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Barcelona Convention

SPA/RAC

ACTION PLAN FOR THE CONSERVATION OF MARINE TURTLES IN THE MEDITERRANEAN



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Table of content

1. INTRODUCTION 7

2. OBJECTIVES 9

3. PRIORITIES 9

3.1. Protection and management of the species and their habitats 9
3.2. Research and monitoring 10
3.3. Public awareness and education 10
3.4. Capacity building/Training 10
3.5. Coordination 10

4. IMPLEMENTATION MEASURES 11

4.1. Protection and management 11
4.2. Scientific research and monitoring 12
4.3. Public awareness and education 14
4.4. Capacity building/Training 14
4.5. National Action Plan 14
4.6. Regional coordination structure 15
4.7. Participation 16
4.8. Action Plan partners 16

ANNEX I - IMPLEMENTATION TIMETABLE

ANNEX II - RECOMMENDATIONS AND GUIDELINES ON TAGGING IN THE MEDITERRANEAN

1. INTRODUCTION

The Parties to the Barcelona Convention included among their priority targets for the period 1985-1995 the protection of Mediterranean marine turtles (Genoa Declaration, September 1985). To this purpose and as a response to growing international concern about the status of Mediterranean marine turtles, which encounter various threats, including mortality in fishing gear and loss of vital habitats on land (nesting beaches), they adopted in 1989 the Action Plan for the Conservation of Mediterranean Marine Turtles. In 1996, the Parties confirmed their commitment to the conservation of marine turtles by including the 5 species of marine turtle recorded for the Mediterranean in the List of Endangered and Threatened Species annexed to the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995). The Protocol calls on the Parties to continue to cooperate in implementing the Action Plans already adopted.

Since 1989, the Action Plan has been revised three times. The first review was in 1999, when the updated version of the Action Plan was adopted by the 11th Conference of the Contracting Parties to the Barcelona Convention (COP11 Malta). The second review was in 2007 and concerned only the update of the timetable for the period 2008-2013. The last revision occurred in 2013 where the timetable has been updated for the period 2014-2019.

Two species of turtle nest in the Mediterranean, the Loggerhead turtle (*Caretta caretta*) and the Green turtle (*Chelonia mydas*). The Leatherback turtle (*Dermochelys coriacea*) is recorded fairly regularly in this sea, while the other two species (*Eretmochelys imbricata, Lepidochelys kempii*) are very rarely encountered. Loggerhead turtles also enter the Mediterranean from the Atlantic as juveniles in their oceanic stage and return to the Atlantic.

Marine turtles are reptiles and reptiles evolved on land. Though they have adapted well to living in the sea, their ties to their ancestors, leads them back to land to lay their eggs and reproduce. The intensive exploitation of turtles during much of last century has led to a virtual collapse of the turtle populations in the Mediterranean. Relatively new threats such as incidental catches and mortality in fishing gear and loss of nesting habitats as well as the plastic ingestion and entanglement face the remaining populations. The conservation of turtles, as a result of their biology, needs to address threats and issues both on land and in the sea. Marine turtles are long living reptiles and the recovery of populations is therefore a long process. Their reproduction on land poses threats to them, but it also provides opportunities, in a practical way, to help the species recover, for example by reducing predation. Good knowledge of their biology and needs is essential if this opportunity is to be used properly. Turtles do not nest every year and significant fluctuations from year to year in nesting activity are common, especially in green turtles. As a consequence, long term data are needed in studying populations and in drawing conclusions.

The wider issues of biodiversity conservation need to be taken into consideration in conserving any species, such as sea turtles. Threatened species are components of an ecosystem and the interdependence of the implementation of the various SPA/RAC Action Plans for endangered species and biodiversity conservation is stressed here.

There is clear evidence of important negative impacts on the populations of Mediterranean marine turtles by human activities. The most serious current threats/effects to turtles are:

- deterioration of the critical habitats for the life cycle of marine turtles, such as nesting, feeding and wintering areas, and key migration passages
- direct impacts on turtle populations of incidental capture in fisheries, intentional

killing, consumption, egg exploitation and boat strikes

pollution, which can have impacts on both habitats and species

Knowledge of the genetic stocks, status, biology and behaviour of marine turtles is increasing rapidly in the Mediterranean and though gaps still exist, sufficient information is available for conservation purposes. This information has been used in updating and improving the provisions of the present MAP Action Plan for the Conservation of the Mediterranean Marine Turtles[1]. Sufficient information is also available in most cases todraw up National Action Plans for the conservation of marine turtles.

Elaborating and implementing action plans to confront the threats to biological diversity is an effective way of guiding, coordinating and stepping up the efforts made by the Mediterranean countries to safeguard the region's natural heritage. The adopted Ecosystem Approach (EcAp) to management of human activities with a view to conserve natural marine heritage and protecting vital ecosystem services recognizes that to achieve good environmental status "Biological diversity is maintained or enhanced". In this context, three common indicators related to marine turtles have been elaborated within the 27 common indicators of the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and related Assessment Criteria (IMAP):

- **COMMON INDICATOR 3:** Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles);
- **COMMON INDICATOR 4:** Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles);
- **COMMON INDICATOR 5:** Population demographic characteristics (EO1, e.g.body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)

The 2017 Mediterranean Quality Status Report (QSR)8, within the analysis conducted on Common Indicators 3 (Species distributional range), 4 (Population abundance of selected species) and 5 (Population demographic characteristics) related to EO1 on marine mammals, seabirds and marine reptiles, focused on the major existing gaps related to the current knowledge about the presence, distribution, habitat use and preferences of these marine species stressing the need to increase efforts on filling these gaps in order to predict with any certainty the future viability of sea turtles populations in the Mediterranean. .

Information from various sources has been taken into account in this Action Plan. Effective protection and management of nesting areas, practical measures to reduce turtle by-catches, as well as the management of feeding grounds, based on scientific information, are some of the key elements that can help to ensure the survival and the recovery of populations of marine turtles. These elements have been paid due attention. Scientific information on population dynamics, tagging, biology, physiology, public awareness etc have also been given due attention in this plan.

[1] UNEP(DEPI)/MED IG.23/23 – Annex I "Key findings of the Mediterranean Quality Status Report and Recommendations for the Further Implementation of the Ecosystem Approach Roadmap".

The effective and sustainable protection of the Mediterranean marine turtles implies management of the Mediterranean as a whole, taking into account the ecosystem approach, and should take advantage of the actions of all the concerned stakeholders and be carried out in cooperation with organisations, programmes and plans, at the supranational and national level such as the Mediterranean Action Plan (MAP); Fisheries Management Plans (FAO/GFCM); the Marine Turtle Specialist Group (IUCN/SSC); International Commission for the Conservation of Atlantic Tunas (ICCAT); International Commission for the Scientific Exploration of the Mediterranean Sea (ICSEM); relevant NGOs, Research institutions, Universities etc.

This Action Plan outlines objectives, priorities, and implementation measures in different fields as well as their coordination. The different components of the Action Plan are mutually reinforcing and may act synergistically.

The progress in implementing the Action Plan will be reviewed at each meeting of the National Focal Points for SPAs/DB, on the basis of national reports and of reports by SPA/RAC on the regional aspects of the Action Plan. The Action Plan will be assessed and revised and updated as necessary, every five years, unless the SPA Focal Point Meetings deem otherwise.

2. OBJECTIVES

The objective of this Action Plan is the recovery of the populations of *Caretta caretta* and *Chelonia mydas* in the Mediterranean (with priority accorded to *Chelonia mydas*, wherever appropriate) through:

- Appropriate protection, conservation and management of marine turtle habitats, including nesting, feeding and wintering areas and key migration passages
- Improvement of the scientific knowledge by research and monitoring

3. PRIORITIES

Acknowledging the progress achieved over the past years and the proliferation of projects, activities and actions in many countries in the region, it is considered an overarching priority action to continue and enhance such ongoing projects and activities related to marine turtle conservation, research and monitoring. The following priorities have been identified for each component of this Action Plan:

3.1. Protection and management of the species and their habitats

Development, implementation and enforcement of specific legislation on sea turtles;

Protection and effective management of nesting areas (including the adjacent sea);

Protection and management of feeding, wintering and mating areas and key migration passages;

Minimization of incidental catches and elimination of intentional killings.

Restoration of degraded nesting beaches.

3.2. Research and monitoring

Knowledge needs to be improved in the following topics:

- Identification of mating, feeding and wintering areas and key migration passages;
- Identification of potential and new nesting areas;
- Biology of the species, in particular aspects related to life cycles, population dynamics and population trends and genetics;
- Assessment of fisheries interactions (e.g. Bycatch) and associated mortalities, including modification of fishing gear and related socioeconomic issues;
- Assessment and improvement of nesting beach management techniques;
- Strengthening the regional network of stranding networks;
- Strengthening the data collection of stranded sea turtles through National stranding networks and rescue centers;
- Assessment of population trends through long term monitoring programmes, both on nesting beaches and at sea based on the IMAP developed within the framework of the EcAp process of the Barcelona Convention as well as the monitoring requirements set under the MSFD of the EU;
- Impact of pollutants (including plastics) on the health of individuals and populations, as well as the impact of climate change.

3.3. Public awareness and education

For the implementation of this action plan, public support is needed. Information and education campaigns on relevant turtle conservation issues should target groups such as:

- Local residents and visitors to nesting areas;
- Fishermen and other stakeholders;
- Tourists and tourism-related organizations;
- Schoolchildren and teachers;
- Decision makers at national, regional and local levels;
- Appropriate training/education of stakeholders can be given (e.g., to fishermenand tourism workers).

3.4. Capacity building/Training

Training of managers and other staff of protected areas in conservation and management techniques and of scientists, researchers and other staff in conservation, research and monitoring in the priority issues covered by the Action Plan.

3.5. Coordination

Promote and enhance cooperation and coordination among the Contracting Parties, the UNEP/MAP partners, relevant organizations and projects carried out in the field of sea turtles conservation. Priority should be given to the regular assessment of the progress in the implementation of this Action Plan.

4. IMPLEMENTATION MEASURES

The implementation of the measures recommended in this Action Plan will only be possible with the appropriate support by the Parties and by competent international organizations, particularly as regards the provision of adequate financial support, through national and regional funding programmes and through support for applications to donors for projects. Much progress has been achieved over the past years, with the proliferation of projects, programmes, activities and actions in many countries around the Mediterranean. The implementation and coordination of such ongoing activities related to marine turtle conservation, research and monitoring is expected to benefit from the provisions of this Action Plan.

4.1. Protection and management

With regard to protection and management, the following measures are recommended:

(a) Legislation

The Contracting Parties that have not yet extended legal protection to marine turtles should do so as soon as possible.

Each Contracting Party should develop and implement as soon as possible the necessary legislation for the protection, conservation and/or management of areas important for marine turtles, such as nesting (including the adjacent sea), feeding, wintering and mating areas and key migration passages.

In pursuing the above the Contracting Parties should take into account the provisions of the relevant international conventions and supranational legislation as well as the SPA/RAC “Guidelines to Design Legislation and Regulations Relative to the Conservation and Management of Marine Turtles Populations and their Habitats”.

Legislation on deliberate killing must be enforced and updated in some Countries and developed in others totally lacking these measures

(b) Protection and management of habitats

Integrated management plans should be elaborated and implemented for terrestrial and marine areas critical for nesting, feeding, wintering and mating, as well as key migration passages.

Measures and management rules aimed at protecting critical habitats, on land and at sea, should be developed and implemented. In the case of nesting areas, such measures should cover issues such as public access, use of vehicles and horse riding, use of artificial lights, nautical activities, minimization of predation, inundation, disturbance during nesting, disturbance in adjacent waters, etc. In the case of marine areas such measures should address boat traffic and fishing. Contracting Parties are encouraged to use the SPA/RAC

"Guidelines for setting up and management of Specially Protected Areas for marine turtles in the Mediterranean"[2]

Training of the staff involved in protection and management activities is a prerequisite to good management.

(c) Minimisation of incidental catches and elimination of intentional killings

A reduction of incidental catches and mortality can be achieved by:

- Applying appropriate regulations concerning fishing depth, season, gear, etc, especially in areas with a high concentration of turtles;
- The modification of fishing gear, methods and strategies proven to be effective, and as appropriate, their introduction in fisheries legislation and fishing practices;
- Education/training of fishermen to correctly haul, handle, release and record incidentally caught turtles. Use of appropriate methods are described inter alia in the SPA/RAC publication "sea turtle handling guidebook for fishermen"

Deliberate killing and exploitation of marine turtles can be eliminated by:

- Applying and enforcing appropriate legislation;
- Carrying out campaigns among fishermen in order to urge them to release marine turtles caught incidentally and to participate in the information networks on turtles (report sightings of turtles, of tags, participation in tagging programmes, etc.);
- Carrying out campaigns for fishermen and local populations to facilitate the implementation of legislation to ban the exploitation/consumption and trade/use of all products derived from marine turtles.
- The above will help also in reducing mutilations and killing of turtles due to ignorance and/or prejudice.

(d) Other Measures to Minimise Mortality

The setting up and proper operation of Rescue Centers and First Aid Stations is suggested as an additional means to minimize individual turtle mortality. Rescue Centers may also play an important role for the conservation of the populations by contributing to activities such as awareness, education, and data collection. The use of the SPA/RAC "Guidelines to Improve the Involvement of Marine Rescue Centers for Marine Turtles is recommended.

There is a need to develop a common methodology for the management of rescue centers including methods for the collection and transfer of related data.

Training of the staff involved is necessary. In addition, a Mediterranean-wide rescue network should be set up, to assist the exchange of knowledge and experience among those who work with turtles in facing difficulties. The network should include already existing rescue centers and promote the establishment of new rescue centers in countries, which are currently lacking adequate structures.

[2] http://www.rac-spa.org/sites/default/files/doc_turtles/g_l_manag_mpa_turtles_en_fr.pdf

4.2. Scientific Research and Monitoring

The development of research and monitoring programmes and the exchange of information, should focus on the priority fields for the conservation of marine turtle populations, by using various methods, such as beach surveys and monitoring of nesting beaches - especially long term monitoring, tagging (keeping in mind the provisions of the SPA/RAC tagging guidelines), data logging, satellite telemetry, Geographic Information Systems (GIS), genetics, on-board observers and modelling.

(a) Scientific research

For research these should cover inter alia the following (not in order of priority):

- Identification of mating, feeding and wintering areas and key migration passages;
- Identification of potential or new nesting areas;
- Biology of the species, in particular aspects related to life cycles, population dynamics and population trends and genetics. Contracting parties are encouraged to use the "Guidelines to standardize methodologies to estimate demographic parameters for marine turtles populations in the Mediterranean".
- The assessment of turtle by-catch and respective mortality rates from different fishing gear, including small scale and artisanal fisheries;
- Data on the effects of gear modifications (new hooks etc.) and fishing strategies should be collected to evaluate the effects of these on turtle mortality and catch rates as well as the effects on other species;
- The socio-economic effects of the implementation of turtle conservation measures that can impact fisheries need to be evaluated;
- Development of management techniques for nesting beaches and foraging areas;
- Impact of climate change on marine turtles;

(b) Monitoring

For monitoring, programmes should follow the recommendation of the MAP ecological objectives, the IMAP and the relevant Protocol[3]. They should cover inter alia the following (not in order of priority):

- Encourage long-term monitoring programmes for important nesting beaches and foraging areas. All Contracting Parties that have nesting beaches or foraging areas should encourage the uninterrupted and standardized monitoring taking into account their national monitoring programmes related to the biodiversity. Where such programmes do not exist, the Parties should set up such programmes or encourage them. Surveys of nesting beaches of lesser importance and of scattered nesting need also to be undertaken occasionally if possible, so that a more complete picture of populations can be formed. Contracting Parties are encouraged to use the SPA/RAC" Guidelines for the long-term Monitoring programmes for marine turtles nesting beaches and standardized monitoring methods for nesting beaches, feeding and wintering areas";

[3] Monitoring protocol of marine turtles in the Mediterranean

- Onboard observation programmes to gather precise data on species biology and fisheries induced mortality should complement nesting beaches and foraging areas monitoring;
- Strengthening the data collection of stranded sea turtles through National stranding networks and rescue centers;
- Contracting Parties, with the help of national, regional or international organisations,should undertake, when appropriate, joint monitoring initiatives on a pilot basis, with the aim to share and exchange best practices, using harmonized methodologies, and ensuring cost efficiency;
- Contracting Parties should support and take part in regional initiatives and projects led by competent partner organizations that will contribute to the implementation of the initial phase of the IMAP in order to strengthen strategic and operational regional synergies;
- Contracting Parties should report regularly quality assured data.

For some Contracting Parties there is still little information on turtle nesting beaches and size of breeding populations. These Parties should undertake urgently more comprehensive surveys and encourage the setting up of long-term monitoring programmes taking into account their national monitoring programmes related to biodiversity.

4.3. Public awareness and education

Public-awareness programmes, including appropriate multiple information tools (special documentary information material, electronic media etc), should be developed for fishermen, local residents, tourists and tourism-related organizations, to help reduce the mortality rates of marine turtles, to induce respect for nesting, feeding and wintering and mating areas, and to promote the reporting of any useful information concerning sea turtles. Appropriate training/education of stakeholders can be given (e.g., to fishermen, tourism workers).

Information campaigns directed at local authorities, residents, teachers, visitors, fishermen, decision makers at local, regional and national levels and other stakeholders, are urgently needed in order to enlist their participation in the efforts for the conservation of marine turtles and for their support for conservation measures.

4.4. Capacity building/Training

Existing training programmes should be continued, particularly for those Parties that need more expertise and/or experts with specialized knowledge of marine turtles, and for managers and other staff of protected areas, in the conservation and management techniques needed (these include inter alia beach management, tagging and monitoring).

In particular, training programmes in the setting up and operation of Rescue Centers should be continued, with the aim of guaranteeing that these centers have skilled personnel, appropriate equipment and adopt common methodologies for data collection. Training programmes to be elaborated for other fields, as needed, especially where fisheries managers are concerned.

4.5. National Action Plan

Contracting Parties should establish National Action Plans for the conservation of marine turtles.

National Action Plans should address the current factors causing loss or decline of turtle population and their habitats, suggest appropriate subjects for legislation, give priority to the protection and management of coastal and marine areas, the regulation of fishing practices and ensure continued research and monitoring of populations and habitats as well as the training and refresher courses for specialists and the awareness-raising and education for the general public, actors and decision-makers.

The national plans must be brought to the attention of all concerned actors and, when possible, coordinated on a regional basis.

4.6. Regional coordination structure

It is necessary to develop cooperation and exchange of information among the Contracting Parties for the implementation of the Action Plan and to improve the coordination of activities within the region.

SPA/RAC is considered to be the most appropriate existing mechanism for this coordination. The implementation of the Action Plan may be carried out, in cooperation with other bodies concerned, through establishing MoCs, as necessary.

The major function of the coordinating mechanism with regard to marine turtles would be to:

- Assess the progress achieved in implementing this Action Plan. SPA/RAC will request at regular intervals, not exceeding two years, update reports from the Parties and, on the basis of these ongoing national reports and of its own assessment of the progress in the regional component of this Action Plan, prepare reports to be submitted to the SPA National Focal Point meetings, which will make follow-up suggestions to the Contracting Parties.
- Collect and evaluate the data at Mediterranean level.
- Prepare inventories of networks of protected areas for marine turtles in the Mediterranean and facilitate the operation of such networks and of networks on such issues as marine turtle habitats, ecology, conservation etc.
- Prepare a timetable of activities and financing proposals for the Contracting Parties'meetings.
- Contribute to the dissemination and exchange of information.
- Work further and create more opportunities with relevant partner organizations, in order to strengthen technical support that countries might need to implement the IMAP in relation with marine turtles.
- Assist and/or organize expert meetings on specific topics regarding marine turtles.
- Continue to support the organisation of the Mediterranean Marine Turtle Conferences.
- Assist and/or organise, training courses and support and catalyse the

participation of appropriate scientists and other staff in such courses.

Complementary work carried out by other international bodies, NGOs and UNEP/MAP partners aiming at the same objectives should be encouraged and capitalized to prevent possible overlapping and help disseminate their knowledge across the Mediterranean Community.

Coordinate the activities needed for the revision/updating of this Action Plan every five years, or earlier, if this is deemed necessary by the SPA/DB National Focal Point meetings, or on the basis of important new information becoming available.

The inventory of marine turtle critical habitats, including key migrations passages, in the Mediterranean, should be regularly reviewed in the light of increased knowledge and published online through the Mediterranean biodiversity Platform[4].

4.7. Participation

Any interested international and/or national organisation is invited to participate in actions necessary for the implementation of this Action Plan.

Links with other bodies responsible for Action Plans dealing with one or more species of marine turtles should be made, to strengthen co-operation and avoid duplication of work.

The co-ordination structure shall set up a mechanism for regular dialogue between the participating organisations and where necessary, organise meetings to this effect.

4.8. Participation

Implementing the present Action Plan is the province of the national authorities of the Contracting Parties. The concerned international organisations and/or NGOs, laboratories and any organisation or body are invited to join in the work necessary for implementing the Action Plan. At their ordinary meetings, the Contracting Parties may, at the suggestion of the meeting of National Focal Points for SPAs/BD, grant the status of «Action Plan Partner» to any organization or laboratory which so requests and which carries out, or supports (financially or otherwise) the carrying out of concrete actions (conservation, research, etc.) likely to facilitate the implementation of the present Action Plan, taking into account the priorities contained therein.

[4] http://data.medchm.net

ANNEX I - IMPLEMENTATION TIMETABLE

ACTION	Deadline [5] / periodicity	By Whom
A. PROTECTION AND MANAGEMENT		
A.1 Legislation		
a. Protection of turtles – general species protection	As soon as possible	Contracting Parties
b. Enforce legislation to eliminate deliberate killing	As soon as possible	Contracting Parties
c. Habitat protection and management (nesting, mating, feeding, wintering and key migration passages)	As soon as possible	Contracting Parties
A.2 Protection and Management of habitats		
a. Setting up and implementing management plan	Immediate and continuous	Contracting Parties
b. Restoration of damaged nesting habitats	Immediate and continuous	Contracting Parties
A.3 Minimisation of incidental Catches		
a. Fishing regulations (depth, season, gear) in key areas	Immediate and continuous	Contracting Parties
b. Modification of gear, methods and strategies	Immediate and continuous	SPA/RAC, Partners & Contracting Parties
A.4 Other Measures to Minimise individual Mortality		
a. Setting up and/or improving operation of Rescue Centres	Continuous	Contracting Parties
b .Elaborate guidelines for the management of rescue centers, including methods for data collection	1 year after adoption	SPA/RAC
B. SCIENTIFIC RESEARCH AND MONITORING		
B.1 Scientific Research		
a. Identification of new mating, feeding and wintering areas and key migration passages;	Continuous	Contracting Parties and Partners
b. Elaboration and execution of cooperative research projects of regional importance aimed at assessing the interaction between turtles and fisheries	Continuous	SPA/RAC, Partners & Parties
c. Tagging and genetic analysis (as appropriate)	Continuous	SPA/RAC and Contracting Parties and Partners
d. Facilitate the networking between managed and monitored nesting sites, aiming at the exchange of information and experience	Continuous	SPA/RAC
B.2. Monitoring		
a. Setting up and/or improving long-term monitoring programmes for nesting beaches, feeding and wintering areas	Continuous	Contracting Parties and SPA/RAC

[5] The deadlines mentioned are not intended in any way to postpone or delay the drafting and/or the implementation of legislation or management plans or of monitoring programmes etc. that already exist and/or are ongoing

b. Elaboration of protocol for data collection on stranding	2 years from adoption	SPA/RAC
c. Setting up national stranding networks	As soon as possible	Contracting Parties
C. PUBLIC AWARENESS AND EDUCATION		
Public awareness and Information campaigns in particular for fishermen and local populations	Continuous	SPA/RAC, Partners and Contracting Parties
D. CAPACITY BUILDING		
Training courses	Continuous	SPA/RAC and Partners
E. NATIONAL ACTION PLANS		
Elaboration of National Action Plans	Continuous	Contracting Parties
F. COORDINATION		
a. Assessment of progress in the Implementation of the Action Plan	Every Five years	SPA/RAC and Parties
b. Cooperation in organising the Mediterranean Conferences on marine turtles	Every three year	SPA/RAC
c. Updating the Action Plan on Marine Turtles	Five years from adoption	SPA/RAC

ANNEX II - RECOMMENDATIONS AND GUIDELINES ON TAGGING[6] IN THE MEDITERRANEAN

▪ General Recommendations

a. It is stressed to all prospective tagging projects that **tagging is not a conservation measure** and that it is not an alternative to conservation. All it can do, at best, is to help get information on which to base conservation policy and actions

b. Encourage enforcement, at national level, of permitting legislation for tagging. This is to ascertain that **aimless tagging** does not take place and that tagging teams/persons or organizations have well thought out plans and aims and adequate training for what they are intending to do

c. There is a need for **training courses** in planning and undertaking tagging projects and/or support in training in the field (with the provision of experts), particularly for new projects

d. There is a need for **support** for tagging, with equipment, materials etc for projects that are qualified for such work (having undertaken adequate planning, training etc)

e. Tagging equipment should if possible be provided after a request and the tags provided should carry the **return address** of the project or country

f. There is a need in the countries for **advice and guidelines**, given inter alia through SPA/RAC and its website www.spa-rac.org, on tagging issues, providing links to key websites such as www.seaturtle.org and its **Tag Finder** site, as well as to the **ACCSTR Sea Turtle Tag Inventory** www.accstr.ufl.edu , encouraging visitors to register their tag series in this database. Duplication of effort will be avoided this way

g. Tagging is not to be taken lightly and minimum guidelines are needed to ensure the wellbeing of turtles (the basic **Guidelines to minimize damage/disturbance to turtles by tagging** were drafted by the relevant SPA/RAC WG - see below)

h. The development of simple practical materials (stickers etc) for **awareness** campaigns for fishermen and other stakeholders (e.g., coastal communities) will be useful.

i. A **Regional Inventory of Tagging Projects** is needed and is in fact a priority issue. This should be updated as new information becomes available and should be available on line. (A **questionnaire** was drafted by the working group and was submitted to the participants of the workshop for completion. It is available from SPA/RAC for anybody who wishes to be included in the Inventory).

▪ Guidelines to minimize disturbance/damage to turtles by tagging

Metal tags

a. Do not use Style 1005-49 metal tags (National Band and Tag Company (NBTC) USA)

b. Use size 681C (National Band and Tag Company (NBTC) USA) - for turtles over 30 cm CCL (i.e., do not tag turtles smaller than 30cm CCL)

c. Do not use tags in juvenile turtles in such a way as to constrict the growth of the flipper

Plastic tags

d. Do not use Jumbo tags (Jumbotag - Dalton supplies Ltd, UK) for turtles smaller than 50cm CCL

e. Do not use Rototags (Rototag - Dalton supplies Ltd, UK) for turtles smaller than 30 cm CCL

Pit tags

f. Do not use PIT tags (Passive Integrated Transponder tags) in turtles smaller than 30 cm CCL

g. If you use PIT tags, then apply them under the scales or between the digits, in the muscle, on the front left flipper.

General

h. Do not use tagging methods proven to be unsatisfactory

i. Do not tag a turtle on her way up the beach or during egg-laying. Tag after the egg chamber is covered or if the turtle is on her way back to the sea.

j. Do not turn turtles over for tagging.

[6] Though explicit mention is made in the Guidelines above of specific trade names (Dalton and National Band and Tag Company), the guidelines are applicable to similar tags (material, size etc) made by other manufacturers. Specific mention was made of these manufacturers and tags, as these are the tags most commonly used for tagging turtles and are hence well known.

SPA/RAC WORKING AREAS

*SPA/ RAC, the UNEP/ MAP **Specially Protected Areas Regional Activity Centre**, was created in 1985 to assist the Contracting Parties to the Barcelona Convention (21 Mediterranean contries and the European Union) in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol).*

POST-2020 SAPBIO

Strategic Action Programme for the **Conservation** of **Biodiversity** and **Sustainable Management** of **Natural Resources** in the **Mediterranean Region**

SPAMI

Specially Protected Areas of **Mediterranean Importance**

Marine turtles

Cetaceans

Specially Protected Areas

Monitoring

Mediterranean Monk Seal

Cartilaginous fishes
(Chondrichtyans)

Coralligenous and other calcareous bio-concretions

Marine vegetation

Marine and coastal bird species

Listed in Annex II of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean

Dark Habitats

Habitats and species associated with seamounts, underwater caves and canyons, aphotic hard beds and chemo-synthetic phenomena

Species introduction and invasive species

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