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Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
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Announcing FINS, the new voice of ACCOBAMS in support of whales and dolphins

by Marie-Christine Van Klaveren

It is always comforting to note that the policies and the priorities adopted are found within the international community; in a word, they "are in the wind". The current debate within the UNEP family is focussed on the reinforcement of the scientific bases for sound decision making.

The reinforcement of the scientific bases passes through the increase of the geographic coverage of the monitoring activities, and by the reinforcement of capacity building, which creates a community of scientists able to provide useful information for decision-making, and able to understand the need of stakeholders. These were the issues that the first Meeting of the Contracting Parties to ACCOBAMS adopted as a priority, and which provided the focus for the Agreement's activities during these last two years.

The protection of biological diversity in the high seas is also a concern for the international community, which snugly fits within the goals and the implementation policies of ACCOBAMS. Although absent from the debate within the Djakarta Mandate of the Convention on the Biological Diversity (CBD), the protection of the high seas was an element of the preparation of the Johannesburg Summit (WSSD), was adopted in its Action Plan, was followed by a Resolution of the UN Assembly debate on the Law of the Sea, and finally received an important place in the Resolution and programme of work of the last Conference of the Parties of CBD.

Our region had a pioneering role in this context. I do hope that more progress at our level could help to overcome the concern and opposition expressed by some countries on this matter. The World Conservation Union (IUCN), as well as some key countries, took a very effective leadership on the protection of the high seas. I am confident that these leading organisms will be able to build upon the momentum created by the last COP of CBD, and produce the juridical tools that we need to go forward. ACCOBAMS will closely follows their progress and collaborate to this end.

I seize this opportunity to stress that the Secretariat of ACCOBAMS could not maintain its effectiveness without the contributions from the Partners of the Agreement. This is a confirmation of the benefits deriving from such institutional partnership, as provided for by the decisions of the Contracting Parties.

In preparing for the next Meeting of the Parties of ACCOBAMS (Palma de Majorca, 9-12 November 2004), it becomes obvious that partnerships must be further enhanced, particularly to promote capacity building and monitoring efforts across the wide expanse of the Black and Mediterranean Seas. Our knowledge needs to be increased to raise the stakeholders' awareness, to provide them with sufficient background for decision making, and to guide them to adopt the right decisions. In this context, cetacean conservation issues have yet to raise to the appropriately high level of biodiversity conservation policies in some of the ACCOBAMS countries, and too few scientific and technological structures are being involved to properly address such issues.

These are all very good reasons for stimulating and enhancing the involvement of the greater NGOs in our region. Since the beginning, ACCOBAMS benefited from the support of such NGOs, and it is my most sincere wish that in 2004 such support will grow even further. Science in the ACCOBAMS context is badly needed to drive decisions. Active NGOs are very aware of this fact, and focus their programmes to support Governments and other stakeholders to conserve our cetaceans populations.

The greater our knowledge of these animals - which can reach the point where we can give names to individuals thanks to photo-identification-based studies of their social behaviour and ecology – the greater will be our respect for them, and our desire of protecting them.

This is why I believe that high-level mammals

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such as cetaceans should not be merely considered "air-breathing fishes", but flagship species, symbols of nature conservation, and a link between mankind and nature.

Such concern is typical of the goal of animal welfare-oriented NGOs. I know that sometimes merging ecological considerations with animal welfare can be criticized. However, ACCOBAMS focuses on a group of species that cannot be considered without bearing in mind their high taxonomical level. Many of their threats, in particular those related to interactions with fisheries, are generated by their intelligence and by their special ways of associating themselves with human activities. Studies of cetacean behaviour are fundamental for the design of appropriate conservation actions. The Agreement itself prohibits any kind of harassment, even through scientific endeavour, unless it is needed to promote these animals' welfare.

ACCOBAMS and its Partners will continue to join efforts to promote scientific knowledge, for the benefit of future generations of coexisting humans and cetaceans.

FINS is the new voice of this effort. It is latest generation of the ACCOBAMS Bulletin, our tool to remain connected, more flexible than its predecessor and complementary to our Website. In conjunction with the Editorial Board I will do all I can to ensure that all contributors will find FINS appropriate for the hosting of their views, and that all readers will receive from it the most accurate and balanced information.

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Sharing our seas with whales and dolphins

by Sidney Holt

As the crisis of sea fishing extends from regional problems to global concern there is increasing interest in finding scapegoats in order to avoid confronting the reality of mismanagement - or non-management - of fisheries since the industry passed from sailing to powered vessels in the late nineteenth century. For this purpose the cetaceans, and especially the large whales, are an obvious target: they are big and visible to us, and individually no doubt consume large quantities of fishes and other marine organisms even though they are far less numerous than they were a century or so ago.

It is therefore understandable that those countries and corporations with large fisheries interests would seek at this time to engage in a pre-emptive war against the marine mammals, especially the cetaceans. That is exactly what the Governments of Japan and Iceland, and to a lesser extent Norway, have been doing, with increasing vigour, for the past decade. And the "threat" that whales supposedly pose to fisheries now provides the rationale for continuing and expanding programmes of "scientific whaling" - the killing of whales 'for scientific purposes' - through a legal loophole in the International Convention for the Regulation of Whaling (1946), under which the International Whaling Commission (IWC) operates - by Japan in the Antarctic and North Pacific, and Iceland in the North Atlantic.

The Japanese efforts were originally oriented to the abolition of the indefinite moratorium on all commercial whaling that came into effect in 1986. At first it was said that the moratorium would allow minke whales in the southern hemisphere to increase so much that the recovery of the blue whale under "protection" would be impeded, by competition for a major food resource – Antarctic krill, an abundant Euphausiid. Failure to note any increase in blue whales was cited as support for this hypothesis, until it emerged that Soviet whalers had in any case continued to hunt blue whales in significant numbers after they were supposedly protected. But, in any case, methods of counting whales are not adequate to detect rather small expected rates of increase over just a few years.

Unlike Norway, the governments of Japan and Iceland do not have standing "objections" to the IWC's moratorium decision and are therefore legally bound by it. However, the whaling interests in both countries have always been busy finding ways of getting around that restraint, and the "scientific whaling" ruse was invented and put into effect by Iceland in the late 1980s. It did not last long because of a secondary boycott of Icelandic cod and other fish products put into effect by, especially, German wholesale importers. But Japan, having seen that Iceland's activity would not have been stopped by solely diplomatic/legal means, did go ahead in the Antarctic. The catching of minke whales there was at first advertised as a means of obtaining better estimates of the natural mortality rate of that species and, when this failed, the rationale shifted to claims to be obtaining data that would improve the implementation of the IWC's new management paradigm - the Revised Management Procedure (RMP). This, also, was a failure at the scientific level; hence the subsequent move to the "whales are eating our fish" gambit.

An advantage of this move was that it opened the way to expansion of scientific whaling to other species and in other regions. The expansion from the Antarctic to the North Pacific was made primarily for economic reasons; this whaling, which is commercial in fact though not in name, and which is subsidised by the State, is conducted by a single pelagic whaling "expedition" (factory ship plus catcher boats) which can best be employed alternately in the northern and southern summers. The rationale of seeing what the whales are eating naturally can be – and has been - applied to the other species such as Bryde's and sei whales, and even to the sperm whale, which is otherwise and specifically protected under another IWC decision. The tactic is also more

plausible in the North Pacific than in the Antarctic, because the whales there are indeed consuming some fishes of current human interest, not merely krill and copepods.

That is the background to the present confrontation between groups of states in the IWC. But the scientific whaling is, in its turn, simply the precursor to a plan for "scientific multi-species management" involving large-scale culling of big predators for the purpose of maximising the human catches of their prey. That is the gist of the message being conveyed relentlessly by Japanese officials not only to the IWC but to a whole series of international conferences, convocations and negotiations, including those held under the auspices of the United Nations system, especially FAO - the Food and Agriculture Organisation based in Rome. This and other signals tell us that what is now at stake is much more than the lifting of the commercial whaling moratorium. How else can one explain the absurdity of the claim by the Japanese delegation to the UN Conference on World Food Security that such security depends on the resumption of whaling, now an economically derelict industry? The reality is that if whales ever do again play a significant part in human nutrition, as they once did, it will be when they have been left alone to recover in numbers over the next century or two. We can surely leave it to future human generations to pick up again the fierce debate about whether it is ethical to eat whales and dolphins.

ACCOBAMS is both a political and a scientific body, so I want now to give attention to the relation between science and politics/management/conservation in this context. First, when confronted with the argument that wild predators are consuming, inter alia, species of prey of commercial interest to humans so they should be "culled", the usual reaction of biologists - especially the mathematically inclined ones - is to point to the complexity of the food chains or web. Normally the diet of the whale or dolphin may consist only partially of species of economic interest to humans, and also they are rarely the sole wild predators on those species; they are often not even the main predators on the species. Add to this other inter-species interactions, cannibalism, other forms of competitiveness than predation, all masked by natural or human induced environmental changes, and the result is often that we, as scientists, can say little more than that it is by no means sure that culling some cetaceans would improve fisheries. Sometimes we can go further and say that such inadequate data as we have suggest that culling the big predators would actually harm the fisheries that target some of their prey species.

Popular pamphlets have been published to explain all this, and some of them do it quite well. UNEP, with a coalition of environmentally concerned NGOs, has published a competent and useful "Protocol" that sets out the data and modelling requirements for a rational evaluation of culling proposals. But I think a consequence of these efforts might be to induce an effective rejection by many lay persons, politicians and administrators, media persons, people in the fishing industry, and the general public, of the scientific approach . They can conclude that it is all so complicated that we can better use our "common sense", and that tells us that if whales and dolphins eat fish then if there were fewer of them we would get more; and, anyway, scientists are always asking for more money for research! Some of us would even be wary of directly confronting that attitude, believing that no matter how many "data" were obtained we might not be able to provide sure models of how marine ecosystems would react to such culling, just as we are severely limited, in principle, in the prediction of other complex systems, such as the weather. As an example of deeper problems, consider the fact that multi-species models of marine systems do not take account of the likelihood that marine mammals can, and do, deliberately select their diets, and switch their preference just as do terrestrial mammals – and perhaps birds - rather than swimming about gulping down what happens to be there that is edible.

The propaganda campaign in favour of whale culling, by Japanese authorities, has been largely confined to demonstrating that, globally, the cetaceans consume far more "living marine resources" than the recorded catches by humans. This is reinforced by leaflets and booklets with lurid photographs of whale stomachs full of fishes that appear also on Tokyo fish market. They seem to have decided that the "revelation" of stomach contents is adequate for their political purpose, and that looking closely at ecosystems through multi-species models would only confuse the argument. It is therefore perhaps worthwhile, though not scientifically so interesting, to examine critically the "evidence" of huge consumption of marine resources by cetaceans.

This has yet to be done comprehensively and decisively. A workshop organised in Venice by the Commission for the Scientific Exploration of the Mediterranean Sea (CIESM) recently began to look at some aspects of this issue. Generally, the examination of stomach contents is only for the purpose of determining what the predator has been eating, not how much. Even in that very limited task serious problems are met in taking account, for example, of the different rates of digestion (and hence disappearance) of different prey species. And the variation from one stomach content to another is enormous, thus creating serious sampling problems. Then, the quantities eaten are estimated by metabolic calculations that simply involve scaling quantities measured in experiments with captive mammals with the size distributions of the wild animals. There are three ways of doing that (which were compared at an IWC workshop last year (boycotted by the Japanese authorities) and they give widely differing results.

The total consumption figures compiled by scientists associated with the whaling industry were dominated by the vast quantities of krill and copepods presumed to be eaten by baleen whales in the southern hemisphere; but those species are, of course, of very limited commercial interest to humans. We are left with the fact that dolphins and some whales do eat, in the northern hemisphere, some fishes, squids etc. of interest to fishers. But we are very far indeed from being able to evaluate the consequences, and even further from an ability to predict the further consequences of any systematic effort to decimate the cetacean "culprits".

I think it may in some ways be more important to look at the quantities that are opposed to the consumption by cetaceans: i.e. the human catches. Commercial fishing is extraordinarily inefficient, as well as damaging in terms of use of living marine resour-

ces, and not only because of the management failures that have allowed the depletion of most fish stocks for profit, and the near biological extinction of some of them. The approximately 100 million tonnes of catches recorded annually, a figure that is contrasted with the claimed several hundred million tonnes consumed by cetaceans, is in fact a small proportion of what humans actually extract or kill, directly, and as measured by its contribution to human nutrition. Firstly, nearly half of the recorded catch is reduced to fish-meal and oil, the main use of which is in livestock feeds. For every tonne of fish processed in this way we might get 100kg of farmed trout, salmon or chickens (and the oil going into salmon feeds now is so contaminated with POPs etc that it has recently been shown to be dangerous to eat the "farmed" fish frequently. But that's another story!)

Secondly, huge quantities of fishes and other organisms are discarded at sea because there is no market for them at that place and time. There are few estimates of the quantities involved but they seem to be of the order of scale of the total recorded landings. Thirdly, similarly vast quantities of living materials are thrown overboard from trawlers as "rubbish"; they are not even noticed as "discards".

Fourthly, some kinds of fishing gears destroy "marine living resources" directly, such as benthic animals mangled by bottom trawls. There are few estimates of quantities but those few that are in the scientific literature suggest the global quantities are very high. Fifthly, of the landed catch that goes to direct human consumption only a small proportion actually finds its way into human stomachs. Take away the heads, bones and organs, and less than half of that part of the landed catch designated as for human consumption actually enters the human food chain. Of course the waste may in some circumstances be utilized, partly, for other commercial products (just as baleen whale oil was used in the early part of the 20th century largely to make the munitions with which the first World War was fought) but that is hardly relevant if the argument is about World Food Security!

Overall, it may be said that humans have a vastly greater direct impact on living marine resources than do the cetaceans, while actually securing far less metabolic input. Additionally, of course, there are the indirect and incidental impacts of fishing of which researchers on cetaceans are well aware - incidental catches of dolphins, seabirds and unwanted fish species in nets and on lines. Possibly more important is an indirect effect against which provision is made in the UN Convention on the Law of the Sea but which has largely been ignored: the requirement that fisheries - especially on species that form the prey of others - be so managed that the productivity of dependent species (i.e. the other predators) is not adversely affected.

Returning now to the matter of the stomach contents of "scientific" whales and stranded dolphins and porpoises, the point was made over and again, at the CIESM workshop mentioned above, that species overlap between the diets of the cetaceans and the catches by humans does not mean they are competitors, it only indicates a potential for competition. Ecologically, existence of competition requires a contrary effect, i.e. an increase in one will cause a decrease in the other, and vice versa.

And, finally, a comment on sustainability, and a warning about multi-species and ecosystem management, two related ideas that look attractive to most ecologists and some managers. When, in the 1960s, it was evident to all that the baleen whales in the Antarctic were desperately over-fished, it dawned on some whaling operators that returning to a sustainable catch level would probably be socially and financially extremely uncomfortable if not painful. They opted, while paying lip-service to "conservation", to devise an exit strategy that required continued whaling with high intensity for a number of years. In this way biologically and economically unsustainable whaling turned into forms of sustainable development in the economic sense. Specifically, blue and fin whales were converted into shipbuilding industries in Norway and a road haulage corporation in Scotland.

The political world has adopted a sustainability paradigm and it is now politically difficult to argue openly for unsustainable use of renewable living resources. Yet, with a global fisheries crisis, not unlike the whaling crisis of the 1960s, I imagine that some fishing corporations are looking to exit strategies rather than painful, selective down-sizings. Here, just as whalers have been ready to highjack the IWC's provision for samples of whales to be killed for scientific purposes, there is some interest in a corresponding distortion of the ideals of multi-species and ecosystem management. The logic is simple in concept: continue to deplete (and make profit from) some very high value predatory species (whales, tunas, others) with the purported objective of benefiting the smaller, but more numerous and - in overall value – still profitable prey species. As scientists we need to be aware of how easily interesting, but perhaps rather idealistic, concepts can be perverted for shorter-term economic gain.

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Want to send news and articles to FINS? We welcome contributions in the field of cetacean conservation from all parties. Please send proposals, suggestions and items for the calendar of events to: G. Notarbartolo di Sciara, disciara@tin.it

The Scientific Committee of ACCOBAMS

by Giuseppe Notarbartolo di Sciara

The Scientific Committee of ACCOBAMS is the most active collegial organ of the Agreement, meeting approximately once every year, but also conducting a series of activities on a continual basis. This is possible because most members of the Committee are professionals in the field of cetacean conservation science, and therefore the Committee's activities are natural ingredients of their professional life. The rules for the composition of the Committee were specifically designed to ensure that, at a minimum, a substantial portion of the Committee is made of cutting-edge specialists of cetacean ecology and conservation. This ensures that the Committee is a truly scientific, rather than bureaucratic body, and will always be able to fulfil its role of advisor to the Meeting of the Parties in the best possible way.

The Scientific Committee of ACCOBAMS is composed of 12 members. Four of these are nominated by the Parties during their ordinary meetings, each of them representing a sub-region of the Agreement area (i.e., contiguous Atlantic area and western Mediterranean; central Mediterranean; eastern Mediterranean; Black Sea). To ensure maximum turnover in membership, and to afford the opportunity of participating in the Committee's activities to the greatest possible number of local scientists, the orientation is that such appointments be not renewable. Five members are nominated by the General Secretariat of CIESM (the International Commission for the Scientific Exploration of the Mediterranean) from within the Commission's Task Force on Marine Mammals. The remaining three members are representatives, respectively, of the European Cetacean Society (ECS), of the Scientific Committee of the International Whaling Commission (IWC), and of the World Conservation Union (IUCN).

The first meeting of the Scientific Committee was held in Tunis in October 2002; the second occurred in Istanbul in November 2003. Participation to the Committee meetings by invited experts and observers is being encouraged and increasingly expanded, with the aim of making such meetings an opportunity for contact and exchange among the greatest possible number of actors of the scientific and conservation community throughout the Agreement Area.

Most importantly, the Scientific Committee can be best described through the work that it carries out, in order to support the Meeting of the Parties to pursue the objectives of the Agreement, and in particular the prescriptions of the Conservation Plan. The main activities (listed and described under www.accobams.org/activities/index.htm) stem from the "implementation priorities" which were adopted by the First Meeting of the Parties (March 2002).

Some of the most relevant decisions concerning such activities, adopted at the last meeting of the Scientific Committee (22 November 2003), are summarised as follows:

Whale watching. A set of guidelines for the regulation of whale watching in the Agreement area was prepared by a working group coordinated by Mark Simmonds. Although the guidelines were formally adopted during the last meeting, it was considered helpful to maintain an operational working group, tasked with further elaborating and updating the guidelines.

Competitive interactions between dolphins and coastal fisheries. A questionnaire was prepared by a working group coordinated by Drasko Holcer. Considering that bottlenose dolphins appear to be responsible for most interactions in the Agreement area, it was suggested to combine this activity with the work in progress to develop a conservation plan for the species (see further on). Furthermore, in order to provide guidance to the Secretariat concerning how to address the frequent requests for advice received on the use of acoustic deterrent devices, it was decided to convene a meeting, as soon as possible, of a small group of experts, with the task of updating relevant guidelines that had been produced in a previous workshop convened by ICRAM in 2001. A recommendation to this effect, on guidelines for the use of acoustic deterrent devices, was also adopted.

By-catch. The Committee approved the idea of preparing a proposal for the systematic collection of information on bycatch of cetaceans in the Agreement area, to be funded possibly by the EC, and supported by other relevant international organisations, such as FAO's General Fisheries Council for the Mediterranean (GFCM). Of relevance to the issue of by-catch, it was pointed out that driftnets were coming back in use in several areas of the Mediterranean Sea, even in MPAs for cetaceans, though under different names, and with some technical peculiarities aimed at differentiating them from traditional driftnets. The situation was of great concern as driftnets are considered to be the single gear inducing the highest number of incidental captures of cetaceans, and the intensive use of driftnets in the Mediterranean in past decades had contributed to a firm position by the U.N. and at the origin of a ban declared by the EU. A recommendation on pelagic gillnets was therefore adopted by the Committee.

Protected areas for cetaceans. The usefulness of having networks of protected areas was remarked, as emphasized, most notably, by the World Summit on Sustainable Development (WSSD, Johannesburg 2002). The following actions were adopted: (a) to undertake a revision of the annotated format for the proposal of SPAMIs, to account for the special needs required in the establishment of MPAs for cetaceans; (b) to test the revised annotated format by compiling proposals for the areas identified by the First Meeting of the Parties. Priority should be given to areas under the jurisdiction of a country Party to ACCOBAMS, notably the pre-identified sites in Croatia and in Ukraine. Concerning the remaining two sites, both in Greece, a demarche should be undertaken by the Secretariat with the Greek Government to verify its willingness to cooperate in such action; (c) to identify additional areas for the designation of MPAs for cetaceans in the Agreement Area; and (d) to establish a working relationship with the body in charge of the management of the Pelagos Sanctuary in the Ligurian Sea. The regional representatives have been asked for the preparation for a list of marine protected areas in collaboration with both Sub-

Regional Coordinating Units, with the view to extending the remit of these protected areas for cetacean protection. Finally a recommendation on the establishment of a link with the Pelagos Sanctuary was adopted by the Committee.

Conservation plan for cetaceans in the Black Sea. A strategy for cetacean research and conservation actions is being developed as a matter of high priority under the coordination of Alexei Birkun. A concept paper for a medium-sized GEF project has been modified based on advice received from the UNEP office in Nairobi. In parallel, a strategic document for the conservation of Black Sea cetaceans was presented, which was prepared as a collaborative effort among scientists from Ukraine, Russia, Georgia and Italy, joined in Istanbul by Turkish colleagues. The strategy includes activities on management, education and awareness, and research and monitoring. A recommendation to the Black Sea countries, was also adopted, urging them support the GEF project with human and financial resources as a matter of high urgency.

Conservation plan for common dolphins in the Mediterranean Sea. Giovanni Bearzi gave a progress report on the project - funded by ACCOBAMS, by the Whale and Dolphin Conservation Society and by ASMS OceanCare - which began in May 2003 and will end in April 2005. Most of the threats to the relevant population have been identified, and the IUCN has listed in the most recent Red List the Mediterranean population as endangered based on a proposal of the Species Survival Commission's Cetacean Specialist Group. A dedicated space was also prepared on the ACCOBAMS Science website.

Conservation plan for bottlenose dolphins in the Mediterranean Sea. A plan proposal was presented, which had been requested to Giovanni Bearzi from the Scientific Committee in previous months. Attention was drawn again on the fact that this is one of two species listed in Annex II of the "Habitats Directive". Donors' interest for one species can result in benefits to other species, if problems such as interactions with fisheries are addressed. The Chair's proposal, to set up a small working group to draft a short document to raise the interest in appropriate circles, was adopted.

Basin-wide sperm whale survey. The International Fund for Animal Welfare (IFAW) presented a pilot study cruise it had carried out in Summer 2003 aboard the vessel "Song of the Whale" on behalf of ACCOBAMS in the central Mediterranean and surrounding areas, describing the areas tracked, and the results of their encounters with sperm whales as well as with several other species, including cetaceans rare in the region. This preliminary survey on sperm whales has provided the basis for knowing the needs for future more in-depth studies. The matter of the preparation of a future survey based on what was learned from the preliminary study was raised, and the creation of an ad hoc group to prepare a proposal with an appropriate budget towards that activity was decided.

Fin whale conservation activities. Studies of fin whales in the Mediterranean, in addition to serving in general conservation purposes for the species in the area, could provide excellent insight into the problem of collisions between vessels and large cetaceans. The suggestion was made that a workshop be organised to promote progress on the study of this species. The Committee recognised that the primary aim of the workshop should be to gather all experts involved in fin whale research in the ACCOBAMS area, to develop a co-ordinated research plan, to avoid duplication of effort and the development of agreed methods of data collection and analysis. An important component of the workshop will be to develop a framework for the sharing of existing and future relevant datasets amongst scientists in the region. The Committee recommended as well the establishment of a joint steering group to develop a detailed agenda and practical arrangements for the workshop. A recommendation to this effect was adopted. The Secretariat proposed to contact the three countries involved in the Pelagos Sanctuary to look into the possibility of collaborating in the organisation of the workshop.

Ship collisions. Two different approaches to the problem were suggested: an impact assessment and the development of mitigation measures. The Committee proposed that an ad hoc workshop be organised, possibly in cooperation with the Pelagos Sanctuary, ideally to be held in the context (e.g., immediately before) of the fin whale workshop referred to above. The Committee adopted a recommendation on this subject.

Photo-identification training activities. A pilot course was organized at the Tethys Research Institute field station in Kalamos, Greece, attended by Black Sea researchers (two from Ukraine, two from Russia and two from Georgia). Intensive training activities, centred around dolphin photo-identification methods, were conducted both at sea and at the base. A follow-up was organized in Balaclava, Ukraine to examine the work done by Black Sea researchers in the Kerch Strait. Overall, this experience was very successful. The Secretariat mentioned that a program with Georgia related to this issue is being organised for 2004.

Tissue banks. A progress report on the establishment of a system of tissue banks in the Agreement area was introduced by the Chair. Daniel Cebrian (RAC/SPA, Tunis) informed the participants about the symposium scheduled for 2004 on cetacean conservation in Libya, a country willing to become active in cetacean issues. An important part of the symposium will be a training workshop on tissue banks, mainly addressed to participants from the southern and eastern Mediterranean coasts. Invited expert Prof. Bruno Cozzi from the University of Padua informed that both the Universities of Padua and Barcelona are participating in the creation of tissue banks within the Agreement area.

Emergency Task Force. A programme document was presented by the Chair to stimulate progress on this action, which had been rather slow in the past. Mark Simmonds agreed to coordinate the working group to carry out what is needed for its implementation.

Strandings. Toni Raga presented the stranding database prepared by the University of Valencia, explaining that the database was originally intended for the Barcelona Convention area, but has now been adapted to host the entire Agreement area. Data retrieval has started and national focal points and coordinators should provide their countries data for 2000, 2001 and 2002 at this time. The Chair indicated that there is also a need to develop the institutional, operational and logistic framework for the imple-

mentation of an Agreement-wide stranding network, which would function as an umbrella to the assemblage of national stranding networks within both Member States and Riparian States. A basic element of this effort lies in the identification of expertise for the preparation of such a complex project. The Committee adopted a recommendation to all Member and Range States to promote the implementation of national stranding networks. The importance of disposing of adequate methods and technologies to address live strandings was also noted. Anastasia Komnenou proposed that such a delicate and complex topic be the subject of an ad hoc meeting, which she would be ready to organise in Thessalonica, Greece in 2004, in cooperation with Mark Simmonds.

Anthropogenic noise. During its first meeting in Monaco in March 2003, the Bureau of ACCOBAMS urged the Scientific Committee to prepare a recommendation directed to government agencies, the scientific community, the industry, and the military, on the use of active sonar and other man-made, high level underwater impulsive sound. A brainstorming meeting on the effects of anthropogenic noise on cetaceans in the Agreement area was therefore held one day before the 2003 Committee meeting. The Chair briefly summarised the results of the brainstorming meeting before opening the floor to a discussion aimed at helping to draw up a recommendation. Concern was expressed by Committee members on the actual and potential negative effects of anthropogenic noise on cetaceans in the Agreement area. There is now general acceptance that mass strandings of cetaceans, and most notably of beaked whales, may result from military sonar activities, also within the Agreement area. It was recognised that a number of monitoring and research projects need to be initiated to address questions related to the possible effects of anthropogenic noise in the ACCOBAMS area, including mapping of local ambient noise, the assessment of potential acoustic risk for individual species, and the carrying out of targeted, well-defined experiments to identify and quantify actual and potential risk for such species. The discussion also dealt with the need for specific management measures, such as avoiding the use of military sonar in areas known to contain habitat of Cuvier's beaked whales, which can be implemented already without invoking the need for further research. The Committee recommended that existing guidelines for the use of military sonar, developed by NATO and possibly by other organisations, be made available for review, with a view to developing common sets of guidelines for use in the Agreement area. Throughout the discussion, it was noted that the Committee did not imply that military sonar represents the only important threat to cetaceans related to anthropogenic noise in the Agreement area. Rather, it reflects the fact that the cause-effect link in this situation is best understood at present. Other sources of underwater man-made noise known or presumed to affect cetaceans, such as those deriving from seismic exploration, are known to occur in the ACCOBAMS area. The Committee therefore recommended that guidelines existing in some countries for the use of such non-military sonic devices be also submitted for review. A recommendation on man-made noise in the ACCOBAMS area was finally adopted by the Committee.

Eco-labelling. Based on a request from the first meeting of the Bureau, the Scientific Committee addressed the issue by listing activities that would benefit from eco-labelling, a practice which should be encouraged to strengthen the conservation of cetaceans in the ACCOBAMS area. A study was recommended to provide suggestions to orientate the stakeholders in elaborating tools, such as guidelines, guidance, charts, codes of practice, etc., to certify and give labels to users and companies, to identify the main uses and activities which may affect cetaceans, to determine the legal questions which result from them, and to review the existing regulations which may be imposed to optimally conserve cetaceans.

Prey depletion. The Chair presented a document on the subject, with suggestions for addressing the problem on how to determine whether a cetacean population is undergoing nutritional stress. He also informed the Committee on the intention by the CIESM of organising an international workshop on the roles of cetaceans in their ecosystems, with an emphasis on the Mediterranean (see story in this issue of FINS). The Committee suggested that the outcome of such workshop may provide the stimulus for a set of ad hoc recommendations from the Scientific Committee to the Meeting of the Parties, to engage in further action in this field.

Updated information on the composition and activities of the Scientific Committee can be found on ACCOBAMS the website.

The site also contains the Committee's Rules of procedure, copies of the reports of both meetings, as well as the recommendations adopted, the agendas, and all the annexed documents.

The third meeting of the Scientific Committee is scheduled for early 2005, a few months after the second Meeting of the Parties.

The exact date and venue of the meeting will be announced later this year.

Giuseppe Notarbartolo di Sciara
is the chair of the Scientific Committee of ACCOBAMS

For more information:
www.accobams.org/index_science.htm

The plight of the Mediterranean common dolphins

by Giovanni Bearzi and Randall R. Reeves

For more information: www.accobams.org/species/Delphinus_delphis/index.htm

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The World Conservation Union (IUCN) has recently described the Mediterranean "subpopulation" of short-beaked common dolphins as Endangered in its Red List of Threatened Animals. This listing highlights how urgent it has become to do something to prevent the complete disappearance from the area of a species that until recently was considered "common" in the Mediterranean. Indeed, common dolphins were one of the most abundant cetacean species - and possibly the most abundant of all cetaceans living in the Mediterranean - until as recently as the 1960s. So, what prompted such a rapid decline? Why did these incredibly beautiful animals leave, die or otherwise disappear? We don't know for sure. A recent review of their status suggests that the decline may be at least partly the result of large-scale habitat changes over the past 30-40 years, and particularly the reduced availability of key prey caused by overfishing and habitat degradation. Other factors that may have contributed to the species' decline include contamination by man-made chemicals, potentially resulting in debilitating effects on their health and ability to reproduce successfully, and incidental mortality in fishing gear, especially gill nets. Environmental changes such as those associated with global warming also may have played a role, for example by influencing the amount or distribution of the dolphins' prey. Although the exact cause or causes are uncertain, there is no doubt about the fact that a large-scale population decline has occurred, and that common dolphins now survive only in relatively small portions of their former Mediterranean range. These latter include the Alborán Sea, in the western Mediterranean, where thousands of animals are still present, and the northern Aegean Sea, where data are scarce but it appears that densities remain fairly high.

The relative importance and interplay of potential threats such as prey depletion, contamination and bycatch are not well understood, so designing and implementing appropriate measures to counteract them is a daunting task. Calling for "more research" (and then yet some more) feels inadequate, perhaps even irresponsible. Although continued monitoring of the last surviving common dolphin communities is important, what we know right now may be sufficient to gain some understanding of the problems and should provide the basis for at least a few precautionary actions. If there is to be any hope of preserving viable numbers of common dolphins throughout much of their historic range in the Mediterranean basin, it will require the timely implementation of carefully planned measures.

This is why ACCOBAMS, with support from WDCS - the Whale and Dolphin Conservation Society and from ASMS OceanCare, have endorsed a project for the conservation of Mediterranean common dolphins that was presented by the Tethys Research Institute during the first meeting of the ACCOBAMS Scientific Committee. This 26-month project includes the preparation of a Conservation Plan, the analysis of 11 years of existing data, and the design of a web site dedicated to Mediterranean common dolphins. These initiatives are aimed at defining priority actions to protect this endangered dolphin population in key parts of its range.

In some cases, it is now very difficult to conduct meaningful field studies on the species because only rare, scattered individuals remain. However, a thorough review of the existing historical literature may teach us a lot. For instance, in places such as the northern Adriatic Sea, research based on both literature and field surveys has shown that common dolphins and bottlenose dolphins used to be seen regularly in the region. Today, only the latter remain. Why are there no more common dolphins? At least as far as this region is concerned, it appears that the decline was triggered by intensive hunting, particularly in the 1950s when dolphins were slaughtered off the former Yugoslavia because of the perceived high levels of competition with local fisheries. Bounties had been offered to promote the killing of dolphins in the Adriatic beginning in the 19th century. Early hunting campaigns may not have had a major impact on the reportedly abundant dolphin populations, but in the first half of the 20th century institutional campaigns aimed at complete extermination increased in intensity and resulted in the deaths of many hundreds of dolphins. The animals were depicted as "ichthyophagous monsters", "noxious pirates" and "man's worst enemies.". By the time such systematic campaigns came to an end, probably in the early 1960s, Adriatic dolphins must have been severely depleted. Unfortunately, habitat degradation was well underway by then, and it quickly became a source of concern for all of the Adriatic wildlife. Overfishing, eutrophication, anoxia, sea-floor degradation and chemical contamination are some of the threats that have faced the northern Adriatic ecosystem in the last 30 years. It appears that although the remarkably resilient bottlenose dolphins manage to survive at their current low densities, common dolphins - still present in the northern Adriatic until the 1970s - were unable to cope with yet another threat, and disappeared.

What can we do besides lament the disappearance of these magnificent creatures? Sadly, not as much as we would like to. For instance, the forces that cause climate change and chemical contamination are unlikely to be influenced in a major way by concern for common dolphins in the Mediterranean. Our current lifestyle choices, entrenched patterns of overconsumption, human overpopulation and political gamesmanship militate strongly against the types of changes needed to reverse what are essentially global trends. However, at a time when the stark evidence of wide-scale overfishing and the consequent need for immediate and decisive measures to reduce fishing pressure is finally capturing the attention of European decision makers, the goal of conserving common dolphins may converge with, and in fact add to, the momentum building in the direction of improved ecological conditions for the benefit of both humans and wildlife. In this context, the decline of common dolphins provides one more signal that our collective actions can have large-scale, unforeseen, unintended, and intractable consequences.

News from the Secretariat

by Marie-Christine Van Klaveren

New ratifications. With great pleasure the Secretariat announces that Ukraine joined the Parties on 1 Jan 2004, and that France will become Party in spring 2004, following the official publication (occurred on 7 Feb) of the national law on the ratification of the Agreement. Similar processes are in progress in Italy and Lebanon.

Reinforcement of the Permanent Secretariat by Italy. In Dec 2003 the Ministry of the Environment of Italy appointed Roberta Mazzucco, expert in international cooperation, and Caterina Ronchieri, expert in law, to second the Secretariat for a period of one year. Their expertise is not only valuable on technical issues, as this example of secondment also improves national and regional cooperation in implementing the Agreement and will be particularly helpful in the preparation of the Second Meeting of the Parties which will be held in Nov 2004. This secondment relies on Resolution 1.6, by which the Parties inter alia call upon Range States to contribute on a voluntary basis to the implementation of the Agreement and agreed that these contributions could also be in kind.

Voluntary contributions. As in 2003, the United Kingdom renewed its interest in the implementation of the Agreement by offering a voluntary contribution of €10.000. A substantial support to ACCOBAMS this year was also provided by the Government of Italy, not only through the secondment of the Secretariat, but also with two considerable voluntary contributions: one of €50.000 devoted to capacity building in the area of the Pelagos Sanctuary for Mediterranean Marine Mammals, and the other of €36.000 (corresponding to the 2003 ordinary contribution) which will be devoted to the development of a regional stranding network.

ACCOBAMS welcomes new Partners. The range of ACCOBAMS Partners welcomed ASMS OceanCare and the Spanish Cetacean Society (SEC). ASMS is a Swiss non-profit non-governmental organisation which has dedicated its work to the conservation of marine mammals since it was founded in 1990. In current times, ASMS developed a campaign against noise pollution of the seas and published a legal analysis on "The use of LFA Sonar under International Law". The Spanish Cetacean Society was founded in Valencia in April 1999 with the aim of promoting and coordinating cooperation among persons and institutions working on the research and conservation of cetaceans in Spain and integrating research efforts in the regional, national and international conservation strategies.

Collaboration with the Pelagos Sanctuary. Within the framework of the objectives that the two Agreements have in common, the Scientific Committee renewed its willingness to collaborate with the Pelagos Sanctuary by adopting a recommendation focused on the mutual development of activities, such as the organization of a workshop on fin whale conservation research.

Collaboration with the NGOs. ASMS and WDCS renewed their financial support to the Mediterranean common dolphin conservation plan for 2004, which is prepared by the Tethys Research Institute, to be presented to the Second Meeting of the Contracting Parties (9 -12 Nov 2004, Palma de Majorca). Two important non-governmental organizations are supporting ACCOBAMS in matters related to cetacean population surveys. IFAW next summer will bring to the Mediterranean its new research vessel Song of the Whale II for a second year of research cruises, in preparation for a basin-wide sperm whale survey, and Ocean Alliance will bring to the Mediterranean its Voyage of the Odyssey (see story on this issue of FINS).

Marie-Christine Van Klaveren is the Executive Secretary of ACCOBAMS

For more information see:
www.accobams.mc

ACCOBAMS*Science* online!

by Giovanni Bearzi

The ACCOBAMS Secretariat has promoted the development of a "Science" section of the ACCOBAMS web site, that features all activities conducted by the Scientific Committee as well as relevant research, conservation, capacity building and public awareness actions.

The site, which is intended to function as a tool for cetacean research and conservation, features a "Species" section including information on all the cetacean species present in the Agreement area, plus a dedicated section on short-beaked common dolphins and the conservation problems they are facing in the Mediterranean. Similar sections are planned for species such as the fin whale, sperm whale, common bottlenose dolphin and harbour porpoise. Another portion of the site provides information on the Scientific Committee and reports on its annual meetings. A large section - currently in preparation - will describe all the actions conducted in the context of the Agreement, from capacity building to whale-watching and tissue banks. A "Resources" section includes useful links and a "Tools" area that provides a number of other links to internet resources that may turn out to be useful for those who are working on cetaceans.

The site also features selected parts of the ACCOBAMS report "Cetaceans of the Mediterranean and Black Seas: State of Knowledge and Conservation Strategies", which can also be downloaded as full document or single contributions. Selected sections include a "species impact table" and cetacean names in all languages relevant to the Agreement area.

One of the most demanding works has been the design and programming of a database system aimed at a comprehensive review of all cetacean-related activities in the Mediterranean and Black Seas. The database will allow to collect detailed and continuously updated information on cetacean research projects, whale watching activities, organisations and individuals working on cetaceans in the Agreement area. This fully interactive database allows easy data entry and sorting. Database entries are automatically submitted to a moderator for approval before being included in the ACCOBAMS system. At regular intervals, ACCOBAMS will produce comprehensive reports that will be distributed to the concerned parties. This can be done through a series of "export data" functions in the database administration section.

All persons who are engaged personally in research on cetaceans in the ACCOBAMS area having conservation or management implications are invited to submit their information in the database. Whale watching operators are also welcome to enter the data on their operations. A rich database will provide updated information on activities and needs, and will help to create a cetacean conservation community in the ACCOBAMS area.

The ACCOBAMScience web site can be seen online at:

www.accobams.org/index_science.htm

Short News

A scholarship on cetacean research for Eastern European students

By Drasko Holcer

Blue World Institute of Marine Research and Conservation, in association with MOL Plc., is offering two funded places for student thesis for the summer research season of 2004 at the Adriatic Dolphin Project on the island of Losinj, Croatia. Students from Croatia, Czech, Hungary, Poland, Romania, Slovakia and Slovenia should be studying biology, geography, natural sciences or a related subject and be in their thesis year.

As this thesis are in the field of cetacean research, their outcomes should benefit to the education of future cetologists and development of cetacean research and conservation in the central and eastern European region. Complete information on the application process, topics and qualifications can be found on the following web address:
http://dolphin.mol.hu

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First record of a humpback whale stranding on the coast of Syria (Eastern Mediterranean)

by Adib Saad

On 5 Apr 2003 a dead humpback whale, *Megaptera novaeangliae*, was reported floating one km offshore, N of Tartous, Syria. We towed the carcass to shore, where we could examine the whale, take measures and photographs, and estimate that death had occurred approx. 24-48 h earlier. Species identification was unambiguous. The length of the animal, a male, was 785 cm, and its flipper 164 cm long. We estimate its weight at approx 2 t, and its age at about one year. Upon dissecting the whale we found that the stomach and intestine were empty, except for a small amount of planktonic crustaceans located in the last tract of the intestine.

To the best to our knowledge, in agreement with the local fishermen, this is the first record for the species in this area of the eastern Mediterranean. We could not ascertain the cause of death, however explosions from naval exercises, the collision with a ship, or the loss of the mother (given that at such young age the calf is not independent) are possible explanations.

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See the photographs of the stranded humpback whale calf at: www.accobams.org/index_science.htm

Rare occurrences of cetaceans along the Israeli Mediterranean coast

by Aviad Scheinin, Dan Kerem, Oz Goffman and Ehud Spanier

We would like to report on recent rare occurrences of four cetacean species along the Israeli coast of the Mediterranean Sea: minke whale (*Balaenoptera acutorostrata*), humpback dolphin (most probably *Sousa chinensis*), rough-toothed dolphin (*Steno bredanensis*) and false killer whale (*Pseudorca crassidens*). Cetacean sightings in this area are always suspect of evidence for Lessepsian migration (i.e., *Sousa chinensis*). Dedicated methodological surveys in this area are crucial in order to clarify the occurrence and abundance of these and of other cetacean species in the easternmost Mediterranean Sea.

Minke whales. On 8 May 2000 the body of a minke whale calf was found entangled in a gill-net at a water depth of 14 m, 3.5 km off Akko shore (32°55'N; 035°02'E). Sea conditions were calm, water temperature was 23°C. The finding coincided with a very unusual and short-lasting local red-tide event, the sea teaming with macroplankton and unusually large schools of mullet (*Mugil cephalus* and *Liza aurata*). Autopsy revealed milk at various digestive stages in the stomach and intestines, which would indicate the proximity of its mother, but surveys in the area were fruitless. Mitochondrial DNA typing showed relation to the North Atlantic stock of minke whale. On February 8th 2004, another calf, a 5 m female, got entangled in a gill net half a mile offshore (12 m water depth) on the southern outskirts of Haifa. This specimen seemed somewhat emaciated. It too had some digested milk in the stomach and fecal material in the hind gut, with no evidence of prey items.

Humpback dolphin. On 10 Jan 2000 a juvenile humpback dolphin was spotted swimming in the Bay of Atlit, 10 km S of Haifa. It had a big, distinct hump and a distinctive identifiable white scar at the base of the dorsal fin. The second sighting was on 18 Jan, at 10:30, inside Jaffa Port, 80 km south of the previous observation. The dolphin was observed for 7 hours, swimming and feeding in water of 2.5-5 m depth and 170C. Outside, a south-southwesterly storm with gales up to 100 km/h lifted 8 m high waves and the dolphin seemed to be taking refuge inside the port. On 20 Jan. the same individual in apparently good condition was sighted further south, inside Ashdod port. Open sea conditions were still stormy with southwesterly winds up to 45 km/h and 3-4 meter waves. This was the last sighting.

Rough-toothed dolphins. During the past eight years IMMRAC's researchers documented five rough-toothed dolphin strandings. In comparison, only one stranding and three sightings (two in 2003) of short-beaked common dolphin (*Delphinus delphis*) occurred during that period. The species is considered rare in the Mediterranean, and this regional clustering seems rather unusual. Interestingly, all

strandings have occurred during the months February-April. Also, four of the five were under a year old. It is reasonable to believe that this species is passing by our coastline during this period of the year. The possibility of Lessepsian migration will be examined by means of molecular analysis.

False killer whales. On 28 Mar 2003, at 07:20, a pod of about 20 false killer whales was sighted 70 nm west of the Israeli coastline (33^{o} 18'N, 0033^{o} 44'E). Bottom depth at the sighting point was 1,800 meters. Skies were clear and sea was very calm (Beaufort 0-1). During the 100 min-long observation, the pod exhibited two behavioral modes, resting and dive-traveling. During the former, some individuals approached the boat to bow-ride. During the dive-travel mode, one individual preformed wake- and keel-riding for 5 minutes, at an average speed of 6.4 kts.

Aviad Scheinin, Dan Kerem, Oz Goffman and Ehud Spanier are from the Israeli Marine Mammal Research & Assistance Center (IMMRAC), The Leon Recanati Institute for Maritime Studies and Department of Maritime Civilizations, University of Haifa, Haifa 31905, Israel

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See the photographs of some of the cetaceans mentioned here at: www.accobams.org/index_science.htm

Training on Stranding Rescue Techniques in Malta

by Sarah Muscat

Nature Trust (Malta) and British Divers Marine Life Rescue (BDMLR) organised for the second consecutive year a marine mammal medic course for the members of the Marine Rescue Team. Another course was held specifically for the training of the veterinarians of the same team. Dr James E. Barnett, who is a veterinarian with marine mammal experience and a director of BDMLR, is delivering the courses for the Team.

The Marine Rescue Team consists of ten mammal medics who come from all walks of life, including professional divers and biologists. In addition to the core team there are three local dedicated veterinarians who are presently the only ones that have the necessary training on how to handle marine mammals. The objectives of the Team are to succeed in refloating live cetaceans, with the minimum stress possible, that strand along the coast of our archipelago. It is also the Team's task to collect as much data as possible out of all strandings and a scientific group within the Team itself was set up specifically for this purpose. Training of the Rescue Team is an ongoing process that is carried out on a monthly basis with the medic course being the final wave of knowledge for the team members.

The medic course was specifically designed to suit the needs of Malta and is continually being updated by Dr Barnett. It is divided into two parts. The first covers the theory aspect, consisting of cetacean species identification and biology, and first aid and rescue techniques for cetaceans. The second part consists of a practical session with a life size, water-filled model of a dolphin. This session includes handling, lifting and first aid techniques. The veterinarian's course includes all the above with more scientific detail and an additional technical lecture on how to medicate cetaceans, carry out post mortems and euthanise the animals.

The monthly training of the team covers various subjects at great depth. These sessions train the members on how to take technical photos and how to collect specific data on the biology and physiology of the animals. Other sessions also include team exercises consisting of dealing with various stranding scenarios that would have actually happened during the year throughout the world. Drills are also carried out especially during quiet periods in order to keep the members of the team sharp and ready.

Sarah Muscat is the chair of Nature Trust, Malta
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See a photograph of the training session at:
www.accobams.org/index_science.htm

A workshop on cetaceans and marine trophic webs

The 25th CIESM Workshop, "Investigating the roles of cetaceans in marine ecosystems", was organised in Venice from 28 to 31 Jan 2004. The workshop, organised by Fréderic Briand and Giuseppe Notarbartolo di Sciara, was attended by 16 international experts. The meeting was hosted by Thetis s.p.a., a marine engineering firm headquartered in the historical Arsenale. The main goal of the workshop was to address the scientific and methodological aspects of investigating marine foodwebs, specifically as far as cetaceans are concerned, also keeping in mind important management implications such as the relationships between cetaceans and fisheries. Issues debated included ways to assess the trophic position of cetacean populations, methods for the determination of the diet of cetaceans, and model approaches to determine whether a given cetacean population is food-limited by fishery activities, and whether a given fishery is adversely affected by the presence of cetaceans feeding on economically important resources. The proceedings of the workshop, soon to become available online, are likely to stimulate recommendations from the Scientific Committee to the Meeting of the Parties to ACCOBAMS, to engage in management activities targeting the issues of cetacean prey depletion and of conflicts between cetaceans and fisheries in the Agreement area.

For more information:
www.ciesm.org/publications/works.html

Ocean Alliance: the Voyage of the Odyssey in the Mediterranean Sea

by Simone Panigada

The Ocean Alliance, under the leadership of Dr. Roger Payne, encompasses the Whale Conservation Institute (Right Whale Program and WHALE Education Program) and the Voyage of the Odyssey. Ocean Alliance's unique position is derived from its

commitment to rigorous scientific investigation and to the welfare of marine mammals and their ocean environment. Ocean Alliance has also established long-lasting networks with scientists and other major affiliations around the world, which provide important scientific collaborations and the sharing of ideas and data.

The Voyage of the Odyssey is a multi-year programme designed to gather the first comprehensive baseline data set on the distribution and concentrations of synthetic contaminants found in oceanic top-level predators such as sperm whales (Physeter macrocephalus) and predatory fishes throughout the world's oceans. Ocean Alliance will focus on the sperm whale because of its worldwide distribution and its role of vertex predator.

In March 2000 Odyssey set sail from San Diego, California to the Galapagos Islands where she surveyed the area for four months. From the end of July through October 2000, Odyssey completed the Pacific Passage taking the scientists and crew aboard from the Galapagos to Christmas Island and Tarawa Atoll in the Republic of Kiribati. Odyssey surveyed the waters in and around Papua New Guinea for six months and Western Australia for six months. Currently, Odyssey is in the Indian Ocean and will be searching for sperm whales over the coming months as she travels to the Seychelles, Mauritius and the Maldives Islands.

After the Maldives Odyssey will cruise in the Red Sea, aiming to enter the Mediterranean Sea through the Suez Canal in May 2004, when the Mediterranean Passage will start. The boat will first visit the waters of Turkey and Greece and then will move to the Ligurian Sea Sanctuary, where she is scheduled to arrive around mid-July 2004. Then the Odyssey will move west, monitoring the Balearic Islands and the Alborán Sea, leaving the Mediterranean at the end of September.

The main objective of the Voyage of the Odyssey is to collect biopsies for toxicological analysis, which will constitute a global database on the level of anthropogenic contaminants present in the oceans today. Additional research activities include:

Genetics: each of the biopsies collected for contaminant detection will be split in order to complete DNA analysis on each sample (gender typing, mitochondrial DNA sequencing, and genotyping with hypervariable microsatellite loci). These analyses will also provide information on genetic inter-relatedness at the sub-population level.

Photo-Identification: along with the biopsy collection, photo identification will be completed on each sampled whale and other non-sampled whales, as time permits. The photo-identification reduces the likelihood that an individual whale in a group will be sampled more than once. Also establishing a database of photographs will aid other researchers in reaching an adequate sample size to apply mark-recapture methods to estimate the absolute abundance and the survival rate of the Mediterranean population.

Acoustics: whale vocalizations from hydrophones and acoustic arrays will be recorded both manually and by an automated system. A special software programme allows the sounds to be classified, thus characterizing different individuals and population on the basis of their vocalizations.

Stable isotope analyses: a small fragment of the biopsy sample will be frozen and used for stable isotope analyses to describe diet habits of sperm whales.

In addition to the research techniques mentioned above, the Voyage of the Odyssey will provide insight on the distribution of all cetacean species encountered in areas such as the Eastern Mediterranean, which have had, so far, very poor research effort coverage. Moreover, by inviting representatives of ACCOBAMS Range States on board the research vessel, the Voyage of the Odyssey will promote the establishment of collaborations with local scientists. Particular emphasis will be also devoted to public awareness and capacity building activities in the Mediterranean Basin.

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More information can be found at :
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See the R/V *Odyssey* and the draft Mediterranean cruise plan at: www.accobams.org/newsletter/index.htm_

Cetacean surveys in the Black Sea (August – October 2003): harbour porpoises continue to be in decline

by Alexei Birkun, Jr.

Before the last decade of the 20th century the harbour porpoise (*Phocoena phocoena*) was the most abundant cetacean species in coastal waters of the northern, northwestern and northeastern Black Sea. In the late 1990s, numerical ratio between harbour porpoises and another inshore cetaceans – bottlenose dolphins (*Tursiops truncatus*) – changed radically towards the prevalence of latter species in the northern Black Sea off Crimea Peninsula. The predominance of bottlenose dolphins in the northeastern shelf area along the Crimean and Caucasian coasts has been confirmed in August 2002 by means of aerial survey conducted within the Russian-Ukrainian Azovka'02 project ("Azovka" and "Afalina" are the Black Sea harbour porpoise and the bottlenose dolphin in Russian and Ukrainian). However, until recently there were no tolerable estimates of cetaceans abundance in the entire Ukrainian and Russian 12-miles-wide territorial waters of the Black Sea.

Two shipboard line transect surveys have been carried out in September and October 2003 to estimate the abundance of harbour porpoises, bottlenose dolphins and short-beaked common dolphins (*Delphinus delphis*) in the area of concern. Those cruises (a total of 2230km of observation effort along 79 zigzag tracklines) extended between the Ukrainian border with Romania in the west and Russian border with Georgia in the east. Another series of boat surveys was conducted in August 2003 in the Russian and Ukrainian parts of the Kerch Strait (310km of the effort including 35 transects). In every above case, visual observations were accompanied by photo-identification studies. Just in July 2003 four members of the joint Russian-Ukrainian research team have been trained by specialists from the Tethys Research Institute (Italy) in proper techniques. Besides, they were provided by the ACCOBAMS Secretariat with proper cameras and lenses.

FINS can be found online on the Website of ACCOBAMS: www.accobams.org/index_science.htm

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As a result, the collection of images has been established for dolphins sighted in the Kerch Strait and along the coasts of Crimea and Russian Caucasus, and the absolute abundance of cetaceans was estimated as follows: 1157±602 harbour porpoises, 4193±1090 bottlenose dolphins and 5376±1718 common dolphins in the Black Sea study area, and 54±46 harbour porpoises and 127±41 bottlenose dolphins in the Kerch Strait. According these figures, the harbour porpoise is the least abundant cetacean species in the Ukrainian and Russian Black Sea. Annual mass mortality of these animals in bottom-set gill nets was recognized earlier as principal cause of their population decline. Certainly, the riparian states should provide special measures for this species conservation. The extermination of illegal fishing for Black Sea turbot and sturgeon (both fisheries are dangerous to harbour porpoises) should be at the centre of their attention.

The surveys were organized by the Brema Laboratory (Simferopol, Ukraine) and Institute of Ecology and Evolution (Moscow, Russian Federation) in the framework of MS'03 and Afalina'03 projects supported by the Ukrainian Ministry of Environment and Russian Academy of Science.

The research team was composed by: Alexei Birkun, Jr. (project co-ordinator from Ukraine), Dmitry Glazov, Sergey Krivokhizhin, Lev Mukhametov (project co-ordinator from Russia), Olga Shpak, Alexander Zanin.

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Development of cetacean monitoring network in Ukraine

By Alexei Birkun, Jr.

Cetaceans of all three Black Sea species – the harbour porpoise (*Phocoena phocoena*), short-beak common dolphin (*Delphinus delphis*) and common bottlenose dolphin (*Tursiops truncatus*) – occur in Ukrainian waters represented by sizeable portions of the northern Black Sea, Sea of Azov and Kerch Strait. The entire coastline of Ukraine extends nearly 2650 km from the Danube Delta in the west to the Gulf of Taganrog in the east (map).

During last 15 years, since February 1989, the cetacean monitoring network (CMN) is working in Crimea with accumulation of data on dolphin and porpoise strandings, by-catches and sightings in the Brema Laboratory (Simferopol) [1], nongovernmental institution specializing in tasks of research and conservation of Black Sea cetaceans. In 2000, CMN spread to Odessa [3], where local team of enthusiasts consists of specialists from the Odessa Centre of the Southern Research Institute of Fisheries and Oceanography, the Odessa Branch of the Institute of Biology of Southern Seas, and the State Inspection for the Protection of the Black Sea.

Further development of the network has happened within the MORECET (MOnitoring and REhabilitation of CETaceans) project started in 2002. As a result, four mobile groups assigned for search and rescue of damaged marine mammals have been established in Crimea with their residence in Yevpatoria [6], Sevastopol [7], Yalta [8] and near Feodosia in the Karadag Nature Reserve [9]. The research teams from another six Ukrainian coastal protected areas – the Dunaisky (Danube) Biosphere Reserve [2], Chernomorsky (Black Sea) Biosphere Reserve [4], Swan Islands Branch of the Crimean Nature Reserve [5], Cape Martyan Nature Reserve [8], Opuk Nature Reserve [10] and Kazantip Nature Reserve [11] – joined CMN in autumn 2003 when they implemented MS'03 project supported by the Ukrainian Ministry of Environment and co-ordinated by the Brema Laboratory.

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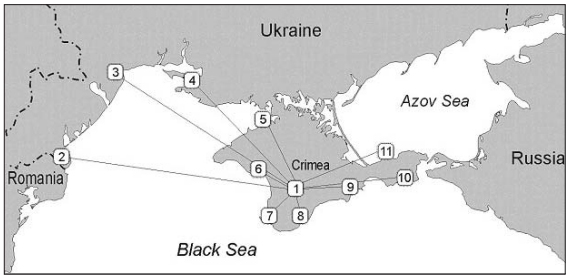

A whale of a finding in the Sicily Channel

Ten days ago, in late February 2004, a field expedition led by Silvestro Greco of ICRAM (the Italian Central Institute for Applied Marine Research), and including Caterina Fortuna, Giancarlo Lauriano and Simone Canese, searched the waters surrounding the island of Lampedusa, in the Sicily Channel, looking for fin whales. Their efforts were rewarded beyond reasonable expectations. Fin whales were quite frequently found, always engaging in spectacular feeding activities at the surface. Zooplankton sampled in the presence of foraging whales revealed extraordinarily high concentrations of the euphausiid *Nyctiphanes couchii*, a species which was not known to constitute an important food item for fin whales in the Mediterranean. Five whales were tagged with satellite radio-transmitters, all of which are providing position data at this moment. Together with recent information collected by Christophe Guinet (CEBC-CNRS, France) and his team in the Ligurian Sea, where a number of fin whales were also tagged with satellite transmitters last summer, this recent knowledge gathered by ICRAM is putting Mediterranean fin whales under a completely new and exciting perspective. You can look forward to a full story on Mediterranean fin whales on a next issue of FINS.

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Book Review

by Giuseppe Notarbartolo di Sciara

Encyclopedia of marine mammals. W.F. Perrin, B. Wursig, J.G.M. Thewissen (Eds.). 2002. xxxviii - 1,414 pp.

My life would have been much easier when I began to deal with marine mammals 30 years ago as a student, had I had access to a formidable source of information such as the Encyclopedia of marine mammals. The book is a mighty tome, weighing just a bit less than four kg, and containing 283 peer-reviewed articles which describe most of what you ever wanted to know about marine mammals, from Abundance estimation to White-beaked dolphin. Included also are a very detailed subject index (41 pages of it), a quite useful and authoritative glossary, the biographies of 53 among the major past contributors to marine mammal science, 840 illustrations, and 16 colour plates. Assembling such a compendium of thalasso-theriological knowledge must have been a daunting task, however the editors have done, in my opinion, a terrific job, and a timely one too. Cetology, just like zoology or perhaps even more, has literally exploded during the last decade or so, and it is very useful to have the current state of the art all bound together, while knowledge keeps growing exponentially. The range of subjects that are treated in the book is quite broad – ranging from typically scientific matters to historical and cultural aspects - but still retains a remarkable depth: a testimony of great care and thoughtfulness from the part of its conceivers. There were 250 contributors to the Encyclopedia, from all continents. Unfortunately, the Mediterranean and Black Seas are rather underrepresented, with the inclusion of only three authors from the region (i.e. 1.2% of the total), who are active investigators of local marine mammals at this time. But let's not indulge in frustration, and see this instead as a healthy wakeup call for all the good scientists who do exist and produce first-rate knowledge on cetaceans in the ACCOBAMS area, to strive to make their voice heard in the international fora, with modern contributions from the region where cetology first began 2,500 years ago. A remarkable feature of this book is that, in addition to being a prime reference source in the field of marine mammalogy, it also makes fascinating reading. Although, due to its sheer bulk, I would not recommend you to take the Encyclopedia with you on a hammock on your next tropical vacation (it might painfully remind you of the existence of gravity), I believe that its presence should be a must in the library of every institution and individual concerned with marine ecology and conservation. Even more so in those libraries where financial considerations are a constraint to the acquisition of large numbers of books and journals dealing with marine mammals. In the Encyclopedia of marine mammals you will get them all in one place.

Calendar of events

15-16 Mar – Workshop: Marine resources management for sustainable ecosystem in the Mediterranean. IUCN Centre for Mediterranean Cooperation, Malaga, Spain.
http://www.iucn.org/places/medoffice/nosotrosEN.htm

21-26 Mar - White Water to Blue Water (WW2BW) Conference. Miami, USA. To promote the practice of integrated watershed and marine ecosystem-based management in support of sustainable development.
http://www.international.noaa.gov/ww2bw

28-31 Mar – 18th Annual Conference of the European Cetacean Society. Kolmården, Sweden.
http://web.inter.nl.net/users/J.W.Broekema/ecs

29 Mar – 2 Apr – International Maritime Organisation, Marine Environment Protection Committee, 51st Session. London.
http://www.imo.org/home.asp

31 Mar – 2 Apr – 12th Meeting of the Scientific Council of the Convention on Migratory Species (CMS). Glasgow, Scotland, U.K.
http://www.wcmc.org.uk/cms

22 Apr – Earth Day.
http://earthday.envirolink.org

2-6 May – 4th World Fisheries Congress. Vancouver, Canada. The Congress theme, "Reconciling Fisheries with Conservation: The Challenge of Managing Aquatic Ecosystems", will be addressed by a world class list of keynote speakers, session topics, posters, limited presentations, round table discussions, forums, workshops and debates. http://www.worldfisheries2004.org/home.htm

29 May – 2 June – ACCOBAMS Workshop on Tissue Banks. Libya. http://www.accobams.org/index_science.htm

5 Jun – World Environment Day 2004. The World Environment Day theme selected for 2004 is "Wanted! Seas and Oceans – Dead or Alive?". The main celebrations will be held in Barcelona, Spain in collaboration with the Universal Forum of Cultures.
http://www.unep.org/wed/2004/About_WED_2004/index.asp

7-11 Jun – 37th CIESM Congress. Barcelona, Spain.
http://www.ciesm.org/events/congr.html

19-22 Jul – 56th Meeting of the International Whaling Commission. Sorrento, Italy.
http://www.iwcoffice.org

Sept – 3rd International Conference on Marine Mammals of the Holarctic. Koktebel, Ukraine.
http://mmh3.2mn.org/index.htm

2–14 Oct – 13th Conference of the Parties to CITES. Bangkok, Thailand.
http://www.cites.org

11-15 Oct – International Maritime Organisation, Marine Environment Protection Committee, 52nd Session. London.
http://www.imo.org/home.asp

9-12 Nov – 2nd Meeting of the Parties to ACCOBAMS. Palma de Majorca, Spain.
http://www.accobams.mc

17-25 Nov – 3rd World Conservation Congress, IUCN. Bangkok, Thailand.
http://www.iucn.org