

Minutes of the Atlantic Scientific Review Group Meeting Woods Hole, MA 4-5 November 1999

The fall 1999 meeting of the Atlantic Scientific Review Group (ASRG) was convened at 9:00 am on Thursday, 4 November April 1999 at the Northeast Fisheries Science Center, Woods Hole, MA. The agenda for the meeting is shown in Appendix I (WP 1), participants in the meeting are listed in Appendix II, and working documents are listed in Appendix III.

DAY 1, 4 NOVEMBER 9 AM

Opening remarks were first presented by Randy Wells (Chair, ASRG) and Richard Merrick (Chief, Protected Species Branch, NEFSC).

1.0 OLD BUSINESS

Two new members of the ASRG, Bill Foster and Sharon Young, were welcomed. Minutes of the April 1999 meeting (WP 1) and the agenda for this meeting (WP2) were reviewed and accepted.

2.0 STATUS OF APRIL 1999 ASRG AND JSRG RECOMMENDATIONS TO NMFS

The status of the JSRG recommendations to NMFS (WP3) were referred to NMFS Headquarters staff for future comment. Discussion then turned to the ten ASRG recommendations (WP4; see April 1999 minutes). Basically, all eight were either done (recommendations 4-7, 9-10) or were underway. Of the latter, the most discussion focused on recommendation 1 - support for placement of observers on Mid-Atlantic coastal gillnet vessels. There has been some difficulty in placing observers on boats especially in North Carolina. Letters have been sent out and fines increased. The SERO will check again after Christmas season and take further action if necessary. In North Carolina, around 80 of 300 gillnetters have registered. It was noted that boats from Cape Hatteras south didn't know about this requirement or that they were considered part of the Mid-Atlantic coastal gillnet fishery. Outreach meetings have been held by NEFSC, SEFSC, and SERO. ASRG requested information on whether refusals are fined.

Recommendation 2 dealt with the Gulf of Mexico bottlenose dolphin stock ID workshop. The RPS proposal to fund this workshop was not supported by the RPS Panel. SEFSC staff indicated they would fund a meeting themselves in May or June (in later discussion it was decided to hold the meeting in Sarasota in March before the ASRG meeting with partial funding from the ASRG budget).

Gulf of Maine humpback whale stock definition was tabled for later discussion under the Stock Assessment (SAR) reports.

Recommendations that the default Rmax value for harbor porpoise continue to be used, that the

PBR for North Atlantic right whales be set at 0, and that the draft serious injury guidelines be used have been implemented in the FY00 SAR.

As recommended by the ASRG, the NMFS has proposed in the 2000 List of Fisheries that the pelagic longline remain a Category I fishery.

SEFSC staff provided a brief update of the status of their bottlenose dolphin genetics, photo ID , and satellite tagging (ASRG recommendation 8).

Finally, as recommended by the ASRG (nos. 9 and 10), genetic analysis of Mid-Atlantic and Gulf of Maine harbor porpoise is continuing.

3.0 RESULTS OF FY00 RPS

An overview of the FY00 RPS funding was first presented. A significant portion of the RPS funding was transferred in FY99 to base budgets of the 11 FMC's. This in addition to the committed funds for multi-year projects and other committed funds (e.g., right whale and Steller sea lion PPA's) resulted in only \$3 mil remaining for new programs for FY00. Right whale research is funded separately now, and the House-Senate conference committee recommended that \$4.1 mil be available for North Atlantic right whale research and management for FY00. In FY99, \$1.5 mil was available, and the increased funds will be used largely to support new research to reduce ship strikes, entanglements, and determine causes of the declines in reproductive rates.

SEFSC

The SEFSC expects that for FY00, they will be funded at around \$1 mil, although their FY00 request was considerably higher (WP5). Only partial funding is available for bottlenose dolphin abundance surveys in FY99 and FY00, so they remain unable to develop a comprehensive abundance estimate for the species. The lack of funding from the RPS Panel has been largely the result of disagreements over survey methodology. As noted earlier, the bottlenose dolphin workshop was not recommended for funding by the Panel but will still go on. A passive acoustic assessment study will begin as a cooperative effort between the east coast and west coast science centers. ASRG asked if the SEFSC had considered cooperative work with the Naval Undersea Warfare Center in RI. SEFSC has consulted with them.

Some discussion focused on observer programs. SEFSC noted that new observer programs are expensive and that the Panel has declined to fund new efforts. It was also asked NMFS decided to base fund the Mid-Atlantic observer program but not the molecular genetics? The SEFSC could offer no explanation of NMFS reasoning for not funding these long term programs in the Southeast, particularly when NMFS had provided base funding for the molecular genetics program in the Southwest Fisheries Science Center. The SEFSC has and will continue to appeal this decision and request base funding for its molecular genetics program.

NEFSC

The two observer programs to support the harbor porpoise Take Reduction Plan (TRP) will likely be funded again (WP6). However, observer program for the Atlantic herring and the squid, mackerel, butterfish fishery were not supported by the Panel. Two new harbor porpoise proposals were supported by the Panel - evaluation of the results year 1 of the TRP and additional genetics. The second year of the TRP monitoring program and the common dolphin life history project will likely also be supported.

A potentially significant increase in RPS funded right whale research may also occur. At the least these funds would be used to support the base right whale assessment program (catalog, photo ID/database and surveys), genetics, habitat use and satellite telemetry, and testing of a ship avoidance acoustic (sonar) system.

General discussion then turned to the erosion of RPS fund spending power due to transfer of permanent salaries to RPS base funds, application of higher overhead rates, and additional taxes from NOAA/NMFS. The ASRG agreed that these changes were negatively impacting programs and quality of research. An Ad Hoc committee (chaired by Sharon Young.) will write a "letter of concern" to NMFS.

Break - 10:45 AM. - 11:00 AM

4.0 RESULTS OF THE 3 NOVEMBER NMFS MEETINGS ON STRANDINGS (R. Merrick, NEFSC)

There has been a major increase (>100% increase) in strandings in 1999 over previous years for harbor porpoise. Few animals have been taken in the coastal gillnet fisheries but beached animals were increasing. Most animals were emaciated, juveniles with approximately the same proportion of animals showing signs of human interactions. The meeting was held to determine if this increase was observed in other species, and what could be the cause for the increased porpoise strandings.

There were also increased number of large cetaceans (especially minke whales), but animals were mostly reported from offshore areas. This increasing trend in Massachusetts 1993-98 may be a function of increased effort in the offshore brought on though more awareness (U.S.C.G.)

Turtle strandings do not appear to have increased significantly at this time. There was, however, a major stranding event of turtles in Virginia and North Carolina in the early summer.

In the SE, general trends are consistent with recent years, and there might actually have been a decrease in the Gulf of Mexico.

Finally, a study at the SEFSC suggested that oceanic conditions may have increased the number

of strandings in the Beaufort, North Carolina area. A cold water front moved in and compressed the warm water area along the Outer Banks. This then concentrated turtles and dolphins close to shore possibly causing strandings. This suggests the need for a fine scale study of oceanography in areas with increased strandings.

5. STOCK ASSESSMENT REPORTS (WP9-11)

Discussion under this item did not follow the same order as shown in the agenda.

Sirenia (B. Brooks, USF&WS, WP7-10))

Florida Manatees

Chief causes of mortality are water craft, and locks/gates along canals based on observations from the USF&WS database going back to 1974. Lock gates remain a problem and Florida agencies will continue to implement re-designed water control structures to help achieve 0 mortality. Fishery related mortality from monofilament line and crab pots have become a major sources of injury. USF&WS now has programs to clean up monofilament line and to work with fishermen in crab pot fishery.

Florida state funds enforcement at \$200K per year. U.S.C.G. support is also strong (they are issuing citations).

Assessments- Three synoptic surveys were completed this year with record numbers of manatees counted. These surveys provide, at best, minimum counts of manatees, but do not provide good abundance estimates. Five regional populations have been defined. USF&WS is presently working in estimating survival in each year, in part through photo-id's (scars) dating back to 1970's. These survival estimates together with estimates of fecundity have been used to develop a set of delisting criteria. Discussion then turned to concerns that juvenile survival was not accounted for in the criteria. Lacking these data it would be possible to delist while the population was in steep decline. USF&WS was attempting to address this concern through photo-id and aerial survey data. It was further suggested that USF&WS consider population modeling of the survival rate.

Discussion next considered whether animals were being sighted more frequently outside of Florida. The answer was yes with animals now being seen commonly in Georgia, Louisiana, and North Carolina.

Finally, the SRG suggested that a table of mortalities be included in the SAR chapter.

Antillean Manatees

Discussion occurred mostly about poaching. The SRG recommended that Puerto Rico address poaching enforcement. Note that other human mortality has shifted from fishery interaction to water craft.

The SRG discussed whether the manatee section should be included with the NMFS part of the SAR . While it was recognized that there were timing and clearance problems the SRG recommended that this be done as possible.

Concern was raised as to whether takes were exceeding PBR and if so, shouldn't a TRT be formed? However, it was noted that it was not clear whether PBR was exceeded and the fishery was basically a state rather than federal fishery. As such, the concern was tabled.

Mysticetes (P. Clapham, NEFSC)

North Atlantic Northern Right Whales

Summaries were first presented of the WHOI and IWC population modeling workshops. Both workshops came to the same general conclusion about the status of the population—it was declining.

The population began declining in the late 1980s or early 1990s due in part to declining recruitment. Moreover, the reproductive rate (interbirth interval) rate has also declined (from 3 yrs in 1980s to 5+ yrs. In 1990s). Reproductive rate appears to be half of that in Southern hemisphere species.

These results point towards the need for more genetic research. The hope is that the continued genetic and population dynamics analyses will be joined in another workshop within the next year.

One finding of the workshops was that mark-recapture is not a satisfactory means of providing abundance estimates, but was useful for determining trends in survival. A series of recommendations from the IWC workshop were then briefly reviewed.

SRG raised concern about why US and Canadian mortalities were not both shown in the SAR. It was recommended that the SAR include both sources of mortality.

The group then reconsidered whether more recent events should be shown in SAR tables (i.e., should 1999 mortalities be shown in the SAR 2000 table which included mortalities during 1994-1998. The SRG recommended that these data should be placed in text not in table.

Humpback Whales

Analysis of the YONAH data suggests that a Gulf of Maine feeding aggregation can be identified genetically. Thus, the SAR will only focus on this stock. However, it is not clear how abundance for this stock can be estimated. Mark and resighting analyses would be the appropriate approach. However, the available datasets violate key assumptions of a this form of analysis. Thus, at this time the NEFSC cannot provide a stock size estimate, and will continue to use the North Atlantic population estimate. Additional data exist that have not been analyzed. The NEFSC will review these data by the next SRG meeting to determine whether it is possible to estimate stock size for the GOM stock.

Discussion briefly touched on why humpbacks are listed as endangered under the ESA. It was pointed out that this and all other large whale species were already considered endangered in the late 1960s, before the ESA was passed. The IWC comprehensive reassessment of humpback whale status will be used in future (2001?) to bolster consideration by the US as to whether the species should be down listed to threatened.

The SRG questioned whether there were no serious injuries to humpbacks during 1997-98 (as shown in the SAR). It was noticed that some species were listed as stranded with injuries that, in other species, would be called fishery related. NEFSC staff will check . It was noted by Andy Read that in 1998 a mother/calf of right whales were released from a herring weir in Canada, and that E. Trippel could provide observer data on herring fishery.

Sei/Fin Whale

No major change in the SAR and no significant discussion. It was suggested that the status of the stocks subsection should discuss the state of the recovery plan.

Blue Whale

No major change in the SAR and no significant discussion. It was suggested that the status of the stocks subsection should discuss the state of the recovery plan.

Minke Whale

New data are in this SAR on abundance and mortalities. The SRG asked whether mortality from a whale watch boat in 1998, and a gunshot mortality in the Keys in 1997 or 1998 were included in the database? The former was, the latter probably was not but would be checked.

SRG asked whether all past abundance estimates should be listed. The general policy as to delete everything older than 8 years in the tables (but not in text).

Serious Injury Determinations in Pelagic Longline Fishery - (S. Swartz, SEFSC)

These results were first presented at the April SRG meeting (WP12-14). At that time, some suggestions were made with the intent that SEFSC would represent these data at the November meeting. These data are incorporated in the 2000 SAR.

F/PR indicates that criteria for assessing serious injury is in workshop report but was never published in the Federal Register.

SRG suggested that columns for estimates of mortality and serious injury should be included in the Tables. NEFSC staff asked if Table 3 was still useful. SRG indicated it was not, but that uninjured animals still need to be addressed in text.

Odontocetes (G. Waring, NEFSC)

Sperm Whales

No major change in the SAR and no significant discussion. It was suggested that the status of the stocks subsection should discuss the state of the recovery plan.

Beaked Whales

SRG questioned why the beaked whale section under fishery interaction still used "undifferentiated beaked whales" when it appears that the data is now available to separate out the individual species. NEFSC indicated that in the FY2001 SAR, catch estimates will be broken out by species. At that time, it will be easier to deal with issues of strategic stocks as well.

It was also suggested by the SRG that the wording of this section may be too technical.

SRG asked that because this survey area included Canadian waters it also included Canadian that might be a separate stock. NEFSC staff indicated that the distribution of each species was evaluated and the appropriate abundance estimate was completed.

The meeting was adjourned at 5 p.m. due to a power outage.

DAY 2-5 NOVEMBER 1999, 8:15 AM

5. STOCK ASSESSMENT REPORTS (cont)

Pinnipeds - (G. Waring, NEFSC)

No major change in the SAR and no significant discussion. SRG asked if Seabrook Nuclear

Power plant takes were included; they were.

Odontocetes - (G. Waring, NEFSC)

Dwarf and Pygmy Sperm Whales

The biggest changes with this section were the inclusion of western North Atlantic Stock estimates from the 1998 surveys, plus incorporation of the latest stranding records in the text. The 1996-97 SE Kogia numbers are yet to be included. Some discussion then focused on the use of pooled data used in NW Atlantic but not in Gulf of Mexico. SEFSC staff acknowledged the need for directed surveys in the Gulf of Mexico but noted that, although the SEFSC had requested annual funding to conduct cetacean assessment surveys, F/PR had not provided funds to conduct cetacean assessment surveys in the Gulf of Mexico. As a proxy for dedicated cetacean surveys in the Gulf of Mexico, the SEFSC places marine mammal and sea turtle observers on ichthyoplankton surveys which are conducted each spring and fall. In this way, some minimal information on cetaceans in the Gulf of Mexico is obtained, but there are limitations to the analyses that can be conducted with these data..

Risso's Dolphins

No major change in the SAR and no significant discussion. However, it was noted that numbers of serious injuries/mortalities need to be changed to keep up with SEFSC serious injury determinations.

Pilot Whales

Discussion with this species focused on the need to address species definition of short-finned and long-finned pilot whales when doing all estimates. For example, Table 2 needs to be corrected.

Distribution by sub-species was also a concern with discussion focusing on the use of stranding data to determine distribution or alternatively, to use biopsy samples from free-ranging animals.

For now, the SRG recommend lumping the abundance estimate, and that the SEFSC and NEFSC get together to consistently report bycatch of pilot whales for the 2 sub-species.

It was also recommended that the SAR truncate old bycatch estimates and incorporate new figures for all species.

White-sided Dolphins

Basically, editorial comments only (e.g., take out "about 25 specimens" in opening text) It was suggested that NEFSC further explore Canadian bycatch data (Hooker et al.) and especially in the Canadian Spanish Mackerel Fishery.

Low observer coverage in the squid-mackerel-butterfish trawl fishery was recognized, but was still an issue of concern to the SRG.

Atlantic Spotted Dolphin

SRG raised concern about the possibility of a coastal and offshore/deep water forms of the species. Animals off Cape Hatteras are small animals and not seen further south. There is anecdotal evidence from Canadian fishermen of large heavily spotted animals offshore. NEFSC continues to explore this possibility using biopsies to determine if a sub-species (WP15).

SRG recommends this be treated as one species for now but that concern should be raised in the text. NEFSC should also prioritize processing of spotted dolphin biopsies.

Pantropical Spotted Dolphins

Similar comments to the Atlantic spotted dolphin were raised. There was also a discrepancy in N_{min} and PBR numbers in different part of text.

Striped Dolphins

Mostly editorial comments were made. There is an error in Table 1—this shows the survey ran from Maryland to the Gulf of St. Lawrence while it should be from Florida to Gulf of St. Lawrence. Note too that serious injuries need to be updated based on the SEFSC's analyses.

Harbor Porpoise

Stock definition was a major point of discussion. The primary US stock is considered to be the Gulf of Maine and Bay of Fundy. However, recent telemetry data show animals (mother/calf) may spend part of summer in the Gulf of St. Lawrence. This could explain interannual variation in abundance if stock structure (e.g., the large variability in density in two years of Canadian surveys in Gulf of St. Lawrence) in an area varies from year to year. The SRG recommended that the opening text discuss the hypothesis that there may be more variability in distribution and stock definition is uncertain.

SRG asked if the North Carolina haul seine had ever taken harbor porpoise, and if not, should this taking be shown in the List of Fisheries? The SRG recommended that the mention in the LOF that this fishery took harbor porpoise be removed.

The SRG suggested the section about bycatch in pinger nets should be clarified.

Canadian representative to the SRG asked if there was any information available on habituation of porpoise to pingers. Several studies are in progress and will be discussed at the porpoise Take Reduction Team meeting in December.

The SRG suggested that the SAR include some mention of mortality of porpoise by bottlenose dolphins

9:35 AM break

7.0 HARBOR PORPOISE TRP RESULTS (Beach, NERO; Merrick, NEFSC)

Harbor porpoise Gulf of Maine TRT will meet Dec 14-15 with the Mid-Atlantic TRT to meet in Mid- January .Through August 1999, the NEFSC estimates that there have been 144 porpoise takes in the GoM and 53 in the Mid-Atlantic. One observed take in August, 1 in September, and 2 in October. It is possible we will be below PBR this year but animals on the beach are much higher this year than last. Is the apparent decline in takes real and a result of the take reduction plan? Are the increased strandings just an anomaly and the result of oceanographic conditions? The NEFSC hopes to have more insight by the December TRT meeting.

It was also noted that studies on results of take reduction through use of reflective net gear will be available for the next SRG meeting.

8.0 MID-ATLANTIC BOTTLENOSE DOLPHINS

Stock Assessment Report (S. Swartz, SEFSC)

Initially there were a number of editorial comments (e.g., delete all reference to “cold” and “warm” water forms; min. pop. estimate 25,398 in text does not match table. Generally, the SRG was asking for more detail in the SAR chapter for the coastal form. Data were needed for Puerto Rico in Table 2. The statement in the Current trends sections ...”between 1983 -1992 no significant difference in abundance...” needs to be clarified. More information is needed on mortality for Mid-Atlantic Tursiops. One SRG member did not believe 5% of the Mid-Atlantic coastal gillnet fishery was observed. It was also suggested that NMFS complete the table that breaks out stranding numbers by fishery/state for Tursiops.

Discussion then turned to several substantive issues, notably stock ID and abundance estimates. Essentially, SEFSC needs additional samples to complete the initial stock ID, and need a complete survey of offshore and inshore waters to develop an abundance estimate. There is also a need to perform both an abundance survey and a biopsy survey simultaneously.

REWRITE “There are at least 2-3 stocks of bottlenose in the NW Atlantic Ocean—one coastal, and 1-2 offshore (WP16-19). Evidence of 2 offshore stocks comes from observer reports from the surveys and are now being evaluated genetically. Presently there are two recognized stocks of bottlenose dolphin in the NW Atlantic - the offshore and inshore or “coastal migratory” stocks. Research on stock structure conducted during the past few years, particularly genetic analyses, suggests that there are multiple sub-stocks or groups within each of these two recognized stocks. The SEFSC will have initial results of stock structure research conducted during the past 4 years

on the mid-Atlantic bottlenose dolphin "stock complex" in FY 2000 to present this information at the first meetings of the mid-Atlantic bottlenose dolphin take reduction team.

The SEFSC proposed to conduct bottlenose dolphin abundance surveys as part of the mid-Atlantic stock identification program; however, F/PR has not recommended funding due to concerns for the survey design methodology and estimated cost. To conduct a full survey with biopsy, both the offshore waters > 10 m deep and the inshore waters < 10 m deep must be sampled. The NOAA research vessel *RV Gordon Gunter* was used in the 1998 and 1999 to conduct abundance surveys, but it cannot survey in water depths of < 10m, which characterizes a significant portion of the nearshore bottlenose dolphin coastal habitat. SEFSC proposes to use aerial surveys to estimate abundance in the inshore waters, in combination with small boat biopsy surveys to collect biopsies. The use of an aircraft will eliminate the problem of dolphins being attracted to the survey vessel before they are detected by the observers - this attraction violates the assumptions of line transect design and could bias any estimates. They would then biopsy animals using independent small vessels that are capable of working in shallow waters.

Discussion then focused on design of a line transect versus mark-recapture sampling scheme in inshore areas. There are significant problems using traditional line transect surveys to sample dolphins animals inside bay, sound, and creek areas due to the complexity of the habitat. It was suggested that the SEFSC consider using point transect design combined with photo id. The SEFSC intends to explore a mark-recapture survey design that will utilize photographic identification data to develop abundance estimates for dolphin within bays, sounds, and estuaries. There will still remain the problem of integrating these estimates with estimates of dolphin abundance outside the bays, sounds, and estuaries. This will require an understanding of mixing rates, movements and seasonal trends in both areas.

It has, however, been difficult to obtain funding for these surveys. It was suggested that a group of ASRG members approach the state of North Carolina's fishing industry grants program to explore funding for alternative survey approaches for bottlenose dolphin within bays sounds and estuaries. It is possible this program can support some of the research, though not necessarily through NMFS.

Finally, the SRG recommend that a separate survey to estimate dolphin abundance and to collect biopsy samples in shallow (< 10m) waters be funded by F/PR.

TRT Formation and Meetings (K. Wang, SERO)

TRT pre-meetings will begin in September 2000 with the first official meeting in November 2000. The first draft is planned for completion in May 2001 to be published in the Federal Register in July. A Final Rule is expected by December 2001 with implement in January 2002. The Plan will cover the area from Delaware/New Jersey to Florida.

The SRG questioned why there was to be a TRT meeting when there is so much uncertainty in

designing study. SERO staff responded that regardless of the difficulty in designing surveys, NMFS needs to take steps to reduce takes. However, without an accurate abundance estimate it is difficult to determine if a TRT should be convened.

Bottlenose Dolphin Stock Structure Workshop Progress (S. Swartz, SEFSC)

Although not funded by RPS, a *Tursiops* stock structure workshop will be held in spring 2000 (WP20). It will focus on developing an approach to identification of bottlenose dolphin stock structure in the Gulf of Mexico. The workshop will discuss and incorporate the experience and approaches utilized in the mid-Atlantic stock identification program that have been most productive and that appear to be applicable to the Gulf of Mexico.

It was suggested that \$10K of the ASRG meeting budget be transferred to support this workshop (rather than hold a meeting in the Caribbean). The SRG agreed. It was also agreed to schedule the workshop just before the next ASRG Meeting (which will be Sarasota in mid March).

9.0 TRT/TRP PROGRESS

Discussion briefly turned philosophical and addressed when NMFS should consider a TRP successful. The SRG seemed comfortable with the idea that if takes were below PBR for 3-5 years that the Plan was effective. It was also pointed out that the ultimate goal was to reach ZMRG.

10.0 ASRG BUSINESS

SEFSC and NEFSC reviewed the status of funding for the SRG meetings and other MMPA implementation support. For FY00, there is \$50K budgeted, with \$25K budgeted to support travel for this group. This meeting costs ~\$5-6K.

The SRG next discussed whether all species should be included in each yearly publication. The SRG recommended that all non-updated species be included but on the end of the document. Next question was whether the SAR should be separated into two documents - Gulf of Mexico and Atlantic Ocean. The SRG recommended that the SAR remain as one document.

The SRG then discussed whether a replacement should be found for Graham Worthy, who has had a difficult time attending recent meetings. A variety of potential candidates and recruitment strategies were discussed including: 1) a Texas A&M Post Doc, 2) soliciting suggestions from G. Worthy, 3) announcement at the Biennial, and 4) someone from Minerals Management Service (Bill Lang). The question was raised about whether a Federal employee can be on the SRG. NEFSC staff will check with F/PR.

There being no further business, the meeting adjourned at ca. 2:30 p.m.

Summary of Recommendations and Actions Arising from the Atlantic Scientific Review Group (ASRG) Meeting

November 4-5, 1999, Woods Hole, MA

Recommendations to the National Marine Fisheries Service

- The ASRG is concerned that Recover Protected Species (RPS) funds appropriated by Congress for marine mammal management and conservation activities and ESA recovery plan implementation are being diverted to support base salaries and overhead. This will erode the ability of the National Marine Fisheries Service to conduct adequate research to meet mandates of the MMPA and ESA and may seriously compromise the effectiveness of research programs and conservation activities. The ASRG **recommends** that these funds not be used to pay labor costs and should be used to support MMPA and ESA implementation research as intended by Congress.
- The ASRG is extremely concerned regarding the recent findings of the International Whaling Commission (IWC) Workshop on the status and trends of North Atlantic right whales. The ASRG **strongly encourages** the National Marine Fisheries Service to take expeditious action to reduce anthropogenic sources of mortality and serious injury throughout the range of this stock, and to implement recommendations from the IWC workshop.
- The ASRG **recommends** that the spotted dolphin complex in the western north Atlantic be examined in greater detail, with expeditious processing of existing genetics samples. It is possible that more than one distinct stock of *S. frontalis* exists (e.g., coastal vs. offshore), but consistent objective criteria for these distinctions do not exist at this time. Until such time as multiple stocks are demonstrated, abundance should be estimated for the spotted dolphin complex.
- In preparation for the November 2000 Take Reduction Team meetings, the ASRG **recommends** that the SEFSC develop a preliminary estimate of bottlenose dolphin abundance in the Mid-Atlantic with data from the 1998 and 1999 *Gordon Gunter* surveys, and if possible, re-analyze previous aerial surveys (e.g., 1994-1995) of the near-shore shallow water (<10 m) not surveyed in 1998 or 1999. These data should then be used in combination with genetic information on the distribution of offshore and inshore ecotypes to estimate total abundance of both ecotypes in the Mid-Atlantic excluding those animals that are found in the bays, sounds, and estuaries.
- The ASRG expressed concern that no abundance estimate yet exists for the coastal stock of bottlenose dolphins, particularly given that that a Take Reduction Team for this stock is scheduled to be convened in November 2000. The ASRG **strongly recommends** that the SEFSC conduct a survey of this stock in FY 2000 that includes biopsy sampling to address issues of stock structure. The ASRG further **recommends** that the SEFSC work with researchers at other Science Centers to develop a cost-effective and efficient survey design. In addition, the ASRG encourages non-government scientists and representatives of the commercial fishing

industry to develop a complementary research program to assist in the expeditious assessment of stocks of bottlenose dolphins in coastal waters of the Mid-Atlantic states.

Recommendations Relating to Stock Assessment Reports

- The ASRG **recommends** that the Stock Assessment Report table of summarized records of mortality and serious injury for large whales include both US and Canadian records, with indications in the table of which specific records were used for Potential Biological Removal (PBR) calculations.
- The ASRG **recommends** that all current information on mortalities of large whales be presented in the text of the Stock Assessment Reports. Information presented in the mortality and serious injury table for each species should continue to be limited to the appropriate five-year time period.
- The ASRG **recommends** that serious injuries be presented in a separate column in the mortality and serious injury table in the Stock Assessment Reports, thereby eliminating the need for Table 3 (injuries and number released alive). Information on numbers of un-injured animals released alive should be retained in the text.
- The ASRG **recommends** that criteria for considering fishery-related entanglements be consistent across stocks in the Stock Assessment Reports.
- The ASRG notes that the *Kogia breviceps* and *Kogia simus* data have been combined in the Stock Assessment Reports, and a minimum population estimate has been computed for this combined group for the Western North Atlantic, similar to what has been done for *Mesoplodon* spp. The ASRG **recommends** that the same procedure be followed for the Gulf of Mexico stocks of *Kogia*. Pooled estimates are preferred as it is not possible to reliably distinguish between *Kogia* species in the field.
- As decided at the joint SRG meeting in April 1999, all stocks should be presented in each year's Stock Assessment Reports, even though some stocks will not be reviewed or revised during a given year. The ASRG **recommends** that Stock Assessment Reports include reviewed/revised accounts first, with all un-reviewed accounts presented together at the end of the document.
- The ASRG **recommends** that the NMFS and USFWS publish their Stock Assessment Reports together in a single volume each year.

Recommendations to the U.S. Fish and Wildlife Service

- The ASRG recommends further investigation into the incidence of poaching of Antillean manatees. The unexpectedly high incidence of orphaned calves and results of interviews suggest the continued occurrence of unrecorded takes of manatees in the waters of Puerto Rico.

- The ASRG recommends that the NMFS and USFWS publish their Atlantic and Gulf of Mexico Stock Assessment Reports together in a single volume.

Recommendation to the Population Status Working Group of the Manatee Recovery Team

- The ASRG noted, in relation to the proposed manatee recovery criteria, that the survival rates were obtained from mark-recapture analyses based on scarred individuals. Scarred individuals comprise only a fraction of the population, and may not be representative of the unscarred, generally younger individuals. Since in many other mammal species juvenile survival tends to be lower than adult survival, applying the mark-recapture estimate to calculate overall population rate of increase may cause overestimation of this rate. In view of this, the ASRG recommends that uncertainty about juvenile mortality be reflected in the population assessment results, and that efforts be made to obtain information on juvenile mortality.

Appendix I. Atlantic Scientific Review Group meeting agenda

1.0 Old Business

- 1.1 Welcome new members (Sharon Young (HSUS) and Bill Foster (NC fisherman))
- 1.2 April 1999 minutes

2.0 Status of recommendations from Joint SRG meeting (Kenney, Merrick/Swartz)

3.0 Results of the FY00 RPS panel (Merrick/Swartz)

4.0 Results of the 3 November NMFS meeting on strandings (Merrick)

5.0 Stock Assessment Reports

5.1 Issues

- 5.11 Humpback whale stock estimates and PBR value (Gulf of Maine-Bay of Fundy stock) (Clapham)
- 5.12 Serious injury determinations in the pelagic longline fishery (Swartz)
- 5.2 Draft 1999 and 2000 SARs (Waring/Hansen)
- 5.3 Draft SARs for Florida and Antillean manatees (Brooks)

6.0 North Atlantic right whales

- 6.1 Summary of right whale meetings (IWC - Clapham, WHOI - Brault)
- 6.2 Timing of inclusion of recently-entangled right whales in official NMFS counts, as needed by TRT (Young)

7.0 Harbor porpoise TRP results (Beach)

8.0 Mid-Atlantic bottlenose dolphins

- 8.1 Stock ID/structure results (Swartz)
- 8.2 Mortality estimation status from the NEC (Rossman, Palka)
- 8.3 TRT formation and meetings (Wang)
- 8.4 Abundance estimate progress (Swartz, Mullin)
- 8.5 Bottlenose dolphin stock structure workshop progress (Swartz)

9.0 TRT/TRP progress in general -- are they working? If there is progress, is it due to reductions in fishing effort or are the measures actually working? If they are not working, then what alternatives are being considered? (DeAlteris)

10.0 ASRG Business

- 10.1 ASRG budget (Merrick/Swartz)
- 10.2 Standardization of on-line SAR formats (Kenney)
- 10.3 Possible replacement of Graham Worthy as ASRG member
- 10.4 Venue and timing of the next meeting(s)

Appendix II. Attendees at the Atlantic SRG meeting

Name	Affiliation	E-mail address
Solange Brault	ASRG, University of Massachusetts	brault@umb.edu
Joe DeAlteris	ASRG, University of Rhode Island	joede@uri.edu
Bill Foster	ASRG	fost&par@beachlink.com
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Dan Odell	ASRG, University of Central Florida	Dan.Odell@anheuser-busch.com
Andy Read	ASRG, Duke University	aread@duke.edu
Randall Wells (Chair)	ASRG, Chicago Zoological Society & Mote Marine Lab	rwells@mote.org
Sharon Young	ASRG, Humane Society U.S.	sbyoung@capecod.net
Tami Adams	Center for Marine Conservation	tadams@dccmc.org
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Ed Trippell	DFO, Canada	TrippelE@mar.dfo-mpo.gc.ca
Kim Thounhurst	NERO, NMFS	kim.thounhurst@noaa.gov
Kathy Wang	SERO, NMFS	kathy.wang@noaa.gov
Gordon Waring	NEFSC, NMFS	gordon.waring@noaa.gov

Appendix III. List of materials passed out at the Atlantic SRG meeting

Working Paper	Title
1	Minutes of the ASRG meeting, Seattle, WA 15 April 1999
2	Meeting agenda
3	Joint recommendations (from April 1999 Joint SRG meeting)
4	ASRG recommendations to NMFS (from April 1999 meeting)
5	SEFSC MMPA-ESA research for FY 2000
6	PSB RPS proposals & right whale work plan + other RPS/IWC funding
7	Florida manatee recovery accomplishments 1998 annual report, USF&WS, Jacksonville, FL
8	Summary of manatee population status and proposed recovery status. Pres. By the Manatee population Status Working Group at the Florida Manatee Recovery Team meeting 26-27 April 1999.
9	West Indian Manatee (<i>Trichechus manatus latirostris</i>) Florida stock assessment report, USF&WS, Jacksonville, FL
10	West Indian Manatee (<i>Trichechus manatus manatus</i>) Antillean stock assessment report, USF&WS, Jacksonville, FL
11	U.S. Atlantic and Gulf of Mexico Marine Mammal stock assessments - 2000. U.S. Dep. Commer, NOAA, NMFS, NEFSC.
12	Revised mortality estimates of marine mammal bycatch in 1992-97 based on serious injury guidelines.
13	Yeung, C. 1999. Estimates of marine mammal and marine turtle bycatch by the U.S. Atlantic pelagic longline fleet in 1998. U.S. Dep. Commer, NOAA Tech. Memo NMFS-SEFSC-430. 26 p.
14	Johnson, D. R., C. Yeung, and C. A. Brown. 1999. Estimates of marine mammal and marine turtle bycatch by the U.S. Atlantic pelagic longline fleet in 1992-97. U.S. Dep. Commer, NOAA Tech. Memo NMFS-SEFSC-418. 70 p.
15	Rosel, P., and L. Bero. 1999. Report on genetic analyses of <i>Stenella</i> samples collected on 1998 Delaware II biopsy cruise (DE9807/9808).

16	Update on SEFSC genetic study of offshore vs coastal bottlenose dolphins 4-5 November 1999.
17	Urian, K. W., A. A. Hohn, and L. J. Hansen. 1999. Status of the photo-identification catalog of coastal bottlenose dolphins of the western North Atlantic: report of a workshop on catalog contributors. U. S. Dep. Commer. NOAA Tech. Memo. NMFS-SEFSC-425. 24 p.
18	Progress report: Marine mammal observer program - Mid-Atlantic coastal gillnet fishery.
19	Progress report: Stock structure of bottlenose dolphins.
20	Progress report: Stock structure experimental design workshop.