



CONVENTION ON MIGRATORY SPECIES

Distribution: General

UNEP/CMS/ScC18/Inf.6.1.1/Rev.1
26 June 2014

Original: English

18th MEETING OF THE SCIENTIFIC COUNCIL

Bonn, Germany, 1-3 July 2014

Agenda Item 6.1

CONSERVATION PROGRESS TAKEN BY RANGE STATE PARTIES DURING THE TRIENNIUM FOR AQUATIC MAMMALS LISTED FOR CONCERTED ACTIONS AND COOPERATIVE ACTIONS

Summary

A key task for the CMS Scientific Council's Aquatic Mammals Working Group (AMWG) is to comply with *Resolution 10.23: Concerted and Cooperative Actions* by reporting on the conservation progress made by Range State Parties during the triennium concerning aquatic mammals listed for 'Concerted Actions' and 'Cooperative Actions'.

William Perrin in his role as the COP-appointed Councillor for Aquatic Mammals and Chair of the AMWG and AMWG member Margi Prideaux found volunteer expert Focal Points for 11 of the 26 aquatic mammal 'Concerted Action' and 'Cooperative Action' species.

A summary and detail of each of the available reports are submitted, as requested by Resolution 10.23, for consideration by the CMS Scientific Council.

CONSERVATION PROGRESS TAKEN BY RANGE STATE PARTIES DURING THE TRIENNIUM FOR AQUATIC MAMMALS LISTED FOR CONCERTED ACTIONS AND COOPERATIVE ACTIONS

A REPORT BY THE FOCAL POINTS OF THE AQUATIC MAMMALS WORKING GROUP
Rev 1, 26th June 2014

This revision includes the humpback whale Focal Point report and fixes some minor formatting

The Convention on Migratory Species (CMS) has evolved the operation of a number of well-practised mechanisms for targeting conservation activity towards particular migratory species, which may be brought into effect from time to time according to need. These include ‘concerted actions’ for certain species included in CMS Appendix I, and ‘cooperative actions’ for certain species included in Appendix II. This was discussed recently in detail at the last CMS Conference of the Parties (CoP), within Document 10.36:

Concerted Actions

- Conservation measures undertaken for species or groups of species identified for this purpose in decisions of the Conference of Parties.
- The species are identified from among those listed on CMS Appendix I.
- The conservation measures are the collective responsibility of Parties acting in concert, and tend to be set out in Action Plans.

Cooperative Actions

- Projects or institutional arrangements implemented by Parties cooperating for the conservation of species or groups of species identified for this purpose in decisions of the Conference of Parties.
- The species are identified from among those listed on CMS Appendix II.
- The actions are either designed to support the conclusion of an instrument under Article IV of the Convention or as an alternative to it, and enable conservation measures to be progressed in the meantime.

A key task for the CMS Scientific Council’s Aquatic Mammals Working Group (AMWG) is to comply with *Resolution 10.23: Concerted and Cooperative Actions* and by implication also *Resolution 10.15: Global Programme of Work for Cetaceans* by reporting on the conservation progress taken by Range State Parties during the triennium of aquatic mammals listed for ‘Concerted Actions’ and ‘Cooperative Actions’.

This includes 11 aquatic mammals for ‘Concerted Action’ and 15 aquatic mammals for ‘Cooperative Actions’ (26 aquatic mammal species in total). These are:

‘Concerted Action’ Species

Physeter macrocephalus, sperm whale
Platanista g. gangetica, Ganges River dolphin
Pontoporia blainvillei, La Plata dolphin
Balaenoptera borealis, sei whale
Balaenoptera physalus, fin whale
Balaenoptera musculus, blue whale
Megaptera novaeangliae, humpback whale
Eubalaena australis, southern right whale
Lontra felina, southern marine otter
Lontra provocax, southern river otter
Monachus monachus, Mediterranean monk seal

‘Cooperative Action’ Species

Monodon monoceros, narwhal
Phocoena spinipinnis, Burmeister’s porpoise
Phocoena dioptrica, spectacled porpoise
Neophocaena phocaenoides, finless porpoise
Sousa chinensis, Indo-Pacific humpbacked dolphin

Lagenorhynchus obscurus, dusky dolphin
Lagenorhynchus australis, Peale's dolphin
Tursiops aduncus, Indo-Pacific bottlenose dolphin
Stenella attenuata, pantropical spotted dolphin
Stenella longirostris, spinner dolphin
Lagenodelphis hosei, Fraser's dolphin
Orcaella brevirostris, Irrawaddy dolphin
Cephalorhynchus commersonii, Commerson's dolphin
Cephalorhynchus eutropia, Chilean dolphin
Orcinus orca, killer whale

The CMS agreements of direct relevance for aquatic mammals are:

1. Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS)
2. Agreement on the Conservation of Seals in the Wadden Sea (Wadden Sea Seals)
3. Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS)
4. Memorandum of Understanding concerning Conservation Measures for the Eastern Atlantic Populations of the Mediterranean Monk Seal (*Monachus monachus*) (Monk Seal in the Atlantic)
5. Memorandum of Understanding concerning the Conservation of the Manatee and Small Cetaceans of Western Africa and Macaronesia (Western African Aquatic Mammals MoU)
6. Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region (Pacific Cetaceans MoU)
7. Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MoU)

William Perrin in his role as the CMS Appointed Councillor for Aquatic Mammals and Chair of the AMWG and AMWG member Margi Prideaux secured expert Focal Points for 14 of the 26 aquatic mammal 'Concerted Action' and 'Cooperative Action' species.

A summary and detail of each of the available reports is submitted, as requested by Resolution 10.23, for consideration by the CMS Scientific Council (ScC).

FOCAL POINT REPORT SUMMARIES

Reports on the 'Concerted Actions' and 'Cooperative Actions' taken by Range State Parties during the triennium have been provided by each of the Focal Points.

It is a fair summary that in most cases CMS Parties do not appear to have undertaken any specific or deliberate 'Concerted Actions' and 'Cooperative Actions' as required by the Convention. None of the Focal Point reports have identified any specific such actions in their reports and Parties working within the CMS agreements do not appear to have given specific attention to progressing conservation activities focused on 'Concerted Actions' or 'Cooperative Actions'. The exception is possibly for *Monachus monachus*, Mediterranean monk seal.

To address this low momentum, each of the Focal Point reports identifies future conservation priorities for CMS Parties to consider. These are brought forward as suggestions for the CMS ScC to consider recommending as CMS Party 'Concerted Action' and 'Cooperative Action' priorities in the coming triennium.

In summary these are:

***Balaenoptera borealis*, sei whale**

Miguel Iniguez

The Focal Point recommends that conservation priorities should be to:

1. reduce mortality in fishing gear;
2. determine abundance estimation worldwide, particularly in Southern Ocean;
3. determine population size by supporting genetic studies;
4. determine climate change impact on this species; and
5. evaluate potential acoustic impact and ship strikes in areas with high vessel traffic density.

Range States need to increase coordination to achieve conservation action, with a special emphasis on Parties/Signatories, the agreement Secretariats and Non-Party Range States for ACCOBAMS and the Pacific Cetaceans MoU. It is also critical that consideration is given to concerted action in the regions where there are no CMS agreements covering sei whales

***Cephalorhynchus commersonii*, Commerson's dolphins** Miguel Iñíguez

The Focal Point recommends that conservation priorities should be to:

1. reduce mortality in fishing gear;
2. determine population size by supporting genetic studies;
3. determine level of pollution in different populations; and
4. determine climate change impact on this species.

Range States should increase regional coordination to achieve conservation action.

***Cephalorhynchus eutropia*, Chilean dolphin** Rodrigo Hucke-Gaete

The Focal Point recommends that conservation priorities should be to:

1. undertake population abundance estimates throughout its distributional range, considering each management unit;
2. in parallel with the above, develop predictive habitat models based on available data on occurrence and distribution;
3. assess the extent of current interactions with aquaculture and coastal fisheries, including by-catch, directed takes, pollution effects and displacement from critical habitat; and
4. foster the establishment of Marine Protected Areas and develop a National Action Plan that achieves the required conservation objectives nation-wide.

Range States should increase regional coordination to achieve conservation action.

***Lagenorhynchus obscurus*, dusky dolphin** Liz Slooten

The Focal Point recommends that conservation priorities should be to:

1. reduce the impacts of deliberate hunting; and
2. reduce the impacts of bycatch in fisheries.

Greater emphasis should be placed on delivering conservation through the Pacific Cetaceans MoU and the Western African Aquatic Mammals MoU. Eastern Pacific Range States Peru and Chile should join the Pacific Cetaceans MoU. South Africa and Namibia should join the Western African Aquatic Mammals MoU

***Lontra provocax*, southern river otter** Maximiliano Sepúlveda

The Focal Point recommends that conservation priorities should be to:

1. develop a Conservation Bi-national Plan;
2. develop specific National Conservation Plans in for each country;
3. promote funding for research and management on the species;
4. develop validated Monitoring Programs in protected and unprotected lands; and
5. reinforce the importance of environmental impact assessment projects in relation to the species in order to adequately determine:
 - a. presence of otter population in areas of projects, and
 - b. in those projects requiring to implement adequate actions to incorporate: i) measures of monitoring, ii) mitigation and iii) compensation activities.

Range States need to increase coordination to achieve conservation action.

***Megaptera novaeangliae*, humpback whale** Howard Rosenbaum

The Focal Point recommends that conservation priorities should be to:

1. further refine units of conservation. The accurate identification of the number and distribution of demographically discrete populations, and their respective levels of genetic connectivity, is required to fully assess the status of humpback whale recovery from historic whaling and also present and future vulnerabilities to direct and indirect anthropogenic impacts.
2. develop greater understanding of the spatial and temporal distribution of high-use breeding, migratory, and foraging habitat, including potential overlap of such habitat with anthropogenic disturbance.
3. quantify the impact of anthropogenic noise on humpback whale acoustic habitat, including oil and gas exploration and development, shipping, and military sonar.

4. develop predictions of the impacts of climate change on the distribution of foraging habitat and predator-prey dynamics in the Southern Ocean.
5. further research the effects of disease, marine pollution including micro-plastics, and their interactions, on humpback whale populations.
6. develop mitigation measures to reduce threats from existing and planned coastal habitat modification and loss, including specifically the threat of ports and other infrastructure in Oman (Duqm, Salalah), Gabon (Port Gentil) and other range states.
7. raise awareness and increase implementation of mitigation to reduce the risk of mortality from ship strikes and potential impact associated anthropogenic noise exposure.
8. further investigate training workshops and implementation of measures to reduce the threat of mortality resulting from fisheries interactions, especially gill net entanglement.
9. evaluate genetic differences among ASHW sampled in range states beyond Oman, and to further investigate levels of genetic diversity and any direct connections (and distinctiveness) from other humpback whale populations

Range States should increase regional coordination to achieve conservation action. In particular attention should be given to humpback whales in the Arabian Sea.

***Monachus monachus*, Mediterranean monk seal**

Daniel Cebrian

The Focal Point recommends that conservation priorities should be to:

1. promote new clear legislation, including well-defined regulations, to address and prosecute the longstanding “de facto” impunity of monk seal killing
2. develop fishing regulations to reduce seals drowning in static nets;
3. map key habitats subject to land use protection measures and a request to concerned authorities at international and national level to implement adequate regulations;
4. consolidate small populations by citizen sensitising and seal movement monitoring to ascertain suitable habitat in these areas adequate for recolonisation;
5. undertake physical interventions in caves currently not suitable for the species in the broad Sahara coast area should be undertaken to facilitate their use by the species.
6. research the relocation of juveniles to adequately planned sites in the broad Macaronesian region; and
7. conduct appropriate monitoring of populations.

Timely reassessment of the Monk Seal in the Atlantic action plan would be appropriate, given the age of the action plan and the emergent information about the species and threats they face.

***Orcaella brevirostris*, Irrawaddy dolphin**

Louella Dolar

The Focal Point recommends that conservation priorities should be the following:

1. develop a cooperative endeavour among the three range states for the conservation of Irrawaddy dolphins, initiated by a workshop to assess the conservation status and threats to the populations of Irrawaddy dolphins in Bangladesh, India and the Philippines;
2. undertake cooperative research between India and Bangladesh to assess population size and threats to the Irrawaddy dolphins in mangroves and coastal waters.
3. specifically in the Philippines:
 - a. follow through in the establishment of protected areas in the Visayas dolphins’ core/critical habitat and implementation of the conservation plan.
 - b. at Malampaya Sound, remove stationary fishing structures (fish pens) and remove gillnet fishing in the Malampaya Sound Irrawaddy dolphin core habitat.
 - c. assess the third (Quezon) Irrawaddy dolphin population.

Range States should increase regional coordination to achieve conservation action.

***Phocoena spinipinnis*, Burmeister’s porpoise**

Jeffrey Mangel

The Focal Point recommends that conservation priorities should be the following:

1. region wide surveys to obtain information on abundance, distribution and residency patterns.
 - a. efforts should take full advantage of existing data sets (e.g. at-sea surveys and strandings data).

2. assessments of the type and scale of interactions with small-scale (artisanal) and industrial fisheries throughout the region.
 - a. Efforts should take into account what is currently known about species stock structure and potential management units.
 - b. These efforts would benefit from the regular reporting of government fishery statistics.
3. experimentation and implementation of bycatch mitigation solutions and technologies (e.g. acoustic alarms) in fisheries identified with interactions.
4. genetic studies to clarify broad and fine-scale stock structure and population vulnerability to threats.
5. data collection and analysis on natural history parameters (e.g. reproduction, growth, feeding ecology, parasites).
6. assessments of habitat degradation and loss such as due to coastal development, pollutants (including noise), development of aquaculture facilities.
7. awareness raising activities to promote improved public understanding of the species, its distribution and its conservation status (including existing national protective legislation).
population health & disease monitoring.

Range States should increase regional coordination to achieve conservation action.

***Physeter macrocephalus*, sperm whale**

Giuseppe Notarbartolo di Sciarra

The Focal Point recommends that conservation priorities should be to:

1. ensure compliance with fishery regulations limiting or prohibiting the use of pelagic driftnets in areas containing sperm whale habitat;
2. recommend the definition of shipping lanes and speed limitations for vessels transiting in areas (e.g., straits) containing particularly high densities of sperm whales;
3. implement international and regional regulations limiting the introduction in the marine environment of solid debris, particularly plastics;
4. ensure that underwater noise is fully taken into account in a precautionary manner when reviewing Environmental Impact Assessments for activities that produce noise within sperm whale habitat, including the provision of precautionary and effective mitigation and monitoring measures; and
5. address disturbance by irresponsible whale watching operations in sperm whale habitat by passing and enforcing appropriate regulations.

Anthropogenic threats to socially complex mammals such as sperm whales should be assessed on the basis of their interactions with social structure; the role and dynamics of culturally transmitted behaviours should be taken into consideration when determining conservation measures; and culture should be taken into account when considering population units to conserve.

Range States need to increase coordination to achieve conservation action, with a special emphasis on Parties/Signatories, the agreement Secretariats and Non-Party Range States for ACCOBAMS and the Pacific Cetaceans MoU. It is also critical that consideration is given to concerted action in the regions where there are no CMS agreements covering sperm whales

***Platanista g. gangetica*, Ganges River dolphin**

Gil Braulik

The Focal Point recommends that conservation priorities should as follows:

1. scale education of river side communities to wider areas beyond the Brahmaputra and Sundarbans, including their community and fisher group consultation and involvement with in ecosystem management, to reduce direct hunting and fisheries bycatch;
2. collect information on high dams for hydropower including what affect these dams may have and an assessment on a case-by-case basis, as well as cumulative impact assessments;
3. research how dolphins use their habitat at different flow levels, and determining a recommended environmental flow that needs to be maintained for survival of the Ganges River dolphin;
4. assess dolphin movements using the latest tools and technology; and

5. survey 'gap' areas, especially some of the larger rivers in Bangladesh to enable important sites to be identified, and allow an evaluation of potential sites for establishing new protected areas throughout the species' range.

Range States need to increase coordination to achieve conservation action.

***Sousa chinensis*, Indo-Pacific humpbacked dolphin** Thomas Jefferson

The Focal Point recommends that conservation priorities should be to:

1. enforce existing legislation providing legal protection to humpback dolphins in all countries of the range;
2. establish or increase onboard fisheries observer programs to obtain information on by-catch levels of humpback dolphins in fisheries.; and
3. conduct population assessment in all parts of the species' range, and development of management plans to maintain or recover populations affected by human activities.

Range States need to increase coordination to achieve conservation action.

***Stenella attenuata*, pantropical spotted dolphin** Michael Scott

The Focal Point recommends that conservation priorities for the eastern tropical Pacific should be to:

1. re-initiate fishery-independent dolphin abundance surveys to monitor population trends;
2. re-initiate dolphin and tuna sampling program aboard purse seiners, including:
 - a. sampling to monitor population trends from reproductive and age data; and
 - b. sampling of tuna, dolphin, and other bycatch species to monitor climate-related changes on tropical ecosystems.
3. assess coastal fishery takes of spotted dolphins.

The AMWG further recommends that conservation priorities for the western and Central Pacific should be to:

1. assess coastal fishery takes of spotted dolphins; and
2. expand observer coverage of purse-seine and longline fisheries to produce more precise mortality estimates.

These conservation priorities could be achieved with CMS working closely with the commercial tuna fishery agreements. Range States need to increase conservation action in national governed coastal fisheries.

***Stenella longirostris*, spinner dolphin** Cara Miller

The Focal Point recommends that conservation priorities should be to:

1. assess and addressing bycatch - although this is unknown it is potentially a very serious threat to this species;
2. investigate impacts of ecotourism operations – of particular note is the dolphin watch industry operating in Guam;
3. assess the impacts of drive hunts in the Solomon Islands; and
4. protect critical habitat, in particular of resting and foraging areas.

These priorities can be achieved by the Pacific Cetaceans MoU, if necessary through the establishment of cooperative action with relevant international or regional organisations.

However to do so requires commitment of the Signatories, the agreement Secretariat and Non-Party Range States as well as necessary funding commitments

Securing Focal Points and reports for the remaining 12 'Concerted Action' and 'Cooperative Action' species will continue in the coming months. The remaining species will remain the responsibility of the new Appointed Councillor for Aquatic Mammals until appropriate experts are appointed as Focal Points.

AQUATIC MAMMAL FOCAL POINT REPORTS

The following Focal Point reports are as submitted by each of the Focal Points, with only minor stylistic edits to provide consistency between them.

Focal Point Report on *Balaenoptera borealis*, Sei Whale

Species listed:	Sei whale (<i>Balaenoptera borealis</i>) Concerted Action Species
AMWG Focal Point:	Miguel Iñíguez
Party Range States:	Argentina, Australia, France, India, Kenya, Mozambique, Norway, Poland, South Africa, Spain, United Kingdom, United Republic of Tanzania, Uruguay
CMS agreements or action plans relating to sei whales:	ACCOBAMS, Pacific Cetaceans MoU
Assessment of the extent and how the needs of sei whales have been addressed by the CMS agreements or action plans (listed above):	<p>ACCOBAMS and the Pacific Cetaceans MoU both contain a comprehensive suite of tasks related to cetacean conservation, however neither has given specific focus to sei whales in the last triennium.</p> <p>IWC begin a pre-implementation assessment for North Atlantic sei whales. It is also carry on in-depth evaluation of the status in the North Pacific.</p> <p>Beyond that, policy focus for this species has been through the International Whaling Commission (IWC), Food and Agricultural Organisation (FAO)/ Committee on Fisheries (COFI), Western Hemisphere Migratory Species Initiative (WHMSI), ASCOBANS, ACCOBAMS, Programa de la Naciones Unidas para el Medio Ambiente (PNUMA), International Maritime Organization (IMO), Inter-American Tropical Tuna Commission (IATTC), Commission for the Conservation of Southern Bluefin Tuna (CCSBT), Western and Central Pacific Fisheries Commission (WCPFC), Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).</p>
Future conservation action needs of sei whales (please present in relative priority):	<p>Conservation priorities should be to:</p> <ol style="list-style-type: none"> 1. reduce mortality in fishing gear; 2. determine abundance estimation worldwide, particularly in Southern Ocean; 3. determine population size by supporting genetic studies; 4. determine climate change impact on this species; and 5. evaluate potential acoustic impact and ship strikes in areas with high vessel traffic density.
Can these be achieved through the existing agreements or action plans?	<p>All of the above can be achieved by ACCOBAMS and the Pacific Cetaceans MoU for the regions that are covered by these agreements, if necessary through the establishment of cooperative action with relevant international or regional organisations (e.g., Regional Fisheries Management Organisations, IWC). However to do so would require commitment of the Parties/Signatories, the agreement Secretariats and Non-Party Range States. It is also critical that consideration is given to concerted action in the regions where there are no CMS agreements covering sei whales</p>
Additional comments:	<p>Sei whales have been the target of modern whaling. There is no abundance estimates for the Southern Ocean where it was greatly depleted. Recovery slowly in the NE Atlantic. The species was heavily exploited in Canada until 1970s. Last assessment for 2006/7 estimated a population of 7,700 for the NW Pacific. The species has been effectively protected from whaling since mid-1970s apart from in the Central North Atlantic where protection came with the moratorium in 1986.</p>

Focal Point Report on *Cephalorhynchus commersonii*, Commerson's Dolphin

Species listed:	Commerson's dolphin (<i>Cephalorhynchus commersonii</i>) Cooperative Action Species
AMWG Focal Point:	Miguel Iñíguez
Party Range States:	Argentina, Chile, France (Kerguelen Island)
CMS agreements or action plans relating to Commerson's dolphins:	There are no CMS agreements or CMS action plans for this species
Assessment of the extent and how the needs of Commerson's dolphins have been addressed by the CMS agreements or action plans (listed above):	There are no regional agreements that contemplate Commerson's dolphins. An initiative in Argentina to mitigate marine mammal mortality in fishing gear through a National Action Plan benefits Commerson's dolphins as well as other species. Beyond that, policy focus for this species has been through the IWC, IMO, FAO/COFI, WHMSI
Future conservation action needs of Commerson's dolphins (please present in relative priority):	Conservation priorities should be to:: <ol style="list-style-type: none"> 1. Mitigate mortality in fishing gear. 2. Determine population size by supporting genetic studies. 3. Determine level of pollution in different populations. 4. Determine climate change impact on this species.
Can these be achieved through the existing agreements or action plans?	Range States need to increase coordination to achieve conservation action
Additional comments:	The species name within the CMS system should be amended to reflect the recognized Spanish name: Tonina overa and French name: Dauphin de Commerson.

Focal Point Report on *Cephalorhynchus eutropia*, Chilean Dolphin

Species listed:	Chilean dolphin (<i>Cephalorhynchus eutropia</i>) Cooperative Action Species
AMWG Focal Point:	Rodrigo Hucke-Gaete
Party Range States:	Argentina, Chile
CMS agreements or action plans relating to Chilean dolphin:	There are no CMS agreements or CMS action plans for this species
Assessment of the extent and how the needs of Chilean dolphin have been addressed by the CMS agreements or action plans (listed above):	No action has been undertaken to date by the CMS, however, recent research advances have provided new information on habitat selection, fine-scale movement and population structure. This species is a costal small cetacean which is even more restricted in its distribution to habitats of riverine influence, as well as to areas where tidal regimes are significant. Within these areas, studies have demonstrated that Chilean dolphins present biologically relevant behaviours and have very restricted fine-scale movements. Genetic diversity and population structure studies have evidenced at least two conservation/management units in Chile: one inhabiting the exposed coast along the northern limits of its distribution, and the other throughout the inner seas, fjords and channels of its southern distributional range: i.e. 41°S-55°S. Conservation concerns include an unassessed degree of by-catch and further use of dolphin remains in artisanal fisheries. Also, and perhaps more importantly, the fast growing aquaculture industry (mostly salmon and mytilids) has possibly displaced several groups/populations from their original habitat and has been attributed to cause an as yet unassessed and unreported level of incidental mortality and habitat degradation.
Future conservation action	Conservation priorities should be to:

needs of Chilean dolphin (please present in relative priority):	<ol style="list-style-type: none"> 1. Undertake population abundance estimates throughout its distributional range, considering each management unit. This issue is a major information gap for the species and should be tackled rapidly. 2. In parallel to the above, develop predictive habitat models based on available data on occurrence and distribution; this information is of utmost relevance for identifying Chilean dolphin potential hotspots and aid in designing proper abundance surveys, particularly in complex survey regions (e.g. Thomas et al. 2007; Dawson et al. 2008) as southern Chile is. 3. Assess the extent of current interactions with aquaculture and coastal fisheries, including by-catch, directed takes, pollution effects and displacement from critical habitat. 4. Foster the establishment of Marine Protected Areas in places where Chilean dolphin populations are still relatively unaffected by anthropogenic activities, and develop a National Action Plan that achieves the required conservation objectives nation-wide.
Can these be achieved through the existing agreements or action plans?	<p>Range States need to increase coordination to achieve conservation action.</p> <p>There are no existing agreements or action plans for the species, but a potential agreement between Argentina and Chile seems straightforward. The latter is plausible when considering the recent sighting of a small group of Chilean dolphins in the Argentine Atlantic coast (some 600 km north of its previously reported conventional range), including a possible hybrid with Commerson's dolphin. However, an intense effort must be put forward along the traditional range of the species, where industrial activities are increasing and should follow the priorities outlined above.</p>
Additional comments:	<p>Work cited:</p> <p>Dawson, S., P. Wade, E. Slooten & J. Barlow (2008). Design and field methods for sighting surveys of cetaceans in coastal and riverine habitats. <i>Mammal Rev.</i> 38: 19-49.</p> <p>Heinrich, S. (2006). Ecology of Chilean dolphins and Peale's dolphins at Isla Chiloe, southern Chile. PhD thesis, University of St Andrews.</p> <p>Morgenthaler, A., J. Fernández, R. Moraga, C. Olavarría (2014). Chilean dolphins on the Argentine Atlantic coast. <i>Marine Mammal Science</i> 30(2): 782-787. DOI: 10.1111/mms.12052</p> <p>Pérez-Alvarez, M.J. (2012). Variación geográfica y determinantes de la distribución del delfín chileno, <i>Cephalorhynchus eutropia</i> (Gray 1846), a lo largo de la costa de Chile: aproximación morfológica y molecular. Phd Thesis, Universidad De Chile.</p> <p>Pérez-Alvarez M.J., C. Olavarría, C.S. Baker, R.M. Hamner, R. Moraga & E. Poulin (2013). Genetic diversity and population structure of Chile's only endemic cetacean: <i>Cephalorhynchus eutropia</i>.</p> <p>Thomas, L., R. Williams & D. Sandilands (2007). Designing line transect surveys for complex survey regions. <i>J. Cetacean Res. Manage.</i> 9(1): 1-13.</p> <p>Viddi, F.A. (2009). Behavioural ecology of small cetaceans in the Northern Patagonian fjords, Chile. Ph.D. thesis. Macquarie University, Sydney, Australia.</p> <p>Viddi, F.A. & Harcourt, R. (in press). Behaviour of Chilean and Peale's dolphins in southern Chile: interspecific variability of sympatric species. <i>Journal of the Marine Biological Association of the United Kingdom</i>.</p> <p>Viddi, F.A., Harcourt, R., Huckle-Gaete, R. & Field, I. C. (2011). Fine-scale movement patterns of the sympatric Chilean and Peale's dolphins in the Northern Patagonian fjords, Chile. <i>Marine Ecology Progress Series</i> 436, 245–256. doi: 10.3354/meps09251</p> <p>Viddi, F.A., Huckle-Gaete, R., Torres-Florez, J.P. & Ribeiro, S. (2010). Spatial and seasonal variability in cetacean distribution in the fjords of northern Patagonian, Chile. <i>ICES Journal of Marine Science</i> 67, 959–970. doi:10.1093/icesjms/fsp288</p>

Focal Point Reporting on *Lagenorhynchus obscurus*, Dusky Dolphin

Species listed:	Dusky dolphin (<i>Lagenorhynchus obscurus</i>) Cooperative Action Species
AMWG Focal Point:	Liz Slooten
Party Range States:	Argentina, Australia, Chile, France, New Zealand, Peru, South Africa, United Kingdom, Uruguay
CMS agreements or action plans relating to dusky dolphin:	<p>The range states of the dusky dolphin on western African coasts, namely South Africa and Namibia, do not appear to be Parties to the Western African Aquatic Mammals MoU. Therefore, if any concerted or cooperative actions were undertaken by these countries (none to our knowledge) they would not have occurred under the Western African Aquatic Mammals MoU.</p> <p>The Pacific Cetaceans MoU would only concern the dusky dolphin Range States, New Zealand and Australia. We are not aware of any research or conservation management activities to protect dusky dolphins in NZ or Australia. We strongly encourage CMS to invite the eastern Pacific range states Peru and Chile to join the Pacific Cetaceans MoU. There have been no concerted or cooperative actions between Peru and Chile. There are serious conservation issues in these countries, including bycatch of dusky dolphins in fisheries and deliberate hunting. Even better would be some discussion among countries in the eastern and western Pacific, to coordinate actions on dusky dolphin conservation.</p>
Assessment of the extent and how the needs of dusky dolphin have been addressed by the CMS agreements or action plans (listed above):	The needs of dusky dolphin have not been addressed by or through the CMS agreements listed.
Future conservation action needs of dusky dolphin (please present in relative priority):	<p>Conservation priorities should be to:</p> <ol style="list-style-type: none"> 1. Reduce the impacts of deliberate hunting 2. Reduce the impacts of bycatch in fisheries <p>In the short term, ensure that these impacts are reduced to sustainable levels. In the longer term, reduce these impacts as far as possible. It may also be useful to encourage sustainable tourism as an alternative to the above activities.</p>
Can these be achieved through the existing agreements or action plans?	Yes. In the first instance, this could include compiling data on the amount of bycatch and directed takes, carrying out population surveys and considering potential changes in distribution due to climate change and/or changes in prey availability.
Additional comments:	The range states should be encouraged to fund the research mentioned above and while the research is being carried out to put in place precautionary protection measures.

Focal Point Report on *Lontra provocax*, Southern River Otter

Species listed:	Southern river otter (<i>Lontra provocax</i>) Concerted Action Species
AMWG Focal Point:	Maximiliano Sepúlveda
Party Range States:	Argentina, Chile
CMS agreements or action plans relating to southern river otter:	There are no CMS agreements or CMS action plans for this species
Assessment of the extent and how the needs of southern river otter have been addressed by the CMS agreements or action plans	Considering that none of the Parties (Chile and Argentina) have any CMS agreements or action plans on the species is not possible to assess this aspect. As urgency each country should start as soon as possible those activities.

(listed above):	
Future conservation action needs of southern river otter (please present in relative priority):	<p>Conservation priorities should be both countries, Chile and Argentina, to:</p> <ol style="list-style-type: none"> 1. develop a Conservation Bi-national Plan; 2. develop specific National Conservation Plans in for each country; 3. promote funding for research and management on the species; 4. develop validated Monitoring Programs in protected and unprotected lands; and 5. reinforce the importance of environmental impact assessment projects in relation to the species in order to adequately determine: <ol style="list-style-type: none"> c. presence of otter population in areas of projects, and d. in those projects requiring to implement adequate actions to incorporate: i) measures of monitoring, ii) mitigation and iii) compensation activities.
Can these be achieved through the existing agreements or action plans?	<p>Given that there are no action plans or agreement, the current situation is inadequate to achieve these actions.</p> <p>Stronger coordination of agencies and interested parties in order to start the measure should be encouraged as soon as possible.</p>
Additional comments:	<p>For Chile, information was requested from the Government Agency in charge of the otter conservation and management by law, SUBPESCA (fisheries services). SUBPESCA reported no action plan developed or other activities specifically addressing any otter conservation actions but they sent me a recent Regulatory Law (2011 year), which address the minimum distance to watch marine mammals including otters in relation to tourism activities. In Chile, also CONAF (National Park Service) can develop national plans, they started this process on 2009 year but the process did not finish and today no National Action Plan exist for the species.</p> <p>For Argentina, information was requested from APN (National Park Service), they have been very active historically (30 years) in monitoring fresh water otter population in the Nahuel Huapi population (northern), but no National Conservation Plan has been develop. Current research in the southern population at Tierra del Fuego is indicating the presence of southern river otters in that area, but more research and coordination in monitoring population is required.</p>

Focal Point Report on *Megaptera novaeangliae*, Humpback Whale

This is a partial report covering a few key regions only. A further report covering the remaining Party Range States will be developed.

Species listed:	Humpback whale (<i>Megaptera novaeangliae</i>) Concerted Action Species
AMWG Focal Point:	Howard Rosenbaum
Party Range States:	Angola, Antigua and Barbuda, Argentina, Australia, Bangladesh, Barbados, Belgium, Benin, Brazil, Cabo Verde, Cameroon, Chile, Congo (Brazzaville), Cook Islands, Costa Rica, Cuba, Cyprus, Côte d'Ivoire, Democratic Republic of the Congo (Kinshasa), Denmark, Djibouti, Ecuador, Egypt, Equatorial Guinea, Eritrea, Fiji, France, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Honduras, India, Iran, Ireland, Israel, Jordan, Kenya, Liberia, Madagascar, Malta, Mauritania, Mauritius, Morocco, Mozambique, Netherlands, New Zealand, Norway, Pakistan, Palau, Panama, Peru, Portugal, Samoa, Saudi Arabia, Senegal, Seychelles, Somalia, South Africa, Spain, Sri Lanka, Sweden, Togo, Tonga, Tunisia, Tuvalu, United Kingdom, United Republic of Tanzania, Uruguay, Vanuatu, Yemen
CMS agreements or action plans relating to humpback whale:	ACCOBAMS, Pacific Islands Cetaceans MoU
Assessment of the extent and how the needs of humpback whale have	The Arabian Sea humpback whale is recognized as a sub population geographically, demographically and genetically isolated from the Southern Hemisphere populations, with a unique year-round residency in sub-tropical

<p>been addressed by the CMS agreements or action plans (listed above):</p>	<p>waters of the Arabian Sea. During the peak monsoon season during Northern Hemisphere summer months, high nutrient levels in the upwelling systems of the Arabian Sea result in phytoplankton blooms and high productivity which is believed to supply the food required for whales to reside in the region year-round.</p> <p>Based on historical records from soviet whaling data as well as recent records, the distribution of the Arabian Sea humpback whale population ranges mainly along the coastal waters of Oman, India, Pakistan and Iran with some possible presence in the coastal waters of Sri Lanka, United Arab Emirates and Yemen. Dedicated surveys since 1999 have provided good information on key habitats off the Arabian Sea coast Oman, as well as individuals' behavior patterns. However, information around this sub population in other areas within its known distribution range is very limited.</p> <p>As in many other parts of the world, cetaceans in this region are under threat from a number of human activities. These include incidental capture in fishing gear, underwater noise pollution (increasing maritime traffic, oil and gas exploration and development, military activities), ship strikes, as well as other impacts from industrial activities, marine tourism and coastal development. With the number of humpback whales off the coast of Oman estimated to be fewer than 100 individuals, any increased threat levels could be detrimental for this isolated population. Historical and ongoing research indicates that the population may suffer pathologies such as Tattoo skin disease and liver disorders and that 30-40 of the population showed scarring consistent with interaction with fisheries gear. Moreover, this population has low levels of genetic diversity, and exhibits a very high degree of genetic differentiation and low to no levels of gene flow with other humpback whale populations. Given the critical status of this population, the ASHW is currently listed as Endangered on the IUCN Red List of threatened species.</p> <p>In order to address the increasing threats to this endangered population, a regional framework could enable key stakeholders to address critical conservation needs in a focussed and coordinated way. Such a regional initiative would benefit from additional support from intergovernmental conservation treaties, such as CMS and IWC. In 2008, the IWC-Scientific Committee encouraged range state IWC members, Oman and India, to engage in conservation actions towards the development of a regional Conservation Management Plan (CMP). Since then, a number of scientists and NGO's associated with research in the region have recognized the requirement to strengthen ties between active research initiatives in an effort to share technical knowledge, identify key conservation priorities and explore potential opportunities leading to a coordinated regional effort for the conservation of the ASHW population.</p> <p>Determining Units of Conservation for the Humpback Whale A number of genetic studies have provided information related to defining units of conservation for the humpback whale. At the global scale, Bayesian analyses conducted on the mitochondrial DNA (mtDNA) control region (465 bp) of approximately 2,700 individuals and eight nuclear intron sequences of approximately 70 individuals from the North Pacific, North Atlantic and Southern Hemisphere, date the origin of mtDNA lineages to the Pleistocene and indicate colonization of the northern oceans prior to the Last Glacial Maximum. Coalescent analyses conducted on the same data set reveal highly restricted gene flow between ocean basins. Together, these results suggest that humpback whales in the North Pacific, North Atlantic and Southern Hemisphere are on independent evolutionary trajectories; a finding that supports the taxonomic revision of <i>M. novaeangliae</i> to the sub-species level.</p> <p>An ocean-wide genetic survey across the North Pacific suggests that migratory fidelity of humpback whales may operate somewhat independently on breeding and feeding grounds over evolutionary timescales. Microsatellite genotyping and</p>
---	--

	<p>sequencing of a 500 bp fragment of the mtDNA control region was carried out for 2,193 biopsy samples collected from 8 breeding regions and 10 feeding regions during the winter and summer of 2004 to 2006. Haplotype frequencies were significantly different between breeding regions, providing evidence of strong natal fidelity. Feeding regions were also markedly differentiated, providing evidence of strong maternal fidelity. A comparison of breeding regions with feeding regions also showed significant differences in haplotype frequencies, even for regions known to be connected by individual migration. These findings indicate complex population structure across the region and imply the potential need to define different conservation units in each seasonal habitat.</p> <p>Across the Southern Hemisphere, genetic evidence suggests significant degrees of population structure between all ocean basins, with distinct demographic units residing in the southeastern Atlantic, southwestern Atlantic, southwestern Indian Ocean, and northern Indian Ocean (Breeding Stocks (BS) A, B, C, and ASHW, respectively). BSB may represent two genetically distinct units, or “sub-stocks”: BSB1 represents a large breeding aggregation located in the greater Gulf of Guinea, and BSB2 represents a smaller group of whales that feed and migrate off west South Africa, and breed at an as yet unknown location. Low levels of significant genetic population structure and high rates of gene flow also exist between three sub-stocks within BSC, namely BSC1 (East South Africa), BSC2 (Mozambique Channel), and BSC3 (Antongil Bay, Madagascar) (Rosenbaum et al. 2009). ASHW show high levels of genetic differentiation for both mitochondrial and nuclear markers, which indicate that they are a genetically distinct population, and on an independent evolutionary trajectory from other humpback whales. Further research efforts are needed to distinguish appropriate biological units of conservation for humpback whale populations in both the southeastern Atlantic and western Indian Ocean.</p> <p>The International Whaling Commission Scientific Committee for Southern Hemisphere humpback whales completed a stock reassessment of Western Australia (BSD), Eastern Australia (BSE1), and the western Pacific Islands of Oceania, including New Caledonia (sub-stock BSE2), Tonga (sub-stock BSE3), the Cook Islands and French Polynesia (BSF). For the assessment, BSE2-3 and BSF were treated as a single unit for Oceania (BSO). The results of the BSD/E1/O assessment suggest that the population status of BSD is approaching pre-exploitation levels, however the Committee recommended that further work is required to further refine the estimation. The assessment also indicated levels of recovery for BSE1 and Oceania towards pre-exploitation levels to be 63% (90% PI = 56-73%) and 38% (90% PI = 24-53%), respectively. Further clarification of stock structure in Oceania and the extent of mixing at high latitudes are required as mixing with BSE1 on feeding areas may influence the catch allocation of BSD. In general, units of conservation in Oceania require further investigation due to inadequate stock structure definition across the broad area, a lack of population trend data for most of the region, and a lack of resolution and understanding of connectivity in eastern Oceania.</p>
<p>Future conservation action needs of humpback whale (please present in relative priority):</p>	<p>Conservation priorities should be to:</p> <ol style="list-style-type: none"> 1. further refine units of conservation. The accurate identification of the number and distribution of demographically discrete populations, and their respective levels of genetic connectivity, is required to fully assess the status of humpback whale recovery from historic whaling and also present and future vulnerabilities to direct and indirect anthropogenic impacts. 2. develop greater understanding of the spatial and temporal distribution of high-use breeding, migratory, and foraging habitat, including potential overlap of such habitat with anthropogenic disturbance. 3. quantify the impact of anthropogenic noise on humpback whale acoustic habitat, including oil and gas exploration and development, shipping, and military sonar. 4. develop predictions of the impacts of climate change on the distribution

	<p>of foraging habitat and predator-prey dynamics in the Southern Ocean.</p> <ol style="list-style-type: none"> 5. further research the effects of disease, marine pollution including microplastics, and their interactions, on humpback whale populations. 6. develop mitigation measures to reduce threats from existing and planned coastal habitat modification and loss, including specifically the threat of ports and other infrastructure in Oman (Duqm, Salalah), Gabon (Port Gentil) and other range states. 7. raise awareness and increase implementation of mitigation to reduce the risk of mortality from ship strikes and potential impact associated anthropogenic noise exposure. 8. further investigate training workshops and implementation of measures to reduce the threat of mortality resulting from fisheries interactions, especially gill net entanglement. 9. evaluate genetic differences among ASHW sampled in range states beyond Oman, and to further investigate levels of genetic diversity and any direct connections (and distinctiveness) from other humpback whale populations
<p>Can these be achieved through the existing agreements or action plans?</p>	<p>Greater attention should be given to this within the Pacific Islands Cetaceans MoU. It is also critical that consideration is given to concerted action in the regions where there are no CMS agreements covering humpback whales. In particular attention should be given to humpback whales in the Arabian Sea.</p>
<p>Additional comments:</p>	<p>Work cited:</p> <p>Baker, C. S., Steel, D., Calambokidis, J., Falcone, E., González-Peral, U., Barlow, J., Burdin, A. M., Clapham, P. J., Ford, J. K. B., Gabriele, C. M., Mattila, D., Rojas-Bracho, L., Straley, J. M., Taylor, B. L., Urbán, J., Wade, P. R., Weller, D., Witteveen, B. H. & Yamaguchi, M. 2013. Strong maternal fidelity and natal philopatry shape genetic structure in North Pacific humpback whales. <i>Marine Ecology Progress Series</i>. 494: 291-306.</p> <p>Carvahlo, I., Loo, J., Collins, T., Barendse, J., Pomilla, C., Leslie, M. S., Ngouesso, S., Best, P. B. & Rosenbaum, H. C. 2014. Does temporal and spatial segregation explain the complex population structure of humpback whales on the coast of West Africa? <i>Marine Biology</i>. 161: 805-819.</p> <p>Gales, N., Bannister, J. L., Findlay, K., Zerbini, A. & Donovan, G. P. 2011. Humpback whales: Status in the Southern Hemisphere. <i>Journal of Cetacean Research and Management: Special Issue 3</i>, pp x+317.</p> <p>IWC. 2014. Annex H: Report of the Sub-Committee on Other Southern Hemisphere Whales Stocks. <i>International Whaling Commission</i>, pp. 1-36.</p> <p>Jackson, J. A., Steel, D. J., Beerli, P., Congdon, B. C., Olavarria, C., Leslie, M. S., Pomilla, C., Rosenbaum, H. C., Baker, S. C. 2014. Global diversity and oceanic divergence of humpback whales (<i>Megaptera novaeangliae</i>). <i>Proceedings of the Royal Society B</i>. 281: 20133222.</p> <p>Minton, G., Collins, T. J. Q., Pomilla, C., Findlay, K. P., Rosenbaum, H. C., Baldwin, R., and Brownell Jr, R. L. 2008. <i>Megaptera novaeangliae</i>, Araiban Sea subpopulation. <i>IUCN Red List of Threatened Species</i> http://www.iucnredlist.org/details/132835.</p> <p>Minton, G., Collins, T. J. Q., Findlay, K. P., Ersts, P. J., Rosenbaum, H. C. Berggren, P., and Baldwin, R. M. 2011. Seasonal distribution, abundance, habitat use and population identity of humpback whales in Oman. <i>Journal of Cetacean Research and Management. Special Issue on Southern Hemisphere Humpback Whales</i></p> <p>Pomilla C, Amaral AR, Collins T, Minton G, Findlay K, Leslie MS, Ponnampalam L, Baldwin R, Rosenbaum HC. In Review. The world's most isolated and distinct whale population? Humpback whales of the Arabian Sea.</p> <p>Reeves, R. R., Leatherwood, S. & Papastavrou, V. 1991. Possible stock affinities of humpback whales in the northern Indian Ocean, in <i>Cetaceans and cetacean research in the Indian Ocean Sanctuary: Marine Mammal Technical Report Number 3</i>. Leatherwood, S. and Donovan, G. P. Eds. 3, UNEP, Nairobi, Kenya. pp.259-269</p> <p>Rosenbaum, H. C., Maxwell, S. M., Kershaw, F. & Mate, B. 2014. Long-</p>

	<p>range movement of humpback whales and their overlap with anthropogenic activity in the South Atlantic Ocean. Conservation Biology. 28: 604-615.</p> <p>Rosenbaum, H. C., Pomilla, C., Mendez, M., Leslie, M. S., Best, P. B., Findlay, K. P., Minton, G., Ersts, P. J., Collins, T., Engel, M. H., Bonatto, S. L., Kotze, D. P. G. H., Meyer, M., Barendse, J., Thornton, M., Razafindrakoto, Y., Ngouessono, S., Vely, M. & Kiska, J. 2009.</p> <p>Population structure of humpback whales from their breeding grounds in the South Atlantic and Indian Oceans. PLoS ONE. 4:e7318.</p>
--	--

Focal Point Report on *Monachus monachus*, Mediterranean Monk Seal

Species listed:	Mediterranean monk seal (<i>Monachus monachus</i>) Concerted Action Species
AMWG Focal Point:	Daniel Cebrian
Party Range States:	Albania, Algeria, Bulgaria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Libya, Mauritania, Monaco, Montenegro, Morocco, Portugal, Spain, Tunisia, United Kingdom
CMS agreements or action plans relating to Mediterranean monk seal:	Monk Seal in the Atlantic
Assessment of the extent and how the needs of Mediterranean monk seal have been addressed by the CMS agreements or action plans (listed above):	The above action plan has allowed up to now an adequate framing of activities aimed to the recovery of the Atlantic population both in West Sahara and in the Madeira archipelagos.
Future conservation action needs of Mediterranean monk seal (please present in relative priority):	<p>Conservation priorities should be the following:</p> <p>Mediterranean sizeable population areas</p> <p>Two key measures are needed to halt human driven killing of monk seals in the main concentration areas of the species Mediterranean. The threat is enough to drive them to an irreversible extinction vortex:</p> <ol style="list-style-type: none"> 1. Promotion of new clear legislation, including well-defined regulations, to address and prosecute the longstanding “de facto” impunity of monk seal killing is urgently needed to halt the main cause of threat to the species in the Mediterranean region. This mismanagement situation is singular to this top predator if compared to other big mammals around the world such as big cats, rhinos, etc. where the problem exists but not such legal impunity. 2. Fishing regulations are needed to reduce seals drowning in static nets, the second cause of mortality in eastern Mediterranean. This mortality factor may be strongly reduced by combining spatial and temporary fishing regulations limiting the use of those gears in countries where presence, and notably breeding of the species occur. Such action may be further developed in collaboration with GFCM responsible body for fishing regulations at Mediterranean scale <p>The third main threat in the Mediterranean is key habitat degradation. While breeding and resting sites are clearly identified to a great extent in Greece, Turkey and Cyprus, not solid measures are taken to warrant their integrity. Only a recent action by the Bern Convention has taken place in Turkey on this regard.</p> <ol style="list-style-type: none"> 3. A map of key habitats to be subject to land use protection measures should be developed to request concerned authorities at international and national level to implement adequate regulations. <p>Mediterranean small population areas</p> <p>Monk seals are progressively recolonising areas in Croatia, Italy and Tunisia. Numbers of individuals are small but presence constant. Specific projects to</p>

	<p>consolidate those populations are needed, including:</p> <ol style="list-style-type: none"> 4. citizens sensitising and seals movements monitoring as a key tool to ascertain suitable habitat in these areas adequate for recolonisation. <p>Atlantic area</p> <p>The main threat to the Atlantic population keeps being the vulnerability to stochastic risks posed by the reduced number of breeding sites in the Sahara. Climate change might accelerate the rate of toxic blooms in the Atlantic area and affect the monk seals more frequently than in the past.</p> <p>Two possibilities at least exist to mitigate and even neutralise this medium term threat:</p> <ol style="list-style-type: none"> 5. Physical interventions in caves currently not suitable for the species in the broad Sahara coast area should be undertaken to facilitate their use by the species. Since current breeding caves are so few, even few successful interventions may be sound. 6. Relocation of juveniles to adequately planned sites in the broad Macaronesian region should be researched, aimed to that action when a number of seals recruitments equivalent to the one previous to the last epizootic would be reached in the West Sahara. <p>Finally:</p> <ol style="list-style-type: none"> 7. Monitoring of populations is a fundamental tool to be kept in all of the above populations. Use of camera and video technology keeps being the most appropriate and affordable one for all the areas. Radio-tracking keeps being very valuable for specific questions regarding habitat use.
Can these be achieved through the existing agreements or action plans?	<p>The action plan for the Monk Seal in the Atlantic has been a key management and governance-supporting tool favouring the ongoing recovery of the Atlantic population. A reassessment of its content would be convenient after many years passed since its starting, to keep it updated face to the current state of progress.</p> <p>A common action for the Mediterranean framed among Bonn, Bern and Barcelona did not have a follow up after its initial proposal by the side of UNEP/MAP in 2006. The Barcelona Convention does not possess the needed means to pursue an efficient conservation for the species at the moment.</p>
Additional comments:	<p>Several documents related to the species status and needs in the Mediterranean have been produced by United Nations Environment Program/ Mediterranean Action Plan (UNEP/MAP) - Regional Activity Centre for Specially Protected Areas (RAC/SPA) along more than a decade.</p>

Focal Point Report on *Orcaella brevirostris*, Irrawaddy dolphin

Species listed:	Irrawaddy dolphin Cooperative Action Species
AMWG Focal Point:	Louella Dolar
Party Range States:	Bangladesh, India, Philippines
CMS agreements or action plans relating to Irrawaddy dolphin :	None
Assessment of the extent and how the needs of Irrawaddy dolphin have been addressed by the CMS agreements or action plans (listed above):	There had been no agreements or action plans in the range states relating to Irrawaddy dolphins.
Future conservation action needs of Irrawaddy	<p>Conservation priorities should be the following:</p> <ol style="list-style-type: none"> 1. A cooperative endeavour should be carried out among the three range

dolphin (please present in relative priority):	<p>states for the conservation of Irrawaddy dolphins. A workshop should be conducted to assess the conservation status and threats to the populations of Irrawaddy dolphins in Bangladesh, India and the Philippines. The workshop can be a venue to see similarities in the threats faced by the populations, to share lessons learned and to develop conservation plans.</p> <ol style="list-style-type: none"> 2. Cooperative research between India and Bangladesh to assess population size and threats to the Irrawaddy dolphins in mangroves and coastal waters. 3. In the Philippines: 4. follow through in the establishment of protected areas in the Visayas dolphins' core/critical habitat and implementation of the conservation plan. 5. At Malampaya Sound, removal of stationary fishing structures (fish pens), removal of gillnet fishing in the Malampaya Sound Irrawaddy dolphin core habitat should also be carried out. 6. Assessment of the third (Quezon) Irrawaddy dolphin population.
Can these be achieved through the existing agreements or action plans?	There are currently no existing international agreements or action plans among the Party range states.
Additional comments:	<p>Below is an update on the conservation status of Irrawaddy dolphins in the range states:</p> <p>Bangladesh:</p> <ul style="list-style-type: none"> • About 5,400 Irrawaddy dolphins (CV=39.5%) occur in freshwater-affected coastal waters (Smith et al. 2008) and 451 (CV=9.6%) occur in waterways of the Sundarbans mangrove forest of Bangladesh (Smith et al. 2006). Mortality of Irrawaddy dolphins has been documented in drifting gill nets targeting sharks and rays in coastal waters (Smith et al. 2008). <p>India:</p> <ul style="list-style-type: none"> • The 2013 estimate of the Chilika Lagoon population was 152 dolphins, 4.6% higher than the 2012 estimate; the difference was attributed to the increase in the number of observed calves, i.e from 11 in 2012 to 18 in 2013 (Chilika Development Authority Annual Population Estimation unpubl. data). • Population estimation conducted in 2005 using the mark-recapture method was 111 (C.V.=8%) dolphins in the lagoon (Sutaria and Marsh 2011). • Conservation measures conducted by the Chilika Development Authority in close coordination with the State Forest Department: <ul style="list-style-type: none"> ○ Survey and identification of dolphin habitat in the lagoon for proper management, ○ Development of dolphin watching protocol for safe watching of dolphins that includes training of boat operators, ○ Widening and deepening of Magarmukh channel for free movement of dolphins from Outer channel to the main lagoon and ○ Acoustic survey of underwater behavior of dolphins through deployment of hydro phones in collaboration with Tokyo University. <p>Philippines:</p> <ul style="list-style-type: none"> • Two new populations (Visayas and Quezon, Palawan) have been discovered in the past five years. Malampaya Sound population is down from 77 (C.V. 27.4%) estimated in 2003 (Smith et al. 2004) to 35 (CV=22.9%) (Whitty, unpubl. data) 2013. The second population (in the Visayas) discovered in 2009 is below 25 dolphins (Dolar, 2013 unpubl. data). The third population discovered in 2013 has not been assessed yet. • Malampaya Sound 2013 recovery plan includes rezoning of the Sound and removal of all stationary fishing structures in dolphin core area.

	<ul style="list-style-type: none"> • Development of a comprehensive conservation plan for the Visayas population that includes establishment of community-based marine protected areas for the Irrawaddy dolphins, and a plan to include one of the two important core areas as a Ramsar site. • There has been a comprehensive biodiversity assessment of the core habitat of the Visayan Irrawaddy dolphin population, as well as threats assessments.
--	--

Focal Point Report on *Phocoena spinipinnis*, Burmeister’s Porpoise

Species listed:	Burmeister’ porpoise (<i>Phocoena spinipinnis</i>) Cooperative Action Species
AMWG Focal Point:	Dr. Jeffrey C. Mangel
Party Range States:	Argentina, Brazil, Chile, Peru, Uruguay
CMS agreements or action plans relating to Burmeister’s porpoise:	There are no CMS agreements or CMS action plans for this species
Assessment of the extent and how the needs of Burmeister’s porpoise have been addressed by the CMS agreements or action plans (listed above):	<p>As there are no existing CMS agreements or action plans pertaining to this species, these needs have not been specifically addressed. However, directed and opportunistic research and monitoring activities have been conducted in the range states by governmental and non-governmental organizations and researchers, and in some cases these activities are ongoing. Efforts include:</p> <ul style="list-style-type: none"> • At-sea observations & species distribution. • Strandings monitoring and tissue sampling. • Genetic, morphometric, stock structure analyses. • Shore-based and at-sea monitoring of fishery interactions, including bycatch and direct take for use as bait or for human consumption. • Small cetacean bycatch mitigation trials. • Acoustic monitoring. • Disease, parasite and pollutant assessments.
Future conservation action needs of Burmeister’s porpoise (please present in relative priority):	<p>Very little is known about this cryptic species and there remains an urgent need for a wide range of research and conservation activities toward improving our understanding of the species and its vulnerability to and possible solutions to anthropogenic impacts.</p> <p>Conservation priorities should be the following:</p> <ol style="list-style-type: none"> 1. region wide surveys to obtain information on abundance, distribution and residency patterns. <ol style="list-style-type: none"> a. efforts should take full advantage of existing data sets (e.g. at-sea surveys and strandings data). 2. assessments of the type and scale of interactions with small-scale (artisanal) and industrial fisheries throughout the region. <ol style="list-style-type: none"> a. Efforts should take into account what is currently known about species stock structure and potential management units. b. These efforts would benefit from the regular reporting of government fishery statistics. 3. experimentation and implementation of bycatch mitigation solutions and technologies (e.g. acoustic alarms) in fisheries identified with interactions. 4. genetic studies to clarify broad and fine-scale stock structure and population vulnerability to threats. 5. data collection and analysis on natural history parameters (e.g. reproduction, growth, feeding ecology, parasites). 6. assessments of habitat degradation and loss such as due to coastal development, pollutants (including noise), development of aquaculture facilities. 7. awareness raising activities to promote improved public understanding

	<p>of the species, its distribution and its conservation status (including existing national protective legislation).</p> <p>8. population health & disease monitoring.</p>
Can these be achieved through the existing agreements or action plans?	<p>These recommended future conservation actions cannot currently be addressed as there are no existing CMS agreements or action plans pertaining to this species. In the absence of CMS agreements or action plans, alternative existing regional agreements or institutions, such as the Permanent Commission for the South Pacific (CPPS), could potentially serve as venues to promote, fund or implement these actions. The eventual adoption of the 'Plan de Acción Nacional para Reducir la Interacción de Mamíferos Marinos con Pesquerías' by Argentina will also benefit Burmeister's porpoise conservation.</p>
Additional comments:	<p>In preparing this report comments were received from: J. Alfaro-Shigueto, R. Bastida, P. Bordino, E. Crespo, F. Felix, M. Iñiguez, A. Pacheco, D. Palacios, G. Sanino, M-F. Van Bresseem, K. Van Waerebeek.</p> <p>Work cited:</p> <p>Bordino, P., Kraus, S., Albareda, D., Fazio, A., Palmerio, A., Mendez, M., Botta, S., 2002. Reducing incidental mortality of Franciscana dolphin <i>Pontoporia Blainvillei</i> with acoustic warning devices attached to fishing nets. <i>Marine Mammal Science</i> 18, 833-842.</p> <p>Corcuera, J., Monzon, F., Aguilar, A., Borrell, A., Raga, J.A. 1996. Life history data, organochlorine pollutants and parasites from eight Burmeister's porpoises, <i>Phocoena spinipinnis</i>, caught in northern Argentine waters. <i>Oceanographic Literature Review</i> 43(10), 1069.</p> <p>Crespo, E.A., Corcuera, J.F., Cazorla, A.L., 1994. Interactions Between Marine Mammals and Fisheries in Some Coastal Fishing Areas of Argentina, Report of the International Whaling Commission (Special Issue) 15, 269-281.</p> <p>García-Godos I., Van Waerebeek K., Reyes J.C., Alfaro-Shigueto J. and Arias-Schreiber M. (2007). Prey occurrence in the stomach contents of four small cetacean species in Peru. <i>The Latin American Journal of Aquatic Mammals</i> 6(2): 171-183.</p> <p>Goodall, R.N.P., Schiavini, A.C.M., 1994. Net fisheries and net mortality of small cetaceans off Tierra del Fuego, Argentina. Report of the International Whaling Commission (Special Issue) 15, 295-304.</p> <p>Goodall, R.N.P., Wursig, B., Wursig, M., Harris, G., Norris, K.S., 1996. Sightings of Burmeister's porpoise, <i>Phocoena spinipinnis</i>, off southern South America. <i>Oceanographic Literature Review</i> 43(10), 1042.</p> <p>Lescrauwaet, A., Gibbons, J., 1994. Mortality of small cetaceans and the crab bait fishery in the Magallanes Area of Chile since 1980. Report of the International Whaling Commission (Special Issue) 15, 485-494.</p> <p>Mangel, J.C., Alfaro-Shigueto, J., Van Waerebeek, K., Cáceres, C., Bearhop, S., Witt, M.J., Godley, B.J., 2010. Small cetacean captures in Peruvian artisanal fisheries: High despite protective legislation. <i>Biological Conservation</i> 143, 136-143.</p> <p>Mangel, J.C., Alfaro-Shigueto, J., Witt, M.J., Hodgson, D.J., Godley, B.J., 2013. Using pingers to reduce bycatch of small cetaceans in Peru's small-scale driftnet fishery. <i>Oryx</i> 47, 595-606.</p> <p>Molina-Schiller, D., Rosales, S.A., Freitas, T.R.O.D., 2005. Oceanographic conditions off coastal South America in relation to the distribution of Burmeister's porpoise, <i>Phocoena spinipinnis</i>. <i>Latin American Journal of Aquatic Mammals</i> 4, 141-156.</p> <p>Reyes, J.C., Van Waerebeek, K., 1995. Aspects of the Biology of Burmeister's Porpoise from Peru, In <i>Biology of Phocoenids</i>. eds A. Bjorge, G.P. Donovan, pp. 349-364. International Whaling Commission, Cambridge.</p> <p>Reyes, L.M. 2006. Cetaceans of Central Patagonia, Argentina. <i>Aquatic Mammals</i> 32(1), 20-30.</p> <p>Rosa, S., Milinkovitch, M.C., Van Waerebeek, K., Berck, J., Oporto, J., Alfaro-Shigueto, J., Van Bresseem, M.-F., Goodall, N., Cassens, I., 2005.</p>

	<p>Population structure of nuclear and mitochondrial DNA variation among South American Burmeister's porpoises (<i>Phocoena spinipinnis</i>). <i>Conservation Genetics</i> 2005, 431–443.</p> <p>Tzika, A.C., D'Amico, E., Alfaro-Shigueto, J., Mangel, J.C., Van Waerebeek, K., Milinkovitch, M.C., 2010. Molecular identification of small cetacean samples from Peruvian fish markets. <i>Conservation Genetics</i> 11, 2207-2218.</p> <p>Van Bresseem, M.-F. and Van Waerebeek, K. 1996. Epidemiology of poxvirus in small cetaceans from the Eastern South Pacific. <i>Marine Mammal Science</i> 12: 371-382.</p> <p>Van Bresseem, M.-F., Van Waerebeek, K., Raga, J.A., Godfroid, J., Brew, S.D. and MacMillan, A.P. 2001. Serological evidence of <i>Brucella</i> species infection in odontocetes from the south Pacific and the Mediterranean. <i>Veterinary Record</i> 148: 657-661.</p> <p>Van Bresseem, M.-F.V., Cassonnet, P., Rector, A., Desaintes, C., Van Waerebeek, K., Alfaro-Shigueto, J., Ranst, M.V., Orth, G., 2007. Genital warts in Burmeister's porpoises: characterization of <i>Phocoena spinipinnis</i> papillomavirus type 1 (PsPV-1) and evidence for a second, distantly related PsPV. <i>Journal of General Virology</i> 88, 1928-1933.</p> <p>Van Waerebeek, K., Van Bresseem, M.-F., Felix, F., Alfaro-Shigueto, J., Garcia-Godos, A., Chavez-Lisambart, L., Onton, K., Montes, D., Bello, R., 1997. Mortality of dolphins and porpoises in coastal fisheries off Peru and southern Ecuador in 1994. <i>Biological Conservation</i> 81, 43-49.</p> <p>Van Waerebeek, K., Santillán, L., Reyes, J.C., 2002. An unusually large aggregation of Burmeister's porpoise <i>Phocoena spinipinnis</i> off Peru, with a review of sightings from the eastern South Pacific. <i>Noticiario Mensual</i> 350, 12-17.</p>
--	--

Focal Point Report on *Physeter macrocephalus*, Sperm Whale

This is a partial report covering the Mediterranean and Pacific Islands regions. A further report covering the remaining Party Range States will be developed.

Species listed:	Sperm whale (<i>Physeter macrocephalus</i>) Concerted Action Species
AMWG Focal Point:	Dr Giuseppe Notarbartolo di Sciara
Party Range States:	Argentina, Australia, Belgium, Brazil, Chile, Costa Rica, Denmark, Eritrea, France, India, Ireland, Kenya, Liberia, Mozambique, Netherlands, New Zealand, Norway, Panama, Portugal, South Africa, Spain, Sri Lanka, United Kingdom, United Republic of Tanzania, Uruguay
CMS agreements or action plans relating to sperm whale:	ACCOBAMS, Pacific Cetaceans MoU
Assessment of the extent and how the needs of sperm whale have been addressed by the CMS agreements or action plans (listed above):	<p>Recent concern on sperm whale conservation issues in the Mediterranean by the ACCOBAMS Scientific Committee (Annex IX to the Report of the 5th Meeting of Parties, Tangier, 5-8 Nov 2013) was expressed in relation to a) noise produced by prospected seismic surveys in the Hellenic Trench (the species' main known habitat in the eastern basin), and b) frequently observed ingestion of plastic debris, sometimes in massive amounts. At the same MoP (2013) an Agreement Strategy (2014-2025) was adopted with Resolution 5.1 which included the need of better understanding the relationship between anthropogenic noise and cetacean conservation in the region, with specific reference to sperm whales. Also, Resolution 5.11 (ship strikes on cetaceans) referred to the need of supporting studies (photo-id, telemetry, genetics) to elucidate migration/movement patterns, inter alia, of sperm whales, which would aid in the implementation of mitigation measures.</p> <p>To date there have been no species activities focused on sperm whale under the Pacific Cetacean MoU. A number of proposals have been developed that have had</p>

	signatory support, but CMS has not yet provided funding support.
Future conservation action needs of sperm whale (please present in relative priority):	<p>Conservation priorities should be to:</p> <ol style="list-style-type: none"> 1. ensure compliance with fishery regulations limiting or prohibiting the use of pelagic driftnets in areas containing sperm whale habitat. 2. recommend the definition of shipping lanes and speed limitations for vessels transiting in areas (e.g., straits) containing particularly high densities of sperm whales. 3. implement international and regional regulations limiting the introduction in the marine environment of solid debris, particularly plastics. 4. ensure that underwater noise is fully taken into account in a precautionary manner when reviewing Environmental Impact Assessments for activities that produce noise within sperm whale habitat, including the provision of precautionary and effective mitigation and monitoring measures. 5. address disturbance by irresponsible whale watching operations in sperm whale habitat by passing and enforcing appropriate regulations . <p>Anthropogenic threats to socially complex mammals such as sperm whales should be assessed on the basis of their interactions with social structure; the role and dynamics of culturally transmitted behaviours should be taken into consideration when determining conservation measures; and culture should be taken into account when considering population units to conserve.</p>
Can these be achieved through the existing agreements or action plans?	All of the above can be achieved by ACCOBAMS and the Pacific Cetaceans MoU for the regions that are covered by these agreements, if necessary through the establishment of cooperative action with relevant international or regional organisations (e.g., Regional Fisheries Management Organisations, International Maritime Organisation (IMO)). However to do so would require commitment of the Parties/Signatories, the agreement Secretariats and Non-Party Range States. It is also critical that consideration is given to concerted action in the regions where there are no CMS agreements covering sperm whales

Focal Point Report on *Platanista g. gangetica*, Ganges River Dolphin

Species listed:	Ganges River dolphin (<i>Platanista g. gangetica</i>) Concerted Action Species
AMWG Focal Point:	Gil Braulik
Party Range States:	Bangladesh, India, Nepal
CMS agreements or action plans relating to Ganges River dolphin:	There are no CMS agreements or CMS Action Plans for this subspecies.
Assessment of the extent and how the needs of Ganges River dolphin have been addressed by the CMS agreements or action plans (listed above):	<p>Ganges dolphin conservation has been elevated in priority in India in recent years. The National Ganga River Basin Authority (NGRBA) was constituted by the Government of India under the Chairmanship of the Prime Minister on 20th February 2009. The First Meeting of the NGRBA was held on 5th October 2009, in which the Prime Minister declared the Ganges dolphin as the National Aquatic Animal which was then notified on 18th May 2010.</p> <p>There is now a Conservation Action Plan for the Ganges dolphin in India that was produced by the Indian Government and published in 2010 and provides a summary of conservation status and suggested conservation actions. No such document is available for Bangladesh or Nepal the other range states and nothing has been produced for the entire subspecies and range states.</p> <p>CMS are supporting work in the Sundarbans of Bangladesh on coastal and river dolphins.</p>
Future conservation action	Conservation priorities should as follows:

<p>needs of Ganges River dolphin (please present in relative priority):</p>	<ol style="list-style-type: none"> 1. Some of the greatest threats to Ganges River dolphins originate from fishing and river side communities, therefore the education of these communities and their involvement in ecosystem management is essential for successful dolphin conservation. Education and awareness among fishers, consultation with fisher groups when creating systems of fisheries management to coexist with river biodiversity conservation, and community involvement in river dolphin monitoring and management has reduced mortality of dolphins through both direct hunting and fisheries bycatch in the Brahmaputra and Sundarbans and scaling up these approaches to wider areas would provide considerable conservation benefits. 2. The Ganges basin, and to a lesser extent the Brahmaputra, are the focus of intense water development. Dams are being constructed in their upper reaches for water storage and hydropower, there is a proposed river linking scheme to connect the Ganges to rivers in the South of the Indian peninsula and water is diverted for irrigation leaving many stretches little more than a trickle in the dry season. This is a huge, politically sensitive topic in South Asia and one that is so large that it cannot be tackled by conservationists on a site by site basis, and needs a unified approach in order to have any chance of being heard. There are two priority issues that relate to this: <ol style="list-style-type: none"> a. High dams for hydropower: These are often in the upper reaches of rivers (there are hundreds proposed in the Brahmaputra catchment alone), just above or near the dolphins' distribution limit, but the changing flow regime that results will likely impact the dolphins downstream. At present there is little information on what affect these dams may have and an assessment on a case-by-case basis, as well as a cumulative impact assessment would be extremely useful. b. Water diversion for irrigation: Diversion of water reduces the biological carrying capacity of the river, reduces habitat complexity, changes the fish assemblages, and concentrates pollutants, dolphins and human activities into a small restricted area. The survival of the Ganges river dolphin and a great deal of other aquatic animals is dependent on the maintenance of sufficient waterflow. Understanding of how dolphins use their habitat at different flow levels, and determining a recommended environmental flow that needs to be maintained for survival of the Ganges River dolphin would be complex, but extremely valuable. 3. Very little is known about movements and home range of the Ganges River dolphin, and this information is vital for developing effective conservation measures especially if, as is suspected, movements are long range and across international boundaries. An assessment of dolphin movements using the latest tools and technology would provide very valuable information for conservation that is currently completely lacking. 4. Many parts of the range of the Ganges dolphin have not be surveyed, especially in Bangladesh. It is of high priority to survey these 'gap' areas, especially some of the larger rivers in Bangladesh. This information will enable important sites to be identified, and allow an evaluation of potential sites for establishing new protected areas throughout the species' range.
<p>Can these be achieved through the existing agreements or action plans?</p>	<p>No. There is no existing agreement or subspecies action plan (only one for India). However some of these actions are underway on a small scale in specific project sites.</p>
<p>Additional comments:</p>	<p>Summary of Conservation Status The Ganges River dolphin inhabits a vast network of rivers primarily in India and Bangladesh and small numbers also occur in Southern Nepal. It has been suggested that the entire population of Ganges River Dolphins may number in the low thousands. However, substantial portions of the range, especially in</p>

Bangladesh, have not yet been surveyed. There are high-density areas in the central Ganges, within the Vikramshila Gangetic Dolphin Wildlife Sanctuary, in the Sundarbans delta, and in the lower Sangu River of Bangladesh. The former range has been fragmented by irrigation barrages, and dolphins have now disappeared from many upstream areas. The dolphin population in the Ganges River has been fragmented by the Farrakka, Narora, and Bijnor barrages and dolphins have now disappeared from above Bijnor barrage and from many of the smaller Ganges River tributaries. Their range has also declined in the northern and eastern tributaries of the Brahmaputra River, and dolphins have been extirpated from above Kaptai Dam in south-eastern Bangladesh.

The major threats to this subspecies are population fragmentation, depleted dry season river flows, and incidental capture in fishing gear. Reduced flows concentrate dolphins, pollutants and human activities and exacerbate many of anthropogenic threats to the species.

Current Conservation Activities

A variety of small-scale and location-specific activities are underway especially in India and the Sundarbans of Bangladesh. The primary organisations involved are WWF-India especially in the upper reaches of the Ganges, the group at Patna University in upper Bihar, and Bhagalpur University in lower Bihar, and Aaranyak in the Brahmaputra in India. In Bangladesh the WCS Bangladesh Cetacean Biodiversity Project have made great progress in the Sundarbans and work by the Zoological Society of London has been conducted recently on the Karnaphuli and Sangu Rivers in SE Bangladesh.

Conservation activities that are in progress include the following:

- Work conducted by the WCS-BDCP led to establishment of three wildlife sanctuaries in the Eastern Sundarbans several years ago. WCS have led meetings and coordinated actions with government officials, local communities and partner NGOs, to develop and implement a science-based, community-informed management plan for three wildlife sanctuaries.
- WWF-India are involved in various research, awareness programmes, and conservation initiatives in the Upper Ganga, Chambal, Ghaghra and Giruwa River in Ganga and its tributaries.
- During 2002 – 2005 WWF-India carried out a detailed survey in the Ganga and its tributaries covering more than 6000 kms to understand the status of Ganges dolphin throughout its range. The data has not been published in a scientific publication and methods were direct counts. There are still significant gaps in the survey coverage of the vast network of rivers in Bangladesh and India where dolphin relative abundance, or presence is not known.
- WWF-India have been collaborating with Tom Akamatsu at Tokyo University, Japan and IIT Delhi to develop the use of passive acoustics for Ganges dolphin monitoring. Most of this work is unpublished.
- Outreach programs with fishing communities are being conducted across Bhagalpur and adjoining districts in Bihar.
- The ‘Dolphin Mitra’ (friends of dolphins) program has helped create an informal network of fishers in the Vikramshila Gangetic Dolphin Sanctuary, through which illegal fishing activities, other disturbances and interesting sightings of biodiversity are reported.
- There is an ongoing project to evaluate the effectiveness of the Vikramshila Gangetic Dolphin Sanctuary.
- In the Karnaphuli-Sangu River the Zoological Society of London (ZSL) are conducting a study to investigate dolphin susceptibility to bycatch in freshwater fisheries, particularly looking at factors such as mesh size of nets, net type, season, effort, location etc.
- ZSL are also conducting a study looking at habitat loss due to declining

	<p>river depth due to sedimentation from excessive deforestation and also from salt-water intrusion.</p> <ul style="list-style-type: none"> • ZSL are also conducting a study looking at the impact of pollutants on survivorship. • In the Brahmaputra River in India there are regular population assessments of dolphins that use more sophisticated methods than on the Ganges (independent double observer based capture-recapture). This work involves Aranyak, the Wildlife Institute of India, Zoological Society of London (UK) and National Research Institute of Fisheries Engineering (Japan) • In the Brahmaputra Aaranyak have conducted considerable community awareness campaigns. In 2012-13 they conducted a total of 148 awareness campaigns in 142 sites across the Brahmaputra river system, in which about 40,000 people participated resulting in a significant increase in awareness of dolphin conservation among river side communities. • In Feb-Mar, 2014 the first ever dolphin survey was conducted in the Sundarban Biosphere Reserve in India, West Bengal. • In the Brahmaputra River, surveys were used to identify 'important dolphin habitats' and conservation has been focussed in these locations. A Dolphin Conservation Network was established in 2008 covering the 30 most important dolphin habitats across Assam. Under this network, dolphins are regularly and closely monitored with the help of trained community youths. It is believed that due to the active role of network in protecting the dolphins and their habitats, dolphin mortalities has been reduced by 70% in these 30 sites since 2008.
--	--

Focal Point Report on *Sousa chinensis*, Indo-Pacific Humpbacked Dolphin

Species listed:	Indo-Pacific humpbacked dolphin (<i>Sousa chinensis</i>) Cooperative Action Species
AMWG Focal Point:	Thomas Jefferson
Party Range States:	Australia, Bangladesh, Djibouti, Egypt, Eritrea, India, Iran, Iraq, Israel, Kenya, Madagascar, Mozambique, Pakistan, Philippines, Portugal, Saudi Arabia, Seychelles, South Africa, Sri Lanka, United Republic of Tanzania, Yemen
CMS agreements or action plans relating to Indo-Pacific humpbacked dolphin:	<p>Pacific Cetaceans MoU</p> <p>In addition, Indo-Pacific humpbacked dolphin is Listed at Near Threatened on the International Union for Conservation of Nature (IUCN) Red List, listed on Appendix I of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and on Appendix II of CMS.</p> <p>In Australia, the species is listed as Insufficiently Known in the Action Plan for Australian Cetaceans (1996) and protected under several pieces of national and regional legislation in Australia. It receives some protection from general measures of the Great Barrier Reef Marine Park in Australia</p> <p>In Sri Lanka, legally protected under the Fauna and Flora Act and Fisheries and Aquatic Resources Act</p>
Assessment of the extent and how the needs of Indo-Pacific humpbacked dolphin have been addressed by the CMS agreements or action plans (listed above):	<p>Almost without exception, the various pieces of legislation protecting humpback dolphins in various countries have essentially no impact on the species' conservation status.</p> <p>In most countries, there is virtually no enforcement or mitigation of restrictions that would provide protection to humpback dolphins. Australia and South Africa are probably the two main exceptions, and both countries developed plans to reduce dolphin deaths in shark meshing operations.</p>
Future conservation action	Conservation priorities should be to:

needs of Indo-Pacific humpbacked dolphin (please present in relative priority):	<ol style="list-style-type: none"> 1. enforce existing legislation providing legal protection to humpback dolphins in all countries of the range. 2. establish or increase onboard fisheries observer programs to obtain information on by-catch levels of humpback dolphins in fisheries. 3. conduct population assessment in all parts of the species' range, and development of management plans to maintain or recover populations affected by human activities.
Can these be achieved through the existing agreements or action plans?	In most cases, no. The existing agreements and plans can help, but there needs to be much more done to provide adequate protection for these animals in most range countries.
Additional comments:	<p>As coastal marine mammals, humpback dolphins suffer from many problems, especially fisheries bycatch, habitat loss and degradation, pollution/contamination, vessel collisions, etc. There has been almost no proper assessment of populations and their status in most of the range countries, and little cross-border cooperation. Australia and South Africa appear to be the main exceptions, and even in these countries, the work has not been adequate.</p> <p>The taxonomy of the genus is being revised, and the species <i>S. chinensis</i> in the future will be restricted only to the area of SE Asia, with Australian and animals west of India being relegated to different species.</p>

Focal Point Report on *Stenella attenuata*, Pantropical Spotted Dolphin

This is a partial report covering the eastern tropical Pacific and the western and Central Pacific regions. A further report covering the remaining Party Range States will be developed.

Species listed:	Pantropical spotted dolphin (<i>Stenella attenuata</i>) Cooperative Action Species
AMWG Focal Point:	Dr Michael Scott
Party Range States:	Australia (WCPFC), Cook Islands (IATTC cooperating non-member, WCPFC), Fiji (WCPFC), Philippines (WCPFC), Samoa (WCPFC), Costa Rica (IATTC, AIDCP, WCPFC), Ecuador (IATTC, AIDCP, WCPFC cooperating non-member), Honduras (IATTC cooperating non-member, AIDCP), Panamá (IATTC, AIDCP, WCPFC cooperating non-member), Perú (IATTC, AIDCP).
CMS agreements or action plans relating to pantropical spotted dolphin:	<p>Pacific Cetaceans MoU</p> <p>Spotted dolphins are often taken as bycatch tuna fisheries and international and national management of these fisheries have sought to reduce or eliminate this bycatch. The countries above are all members or cooperating non-members in at least one of these Regional Fisheries Management Organisations.</p> <p>The member countries of the Western and Central Pacific Fishery Commission (WCPFC) adopted Conservation and Management Measure 2011-03 Conservation and Management Measure to Address the Impact of Purse Seine Activity on Cetaceans which entered into force on 1 Jan 2013. This management action prohibits the setting of purse-seine nets on tuna associated with cetaceans. If cetaceans are unintentionally encircled in the purse seine net, the captain must ensure that all reasonable steps are taken to ensure its safe release and report the incident to the flag country. In support of this management action, the WCPFC currently maintains an observer program with a minimum target of 5% coverage. The estimated mortality of spotted dolphins is currently low, ranging from 0-13 animals (WCPFC8 -2011-IP-01 (rev. 1))</p> <p>The member countries of the Inter-American Tropical Tuna Commission (IATTC) and the signatories to the Agreement for the International Dolphin Conservation Program (AIDCP). This program attempts to reduce incidental mortal to levels approaching zero by instituting mortality limits for each vessel, stock mortality limits for the entire international fleet, crew training, gear inspections, and a International Review Panel to monitor infractions. In support of this management action, the AIDCP Observer Program currently mandates</p>

	<p>maintains 100% coverage of all Class-6 vessels and smaller vessels that request a Dolphin Mortality Limit.</p> <p>This program has resulted in a dramatic decline in dolphin mortality from over 130,000 dolphins in 1986 to approximately 800 dolphins in 2013. Of the total, about 300 were spotted dolphins.</p>
Assessment of the extent and how the needs of pantropical spotted dolphin have been addressed by the CMS agreements or action plans (listed above):	The conservation program in the eastern Pacific has been highly successful in reducing the mortality of dolphins. The program in the western and Central Pacific is in its beginning stages but it has made strides toward assessment of the takes of cetaceans in tuna fisheries.
Future conservation action needs of pantropical spotted dolphin (please present in relative priority):	<p>Conservation priorities for the eastern tropical Pacific should be to:</p> <ol style="list-style-type: none"> 1. re-initiate fishery-independent dolphin abundance surveys to monitor population trends. 2. re-initiate dolphin and tuna sampling program aboard purse seiners. <ol style="list-style-type: none"> a. Sampling to monitor population trends from reproductive and age data. b. -Sampling of tuna, dolphin, and other bycatch species to monitor climate-related changes on tropical ecosystems. 3. assess coastal fishery takes of spotted dolphins. <p>Conservation priorities for the western and Central Pacific should be to:</p> <ol style="list-style-type: none"> 3. assess coastal fishery takes of spotted dolphins. 4. expand observer coverage of purse-seine and longline fisheries to produce more precise mortality estimates.
Can these be achieved through the existing agreements or action plans?	These conservation priorities could be achieved with CMS working closely with the commercial tuna fishery agreements. Range States need to increase conservation action in national governed coastal fisheries.

Focal Point Report on *Stenella longirostris*, Spinner Dolphin

This is a partial report covering the Pacific Islands region. A further report covering the remaining Party Range States will be developed.

Species listed:	Spinner dolphin (<i>Stenella longirostris</i>) Cooperative Action Species
AMWG Focal Point:	Dr Cara Miller
Party Range States:	Australia, Cook Islands, Fiji, Philippines, Samoa Costa Rica, Ecuador, Honduras, Panama, Peru
CMS agreements or action plans relating to spinner dolphin:	Pacific Cetaceans MoU
Assessment of the extent and how the needs of spinner dolphin have been addressed by the CMS agreements or action plans (listed above):	The Pacific Cetaceans MoU contains a comprehensive suite of tasks related to cetacean conservation in the Pacific. A number of tasks could be linked to the data and conservation needs of spinner dolphins. However, due to the large number of tasks that are included in this plan it is difficult to discern which is most urgent and of highest priority.
Future conservation action needs of spinner dolphin (please present in relative priority):	<p>Conservation priorities should be to:</p> <ol style="list-style-type: none"> 1. assess and address bycatch - although this is unknown it is potentially a very serious threat to this species. 2. investigate impacts of ecotourism operations – of particular note is the dolphin watch industry operating in Guam 3. assess the impacts of drive hunts in the Solomon Islands 4. protect critical habitat, in particular of resting and foraging areas.
Can these be achieved through the existing	These priorities can be achieved by the Pacific Cetaceans MoU, if necessary through the establishment of cooperative action with relevant international or

<p>agreements or action plans?</p>	<p>regional organisations. However to do so requires commitment of the Signatories, the agreement Secretariat and Non-Party Range States as well as necessary funding commitments.</p> <p>Bycatch: the levels of spinner dolphin bycatch and fishery interactions can not be robustly assessed via current regional data holdings (even if they were readily available). A methodology to both increase (and verify) records is needed.</p> <p>Ecotourism: Yes, if funding and interested researchers were available. In addition, cooperation with boat operators would be necessary, as would necessary permissions from the Guam government.</p> <p>Drive hunts: Assessment of the number of spinner dolphins (as well as other species) in the Solomon Island drive hunts would require on ongoing monitoring presence within the relevant locations from January – April annually. Such a presence would need permissions from the villages involved and the Solomon Islands government – as well as ongoing funding - to undertake such work. Furthermore, the undertaking of dedicated field surveys to provide an estimate of population size and structure would be necessary to then calculate and discuss whether the number of animals taken in the drive hunts could be considered ‘sustainable’. In addition, discussions of animal welfare for drive hunt activities are also warranted yet not included in the current action plan.</p> <p>Critical habitat: Yes. Increased funding availability and focused research studies are required.</p>
------------------------------------	---