COOPERATION WITH OTHER ORGANISATIONS

The reports of observers representing the Commission at the following meetings are attached as the Appendices indicated:

Appendix	Meeting	IWC Observer
A	29th Meeting of the Commission and Scientific Committee of CCAMLR, Hobart, Australia, 25 October – 5 November 2010.	Bo Fernholm (Sweden)
В	Report from the 2010 activities in ICES.	Tore Haug (Norway)
С	16 th Meeting of the CMS Scientific Council, Langer Eugen, Bonn, 28-30 June 2010	Bill Perrin (USA)
D	17 th Meeting of the ASCOBANS Advisory Committee, Bonn, 4-6 October 2010 and the 18 th Meeting of the ASCOBANS Advisory Committee, 4-6 May 2011.	Meike Scheidat Martine van den Heuvel-Greve & Steve Geelhoed (The Netherlands)
E	Decisions from the Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean (SPAW) 6 th Conference of Parties (COP6), October 2010	Carole Carlson (USA)
F	PICES XVIII Annual Meeting, Portland, Oregon, USA., October 22–31, 2010	Hidehiro Kato (Japan)
G	19th Annual Meeting of the North Atlantic Marine Mammal Commission (NAMMCO), Tórshavn, Faroe Islands, 31 August to 2 September 2010	Joji Morishita (Japan)
Н	81 st Meeting of the Inter-American Tropical Tuna Commission (IATTC), Antigua, 27 September - 1 October 2010, Antigua Guatemala,	Jeremy Rusin (USA)
I	23 rd Meeting of the Parties to the Agreement on the International Dolphin Conservation Program (AIDCP), Antigua, Guatemala, 24-25 September 2010	Jeremy Rusin (USA)
J	Co-operation with the International Maritime Organisation	

Appendix A

Observer's Report from the 29th Annual Meeting of the Commission and Scientific Committee for the Conservation of Antarctic Marine Living Resources (CCAMLR), Hobart, Australia, 25 October – 5 November 2010

Observer: Bo Fernholm (Sweden)

The Twenty-ninth Annual Meeting of the Commission for the Conservation of Antarctic Marine Living Resources was held in Hobart, Tasmania, Australia, from 25 October to 5 November 2010. It was chaired by Ambassador D. MacKay (New Zealand). The Commission meeting was preceded by a week-long meeting of the Scientific Committee of CCAMLR.

In an opening address the Governor of Tasmania, Peter Underwood welcomed delegates and remarked about the recent birth of a southern right whale in Hobart waters:

"These links to the south were never more apparent than during this winter when a southern right whale gave birth to her calf in the River Derwent, a calf that was the product of the richness of the Southern Ocean and will be setting off on its first "trip South" over the next few months. It is believed that it is 190 years since the last birth of a southern right whale was reported for the Derwent, so you can imagine that the birth here this year created much local and international interest. It is also an indication of the dynamic nature of the Southern Ocean and the changing environment in which CCAMLR operates."

The IWC Observer to CCAMLR described IWC work of relevance to CCAMLR (CCAMLR-XXIX/BG/39 Rev. 1). The Commission noted the reported increase in Southern Ocean whale populations of between 7 and 8% per annum (SC-CAMLR-XXIX, paragraph 10.15). The IWC Observer also noted that the newly appointed Executive Secretary of IWC had extensive experience in Antarctic research.

The CCAMLR Scientific Committee

In the CCAMLR Scientific Committee I reported briefly on Antarctic Whale stocks considered by the 62nd Meeting of the SC-IWC in Agadir, Morocco. For the Antarctic minke whales, two different methods for estimating abundance gave different results, but indicated a possible decline. Work is ongoing to derive an agreed estimate for abundance and trends.

For southern hemisphere blue whales, an annual rate of increase of 8% is indicated. For the Australian south coast population of the southern hemisphere right whale, the annual rate of increase is 7.5%.

The Scientific Committee subgroup WG-EMM (10/12) reported on the results of analyses of niche occupancy for various predators in the Ross Sea region, considering three important components: (i) their projected spatial distribution and overlap; (ii) their capacity to utilise different parts of the water column (foraging depth); and (iii) diet. Species for which distributions were modeled included cetaceans (Antarctic minke whale (*Balaenoptera bonaerensis*) and Ross Sea killer whale (*Orcinus orca*) – ecotype C), seals (crabeater seal and Weddell seal), penguins (Adélie penguin and emperor penguin) and other seabirds (light-mantled sooty albatross (*Phoebetria palpebrata*), Antarctic petrel (*Thalassoica antarctica*) and snow petrel (*Pagodroma nivea*)). Leopard seals and killer whale ecotype A/B, were not included because of their rarity and lack of adequate sightings data. Adequate data for modelling Arnoux's beaked whales (*Berardius arnuxii*), *D. mawsoni* and colossal squid (*Mesonychoteuthis hamiltoni*), which are also important predators, were not available. Predator distribution patterns were modelled at a resolution of 5 km2, using environmental data and species presence data. A machine learning,

'maximum entropy' modelling algorithm (MAXENT) was used to model spatial patterns of the probability of species' occurrence. These data were then used to identify areas of importance to species in a conservation prioritisation framework. Data on diving depth and diet were taken from the literature.

Subgroup WG-FSA (10/P6) reported that depredation of toothfish hooked in longline fisheries has been witnessed for marine mammal species, including killer whales and sperm whales (e.g. WG-FSA-10/P6). The Working Group agreed that the regular collection of data indicative of depredation would be useful, and considered whether marine mammal sightings during gear hauling, and/or directly observed behaviours indicative of depredation events, could be routinely included in the C2 data reporting requirements for longline fisheries. Depredation reporting should record which species is observed, and should be a vessel responsibility rather than an observer responsibility. Options for validation of the resulting data, e.g. using fishery observers, should be considered.

Report from the 2010 activities in ICES

Tore Haug: Norway

ICES WGMME

The ICES Working Group on Marine Mammal Ecology (WGMME) met at the University of the Azores in Horta, The Azores from 12 April to 15 April 2010. The WG considered a wide range of issues, including reviewing the effects of wind farm construction and operation on marine mammals and assessing the current contaminant loads in marine mammals within the ICES Area. Other topics included reviewing population abundance, structure and status of marine mammals off the Azores, further development of a framework for surveillance and monitoring of marine mammals, and evaluating the scope for a European marine mammal tissue bank. The European Commission also requested an assessment of the population status of cetaceans concerned by EC Regulation 812/2004.

The WG outlined and reviewed the potential negative impacts of wind farms (construction and operation) on marine mammals and provided advice on research needs, monitoring and mitigation schemes. The WG made a number of recommendations with regard to wind farm developments, including the establishment of means for efficient dissemination of results of common interest and means of making available previous EIA reports and previously collected baseline data for subsequent studies and assessments. The WG also recommended multinational studies should be undertaken, and management decisions regarding offshore wind farms should be based on appropriate populations and/or management units for the relevant marine mammal species, irrespective of national borders. Further recommendations include development of methods to assess the cumulative effects on marine mammals of the underwater noise level caused by the simultaneous wind farm construction and operation at nearby sites. Other recommendations relate to improving our understanding of the characterization sources of underwater noise associated with the construction and operation of offshore wind farms, establishing common accepted tolerance limits for acute noise exposure in marine mammals and the development of common guidelines for mitigation in relation to pile driving.

An overview on current contaminant loads in marine mammals inhabiting the ICES was reported by the WG, highlighting (regions and) marine mammal populations at highest risk from environmental exposure. Further, the cause–effect relationships between contaminants and health status, and the population-level effects of environmental impacts were also assessed. Despite being banned for two to three decades, polychlorinated biphenyls (PCBs) still occur at concentrations that exceed proposed thresholds for mammalian toxicity in some marine mammal top predator species, including bottlenose dolphins and killer whales. Compared with many other legacy pollutants, PCBs are declining only very slowly in many geographic regions (e.g. harbour porpoises in UK waters). Given the high levels of PCBs in marine mammals (compared with proposed toxicity thresholds), the resistance of PCBs to environmental degradation and their relative toxicity, PCBs undoubtedly continue to pose the greatest toxicological threat to some marine mammal species within the ICES Area. The WG recommended that research is needed to assess trends in contaminant exposure (PCBs and newer contaminants) and to conduct risk assessments for health and reproductive effects from contaminant exposure in species of highest risk (e.g. killer whales, St Lawrence belugas, bottlenose dolphins, and Baltic marine mammals).

ICES SGBYC

The Study Group for Bycatch of Protected Species (SGBYC) met at the ICES HQ in Copenhagen from 1–4 February 2010. The SG examines the monitoring, assessment and mitigation of the incidental capture of protected species. It also coordinates and reviews activities conducted under EU Council Regulation 812/2004 on cetacean bycatch, including observer programmes and bycatch mitigation trials, and collates data provided in these and other reports with the aim of providing an overview of bycatch levels of protected species impacted in and around the ICES Area.

The SG noted that information on the extent of cetacean bycatch in European waters had much improved during the past three or four years, but that monitoring and mitigation efforts could be better focused. The Study Group reviewed ongoing and recent work on protected species bycatch reduction in the ICES region and elsewhere, recognized that a lot of work has been done, and suggested that it would be an opportune time to review the results of all of these trials in an overview. The Study Group also pointed out a number of areas of research into bycatch reduction that appear to have received insufficient attention so far, including improvements in technical aspects of pingers. SGBYC finally reiterated its view that collaboration with ongoing discard sampling schemes would be desirable to improve knowledge of the areas and gear types where protected species bycatch might be expected.

ICES/NAMMCO WKOSBOMB

The Joint NAMMCO/ICES Workshop on observation schemes for bycatch of mammals and birds (WKOSBOMB) met at the ICES HQ in Copenhagen, Denmark, 28 June-1 July 2010. The Workshop covered a range of topics, agreed by a joint NAMMCO/ICES steering group.

Indirect approaches include the collation of anecdotal accounts, the systematic examination of dead stranded animals or those found floating at sea, the examination of live animals by photo-monitoring for evidence of past entanglements, interviews of fishermen, collation of fishery logbook data, and through piggybacking on other research programmes. Wherever possible, results from any of these methods should be compared with one another. An example was discussed from Iceland where porpoise by-catch rates from research surveys in a limited time and area were compared with results from a questionnaire survey and with official logbook data. In this case by-catch rates calculated from logbook data were considerably lower than those estimated using the other methods by-catch.

Several alternative by-catch monitoring systems involving independent observations, but not relying on dedicated onboard observer programmes were discussed. A system of GPS-linked video surveillance was described on boats in Denmark, where by-catches of porpoises had clearly been identified and recorded. In the USA a system employing an alternative platform has been developed, where two observers used a fast power boat to monitor fishing operations by inshore gillnet vessels. Although daily costs were higher than using onboard observers, this approach enabled monitoring of a fleet sector that had been previously underrepresented. Another scheme was described in which Norwegian fishermen were paid to complete detailed activity and catch logs which had provided useful information on porpoise by-catch in coastal gillnet fisheries. Integrating fishery effort data with information on cetacean strandings and at-sea acoustic monitoring of porpoises in Polish waters was also described as another means of monitoring by-catch. Finally, the discard sampling scheme mandated at a European level under the data collection framework was also described, and its advantages and disadvantages as a means of collecting marine mammal and seabird by-catch data were discussed.

The Workshop discussed how fishing effort data can be used to plan and stratify sampling at sea, and how it can be used to raise observed by-catch rates to the fishery or fleet level. Problems with the reliability of effort data were described and discussed. Some of the statistical methods for raising by-catch estimates were also reviewed. It was stressed that there is not a single preferred way to determine overall total by-catch for a fishery, and that generally caution is required because sampling levels tend to be low and by-catches of protected species are generally rare events. It was also noted that total by-catch estimates are highly dependent on the raising factor, and that a detailed knowledge of the fishery is important to obtain the most reliable estimates.

ICES ASC

The 2010 ICES Annual Science Conference (ASC) was held in Nantes, France, 20-24 September 2010. The conference included no particular theme session devoterd entirely to marine mammals. Nevertheless, some sessions were designed with marine mammals included as an integral part. Relevant sessions at the 2010 ASC were:

- Theme session F: "Monitoring biological effects and contaminants in the marine environment: where do we go from here?"
- Theme session G: "Beyond correlations: what are suitable methods for describing and testing non-linear spatio-temporal changes, patterns and relationships?"
- Theme session Q: "Marine Biodiversity the science and management needed to meet 2010 commitments."
- Theme session P: "Joint ICES/PICES Theme Sessions on "Responses to climate variability: comparison of northern hemisphere marine ecosystems."

Upcoming theme sessions, relevant to marine mammal issues, intended for the ASC, 19-23 September 2011 in Gdansk, Poland, include titles such as "Applications of optical and image based technologies in the ecosystem approach to fisheries management", "Integrating top predators into ecosystem management" and "Surplus Production Models: Quantitative Tools to Manage Exploited Fisheries and Compare the Productivity of Marine Ecosystems". More information is available at the ICES web side www.ices.dk.

Marine mammals are explicitly mentioned in the 2009-2013 ICES Science Plan under the overarching thematic area *Understanding Ecosystem Functioning*. The research topics include top predators (marine mammals, seabirds, and large pelagics) and their role in marine ecosystems.

Appendix C

Observer's Report from the 16th Meeting of the Convention on the Conservation of Migratory Species (CMS) Scientific Council, Langer Eugen, Bonn, 28-30 June 2010

Observer: Bill Perrin (USA)

The Scientific Council met in Bonn, Germany, 28-30 June, 2010. The Council reviewed a proposal by Spain to list two beaked whale species, *Ziphius cavirostris* and *Mesoplodon densirostris*, on Appendix I of the Convention (requires complete protection by the Parties) on the grounds that they are susceptible to death caused by acoustic pollution, particularly military sonar and that they occur in small local populations as evidenced by results of surveys in the Canary Islands and Hawaii. The Council noted that the two species are distributed widely around the world and that there are no estimates of global abundance. Both are listed by the IUCN as Data Deficient. It was agreed that there is not sufficient information available on abundance and conservation status to justify Appendix I listing.

The Council recommended that funding be sought to support a workshop to assess status of and threats to small cetaceans in the western Indian Ocean. A proposal to organize the workshop is under consideration by the Secretariat.

The next COP will be held in Norway during November 2011.

Observers' report on the 17th and 18th Meeting of the Advisory Committee to the Agreement on Small Cetaceans of the Baltic and North Seas (ASCOBANS)

Observers: Meike Scheidat, Martine van den Heuvel-Greve & Steve Geelhoed (The Netherlands)

The 17th meeting of the Advisory Committee (AC) to the Agreement on Small Cetaceans of the Baltic and North Seas (ASCOBANS), was held in Bonn, 4th to 6th October 2010. The scientific session was chaired by Stefan Bräger (Germany), the administrative session was chaired by Jan Haelters (Belgium).

The 18th meeting of the Advisory Committee (AC) was held in Bonn, 4th to 6th May 2011. The scientific session was chaired by Sami Hassani (France).

The main topics at the AC meeting, as far as relevant to the IWC, were:

1. Baltic Sea harbor porpoises:

• The Jastarnia group will make a proposal to extent their Agreement area west of the Darss-Limhamm Ridge up to the boundary of the North Sea Plan at latest before the 19th ASCOBANS AC meeting. This would cover the so called "gap area" which at the moment is not covered by either the North Sea or the Jastarnia Plan.

2. ASCOBANS Conservation Plan for Harbour Porpoises in the North Sea

- The co-ordinator and the members presented their progress in implementation measures.
- Working group North Sea has been established (chair: Martine van den Heuvel-Greve).

3. Review of new information on bycatch and other causes of mortality

- Highlights of the ASCOBANS report on bycatch were presented: sample sizes on bycatch are too low to allow reliable estimates of bycatch rates, commitment of stakeholders is a key factor in reducing bycatch, promising developments electronic monitoring schemes for effort small vessels.
- Results from several workshops and experiments with pingers stressed the need for co-operation with fisheries.
- A working group on bycatch was established, chaired by Russell Leaper.
- A study on ship strikes identified potential high risk areas (eg shelf edge Bay of Biscay), and showed one caveat i.c. detailed data on shipping. AIS and VOR have limitations. For the 19th ASCOBANS AC meeting a map with areas with a high risk of ship strikes should be prepared.

4. Review of New Information on Population Distribution, Sizes and Structures

- Results of recent (national) surveys were presented.
- Topic to address in ASCOBANS: review/monitoring on climate change induced distribution shifts.
- The WG group on large cetaceans was established (chair: Peter Evans). Its aim is to summarize information on large cetaceans in the Agreement area and address aspects of their conservation.

5. Review of new information on pollution, underwater sound and disturbance

- Results from different workshops and reports on underwater sound and pollutants were presented. The decline in PCB's in Bottlenose Dolphins and Harbour Porpoises seem to have leveled off.
- Working group noise was established (chair: Karsten Brensing) and is jointly working with ACCOBAMS and OSPAR.

The full reports as well as all related working documents are available via http://www.ascobans.org/.

Appendix E

OBSERVER'S REPORT FOR THE PROTOCOL CONCERNING SPECIALLY PROTECTED AREAS AND WILDLIFE IN THE WIDER CARIBBEAN (SPAW) OCTOBER 2010

Observer: Carole A. Carlson

MARINE MAMMAL ACTIVITIES UNDER THE FRAMEWORK OF UNEP'S CARIBBEAN ENVIRONMENT PROGRAMME AND SECRETARIAT TO THE CARTAGENA CONVENTION AND ITS SPAW PROTOCOL (JUNE 2010- JUNE 2011)

Decisions from the Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean (SPAW) 6th Conference of Parties (COP6), OCTOBER 2010

- Acknowledge the progress made with the implementation of the Marine Mammal Action Plan and request that the Secretariat, in collaboration with the SPAW Regional Activity Center continue to fundraise and develop strategic partnerships for its further implementation, in particular the development of the proposal to LifeWeb on marine corridors and marine mammal conservation for the Wider Caribbean, and the implementation of key priorities of the Manatee Regional Management Plan
- 2) Re-establish the Working Group in charge of the Review for the Criteria for the Listing of Species in the Annexes to the SPAW Protocol and to request the Group to:
 - a. As a first step, seek the input from the Parties on the species to be reviewed
 - b. Secondly, identify any species receiving protection from any other International Agreements and internationally recognized lists that are not listed on the SPAW Annexes
 - c. Select from the species resulting from points a and b and any other species that the Working Group feels need attention a species "short-list" to be reviewed by the working group according to the criteria approved by COP3.
- 3) Prioritize in the 2010-2011 Workplan the establishment of a Working Group to develop the draft criteria for the assessment of exemptions regarding Article 11 paragraph 2, and to this end establish a Working Group under the leadership of SPAW RAC to begin its work as soon as feasible

Protecting Habitats and Migration Corridors for Marine Mammals in the South and Northeast Pacific and the Wider Caribbean through Marine Protected Area Networks (LifeWeb Project)

With funding provided by the Government of Spain and supported by UNEP, UNEP-CEP and the Government of France

Objectives

- 1) Provide an overview of essential habitats and regional-scale migration routes for marine mammals in need of better management in Southeast and Northeast Pacific, Wider Caribbean and adjacent regions
- 2) Introduce integrated planning approaches, including providing technical guidance, regional training and learning exchanges on marine spatial planning, MMPA networks design, transfer of skills, tools and good practices on transboundary governance and equitable sharing of MMPA benefits;
- 3) Apply integrated marine spatial planning and management approaches and tools in two demonstration projects (Southeast and Northeast Pacific Region & Wider Caribbean)
- 4) Develop strategic communication products to 'Make the Case' for integrated, transboundary management of marine mammal migration routes and critical habitats.

Activities to Date

- 1) Marine Mammal Project Design and Planning consultation (19-20 June 2010)
- 2) Regional Workshop on Integration, Mapping and GIS Analysis of Marine Mammal Migration Routes, Critical Habitats and Human Threats in the Wider Caribbean Region (9-11 May 2011)
- 3) Assist in the Coordination of the Second International Conference on Marine Mammal Protected Areas (7-11 November 2011)
- 4) Identifying marine mammal data sources within the Wider Caribbean Region (WCR)
- 5) Begin the analysis of identified marine mammal data, in collaboration with the Whale and Dolphin Conservation Society (WDCS), GRID-Arendal and other regional and international partners, in order to develop data layers and maps on the critical habitats for marine mammals in the Wider Caribbean, including identification of threats, migration routes and distribution

Improving Capacity in the Wider Caribbean Region

Funding provided by the US Marine Mammal Commission through the National Fish and Wildlife Foundation

Main Objectives

- 1) Improve and centralize the level of information and knowledge on the status, distribution and threats of marine mammals in the region
- 2) Identify critical habitats for marine mammals in the region
- 3) Improve understanding of tourists and tourism stakeholders on marine mammal natural history, conservation and best practices for marine mammal viewing

Upcoming Activities

Marine Mammal Watching Workshop (Panama, 25-29 October 2011)

- 1) assess the extent of problems and needs and identify opportunities in existing marine mammal watching operations;
- 2) identify areas with potential for marine mammal watching activities;
- 3) document existing marine mammal educational materials;
- 4) standardize data collection forms and organize baseline research on cetaceans;
- 5) discuss the formulation of Regional codes of conduct for observing marine mammals

Observer Report from the 2010 Annual Meeting of PICES

Observer: Hidehiro Kato (Japan)

The PICES (North Pacific Marine Science Organization; Headquarter at Sydney, British Columbia, Canada) is an inter-governmental organization among Canada, China, Japan, Korea, Russia and US. It has four committees, Biological Oceanography Committee (*BIO*), Fisheries Science Committee (*FIS*), Marine Environmental Quality Committee (*MEQ*), Physical Oceanography and Climate Committee (*POC*), one technical committee for data exchange (*TCODE*) and one major research project *FUTURE* (*Forecasting and Understanding Trends, Uncertainty and Responses of the North Pacific Ecosystems) which was started in 2008. PICES meets once a year and also has regular business meetings and associated symposium, some with over 500 participants. PICES has had interests on marine birds and mammals since 1997 as ecosystem components from ecosystem and environment view points and has a special working group to assess feeding impact by marine birds and mammals upon ecosystems (WG11 chaired by Hunt and Kato; 1997 - 99) and MBM (marine birds and mammals) advisory panel (AP-MBM) to understanding coupled climate-ecosystem fluctuations etc. in the North Pacific Ocean in collaboration with other study areas (co-chaired by Sydeman and Kato, 2000 – current) under auspices of <i>BIO* subcommittee.

The 2010 annual meeting of PICES (PICES XVIII) was held at the Oregon Convention Centre, Portland, Oregon, U.S.A. between October 22–31. Kato participated in the meeting and associated working groups and symposia especially in the *AP-MBM* meeting and its sponsored theme session (W3) as an IWC observer. AP-MBM met afternoon on 27 October, 2010 following discussions raised during regular session. The following two topics seem to be interesting ones and relevant to IWS/SC:

1. Reports from members parties.

The following short presentations were made at very early part of the session:

H. Kato (Japan) reported on his activities as the PICES liaison to the International Whaling Commission (IWC) (See point 4 below). The AP thanked Kato for his efforts to integrate PICES science in the IWC science-policy arena, and recommended to BIO that Kato remain as the PICES liaison. Kato presented a summary of Japanese cetacean research in the North Pacific. K. Hattori (Japan) presented a summary of Japanese research on Steller's sea lion. S. Choi (Korea) presented a summary of marine mammal research in Korean waters. Many marine mammal populations in Korean waters are of concern.

2. AP-MBM leadership.

W. Sydeman (USA, seabirds) and Kato (Japan, marine mammal) have been co-chairs of the AP for 7+ years. AP members and observers thanked both chairs for their long-term commitment to PICES and their leadership of the panel. The AP recommended to BIO/PICES that members Y. Watanuki (Japan, seabirds) and R. Ream (USA, marine mammals) become the new co-chairs of the AP, effective immediately. Sydeman and Kato will remain on the AP for a period of transition.

3. Future Direction of AP-MBM.

The AP reviewed aspects of the new PICES science program, FUTURE. The panel and observers considered how to best contribute to this program, which is focused on:

- i) understanding climate change and anthropogenic impacts on marine ecosystems in the PICES region,
- *ii*) forecasting future ecosystem change,
- iii) better communications with society.

The AP reiterated its primary mission to provide advice to the PICES community about the role of marine birds and mammals in N. Pacific marine ecosystems, especially as related to "top-down" (predation) controls of marine food webs. Secondly, the AP exists to ensure that seabirds and marine mammals are included in PICES-related ecosystem research, including forecasting, and communications.

The AP discussed how the many long-term and large-scale datasets on marine birds and mammals in the N. Pacific could and should be used in analyses and especially models of marine ecosystem change. The AP noted that to date PICES modelling efforts, e.g. NEMURO and NEMURO.FISH, have yet to integrate data on top predators. The AP also concluded that marine birds and mammals often serve as excellent "near real C:\IWC63\63-4

time" indicators of marine ecosystem structure and functions, and should be used more in this capacity. The AP and observers agreed to support and promote the goals of FUTURE in all possible manners.

To facilitate the development of a new and well-defined program on marine birds and mammals, the AP agreed to form 4 sub-committees. These subcommittees will work inter-sessionally to design and articulate its vision and specific plans to meet objectives and goals. The AP plans to host a half day workshop during the upcoming PICES/ICES ESSAS meeting (Seattle, May 2011) to work on its vision for the future.

Focal points for AP-MBM were defined as follows:

- *i)* Updating, Enhancing, and Integrating Models of Prey Consumption for Top Predators in the N. Pacific.
- *ii*) Defining Critical Habitats and High Use Areas for Top Predators in the N. Pacific.
- iii) Using Marine Birds and Mammals as Indicators of Ecosystem Change in the N. Pacific.
- *iv*) Conserving Threatened and Endangered Marine Birds and Mammals in the N. Pacific.

The AP is now working to select leadership for each of these focal areas. Leaders will then work with AP members and observers to develop specific plans for activities for the next 5 years. In response to the proposal by AP-MBM, the Biological Oceanography Committee (BIO), which is an umbrella organization of the AP, has continued to assess the plan for the next five years and to develop their discussions at the next meeting.

4. Other issue

Kato was informally informed from a representative of the Fisheries Science Committee (FIS) that the committee has much interest to have presentation (some kind of lecture) to outline the Revised Management Procedure developed by the IWC/SC, in future session.

The next PICES annual meeting (PICES 2011) will be held October 14-23, 2011, at Khabarovsk, Russia.

Observer Report of the 19th Annual Meeting of the North Atlantic Marine Mammal Commission (NAMMCO)

Joji Morishita

The North Atlantic Marine Mammal Commission held its 19th Annual Meeting from 31 August to 2 September 2010, in Tórshavn, Faroe Islands. The member countries of NAMMCO are the Faroe Islands, Greenland, Iceland and Norway. The Governments of Canada, Denmark, Japan and the Russian Federation are represented as observers at the meeting.

Major items discussed are as follows.

Status of whale stocks

Stock assessments based on the final outcome of estimates from the Trans North Atlantic cetacean sightings surveys (T-NASS) in 2007 has become available for fin, minke and humpback whales. Management procedures applied have been derived from those developed in the IWC using the Revised Management Procedure (RMP) approach with accepted tuning levels.

A priority task for the NAMMCO Scientific Committee in coming months will be the finalization of an updated abundance estimate for pilot whales in the North Atlantic.

Planning of the next regular NASS survey at some time between 2013 and 2015 is underway.

Ecosystem Management and Modeling

NAMMCO, through its Scientific Committee, is now committed to an extensive and unique modeling program that will involve experts from countries both within and outside NAMMCO, including Canada, Japan, Russia and South Africa. This ambitious ecosystem modeling program is likely to become a major step forward in this field on a global scale.

It will run over 2-3 years to progress work towards achieving NAMMCO's commitment to using ecosystem-based management of marine resources in the North Atlantic region. Four different models will be applied in two geographical regions: the Barents Sea and the waters around Iceland.

Expert Review of Whale Killing Data

The Committee on Hunting Methods convened an expert working group in early 2010 to undertake a review and evaluate the large whale killing data from member countries and Japan, as well as examine data and information on recent and ongoing research on improvements and technical innovations in hunting methods and gears used for the hunting of large whales in NAMMCO countries. The expert working group made a number of recommendations. The report is available on the website www.nammco.no

Humpback Quotas for Greenland

Greenland informed the Council that it has resumed humpback whaling in West Greenland with a quota of 9 humpback whales allocated by the IWC, including "struck and lost" and a carry-over system.

Based on the most recent advice from the NAMMCO Scientific Committee, the Management Committee on Cetaceans concluded that a total removal of up to 20 humpback whales per year from 2010 to 2015 would be sustainable.

Appendix H

81st Meeting of the Inter-American Tropical Tuna Commission (IATTC) Antigua, Guatemala, 23 September – 1 October 2010

Observer: Jeremy Rusin (United States)

IATTC

The primary focus of the IATTC remains on managing fisheries for tuna and billfish in the Convention area. However, the Antigua Convention also calls for an ecosystem approach to management including monitoring, management and conservation of non-target or associated or dependent species, and it mandates the application of the precautionary principle in managing under uncertainty. With the entry into force of the Antigua Convention in 2010, the IATTC is expected to give greater consideration to these non-target and associated species, including cetaceans, in taking management decisions.

Entry into force of the Antigua Convention – The Antigua Convention (Convention), which was negotiated to strengthen and replace the 1949 Convention establishing the IATTC, entered into force on 27 August 2010. The Convention is open to the following: (a) the Parties to the 1949 Convention; (b) States not Party to the 1949 Convention with a coastline bordering the Convention Area; (c) States whose vessels fish for fish stocks covered by the Convention, following consultation with the Parties; or (d) States that are otherwise invited to join on the basis of a decision by the Parties. In 2010, thirteen governments had ratified the Convention and deposited their instruments of ratification or accession. Four of these – Belize, Canada, China, and the European Union – became new IATTC members as of 27 August. Chinese Taipei, as a Fishing Entity, provided the required written communication to the depositary, pursuant to Article XXVIII of the Convention, and therefore also became a member of the Commission as of 27 August.

Ecosystem impacts of fisheries – during the IATTC SAC meeting the IATTC scientific staff presented a summary of ongoing work describing what is known about the direct impact of the fisheries upon various species and species groups of the ecosystem, and reviewing what is known about the environment and about other species that are not directly impacted by the fisheries. This effort has been ongoing in some form since 2003; however, it has been reinvigorated since 2008 with the anticipated entry into force of the Antigua Convention and other factors. The results of this and similar work may help inform future directions of AIDCP and IATTC measures designed at managing fisheries and conserving dolphins (e.g., through balancing ecosystem impacts of different fishing practices). This work will be ongoing in 2011.

Place and date of next IATTC meeting - 29 June - 8 July 2011, La Jolla, CA, USA

23rd Meeting of the Parties to the Agreement on the International Dolphin Conservation Program (AIDCP)

Observer: Jeremy Rusin (United States)

AIDCP

The objectives of the AIDCP are:

- 1. To progressively reduce incidental dolphin mortalities in the tuna purse-seine fishery in the Agreement Area to levels approaching zero, through the setting of annual limits;
- 2. With the goal of eliminating dolphin mortality in this fishery, to seek ecologically sound means of capturing large yellowfin tunas not in association with dolphins; and
- 3. To ensure the long-term sustainability of the tuna stocks in the Agreement Area, as well as that of the marine resources related to this fishery, taking into consideration the interrelationship among species in the ecosystem, with special emphasis on, inter alia, avoiding, reducing and minimizing bycatch and discards of juvenile tunas and non-target species.

As of 2010, Costa Rica, Ecuador, El Salvador, the European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States, Vanuatu, and Venezuela have ratified or acceded to the AIDCP, and Bolivia and Colombia are applying the AIDCP provisionally. The IATTC provides the Secretariat for the AIDCP programme.

On-board observer program – The AIDCP mandates 100% coverage by observers of fishing trips by purse seiners of carrying capacity greater than 363 metric tons (t) in the Agreement Area. In 2009 and 2010, 100% of the trips by these vessels in the Agreement Area were sampled by independent observers. In addition to reporting on dolphin deaths in the fishery, the observer program provides other critical data on catch and bycatch of other species, gear configuration and compliance with existing AIDCP and IATTC conservation and management measures. While overall compliance has improved substantially in recent years, making additional progress in this area has been a focus of the AIDCP Parties as part of an overarching effort to strengthen the implementation of the AIDCP. These efforts continued in 2009 and 2010, and they are ongoing.

2009 and 2010 dolphin mortality limits - While most information on the fishery and dolphin deaths is available for 2009 and 2010, some (e.g., reported dolphin kills for 2010) will not be available until later in 2011. The overall dolphin mortality limit (DML) for the international fleet in 2009 and 2010 was 5,000 animals, and the unreserved portion of 4,900 was allocated to 92 qualified vessels that requested DMLs. In 2009, no vessel exceeded its DML; this information has not yet been reported for 2010. The average individual-vessel DML (ADML) in 2009, based on 92 DML requests, was 53. The Parties requested and received 87 DMLs for 2010 from the unreserved portion (4,900) of the overall fleet mortality limit. The ADML is 56.32. The number of sets on dolphin-associated schools of tuna made by vessels over 363 t is currently increasing, from 9,246 in 2008 to 10,910 in 2009 to 11,645 in 2010. This type of set accounted for 42% of the total number of sets made in 2008, 49% in 2009 and 45% in 2010. While the focus within the AIDCP has been on minimizing the reported dolphin mortalities in the fishery, some Parties continue to express concern over the unobserved impacts of the fishery on affected dolphin stocks, particularly in light of no clear demonstration that these stocks are recovering at a rate consistent with reported mortality and population depletion level. The increasing trend in sets made on tuna in association with dolphins 2008-2010 is cause for some concern at least among the Parties that this practice may have indirect negative effects on dolphin populations. In addition, dolphin and ecosystem assessment surveys that were scheduled for 2009 and 2010 have been delayed due to lack of resources, so it is unclear when abundance estimates for cetaceans in the eastern tropical Pacific will be available to update the most recent survey data collected in 2006.

Reported dolphin deaths for 2009 are presented by species and stock in the table below.

Dolphin species and stock	2009 reported incidental mortality (numbers of animals)
Offshore spotted dolphin (Stenella	
attenuata)	
Northeastern	264
Western-southern	254
Spinner dolphin (S.	
longirostris)	
Eastern	288
Whitebelly	222
Common dolphin (Delphinus	
delphis)	
Northern	109
Central	30
Southern	49
Other dolphins ¹	23
Total	1,239

T"Other dolphins" includes the following species and stocks, whose reported mortalities were as follows: Central American spinner dolphins (*Stenella longirostris centroamericana*) 10; striped dolphins 5; coastal spotted dolphins 2; bottlenose dolphins 1; unidentified dolphins 5.

Place and date of the next AIDCP meeting - 18-19 October 2011, La Jolla, CA, USA

CO-OPERATION WITH THE INTERNATIONAL MARITIME ORGANISATION

Russell Leaper

No IWC observer was present at the IMO's Marine Environment Protection Committee (MEPC) 61st meeting which took place from 27 Sept to 1 Oct 2010. The MEPC's 62nd meeting is scheduled to take place 11-15 July 2011. In the absence of an observer this report provides an update on the progress of work of joint interest to the IMO and IWC.

Members of the IWC Scientific Committee contributed to an IMO correspondence group which reported to the 61st meeting of the Marine Environment Protection Committee in September 2010. The group was established to identify and address ways to minimize the introduction of incidental noise into the marine environment from commercial shipping. The IMO is expected to continue this work in 2011.

The IWC has also contributed to IMO discussions on addressing ship strikes and the impacts of underwater noise from shipping. In 2009 the IMO issued a guidance document for minimizing the risk of ship strikes with cetaceans (MEPC.1/Circ.674). This guidance would be used as a basis for any proposals by IMO member states for mitigation measures to reduce ship strike risks. The IWC Scientific Committee continues to consider methods to estimate the extent of human induced mortality from, amongst other things, ship strikes as part of work under the Revised Management Procedure. The IWC Conservation Committee's Ship Strikes Working Group also continues to explore other issues relating to ship strike including modelling of risk and mitigation measures.