



Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area - Vol. 3, N. 2, 2007 SPECIAL ISSUE SPECIAL ISSUE



FINS

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Conserving Mediterranean and Black Sea cetaceans: the contribution from science

When the Mediterranean and Black Sea nations sent their delegations to Monaco in November 1996 to participate to the signature ceremony of ACCOBAMS, they unambiguously expressed the political will to protect the region's whales, dolphins and porpoises. This political will was deriving not only from the need to comply with commitments these nations had undertaken in various international fora, but also from the desire to guarantee a future to these extraordinary marine mammals manifested by their citizens, acutely concerned for the survival of cetaceans due to the variety and intensity of threats posed to them by human activities in the region.



GobbaSon3 (the third son of long-term resident Gobba) ripples the glassy waters near Kalamos, Greece. This is one of the few bottlenose dolphins now living in the area, formerly a paradise inhabited by 100+ common dolphins and other megafauna, but today home to a handful of animals as a result of fishery overexploitation (photograph taken on 31 July 2007 by Annalise Petroselli / Tethys).



Today, ten years after the impetus culminating in the signature of ACCOBAMS, in spite of all efforts the threats to cetaceans in the region haven't decreased; if anything, the situation has gotten worse in many respects. Certainly, conserving cetacean populations in semi-enclosed, heavily-used basins such as the Mediterranean and Black Seas is no small feat. Countless human activities, many of which carrying significant economic or strategic importance, clash with the well-being of these marine mammals. Conflicts need to be addressed, frequently requiring considerable political boldness; solutions often entail a compromise to both the environmental and the productive side of the conflict, as well as a cost to the daring politician. Alas, with a few notable exceptions, cetaceans and marine conservation so far have always gotten the short straw.

To support their decision-making process and address conflicts adequately, politicians need to rely on the best scientific knowledge they can get. Cetacean science is fraught with uncertainties due to the meagre investments in marine mammal research made by our societies, and the cryptic nature of these animals has not made this task any easier. Still, significant advances in knowledge were made in recent years, in part thanks to the dedication of specialised NGOs, and as a result the wider scientific community is now able to offer useful advice in matters pertaining to risk mitigation and to the thorny questions posed by precautionary management.

ACCOBAMS provides for the integration of scientific advice in its functioning through a Scientific Committee, first established five years ago. This special issue of FINS is dedicated to describe the work that was done by the Committee from the beginning of its existence to this date: its meetings, its working groups, its output in various formats, and, most importantly, the recommendations addressed to the parties. This account provides an opportunity for portraying the peculiarities of the Scientific Committee of ACCOBAMS, characterised by independence from political interference – as all scientific committees should be – and strong conservation motivation by its components.

Motivation is the real glue of the Committee, and can be kept alive only by the awareness of being part of a greater system. This will ultimately feed into a decision-making process resulting in a better conservation status of the region's whales, dolphins and porpoises.

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The Scientific Committee of ACCOBAMS: roles, composition, and functioning

In its Article 7 the Agreement text directs the parties to create a Scientific Committee with advisory functions, through the selection of persons qualified as experts in cetacean conservation science (see Box 1).

The Agreement also lists the tasks of the Committee, which include advising on the preparation of guidelines for the reduction or elimination of adverse human-cetacean interactions, habitat protection, emergency measures and rescue methods, and in the granting of exceptions to the prohibition of deliberate takes of cetaceans in the Agreement area, for the purpose on nonlethal in situ research. The Committee is also expected to: advise on activities related to the Conservation Plan (Annex 2 to the Agreement), formulate recommendations to the Meeting of the parties relating to their development, contents and implementation, conduct scientific assessments of the conservation status of cetacean populations, advise on the development and co-ordination of research and monitoring programmes, and facilitate the exchange of scientific information and of conservation techniques.

The Committee is composed of 12 members: four are nominated by the parties, five by the International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM), one by the World Conservation Union (IUCN), one by the European Cetacean Society (ECS), and one by the International Whaling Commission (IWC)(see Box 2).

At the ACCOBAMS final negotiation meeting (Nov. 1996) the CIESM was identified as the choice organization in the Agreement area to which the function of the Scientific Committee is CIESM: http://www.ciesm.org

IUCN:

http://www.iucn.org ECS: http://www.europeancetaceansociety.eu/ecs/

Box 1

Article VII Scientific Committee

1. A Scientific Committee, comprising persons qualified as experts in cetacean conservation science, shall be established as an advisory body to the Meeting of the Parties. The Meeting of the Parties will entrust the functions of the Scientific Committee to an existing organization in the Agreement area that assures geographically-balanced representation.

2. Meetings of the Scientific Committee shall be convened by the Agreement Secretariat at the request of the Meeting of the Parties.

3. The Scientific Committee shall:

a) provide advice to the Meeting of the Parties on scientific and technical matters having a bearing on the implementation of the Agreement, and to individual Parties between sessions, as appropriate, through the Co-ordination unit of the subregion concerned;

b) advise on the guidelines as provided for in Article IV, paragraph 3, assess the reviews prepared in accordance with Annex 2 to this Agreement and formulate recommendations to the Meeting of the Parties relating to their development, contents and implementation;

c) conduct scientific assessments of the conservation status of cetacean populations;

d) advise on the development and co-ordination of international research and monitoring programmes, and make recommendations to the Meeting of the Parties concerning further research to be carried out;

e) facilitate the exchange of scientific information and of conservation techniques;

f) prepare for each session of the Meeting of the Parties a report of its activities which shall be submitted to the Agreement secretariat not less than one hundred and twenty days before the session of the Meeting of the Parties and circulated forthwith by the Agreement secretariat to all Parties;

g) render timely advice on the exceptions of which it has been informed pursuant to Article II, paragraph 2; and

h) carry out, as may be necessary, other tasks referred to it by the Meeting of the Parties.

4.The Scientific Committee, in consultation with the Bureau and the respective Co-ordination units, may establish working groups as may be necessary to deal with specific tasks. The Meeting of the Parties shall agree a fixed budget allocation for this purpose.

The full text of the Agreement can be found in 12 languages on:

http://www.accobams.org/ 2006.php/pages/show/92



Box 2

Members of the Scientific Committee (2002-2007)

Aguilar, Alex (CIESM, 2002-3) Bayed, Abdellatif (regional representative, Western Mediterranean and Contiguous Atlantic, 2002-4) Beaubrun, Pierre-Christian (CIESM, 2002-4) Birkun, Alexei Jr. (CIESM, 2002-7) Bradai, Mohammed Nejmeddine (regional representative, Western Mediterranean and Contiguous Atlantic, 2005-7) Cañadas, Ana (CIESM, 2004-7) Donovan, Greg (IWC, 2002-7) Frantzis, Alexandros (CIESM, 2002-4) Guinet, Christophe (CIESM, 2004-7) Hadjchristophorou, Myroula (regional representative, Eastern Mediterranean, 2004-7) Holcer, Drasko (regional representative, Central Mediterranean, 2002-4; CIESM, 2004-7) Komakidze, Akaki (regional representative, Black Sea, 2002-4) Komnenou, Anastasia (regional representative, Eastern Mediterranean, 2002-4) Lauriano, Giancarlo (regional representative, Central Mediterranean, 2004-7) Notarbartolo di Sciara, Giuseppe (CIESM, 2002-7); Chair of the Committee (2002-7) Panigada, Simone (ECS, 2004-7) Radu, Gheorghe (regional representative, Black Sea, 2004-7) Raga, Juan Antonio (ECS, 2002-4; regional representative, Western Mediterranean and Contiguous Atlantic, 2004-5) Read, Andy (IUCN, 2002-4) Reeves, Randall (IUCN, 2004-7)

to be entrusted (Art. VII, 1). The five members nominated by the CIESM function as a scientific "hard core" of the Committee, to ensure that the state-of-the-art of regional cetacean conservation science is applied to its activities. Such function is further reinforced by the representatives of the IUCN, ECS and IWC, who help maintaining the Committee's scientific debate within a wider, and possibly global, context.

The four members nominated by the parties act as regional representatives, each of them functioning as link between the Committee and the scientific community of one of the sub-areas in which the Agreement area is subdivided: western Mediterranean and contiguous Atlantic, central Mediterranean, eastern Mediterranean, and Black Sea.

At each Meeting of the parties (MOP), a new Scientific Committee is established, its mandate expiring at the subsequent MOP. To facilitate turnover within the Committee's membership, it was recommended that the regional representatives serve for only one mandate. By contrast, to ensure that scientific competence at the highest possible level be maintained within the Committee, in a region where cetacean conservation science is still diffused to a limited extent, members nominated by CIESM, ECS, IUCN and IWC may be reappointed. A list of the persons who have served on the Scientific Committee of ACCOBAMS since its first meeting is provided in Box 2. The Scientific Committee is convened by the Secretariat, and meets two to three times between MOPs (see Box 3 for a list of past meetings). The meetings and the Committee' functioning are governed by rules of procedure which are adopted by the Committee itself. The Chair of the Committee prepares a draft agenda in consultation with the Secretariat and the Committee's members. In addition to Committee members, the meetings are attended by the Secretariat, by representatives of the Sub-Regional Coordinating Units, and by a number of invited experts and observers. These are invited by the Chair in consultation with the Secretary, and include persons having special expertise, also based on specific items of the agenda. All ACCOBAMS Partners are entitled to send observers to meetings of the Scientific Committee.

All the recommendations adopted by the Scientific Committee at its meetings (see Box 4),

Box 3

Meetings of the Scientific Committee

- 1. Tunis, 3-5 October 2002
- 2. Istanbul, 20-22 November 2003
- 3. Cairo, 15-17 May 2005
- 4. Monaco, 5-8 November 2006



as well as the meeting report and documents, can be found on the ACCOBAMS website. Some documents, which were provided to the meetings solely to support the discussion on specific items and are the product of work-in-progress, are not posted on the Agreement website and may only be requested from the author(s).

The following pages of this Special Issue of FINS describe the range of issues that are currently debated within the Scientific Committee, and that constitute the body of the Agreement's future Work Programme (2007-2010) submitted for adoption by the next MOP. These include: knowledge of cetacean population ecology of conservation relevance, species-based conservation approach, stranding networks and tissue banks, interactions with fisheries, ship strikes, whale watching, marine protected areas, emergency task forces, capacity building, granting of exceptions, captivity-related issues, and emerging issues such as climate change amd marine litter. ĭ

Box 4

| | Recommendations adopted by the Scientific Committee of ACCOBAMS |
|---|--|
| 1.1 | Use of acoustic devices |
| 1.2 | Bycatch |
| 1.3 | Fin whales |
| 1.4 | Tissue banks |
| 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 | Guidelines for the use of acoustic deterrent devices – a way forward Pelagic gillnets in the ACCOBAMS Area Relationship between ACCOBAMS and the Pelagos Sanctuary The Conservation Plan for Cetaceans in the Black Sea Fin whale workshop National stranding networks Man-made noise Ship collisions The fundamental need for information on abundance and distribution of cetaceans within the area |
| 4.1 4.2 4.3 4.4 | Conservation of Mediterranean common dolphins Use of driftnets in the Mediterranean Sea Anthropogenic Noise Programme for a comprehensive Survey of the abundance and distribution of cetaceans in the ACCOBAMS Area |
| 4.5 | Black Sea Cetacean Survey |
| 4.6 | Black Sea Cetaceans Conservation Plan |
| 4.7 | Work on fin whales and ship strikes in the Mediterranean Sea |
| 4.8 | Tissue banks |
| 4.9 | Marine Protected Areas for cetaceans |
| 4.10 | Red List Assessments |
| 4.11 | Captive facilities |

- Acoustic Harassment Devices 4.12
- 4.13 Minimum funding for the Scientific Committee

The texts of all Recommendations, as well as the reports of the meetings and other pertinent information on the Scientific Committee, can be found on the ACCOBAMS website:

http://www.accobams.org/ 2006.php/pages/ show/34

Recommendations are normaly adopted by the Scientific Committee during meetings immediately preceeding a MOP.

in the





Cetacean population ecology in the ACCOBAMS Area

For more information on the organisational effort concerning the basin-wide surveys see document MOP3.Inf12 available on:

http://www.accobams.org/ 2006.php/parties/documents/5 Ecological knowledge of cetaceans in the Agreement area is sparse and very irregularly distributed in space and time. The greatest part of what is known comes from highly localised summer observations, and yet we know that there are major seasonal variations in cetacean distribution and abundance in the region. Furthermore, while the summer distribution and abundance of some of the commonest species (e.g., fin whales and striped and bottlenose dolphins) begins to be reasonably well known in parts of the area, such as the north-western Mediterranean and the northern Alborán Sea, there still are large portions of the region, especially in the southern and eastern Mediterranean, where no regular cetacean surveys have ever been conducted.

This lack of knowledge is problematic to conservation actions in an ACCOBAMS perspective, the geographic scope of any Agreement being an integral part of any of its policies and therefore indispensable for the achievement of its aims. Knowing the absolute size of populations in successive years is necessary to detect population trends, and in many cases not even the initial data-point of future time series is available. In other words, we don't know how many animals of the various species are found in the region. To overcome this problem, three actions are currently being promoted by the Scientific Committee:

(a) the organisation of a basin-wide survey to describe absolute abundance and distribution of cetaceans in the region (inspired by the SCANS and SCANS II initiatives),

(b) the collection of genetic information to detect and describe cetacean population structure, and

(c) the establishment of a centralised cetacean sighting database (or a centralised network of databases).

Basin-wide survey

At the 2nd meeting of the ACCOBAMS Scientific Committee (November 2003), Recommendation 2.9 ("The fundamental need for information on abundance and distribution of cetaceans within the area") noted the need for: "... obtaining baseline population estimates and distributional information of cetaceans within the area as soon as possible. Without such information (and a suitable monitoring programme) it will be impossible to inter alia determine whether ACCOBAMS is meeting its conservation objectives. The great importance of such information in the assessment of risk, the determination of appropriate mitigation measures and the associated determination of priority actions, has been highlighted by many discussions at this meeting." The Committee had agreed that such work represented the highest priority for research within the area. It was recognised that development of a research plan to address the need was a major undertaking from the scientific, logistical and financial standpoint. The work will involve the simultaneous ship-based and airplane-based surveys (depending on circumstances) over a number of cells in which the entire ACCOBAMS area will be partitioned. Population densities and absolute estimates will be derived applying the line-transect method, which will be used to model the perpendicular distances of the sightings from the survey tracks. It was also recognised that the only way to take this forward was to hold at a series of workshops of experts, the first of which was organised in December 2004 in Valsain, Spain. In that occasion a steering committee was established, to arrange and carry out informal consultations with experts to homogenize the methodology, to organize and conduct a sub-regional training workshop in the Black Sea (Meeting on Methodology for Surveying the Black Sea, 15-16 September 2005, St. Andrews, Scotland and Workshop on Cetacean Surveying in the Black Sea, Istanbul, 17-18 October 2005), to refine methodology and study design (Pre-Workshop meeting on obtaining baseline cetacean abundance information for the ACCOBAMS area, St. Andrews, Scotland, 18-19 December 2006), and to address logistical issues. A second workshop to finalise the project document and to develop strategy for fundraising and for obtaining the support of national authorities will be organised after MOP3 (Workshop meeting on obtaining baseline cetacean abundance information for the ACCOBAMS area). In the mean time, the Scientific Committee recommended the implementation of a programme of communication to increase awareness on the project among the parties, providing a description of the project and clear information about its objectives and the surveying techniques to be used, and organising at the occasion of MOP3 a special event to formally present to officials of the parties the survey objectives and methodologies, and seek information from the country

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representatives on further details about the needed steps and authorisations for carrying out the field work of the survey in the waters under their jurisdiction.

Genetic studies

During the past decade colleagues have been able to contribute new knowledge concerning population structure of several Mediterranean and Black Sea cetaceans (e.g., fin whales; sperm whales; Cuvier's beaked whales; bottlenose, Risso's, common and striped dolphins; harbour porpoises). The Scientific Committee recommended that the stock identity and structure of the Agreement's cetacean populations be continued, to test population differentiation and gene flow within and among sub-regions on sufficiently fine geographic scales. To achieve this, a programme of collection of tissue samples from different portions of the Agreement area will be implemented, through national stranding networks and the support of MEDACES and tissue banks, and carefully planned biopsy collection schemes during sighting cruises. In parallel, the necessary laboratory analytical framework should be secured and funded. To this end a Genetics Working Group should be created to establish the necessary contacts with (a) persons in charge of National Stranding Networks, (b) persons in charge of Tissue Banks, and (c) persons responsible for field projects in which tissue specimens can be collected, in order to secure sources of study material. The Genetics Working Group should prepare a genetics strategy document in which the most urgent actions in terms of conservation needs are identified, discussed and planned.

Sighting databases

A systematic effort to create an Agreementwide sighting database was started under the auspices of ACCOBAMS, CIESM and the Pelagos Sanctuary. A meeting was held in Monaco in September 2006 to investigate ways and modalities to establish a joint database, containing all future available sighting data fulfilling the necessary quality requirements. Data may be contributed both by ACCOBAMS dedicated surveys and research efforts, and through independent, bona fide research activities conducted in the area. This effort should be made to cooperate with global (such as OBIS-SEAMAP or UNEP/MMAP) and regional (e.g., the CIESM database) initiatives, to enrich the database and increase time series by including past sightings. The Scientific Committee, informed about the outcome of the Sep. 2006 meeting, underlined that in the establishment of the joint sighting database, future sighting data should be coupled with related effort. However, given the existence of historical sighting-only data, the database should include an option for gathering this type of information even in the absence of information on effort. The need was stressed for the Secretariats of the involved Organisations (ACCOBAMS, CIESM and Pelagos Sanctuary) to stimulate scientists to participate to this initiative. The ACCOBAMS Secretariats will now work with the Pelagos Sanctuary and CIESM to reach an agreement on the organisational, logistic, practical and financial aspects of the database. At the same time, the Scientific Committee will launch a scientifictechnical working group to define the remaining technical issues and solicit participation to the programme by research groups willing to contribute their data to the database. 🟹

For more information on the Joint Sighting Database see document MOP3.Doc55 available on:

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http://www.accobams.org/ 2006.php/parties/documents/5

The support of Caterina M. Fortuna in the preparation of the section on "cetacean population ecology" is gratefully acknowledged.



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The report "The status and distribution of cetaceans in the Black Sea and Mediterranean Sea", issued as a result of the March 2006 workshop, can be found on

http://www.accobams.org/ 2006.php/publications/all

The Conservation plan for Black Sea cetaceans can be found as MOP3.Doc 19 on

http://www.accobams.org/ 2006.php/parties/documents/5

The Conservation plan for Mediterranean short-beaked common dolphins can be found on

http://www.accobams.org/ 2006.php/documents/show/47

Species-based conservation approach

During the past years, conservation plans were prepared to target cetacean populations found in the ACCOBAMS area which were perceived as a cause for special concern.

Conservation concerns for these cetaceans were confirmed and further substantiated during a workshop organised in Monaco in March 2006 to formulate Red List assessments the status of cetacean populations (or "sub-populations" in IUCN terms) in the ACCOBAMS area. Of 12 cetacean populations assessed in the region, one was proposed as *Critically Endangered*, five as *Endangered*, and two as *Vulnerable*. The remaining four were considered *Data Deficient*, since there was no sufficient information to assess their extinction risk (see Table 1 on opposite page).

A number of cetacean individuals belonging to other species have occurred in the ACCOBAMS area as Visitors or Vagrants (listed in Reeves and Notarbartolo di Sciara 2006), but are not included in specific conservation plans considering that their populations reside outside of the Agreement area.

Black Sea cetaceans

All three species of cetaceans inhabiting the Black Sea were proposed to be included as *Endangered* in the Red List. A Conservation Plan for these cetaceans, first presented at the Third Meeting of the Scientific Committee and discussed at a round table organised in Istanbul in 2006 during a Black Sea Science Conference, was adopted by the Committee at its Fourth Meeting. The Conservation Plan identified the following four high priority actions: (a) completion of the basin wide survey; (b) establishment of a regional bycatch network; (c) establishment of a stranding network; and (d) establishment of an MPA network. The Scientific Committee recommended that these high priority actions be implemented immediately.

Common dolphins in the Mediterranean Sea

The Mediterranean population of *Delphinus delphis* is recognised as Endangered in the Red List (2003) and listed in Appendix I and II of the Convention of Migratory Species. Evidence exists that the conservation status of common dolphins is deteriorating in several portions of the Mediterranean where the species was previously known to persist. A comprehensive Conservation Plan for Mediterranean common dolphins was completed and presented to the 2nd Meeting of the parties in November 2004. parties and Riparian States were invited to implement appropriate parts of the plan and introduce relevant activities into their national plans.

It was widely thought that the enforcement of the already existing regulations would solve a good part of the problems faced by common dolphins in the region. Unfortunately, in spite of all efforts, no significant action has been undertaken anywhere since then to mitigate the conservation problems that common dolphins are encountering throughout the Mediterranean. The only exception was a law adopted by Morocco prohibiting the use of driftnets in the Alborán Sea, within the framework of a conversion plan financed by the EU, to be completed by the beginning of 2009. In the mean time driftnets continue to fish illegally in breach of national and international regulations.

While reiterating that the implementation of the Common Dolphin Conservation Plan should proceed as soon as possible, the Scientific Committee decided to strive to move forward the process by recommending that at least a small steering committee be created immediately to facilitate the implementation of the priority actions of the plan and to coordinate with the relevant authorities through the Secretariat. However, in spite of goodwill from the part of the scientific and conservation communities, no further progress can be made without the political will of enacting management measures clearly outlined in the Conservation Plan.

Bottlenose dolphins in the Mediterranean Sea

Mediterranean bottlenose dolphins are threatened by a range of factors including incidental mortality in fishing gear, overfishing of their prey, habitat loss, contamination by xenobiotics, disturbance and intentional killing, and were proposed to be listed as Vulnerable in the IUCN Red List.

During its 3rd Meeting, the Scientific Committee recommended that a series of regionally defined



working groups be established to draft local Action Plans for bottlenose dolphins in their respective areas. The Committee also recommended compiling a list of individuals and teams who are involved in bottlenose dolphin research and conservation in the Mediterranean region and the contiguous Atlantic area. A few sub-regional action plans were also presented as examples of small-scale action plans.

In order to progress on bottlenose dolphin conservation activities in the Mediterranean region, the Scientific Committee recommended that a small group of experts be formed to develop a template to enable sub-regional groups of bottlenose dolphin researchers to develop local action plans comprising high priority research and management actions.

Sperm whales

Sperm whales in the Mediterranean were considered *Endangered* mostly as a result of bycatch in illegal driftnets, although the potential impact of ship strikes and traffic disturbance was also recognised. A basin-wide study of the distribution and abundance of sperm whales in the Mediterranean (as would result from the "Basinwide Survey"), with the identification of critical habitat, was considered the first step in the implementation of a conservation plan for this species. In addition, the Scientific Committee reiterated the need to address the challenge posed by illegal pelagic driftnets, which continues to be the major threat to the species, as well as the problem caused by ship strikes.

Fin whales

A workshop on fin whales in the ACCOBAMS area was held in Monaco (12-13 November 2005) in collaboration with the Pelagos Sanctuary. The main objectives of the workshop were to review the existing knowledge regarding this species in the Mediterranean, identify feasible scientific and management actions, and provide a rational background for a Mediterranean fin whale conservation plan. The workshop recommended that urgent efforts be made to (a) obtain baseline information on the distribution and abundance of fin whales in the ACCOBAMS area and develop a programme to monitor trends in abundance; (b) to develop a central photo-identification database for use as a long-term management and conservation tool; and (c) examine and elucidate Mediterranean fin whale population structure.

The report of the ACCOBAMS - Pelagos fin whale workshop can be found on

http://www.accobams.org/ 2006.php/publications/all

Table 1. Cetacean "sub-populations" from the ACCOBAMS area assessed at the Monaco workshop (March 2006).

| Species (or sub-species) | Common name | Area | Proposed status |
|-----------------------------|--------------------------------|--|-----------------------|
| Orcinus orca | Orca or killer whale | Gibraltar Strait | Critically Endangered |
| Delphinus delphis | Short-beaked common dolphin | Mediterranean | Endangered |
| Physeter macrocephalus | Sperm whale | Mediterranean | Endangered |
| Delphinus delphis ponticus | Short-beaked common dolphin | Black Sea subspecies | Endangered |
| Tursiops truncatus ponticus | Common bottlenose dolphin | Black Sea subspecies | Endangered |
| Phocoena phocoena relicta | Harbour porpoise | Black Sea subspecies, straddling into the Aegean Sea | Endangered |
| Stenella coeruleoalba | Striped dolphin | Mediterranean | Vulnerable |
| Tursiops truncatus | Common bottlenose dolphin | Mediterranean | Vulnerable |
| Balaenoptera physalus | Fin whale | Mediterranean | Data Deficient |
| Ziphius cavirostris | Cuvier's beaked whale | Mediterranean | Data Deficient |
| Globicephala melas | Long-finned pilot whale | Mediterranean | Data Deficient |
| Grampus griseus | Risso's dolphin | Mediterranean | Data Deficient |



In spite of the amount of research work done for this species in the Mediterranean, the Red List meeting organised in March 2006 was unable to come up with an assessment of fin whale status in the region due to lack of information on population trends, and proposed that the species be provisionally classified as *Data Deficient*. The Scientific Committee welcomed and endorsed the report of the workshop, and recommended to create a "Fin Whale Steering Committee" having the primary role of prioritising actions and identifying initiatives to take the process forward in close contact with the Pelagos Sanctuary and other relevant organisations, experts and research groups in the region.

Harbour porpoises in the Mediterranean Sea

Detailed information on the distribution and density of harbour porpoises in the Northern Aegean Sea, as well as their relationship with the Black Sea population, should be viewed as the essential prerequisite for determining whether conservation measures are needed, and eventually implemented. The "Basin-wide survey" should provide a first description of the overall distribution of the species in Aegean waters.

Other species in the Mediterranean Sea

Investigations on killer whales in the Strait of Gibraltar (proposed as *Critically Endangered* at the Monaco Red List Workshop in March 2006), currently carried out by local research groups, point to precise conservation and management actions which should be considered for implementation by the competent national authorities with the greatest urgency.

The 2006 Monaco Red List meeting suggested that four cetacean species found in the Mediterranean (fin whales, Cuvier's beaked whales, long-finned pilot whales, and Risso's dolphins) should be considered *Data Deficient*, since there was no sufficient information to assess their extinction risk. Like for fin whales, information on abundance, distribution and population structure of the other three species should be collected ASAP to determine if these populations are threatened, and to what extent. While knowledge relevant to this concern will be likely collected at the regional scale with the "Basin-wide Survey", and while relevant ecological information on Cuvier's beaked whales is gathered under different efforts (see "Anthropogenic noise" on page 14), current research projects on these species on a more local basis should be encouraged and facilitated.





Stranding networks and tissue banks

Stranding networks

Stranding monitoring networks are an extremely important conservation tool because they allow the collection of information about important mortality causes for cetaceans in the Agreement area (e.g., atypical beaked whale strandings likely due to military sonar, such as those occurred near Almeria in Jan. 2006, and morbillivirus epidemics). Furthermore, access to stranded cetaceans allows the collection of biological material useful to understand population pathology, genetic structure and emerging pollution threats. Based on this conviction the Scientific Committee recommended that a report be prepared providing a general picture on the situation in the ACCOBAMS area regarding the cetacean stranding monitoring.

A Mediterranean and Black Sea cetacean stranding database, MEDACES, was promoted by the RAC/SPA in cooperation with ACCOBAMS and with the support of the Spanish Government, and is maintained at the University of Valencia. Unfortunately progress of MEDACES is noticeably heterogeneous, with some countries contributing regularly, whereas information from others (most notably, Italy) is still completely missing from the database. Consequently, the Scientific Committee invited the Secretariat to urge the parties to provide inputs to the MEDACES as part of their obligations towards ACCOBAMS.

At the present moment efficient stranding networks only exist in a few countries within the ACCOBAMS area. It is therefore urgent to develop networks where they do not exist, and to encourage other riparian states to do the same. During their first meeting, the contracting parties to ACCOBAMS agreed to endeavour to improve the efficiency, when needed, of national stranding networks (NSN), to help extending the appropriate know-how to countries where strandings are currently not monitored, and to create the basis for the establishment of a wider network at the regional level. Accordingly, that meeting adopted Resolution 1.10 ("Cooperation between national networks of cetacean strandings and the creation of a database") which recommended, among other things, that each party, individually, implement a NSN; that NSNs be coordinated within an Agreement-wide stranding network (ASN), and common databases created; and that other riparian countries of the region be invited to participate in such actions.

Concerning live strandings (which include a range of difficult issues such as veterinary decision-making in the field, response to mass strandings, human health concerns, response to stranded neonates, capacity issues and the very significant differences across the ACCOBAMS region in capacity and approaches, data recording during rescues and sampling, rescue of dolphins from harbours, and 'friendly' solitary dolphins), the First ACCOBAMS rescue workshop, sponsored by the Whale & Dolphin Conservation Society (WDCS), was held in Monaco in November 2006, with invited experts and other participants from 11 countries covering the Black Sea, Mediterranean and contiguous Atlantic area. The Scientific Committee welcomed and endorsed the workshop's final statement, and recommended to establish an advisory panel for ACCOBAMS rescue activities and a veterinary group as suggested by the workshop. It was also expected that such a group would implement the production of information material such as a booklet in appropriate languages to promote rescue activities in the region. Information provided should include basic rescue recommendations, human safety concerns and links to local rescue organisations.

Tissue banks

The Committee recommended to encourage the tissue bank in Padua to join and support the ACCOBAMS process for tissue bank development. The 3rd Meeting invited the Secretariat to contact the Spanish Authorities and seek their support for the tissue bank in Barcelona. Furthermore, the Committee asked the tissue bank holders (Padua and Barcelona) to prepare a concept paper detailing the conservation importance



MEDACES: http://medaces.uv.es/





For more information on the Guidelines on tissue banks see document MOP3.Doc60 available on:

http://www.accobams.org/ 2006.php/parties/documents/5 of tissue banks. In 2006 the Committee discussed a document on tissue banks presented by Prof. B. Cozzi (University of Padua), and stressed that tissue banks are an important research and conservation tool which should be ideally be represented in each ACCOBAMS member state. A coordinated network should also be established to link all ACCOBAMS tissue banks. The existing tissue banks in the ACCOBAMS area should be assured continuity by the states were they were established, and their number should increase to create a network able to ensure storage and availability of tissues for study deriving from stranded and bycaught cetaceans. To this end, a coordination should be established and maintained between the tissue bank network and the stranding networks, also through the support of MEDACES. Finally, guidelines on tissue banks prepared by the Secretariat, including an ethical code, were adopted by the Scientific Committee.

Interactions with fisheries

Activities involve addressing both types of interactions, i.e. direct interactions (also known as operational or technical interactions) whereby cetaceans physically interact with fishing gear and catch such as in bycatch and depredation, and indirect (or ecological) interactions, which can be either feeding-related (i.e., causing exploitative competition between fisheries and cetaceans), or causing interference competition, where one component actively disrupts the activities of the other.

Direct interactions

Activities are directed at addressing the problem of bycatch and depredation, finding possible solutions to avoid such depredation, and evaluating the impact of consequences of prompting the fishing community to use acoustic devices. These actions are based on the "Guidelines for technical measures to minimise cetacean-fishery conflicts in the Mediterranean and Black Seas", resulting from a workshop organised in Rome on 8 July 2004, and on the programme of action agreed at the 2nd meeting of the parties (Resolution 2.21, point 2) "Assessment and mitigation of the adverse impacts of interactions between cetaceans and fishing activities in the ACCOBAMS Area" (also known as "ByCBAMS"). The programme involves the preparation of standard protocols for data collection for the Agreement area, national assessments of the

extent of the by-catch problem, a set of awareness campaigns targeting the fishing community, and pilot actions on the use of acoustic devices and other by-catch and depredation avoidance measures, and on their possible environmental impact.

ByCBAMS was envisaged as acting through two main directions: contacting potential donors to secure funding for the programme components and encouraging countries to develop small national projects aimed at achieving the programme's objectives. In addition, a fruitful collaboration was established, in accordance with the Scientific Committee recommendations, with the General Fisheries Commission for the Mediterranean (GFCM) and in particular with its Sub-Committee on Marine Environment and Ecosystems (SCMEE). The Fishery General Directorate of the Italian Ministry of Agriculture, Food and Forestry approved a significant financial support for the implementation of four components of ByCBAMS: preparation of the standard protocols for data collection; data collection on bycatch in the Tyrrhenian sea; and two workshops (a national meeting in Sept. 2007 and an international meeting programmed in March 2008) on fisheries-cetacean interactions. Furthermore, in 2006 a joint workshop was organised by ACCOBAMS and GFCM on bycatch and a questionnaire disseminated to collect data about cetacean-fishery interactions. The Scientific Committee recommended that





scientists from the ACCOBAMS area be informed about all relevant scientific meetings in order to facilitate their participation, and that all available material on the conservation status of cetaceans be communicated to SCMEE, particularly as far as the distribution and abundance of species, and reported interactions between cetacean and fisheries are concerned.

Concerning the continuation of large-scale use of illegal driftnets in the Mediterranean, the Scientific Committee decided to again draw the attention of the contracting parties on the fact that the non-enforcement of existing regulations on driftnets has a negative impact on the cetacean populations and seriously affects the credibility of ACCOBAMS (Recommendation 4.2).

Concerning the problem of depredation, technological aspects of the issue of pingers were discussed at the 3rd Meeting of the Scientific Committee, with a view of developing common strategies on this issue.

Indirect interactions (including prey depletion)

Long-lived, slow-reproducing marine species such as cetaceans are becoming increasingly endangered due to growing human impacts on the marine environment. A likely source of problems, which however has proven particularly difficult to properly address, is nutritional stress caused by depletion of food resources due to overfishing and environmental degradation. The lack of sufficient food to maximise reproductive potential may be the most important regulator of population size in animals. Unfortunately, it is difficult to assess whether nutritional stress is a contributing factor to the decline of any particular cetacean population. The "nutritional quality" of a diet to an animal is a complex matter to assess given the range of components that can influence its value. The trophic interactions between cetaceans and fisheries have proved particularly hard to track and understand. Gaining a better insight of the roles played by cetaceans in the dynamics and functioning of the marine ecosystem is a key to the proposition of management policies and measures that would ensure that possible competition for prey resources between cetaceans and fisheries is managed in an optimal fashion.

A clear demonstration case of cetacean prey depletion caused by excessive fishing (i.e., the common dolphins off Western Greece which have declined by one order of magnitude in nine years in concomitance with overfishing of their main prey item) was discussed during the Committee's last meeting. Considering the threatened level of the concerned cetacean population (shortbeaked common dolphins), and the importance of addressing the situation also in view of developing mitigation measures applicable to different situations, the Scientific Committee strongly recommended that concrete action be undertaken to regulate coastal fisheries, to be conducted sustainably and with an ecosystem approach. Furthermore, the Committee encouraged the Executive Secretary to pursue her collaboration with a number of concerned NGOs to reach an agreement with the relevant authorities in Greece that improves the situation of the common dolphin in the Ionian Sea. 🍸

See FINS 2(1) - 2005 for a special coverage on driftnets in the Mediterranean

The support of Caterina M. Fortuna in the preparation of the section on "interactions with fisheries" is gratefully acknowledged.



Guidelines to address the issue of the impact of anthropogenic noise on marine mammals in the ACCOBAMS area can be found as document MOP3.Doc20 available on:

http://www.accobams.org/ 2006.php/parties/documents/5

Anthropogenic noise

Although in most cases up to now the date are insufficient to fully evaluate the potential negative effect of anthropogenic noise on cetaceans, there is general acceptance that many atypical mass stranding of beaked whales were the result of military sonar activities. The latest of such episodes was the stranding of four Cuvier's beaked whales (Ziphius cavirostris) on 26 January 2006 on the coast of Almeria, Southern Spain. Although mass strandings may appear to represent the most critical class of incidents concerning the effect of sound on cetaceans, anthropogenic noise, overwhelmingly from shipping but also deriving from coastal construction, has been increasing in the oceans in recent decades, especially in the Northern Hemisphere, since the industrial revolution. Whilst there is little evidence to suggest that this generally has acute effects, the chronic effects of increased noise levels and loud point sources (ships, explosives, constructions etc.) may have significant effects at the population level. To address the issue of hazards posed by noise to cetaceans, the parties to ACCOBAMS adopted a Resolution (2.16) at their last meeting in Palma de Majorca (2005).

Guidelines to address the issue of the impact of anthropogenic noise on cetaceans in the AC-COBAMS area, in response to Resolution 2.16, were adopted by the Scientific Committee at its 4th meeting. During the debate the Committee stressed the importance of a number of underlying concepts that need to be taken into account when considering these guidelines (e.g., the seriousness of threats posed by noise to marine wildlife, the need for regulating and reducing underwater noise, and the need for considering noise a quality parameter when assessing habitat quality and in particular in marine protected areas). Concerned by the proliferation of Controlled Exposure Experiments (CEE), the Scientific Committee stressed that those involved in conducting, funding and managing such experiments should strive for international cooperation, coordination and information exchange and where possible joint programmes of work. Avoidance of duplicative or overlapping research will also help to (i) prevent any unnecessary introduction of noise into the marine environment and (ii) achieve optimal scientific and conservation value from CEEs.

Considering that certain anthropogenic noise can injure and kill some species of cetaceans, notably beaked whales, the Scientific Committee recommended that information on the distribution

and habitat use of Cuvier's beaked whales in the Mediterranean be assessed and communicated to relevant authorities and noise producers (e.g. national navies, NATO, seismic exploration companies, permitting authorities, etc.) to prevent the use of high intensity noise in potentially high density or highly suitable areas for this species. Whilst noting that the future basin-wide survey will be invaluable to strengthen understanding of Cuvier's beaked whale ecology in large portions of the Agreement area where such knowledge is currently absent, the Committee recommended that a habitat use modelling exercise (such as that available for the northern Alborán Sea) be attempted for other parts of the Mediterranean Sea as appropriate, using existing datasets. Accordingly, the so-called "Ziphius modelling initiative" was initiated to strengthen understanding of Cuvier's beaked whale ecology in large portions of the Agreement area where such knowledge is absent, and is currently in progress under the coordination of Ana Cañadas, in collaboration with a number of research groups holding effort and sighting data in the area.

Finally, work is in progress to execute the tasks listed in Resolution 2.16. In particular:

(a) the Scientific Committee will continue describing the extent and temporal variability of the habitat of species that are known to be particularly vulnerable to man-made noise (e.g., *Ziphius cavirostris*). The modelling exercise currently undertaken should be further supported by the parties through the Secretariat's actions, ensuring that more of the existing data be made available, to increase the model's robustness and to compare different algorithms for best results.

(b) parties and bodies responsible for the establishment of marine protected areas (MPAs) in the ACCOBAMS area should be encouraged to incorporate concern for noise into criteria for MPA establishment. Furthermore, parties should recommend avoiding any significant production of man-made noise in cetacean MPAs of their jurisdiction, and competent authorities should recommend avoiding producing significant noise in MPAs beyond national jurisdiction, in particular in areas containing critical habitat of cetaceans likely to be affected by man-made sound.

(c) parties should recommend using special caution and transparency in the production of underwater noise in the Agreement area, through Vol. 3, N. 2, 2007 page 15



the application of the ACCOBAMS "Noise Guidelines". This will involve including in national reports to the ACCOBAMS Secretariat the listing of any activity that parties may have authorised likely to introduce in the environment harmful underwater noise, with adequate details on area, time, and type of noise involved.

(d) The Scientific Committee should start an effort to map noise in the ACCOBAMS area to detect sites most affected and determine if ceta-cean critical habitats are involved.

(e) The Secretariat and parties should strengthen stranding networks throughout the Agreement area, and provide for an increase in the abilities to promptly investigate and intervene in case of atypical mass strandings. This should include creating capacity to collect tissues and perform necropsies, in manners that are appropriate to detect the occurrence of gas and fat embolic syndrome in stranded cetaceans. Finally,

(f) parties and the Secretariat should support ongoing international efforts in the development and adoption of vessel-quieting technologies.



Ship strikes

The potential threat of ship collisions to the conservation of some cetacean populations in the ACCOBAMS area, especially of large whales, is significant. The two species most vulnerable within the area are the fin whale and the sperm whale. Such threat has been exacerbated by the increase in vessel traffic, including fast ferries, over recent years, throughout the area including within existing sanctuary areas. Actions to be undertaken under this topic fall under two categories: assessment of impact at the population level and development of mitigation measures.

In accordance with the decision of the AC-COBAMS parties, a workshop on large whale ship strike in the Mediterranean Sea was held in Monaco (14-15 November 2005) in collaboration with the Pelagos Sanctuary. The main objectives of the workshop were to synthesize the knowledge of ship strikes of fin, sperm, and other large whales in the Mediterranean Sea; to determine data gaps vital to a more comprehensive assessment of the issue; and to discuss and prioritise mitigation and management measures that might effectively be employed to address the issue.

The Scientific Committee welcomed and endorsed the report of the workshop and in order to maintain the momentum generated by the initiative, recommended creating a Coordination Group to detail and prioritise the research and management recommendations developed during the Workshop. The report of the ACCOBAMS ship strike workshop can be found on

http://www.accobams.org/ 2006.php/publications/all



See FINS 3(1) - 2006 for a special coverage on ship strikes in the ACCOBAMS area The Group, established in 2006, will detail and prioritise the research and management recommendations developed during the November 2005 Workshop, by liaising with parties and range states to obtain information to identify zones containing critical habitat of cetaceans susceptible to be impacted by colliding vessels (also on the basis of mathematical models to predict whales' presence and risk levels), where mitigation measures could be prescribed to transiting vessels. This will be achieved by: (a) reporting from maritime companies, through top-down (i.e., regulatory) and bottom-up (i.e., awareness, involvement) approaches; (b) reporting of ship strikes referring to available evidence from post-mortem (trough detailed necropsies) information from strandings networks; (c) reporting of ship strikes referring to photo-identification studies (photographs

may contain evidence of non-lethal encounters with vessels); (d) mapping the temporal and geographic distribution and abundance of cetaceans in relationship to similar information on vessel traffic. This will ultimately lead to the creation of a Mediterranean network, including ACCOBAMS range states, ACCOBAMS Partners, different research institutes, and concerned shipping organisations to build a central data base on ship strike data, to facilitate information exchange and data sharing. A link with the IWC vessel strike data standardisation group will be established. Concurrently, while these information are achieved and critical areas for involved species are identified, the mitigation measures proposed during the workshop will be initially tested in targeted areas, and successively, if proved to be efficient, proposed for implementation on a wider scale. 🟹

Whale watching

Guidelines for commercial cetacean watching activities can be found on

http://www.accobams.org/2006. php/documents/show/84

A database on commercial cetacean watching activities in the ACCOBAMS area can be consulted on

http://www.accobams.org/ database/ Scientific Committee work on whale watching has produced thus far:

1) Guidelines for commercial cetacean watching activities in the Black Sea, the Mediterranean Sea and Contiguous Atlantic Area, and

2) a web-based, searchable database of commercial whale watching operators in the AC-COBAMS area to collect information on whale watching activities throughout the Agreement area, and to provide an updated source of information on whale watching operations in the region.

Such preparatory work was needed to support parties and range states in the timely adoption of appropriate legislation and rules while the industry is developing, and to enable the gathering of updated knowledge on whale watching activities throughout the Agreement area. This knowledge will be essential for: the description of the industry's development; for the assessment of its potential impact on the targeted cetacean populations; for the assessment of the conservation, scientific, educational and economic values of whale watching; for the promotion of the development of responsible whale watching as a complementary or alternative activity to problematic practices (e.g., fishing in competitive situations with dolphins); and,

ultimately, for the orderly management of such activities.

Accordingly, the Secretariat has started monitoring the status of whale-watching activities within the Agreement area, in cooperation with the Pelagos Sanctuary, to maintain a census of the operators, monitor the industry's development and growth and identify potential problems before they become too difficult to manage. This includes the preparation of information material for operators, the definition of an eco-label, the updating of the ACCOBAMS website, and a census of operators.

In addition, the Scientific Committee recommended that the whale watching guidelines currently adopted by ACCOBAMS be kept updated on a regular basis. Given the evolving nature of whale watching and the complexity which intrinsic in the regulation of this industry, the existing guidelines should be constantly improved as appropriate on the basis of newly available information and experience, keeping into account that operational procedures must be tailored to each specific case. The Committee therefore continues to maintain a Working Group tasked with further elaborating and updating the guidelines, particularly in cooperation with existing organizations active in whale watching hot spots. 🍸



Marine Protected Areas

The issue of how to proceed with marine protected areas (MPAs) was discussed during the 1st meeting of the Scientific Committee (Tunis, 3-5 October 2002), where it was recalled that the parties to ACCOBAMS, with Resolution 1.9 (on the implementation of conservation priorities), had identified four key areas containing critical habitat for cetaceans, in which pilot conservation and management projects be developed and implemented as soon as possible: (a) the coastal waters of western Greece and the small islands archipelago centred around Kalamos (important for Mediterranean short-beaked common dolphins); (b) the coastal area of southern Crimea, Ukraine, comprised between Cape Sarych and Cape Khersones (important for Black Sea harbour porpoises and common bottlenose dolphins); (c) the offshore waters of southern Crete, Greece (important for sperm whales); and (d) the waters of the Loŝinj - Kreŝ Archipelago, Croatia (important for Mediterranean common bottlenose dolphins). The issue was further addressed by the Scientific Committee during its 2nd meeting, remarking that MPAs containing critical cetacean habitat should also be envisaged in other areas in addition to the four identified by the Meeting of the parties. It was thus decided that proposals for additional areas in which to undertake such actions should be solicited from the conservation community at large. In order to proceed in this direction, the

four regional representatives within the Scientific Committee were requested to solicit proposals from the scientific and conservation community at large for the future consideration and possible designation of MPAs to protect cetacean critical habitat in the Agreement area. As a result of this activity, a draft programme of work on MPAs for cetaceans in the ACCOBAMS area was developed.

An ad hoc workshop was held in November 2006 as a side event to the 4th meeting of the Scientific Committee, with the aim of reviewing the draft programme of work, drafting criteria for the selection of MPAs, preparing a special format for MPA proposals, and gathering information on sites that contain important cetacean habitat in the Agreement area. During the discussion on criteria, a special attention was given to the value of the use of spatial modelling methods to determine the presence and extent of important habitat for cetaceans on sound scientific bases. A special format provided by the Secretariat was examined and adopted pending a test run of a proposed Specially Protected Area of Mediterranean Importance (SPAMI) in the Alborán Sea. Finally, a number of candidate areas were examined and discussed, and the following recommendations from the Scientific Committee were sent to the parties:

Guidelines for the establishment and management of Marine Protected Areas for cetaceans can be obtained as MOP3.Doc61 from:

http://www.accobams.org/ 2006.php/parties/documents/5





(a) proceed with the 2002 commitment to establish MPAs in Kalamos, Greece (for common and bottlenose dolphins), western Crete + S. Peloponnesus, Greece (for sperm and Cuvier's beaked whales), and Cape Sarych to Cape Khersones, SW Crimea, Ukraine (for bottlenose and common dolphins and harbour porpoises), with a special urgency and concern for the situation of Kalamos.

(b) consider the establishment of MPAs having special importance for Mediterranean common dolphins (as indicated in the Conservation Plan for that species), including: (i) Alborán Sea, Spain-Morocco-Algeria; (ii) waters surrounding the island of Malta and south-eastern Sicily, Italy; (iii) Eastern Ionian Sea and Gulf of Corinth, Greece; (iv) Gulf of Saronikos and adjacent waters (Argo-Saronikos and southern South Evvoikos Gulf), Greece; (v) waters surrounding the Northern Sporades, Greece; (vi) Northern Aegean Sea, Greece; and (vii) waters surrounding the Dodecanese, Greece.

(c) recommend the completion of the establishment of an MPA in the waters surrounding the island of Ischia (south-eastern Tyrrhenian Sea, Italy) to protect cetaceans, to mitigate threats to Mediterranean common dolphins such as boat disturbance and uncontrolled fishing.

(d) give full consideration to the creation of the following MPAs in the Black Sea: (i) Cape Anaklia to Sarp (Georgia), representing winter habitat for common dolphins and harbour porpoises; (iii) Kerch Strait (Ukraine, Russia), used by semi-resident Black Sea bottlenose dolphins and as a migration corridor for several thousand harbour porpoises moving to and from the Azov Sea, and (iii) the Turkish Strait System and the Marmara Sea;

(e) give careful consideration as candidate MPAs to two further areas: (i) the Strait of Sicily including associated islands (Italy, Malta, Tunisia, high seas), where preliminary data suggest that this highly productive area linking the eastern and western Mediterranean, containing a major tanker shipping lane, comprises important habitat for several cetaceans including fin whales and bottlenose and common dolphins; and (ii) the Amvrakikòs Gulf (internal waters of Greece), a semi-enclosed area inhabited by about 150 bottlenose dolphins in one of the Mediterranean areas where the density of this dolphin is highest.

The Committee further remarked the opportunity for the Secretariat to interact with relevant bodies (e.g., the European Commission, the RAC/SPA and the Black Sea Commission) to make full use of existing regulations to promote the establishment of MPAs for cetaceans in the Agreement area. Parties and range states should communicate to the Secretariat candidate areas within their territorial waters and the adjacent high seas to be considered as MPAs for cetaceans, and to be organised within an Agreement-wide network of cetacean MPAs. Parties having the responsibility of cetacean MPAs should ensure that these are provided with adequate management and monitoring, to guarantee maximum effectiveness. Finally, parties and bodies responsible for the establishment of MPAs in the ACCOBAMS area should incorporate concern for noise into criteria for MPA establishment. 📉





Emergency Task Forces

During the first meeting of the parties a number of implementation priorities were adopted, including one concerning the establishment of an Emergency Task Force for special mortality events. The parties recognised that "... in recent years the Agreement area has been the scene of major cetacean mortality events, involving mass strandings over wide geographical areas, which have evoked great concern and have attracted considerable attention from the scientific community. To face possible new mortality outbreaks, as well as major accidental events affecting cetacean populations or their critical habitats, the establishment of a Task Force for marine mammal mortality and special events, formed by international experts, is highly recommended. When necessary, and if requested by the Secretariat, the Task Force will convene and arrange for a small team of experts to assess the situation on the ground and advise national groups. The development of intervention protocols and of code of conducts to be followed in case of emergency situations should also be included within the tasks of such group".

The Scientific Committee agreed that for optimal effectiveness the Emergency Task Force (ETF) should be subdivided in different sections, having different expertise requirements, respectively addressing: (a) unusual mortality events including epizootics and atypical mass strandings (e.g. of beaked whales caused by anthropogenic sound), (b) oil or chemical spills affecting cetacean critical habitat, and (c) single individual

emergencies: live stranding, net entrapment, entrapment in a bay or harbour.

Concerning the "mass mortality" ETF to address unusual mortality events including epizootics and atypical mass strandings (e.g. of beaked whales caused by anthropogenic sound), draft "Guidelines for a Coordinated Cetacean Stranding Response" were recently prepared by the Secretariat through the support of a consultant, and these will be used as a working document in an *ad hoc* meeting of experts which will be organised in the near future, to finalise procedures. The Committee also recognized the need that a network be established as well, and that specialized pathologists be trained.

With respect to the "maritime disaster" ETF designed to address oil or chemical spills affecting cetacean critical habitat, it was agreed that the Secretariat should be encouraged to pursue the contacts with REMPEC and the Black Sea Commission in order to define a joint programme of work.

Concerning the problems posed by single animal stranding emergencies, it was agreed that the matter was already being dealt with through the live stranding effort, first addressed during the ACCOBAMS rescue workshop (Monaco, November 2006), and that it should be further pursued within the framework of the Live Strandings advisory panel.

Guidelines for a coordinated cetacean stranding response can be obtained as MOP3.Doc21 from:

http://www.accobams.org/ 2006.php/parties/documents/5

> Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC): http://www.rempec.org/

Referencing the information contained in FINS

FINS is a newsletter, not a peer-reviewed journal, and for this reason citing uncritically articles appeared on FINS may be discouraged by the editors of scientific journals. However, to cite factual information reported on FINS, which has not appeared elsewhere (e.g., documented strandings or sightings of unusual species), it may be useful, sometimes, to make reference to a news item appeared on FINS. In such cases the following format, which is applied for exemplification purposes to an article from a previous issue, may be adopted:

Smith G. 2004. Interactions between cetaceans and butterflies in the Peloponnese. FINS, the Newsletter of ACCOBAMS 8(2):21-22.

(available from http://www.accobams.org/2006.php/newsletter/all).



Capacity building

Efforts will continue to implement the AC-COBAMS strategy for capacity building, to ensure that the abilities needed to fulfil its mandate are available. Such strategy simultaneously addresses the technical, financial and administrative aspects, and strives to strengthen: (a) the institutional capacity of the Agreement itself and of its organs, as well as that of the parties, public administrations, the research and teaching institutions, the media and non-governmental advocacy organisations; (b) the technical capacity of working on the priorities adopted by the parties in the different fields concerned (e.g., management, science, training, education, public awareness), including individual capacity building of law enforcers, MPA managers, researchers, teachers, media operators, etc.; and (c) the fundraising capacity to secure from both the public and private sectors the financial resources needed to fulfil the goals and objectives of the Agreement.

For maximum effectiveness, the capacity building strategy should keep into account the following considerations:

(a) the current heterogeneity of the distribution of management and research abilities across the Agreement area must be addressed through diffused training initiatives encompassing the full range of needed expertise, coupled with followup support to the trainees once they return to their home bases;

(b) existing research teams with proven expertise and a sound professional record, currently functioning as repositories of cetacean conservation know-how in the area, should be supported and utilised to their full potential to promote the diffusion of relevant capacity;

(c) to facilitate access to specialised literature, currently insufficiently available in most of the Agreement area, efforts should be made to create digital libraries to be distributed electronically to corresponding research teams, and support should be provided to existing libraries containing significant cetological bibliographic collections, to ensure continued updating and expansion, to facilitate access to information to the local scientific community, and to provide a framework for capacity building that will encourage documented cetacean research in the Agreement area; (d) the cooperation of all individuals and institutions already engaging in capacity building in the ACCOBAMS area with independent programmes are solicited within the wider framework of the Agreement capacity building strategy, through appropriate coordination by the Secretariat;

(e) existing research and teaching organisations in States from the southern and eastern Mediterranean and Black seas should be involved in the development of bilateral or multilateral projects on cetacean research and management in cooperation with other countries, in the promotion of post-graduate programs conducted to develop research activities in their waters in collaboration with universities having expertise in this subject, and in facilitating the participation of their researchers in capacity building activities supported by ACCOBAMS.

Specifically for matters pertaining to the competence of the Scientific Committee, the following initiatives are the subject of special, immediate attention:

(a) the implementation of stranding networks in countries where they still don't exist;

(b) the improvement of necropsy skills to detect disease, noise-induced trauma, and blunt trauma as evidence of ship strike;

(c) the improvement and diffusion of analytical abilities relevant to conservation science, such as those needed to the application of spatial modelling techniques to survey data to develop predictive habitat descriptions, population genetics, population assessments (e.g. line transect, photo-id mark-recapture), and acoustics;

(d) photo-identification skills involving the ability of collecting workable photographs from cetacean populations, and apply dedicated software developed through "Euroflukes" (a joint ACCOBAMS – ECS programme) to perform matching of identified individuals within and across different study projects. In particular, the Scientific Committee encouraged the optimization between the joint sighting database and Euroflukes through the final stages of matching software development and the identification of pilot groups to test-run the software.





Granting of exceptions

Article II.2 of ACCOBAMS states that any Party may grant an exception to the prohibition of any deliberate taking of cetaceans only in emergency situations, or for the purpose of non-lethal in situ research aimed at maintaining a favourable conservation status for cetaceans. The Secretariat was directed by the parties during their second meeting to develop, in cooperation with the Scientific Committee, guidelines to support member states in the process of granting such exceptions.

The Framework guidelines on the granting of exceptions for the purpose of non-lethal in situ research aimed at maintaining a favourable conservation status for cetaceans, prepared by a consultant hired by the Secretariat, were examined and reviewed by the Scientific Committee during its 4th meeting.

Considering the concerns expressed by the Committee about the complexity of the matter and the potential problems raised by the strictness of the proposed measures, a working group was established within the Committee to review by the technical part of the guidelines, whereas the Secretariat is reviewing the administrative part. A major objective of the working group, in addition to establishing a set of well-considered, precautionary guidelines to protect cetaceans from unnecessary harm, was to render the process smooth and to avoid creation of a mechanism that could impede or even preclude worthy research in the ACCOBAMS area as investigators are forced to wait to gain approval of their research projects. A draft document containing suggested modifications is in preparation, and will be circulated to the SC members for additional comments and revisions. Annex II to the draft guidelines ("Technical indicators for acceptable research methods and equipment") was also modified, describing different research techniques and prescribing best-practice approaches to be followed on a case-by-case basis. 🟹

Draft framework guidelines on granting exceptions for the purpose of non-lethal *in situ* research can be obtained as MOP3.Doc47 from:

http://www.accobams.org/ 2006.php/parties/documents/5



Captivity-related issues

The trade for the captivity industry of dolphins in the Agreement area, some of which possibly originate from the Black Sea, is apparently continuing, and captures of bottlenose dolphins in the waters of the Black, Marmara, Aegean and Mediterranean Seas, to be used in activities related to the so-called "Dolphin Assisted Therapy" (DAT), are reported to be ongoing, under authorisation by the Turkish Government. The available information points to a growth of the use of dolphins in DAT facilities across the Agreement area, which fuels such upsurge of dolphin captures. The Scientific Committee expressed its high concern about the apparent proliferation of such practice, withdrawing individuals from wild populations of unknown size and trend, and proposed respectively as Endangered (Black Sea bottlenose dolphin) and Vulnerable (Mediterranean bottlenose dolphin) by the Monaco 2006 Red List workshop, as well as leading to the possible introduction of individuals from non-native species, subspecies or populations into the Agreement area, and the risk of disease

transmission resulting from the keeping of such individuals in sea pens.

The Secretariat will endeavour, in cooperation with the Scientific Committee and ACCOBAMS Partners, to raise awareness among Mediterranean government officials, NGOs and the public at large about the predominantly commercial nature of DAT, and on the existence of readily available, cheaper and less hazardous alternatives to such therapeutic practice.

To assist ACCOBAMS riparian nations to address this issue and adopt the appropriate measures, the Scientific Committee adopted the "Guidelines on release of cetaceans into the wild", prepared by experts from the Whale and Dolphin Conservation Society. The guidelines will be disseminated by the Secretariat among parties and range states in the Agreement area, and a commitment should be made by parties to ensure their application.

Guidelines on the release of cetaceans into the wild can be obtained as MOP3.Doc58 from:

http://www.accobams.org/ 2006.php/parties/documents/5





Emerging issues

A proposal to address two emerging conservation issues in the near future will be presented at MOP3: climate change and solid debris.

Climate change

It is recognised that global climate change is occurring, and some scenarios envisage rapid environmental changes in particular in marine ecosystems of the Agreement area. The Secretariat should plan to organise, in cooperation with the Scientific Committee, concerned ACCOBAMS Partners and other related organisation (IWC, IOC, etc.), a meeting of experts to discuss:

(a) prospected and suspected impacts of a sea temperature increase on the cetacean populations in the Agreement area,

(b) implications of such impacts for the current conservation effort (e.g., a discussion of the ap-

plication of current IUCN Red List criteria in the light of climate change),

(c) recommendations for monitoring and research programmes to understand and detect climate change effects on cetaceans in the Agreement area, and

(d) suggestions for possible mitigation measures.

Solid debris (marine litter)

The Scientific Committee will discuss during its next meeting the conservation relevance to cetaceans in the Agreement area of entanglement in, and ingestion of, solid debris (plastics, pieces of fishing gear, and other materials).



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The future of ACCOBAMS: heading for the crossroads between progress and failure

by Giuseppe Notarbartolo di Sciara

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The preceding articles have succinctly described the various activities which the Scientific Committee of ACCOBAMS is currently engaged in, in its efforts to contribute to the goal of the Agreement: conserving Mediterranean and Black Sea whales, dolphins and porpoises.

These activities require regular attention, and thus, unlike other bodies of AC-COBAMS, the Scientific Committee shares with the Secretariat the burden of keeping the steam going on a constant basis. Such efforts, as mentioned earlier, are fuelled solely by motivation. Scientific Committee members include marine conservation professionals who share a very high concern for the conservation status of the region's cetaceans, and the strong wish to be given the chance to contribute to reverse negative trends. To further improve its effectiveness, the Committee is striving to muster up the available knowledge residing within the wider scientific community, to complement its action with specific expertise which may not be present within its ranks.

However, even with the valuable support of the Secretariat, the Scientific Committee can achieve precious little by itself, because the only actions that can make a concrete difference to the status of the region's cetaceans are management actions, **and these may only be implemented by decision makers**. While the politicians' accomplishments will be significantly strengthened by heeding the scientists' advice and many recommendations, the responsibility for action ultimately rests solely on their shoulders.

For this reason the members of the Scientific Committee have placed a great deal of expectation on the upcoming 3rd Meeting of Parties (MOP), and hope that the parties will decide to address with resolve the concerns that it has raised through the years and expressed in its many Recommendations.

For instance, Committee members would be delighted to learn that measures are being taken to eradicate from the region deadly fishing practices such as some types of gillnets and in particular pelagic driftnets, long ago declared illegal by all relevant authorities, including the competent Regional Fisheries Organisation. Or that it will no longer be possible for phantom navies to ensonify beaked whales' critical habitat, causing massive stranding of these vulnerable mammals. Or that all the region's nations, with no exception, will agree to refrain from issuing permits for the live capture of dolphins from populations of unknown or threatened status, to be used in commercial enterprises disguised as therapeutic practices of questionable value. Or that fishing practices are being managed in a sustainable fashion, also having an eye of regard for the wider ecosystem: like in the eastern Ionian Sea where endangered common dolphins have recently been displaced from their prime habitat by the depletion of their main prey through overfishing. Or that full support will be given to the Committee's efforts to organise a region-wide cetacean survey, at long last providing much needed knowledge about population numbers and distribution.

So far, the Recommendations from the Scientific Committee have not had a significant effect, and this is why so much hope is placed on the next MOP. In many cases, just deciding to do what nations have already agreed on doing would make a significant difference. Management measures that will benefit cetaceans, involving sustainable fishing, curbing marine pollution and protecting biodiversity, are already embedded in a large number of existing legislation and treaties. If all such measures, invoked by international, regional and national legal instruments for the wise management of human activities in the Mediterranean and Black Seas (e.g., the FAO Code of conduct for responsible fisheries, the Barcelona and Bucharest Conventions and related Protocols), were to be

A complete list of Recommendations adopted by the Scientific Committee can be found on page 5



fully implemented and enforced, many of the problems preventing whales, dolphins and porpoises from having a favourable conservation status would be challenged, and the recovery of the populations would become possible.

Fifteen years ago, addressing the world's nations gathered in Rio de Janeiro to attend the United Nations Conference on Environment and Development, S.H.S. Prince Rainier III of Monaco declared:

> Let us be careful of easy words and declarations of principle with no followup. Let us find the moral and political strength to apply the prescribed remedies so as to save the essential. It is up to us, Chiefs of State, to seize, together, this chance of long-term revival of our blue planet and so allow our children and future generations to evolve in a healthier and more equitable world.

Bringing about in the Mediterranean and Black Seas an agreement such as ACCOBAMS, in 1996, was an extraordinary accomplishment denoting the existence of an admirable vision among the region's leaders. A decade later, the Agreement is as needed as ever.

However, have the whales and dolphins noticed a difference? We suspect not; at least, not yet. Heeding the appeal of the late Prince seems like an obvious and urgent course of action to convince the world that ACCOBAMS continues to deserve a raison d'être.

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