

[Revised]¹ Chair's Summary Report of the 60th Annual Meeting, Santiago, Chile, June 2008

The 60th Annual Meeting of the International Whaling Commission (IWC) took place at the Sheraton Santiago Hotel and Convention Centre, Santiago, Chile from 23 to 27 June 2008. It was chaired by Dr Bill Hogarth (USA). It was attended by 73 of the 81 Contracting Governments². The associated meetings of the Scientific Committee and Commission sub-groups were held at the same venue in the period 1 to 19 June.

A brief report of the outcomes of the main agenda items is provided below. A full report including details of Commission discussions will be available in the Chair's Report of the 60th Annual Meeting.

1. STATUS OF STOCKS

Antarctic minke whales

Completion of revised circumpolar abundance estimates for Antarctic minke whales continues to be a high priority as there is no agreed current estimate. Data from the IWC-IDCR/SOWER³ cruises are being used for this purpose. The cruises from 1978/79 to 2003/04 were divided into three circumpolar series (the CPI, II and III). Standard analyses of minke whale abundance estimates from these surveys have shown an appreciable decline for CPIII. For some years now the Committee has been trying to obtain abundance estimates from more sophisticated analyses as part of its examination as to whether the decreases represent a real decline in abundance or whether there are other explanations for the differences (e.g. changes in the number of whales in the pack ice which is outside the survey area). The Committee had hoped to present revised estimates this year using three new model approaches, but although considerable progress was made, this had not been possible. To ensure estimates that can be agreed upon are available next year, a detailed work plan and an intersessional workshop have been scheduled.

Western North Pacific common minke whales

In light of the results of the RMP *Implementation* completed in 2003, the Scientific Committee began work on the in-depth assessment of western North Pacific common minke whales, with a special emphasis on the J-stock⁴; that work continues. One of the difficulties facing this assessment is the apparent complexity of the population structure of common minke whales in the waters around Japan; there are at least four stock structure hypotheses and possibly more. The Committee hopes to clarify stock structure next year. Abundance estimates from sighting surveys in Russian Federation and Korean waters were reviewed but further analytical and field work is required before a final new abundance estimate for the area can be agreed. The Committee expressed concern about the continued high levels of reported bycatch of common minke whales from the J-stock and other coastal populations as well as recent suspicion of illegal catches from the J-stock.

Southern Hemisphere humpback whales

Last year, high priority was given to completion of the Comprehensive Assessment⁵ of Southern Hemisphere humpback whale breeding stocks B and C off the western and eastern African coasts respectively. Information presented to the Scientific Committee suggests that the stock structure for both stocks is complex; work to clarify this will continue intersessionally. Abundance estimates presented for breeding stock B off Gabon range from around 6,600 (95% CI 4,900 – 8,800) to 8,200 (95% CI 6,500 – 10,400). Estimates for stock C3 (C stock comprises four sub-stocks, C1-C4) suggest numbers in the range 4,500 – 7,700.

The Scientific Committee reviewed information on other stocks of humpback whales including the stocks wintering off western South America and feeding from Isla Chiloe to the Antarctic Peninsula, humpbacks off eastern Australia, New Zealand and the South Pacific Islands and humpbacks off Oman. A study confirmed that the high growth rate of the east Australian humpback population has continued and yielded a long-term annual rate of increase of 10.9% (95% CI 10.5-11.4%). This population was estimated to number around 9,683 whales in 2007 (95% CI of 8,556 – 10,959). Humpback whales off Oman in the Arabian Sea seem to be one discrete

¹ A minor change has been made to the first sentence of section 16, NGO session.

² As of 16 December 2008, there were 83 Contracting Governments.

³ International Decade for Cetacean Research/Southern Ocean Whale and Ecosystem Research Programme

⁴ The Scientific Committee completed a Comprehensive Assessment in 1992. The Committee defines 'Comprehensive Assessment' as '*an in-depth evaluation of the status of all whale stocks in the light of management objectives and procedures... that ... would include the examination of current stock size, recent population trends, carrying capacity and productivity*'.

⁵ See footnote 3 for definition.

population and the Committee stressed the importance of increasing research on the status of, and threats to this geographically isolated population.

The Scientific Committee reconfirmed its support for the Antarctic humpback whale photo-identification catalogue. The current total number of catalogued whales identified by fluke, right dorsal fin/flank and left dorsal fin/flank is 2,858, 409 and 405 respectively. The Committee noted the general importance of telemetry (radio and satellite tagging) data to its work with respect to clarifying issues of migration and movements; in this context it identified the value of photo-identification studies to assist in following the long-term health of animals after they have been tagged.

Southern Hemisphere blue whales

Good progress was made by the Scientific Committee in collating information on Southern Hemisphere blue whales as part of the Comprehensive Assessment process. Information received on pygmy blue whales confirmed that their presence in Antarctic waters is rare. Evidence was also received suggesting that the Chilean blue whales probably represent a discrete population or even subspecies.

Over 300 individual blue whales have been identified thus far from over 20,000 photographs taken during the IDCR/SOWER cruises. The Committee recommended that photographs taken during the Japanese scientific research programmes in the Southern Ocean should be added to those taken on IDCR/SOWER cruises and that analysis of the Japanese photos should be presented next year. The Japanese samples will increase the overall sample size and this greatly enhances the scientific value of both sets of photographs. A proposal to establish a central web-based catalogue of blue whale identification photographs, primarily for the Southern Hemisphere was endorsed. The system will be designed to facilitate the matching of blue whale photographs among a wide number of researchers and should result in a considerably increased capacity to understand some of the basic questions relating to Southern Hemisphere blue whale populations with respect to movements, basic biology and stock structure.

The Scientific Committee endorsed the results of a paper that suggests a pre-exploitation abundance of Antarctic blue whales of some 256,000 animals (95% credibility interval of 235,000-307,000) and that the minimum population size reached was as low as only 395 whales (95% credibility interval of 235-804), i.e. only 0.15% of the pre-exploitation level. The positive news is that the population has recently been increasing at an estimated annual rate of 6.4% (95% credibility interval of 2.4-8.4%). (The estimated maximum rate of increase for blue whales is about 8.5%.) The most recent survey abundance estimate (for 1997/98) was about 2,300 blue whales (95% CI 1,150 – 4,500) – however, that is still less than one percent of the pre-exploitation abundance levels.

The Committee agreed that the circumpolar assessment for Antarctic blue whales is now complete.

Southern Hemisphere right whales

The Scientific Committee received a considerable amount of new information on southern right whales. Much of the information comes from long-term monitoring programmes; the Committee frequently notes the importance of such programmes to its work. Right whales off southern Australia have been increasing at around 8% annually (approx. 95% CI 4.5 – 11.8%). The value of satellite telemetry studies was illustrated by the information on feeding strategies and movements of animals tagged off South Africa. The Committee was pleased to receive information from South America and encouraged further work, noting the value of partnerships amongst local and national governments, researchers and other stakeholders. It was also pleased to receive the results of a workshop held on the right whales found off Chile and Peru. That workshop had concluded that the right whales in this region were critically endangered and that further work is needed to better understand its status and to enable measures to mitigate anthropogenic disturbance to be developed. The Committee recommended further international co-operation amongst researchers and increased photo-identification and biopsy sampling effort. It also encouraged research into the value of protected areas and the conduct of stock-specific assessments. This latter recommendation will be considered further next year.

Western North Pacific gray whales

The Scientific Committee and the Commission have expressed great concern over the critically endangered western gray whale on a number of occasions. It is one of the most endangered populations of large whales in the world with a population size of around 130 individuals and only about 23 breeding females. The primary feeding grounds lie along the north-eastern coast of Sakhalin Island, where existing and planned oil and gas developments pose potentially serious threats to the population, through habitat damage, ship strikes, noise pollution and oil spills. Entanglements in fishing gear throughout the range also pose a serious threat to the population.

The Scientific Committee welcomed a progress report on the valuable work undertaken since 1995 by the collaborative Russia-US programme, particularly with respect to photo-identification and genetic data.

Information from that programme was incorporated into an updated assessment of the stock. It is encouraging that the population has been slowly increasing, at least up until 2005. However, its low absolute abundance and the news that five females had died in fishing gear during the past three years reaffirmed its critical status; projections incorporating this absolute number of additional mortalities indicate about a 25% probability of population decline and a substantial risk (about 10%) of extinction by 2050. The introduction by Japan of a new regulation in its 'Fisheries Resource Protection Law' aimed at reducing risk of incidental mortalities of gray whales in fisheries was welcomed.

The Committee made a number of recommendations with respect to the reduction of anthropogenic mortalities and disturbance. Development of efficient mitigation is greatly hampered by lack of information on migration routes and breeding destinations of the gray whales. The Committee noted the value of telemetry work in this regard, but also the need to exercise great care before undertaking such work on an endangered population. It will discuss this further next year. The Committee also reaffirmed its support for the IUCN Western Gray Whale Advisory Panel (WGWAP) with respect to the Sakhalin area. It especially welcomed the work being undertaken by the WGWAP to: (1) prepare for a forthcoming seismic survey in 2009; and (2) compare the photo-identification data from the Russia-US programme and the industry-sponsored Russian programme. It strongly encouraged continued collaboration between these two complementary programmes. With respect to threats caused by fishing gear, the Committee recommended that range states make every effort to determine whether stranded or entangled whales match animals found in the photo-identification catalogues and/or genetic archive and to report such events (including photographs) as soon as possible. Identification of the causes of anthropogenic mortality is important in developing mitigation efforts.

In the Conservation Committee, the Russian Federation expressed concern about possible impacts on the gray whales arising from the intensity of on-going research. The Scientific Committee Chair noted that he would investigate whether the Scientific Committee could consider this and would report back to the Conservation Committee next year. The Conservation Committee urged research groups to collaborate in order to minimise any effects.

The Scientific Committee and the Commission again reaffirmed the urgent need to reduce anthropogenic mortality to zero in this population. The work of the WGWAP towards the conservation of this population was endorsed and the participation of the Sakhalin Energy Investment Company in the Panel process was commended. It stressed the need for information on all activities and planned seismic surveys and urged all oil exploration companies to participate fully in the process of providing timely information.

Small stocks of right whales

North Atlantic right whales

This stock is critically endangered with a remaining western North Atlantic population of around 300 animals. It is vulnerable to ship strikes and entanglements. No new information was received this year and the USA was encouraged to provide annual updates on this stock in the future. The Scientific Committee repeated its previous recommendation that it is a matter of absolute urgency that every effort be made to reduce anthropogenic mortality to zero.

North Pacific right whales

Little information is available on North Pacific right whales other than that the population is probably less than 100 individuals. The Scientific Committee noted that it is not aware of any specific anthropogenic threats but it expressed concern about this small population and encouraged research into its status as soon as possible.

Small stocks of bowhead whales

Northeast Atlantic

About 20 bowhead whales were sighted at almost 81°N between Svalbard and Greenland in April 2006. There has been an apparent increase in observations of bowhead whales in these waters in recent years but it is not known if these few animals are stragglers from other populations or if they are survivors from the historic Spitsbergen population. If they are survivors of the Spitsbergen population, they are probably from one of the most endangered populations of the large whales in the world. The Committee recommended additional work to clarify the status as soon as practicable.

North Pacific

In the Okhotsk Sea, whaling on bowheads started in 1846 and was pursued intensively for two decades and then continued sporadically until 1913. Illegal catches resumed in 1967, but the numbers taken remains unknown. In light of the small population size and the recent catch history, the Committee expressed great concern and recommended that further work to investigate the status be conducted as soon as possible.

2. WHALE KILLING METHODS AND ASSOCIATED WELFARE ISSUES

The Commission received reports from a number of countries on animal welfare issues related to whales and whaling. These ranged from information on the most appropriate methods for euthanasia for stranded animals to information on killing methods and hunting information from a number of countries.

The Commission agreed to hold a workshop on welfare issues associated with the entanglement of large whales. This workshop will bring together a group of experts to develop guidelines for dealing with entangled whales, including appropriate methods for euthanasia in circumstances when this is the most appropriate course of action. The workshop will be of 3-4 days duration and will be held in the intersessional period after the 2009 Annual Meeting. The specific timing and venue of the workshop are to be determined.

3. ABORIGINAL SUBSISTENCE WHALING

The Aboriginal Subsistence Whaling Sub-committee met on 18 June to review the Scientific Committee's work on development of an Aboriginal Subsistence Whaling Management Procedure and provide advice to the Commission on catch limits for: (1) Bering-Chukchi-Beaufort Seas stock of bowhead whales; (2) eastern stock of North Pacific gray whales; (3) common minke whales and fin whales off Greenland; and (4) North Atlantic humpback whales off St. Vincent and The Grenadines. The Commission agreed that no changes to the block quotas renewed in 2007 were needed.

The main issue this year was a proposal by Denmark for a strike limit of 10 humpback whales annually for the period 2008-2012 for West Greenland. The Scientific Committee had been unable to provide advice on the same request made last year but had developed a work plan to allow it to provide advice this year. The Committee completed its work in Santiago and had agreed that this strike limit would not harm the population. Last year, Denmark presented its need statement expressed in terms of tonnes of edible products. This year, discussion in the Commission focussed on whether or not Denmark (Greenland) had satisfactorily documented its need for the 10 humpback whales. The Commission was deeply divided over this matter. The Chair had requested that a vote not be taken at this meeting. Nevertheless a vote was taken and the proposal for 10 humpback whales was defeated by 36 votes to 29 with 2 abstentions.

The catch limits presently in force are:

Bering-Chukchi-Beaufort Seas stock of bowhead whales (taken by native peoples of the USA and the Russian Federation): A total of up to 280 bowhead whales can be landed in the period 2008-2012, with no more than 67 whales struck in any year (and up to 15 unused strikes may be carried over each year).

Eastern North Pacific gray whales (taken by native peoples of the USA and the Russian Federation): A total catch of 620 whales is allowed for the years 2008-2012 with a maximum of 140 in any one year.

Caribbean humpback whales (taken by St Vincent and The Grenadines): For the seasons 2008-2012 the number of humpback whales to be taken by the Bequians of St. Vincent and the Grenadines shall not exceed 20.

West Greenland fin whales: The number struck shall not exceed 19 in each year.

West Greenland common minke whales: The number struck shall not exceed 200 in each year (and up to 15 unused strikes may be carried over each year).

West Greenland bowhead whales: The number struck shall not exceed 2 per year (and up to 2 unused strikes may be carried over each year). The quota for each year shall only become operative when the Commission has received advice from the Scientific Committee that the strikes are unlikely to endanger the stock.

East Greenland common minke whales: The number struck shall not exceed 12 in each year (and up to 3 unused strikes may be carried over each year).

The Scientific Committee will continue to give high priority to developing Strike Limit Algorithms (SLAs) for Greenlandic fisheries during the coming year.

4. THE REVISED MANAGEMENT SCHEME (RMS)

Revised Management Procedure (RMP)

This item is addressed in three parts: general issues; the *Implementation* process; and the estimation of bycatch and other human-induced mortality.

General issues

Last year the Scientific Committee re-emphasised the importance of a review of maximum sustainable yield rates (MSYR) in the context of RMP issues, especially with respect to considering modifications to the Catch Limit Algorithm (CLA). Although considerable progress was made, insufficient time was available to consider all of the issues. A plan has been put in place to complete this work before the next annual meeting. One important aim of the review is to finalise the protocol for reviewing proposals to amend the RMP (such as that from Norway).

The Implementation process

The Commission was reminded that the work carried out by the Scientific Committee on *Implementations* is governed by the Requirements and Guidelines developed by the Committee and adopted by the Commission. In essence, once the Commission confirms that the Committee should go ahead with the *Implementation* process, there are a series of steps that must be followed over a two year period, encompassing three annual meetings and two intersessional workshops.

Last year, the western North Pacific Bryde's whale *Implementation* was completed, although abundance estimates for use in the CLA needed to be finalised (should the Commission request the Committee to calculate catch limits). Abundance estimates were agreed this year, with a total estimate of around 20,500 whales (approx 95% CI 10,700 – 39,200).

The Scientific Committee is in the middle of the *Implementation Process* for North Atlantic fin whales and hopes to complete this at next year's meeting.

Estimation of bycatch and other human-induced mortality

The RMP estimates a limit for the number of non-natural removals, not simply a catch limit for commercial whaling. It is therefore important to estimate the numbers of whales removed from the population by indirect means. This year the Scientific Committee addressed mortality due to bycatch in fishery operations, ship strikes, marine debris (e.g. risk from entanglement and ingestion) and noise.

The Scientific Committee reviewed progress towards estimating bycatch using: (1) fisheries data and observer programmes; and (2) genetic data from market sampling. The Scientific Committee has been collaborating with FAO⁶ on collation of relevant fisheries and bycatch data with the aim of identifying fisheries where further monitoring would be valuable. With respect to market sampling, while recognising the differing views of various member governments over this issue, the Committee reaffirmed its view that availability of data from DNA registers will improve estimates of total take from market surveys and its ability to review papers containing the results of market sampling. The Committee requested that these be made available through the Committee's Data Availability Agreement.

With respect to ship strikes, the results from studies of collisions between whales and vessels off the Canary Island and New Zealand and papers on modelling collision risk were reviewed. Substantial progress with the global IWC database of ship strikes has been made. The database design was agreed by the Scientific Committee last year and has also been approved by ACCOBAMS⁷ for its work. Subsequently, a small group of scientists have been populating the database. To date, 763 records, mainly from published sources, have been entered. Consideration is now being given to the best way to continue the data collection process, including ongoing maintenance and quality control of the database and the development of a web-based data entry system via IWC's website. Mortality due to ship strikes is a concern not only with respect to setting commercial and aboriginal subsistence catch limits, but also in evaluating threats to the survival of endangered populations. The issue of ship strikes is also dealt with by the Conservation Committee (see section 13).

With respect to noise, the Scientific Committee agreed that there is a need for internationally co-ordinated research to address gaps in knowledge on sonar-related cetacean strandings including improving the ability to conduct necropsies as quickly as possible, standardising data collection on the animal's environment at the time of the death/stranding, and co-ordinating with military or other government agencies so that all factors related to the stranding are examined. The impacts of noise are also addressed under Environmental Concerns (see section 9).

Revised Management Scheme (RMS)

There were no specific discussions on the RMS. Rather the RMS was included in discussions on the future of IWC (see section 22).

⁶ Food and Agriculture Organisation of the United Nations

⁷ Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Area

5. SANCTUARIES

A proposed Schedule amendment submitted by Brazil, Argentina, South Africa and other co-sponsors to create a new whale sanctuary in the South Atlantic was again submitted for consideration. The Commission received a video presentation in support of the sanctuary. However, the three countries indicated that to facilitate the work on the future of the IWC they would not ask for a vote on this issue. The Chair of the Commission thanked these countries for their constructive attitude.

6. SOCIO-ECONOMIC IMPLICATIONS AND SMALL-TYPE WHALING

Japan again referred to the hardship suffered by its four community-based whaling communities (Abashiri, Ayukawa, Wadoura and Taiji) since the implementation of the commercial whaling moratorium. While in previous years Japan had requested a vote on its proposal to relieve this hardship, this year, because of the progress it saw in the discussions related to the future of the IWC it had decided not to do so. The Chair of the Commission thanked Japan for its co-operative attitude.

7. RESEARCH CONDUCTED UNDER SCIENTIFIC PERMIT

Improving the procedure for reviewing scientific permit proposals

An improved procedure to review special permit proposals as well as the periodic and final review of results from special permit programmes was agreed by consensus by the Scientific Committee and endorsed by the Commission. In this approach, reviews will be undertaken at intersessional workshops of independent experts. A limited number of scientists associated with a proposal will be allowed to attend such workshops in an advisory role, primarily to present their proposal or results and to answer questions of clarification. To ensure that the composition of any expert group is considered balanced and fair, the experts will be chosen by the Chair and Vice Chair of the Scientific Committee and IWC's Head of Science in consultation with a Standing Steering Group representing a range of experience and expertise within the Scientific Committee.

Review of results from existing permits

The Scientific Committee reviewed results from Japan's current research programmes in the Antarctic (i.e. JARPAII⁸) and North Pacific (JARPNII⁹) and Iceland's programme in the North Atlantic¹⁰.

With respect to JARPA II, 2007/08 was the first year of the full-scale research programme. While permits were issued for minke, fin and, for the first time, humpback whales, Japan subsequently agreed to delay the taking of humpback whales at least until after the 2008 Annual Meeting. In the event, 551 Antarctic minke whales were taken and no fin whales. In the JARPN II programme, a total of 207 (plus one lost) common minke, 100 sei, 50 Bryde's and 3 sperm whales were taken in 2007. A review of the first six years of JARPN II will take place intersessionally prior to next year's Annual Meeting following the new approach mentioned above.

Iceland's programme on North Atlantic common minke whales has finished its sampling phase. The total number of common minke whales taken has been 200, the last being taken in 2007. Currently the samples and data are being analyzed and when this has been completed, the programme will be subject to an IWC review following the agreed new procedure.

Again, as in the past, different views on the value of these research programmes were expressed in the Scientific Committee and in the Commission. The deep division within the organisation regarding scientific permit whaling is one of the main reasons why a better approach to the review of proposals and results has been developed.

⁸ JARPA II - a large-scale Antarctic programme that commenced with the first year of a two-year feasibility study during the austral summer of 2005/06. The objectives are defined by Japan as: (1) monitoring of the Antarctic ecosystem; (2) modelling competition among whale species and developing future management objectives; (3) elucidation of temporal and spatial changes in stock structure; and (4) improving the management procedure for Antarctic minke whale stocks. JARPA II will focus on Antarctic minke, humpback and fin whales and possibly other species in the Antarctic ecosystem that are major predators of Antarctic krill. During the 2-year feasibility study a maximum of 850±10% Antarctic minke whales and ten fin whales will be killed and sampled in each season. Annual sample sizes for the proposed full-scale research (lethal sampling) are 850±10% Antarctic minke whales, 50 humpback whales and 50 fin whales.

⁹ JARPN II is a long-term research programme primarily aimed at feeding ecology in the context of contributing to the 'conservation and sustainable use of marine living resources in the western North Pacific, especially within Japan's EEZ.' The programme involves the taking of 150 minke whales, 50 Bryde's whales, 50 sei whales and 10 sperm whales annually in the western North Pacific.

¹⁰ A proposed permit by Iceland, primarily for feeding ecology studies for the take of 100 common minke whales, 100 fin whales and 50 sei whales in each of two years was presented at the 55th Annual Meeting in 2003. In the event, Iceland has issued permits to take 38 common minke whales in 2003, 25 minke whales in 2004, 39 minke whales in 2005, 50 minke whales in 2006 and 39 minke whales in 2007.

8. SAFETY ISSUES AT SEA AND THEIR IMPLICATIONS

This item was included on the agenda at the request of Japan in view of protest activities of the Sea Shepherd Conservation Society that despite the adoption by consensus of IWC Resolutions at the 2006 and 2007 Annual Meetings¹¹ had again been launched against JARPA II research activities in the Southern Ocean during the austral summer of 2007/2008. Japan described the nature of the action taken which it believed had posed a serious threat to the safety of its vessels and their crew. It referred to the statement that had been issued in March by the Intersessional Meeting of the Commission on the Future of IWC, in which the meeting *inter alia*: (1) reiterated that the Commission and its Contracting Governments do not condone and in fact condemn any actions that are a risk to human life and property in relation to the activities of vessels at sea; and (2) urged Contracting Governments to 'take actions, in accordance with relevant rules of international law and respective national laws and regulations, to co-operate to prevent and suppress actions that risk human life and property at sea and with respect to alleged offenders'. Japan welcomed the consultations and co-operation it has had with other relevant governments and the concrete results that are being achieved. It hoped that IWC would encourage future co-operation.

A number of Contracting Governments also welcomed the ongoing co-operation with Japan regarding the recent protests activities in the Southern Ocean. They expressed concern over these activities and while they supported the right to peaceful protest, they noted that this must be done in a manner that does not present a risk to human life or property and is in accordance with domestic and international law. It was noted that IWC is not the competent body in which to address matters of vessel safety, but that this matter was to be discussed the following week at the International Maritime Organisation who has competency on this issue.

9. ENVIRONMENTAL CONCERNS

The Commission reviewed the Scientific Committee's report on environmental matters, including cetacean diseases, ecosystem modelling, climate change effects, pollution, anthropogenic noise and SOCER (State of the Cetacean Environment Report).

With respect to **diseases**, the Cetacean Emerging and Resurging Disease (CERD) group established last year prepared information on cetacean pathogens, biotoxins and disease reports. It also reviewed progress on disease identification and standardisation, case definition, diagnostic laboratories and data sharing. Given the paucity of available or targeted diagnostic laboratories and diagnostic tests specific for marine mammals, a list of laboratories and experts for specific or general diagnostic capabilities by country, continent and/or region will be compiled and maintained.

The Scientific Committee received a report from a two-day pre-meeting workshop on skin diseases in cetaceans held in Santiago on 30-31 May. The workshop reviewed the state of knowledge on the examination of, distribution of, and causes of skin diseases in cetaceans with a focus on cetaceans of South America. The potential for impacts of skin diseases in small populations in areas where there are high levels of environmental degradation was recognised and it was agreed that special action should be given to prevalence and impact of skin diseases in dolphins from southern and south-eastern Brazil. With respect to global action, recommendations were made for research, standardisation and on data sharing.

With respect to **ecosystem modelling**, this year's focus was planning for the joint CCAMLR/IWC workshop, to be held in August 2008, to review input data required for ecosystem models to provide advice on krill predators in the Antarctic marine ecosystem. Expert Working Groups for each of the key taxa were preparing for the workshop. The Scientific Committee agreed that the approach taken by these groups, and the progress being made towards the workshop, was appropriate.

The use of the ECOPATH with ECOSIM software to explore the potential impact of cetaceans on fishery yields was also discussed. The Scientific Committee agreed that simulation testing of multiple models is a valuable approach, reaffirming its conclusion of 2002 that at this stage, no single approach could be recommended to provide reliable information of value to consideration of cetacean dynamics in an ecosystem context. While this does not necessarily rule out the possibility that inferences that could be drawn if a number of different approaches yield qualitatively similar results, the Committee agreed that it may be some time before this situation changes.

With respect to **climate change**, plans have been put in place for a second workshop is planned for 21-25 February 2009 in Sienna, Italy (the first took place 12 years ago). The primary goal of the workshop is to determine how climate change may affect cetaceans, how to best determine these effects, and how to improve

¹¹ Resolution 2006-2 on the Safety of Vessels Engaged in Whaling and Whale Research-related Activities; Resolution 2007-2 on Safety at Sea and Protection of the Marine Environment.

conservation under climate changes described in the 4th report of the International Panel on Climate Change. A Steering Committee was established to agree a final agenda and list of invited participants.

Due to time constraints, the **POLLUTION+** Phase II modelling workshop planned for spring 2008 was not held. However, a new Steering Group has been assembled which is finalising plans for an intersessional workshop that will develop Terms of reference for Phase II of the programme. *Inter alia* the workshop will establish a framework for modelling pollution effects, identify key cetacean populations to be studied, develop a protocol for validating the use of biopsy sampling techniques with respect to pollutant studies and then begin to apply this protocol to large whale species.

The Scientific Committee received new information on **anthropogenic noise** in relation to the potential impacts of seismic surveys on cetaceans, mid-frequency sonar and a cetacean stranding event. It noted a call by a recent International Workshop on Shipping Noise and Marine Mammals for global action to reduce the contributions of shipping to ambient noise with targets being set for the next 10 and 30 years. This year the **State of the Cetacean Environment Report** focussed on the Atlantic, and is based on literature analyses. Almost half of all the literature published on cetaceans in 2007 dealt primarily with conservation-related issues. The focus of next year's report will be the Pacific Ocean.

10. WHALEWATCHING

Over recent years there has been emerging evidence that disturbance from some whalewatching activities may have population-level effects in cetaceans. The Scientific Committee is therefore planning a large-scale whalewatching experiment to assist in describing such effects, improve understanding of the mechanisms involved and develop mitigation measures. Work will continue intersessionally and a final research proposal is expected to be available at next year's meeting. An overview of whalewatching in South America raised concerns that aerial whalewatching in Chile and Brazil using helicopters has the potential to disturb whales. The Committee reviewed aspects of short-term and long-term methods to assess biological impacts of whalewatching on cetaceans and gave advice on further developments.

With respect to guidelines and regulations for whalewatching, the Committee expressed some concern at the apparent trend of government agencies to use voluntary codes of conduct rather than legal regulations. The Committee recommended that in general, codes of conduct should be supported by appropriate legal regulations and modified if necessary as new biological information emerges. The world-wide compendium of whalewatching guidelines and regulations around the world was updated and is available on the IWC web site (<http://www.iwcoffice.org/conservation/whalewatching.htm#regulations>).

Whalewatching, with a focus on management issues was also addressed by the Conservation Committee (see section 13). In the Commission, Argentina gave a presentation on its national whalewatching activities.

11. OTHER SCIENTIFIC COMMITTEE ISSUES

Small cetaceans

This year the Scientific Committee undertook a regional review of conservation issues regarding the (at least) 39 species of small cetaceans in the southeast Pacific (Columbia, Ecuador, Peru and Chile). The Committee noted that little is known about the distribution and abundance of many of the coastal species that are probably most impacted by anthropogenic activities, including Burmeister's porpoise, Peale's dolphin, bottlenose dolphin and the Chilean dolphin. A number of recommendations were made to improve the knowledge of the abundance, distribution, pattern of residency, population structure, life history and ecology of these and other small cetacean species. The Committee expressed concern with respect to both habitat degradation and the exclusion of small cetaceans from their habitat by aquaculture developments and recommendations were also made with respect to direct and incidental takes. A number of small coastal populations, including bottlenose dolphin, Peale's dolphin and spotted dolphins may be threatened by unregulated and undocumented takes for bait. It recommended that the impacts of such removals be assessed and the status of the affected populations be documented. The Committee also recommended that range states establish programmes for monitoring and reporting of bycatch of small cetaceans as part of their regular fisheries monitoring and that existing bycatch monitoring programmes be continued, particularly in relation to mitigation efforts. Recommendations for further research and regional collaboration (e.g. with IOC/UNESCO¹²) were made.

The Scientific Committee also reviewed progress on previous recommendations including those with respect to the vaquita, harbour porpoise (exposed to high bycatch throughout its range), franciscana (at risk from harbour

¹² Intergovernmental Oceanographic Commission/United Nations Educational, Scientific and Cultural Organisation

development and bycatch), illegal takes of botos, the hand-harpoon hunts for Dall's porpoise in Japan (concern regarding sustainability) and Hector's dolphins (bycatch in gill net fisheries).

With respect to the vaquita, the Committee noted that the entire population is most likely to be no more than 150 animals and that there has been an extraordinary rapid decline of approximately 75% in a decade. It further noted that if the current mortality due to bycatch in fishing gear continues, it is likely that the species will be extinct in five years and probably less. The Committee therefore re-iterated its extreme concern about the conservation status of the vaquita which is the most endangered cetacean species in the world. It expressed its great frustration that despite more than a decade of warnings, this species has continued on a rapid path towards extinction due to a lack of effective conservation measures in Mexico (although it welcomed news that Mexico is taking measures to remove fishing gear that entangle these animals). It strongly recommended that, if extinction is to be avoided, all gillnets should be removed from the upper Gulf of California immediately. In the extremely unfortunate circumstance that this does not occur immediately, the Committee indicated that it must certainly occur within the three-year period starting in 2008. To meet this schedule, the Committee encouraged the international community including IWC member countries and non-governmental organisations (NGOs), to assist the government of Mexico in this task. In the Commission, Mexico confirmed that by Presidential Decree, over 50 million USD is being made available to remove gill nets throughout the range of the vaquita.

The Committee reaffirmed its concern over the conservation status of the boto and that directed killing of this species continues without restriction or catch limits. It recommended that immediate steps be taken by Brazil, Colombia, Peru and Venezuela to stop this hunt and that range states report to next year's meeting regarding progress made. In the Commission, Brazil reported that it has established a national working group of cetacean biologists, fisheries experts and environmental managers to devise better regulations for the fisheries that are the major cause of mortalities of the boto. The Committee re-iterated its concerns for stocks of Dall's porpoise and repeated earlier recommendations that catches should be reduced to sustainable levels, that the bycatch levels be quantified and that a full assessment of each of the affected populations be conducted as soon as possible.

In the Commission, China reported on the measures it has taken to protect cetaceans of the Yangtze River (e.g. establishment of 7 sanctuaries, large scale monitoring and the release of young and larval fish as a food source) and its future work plan particularly regarding protection of the finless porpoise. Cambodia reported that it is taking measures to reduce bycatch of the Irrawaddy dolphin of the upper Mekong river through a reduction in the use of gill nets. The Irrawaddy dolphin numbers around 100 animals and is facing extinction without conservation efforts.

Other

Other issues addressed by the Scientific Committee included: the IDCR/SOWER cruises progress with work on stock definition (knowledge of population structure is central to providing advice of conservation and management); DNA testing (genetic methods for species, stock and individual identification, sequence validation, collection and archiving of tissue samples from catches and bycatch, reference databases and standards for diagnostic DNA registries) and new initiatives. With respect to new initiatives, Australia introduced two papers. One considered the use of conservation management plans and the other considered regional non-lethal research partnerships and a proposal to establish one for the Southern Ocean. Both papers were also submitted to the Conservation Committee (see section 13) and the Commission. IWC's Head of Science had introduced a document outlining a general approach and framework towards developing conservation plans that should optimise the likelihood that such plans would be effective. This approach will be considered during the development of the Committee's agenda for next year.

In the Commission, France, while recognising the importance of the Scientific Committee and the value of its report, suggested that as the Committee's report is necessarily technical it would be useful to have, in addition, summary information that is more readily accessible to non-specialists. As an illustration of the type of summary information that might be useful, France introduced a document that provided a species-by-species summary of available knowledge of stock distributions, numbers and conservation of the thirteen species of large whales covered by the Convention. If found useful, the intention would be to address other key subjects dealt with by the Scientific Committee.

12. CO-OPERATION WITH OTHER ORGANISATIONS

The Scientific Committee has continuing co-operative arrangements with a number of other organisations including CMS (Convention on the Conservation of Migratory Species), ASCOBANS (Agreement on Small Cetaceans of the Baltic and North Seas), ACCOBAMS (Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Area), ICES (International Council for the Exploration of the Sea), IATTC (Inter-American Tropical Tuna Commission), ICCAT (International Commission for the

Conservation of Atlantic Tuna), CCAMLR (Convention for the Conservation of Antarctic Marine Living Resources), Southern Ocean GLOBEC, NAMMCO (North Atlantic Marine Mammal Commission), FAO (Committee on Fisheries), PICES (North Pacific Marine Science Organisation), IUCN (International Union for the Conservation of Nature) and ECCO (Eastern Caribbean Cetacean Commission). Reports from IWC observers/participants attending meetings of the above organisations were reviewed.

In the Commission, the Secretary reported that the IMO (International Maritime Organisation) Council approved the Agreement of Co-operation with IWC at its 100th session from 16-10 June. The Agreement will now be submitted to the IMO Assembly for final approval at its next session in November 2009. The Secretary noted that in the meantime, IMO will extend to IWC the privileges and facilities envisioned in the Agreement on a provisional basis.

13. CONSERVATION COMMITTEE

The Conservation Committee met on 17 June.

The Committee reviewed progress with two ongoing areas of work, i.e. (1) an investigation of inedible 'stinky' gray whales in the Chukotkan aboriginal subsistence hunt; and (2) ship strikes on cetaceans. It also *inter alia*: (1) received a report on a workshop held just prior to the Scientific Committee meeting on the status of the southern right whale population of Chile-Peru (see section 1); (2) reviewed the Scientific Committee's report on whalewatching (see section 10) and considered its role in the management of whalewatching; (3) received a number of voluntary national reports on cetacean conservation activities; and (4) under other matters, received papers introducing a strategy for modernising the role of IWC and proposing the formalised development of regional, non-lethal research partnerships.

With respect to 'stinky' gray whales, the USA reported on continuing joint research by the Russian Federation and the USA to address the issue. A report on the findings should be available for review at next year's meeting.

The Conservation Committee received and commended the Third Progress Report of the Ship Strikes Working Group (SSWG) that reported on progress since last year and included the following four major recommendations to the Committee, i.e. (1) the SSWG endorses the recommendations of the Scientific Committee for future work, including that the Secretariat develop and maintain the ship strikes database and integrate it in the IWC website; (2) the Conservation Committee should request Contracting Governments to use the agreed ship strike template and submit ship strikes data to the IWC Secretariat on a regular basis; (3) the Conservation Committee should request Contracting Governments to communicate ship strikes data and information to relevant maritime sector bodies, including port authorities, shipping federations, coast guards and other relevant bodies; and (4) a Steering Committee for a multidisciplinary workshop on ship strike mitigation should be established, noting that workshop participants should represent experts from within the Commission, the Scientific Committee and appropriate other organisations. The Committee noted the significant progress in relation to the IMO, where ship strikes are now on the agenda of the work programme of the Marine Environmental Protection Committee, and in the development of a global database on ship strikes, which now includes 763 records.

With respect to the southern right whale population of Chile-Peru, the Committee stated the importance of continuing work on the status of right whales and recommended that this issue remain a high priority in the future work of the Scientific Committee and that it be retained on the Conservation Committee's agenda.

With respect to the regulation of whalewatching, the Scientific Committee's recommendations were supported. The Conservation Committee was pleased to note countries' willingness to engage in discussion and to look for practical ways to mitigate the effects of whalewatching including holding a workshop to look at developing voluntary 'best-practice' guidelines for the industry. As last year, the Conservation Committee supported the view that it is well-suited to following-up on Scientific Committee recommendations related to the management of whalewatching. Brazil and South Africa agreed to develop a more detailed proposal for review next year on how this might be done.

Australia introduced a proposed strategy for modernising the role of the IWC focused on conservation of whale populations and managing non-consumptive use of whales. It noted the importance of developing Conservation Management Plans which it believed would enable the Commission to more adequately address non-whaling objectives and non-consumptive uses of cetaceans. Australia also proposed the formalised development of regional, non-lethal cetacean research partnerships to strengthen the performance of the IWC as well as improve whale conservation, management and recovery and called for collaboration between the CMS and IWC and their relevant committees.

Finally the Conservation Committee initiated discussions on how sufficient funds and resources, including those from the Secretariat, could be made available for its work.

14. FUTURE WORK OF THE SCIENTIFIC COMMITTEE

The Commission adopted the report from the Scientific Committee, including its proposed work plan for 2008/2009 that includes activities in the following areas:

- continued work on the RMP, particularly with respect to: (1) completing *Implementations* for western North Pacific Bryde's whales and North Atlantic fin whales; and (2) completing the *Implementation Review* for North Atlantic minke whales;
- continued work on the estimation of bycatch and other human induced mortality for use in the RMP;
- continued work on the outstanding aspects of the Aboriginal Subsistence Whaling Management Procedure, particularly the development of an *SLA* or *SLAs* to provide long-term management advice for the Greenlandic fisheries and an *Implementation Review* of eastern North Pacific gray whales;
- annual reviews of catch data and management advice for whale stocks subject to aboriginal subsistence takes;
- continued work on in-depth assessments, with particular emphasis on agreeing abundance estimates for Antarctic minke whales, concluding discussions on stock structure of North Pacific common minke whales and completion of the assessments for Southern Hemisphere humpback whales Breeding Stocks B and C;
- continued work on the conservation of endangered populations with emphasis on western gray whales and northern right whales;
- further review of progress on the TOSSM (Testing of Spatial Structure Models) project and the concept of 'stock' in a management context;
- review of the report from the Specialist Workshop to evaluate the results from JARPN II;
- continued work on environmental concerns, with a focus on: (1) reviewing the report of the second climate change workshop; (2) plans for Phase II of POLLUTION 2000+; (3) reviewing the report from the intersessional group on Cetacean Emerging and Resurging Diseases; and (4) the SOCER report;
- continued work on ecosystem modelling with a focus on reviewing the report from the CCAMLR/IWC workshop on modelling Antarctic krill predators and reviewing models from JARPN II;
- continued work on issues related to whalewatching with a focus on: (1) discussing the proposal for a large-scale whalewatching experiment; (2) assessing the biological impacts of whalewatching on cetaceans; and (3) reviewing whalewatching in Portugal;
- continued work on small cetaceans, including a review of the systematics, population structure and status of common dolphins.

15. INFRACTIONS

The Infractions Sub-committee met on 17 June. It considered: (1) infractions reports from Contracting Governments for 2007, including any penalties imposed and follow-up on earlier reports; (2) the extent of surveillance of whaling operations; (3) information reported as required or requested under Section VI of the Schedule (e.g. date, time, species, position, length, sex, length and sex of any foetus if present, killing method and number of struck and lost animals); and (4) the submission of national laws and regulations. The USA and the Republic of Korea reported infractions.

16. NGO SESSION

This year the Commission allowed NGOs to address the plenary session. Three organisations from each side of the spectrum were given five minutes each to speak. The organisations selected by their peers were Cento de Conservacion Cetacea, the High North Alliance, WWF, the Women's Forum for Fish, Greenpeace and Concepesca.

17. ADMINISTRATION

Items covering administrative and financial matters (i.e. items 17 to 19 of this report) were first considered by the Finance and Administration (F&A) Committee that met on 18 June.

Frequency of meetings

As previously, while some countries supported a move for the Commission to meet every two to three years, others, while sympathetic to this in principle, believed that such a move is premature given the ongoing discussions on the future of the organisation. Several countries supported continued annual meetings of the Scientific Committee even if the Commission was to meet less frequently. The Commission agreed that this issue would best be addressed in the context of the discussions on the future of the organisation.

NGO participation in Annual Meetings

Changes to the procedure governing accreditation and participation of NGOs in IWC meetings were agreed last year enabling national as well as international organisations to become accredited and removing the restriction of one person per organisation in the meeting room at any one time. Registration fees were to be set per individual observer rather than per organisation.

In reviewing these changes, it was considered that the new system appeared to be working satisfactorily and that no changes were needed at present. It was agreed however, that the system should be kept under review.

Website

Following last year's agreement that links would be made from the Commission's website to websites of Contracting Governments where governments express their views and positions on IWC matters, the Secretariat reported that links had been established with the websites of Australia, France, Norway, Slovenia and the UK.

The Commission agreed to begin a partial translation of its website into French and Spanish focusing on the translation of the most frequently visited pages. This would be accompanied by improving machine translation for the remaining parts of the website. It was recognised that this approach would not prevent a move to a fully trilingual site in future if considered necessary.

Use of languages other than English

The Commission adopted an amendment to its Rules of Procedure N.1 to introduce French and Spanish as working languages of the Commission (see section 22 below).

Suspension of voting rights

The Commission adopted amendments to Rule of Procedure E.2(a) and Financial Regulation F.2 to clarify the situation with respect to the due date for payment of financial contributions and voting rights.

Carbon off-setting

The Secretariat was requested to undertake a study to be presented at next year's meeting, on the feasibility and associated costs of off-setting the carbon emissions of the operation of the Secretariat and the meetings of the IWC to become carbon-neutral.

18. FINANCIAL CONTRIBUTIONS FORMULA

The Interim Measure adopted at IWC/54 for calculating financial contributions was introduced to alleviate the financial burden of developing countries. In calculating contributions, the Interim Measure takes account of: (1) membership; (2) whaling activities; (3) the size of delegations to the Commission's Annual Meeting; and (4) a country's capacity to pay. With respect to capacity to pay, Contracting Governments are allocated into one of four groups depending on their Gross National Income and their GNI per capita. The measure also takes into account the special position of 'Very Small Countries' as defined at IWC57 in 2005.

Last year, noting that the cut-off points defining the capacity to pay groups had remained unchanged since 2002 and had not been revised to take account of inflation, the Commission agreed that a review should be undertaken. On the basis of information provided by the Secretariat, this year the Commission agreed to update the existing cut-off points and to do this in future on an annual basis.

19. FINANCIAL STATEMENTS AND BUDGET

The Commission approved the Provisional Financial Statement for 2007-2008 subject to audit. It also approved the budget for 2008-2009, including the research budget, and increases in the media fee from £50 to £55 per organisation for 2009. The fee for non-member governments and intergovernmental organisations remains unchanged at £800 per individual. NGO fees will remain unchanged at £500 for the first observer per organisation and £250 per additional observer.

The Secretariat was requested to re-negotiate the lease for its existing offices (The Red House, Impington, Cambridge, UK). The current lease expires in March 2009.

Andrea Nouak (Austria) and Walter Duebner (Germany) were elected by consensus as Chair and Vice-Chair respectively of the Budgetary Sub-committee. Thanks were expressed to the outgoing Chair of the Budgetary Sub-committee, Joji Morishita (Japan).

20. DATE AND PLACE OF ANNUAL MEETINGS

The 61st annual and associated meetings in 2009 will be held in Funchal, Madeira during the period 31 May to 26 June. The Commission will meet from Monday to Friday 22-26 June.

No offers to host an Annual Meeting in 2010 were received. The Commission agreed to consider in Madeira the need for a 2010 meeting.

21. ADVISORY COMMITTEE

The Commissioner for Côte d'Ivoire was elected onto the Advisory Committee for two years to replace the Commissioner for Cameroon. The Commissioner for Chile indicated that he was unable to continue serving on the Advisory Committee and was replaced for one year by the Commissioner for Costa Rica. The Advisory Committee now comprises the Chair (USA), the Vice-Chair (Japan), the Chair of the F&A Committee (Antigua and Barbuda), the Commissioner for Côte d'Ivoire and the Commissioner for Costa Rica.

22. THE IWC IN THE FUTURE

The Commission held an intersessional meeting in March 2008 to consider the future of the IWC and to find ways to resolve the issues that have polarised a number of the debates within the organisation. As a result of the productive discussions at that meeting and during the 2008 Annual Meeting, the Commission agreed, by consensus, approaches to: (1) reforming its working procedures and practices; and (2) further discussions/negotiations on substantive issues.

Working procedures and practices

The Commission agreed that it would make every effort to reach consensus on all matters of substance and that voting should be a last resort. It developed revised Rule of Procedures/Debate to this effect. The Commission recognised that increased dialogue between Contracting Governments and greater use of informal meetings would improve the prospects of achieving consensus. The Commission agreed that the work of the Commission should be organised to provide sufficient opportunities for all proposals to be discussed informally between Contracting Governments before action was taken by the Commission. It also recognised the importance of ensuring that its proceedings took place in an environment of mutual respect, notwithstanding the differing views and perspectives among Contracting Governments.

To maximise the prospects of reaching consensus, the Commission agreed that full draft text of all proposals for action by the Commission (e.g. Schedule amendments and Resolutions) should be circulated to Contracting Governments 60 days in advance of the annual meeting and that there should be a similar requirement for proposed amendments to the Rules of Procedure and Rules of Debate. Revised Rules of Procedure were developed to this effect.

The Commission also agreed that reducing the uncertainty over the voting intentions of new Contracting Governments would improve the predictability of the Commission's annual meetings. It developed a new Rule of Procedure that would not allow a new Contracting Government to exercise its vote until 30 days after adherence.

Recognising that French and Spanish are the primary languages of many Contracting Governments, the Commission also emphasised the importance of enabling effective participation in its affairs and widely disseminating information to the public through the use of French and Spanish as working languages of the Commission. It amended its Rules of Procedure accordingly (see also section 17).

The Commission further recognised the importance of ensuring accurate and timely information on the Commission's work was provided to the media and encouraged the Chair, Secretary and Head of Science to provide regular briefings to the media at the meetings of the Commission.

The Commission decided to implement the use of French and Spanish as working languages of the Commission beginning with its 60th Annual Meeting and that the other amendments would come into effect at IWC/61 next year.

Further discussions/negotiations on substantive issues

To assist the Commission to arrive at a consensus solution to the main issues it faces and thus to enable it to best fulfil its role with respect to the conservation of whale stocks and the management of whaling, it agreed to establish a Small Working Group on the Future of IWC (SWG). The SWG's primary task is to make every effort to develop a package or packages for review by the Commission.

It was agreed that SWG membership of the working group will be representative in terms of, for example, views, geography and economy and that its members should: (a) consult with those non-participating countries that it broadly represents; and (b) take into account the known general views of all countries that are not members of the working group. It was further agreed that the Chair of the Commission would appoint a facilitator¹³ to chair the group under his supervision.

The working group will present a report on the results of its initial deliberations to the 2009 Intersessional Meeting of the Commission on the Future of IWC. Based upon discussions there, the intersessional meeting will direct the SWG to continue working on a possible package or packages and develop a final report that will be distributed at least 5 weeks before IWC/61 in June 2009.

¹³ from one of the external experts that had so far been involved in discussions, i.e. Professor Calestous Juma, Ambassador Raúl Estrada-Oyuela and Ambassador Alvaro de Soto.