarded as invalid; four year intervals were recommended. The ASRG recommended that it would be appropriate to wait another year to conduct these large-scale abundance surveys in the Gulf of Mexico. The ASRG further recommended that stock identification research on bottlenose dolphins should assume a high priority in SER/SEFSC proposals.

The chair of the ASRG asked Steve Swartz to comment on the possible re-allocation of MMPA funds to cover base costs in the SEFSC. Swartz commented that the discretionary funding in the SEFSC was in short supply and noted that any decisions to use MMPA funds for work other than marine mammal research would be made only by the A.A. Swartz said the funding situation was serious, but that the funds were not frozen. Read commented that the ASRG would take a dim view of MMPA funds being used to cover base costs. The ASRG recommended that NMFS F/PR establish a formal process to evaluate the progress and success of research projects funded by MMPA resources. Such a review would ensure that resources are expended appropriately and that the resulting science achieves the objectives of the MMPA. This evaluation process could be initiated simply by comparing proposal milestones with project results. The outcome of these evaluations should be an important component of subsequent proposal reviews.

## **11. Status of Take Reduction Plans**

Bridget Mansfield informed the ASRG of the status of Take Reduction Plans (TRPs) concerning Atlantic stocks of marine mammals. NMFS anticipates the release of the Gulf of Maine harbor porpoise TRP in the near future. Public comment on the Large Whale TRP has been extended. NMFS plans to issue a biological opinion under Section 7 of the ESA indicating that provisions of the Atlantic Offshore Cetaceans TRP will pose jeopardy to northern right whales. NMFS is currently considering options to address these concerns.

## **12. Status of Manatees**

Jim Valade reported on the status of manatees in the SEUS. Approximately 150 deaths occurred in SW Florida during 1996 as a result of an epizootic event. The die-off was centered in the Ft Myers region at the mouth of the Caloosahatchee River. All age and sex classes were involved. It was initially believed that red tide was the cause of this unusual mortality event, because high counts of red tide organisms and fish kills were co-occurring. Five manatees were rescued alive and exhibited signs of exposure to neurotoxins. All retrieved carcasses were necropsied; many exhibited inflamed sinuses and blood in the lungs. Death occurred rapidly; some animals had food in their mouths at time of death. Exposure to brevetoxins was indicated in post-mortem analyses, although the method of transmission is still unclear - it may have been airborne. The total number of manatee deaths in 1996 was 496, or 16% of the estimated population. Models show a 7-10% increase in the population over the last 10 years. The most recent maximum winter count of manatees in Florida was 2600 individuals. There were no updates available on the status of the Antillean stock of manatees.

## **13. Stock Assessment Research Recommendations**

The ASRG reviewed research priorities for the upcoming FY98 MMPA Funding Review Panel. The ASRG prioritized research needs in the following areas:

### **13.1 Stock Assessment**

- (1) Stock identification and abundance estimation of coastal bottlenose dolphins, particularly along the Atlantic coast. Stock identification should be resolved through a combination of techniques, including photographic identification, genetics, and telemetry.
- (2) Improve understanding of the species and stock identity and abundance of pelagic cetaceans, particularly beaked whales, common dolphins, and pilot whales.
- (3) Improve understanding of the stock structure of harbor porpoises impacted by incidental catches in the Gulf of Maine and mid-Atlantic regions.
- (4) Improve estimation of  $g(0)$ , the proportion of animals that are missed during line transect surveys, particularly for deep-diving species.
- (5) Estimate abundance of bottlenose dolphins and pilot whales in waters of the US Caribbean Sea.

### **13.2 Mortality Estimation**

- (1) Improve estimates of fishing effort for most fisheries in the Atlantic and Gulf of Mexico that interact with marine mammal stocks.
- (2) Estimate incidental catches of marine mammals for the mixed coastal gillnet fisheries of the Atlantic coast, using strandings and alternative observation techniques, if necessary.
- (3) Better characterize incidental catches for the Atlantic trawl fisheries for squid, mackerel, herring and butterfish.
- (4) Determine whether current levels and distribution of observer coverage are adequate for mortality estimation in the pelagic longline fishery.
- (5) Obtain further information on incidental catches in the large mesh shark driftnet fishery in Georgia and Florida.
- (6) Standardize collection and reporting of information on fisheries interactions from stranded cetaceans and live entangled pinnipeds and manatees.
- (7) Increase efforts to detect strandings in areas not currently observed with any frequency, such as the shores of Louisiana.

### **13.3 Bycatch Reduction**

- (1) Conduct gear research to reduce entanglements of right and other baleen whales.
- (2) Evaluate strategies for reducing bycatch of harbor porpoises in sink gill nets, such as acoustic alarms.
- (3) Conduct research to identify current fishing techniques and practices that have a low probability of bycatch.
- (4) Explore the concept of individual bycatch "quotas" or other means of allocating PBR within and among fisheries.

### **13.4 Recovery and Conservation Plans**

- (1) Update the recovery plan for the Antillean manatee, incorporating information collected since 1986.

- (2) Estimate abundance and trends of the North Atlantic right whale population using mark-recapture techniques.
- (3) Conduct demographic analyses of North Atlantic right whales to determine which factors are limiting recovery.
- (4) Create a recovery plan for Mid-Atlantic coastal bottlenose dolphins.
- (5) Expand survey areas for North Atlantic right whales outside known critical habitat.
- (6) Conduct forensic analyses of stranded right whales to determine cause(s) of mortality.

### **13.5 Research & Development**

- (1) Encourage the collection and analysis of life history samples from bycatches. Whole carcasses should be recovered and necropsied whenever possible.
- (2) Continue site-specific population monitoring of bottlenose dolphins at long-term research sites, to provide the means for assessing and understanding changes in abundance. These studies also provide useful models for understanding the demography of other, poorly understood delphinid populations.

### **13.6 Expanding Pinniped Populations**

- (1) Conduct surveys of expanding pinniped populations to monitor the growth of these stocks and help anticipate habitat and fisheries-related issues that may develop as a result of this expansion.
- (2) Encourage the collection and analysis of life history samples from bycatches. Whole carcasses should be recovered and necropsied whenever possible.

### **14. Other Business**

The ASRG will meet again in early November on the Outer Banks of North Carolina. This will be a three-day meeting, with one day dedicated for discussion of bottlenose dolphin stock structure. Aleta Hohn and Barb Taylor will be invited to give presentations. Finally, Andy Read will be stepping down as chair, and the ASRG will need to elect a new chairperson prior to the November meeting.

### **15. Preliminary Agenda Items for November Meeting**

- \* Bottlenose Dolphin Stock Structure
- \* Review Serious Injury Workshop Report
- \* Review Marine Mammal Health & Stranding Response Program
- \* Review 1997 Draft SARs for Strategic Stocks
- \* Review 1997 Draft SARs for Sample of Non-strategic Stocks
- \* Review NMFS FY98 MMPA Research Funding Recommendations