



# Mediterranean Reflections

Year 2010



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# Director's Message



Due to the importance of its biodiversity and socio-political context, the Mediterranean requires concerted action by countries facing different realities. This report is a summary of the main activities carried out by the Centre for Mediterranean Cooperation of the International Union for Conservation of Nature–IUCN in 2010, which was designated the International Year of Biodiversity by the United Nations General Assembly.

A wide variety of species and ecosystems, a temperate climate, highly productive oceans and land, and a long relationship between man and nature are the main hallmarks of the Mediterranean region. The rapid occupation of the coastal region and reduction of natural areas, competition over land and water use, soil erosion

and increasing water scarcity are some of the challenges we face in the Mediterranean, together with climate change, pollution and over-exploitation of fish stocks. These threaten the rich diversity of fauna and flora in this region, the most popular tourist destination in the world.

2010 has been a year in which we have been able to celebrate our first decade of work. We have opened a period of reflection to review our priorities with you, coinciding with my appointment as head of the IUCN Centre for Mediterranean Cooperation in Malaga in June. For this purpose, we organized the first IUCN Mediterranean Forum, which, together with bilateral meetings in the various countries of the Mediterranean basin, has given me the opportunity to listen to you and meet at first hand many people and organizations interested in conservation in this region, a biodiversity hotspot. The degree of participation and enthusiasm shown by colleagues, members, volunteers, sponsors and organizations around the world certainly points to a new decade of renewed energy and working together, not least in the run-up to the forthcoming World Conservation Congress in Jeju (South Korea) in 2012.

In view of what we have achieved so far through all your efforts, we want to present the progress that we have made this year and will continue to improve throughout this new decade, in the belief that conservation will only work based on the following premises:

- Cooperation in the Mediterranean relies on the willingness of its peoples, governments, citizens and partners to participate and enter into dialogue.

- Innovation must be combined with traditional knowledge in order to achieve better results.
- Mediterranean conservation requires the direct involvement of the public and private sectors with the support of civil society, beyond national borders.

This coming year, the International Year of Forests, we will continue along the lines of work established over the last decade, but will pay particular attention to the southern and eastern shores of the Mediterranean region—where we will meet in October to strengthen the sub-regional action programme—while always encouraging collaboration on both sides of the Mediterranean, in coordination with key cooperation agencies and funds for the protection of our environment. We will continue to debate models of ecotourism and the best way to protect marine and terrestrial natural areas in

the Mediterranean, the great need to establish a regional observatory on climate change and critical ecosystems such as mountainous areas, or how to create a system to monitor Mediterranean biodiversity trends. We will also continue to work on the identification of important areas for marine and terrestrial biodiversity, the Red Lists of Threatened Species, studies on the governance of oases and natural resources, and initiatives for better management of forest genetic resources in view of climate change. In short, we will continue working to find the best route to sustainable development in the Mediterranean, to the benefit of all.

By working together we will preserve our biodiversity and the source of our livelihoods, and strengthen the ties linking everyone together in the Mare Nostrum.

Happy reading.

**Antonio Troya**

Director & Programme Coordinator  
IUCN Centre for Mediterranean Cooperation

# Highlights of 2010

## 25 JANUARY

Fishing is one of the most traditional activities in the Mediterranean. In a sea with limited resources, we must pay attention to the ecological conservation needs of marine species if we do not want them to disappear. IUCN took part in the meeting of the Scientific Advisory Committee of the General Fisheries Commission for the Mediterranean (GFCM) in Montenegro to encourage governments, the private sector and international organizations to participate on a scientific basis in protecting this sea.

## 4 FEBRUARY

The creation and management of marine protected areas in Lebanon is one of the goals of the collaboration between the Lebanese Ministry of Environment and IUCN, in order to strengthen institutional capacity and help identify and manage an ecologically viable network of marine protected areas that is representative of Mediterranean ecosystems.

## 9 FEBRUARY

The legal instruments relating to the protection of natural areas in Tunisia have been the subject of a study carried out in collaboration with the IUCN Centre for Environmental Law to help create enough information to harmonize these instruments according to the IUCN classification and management criteria for protected areas worldwide.

## 24 MARCH

Raising awareness among residents and users of protected areas is a key factor in first understanding and

then managing biodiversity sustainability in the medium and long term. Al Hoceima National Park in Morocco is one of the enclaves in which IUCN works to coordinate terrestrial and marine conservation efforts, with a clear local development component involving ecotourism, species conservation, social participation and controlled, small-scale fishing.

## 12 APRIL

Venice hosts the first meeting of the PEGASO project, aimed at developing the new protocol for Integrated Coastal Zone Management (ICZM) in the Mediterranean and Black Sea, established in 2008. The project is developing a platform for dialogue on coastal governance, tools for sustainability assessment and the incorporation of appropriate information through spatial planning systems.

## 22 MAY

Highlighting the importance of biodiversity in our lives as a source of food, medicines and raw materials and as a substrate for the development of other creatures was the objective of four environmental education workshops and an outdoor concert held in Malaga. The various uses that marine and terrestrial species have and their importance as links in the chain of life were included in the IUCN-Med celebrations of International Biodiversity Day.

## 25 MAY

In Madrid, the Spanish Minister for the Environment and Rural and Marine Affairs, Elena Espinosa, together with the Director General of the Spanish Agency for International Development Cooperation, Elena Madrazo, the Andalusian Regional Minister for the Environment, José Juan Díaz

Trillo, and the Director General of the International Union for Conservation of Nature, Julia Marton-Lefèvre, signs a General Partnership Protocol aimed at maintaining the IUCN Centre for Mediterranean Cooperation and its activities in Malaga.

### 31 MAY

The 3rd International Planète Terroirs Forum is held in Chefchaouen (Morocco), with a presentation of the IntegraRBIM (Integration of the Intercontinental Biosphere Reserve of the Mediterranean) Project, developed by the Andalusian Regional Department of the Environment and Department of Agriculture and Fisheries together with the IUCN Centre for Mediterranean Cooperation. One of the aims is to adopt measures to promote local products and the cultural tourism route called the Route of the Moors.

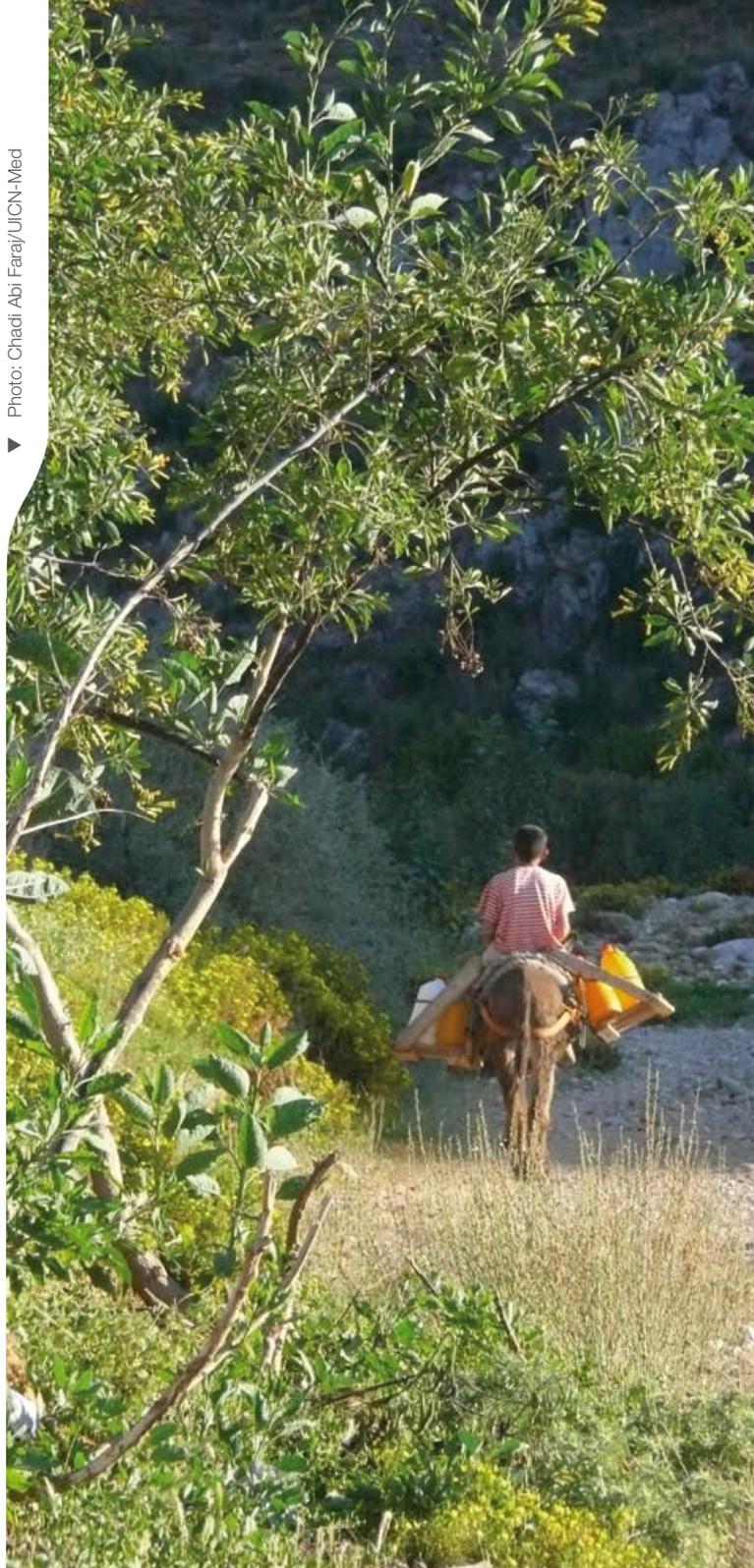
### 21 JUNE

Antonio Troya, a Spanish national with a degree in Biological Sciences, is appointed Director of the IUCN Centre for Mediterranean Cooperation in Malaga after holding several government positions in Spain and Europe for the development, planning and management of nature conservation and environmental protection policies.

### 23 JULY

The environmental information available on the two sides of the Mediterranean is not homogeneous and sometimes is scattered or simply nonexistent. To pool efforts and promote a more thorough and comprehensive system to help visualize existing data, IUCN meets with the Andalusian Regional Department of the Environment to define the technical bases for a geographical information structure that will be useful to both sides of the Mediterranean and thus promote the shared management of natural resources in the Alboran Sea.

Photo: Chadi Abi Faraj/IUCN-Med



## 2 AUGUST

The commercialization of *Stipa tenacissima* (esparto), its adaptation to climate change, and oasis governance are a number of IUCN projects that are the subject of working discussions with the Environment Ministry in Tunisia and other NGOs to advance the implementation of IUCN's North Africa Programme.

## 13 AUGUST

The last call for entries for the Reuters-IUCN awards for environmental journalism received articles on a variety of topics. The Centre for Mediterranean Cooperation took part in selecting the winners.

## 16 SEPTEMBER

The study 'Conservation and sustainable development of the Alboran Sea: strategic elements for future management' is presented in Malaga. Prepared and coordinated under IUCN's leadership by Rafael Robles, former Director of the Spanish Institute of Oceanography, it is the result of joint work by experts, institutions and agencies from Spain, Morocco and Algeria. The book is a pioneer in scientific and political terms and applies a shared working methodology to the study of the Alboran Sea, the driver of biodiversity in the area, across sectors and the three countries that share this sea.

## 23 SEPTEMBER

At the 4th Forum of Tourism in the Mediterranean, involving more than 2700 companies and institutions interested in developing sustainable tourism in this region with such a wealth of biodiversity and cultural heritage, IUCN-Med presents 'From Sustainability to Global Change', a vision of what sustainable tourism is and what it will become in the Mediterranean basin.

## 27 SEPTEMBER

The adaptation of the Mediterranean forest to climate change is the subject of a meeting in Istanbul of the

major regional organizations that share this goal. Regional commitment is reflected in the signing of the Agreement for Mediterranean Forestry Cooperation by IUCN in November 2010.

## 5 OCTOBER

Payment for environmental services is the focus of an international debate between Spain and Latin America held in Solsona (Spain). Such payments are considered tools for the management and conservation of the natural heritage and should be analysed as elements binding agricultural production systems, natural resource management and systems of protected areas through local agreements, public-private partnerships and collaboration with individuals such as landowners.

## 28 OCTOBER

The winners of the IUCN photography and reporting competition: A Mediterranean Image, A Biodiversity Story, organized to celebrate the International Year of Biodiversity, are announced: The Terra Project in Italy, Mohamed Melhaoui in Morocco and Dima Karam in Lebanon.

## 22 NOVEMBER

More than 300 organizations and experts gather in Malaga for the first IUCN Mediterranean Forum to celebrate the 10th Anniversary of IUCN-Med in Malaga and discuss the main challenges for natural resource conservation and sustainable development in the Mediterranean in relation to IUCN's work programme, creating new synergies, partnerships and collaborations with public and private institutions.

## 2 DECEMBER

Marine vegetation plays a critical role for other species, for water purification and as a carbon sink. The fourth Mediterranean symposium organized by the Regional Activity Centre for Specially Protected Areas (RAC/SPA) in Yasmine-Hammamet (Tunisia) offers the opportunity

to address current issues in the conservation of marine flora, such as biological invasions, global warming and its impacts on marine flora, and to strengthen links between scientific institutions through initiatives such as the LIFE+ project for the conservation of seagrass meadows along the Andalusian coast.

## 10 DECEMBER

Ecotourism in North African countries, as in the rest of the Mediterranean, is becoming a priority in order to maintain tourism as a long-term economic activity while promoting the protection and care of natural areas. Collaboration between Spain and Morocco is reflected in projects such as the developing of ecotourism infrastructure in the

Jbel Kelti area in Talassemrane National Park in northern Morocco, and the ecotourism workshop held in Chaouen.

## 12 DECEMBER

The network of marine protected area managers in the Mediterranean (MedPAN) encourages the sustainable management of protected areas by means of projects and activities, strengthening managers' skills through information exchange and the development of specific management tools. The MedPAN General Assembly explored issues such as the development of alternative livelihoods and income generation in Mediterranean marine protected areas through the development of sustainable tourism, fishing tourism or eco-products.

▼ Photo: Mohammed Melhaoui





# Designing a sustainable future in the Mediterranean

# Conserving Biodiversity

Ensuring sustainable and equitable management of biodiversity both locally and globally



▲ Photo: Chadi Abi Faraj/IUCN-Med

*The Mediterranean biome is home to 20% of world plant richness in an area that makes up only 2% of the planet. In the Mediterranean Sea, which covers 1.5% of global ocean area, we find 7% of marine fauna and 18% of marine flora, despite the low nutrient concentrations that characterize its waters. Although much of the fauna is native to the Atlantic, the levels of endemism are also high (28%), including some emblematic species of interest to global conservation. There are, however, significant gaps in the information available and in the interpretation of the data to make conservation an indispensable prerequisite for achieving sustainable development.*

## MARINE INHABITANTS

Many marine species in our region are highly valued commercially: sardines, tuna and anchovies form part of the ecological heritage of this sea and the culinary culture of many peoples. However, the first regional assessment of the conservation status and geographical distribution of Mediterranean marine fish has yielded troubling

conclusions. We need more research in our seas, since there are insufficient data to assess almost a third (151 species) of the fish studied. The report 'The Status and Distribution of Fish in the Mediterranean Sea', published by IUCN, analyses the conservation status of all marine fish native to the Mediterranean, based on an assessment of 513 species and 6 subspecies according to the IUCN Red List methodology, and identifies those that are threatened with extinction so that appropriate measures

can be taken to improve their protection. Of the 15 threatened species (Critically Endangered, the highest category of threat), 14 are sharks and rays. Seventy-four species of marine fish (14% of those studied) are considered endemic, that is, found only in the Mediterranean, and there is insufficient data to evaluate the threat status of 14% of these.

Another conclusion of this study is that more than half of the species are threatened by inappropriate fishing methods and management as well as by-catch, which has a particularly serious effect on large species like sharks, which have longer, slower life cycles and are therefore more vulnerable to extinction. The report considers collaboration and management in regional conservation to be a priority in order to be able to establish areas closed to fishing and to generate new data, especially from the southern and eastern Mediterranean, that will complete the current information available.

Dolphins and whales also swim in our waters, and they will be the subject of the forthcoming IUCN Cetacean Red List to be published in 2011, which will serve as an update to the report on the 2006 Monaco workshop and the more recent evaluations conducted during the year.

Marine vegetation and the services it provides as food, a source of medicines, a home for other species, a water filter and a carbon sink are also the subject of discussion and study in our region. In this respect, IUCN has joined forces with the Andalusian Regional Department of the Environment in a LIFE+ project starting in January 2011, for the protection of *Posidonia oceanica* seagrass meadows at six locations on the Andalusian coast. Planned activities for 2011 include assessment of the conservation status of these seagrass beds, organization of a Posidonia Sea Festival in Malaga in June 2011, the development of a virtual library and symposia on marine phanerogam beds and participation in the project's Technical Advisory Committee on phanerogam beds.

Aspects of the seagrass meadows' resilience to climate change are also being examined and will be the subject of

a publication in 2011, which will supplement existing knowledge on the ability of the species to adapt to the consequences of global warming, one of the main threats together with trawling. We have also begun to take steps to assess the conservation status of marine phanerogam species found in the Mediterranean in 2011.

At a local level, in the Al Hoceima National Park in Morocco, IUCN-Med, together with the Park management and SEO/Birdlife, has developed two Strategic Action Plans for two bird species in the area that are noteworthy for their ecological importance and conservation status: Audouin's gull (*Larus audouinii*—Near Threatened according to the IUCN Red List) and the osprey (*Pandion haliaetus*—Least Concern on the IUCN Red List). We have also set up a Cetacean Observation Programme for dolphins and whales in collaboration with local organizations.

▼ *Serranus Scriba* and *posidonia* - Photo: Andrea Molinari



## ECOSYSTEM UNDERCURRENT: OUT OF SIGHT, BUT NOT OUT OF MIND

Pelagic ecosystems, those relating to the open sea and the great mass of water away from the coast and the sea bed (and which are sometimes termed high seas, although they are different) are unknown to many people but no less important for all that. The study published this year on 'The Mediterranean Pelagic Habitat: Summary of oceanographic and biological processes' seeks to apply a dynamic process approach to the conservation of this habitat, with a view to ensuring that not only pelagic marine species but also the dynamic pelagic habitats upon which they depend are taken into consideration when Marine Protected Areas are set up.

The importance of these ecosystems in the Mediterranean Sea—a hatchery and habitat for many species of fauna and flora and an area of transit on

migratory routes—is underlined by the fact that most of its waters beyond those areas declared to be territorial waters (12 nautical miles from the coast) are traditionally viewed as high seas. That means that what happens in these waters is beyond national jurisdiction and therefore they are 'no man's sea', so to speak, in which threats to biodiversity are not considered the responsibility of any particular country. Whatever happens in these areas of the sea, which are dynamic, consisting of water columns and currents with a flow of nutrients, and also subject to climate change impacts such as salinization or temperature increase, can affect the entire Mediterranean and the distribution and biological processes of species. Hence the importance of using a variety of biodiversity protection tools, such as international agreements, that take into account both action plans for the conservation of specific species and the creation of new Marine Protected Areas in the Mediterranean, while also considering the dynamism inherent to pelagic habitats and other factors such as shipping, fishing quotas or activities resulting in the discharge of pollutants into the sea.



▼ *Gobius auratus* - Photo: Andrea Molinari

## A NETWORK TO SAVE THE SEA

Only about 4% of the Mediterranean Sea is covered by protected areas at present, a figure still far short of the target of at least 10% by 2020 set by the United Nations Convention on Biological Diversity (CBD). There are many factors that influence the protection of areas important for their biodiversity, among which is the lack of adequate scientific information to support the decisions of countries and governments to delimit and create new areas to protect their living resources.

The aim of the IUCN Centre for Mediterranean Cooperation is to pool the efforts of and the information provided by institutions and bodies implementing regional conventions on biodiversity protection, such as the Mediterranean Action Plan of the Barcelona Convention in Greece (MAP), the Regional Activity Centre for Specially Protected Areas in Tunisia (RAC/SPA), the General Commission for Fisheries in the Mediterranean in Rome, the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) in Monaco, and the Mediterranean Wetlands Initiative (MedWet) in Kifissia, to coordinate joint

and complementary actions. It also works closely with ministries and governments responsible for policy development at national level, with representatives of the private sector to influence their modus operandi with a view to cleaner and more sustainable development, and with marine researchers and experts as well as NGOs, of course, that advocate the protection of our region.

The first step to achieving a network of Marine Protected Areas which is consistent and representative of Mediterranean biodiversity is to obtain a more complete regional view of the most critical points and ecosystems in need of protection and to increase knowledge in areas poorly studied to date, in order to present this information to decision makers in an easily understood format.

## BIODIVERSITY BLUE SPOTS

The IUCN-Med project to identify representative and priority areas and species for conservation in the Mediterranean Sea (MedRAS) bore fruit in 2010, significantly improving the compilation and display of ecological data on species and habitats and their uses



▼ Map of the Mediterranean - Photo: Nasa

and impacts, in little-studied areas of the southern and eastern Mediterranean. The project has conducted two case studies in very specific areas: the Alboran Sea and Libya, to be published in 2011. These important locations were selected once a new methodology had been prepared and implemented to develop and standardize the criteria for selecting priority areas and species in the Mediterranean.

In the Alboran Sea, an area of special importance due to its exchange with the Atlantic Ocean and as a fisheries resource shared between countries, nine significant core areas have been identified, which include 26 priority areas between Spain, Morocco and Algeria. The study was conducted based on information collected in a geographical information system including data from different levels: geomorphology of the area, fauna and flora, cultural assets, bathymetry, pressures and existing forms of protection, among others. In Libya, 24 sites in need of conservation were initially identified at coastal and marine level.

With this same objective, IUCN-Med is working closely with the Ministry of the Environment in Lebanon on the preliminary identification of sea areas in need of

biodiversity conservation, through the use of a geographical information system together with information about the activities taking place along the coast and at sea.

## LESS WATER + BETTER MANAGEMENT = CONSERVATION

The Mediterranean is facing the great challenge of managing water despite a growing population, increased pollution, construction of dams and irrigation systems, and the impacts of climate change, such as drought, desertification and rising temperatures. Freshwater species that live in rivers, lakes and wetlands are indicators of the good health of these ecosystems.

As a contribution at the regional level, IUCN-Med has worked in 2010 on a Mediterranean-level assessment of aquatic plants, freshwater crabs and crayfish, non-endemic fish, molluscs, dragonflies and damselflies. There are nine categories in the IUCN Red List system, ranging from species that are not threatened (Least Concern) to species that no longer exist (Extinct). At the regional level,



▼ Siwa, Egypt - Photo: Kevin Smith

we use two additional categories (Regionally Extinct and Not Applicable, for example, for non-native species). The threatened categories (Vulnerable, Endangered and Critically Endangered) are based on five scientific criteria that evaluate the extinction risk of species based on biological factors such as rate of decline, population size, geographical distribution, population level and distribution fragmentation. The criteria can be applied to all species (excluding micro-organisms) in all regions and countries.

The integration of information on these species in the report published in 2010 on the 'Conservation status and geographic distribution of freshwater biodiversity in North Africa' has provided a starting point for the management of the major river basins. This study of freshwater biodiversity in North Africa is a review of the conservation status of five taxonomic groups comprising 895 species: 128 fish, 160 molluscs, 83 dragonflies and damselflies, 3 crayfish and 521 aquatic plants. The project includes the Moulouya River Basin as a case study in Morocco, from which specific recommendations can be drawn for the management of its most precious natural resources (water and biodiversity) and the sustainable development of the area.

The results of the project in Morocco were disseminated among the local inhabitants by the 'Moulouya Caravan' between 12 and 22 January 2010. The analysis of results and reflections on their application in the conservation of biodiversity in the basin were recorded in a document entitled 'Lessons learned from European projects in the Moulouya basin'. A network for collaboration among local decision makers has also been launched to improve the protection of freshwater biodiversity in the basin.

The aim of these studies is to influence the amount of attention they enjoy from international conventions such as Barcelona, the aim of which is the protection of the Mediterranean area, as well as national policies. The results of the assessment of freshwater biodiversity throughout the Mediterranean will be published in 2011.

Work will continue throughout 2011 on identifying the economic value of aquatic species of fish, molluscs and

▼ *Calopteryx Haemorrhoidalis* - Photo: Fabio Pupin



plants of the Mediterranean, and disseminating the information among managers and decision makers to improve conservation measures and plans. Other activities planned for 2011 include supporting the Ministry of Tourism and Environment of Montenegro in the designation of Marine Protected Areas and the organization of a regional workshop for the identification and design of Marine Protected Areas in the Adriatic Sea.

To facilitate the development of red lists, IUCN-Med has translated and published in Arabic the IUCN Red List Categories and Criteria, version 3.1, in order to encourage the creation of red lists in Arabic-speaking countries, at both national and regional level. The guidelines for the application of the IUCN Red List criteria at the regional level will also be translated in 2011.

Biodiversity conservation and the sustainable use of marine and freshwater resources in high priority areas in the Mediterranean, a project which is scheduled for September 2011, covering Algeria, Egypt, Lebanon, Morocco, Tunisia and Montenegro. The project's main objective is to assess, conserve and manage the

biodiversity and critical habitats of the marine environment as well as freshwater ecosystems in the Mediterranean. Within the project, the species programme seeks to highlight those species, habitats and wider geographical areas that are critical and require urgent conservation action.

## AQUATIC VEGETATION

The project to determine the conservation status of 454 species and 19 subspecies of aquatic plants found in the Mediterranean was conducted between 2007 and 2010 as a collaboration between the IUCN Centre for Mediterranean Cooperation and Tour du Valat, an IUCN member in France. The aim was to identify hydrophyte and helophyte species threatened with extinction at regional level according to the IUCN Red List categories and criteria and to make the necessary recommendations to improve their conservation status. For the purposes of this study, the Mediterranean region was defined in terms of freshwater systems, including the basins of the rivers flowing into the Mediterranean Sea and adjacent Atlantic waters in Spain, Portugal and Morocco.

The species evaluated did not include all known Mediterranean aquatic plant species. Seventy-three of the 473 species assessed are threatened with extinction (CR, EN or VU) and 58 are Near Threatened (NT). One species, *Laurembergia tetrandra*, was classified as Regionally Extinct (RE). Of all the species studied, nearly one third are endemic to the Mediterranean region and, of these, 55 species are endangered and 40 are Near Threatened (NT). There are significant gaps in the list, especially in the eastern Mediterranean including Greece and Turkey, countries known for their high number of endemic plant species. Therefore, it is suspected that the number of threatened species is higher than that presented as a result of the evaluation.

The loss and degradation of habitats are major threats to the Mediterranean aquatic plants evaluated. Urbanization and tourism infrastructure lead to a direct loss of habitat. The draining of wetlands for infrastructure projects, agriculture and other reasons is leading to severe habitat degradation and thus to population declines. Moreover, recreational activities in wetland areas adversely affect aquatic plants. Increased drought frequency and problem native species competing with aquatic plants also affect



▼ Tonga lake, Algeria - Photo: Boudjèma Samraoui

the conservation status of these species. The status of all species was evaluated using the IUCN Red List criteria (IUCN 2001), following the guidelines for their use at regional level (IUCN 2003). The evaluations were reviewed by other experts during three workshops held in Portugal (2007), Tunisia (2009) and France (2010) and through correspondence with relevant experts.

These evaluations have in turn helped to establish a network of regional experts in the countries of North Africa and the eastern Mediterranean, who are now able to develop Red Lists and use GIS tools for biodiversity analysis.

## THE GREEN SIDE OF THE MEDITERRANEAN

To assess the value of biodiversity and its ecological capacity for adaptation and survival as a species and/or habitat, a network of priority sites called 'Mediterranean Mosaics' has been created where conservation and monitoring activities are planned in order to increase their resilience and adaptability to climate change. Representatives of five Mediterranean landscapes met in Córdoba in March to develop this concept, strategy and methodology. The resulting document includes a comprehensive proposal for landscape design and identification of conservation actions to support ecological resilience: indicators, training, adaptive management and support for representation work in the world of politics and international conventions. The initiative, which is still in its early stages, has been presented in five languages with a booklet to help raise funds.

Areas important for their plants have also been identified geographically in the study conducted by IUCN-Med, Plantlife International and WWF, in collaboration with the IUCN Species Survival Commission Plant Specialist Group. It includes profiles of 10 southern and eastern Mediterranean countries: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia, Syria and Albania. The project has identified 207 Important Plant Areas (IPA) in these countries, increasing the total number



of IPAs in the region to 888, including all types of habitats: forests, grasslands, wetlands, etc. Forty per cent of the IPAs identified coincide with key areas for biodiversity in the region, which are locations important for other species (mammals, birds, freshwater fish and amphibians).

Overgrazing is the most significant threat to the IPAs and affects 67% of locations. Deforestation (mainly due to the collection of firewood), tourism development, intensification of agriculture and unsustainable harvesting of plants affect more than one third of the IPAs analysed. Climate change principally affects the IPAs in Morocco and Lebanon, due to the number of high altitude areas, as well as Tunisia, due to the number of isolated wetlands. In these cases, higher temperatures resulting from climate change leave plants with no option as they cannot migrate elsewhere.



▲ Mbas Deja Leva, Albania - Photo: REC Albania

This project has produced 10 recommendations to help the conservation of wild plants in the Mediterranean. Successful implementation of these recommendations will ensure a sustainable future for the environment and the inhabitants of this unique region; failure will condemn them to a lack of natural resources and little resilience to the profound changes in climate. The results of the identification of priority areas for plant biodiversity have been lodged with the Critical Ecosystem Partnership Fund (CEPF) for consideration as a criterion when identifying geographical areas in urgent need of protection and financing from the Fund. The inclusion of data on the red list of threatened species of fauna and flora in the entire Mediterranean region could facilitate the identification of other areas in need of protection, so work will continue in 2011 on the integration of these data.

## TOWARDS AN ESPERANTO FOR CONSERVATION: BIOGEOGRAPHY

The development of a centralized information platform easily accessible by all is one of the major objectives we are pursuing through our projects. The inclusion of data of various kinds, which should include socio-economic and ecological profiles among others, and their analysis on a geographical basis can help achieve a more complete regional view of our Mediterranean landscape. Species distributions, terrestrial and marine territories and areas, and the different uses attributed to them, are helping to identify top-priority biodiversity sites in an ecological and socio-cultural context in order to assist politicians and managers in making decisions. This will provide an opportunity to assess current conservation status, exchange experience and promote greater cooperation between regions, especially on sites that affect cross-border areas.

IUCN-Med already has considerable experience in mapping the geographical distribution of certain habitats and species on the IUCN Red List of Threatened Species, the website of which has since 2010 included a section with data on the groups of Mediterranean species evaluated so far. Aside from this information, IUCN-Med is promoting the use of geographic information systems to create new maps on the biodiversity and ecology of the region, showing habitats and priority areas for conservation. In 2010 we worked especially on the Alboran Sea, Libya and Lebanon. In the Al Hoceima National Park in Morocco, IUCN-Med is developing the first atlas of the park with detailed mapping, and started the process of marking out a marine area in collaboration with local fishermen. In the Moulouya river basin, information on freshwater species has been incorporated in a geographic information system (GIS) to assist water management decision making, taking into account the biodiversity of the area and the needs of the local population.

The working session during the IUCN Mediterranean Forum on Biodiversity Conservation in the Mediterranean:

Prospects and Challenges brought to light the fact that in a period of global change such as the present, it is essential to study species and monitor their responses to environmental change in order to ensure the success of policies and actions for biodiversity conservation and ecosystem functioning. However, more work is needed to interpret the available data and to develop indicators and tools valid for the whole Mediterranean region, a model of cooperation for conservation. The participants in this session of the Forum recommended that IUCN-Med act as a bridge between the scientific data, conservation needs and decision makers. Communication and development of a language understandable by all are necessary at all levels: for the media, society in general and all agents that have an impact on biodiversity, including the private sector. Similarly, IUCN-Med should support Mediterranean countries in developing action plans under the CBD and should continue developing specific conservation

activities on the ground to serve as pilot projects for other similar regions, benefiting others with the experience and lessons learned.

IUCN's power to bring together institutions and experts from different sectors in the Mediterranean should be used to create a single point of reference and interpretation of data, which should become a platform for the ongoing analysis of biodiversity trends and the most appropriate conservation measures, making use of regional networks of experts, new technologies and the cooperation of countries on both sides of the Mediterranean. Following these recommendations, the Centre for Mediterranean Cooperation is already establishing relevant contacts with environmental observatories in Andalusia in order to pool efforts and define the parameters needed to set up a Mediterranean Biodiversity Observatory to provide the information necessary for shared management at a regional level.



▼ Photo: Carla Danelutti

# Changing our climate forecast

[ Policies and practices to mitigate and adapt to climate change include biodiversity issues at local and global level ]

*One of the objectives of the IUCN Centre for Mediterranean Cooperation is to facilitate the access of southern and eastern Mediterranean countries—which are probably most vulnerable to climate change—to international funds and mechanisms that help them to adapt to global change and that seek to mitigate the impacts of climate change, on a scientific basis and through sustainable development.*

*IUCN-Med has contributed to the drafting of position papers that reflect more clearly the priorities for the Mediterranean as a region. With this in mind, it has helped to identify experts from the Secretariat, Commissions and other partners to prepare these documents and participate in regional and national workshops, and it has promoted the creation of working groups on issues related to climate change and the organization of meetings and conferences to facilitate the participation of North African countries.*

▼ Photo: CENEAM





▲ IUCN Mediterranean Forum - Photo: Chadi Abi Faraj/IUCN-Med

## NATURAL FINANCIAL AND POLITICAL TOOLS

The IUCN Mediterranean Forum held in Malaga was an opportunity for discussion with government representatives, NGOs and scientists to define the future direction of the Centre and redefine some of the priorities for key issues such as adaptation to climate change, sustainable tourism, rural development, the challenges of biodiversity conservation, global change in mountains and forests, marine ecosystem research, management and governance, energy and natural resources. In parallel with these technical sessions there were also sessions on developing partnerships, international cooperation, the role of foundations and access to Euro-Mediterranean environmental policies to facilitate networking and access to environmental programmes in the region.

The study on the potential impact of the Euro-Mediterranean free trade area on the countries of North Africa has been completed this year and distributed among IUCN members in order to provide a closer look at the possible impacts that infrastructure and development plans in the region will have on natural resources. The information session held during the IUCN

Mediterranean Forum on European Union financing instruments relating to the Mediterranean environment and surroundings, such as European Neighbourhood and Partnership Instrument (ENPI) for cross-border multilateral cooperation, and the presentation of the study on free trade have responded to the need expressed by IUCN members to improve the ability to access funds and mechanisms for the protection of natural resources in North African countries, facilitating cooperation and sustainable economic development.

The EuroMed area is an opportunity for regional cooperation and planning. The Forum participants concluded that land and landscape organization needs improving, a key issue especially in marine areas to ensure sustainability in the Mediterranean under the influence of the EU, with the rapid changes that this will bring. The identification of appropriate indicators is essential for proper analysis and planning. How to include civil society in the planning process remains an open question.

The participants also agreed that EU influence and funding instruments must be harnessed in the Mediterranean to create innovative solutions in response to new challenges, such as food security, water scarcity and growing and changing demographic trends.



▲ Alhucemas - Foto: Mohammed Melhaoui

## UNDERSTANDING THE EFFECTS IN ORDER TO ADAPT TO CHANGE

It is necessary to understand the effects of climate change on the various ecosystems and/or economic activities, such as agriculture and tourism, and to develop strategies for adapting to and mitigating such change in order to be able to design appropriate measures for the various Mediterranean scenarios. IUCN-Med has worked with its members and partners to enhance their effective participation in national and regional debates, supporting them in developing position papers at the Copenhagen climate change summit, and signing a partnership agreement with the Andalusian Regional Department of the Environment to encourage the participation of southern and eastern Mediterranean countries in international negotiations on climate change policy.

Adaptation strategies that improve the security of the most vulnerable groups, particularly women in some countries, have been implemented in several priority areas for IUCN and its members in the region, including North Africa. Two pilot areas, El Bayadh in Algeria and Jradou in Tunisia, have been the scene of a village-level participatory assessment

to analyse the socio-economic and cultural resilience of rural populations and to plan uses and management strategies that are better adapted to climate change. Use of CRISTAL (Community-based Risk Screening Tool–Adaptation and Livelihoods) provides an understanding of the local views and strategies for addressing environmental vulnerability. This analysis was conducted with the aim of launching pilot projects and testing adaptation options in selected areas, helping to develop recommendations and case studies and to disseminate this information.

## MEDITERRANEAN MOUNTAINS

Mediterranean mountains have been identified as critical ecosystems in the region, particularly with regard to the impact of global change, land degradation and adaptation to climate change. IUCN-Med is working with the Mediterranean Mountain Partnership. There is, however, an obvious lack of information on the ground.

The participants in the Mediterranean Forum agreed on a series of recommendations to make progress in these critical systems, by working with IUCN members and partners at the regional level to achieve a common approach and a single terminology to apply to the methodology for collecting and analysing environmental data at local and regional level and integrating them with socio-economic and cultural variables.

IUCN-Med aims to play a central role in defining a Mountains Agenda with information distribution channels and cross-cutting cooperation networks to ensure that information reaches land managers. For this we are working with our partners to identify pilot areas where long-term adaptation policies can be carried out, and to evaluate and monitor adaptive management measures in conjunction with managers and scientists. This work takes account of the biophysical aspects of climate change and the socio-cultural variables of the use of the land and its associated resources, including farming practices and forest ecosystem and soil restoration activities in specific areas, and necessarily involves local people, the ultimate aim being to reduce poverty.

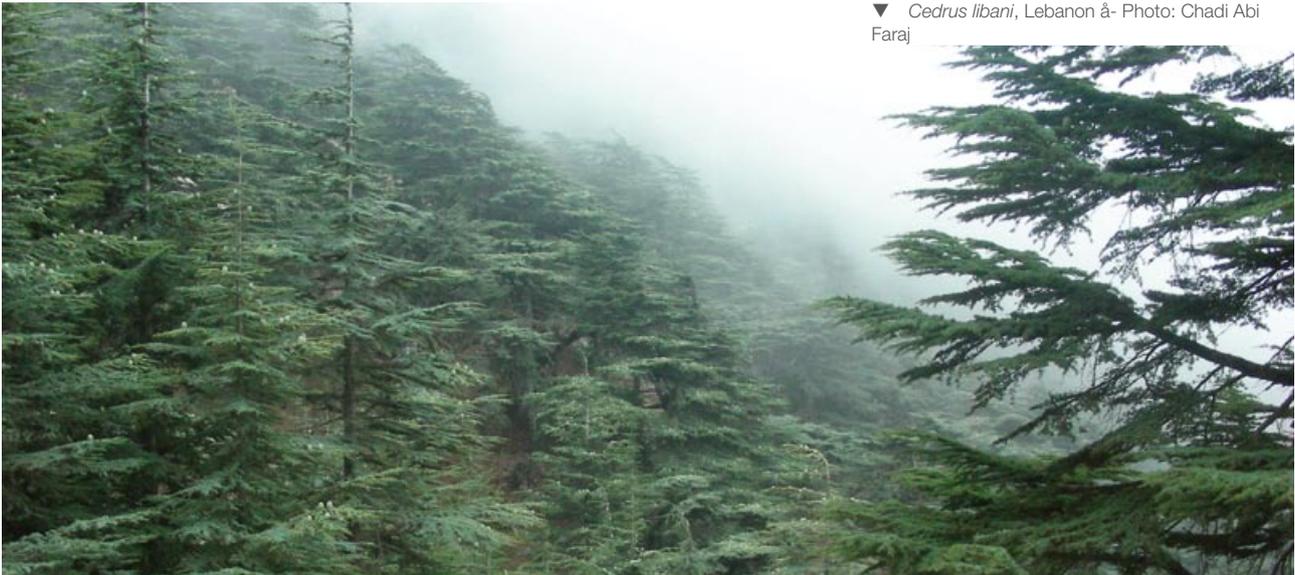
## A REGIONAL FOCUS: THE MEDITERRANEAN OBSERVATORY

One of the objectives of the IUCN Mediterranean programme is to develop and implement strategies to adapt to the impacts of climate change in priority ecosystems in the Mediterranean, such as forests, arid areas, the sea and freshwater ecosystems. Supporting and facilitating joint research programmes between the northern, southern and eastern Mediterranean in critical areas for adaptation to climate change is part of the way to understanding the conservation and conservation management needs in situ and to facilitating the migration of species, including capacity building to support their implementation.

The main Mediterranean conservation agencies agree that the gaps in existing information must be filled and supplemented where further investigation is needed.

Interpretation of this body of knowledge is also needed, however, to help identify medium- and long-term trends. The Mediterranean Laboratory concept has been an important topic of discussion with IUCN members in the region, which have seen the IUCN Centre for Mediterranean Cooperation as an appropriate entity to perform this role and serve as a model for other areas of the world.

In 2010 we have been working to define a regional initiative for adaptation to global change in mountainous areas through the development of the Climate Change Observatory concept in Mediterranean mountain ecosystems, to be launched in 2011. The Collaborative Partnership for Mediterranean Forests agreement was also signed for four years with FAO–Silva Mediterranea and nine other regional organizations during the Mediterranean Forum. The aim of this agreement is to improve the terms of the policy framework for the sustainable management of forests and associated ecosystem services in the context of climate change in Algeria, Lebanon, Morocco, Syria, Tunisia and Turkey.



▼ *Cedrus libani*, Lebanon &- Photo: Chadi Abi Faraj

## AND FROM THE ASHES ROSE THE PHOENIX ...

Forest cover in Lebanon, which according to recent studies by the Ministry of Agriculture and FAO accounts for approximately 13.5% of the country, is a unique and important feature in the markedly arid south-eastern Mediterranean environment, especially for the national emblem, *Cedrus libani*. As in other parts of the Mediterranean region, the increase in the number and extent of forest fires is the main cause of degradation and loss of forest area in Lebanon. This is due to a combination of factors resulting from global change: between 1,200 and 3,000 hectares of forested land burn every year in Lebanon, while there is a high risk of wildfires in about 28% of the area and an extreme risk in 5.5%.

The IUCN-Med project for Integrated Management and Training for the Control of Forest Fires in Lebanon and Post-Fire Restoration in Pilot Areas, funded by the Spanish Development Cooperation Agency, has worked primarily

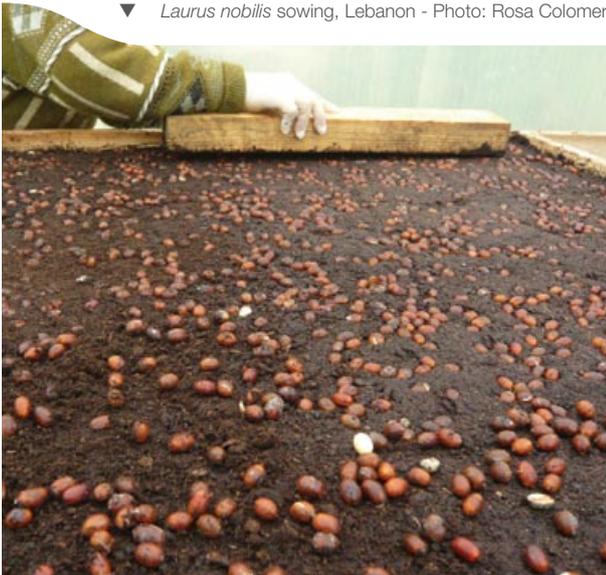
in two fields: in strengthening the capacity of national institutions in order to develop a national forest fire strategy, the text of which, including a long-term action plan, was approved by the Council of Ministers of Lebanon in May 2009; and, secondly, in developing a national vision on forest restoration by contributing practical experience in a mountain forest pilot area of high conservation value, such as the Chouf region, involving local communities.

One of the most noteworthy activities held has been a forest rehabilitation course for representatives of Lebanese public institutions and civil society involved in forest management and fire prevention. The aim is to disseminate the principles and methods of Forest Landscape Restoration and to apply this knowledge in developing a pilot restoration plan in the Chouf, helping to conserve biodiversity, control soil erosion and spread new technologies for post-fire restoration, such as those used in Spain.

As for reforestation activities that are more resilient to climate change, nursery techniques for the production of 48 species of native plants and the development of 30 other species have been tested, resulting in some 23,000 seedlings of native species grown in the newly established nursery in Ramlieh. In this context, there have been 8 visits for supervision and training in the nursery production of native plants, with the participation of a Spanish propagation expert. Analysis of the different stages in the nursery production of endemic plants, the propagation timetable (seed collection, sowing, transplanting, etc.) and the materials used (type of substrate, seed containers, etc.) have provided valuable knowledge for the future development of reforestation activities in the country.

Forest restoration has also been planned on 3 pilot sites: Marjaayoun and the Litani River, to be implemented after the rainy season in 2011, and the Natural Forest Reserve in Tannourine, a cedar forest of some 600 ha, a quarter of which forms part of the Nature Reserve. Protected since 1999, the reserve has been open to tourism since 2005 and is being reforested with native species produced in the nursery. The training and experience of local agents such as the Association for Forests, Development and

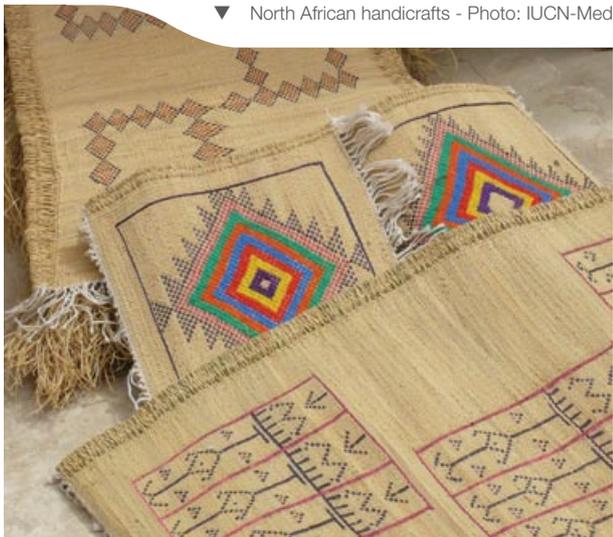
▼ *Laurus nobilis* sowing, Lebanon - Photo: Rosa Colomer



Conservation (AFDC), in this case for the production of native species, have served to replicate the experiment by creating another, larger nursery and to increase knowledge about the value of ecological restoration in preserving the landscape and its biodiversity and preventing erosion, thus helping to control the impacts of climate change.

The effectiveness of reforestation on these pilot sites is being contrasted in two parallel scenarios: arid areas without irrigation and arid areas with regular irrigation. Monitoring the survival rate of native species during long periods of drought will be a clear indicator for choosing species for future reforestation. The recommendations resulting from the restoration work in this area will be used in the other pilot areas.

The objectives achieved in this project include raised awareness regarding the production of native plants according to ecological criteria—control of soil erosion, protection of endangered species, fire resistance, etc.— and economic criteria, such as productivity for the local population through goods and services derived from these plants: medicinal and aromatic species, honey, fruit, timber, etc.



The restoration of these pilot areas will be completed in 2011 and the project's results will be reported in a well-illustrated guide to forest rehabilitation using native species, in order to spread and exchange technical criteria and encourage reforestation using endemic species, thus promoting the creation of landscapes that are more resilient to climate change and forest fires.

## LAND USE AND MANAGEMENT IN ARID AREAS

The natural resources of diverse habitats and ecosystems are suffering the effects of degradation brought on by the climate and a development faster than ever, which tends to exploit resources without regard for continuity over time. To ensure the protection of these resources and the people that depend on them, it is necessary to understand and maintain appropriate management systems that involve local communities, businesses and governments.

The countries of North Africa and their people are being affected by increasing aridity and the consequences of desertification, with the resulting degradation of ecosystems and socio-economic impacts, which adversely affect security and sustainable livelihoods. The IUCN-Med project to support security and sustainable livelihoods through the development of systems of governance and sustainable management of agro-forestry resources in priority areas of North Africa focuses on improving governance structures by combining legal and institutional reforms, economic and social development strategies, international partnerships, training and economic sustainability.

The promotion of sustainable management and better governance of ecosystems in the North African region is based, on one hand, on innovative sectors in areas such as eco-tourism or agro-forestry and, on the other, on the enhancement, diversification and innovation of traditional practices and ancestral technical knowledge regarding the management and multiple use of natural resources, as is the case of esparto. The project plans to organize actions to support the retrieval and dissemination of these

practices in a sustainable manner, through pilot projects such as the creation of a Museum-Workshop of esparto crafts in the area of Jradou in Tunisia, thanks to the work of local women.

In addition to a study of the legislation applicable to protected natural areas in Tunisia and ongoing work on oasis governance, the activities developed in 2010 at the regional level include a study on the environmental impact of the Euro-Mediterranean free trade area on the natural resources of Morocco, Algeria and Tunisia. The results of this study were presented to North African IUCN members at an information session during the IUCN Mediterranean Forum held in November 2011, together with a presentation of European funding mechanisms for environmental activities of interest to the Mediterranean.

## SUSTAINABILITY AGAINST DEGRADATION

Unsustainable use of agricultural and livestock resources in highly vulnerable arid or semiarid areas where there are limitations to agricultural development can have a direct impact on the environment, leading to the desertification of ecosystems and the irreversible degradation of the soil. The effects of this process in turn affect the standard of living of the rural population, often resulting in an exodus to the big cities, coastal areas and abroad, causing complete depopulation along with the disappearance of fauna and flora.

Current governance structures and mechanisms in many Mediterranean countries are often deficient, especially in North Africa and the eastern Mediterranean, where there are extensive areas of high vulnerability such as arid zones. This is one of the main factors aggravating both ecosystem degradation and insecurity for people and their livelihoods.

IUCN-Med is working on the project entitled Support for sustainable livelihoods in North Africa and the Eastern Mediterranean through the conservation and management

of natural resources in arid and semi-arid areas, the aim of which is to contribute to the development of countries in North Africa and the eastern Mediterranean by proposing alternative methods of natural resource conservation that help increase the social and environmental sustainability of arid areas, ensuring better management of natural resources as a livelihood. During 2010 we worked on the identification of stakeholders and the planning of project activities, which will mainly involve: improving the management of arid systems as a source of employment; assessing the impact of and the conditions required for the ecological restoration of the main dune systems on the Algerian coast, with the drafting of recommendations, training sessions and exchange of knowledge on ecological restoration and its application in a pilot area of the region; the training of young people for sustainable development; and the sustainable management of tourism in areas close to protected areas in North African countries, providing decision-making tools as well as technical solutions to ensure that tourism benefits local communities.



▼ Photo: IUCN-Med

# Naturally energizing our future

[ Energy policies and strategies mitigate the impact of the growing demand for energy on biodiversity ]



▲ Green energy in the south of Italy - Photo: Terra Project

*The demand for carbon-based energy in the Mediterranean region is rising relentlessly due to the development of new infrastructure and technologies to support the population. This increasing demand has a major impact on the region's natural resources, making the search for alternative, cleaner, renewable energy sources, especially solar and wind energy, a growing need in the Mediterranean basin.*

The presentation of the work of the Blue Plan during the Mediterranean Forum revealed the trend towards alarming

energy scenarios by 2030 and the worrying evolution of the energy and climate situation. The demand for carbon-based energy continues to rise and most Mediterranean countries rely on imports. In fact, the Mediterranean remains a transit region for more than 22% of the world trade in oil, increasing the impact on and the risks to the sea.

Aware of the need to combine the demands of natural resource conservation with the promotion of sustainable development, IUCN-Med has entered into dialogue with

the energy sector in order to integrate nature conservation into their activities. This involved organizing a seminar, held during the first IUCN Mediterranean Forum in Malaga, on energy networks and natural resources from the perspective of conservation and reduction of the impacts sometimes caused by energy companies and energy transport networks.

Given the geo-strategic situation of the Mediterranean for the energy transport networks and the rise in demand in the medium term, IUCN-Med together with its members and partner institutions have started a dialogue with energy operators to draw up solutions to avoid the adverse impacts on biodiversity and on terrestrial and marine protected areas. Innovation in the energy field and the development of renewable sources of energy may prove to be key factors in the fight against climate change in the Mediterranean region. The inevitable transition to an alternative energy scenario must be promoted, through the use of renewable energy resources and through energy savings and efficiency. After all, the best energy is the energy that is not used: that is the cleanest and most economical kind.

One of the achievements during 2010 was the signing of the agreement with Red Eléctrica de España (REE), one of the largest electricity companies in Spain, to work in the field of renewable energy, climate change and natural resources. The activities covered by the agreement include possible research projects into renewable forms of energy; analysis of the impact of different energy alternatives on natural resources and biodiversity; analysis of the various regional energy policies and strategies and their environmental, economic and social impact; projects for the communication and dissemination of information on energy and the environment; and joint Mediterranean regional seminars, the development of which will commence in 2011.

Negotiations have also started on working with the Ecological Footprint initiative, which was also presented at the Mediterranean Forum.

▼ Dam, Spain - Photo: Nieves Garcia



# Managing ecosystems for human well-being

Development policies and strategies help the vulnerable and poor, especially women, to manage ecosystems sustainably to improve their livelihoods



▲ Photo: Jose Elias Cabrera

*Collaboration with regional and international organizations in charge of protecting and managing natural resources is part of IUCN's everyday work in the Mediterranean. Itself shaped by more than 20 countries with different interests and a single sea for all, the Mediterranean, because of its size and its make-up, is a model for the integration of different stakeholders in the management of shared spaces and resources.*

## PROTECTING MARINE RESOURCES

IUCN-Med is continuing to promote a platform for dialogue on high seas governance through a process of consultation and debate in the western basin of the

Mediterranean. Resulting from this work, the publication 'Towards better governance in the Mediterranean Sea' has laid the scientific basis for making recommendations to governments and regional bodies, and includes a review by country and by region in the Mediterranean of the legislation applying to the creation of protected areas in the high seas. This process has also been illustrated on a smaller scale in the Alboran Sea, through the creation of

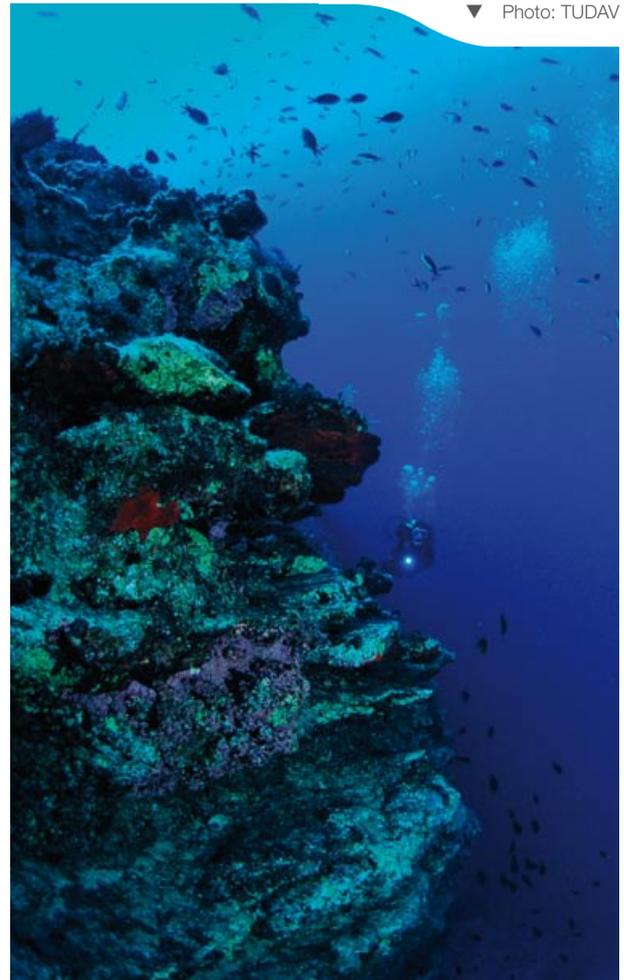
a working group which has helped prepare the study entitled 'Conservation and Sustainable Development in the Alboran Sea', the starting point of an integrated management plan for a sea shared between Spain, Morocco and Algeria.

There is, however, an urgent need to make the countries and relevant organizations aware of key issues affecting conservation in the Mediterranean Sea, including illegal fishing, the risks associated with development at sea, the European maritime policy, the benefits of Specially Protected Areas of Mediterranean Importance (SPAMI), etc. IUCN-Med is working to provide answers in terms of governance, by carefully considering the challenges of jurisdiction in the Mediterranean Sea in order to revitalize the way biodiversity conservation is seen by maritime law in a broad sense.

The unique and vulnerable canyons and seamounts in the Mediterranean are determining factors of ecosystem function and key habitats for deep-sea biodiversity, as well as being economically and ecologically important, particularly in the Gulf of Lion between Spain and France and in the Alboran Sea between Spain, Morocco and Algeria. IUCN-Med and its partners have agreed on the need to support the recommendations of the group of experts on submarine canyons and integrate the strategy for protection of these ecosystems within a Mediterranean spatial planning project, according to an approach based on Mediterranean ecosystem management.

The set of recommendations adopted by the IUCN Working Group which met in Istanbul (January 2010) and in Prócida (October 2010) on the issue of submarine canyons in the Mediterranean were discussed during the IUCN Mediterranean Forum. The purpose is to promote technical and scientific cooperation at regional level, in particular to support the activities of the Regional Activity Centre for Specially Protected Areas (RAC/SPA) in developing projects to create Specially Protected Areas of Mediterranean Importance (SPAMI), as well as the activities of the General Fisheries Commission for the Mediterranean (GFCM) on the designation of Fisheries Restricted Areas (FRA) across the Mediterranean.

Considering that issues of Mediterranean Sea governance are key to biodiversity conservation and the sustainable use of marine resources, and recognizing the complexity of the governance framework in the Mediterranean basin, the central role of IUCN-Med is mainly in the creation of networks to improve governance of the sea, facilitating cross-sectoral, regional and sub-regional exchanges on issues such as governance of biodiversity in the eastern basin or the international straits.



▼ Photo: TUDAV

## DEVELOPMENT + PARTICIPATION = SUSTAINABILITY + CONSERVATION

The new Barcelona Convention Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM), signed in 2008 by Algeria, Croatia, Slovenia, Spain, France, Greece, Israel, Italy, Malta, Morocco, Monaco, Montenegro, Syria and Tunisia, and ratified this year, offers a new tool for collaboration between countries. Support for its implementation and the creation of a similar model for the Black Sea are the objectives of the PEGASO project (People for Ecosystem-based Governance in Assessing Sustainable development of Ocean and coast). The project started in 2010 with a budget of €6,999,004.56 and 24 partners under the leadership of the University of Barcelona. It will provide a platform for dialogue on governance and management of the Mediterranean and the Black Sea coasts and will provide infrastructure to share information; develop new tools, methods and models; and implement the protocol at different levels, improving performance and providing training and an exchange of information.

With a methodology based on maps, indicators, spatial analyses and socio-economic assessments, the Pegaso project will establish a basis for addressing the study of links between the coastal ecosystems of the Mediterranean and Black Seas, acting as a springboard for better coastal management, from research to management at local, national and regional levels.

## GATHERING STRENGTH

Cooperation in the drafting and implementation of protocols, conventions and legislation at national and regional levels is a way to encourage the participation of different sectors of society, scientists and governments, and can serve as a bridge between biodiversity conservation priorities and the need for development, which must be sustainable.

IUCN-Med contributes to these efforts by collaborating with the General Fisheries Commission for the Mediterranean (GFCM) and the Mediterranean Action Plan (MAP/UNEP), and by being part of the RAC/SPA Steering Committee for the identification of Specially Protected Areas of Mediterranean Importance (SPAMI) in the high



▼ Turbot farm, Spain - Photo: APROMAR

seas and the economic value of ecosystems and marine activities. A number of cooperation commitments were signed for that same purpose in 2010 with organizations such as the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) (where IUCN sits on the scientific committee), the Network of Managers of Marine Protected Areas in the Mediterranean (MedPan), MedWet, the WWF Mediterranean Programme and the FAO's COPEMED II project to strengthen sub-regional scientific cooperation and enhance scientific supervision and the capacity for the sustainable management of shared resources.

At national level, IUCN-Med is supporting Tunisia, Algeria and Morocco in the review of existing legislation relating to natural resources. In the case of Tunisia, the study of existing legislation in the country relating to protected areas and types of protection has been a first step towards making the necessary recommendations to policy makers and trying to adjust the system to the internationally recognized IUCN standard for the application of protected area categories in the Mediterranean, thus standardizing the criteria used in the region. The results of this study were presented publicly

during the National Workshop on Biodiversity and Youth held on 22–23 May 2010 in Tunisia by the Tunisian Ministry of the Environment, and further discussed at a regional workshop with representatives from Tunisia, Morocco and Algeria, organized by IUCN-Med in collaboration with the same ministry on 15–17 December 2010.

At ecosystem level, two traditional agro-pastoral systems representative of North Africa—oases and esparto fields—have been chosen for detailed examination of their ecological, productive, economic and socio-cultural value, and for assessment of innovation opportunities in current management systems, so as to diversify the economy of their users. In this context, and in collaboration with the IUCN Environmental Law Centre in Germany, we have started the study on the 'Legal and institutional analysis for sustainable management of oases' in the three Maghreb countries, starting with Morocco.

## MIXING THE TRADITIONAL WITH THE INNOVATIVE

Complementing this study, IUCN-Med has conducted an analysis of the governance of natural resources in Tunisian oases. Oases are fertile areas in a desert where there is a permanent source of fresh water. Oases vary in size from 2.5 acres (1 hectare) around small springs to vast areas of land with natural or artificial irrigation. Underground water sources account for most oases, their springs and wells are supplied from aquifers that may collect water more than 800 kilometres away. Oases are very common and cover around 9,000 km<sup>2</sup> in North Africa. Two thirds of the Saharan population live in oases, where the date palm is the main source of food and provides shade for growing citrus fruits, figs, peaches, apricots, vegetables and cereals. Oases are also an obligatory stop on the migratory routes of many birds, which depend on the diversity of trees and plants that grow there.

The livelihoods and rural systems of many people are under great pressure due to a combination of interconnected biophysical and socio-economic factors,

▼ Oasis in Siwa, Egypt - Photo: Kevin Smith



which are affecting the fragile sustainability of oasis ecosystems. The maintenance of traditional oases with healthy semi-natural habitats, adequate irrigation systems, diverse agricultural products and traditional human activities may be essential for the maintenance of biodiversity, especially in comparison with the extensive homogeneous date palm plantations and agriculture, which require more water from the aquifers.

The underlying cause of the degradation of oases lies primarily in current systems of governance and the limited involvement of local communities in the management of these ecosystems and their access to land and water. The



◀ Oasis in Figuig, Morocco - Photo: Mohammed Melhaoui

disappearance of caravan trade systems has also led to their abandonment and a rural exodus. There is no integrated, collaborative, community approach, resulting in significant problems in access to natural water sources and disputes among water users.

The idea that oases are poorly productive systems without multifunctional values has led the authorities to undervalue them, given the greater productivity of plantations. However, the traditional management systems and rural economy of the oases are increasingly being seen as a means of fighting desertification and enhancing ecological and social resilience to climate change. Improving governance structures and giving consideration to the issue of access and rights are essential in order to maintain and restore oasis socio-ecosystems, creating space for innovative options and alternative uses to improve traditional management systems and people's livelihoods, preventing the rural exodus.

In the case of esparto, a training programme was started for women to improve the production, marketing and sale of esparto products and esparto management in two pilot areas: El Bayadh in Algeria and Jradou (Zaghouan National Park) in Tunisia. In collaboration with l'Alliance Femme et Environnement and the Mouvement Ecologique Algérien, both IUCN members, we have conducted an analysis of women's participation in esparto management and organized several information and training sessions for craftswomen on new techniques and products such as tablecloths and decorations, encouraging the inclusion of young women and the development of workers' associations, resulting in the adaptation of premises for a workshop museum of esparto products in Tunisia run by women.

At the regional level, a working session was organized during the IUCN Mediterranean Forum in November, in collaboration with interested members and institutions, to address the main challenges facing the conservation and management of marine and coastal areas and to assess what role IUCN-Med should play in responding to action priorities for the Mediterranean region. The main recommendations of the participants dealt with the need for advice regarding the international, regional and national

instruments for the management and conservation of the Mediterranean marine environment. The institutions responsible for applying, clarifying and enforcing these instruments should set up a network of marine protected and managed areas and ensure better protection of marine biodiversity in waters beyond national jurisdiction as well as in territorial and internal waters, taking into account the interactions and mutual impacts of the marine, coastal and land environments.

Another recommendation received was to promote the implementation of existing tools and the development of new ones (databases, networks, research, monitoring, indicators, training, education, communication, etc.) for the identification, management and monitoring of knowledge, the development of an adequate network of marine areas to ensure the conservation and management of natural resources and biodiversity and the adaptation to global changes.

Finally, there was agreement on the need to conduct and participate in economic assessment activities for marine natural resources and biodiversity, in order to encourage

national authorities and the private and public sectors to take into consideration the economic value of the marine environment, the importance of better management and the essential role of sea resources and ecosystems in the economy of the Mediterranean communities.

## A NETWORK OF MANAGERS TO PROTECT THE SEA

Areas labelled 'protected' for various reasons also require proper management to achieve their objectives. In order to make the management of marine protected areas, including those in the Natura 2000 network, more effective and to benefit the marine environment, the network of marine protected area managers in the Mediterranean is developing several projects that also involve IUCN-Med.

The purpose of this network of about 30 managers is to facilitate the exchange of experiences and develop appropriate tools for everyone to improve management efficiency and help take appropriate action against invasive



▼ Fishermen in Al Hoceima, Morocco - Photo: Chadi Abi Faraj/IUCN-Med

species and the impacts of climate change. The project for the northern Mediterranean, MedPan North, covers Spain, France, Greece, Italy, Malta and Slovenia and comprises 12 partner organizations, under the leadership of WWF France.

The new IUCN-Med initiative, Nereus, continues the work of developing and identifying a representative network of marine areas managed for different purposes, such as tourism or fishing, which may serve as a model for others to improve conservation of Mediterranean biodiversity.

Knowledge about the management of marine protected areas has also expanded this year, as has the ability of managers to implement it, through various publications on endangered species in the Mediterranean and the translation into Arabic of How to evaluate a marine protected area.

## SUPPORT FOR AL HOCEIMA NATIONAL PARK

Covering land and sea, the Al Hoceima National Park in northern Morocco is the focus of several projects for conserving biodiversity and raising awareness among local people on how to exploit the local natural resources more responsibly.

Funded by the Spanish National Parks Agency and in collaboration with the Spanish Agency for International Development Cooperation and the High Commission for Waters and Forests and the Fight Against Desertification in Morocco, the IUCN-Med management support project for this park includes diverse activities, such as development of a new management plan with marine and terrestrial zoning, a pilot project for the small-scale production and

processing of aromatic plants, support for the fishing community for the sustainable use of marine resources, improvement of the capacity of the park administration and the publication of the first atlas of Al Hoceima in 2011.

Notable events in 2010 include the organization of four workshops in Morocco on 24–27 March, in collaboration with Seo/BirdLife and with the participation of experts and those responsible for the species conservation and land management, to discuss issues such as a Strategic Action Plan for the Audouin's gull (*Larus audouinii*) and the Osprey (*Pandion haliaetus*), both rare in the Mediterranean; bird and cetacean watching in the context of a type of tourism that respects the local fauna and flora; and communication between the park and institutions active in the area to improve the park's management and conservation by promoting sustainable activities.

Other activities to support the park during the year included participation in the workshop entitled 'Systemic Analysis of Prospective Sustainability' held in January in the port of Cala Iris, and the workshop on research and participatory and prospective planning on the Ras Al Ma small-scale fishery, held in February at the port of Ras Kabdana, both organized by AGIR, the Association of Integrated Resources Management, in collaboration with IUCN-Med and the High Commission of Waters and Forests and the Fight Against Desertification in Morocco, within the project 'Study of the socio-economic aspects of small-scale fishing in the Al Hoceima National Park and the area of Cap de l'Eau opposite the Chafarinas Islands Marine Protected Area'.

During these workshops data were reviewed from fishermen from different ports and landing areas along the eastern Mediterranean coast of Morocco, which will be used in ongoing work on the development of a possible fishing reserve in the country.

# Greening the world economy

Economic, trade and investment policies better integrate biodiversity values



▲ Photo: François Simard

*Private sector involvement in natural resource conservation and management is a natural tendency once the agents causing the greatest impacts on nature are known. From extracting minerals to organizing travel, companies operating in the Mediterranean must adopt a greener strategy to conserve the natural resources they use today; otherwise they will eventually disappear, affecting the companies and communities that depend on them. IUCN-Med advocates different forms of involvement with the private sector, ranging from the promotion of offsetting and restoration techniques to the consideration of biodiversity in site selection and management.*

## MORE SUSTAINABILITY IN AQUACULTURE

In 2010 IUCN-Med participated in Mediterranean, a project to identify Sustainable Aquaculture Indicators for the Mediterranean, developed by the Spanish Aquaculture Observatory Foundation (FOESA) in collaboration with the

Spanish Marine Aquaculture Producers' Association (APROMAR), as well as in a sustainable salmon farming initiative in France in collaboration with the Interprofessional Committee for Aquaculture Products (CIPA), the Technical Institute of Aviculture (ITAVI) and the National Institute for Agronomy Research (INRA), in order to provide recommendations for sustainable development in this new economic sector.

## A BOOST TO THE RURAL WORLD

A multifunctional rural landscape facilitates the permeability and connectivity of the land. Nature conservation in turn requires the maintenance of certain activities, for which the involvement of rural communities is essential as a driving force and vital part of these ecosystems.

The conservation of nature can play a highly significant role in rural development. It must, however, take the priorities of the rural population (whether growing or shrinking) into consideration as a baseline for land use planning and biodiversity conservation policies. Land use planning and investment activities should focus on the people living in protected areas and buffer zones as the key to conservation. Biodiversity conservation is in fact a new niche for the creation of sustainable economic activities in rural areas and can contribute services to society.

## RESPONSIBLE TOURISM

Tourism is an essential development factor in the Mediterranean, which hosted by more than 275 million international tourists in 2007, and has an impact on the use of the region's natural resources, mostly on land use but also on water management, job creation, etc. The current situation of tourism in the northern and southern Mediterranean shores differs greatly, with a clear growing trend in the south. We must, however, work towards a tourism that is more responsible and ecological, avoiding the adverse consequences for nature and the resources we share, and maintaining ecosystem services and the well-being of the local people and tourists that enjoy them.

The participants in the Mediterranean Forum recommended developing and reinforcing cooperation and coordination between the public and private sectors



▼ Mediterranean Landscape, Morocco - Photo: Chadi Abi Faraj/IUCN-Med

for sustainable management of the environment. The development of a kind of tourism that respects nature requires a long-term strategy which makes use of existing tools and develops new ones, such as a Mediterranean observatory together with meaningful databases for decision makers, to build capacity at national and regional level in the tourism sector (including government, businesses and civil society), to limit the negative effects on biodiversity and natural resources in the Mediterranean region.

The 'ecotourism' concept has been promoted mainly at two events: the Mediterranean Tourism Forum (Meditour 2010), organized by the Malaga Chamber of Commerce–Euro-Mediterranean Centre for Knowledge, Innovation and Training in Tourism, and the IUCN Mediterranean Forum. A working paper on sustainable tourism in the Mediterranean was also drafted: 'Panorama and Perspectives; Strategies and Actions', and a mission to Morocco was undertaken to participate in the Conference

on Ecotourism in Jbel Kelti and to assess opportunities for cooperation with other ecotourism projects in Tallasemtane Park, part of the Spain-Morocco Intercontinental Biosphere Reserve.

A workshop on responsible tourism was also organized in the Al Hoceima National Park in March, in collaboration with the Andalusian Regional Department of the Environment, Europarc-España and the Scientific Institute of Rabat, and in May a training session was held on communication, awareness raising and environmental education in protected areas for directors and managers of protected areas in North Africa.

## NATURE AND DEVELOPMENT BETWEEN SPAIN AND MOROCCO

The project "Integrated - agricultural, rural, environmental, cultural and tourism - development in the area of the Intercontinental Biosphere Reserve of the Mediterranean" (IntegraRBIM) was approved by the Monitoring Committee of the Operational Cooperation Programme Spain External Borders (POCTEFEX) in January 2010 during its first call for proposals. Partners in the project are the Andalusian Regional Department of the Environment together with the Department of Agriculture and Fisheries, IUCN and various entities from the Kingdom of Morocco.

The actions of this project are structured around the three goals of the Andalusia (Spain)–Morocco Intercontinental Biosphere Reserve of the Mediterranean: to encourage the development and consolidation of the network of protected natural areas in southern Andalusia and northern Morocco; to promote a model of sustainable development that fosters an environmental equilibrium, the participation of local communities and their social and economic development; and to promote cooperation between the two countries by developing common management and coordination tools for the conservation of natural resources and human development.

One of the activities to achieve the defined objectives is the organisation of Handicraft Fairs in the Natural Parks

▼ Al Hoceima, Morocco - Photo: Chadi Abi Faraj/IUCN-Med



included in the RBIM. There are also several ecotourism-related activities, such as the III International Planète Terroirs Forum held in Chefchaouen in June, the II Intercontinental Gibraltar Strait Bird Fair held in September in Tarifa (Cádiz, Spain), the activities organized in Talassentane Park in northern Morocco at the end of 2010 and the promotion of the Route of the Moors, a cross-border itinerary in the Intercontinental Biosphere Reserve of the Mediterranean, taking in the Andalusian natural parks of Sierra de las Nieves, Sierra de Grazalema, the Strait and Los Alcornocales as well as the Talassentane National Park on the Moroccan side. This route aims to highlight the know-how, traditional crafts and local products made in the reserve and to offer tourists an overview of this valuable natural asset.

## A SUSTAINABLE BUSINESS

The International Union for Conservation of Nature (IUCN) and Holcim, the world leader in production and marketing of cement, aggregate, concrete and mortar, have maintained a cooperation agreement for advice on biodiversity management since 2007, which is integrated in the company's policies. This agreement includes promoting best practices as well as identifying and enacting initiatives to help conserve biodiversity.

In the case of Holcim Spain, the agreement signed in 2009 with IUCN-Med has resulted in IUCN experts advising on the proper integration of environmental and social aspects in quarry restoration and in the publication of 'Gravera el Puente, a Sustainable Business'.

An independent evaluation has shown that the main objectives of the partnership agreement between IUCN and Holcim have been met. The cooperation will continue to assist Holcim in achieving its goal of establishing biodiversity protection plans in 80% of its quarries in environmentally sensitive areas by 2013. They will also define indicators to measure the success of the biodiversity management system and develop a water management programme. On 7 February 2011 IUCN renewed the agreement with Holcim for three years in order to integrate biodiversity management into their actions at international level.

In 2010 IUCN established another 5-year alliance with Nestlé Nespresso to promote sustainability in the production of its coffee-making products. IUCN and Nespresso have agreed to research, develop and implement the AluCycle™ initiative, to reduce their footprint during the life cycle of the aluminium used in Nespresso coffee capsules.

# Mediterranean priorities for the future



▲ Photo: IUCN-Med

In the vote held in the Assembly of IUCN members during the World Conservation Congress held in Barcelona in 2008, 7 resolutions and 6 recommendations for implementation in the Mediterranean were adopted, out of a total of 144 motions examined. These documents reflect the concerns and action priorities of IUCN members, secretariat and partners until the next World Congress to be held in Jeju in 2012, and relate mainly to the following areas:

- Conservation and recovery of the Mediterranean Monk Seal
- Conservation of the habitat of the Iberian lynx
- Accelerating progress towards the creation of marine protected areas and networks of marine protected areas
- Artisanal fishing organizations active in the sustainable management of the Mediterranean
- The Great Ecological Connectivity Corridor: Cantabrian Mountains-Pyrenees-Massif Central-Western Alps
- Integrated coastal management in the Mediterranean—the Barcelona Convention
- Improving the governance of the Mediterranean Sea
- Cooperation between the members and committees from Latin America and the Mediterranean
- Increasing the pace and scale of conservation in the Mediterranean biome
- Promotion of protected area categories V and VI for biodiversity conservation
- Conservation of the Western Iberian Peninsula
- Conservation of the Ebro River
- Environmental impact of wind energy production in the mountainous areas of Spain and Portugal

Action priorities in the Mediterranean region were also reviewed during the IUCN Mediterranean Forum in November 2010, coinciding with the 10th anniversary of the establishment of the Centre for Mediterranean Cooperation in Malaga. International and intersectoral cooperation for development and conservation in the Mediterranean has proved to be the basic premise in response to the need for financial support for developing activities in biodiversity conservation with other countries and areas, taking into account that the conservation of natural resources in the Mediterranean is a responsibility for countries and also a means of creating and maintaining traditional livelihoods while promoting sustainable development in the region.

To achieve this, conservation efforts should be built on three pillars: social responsibility, innovation and sustainability, developing a long-term vision of the programmes and taking into account both natural resources and the social development of communities on

both shores of the Mediterranean, including all necessary components (training, education, communication, research, management, governance, etc.), as well as global (natural and climate) change.

Continuing to collect and analyse data in the Mediterranean, where IUCN plays an important role, and researching innovative ways to communicate this information to society are equally essential to successfully realizing our ambitions. Present and future projects therefore seek to promote network creation, co-financing of activities, inclusion of social and cultural aspects, and integrated resource management in the Mediterranean, while helping to improve the capacity of NGOs to design and submit new initiatives. Such initiatives should contain clear indicators and information on the sustainability of their results. Finally, we will continue to work towards setting more realistic 2020 targets for preserving biodiversity, creating opportunities to answer the conservation needs of the Mediterranean region.



▲ Cala Iris, Morocco - Photo: Chadi Abi Faraj/IUCN-Med

# Informing the Mare Nostrum

# Spreading the word



▲ International Year of Biodiversity - Photo: Carla Danelutti

The year 2010 was inundated by a multitude of initiatives relating to the International Year of Biodiversity. Countries around the world worked hard to increase awareness and develop information activities to publicize the importance of species and habitats as a basis for the well-being of people and the planet. Under the slogan 'Biodiversity is Life. Biodiversity is our life', we tried to put across our vision in the Mediterranean region through the creation of a web page showing the initiatives of our members and partners, and the actions of our Secretariat.

'Mediterranean biodiversity is our life: Discover it, Care for it' was our contribution to the celebrations during the year, which included a photo contest: 'A Mediterranean Image, a Biodiversity Story', several open-air fun workshops and a concert by Virginia Maestro in the Eduardo Ocón Auditorium in the park in Malaga.

In addition to the International Year of Biodiversity celebrations in May, the IUCN Centre for Mediterranean Cooperation focused its activities on organizing the first IUCN Mediterranean Forum in Malaga for the conservation

of natural resources in the region. The Forum brought together nearly 300 participants and organizations interested in the conservation of the Mediterranean and sustainable development.

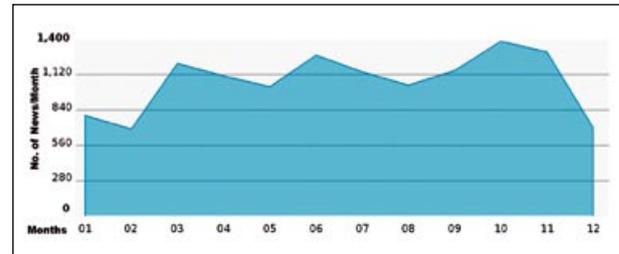
This year, together with IUCN's global headquarters, we also embarked on developing a communication strategy for IUCN-Med with the aim of reviewing our priorities and capabilities, pooling the collective efforts of the various IUCN programmes at international and Mediterranean level and complementing activities undertaken by different departments. Our strategy has also focused on projecting the IUCN vision of 'One Programme' for members, the Secretariat and the Commissions, by publicizing our members' and partners' initiatives on our website in the 'News from our members' and 'Events' sections.

This was also a year of restructuring in the office, with the addition of new staff members and communication methods such as social networking, an area in which we are gradually increasing our presence. We have also

embarked on a new path of producing more audio-visual material with a video to commemorate the first 10 years of work by IUCN-Med, presented during the celebrations of the Centre's 10th anniversary and the IUCN Mediterranean Forum, and some audio interviews with our partners.

The media have also helped us to spread our message. In the digital press alone, 12,773 articles were found that included IUCN information, a great achievement compared to the 4,000 identified in 2009. Our goal in this new year will be to go even further by creating a network of journalists interested in the conservation of the Mediterranean to further disseminate the importance of properly managing the limited resources of a region that is considered critical to biodiversity internationally and which remains a focus of attention due to its cultures, traditions and nature.

As a platform for dialogue and the creation of new projects and initiatives, IUCN-Med has created a new website



where people can interact with us and our networks: <http://www.uicnmed.org/interact/tiki-index.php>. We have begun sharing some of the moments captured by the camera, the words of several of you who came to the Mediterranean Forum and some videos to remind everyone of the importance of Mediterranean biodiversity for our well-being. We encourage you to add your comments and materials and to open up new communication channels for the protection of the Mediterranean.

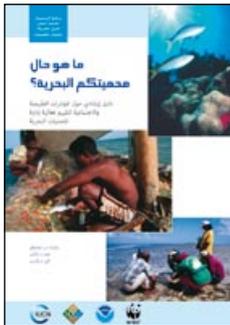


# Publications and Reports



▲ International Year of Biodiversity - Photo: Carla Danelutti

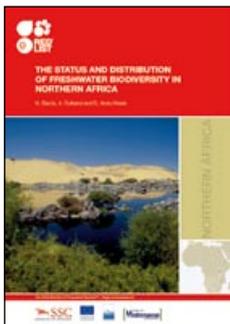
## Books



### How is your MPA doing? - Arabic version

With less than 1% of the global ocean listed as marine protected areas (MPAs), we are still far from achieving the 10% target for 2012. Only by ensuring effective management can MPAs contribute to the ambitious overall goals for biodiversity conservation, the sustainable use of marine resources and a better quality of life for coastal communities. This manual of natural and social indicators for assessing the effectiveness of marine protected area management was developed to help MPA administrators and specialists to better achieve the goals and objectives for which their MPA was created.

Available in English, French, Spanish, Italian and Arabic



### The status and distribution of freshwater biodiversity in northern Africa

This study is a review of the conservation status of 877 freshwater species in northern Africa, belonging to five taxonomic groups: fish (128 taxa), molluscs (155 taxa), dragonflies and damselflies (Odonata) (82 taxa), crayfish (3 taxa) and aquatic plants (509 taxa). The study responds to the lack of information on the status and geographical distribution of species in inland freshwater systems as a basis for the adequate representation of freshwater biodiversity in present and future decision-making processes on the management and conservation of rivers and wetlands in the region.

Available in English



### **Mediterranean Pelagic Habitat: oceanographic and biological processes, an overview**

The marine pelagic ecosystem is the largest ecosystem on earth. It covers 99% of the total volume of the biosphere and is generally considered to be highly resilient. This also seems to be true in the Mediterranean Sea, which can be thought of as a small-scale ocean. In fact, despite thousands of years of exploitation and alteration of the pelagic and coastal environments, it is still home to large populations of resident and migratory pelagic top predators (tuna, swordfish, dolphins, whales, etc.). This publication aims to apply an approach to habitat conservation, trying to ensure that not only pelagic marine species, but also the dynamic pelagic habitats on which they depend, are considered when marine protected areas are set up.

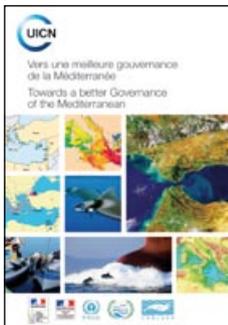
Available in English



### **Conservation and sustainable development in the Alboran Sea. Strategic elements for their future management**

The Alboran Sea is the name given to the maritime area which is the entrance to and exit of the Mediterranean Sea and the point of contact between Europe and Africa. This area is very rich in biodiversity and therefore requires effective protection and management. This document is not definitive, but rather aims to establish a series of visions, experiences and actions that are considered essential today and which will have to be enriched by all those who work and are interested on a daily basis in this 'critical point for biodiversity' in the Mediterranean.

Available in Spanish and French (bilingual version)



### **Towards a better governance of the Mediterranean**

The Mediterranean does not lack tools for governance: the Barcelona Convention and its protocols, particularly the Specially Protected Areas of Mediterranean Importance (SPAMI) protocol; the General Fisheries Commission for the Mediterranean (GFCM); and the agreement on migratory species CMS/ACCOBAMS. However, their implementation, coordination and complementarity need to be improved. The key to good governance lies in political initiative and coordination of activities. This requires close cooperation between states at regional level. Internally, it also requires cooperation between the lawyers who prepare the legal framework, the scientists who must inform and guide the decision-making process, and the politicians who have to find a balance with other public concerns. To this trio must be added the economists, creating a quartet with the skills necessary for good governance. The right balance between the need for socio-economic development and the protection of biodiversity is not easy to find.

Available in English and French (bilingual version)

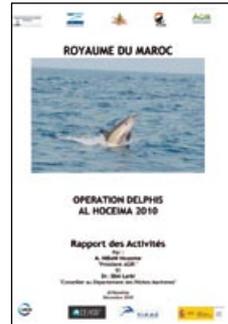
## REPORTS AND OTHER PUBLICATIONS



### Mediterranean Reflections 2009

Report on the results of the work carried out during the year by the Centre for Mediterranean Cooperation (IUCN-Med) in Malaga.

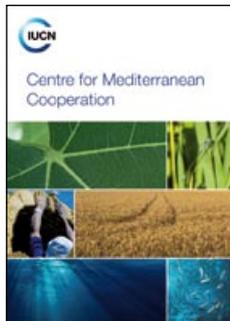
Available in English, French and Spanish



### Operation Delphis–Al Hoceima 2010

Report on the activities led by the Ministry of Agriculture and Marine Fisheries and the AGIR Association of Morocco, with support from IUCN, on 10–11 July for a better understanding and observation of cetaceans in Al Hoceima National Park.

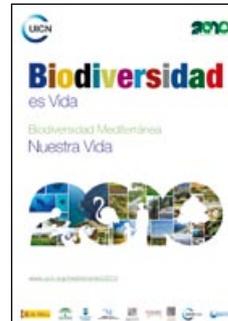
Available in French.



### IUCN-Med Corporate Portfolio

New presentation format for the IUCN Centre for Mediterranean Cooperation.

Available in English, French, Spanish and Arabic



### Posters

Biodiversity is Life. Mediterranean Biodiversity, Our Life. Discover it, Care for it. International Year of Biodiversity (4)



### Map

Parchment-like reproduction of the ancient Mediterranean map of 1154 by Idrissi.

Given to participants at the IUCN Mediterranean Forum



## Multimedia

Video on the 10th anniversary of the establishment of the IUCN Centre for Mediterranean Cooperation in Malaga

Available in Spanish on YouTube

Memory Card: compilation of all IUCN-Med publications from its creation to 2010

Given to participants at the IUCN Mediterranean Forum

## IUCN ONLINE



Our website is now available in the three official languages of IUCN: Spanish, French and English.

We have also introduced new tools to encourage dialogue with our partners:

- Facebook and the International Year of Biodiversity
- Twitter for IUCN-Med publications
- Wiki Interact to share material and create fora for debate

Other IUCN-Med web sites:

Web Photography Competition: A Mediterranean Image, a Biodiversity Story  
<http://www.uicnmed.org/concurso/index.htm>

Our publications and reports can be downloaded in digital format through our website [www.iucn.org/mediterranean](http://www.iucn.org/mediterranean).

For documents prior to 2008, visit [www.uicnmed.org](http://www.uicnmed.org)

If you would like to be kept informed of our activities, please subscribe to Medflashnews, our e-newsletter in three languages, through our website.

# Funding allocation

During 2010, the Mediterranean office managed a budget of more than €1,700,000 for the following work:

- Adaptation to climate change in the conservation and management of Mediterranean forests
- Support for Egypt to create marine protected areas
- Support for security and sustainable livelihoods through the development of systems of governance and sustainable management of agro-forestry resources in priority areas of northern Africa
- Awareness-raising on gender issues and promotion of an equitable approach to nature conservation and sustainable use of resources through the empowerment of women
- Capacity building for the development of a representative network of marine protected areas in the Mediterranean, particularly in Lebanon
- Biodiversity conservation and sustainable use of marine and fresh water resources in high priority areas in the Mediterranean
- Conservation and sustainable development in the Alboran Sea
- Development of the North Africa Programme
- Evaluation of Mediterranean biodiversity: marine fish, mammals, and freshwater species
- Dialogue with the private sector to include biodiversity in their actions
- Training of regional experts and managers in methods for assessing the status of biodiversity conservation
- Training in climate change policies for North Africa
- Integrated management and training for forest fire control in Lebanon and post-fire restoration in pilot areas
- Mediterranean aquaculture: development of sustainability indicators
- Identification of priority representative areas and species for conservation in the Mediterranean Sea
- Inclusion of new information and communication technologies
- Improvement of high seas governance in the western Mediterranean
- Improvement of management of the Al Hoceima National Park in Morocco
- Celebration of the International Year of Biodiversity
- Organization of the first Mediterranean Forum and the 10th anniversary of IUCN in Malaga
- Governance and review of legislation relating to oases in Tunisia
- IntegraRBIM project to support the Spain–Morocco Intercontinental Biosphere Reserve
- LIFE+ Posidonia project on the Andalusian coast

# Our donors

The work of the IUCN Centre for Mediterranean Cooperation is made possible by the generosity, trust and credibility provided by a growing number of members: governments, multilateral and intergovernmental institutions, international conventions and non-governmental organizations, foundations, corporations and individuals. We are extremely grateful for all the contributions received in 2010 in support of the Centre and therefore of IUCN's work.

## OUR CORE SUPPORTERS



Spanish Ministry of the Environment and Rural and Marine Affairs (MARM)



Andalusia regional ministry of environment (Spain)



Spanish Agency for International Development and Cooperation (AECID, Spain)

## OUR PROJECT DONORS



Spanish Agency for International Development and Cooperation (AECID, Spain)



Marine Protected Areas Agency (France)



French Development Agency (France)



European Commission



Andalusia regional ministry of environment (Spain)



Department for International Development (UK)



Diputación de Malaga (Spain)



MAVA Foundation for the Protection of Nature (MAVA, Switzerland)



Ministry of Ecology, Energy, Sustainable Development and Territorial Development (MEDD, France)



Total Corporate Foundation (France)



Holcim (Spain)



Spanish Ministry of the Environment and Rural and Marine Affairs (MARM)



Autonomous Organization of National Parks (OAPN, Spain)

## NEW MEMBERS IN 2010

### Spain

- Fundación CBD para la conservación de la Biodiversidad y su Hábitat
- Oceánidas

### France

- Fédération des Conservatoires botaniques nationaux
- Fédération des conservatoires des espaces naturels - Espaces naturels de France
- Fondation GoodPlanet
- Jardin Botanique de la Ville de Lyon
- Tchendukua - Ici et Ailleurs

### Italy

- Associazione di Cooperazione Rurale in Africa e America Latina

### Jordan

- Jordan Society for Sustainable Development

### Lebanon

- Association pour la Protection du Jabal Moussa

### Portugal

- Associação de Defesa do Património de Mértola

### Serbia

- Ministry of Environment and Spatial Planning

## COOPERATION AGREEMENTS

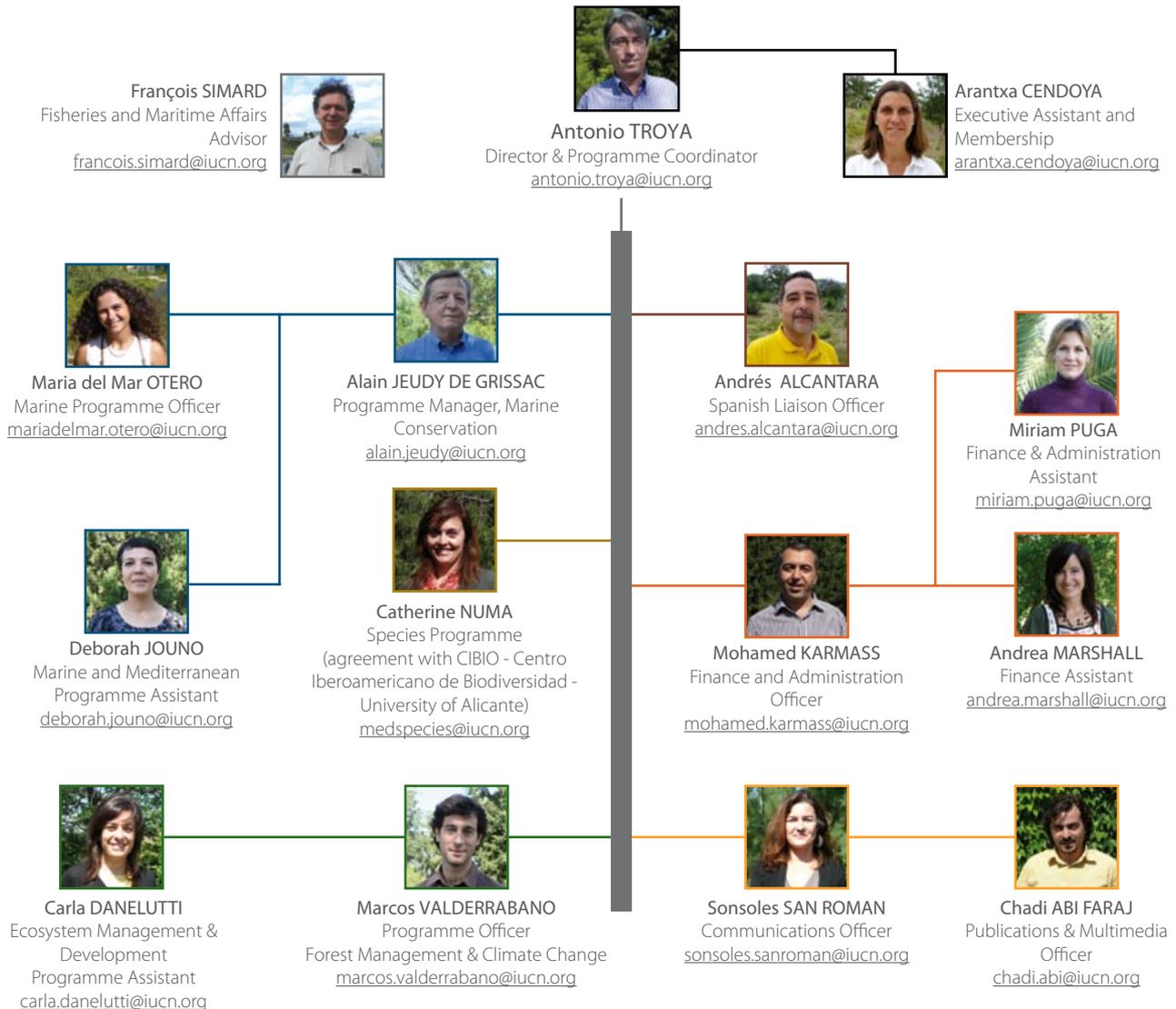
One of the main objectives of the IUCN Mediterranean Forum was to expand collaboration of the IUCN Centre for Mediterranean Cooperation to new allies to help implement the programme of activities in the Mediterranean and the programme for North African countries. The Forum held in November was the meeting point for the signature of the following cooperation agreements:

- Collaborative Partnership on Mediterranean Forests composed of:
  - Agence Française de Développement / Fonds Français pour l'Environnement Mondial
  - Association Internationale Forêts Méditerranéennes (AIFM)
  - European Forest Institute - Mediterranean Regional Office (EFIMED)
  - Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
  - Ministère de l'Alimentation, de l'Agriculture et de la Pêche de la France (MAAP)
  - Plan Bleu/Regional Center of Activities of the Mediterranean Action Plan (PB/PAM)
  - World Wide Fund for Nature - Mediterranean Initiative (WWF-MedPO)
  - ONF International (ONF-I)
  - Mediterranean Model Forest Network (MMFN)
- Cámara de Comercio de Málaga - Centro Euromediterráneo de Conocimiento, Innovación y Formación Turística
- Casa Mediterráneo
- Regional Activity Center for Specially Protected Areas (RAC/SPA)
- World Wide Fund (WWF) – Mediterranean Programme
- Fundación Habitec
- Fundación Tres Culturas
- Food and Agriculture Organization (FAO) – Silva Mediterranea
- FAO/Copemed II Project
- Network of Marine Protected Area Managers in the Mediterranean (MedPAN)
- Red Eléctrica de España - REE

## ADDITIONAL PARTNERS AND AGREEMENTS IN 2010

- Ayuntamiento de Málaga
- Eco-unión
- Empresa Pública Desarrollo Agrario y Pesquero (DAP) de la Consejería de Agricultura y Pesca de la Junta de Andalucía
- Fundación CONAMA
- Instituto Español de Oceanografía (IEO)
- Universidad de Alicante

# The Malaga team



**Outside the Malaga office, based in Lebanon:**

- Hany El Shaer, Marine Programme

**Based in Morocco:**

- Hicham Bouziane, Marine Programme

**The following people worked with us:**

**Margarita ASTRÁLAGA**

Director (till March 2010)

**Rami SALMAN**

Head of Programme (till February 2010)

**Pedro REGATO**

Senior Programme Officer, Ecosystem Management & Development (till March 2010)

**Dania ABDUL MALAK**

Acting Coordinator for Red Lists (till February 2010)

**In addition, the following people collaborated with us:**

- María Teresa Santaella Martín in Institutional Relations
- M<sup>a</sup> Reyes Ponce Bernal in Institutional Relations
- Francisco Javier Martínez Alcazar in Institutional Relations
- Julian Le Viol in the Marine Programme
- Jordi Martínez Samper in the Marine Programme
- Marco Ferrero in Communications
- Cecilia Saura Drago in the IUCN Mediterranean Forum

# IUCN-MED 10<sup>th</sup> ANNIVERSARY

- A reliable scientific voice in a complex socio-economic scenario where different actors come into play with various kinds of abilities and skills.
- A strong advisory body to find solutions to the major environmental challenges in the region.
- An organization that focuses on innovation by designing new alternatives for sustainable development, combining traditional knowledge with new technologies.



## INTERNATIONAL UNION FOR CONSERVATION OF NATURE

### The IUCN Centre for Mediterranean Cooperation

Parque Tecnológico de Andalucía  
C. / Marie Curie, 22  
29590 - Malaga (Spain)  
Tel + 34 - 952 02 84 30  
Fax + 34 - 952 02 81 45  
iucnmed@iucn.org  
www.iucn.org/mediterranean

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