ACTION PLAN FOR THE CONSERVATION OF MARINE AND COASTAL BIRD SPECIES LISTED IN ANNEX II OF THE PROTOCOL CONCERNING SPECIALLY PROTECTED AREAS AND BIOLOGICAL DIVERSITY IN THE MEDITERRANEAN
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FOREWORD

In 1995, the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) adopted a new Protocol concerning Specially Protected Areas and Biological Diversity (SPA/BD Protocol) in the Mediterranean. Annex II of this new protocol lists endangered or threatened species found in the Mediterranean. Subsequently a series of nine Action Plans were also adopted by the Parties to the Convention for the protection of the marine environment and the coastal region of the Mediterranean. These Action Plans, including the Action Plan (AP) for the conservation of bird species listed in the Annex II of the SPA/BD Protocol, identify and lay out priorities and activities that need to be undertaken to attain their specific objectives. They also urge and encourage co-ordination and co-operation amongst Mediterranean states to work towards the achievement of conservation of a species or a group of species within this region. Following the request made for SPA/RAC during the 19th Meeting of the Contracting Parties to the Barcelona Convention (UNEP(DEPI)/MED IG.22/28; Decision IG.22/12), the Action Plan for the conservation of bird species drafted in 2003 is updated during the biennium 2016-2017.
INTRODUCTION

1. INTRODUCTION

1.1. General overview of the avifauna of the Mediterranean

Birds have always fascinated and captivated people’s imagination. Their beauty and their song, as well as their power of flight, have inspired humankind throughout the millennia. Their aesthetic, recreational, social and economic values are recognized worldwide. Birds know no boundaries and they play an important part in nature’s ecosystems. They are also good indicators of the health of the environment. In spite of all this it has been the anthropogenic pressure that throughout the years has threatened the existence of several species, not only in the Mediterranean region.

The ornithological calendar of the Mediterranean is dominated by the seasonal migrations of birds from Europe to Africa in autumn and vice versa in spring, and several species which breed in Europe over-winter in the Mediterranean basin. Nonetheless, the Mediterranean is the home of several hundred bird species, some of which occur exclusively in this climatic zone. The seabirds found along the crowded coastal zone and the islands of this almost land-locked sea are quite resilient, including the comparatively rare and localised Audouin's Gull Larus audouini.

Pelagic bird species in the Mediterranean are relatively few, but several fine breeding colonies of Scopoli’s Shearwater Calonectris diomedea, Yelkouan Shearwater Puffinus yelkouan, and the subspecies of the European Storm-petrel Hydrobates pelagicus melitensis may be found along seacliffs or on small isolated rocky islands and islets.

Coastal seabirds, including the subspecies emigratus of the Lesser Crested Tern Sterna bengalensis with its breeding area restricted to Libya, are found in river deltas and inland saltwater lagoons. Many other coastal species, however, are found breeding in sub-optimal and man-modified habitats such as salinas, while others rely on municipal waste dumps and discards from fishing boats for their food.

The ten new species added to Annex II, include the critically endangered (CE) Balearic Shearwater Puffinus mauretanicus and the near threatened (NE) Armenian Gull Larus armenicus. The trend of both populations has been assessed by IUCN as decreasing. Although the rest of the new species are regarded from a global point of view as least concern (LC), their breeding range in the Mediterranean is restricted to a few countries, particularly eastern ones. Furthermore, the population trend of some of them (e.g. Kentish Plover Charadrius alexandrinus, the Greater Sand Plover Charadrius leschenaultii, the Mediterranean Gull Larus melanocephalus and the Common Gull-billed Tern Gelochelidon nilotica) has also been assessed as decreasing globally.

1.2. Background information of the Action Plan for the conservation of the bird species listed in Annex II

In 1995, the Parties to the Barcelona Convention adopted a new protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean. After a lengthy process of consultation and consent among international organisations, NGOs and experts throughout the Mediterranean, the draft action plan was discussed at the sixth meeting of the National Focal Points for SPAs in Marseilles in June 2003 and then approved and adopted by the XIII Conference of the Contracting
Parties to the Barcelona Convention at Catania, Sicily, in November 2003. During their meeting in Monaco in November 2001 the Contracting Parties had asked SPA/RAC to draw up a draft action plan for the bird species appearing in Annex II, which listed 15 endangered or threatened bird species. Consequently, in 2003, the Parties to the Barcelona Convention adopted an Action Plan for the conservation of the bird species listed in Annex II. The main purpose of the Action Plan was to maintain and/or restore their population levels to a favourable conservation status and to ensure their long-term conservation. The Action Plan also aimed to contribute to the sharing of knowledge and expertise between the Mediterranean countries and to co-ordinate efforts among the countries and other relevant initiatives and agreements. It also inspired a synergetic approach among the Mediterranean countries in the protection of these bird species and their habitats and encouraged research to fill the many gaps in our knowledge concerning coastal and pelagic birds in the Mediterranean, particularly seabirds’ distribution and their movements, as well as their feeding, moulting and wintering areas at sea.

The development of the Action Plan for the conservation of these species followed various initiatives taken by other organisations, such as BirdLife International partners in Mediterranean countries, WWF, IUCN, Medmaravis, and Tour du Valat, on the conservation of birds and their important sites and habitats. Various actions have been taken at national level by the competent authorities and at species level by several non-governmental organisations (particularly BirdLife International partners) in their respective countries, to counteract some of the threats, which were being faced by a number of the species covered by the Action Plan.

In 2005, the first Mediterranean Symposium on the ecology and conservation of the bird species listed in Annex II, was held in Villanov a I la Geltrú (Spain) with the participation of 31 ornithologists and experts from 16 Mediterranean countries. The participants made several recommendations to SPA/RAC, including the addition of 10 new marine and coastal bird species to the list of Annex II. In November 2009, the 16th Ordinary Meeting of the Contracting Parties to the Barcelona Convention, held in Marrakech (Morocco), adopted the addition of the 10 species of marine and coastal birds in Annex II, bringing up the total number of bird species to 25. Ten years after the Villanova Mediterranean Symposium it was appropriate to hold another symposium; (a) to update the knowledge on the status of marine and coastal birds; (b) to assess the effect of new regulations, conventions and research tools; and (c) to call for a closer cooperation among the countries that adopted the list of 25 bird species of Annex II of the SPA/BD Protocol. Hence SPA/RAC, in partnership with the Tunisian NGO Les Amis des Oiseaux (AAO/BirdLife Tunisia), Medmaravis, Tour du Valat Biological Station and the Conservatoire du Littoral, organised the 2nd Symposium on Marine and Coastal Birds in the Mediterranean in Hammamet, Tunisia, in February 2015. Subsequently, the 19th Conference of Parties to the Barcelona Convention, which was held in February 2016 in Athens, asked SPA/RAC, to update the Action Plan for the Conservation of Bird Species listed in Annex II to the SPA/BD Protocol to include the new added species (Decision IG22/12).

1.3. Bird Species listed in Annex II of the SPA/BD Protocol: List of Endangered or Threatened Species


<table>
<thead>
<tr>
<th>English Name</th>
<th>French Name</th>
<th>Scientific Name</th>
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<tbody>
<tr>
<td>Greater Flamingo</td>
<td>Flamant rose</td>
<td>Phoenicopterus roseus</td>
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<tr>
<td>European Storm-petrel</td>
<td>Océanite tempête</td>
<td>Hydrobates pelagicus ssp. melitensis</td>
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<td>Scopoli's Shearwater</td>
<td>Puffin de Scopoli</td>
<td>Cinecittis diomede</td>
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<td>Yelkouan Shearwater</td>
<td>Puffin yelkouan</td>
<td>Puffinus yelkouan</td>
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<td>Balearic Shearwater</td>
<td>Puffin des Balares</td>
<td>Puffinus mynaertanicus</td>
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<td>Pégny Cormorant</td>
<td>Cormoran pygmée</td>
<td>Microcarbo pygmaeus</td>
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<td>European Shag</td>
<td>Cormoran huppé</td>
<td>Phalcocorax aristotelis ssp.desmaresti</td>
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<td>Dalmatian Pelican</td>
<td>Pélican frisé</td>
<td>Pelecanus crispus</td>
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<tr>
<td>Great White Pelican</td>
<td>Pélican blanc</td>
<td>Pelecanus oncoretalus</td>
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<tr>
<td>Kentish Plover</td>
<td>Plover à collier interrompu</td>
<td>Chasornis alexandrinus</td>
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<tr>
<td>Greater Sand Plover</td>
<td>Plover de Leschenault</td>
<td>Chasornis leschenault ssp. columnarius</td>
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<tr>
<td>Slender-billed Curlew</td>
<td>Courlis à bec grêle</td>
<td>Numerus tenenrostris</td>
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<td>Slender-billed Gull</td>
<td>Goéland raaffe</td>
<td>Larus genei</td>
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<tr>
<td>Mediterranean Gull</td>
<td>Mouette mâleacopehale</td>
<td>Larus melanocphalus</td>
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<tr>
<td>Audouins Gull</td>
<td>Goéland ‘d Audouin</td>
<td>Larus audouinii</td>
</tr>
<tr>
<td>Armenian Gull</td>
<td>Goéland d’Arménie</td>
<td>Larus armenicus</td>
</tr>
<tr>
<td>Little Tern</td>
<td>Sterne naïne</td>
<td>Sterne albigonis</td>
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<tr>
<td>Common Gull-billed Tern</td>
<td>Sterne hansel</td>
<td>Gelocheledin nilotica</td>
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<tr>
<td>Caspian Tern</td>
<td>Sterne caspienne</td>
<td>Hydroprogne caspia</td>
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<td>Lesser Crested Tern</td>
<td>Sterne voyageuse</td>
<td>Thalasseus bengalensis</td>
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<td>Sandwich Tern</td>
<td>Sterne caugek</td>
<td>Thalasseus sandwichensis</td>
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<td>Osprey</td>
<td>Balaubard pécheur</td>
<td>Pandion haliaetus</td>
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<td>Pied Kingfisher</td>
<td>Martin-pécheur pie</td>
<td>Ceryle rudis</td>
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<td>White-breasted Kingfisher</td>
<td>Martin-chasseur de Smyrne</td>
<td>Halcyon smynensis</td>
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<td>Eleonora's Falcon</td>
<td>Facou d’Eléonore</td>
<td>Falco eleonora</td>
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1.4. Overview of threats

In general, birds are threatened by habitat loss and disturbance and also from contamination by oil pollutants. Fish farms and wind farms close to seabird colonies, as well as intensive deep water fishing may constitute serious threats to some bird species. Among the 25 species listed in Annex II as endangered or threatened one finds those:

- which are globally threatened;
- which are endemic to the region and have an unfavourable conservation status;
- whose populations are not concentrated in the Mediterranean but which have an unfavourable conservation status and/or a restricted range in the region;
whose populations are not concentrated in the Mediterranean, have a healthy conservation status but are regarded as flagship species. However, they all have something in common. They are all endangered by a number of threats, including:

- Contamination by oil pollutants
- Direct and indirect depletion of food resources
- Non-sustainable forms of tourism
- Disturbance
- Direct persecution including illegal hunting and the use of poison
- Mortality from bycatch
- Wind farms
- Loss of habitats
- Degradation of habitat, particularly wetlands and small islands of high biological importance
- Introduction of and predation by alien species
- Climate change

1.5. Ecology and status of the species

The biology, ecology, distribution and conservation status of the fifteen bird species in the original Action Plan (2003) have been presented in an information document entitled “List of Threatened Bird Species as Adopted by the Barcelona Convention”. It was composed of an annotated List compiled by Medmaravis and edited by J. Criado, J. Walmsley and R. Zotier (April 1996) and gave the status, population size and trends, ecology, threats and conservation measures for each species. This was complemented by other national, regional and global contributions, particularly by BirdLife International.

The additional 10 species, which were originally proposed in 2005 during the first Mediterranean Symposium on the ecology and conservation of the bird species listed in Annex II, held in Villanova i la Geltrú (Spain), were presented by Xavier Monbailliu on behalf of Medmaravis, using a scientific criteria to screen possible candidate species. They are species of particular importance for coastal habitats in the Mediterranean. Their biology, ecology, distribution and conservation status was based on BirdLife International’s publication Birds in Europe: Population estimates, Trends and Conservation status (2004). Their status in the Mediterranean has also been complemented by national experts’ input in response to a questionnaire sent out by SPA/RAC to its National Focal Points. The questionnaire was sent out in October 2016, after a roundtable discussion on the Action Plan for the conservation of bird species listed in Annex II, was organized at the 3rd African Congress for Conservation Biology held in September 2016 at El Jadida, Morocco.

Several ornithological studies have been carried out in the Mediterranean in the last twenty to thirty years, as it can be noted particularly in the proceedings of various symposia including those organised by SPA/RAC, Medmaravis, Conservatoire du Littoral, Tour du Valat, and national NGOs in the Mediterranean countries. Despite all these studies, there are still many gaps in the knowledge of coastal and pelagic birds and their habitats in the Mediterranean, particularly seabird movements and their distribution at sea. There is an urgent need for mapping of breeding, feeding, moultinng and wintering areas of pelagic birds in the whole region.

1.6. Geographical scope of the Action Plan

The geographical scope of the action plan is the entire semi-closed sea and the Mediterranean bio-climate parts of its bordering countries. Some of the species, such as Balearic Shearwater Puffinus mauretanicus and Yelkouan Shearwater Puffinus yelkouan, have a restricted breeding range in the Mediterranean. Others, such as Eleonora’s Falcon Falco eleonorae, have migration routes and/or wintering areas outside the Mediterranean. Other species, such as White Pelican Pelecanus onocrotalus, Greater Flamingo Phoenicopterus ruber, Osprey Pandion haliaetus, Sandwich Tern Sterna sandvicensis and Little Tern Sterna albifrons, are widespread elsewhere, but have a limited range and/or a small population in the Mediterranean. For Slender-billed Curlew Numenius tenuirostris, which is a globally Critically Endangered species, the Mediterranean used to be part of its wintering range, but now its population is estimated to less than 50 according to BirdLife International species factsheet (2016) and there have been no recent confirmed records in the Mediterranean. Apart from the Armenian Gull Larus armenicus, which is Near Threatened, and the Balearic Shearwater, which is Critically Endangered, the other newly added species to Annex II are of Least Concern, according to BirdLife International. However their breeding population and/or range in the Mediterranean are quite restricted.
2. ACTION PLAN OBJECTIVES AND TARGETS

2.1. The main objective

The main purpose of the Action Plan is to maintain and/or restore the population levels of bird species listed in the Annex II of SPA/Birds Protocol to a favourable conservation status and to ensure their long-term conservation.

2.2. Other objectives

- To share information, knowledge and expertise between Mediterranean countries and organisations dealing with the bird species listed in Annex II.
- To co-ordinate efforts among Mediterranean countries and other relevant organisations, initiatives and agreements, so as to ensure the implementation of this Action Plan.
- To encourage a synergetic approach among Mediterranean countries in the protection of the 25 listed bird species and their habitats.
- To encourage research to fill the many gaps which still exist in knowledge of coastal and pelagic birds in the Mediterranean, particularly seabird distribution and movements, and of their feeding, moulting and wintering areas at sea.
3. STRATEGIC APPROACH

In the implementation of this Action Plan there are three levels of priority:

**At Species level**
- To implement this Action Plan for all species in Annex II of the SPA/BD Protocol.
- To consider the conservation of globally threatened species as one of the main priorities of the present Action Plan.
- To give priority to the conservation of other species, which have an unfavourable conservation status at regional level.

**At National level**
- To map the distribution of the species on land as well as at sea.
- To identify sea and coastal important bird areas, particularly for feeding and breeding.
- To identify and control threats for birds and their habitats.
- To protect and monitor Important Bird Areas (IBAs).
- To carry out proper Environment Impact Assessments for all proposed development where any of the species occur.
- To develop and implement appropriate legislation for the protection of birds and their habitats.
- To pursue the principles and adhere to the requirements of Agreements and Conventions related to bird conservation.

**At Mediterranean level**
- To strengthen co-operation and exchange of information and experience in research.
- To disseminate information.
- To promote and support the identification of coastal and sea areas which are important for birds.
- To promote the creation and monitoring of protected areas of coastal and marine important birds areas.
- To prevent and/or control the expansion of invasive species, particularly on small islands of high biological importance for birds.
- To identify and monitor migratory hotspots.
- To seek, whenever appropriate, collaboration at a broader international level with relevant Conventions/Agreements such as the Berne Convention, the Bonn Convention, and in particular with the Afro-Eurasian Water bird Agreement (AEWA).
4. ACTIONS TO ACHIEVE THE OBJECTIVES OF THE ACTION PLAN

4.1. Protected areas

- Important bird marine areas should be identified and given legal protection status.
- Breeding sites of all threatened species should be legally established as protected areas with an adequate management plan.
- Coastal and marine protected important bird areas should be continuously monitored and properly managed.

4.2. Legislation

- Throughout the Mediterranean, species should be afforded legal protection by the Contracting Parties in countries where they breed, winter or occur during migration, as per the guidelines provided by SPA/RAC (see para.5).
- Legislation should include dissuasive penalties.
- Assessment of environmental impact on these species and their habitats by any type of development should be legally obligatory.

4.3. Research

- In view of the existing gaps in knowledge of coastal and pelagic birds and their habitats in the Mediterranean, especially of their movements and distribution at sea, priority must be given to the mapping of breeding, feeding, moulting and wintering areas of the species concerned.
- Resources should be made available for researchers to fill the gaps in knowledge, such as for the establishment of a Mediterranean seabirds’ atlas, and for monitoring population size and breeding success of less well-known species.

4.4. Monitoring Activities

In view of the adoption of the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria (IMAP),
- Contracting Parties to the Barcelona Convention, with the support of the SPA/RAC Secretariat, should update their national monitoring programmes in light of the new elements of IMAP and report regularly quality assured data.
- 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.

The SPA/RAC Secretariat should work further and create more opportunities with relevant partner organizations, in order to strengthen technical support that countries might need to implement the IMAP.

4.5. Awareness, Education & Training

Contracting Parties should promulgate legislation concerning endangered bird species.

Contracting Parties should seek and/or provide the training of personnel for monitoring, conserving and managing protected important bird areas.

The organisation of ornithological training courses in situ for trainers, important bird areas staff and relevant personnel should be supported by SPA/RAC and the partners of the Action Plan.

Public awareness and education programmes and campaigns highlighting the vulnerability of threatened species, directed particularly at stakeholders and decision makers, should be planned and implemented in co-operation with non-governmental organisations.


Contracting Parties should formulate National Action Plans for the conservation of endangered and threatened bird species in the Mediterranean.

National Action Plans should take into consideration the implementation of the specific actions relevant to the particular countries proposed in this Action Plan.

New and updated National Action Plans should address the current factors causing loss or decline of the bird species in Annex II; suggest appropriate subjects for legislation; give priority to the protection and management of sites; and ensure continued research and monitoring of populations and sites.

Contracting Parties should apply and implement their Action Plans.
5. IMPLEMENTATION

5.1. Regional co-ordination structure

Regional co-ordination of the implementation of the present Action Plan will be guaranteed by the Mediterranean Action Plan’s (MAP) secretariat through the Regional Activity Centre for Specially Protected Areas (SPA/RAC).

The main functions of the co-ordinating structure shall consist in:

- Promoting co-operation among Contracting Parties in those actions executed in transboundary areas and at sea in national waters and beyond.
- Promoting the development of a regional network for monitoring populations and distribution of threatened Mediterranean bird species, in co-ordination with other organisations.
- Supporting and collaborating with Contracting Parties in the establishment of important bird areas at sea.
- Providing detailed guidelines to assist countries in their efforts to afford adequate legislative protection to endangered species.
- Elaborating guidelines for monitoring and management plans in collaboration with experts and other interested organisations.
- Urging and supporting the Contracting Parties to create and/or update their national monitoring programmes in light of the new elements of IMAP (Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria) and report regularly quality assured data.
- Assisting countries in the monitoring and conservation of the species listed in Annex II according to the proposed actions by this Action Plan.
- Organising meetings of experts on specific subjects relating to the ecology and conservation of the bird species found in Annex II.
- Preparing progress reports on the implementation of this Action Plan.
- Encouraging complementary work, done by other international organisations with the same objectives, and promoting co-ordination to avoid possible duplication of effort, such as the CMS Secretariat*, the Secretariat of AEWA, the Raptors MOU Coordinating Unit, the African-Eurasian Migratory Landbirds Action Plan (AEMLAP) and Birdlife International.

5.2. Participation

Any interested international, regional and/or national organisation is invited to participate in actions necessary for the implementation of this Action Plan, while links with other bodies responsible for Action Plans dealing with one or more bird species listed in Annex II should be made, to strengthen co-operation and avoid duplication of work.

*Including the Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (MIKT) convened by the CMS Secretariat in conjunction with the Secretariat of AEWA, the Raptors MOU Coordinating Unit and the African-Eurasian Migratory Landbirds Action Plan (AEMLAP) Working Group.
5.3. "Action Plan Partners"

To encourage and reward contributions to the work of applying the Action Plan, the Contracting Parties may at their ordinary meetings grant the title of "Action Plan Partner" to any organisation (governmental, nongovernmental, economic, etc.) that has to its credit concrete actions likely to help the conservation of birds in Annex II of the Protocol. Conditions for the awarding of the Partner title shall be adopted by the Contracting Parties following advice given by the meeting of National Focal Points for SPAs. The co-ordination structure shall set up a mechanism for regular dialogue between the participating organisations and where necessary, organise meetings to this effect. However any dialogue could also be done by mail/email and webinars (on line conferences).

5.4. Assessment and revision

National Focal Points for SPAs, in collaboration with national experts, will be expected to:

- Assess progress in implementing the Action Plan during their meetings.
- Suggest recommendations to be submitted to the Contracting Parties.
- Suggest adjustments to the implementation timetable.

5.5. Timing

The actions advocated by the present Action Plan have to be carried out over a three-year period, starting from when the Action Plan is adopted by the Contracting Parties. At the end of this period, SPA/RAC will prepare a report on the progress made so far in implementing the advocated actions, and will submit this to the National Focal Points for SPA, who will make follow-up suggestions to the Parties.

5.6. Timetable

<table>
<thead>
<tr>
<th>Action</th>
<th>Deadline</th>
<th>By whom</th>
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<tbody>
<tr>
<td>Organisation of the third Mediterranean Symposium on ecology and conservation of the bird species in Annex II.</td>
<td>By beginning of 2023</td>
<td>SPA/RAC &amp; Partners</td>
</tr>
<tr>
<td>Protect legally all bird species in Annex II</td>
<td>1 year after adoption</td>
<td>Contracting Parties</td>
</tr>
<tr>
<td>Establishment/support of research and monitoring programmes to fill gaps in knowledge of threatened species in partnership with other organisations.</td>
<td>From 2018 to 2020</td>
<td>Contracting Parties, SPA/RAC, AP Partners, AEWA, BirdLife International</td>
</tr>
<tr>
<td>Revision of the directory of organisations and experts concerned with the threatened and endangered bird species in the Mediterranean.</td>
<td>By end of 2020</td>
<td>SPA/RAC</td>
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<tr>
<td>Creation/update and implementation of National Action Plans for the conservation of endangered and threatened bird species in the Mediterranean.</td>
<td>From 2018 to 2020</td>
<td>Contracting Parties &amp; SPA/RAC</td>
</tr>
<tr>
<td>Application and implementation of any Action Plans/monitoring activities already in existence for the conservation and monitoring the bird species listed in Annex II.</td>
<td>From 2018 to 2020</td>
<td>SPA/RAC &amp; Contracting Parties</td>
</tr>
<tr>
<td>Participation in promotion of a regional network for monitoring populations and distribution of Mediterranean threatened bird species, in co-ordination with other organisations.</td>
<td>From 2018 to 2023</td>
<td>SPA/RAC, AP Partners, AEWA, BirdLife International</td>
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<tr>
<td>Legal establishment of protected areas important for bird species with adequate management plans at breeding sites.</td>
<td>By end of year 2020</td>
<td>Contracting Parties</td>
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<tr>
<td>Support Contracting Parties and Partners to produce and publish relevant scientific documentation contributing to update knowledge and enhance conservation action taken on the Annex II species.</td>
<td>From 2018 to 2020</td>
<td>SPA/RAC, AP Partners, AEWA, BirdLife International, ICCAT, GFCM</td>
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<td>Identification of important areas for birds on land and at sea (mapping of breeding, feeding, moulting and wintering areas).</td>
<td>From 2018 to 2023</td>
<td>Contracting Parties, AP Partners, AEWA, BirdLife International</td>
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<tr>
<td>Mapping of breeding, feeding, moulting and wintering areas of pelagic species.</td>
<td>From 2018 to 2023</td>
<td>Contracting Parties</td>
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<tr>
<td>Produce the third progress reports in the implementation of the Action Plan.</td>
<td>By end of 2023</td>
<td>SPA/RAC</td>
</tr>
<tr>
<td>Organize specific training courses and workshops in coordination/synergy with international and/or national NGOs</td>
<td>From 2018 to 2023</td>
<td>SPA/RAC, Partners &amp; Contracting Parties</td>
</tr>
<tr>
<td>Optimize synergies with international agreements and organisations dedicated to bird conservation</td>
<td>From 2018 to 2023</td>
<td>Contracting Parties</td>
</tr>
<tr>
<td>Target and lobby decision-making organisations and government bodies to stimulate the implementation of the Action Plan</td>
<td>From 2018 to 2023</td>
<td>Contracting Parties, SPA/RAC, AP Partner, ICCAT, GFCM</td>
</tr>
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</table>

From 2018 to 2020
6. PROPOSED SPECIFIC PLANS

The hereafter listed Specific Action Plans for the 25 bird species listed in the Annex II of the SPA/BD Protocol should be implemented in all Mediterranean states where the species breed, winter or occur on migration. They should be reviewed and updated every three years. If sudden major environmental changes happen which may affect any of the species’ populations in the Mediterranean, an emergency review should be immediately undertaken. The current status given below covers the countries that have a Mediterranean coast. Proposed actions, which apply to all species, should include inter alia the initiation of public awareness campaigns on the status of these species and the preparation of National Action Plans. Other on-going Action Plans, which have been developed by other institutions, and which cover some of the species, are listed below, and should be taken in consideration and implemented where these species occur.

6.1. Greater Flamingo (*Phoenicopterus roseus*)

**Current status**

In the Mediterranean, it breeds in localised sites in suitable wetlands, mainly in Spain, France, Turkey, Italy as well as in Algeria. Breeding colonies are established at sites free from human disturbance and secure from terrestrial predators. Breeding is irregular with numbers fluctuating from one season to another. Substantial numbers also occur in Tunisia, Greece and Cyprus but breed rarely. Mediterranean population seems to be separated from Asiatic populations, with minimal exchange and overlap in Libya and Egypt.

**Current factors causing loss or decline**

Urban development; habitat loss for tourism development; disturbance; and hunting.

**Status under international instruments**


**Current Action Plans**

None

**Action Plan objectives and target**

To maintain healthy breeding populations, and maintain wetlands where the species overwinter.

**Proposed action**

Confer strictly protected status on the species.
Prohibit all types of disturbance to breeding colonies.
Monitor and warden breeding colonies.
Create SPAs where breeding colonies exist.
Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
Restore wetlands where the species used to breed.
Maintain wetlands where the species overwinter.

6.2. European Storm-petrel (Hydrobates pelagicus ssp. melitensis)

Current status
This pelagic colonial species breeds in small to very large colonies mainly on islets and in caves along the coast. Subspecies melitensis is endemic to the Mediterranean. Important breeding colonies are found in Malta, Sardinia and Sicily. Breeding surveys are totally lacking for the Adriatic and eastern Mediterranean. A general decline has been recorded.

Current factors causing loss or decline
Loss of habitat; disturbance; predation by Rattus sp. and Yellow-legged Gull Larus cachinnans; possibly contamination by oil pollutants of the sea.

Status under international instruments
European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

Current Action Plans
None

Action Plan objectives and target
To halt the decline and maintain healthy breeding colonies.

Proposed action
Compile an inventory of breeding sites and map critical habitats supporting the colonies, particularly in the eastern part of the Mediterranean.
Confer strictly protected status on the species.
Prohibit all types of disturbance to the breeding colonies.
Monitor and warden colonies under threat.
Create SPAs where breeding colonies exist.
Plan, regulate and/or manage activities and processes, which may result in loss of habitat and the introduction and/or spread of invasive species, particularly mammals and Yellow-legged Gull Larus cachinnans.

Control and/or eradicate species that have become invasive.
Prevent oil spills and chemical pollution of the sea.
Identify areas at sea important for the species.

6.3. Scopoli's Shearwater (Calonectris diomedea)

Current status
This pelagic, colonial species is restricted to the Mediterranean, nesting in sea-cliffs, on rocky islands and islets. Breeds in Algeria, Croatia, France, Greece, Italy, Malta, Spain, Turkey and Tunisia where the breeding population has been recently estimated at 140,000 pairs. The majority of the population spends the non-breeding season in the Atlantic. Its recent conservation status according to IUCN is of Least Concern (LC) but its population is thought to be in slow decline overall, although more research is required particularly in the eastern part of the Mediterranean and in the Adriatic.

Current factors causing loss or decline
Introduced mammals, such as Rattus sp., which affect breeding success; illegal hunting; taking of eggs and/or chicks; mortality from bycatch (longlines); development close to colonies and disturbance, and possibly oil spills and chemical pollution of the sea.

Status under international instruments
European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

Current Action Plans
None

Action Plan objectives and target
To halt the decline of the population and maintain healthy colonies.

Proposed action
Compile an inventory of breeding sites and map critical habitats supporting the colonies, particularly in the eastern part of the Mediterranean. Confer strictly protected status on the species.
Prohibit all types of disturbance to breeding colonies, including the taking of eggs and young.
Monitor and warden colonies under threat of disturbance.
Create SPAs where breeding colonies exist.
Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
Prevent oil spills and chemical pollution of the sea.
Monitor levels of mercury and chlorinated hydrocarbons in populations.

Develop and implement management projects targeting the conservation of the breeding habitat and strict control of introduced mammals, as well as preventing the introduction of alien predatory species.

Identify important bird areas at sea for the species.

Develop an Action Plan to reduce mortality at sea especially from bycatch.

### 6.4. Yelkouan Shearwater (*Puffinus yelkouan*)

**Current status**

This pelagic colonial species breeds on rocky islands and islets. Population estimated at less than 33,000 pairs, with 95% of the population breeding along the Mediterranean shores of South European countries, with main breeding colonies in Greece, Italy and Malta. Some pairs breed along the North African coast. Breeding surveys in the eastern Mediterranean are lacking and for a number of countries the population is very poorly known.

**Current factors causing loss or decline**

Lack of food resources; lack of protection of breeding colonies; predation by Rats *Rattus* sp, Yellow-legged Gulls *Larus cachinnans*, and possibly feral cats and dogs; disturbance; some mortality from bycatch (nets); and possibly contamination by oil pollutants at sea.

**Status under international instruments**

- EU European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

**Current Action Plans**

A European Action Plan for the Yelkouan Shearwater, led by the Ligue pour la Protection des Oiseaux (LPO), is being prepared by BirdLife International partners under a LIFE project EuroSPA. (http://www.birdlife.org/europe-and-central-asia/project/life-eurosap)

**Action Plan objectives and target**

To halt the decline of the species, to restore its numbers to former status and to increase the knowledge about its biology.

**Proposed action**

- Compile an inventory of breeding sites and map critical habitats supporting the colonies.
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to the breeding colonies.
- Monitor the population dynamics of the species and warden colonies.
- Control and if possible eradicate rats in breeding colonies.
- Ensure the protection of the breeding habitat and create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
- Promote adequate fishing practices, which take into account the conservation of the species.
- Prevent oil spills and chemical pollution of the sea.
- Undertake surveys of colonies and research on the conservation biology of the species.
- Identify areas at sea important for the species.
- Develop an Action Plan to reduce mortality at sea especially from bycatch.

### 6.5. Balearic Shearwater (*Puffinus mauretanicus*)

**Current status**

This pelagic, colonial species is restricted to the Balearic Islands; breeding on rocky islands and islets. It is the most threatened species in Europe. Current official population is estimated at 1989-2883 breeding pairs, but recent research at sea shows a much larger population of individual birds.

**Current factors causing loss or decline**

Predation by introduced carnivores (Genet, Pine Marten and feral cats); bycatch; and possibly oil spills and chemical pollution of the sea.

**Status under international instruments**


European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

**Current Action Plans**


A national Action Plan is in place and is being implemented in Spain.

There is a draft national action plan in France for the Atlantic coast and corresponding to the wintering areas of the species.

**Action Plan objectives and target**

To halt the decline of the species and restore its numbers to former status.

**Proposed action**

- Compile an inventory of breeding sites and map critical habitats supporting the colonies.
- Confer strictly protected status on the species.
Prohibit all types of disturbance to the breeding colonies.
Monitor the population dynamics of the species and warden colonies.
Control and if possible eradicate rats and predators in the colonies and prevent any introduction of terrestrial mammals in breeding colonies.
Ensure the protection of the breeding habitat and create SPAs where breeding colonies exist.
Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
Promote adequate fishing practices, which take into account the conservation of the species.
Prevent oil spills and chemical pollution of the sea.
Undertake surveys of colonies and research on the conservation biology of the species.
Identify the marine important areas for the species.
Develop an Action Plan to reduce mortality at sea especially from bycatch.

6.6. Pygmy Cormorant (Microcarbo pygmaeus)

Current status
The main breeding populations in the Mediterranean of this globally threatened species are found in Montenegro, Serbia, Greece, and Turkey, with some pairs in Albania, Bosnia, Israel and Italy. It is restricted to lowland freshwater and brackish habitats, and in winter frequents coastal lagoons, deltas, rivers and riparian forests. The whole population of the Mediterranean countries probably numbers 11,000-13,000 breeding pairs.

Current factors causing loss or decline
Degradation and loss of wetland habitat; disturbance and hunting; destruction of breeding colonies.

Status under international instruments
European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).
Listed in the AEWA Action Plan (Column B Category 1)

Current Action Plans

Italy has a national Action Plan.

Action Plan objectives and target
To maintain the recent increase of the species’ population size and distribution.

Proposed action
- Afford strict protection to the species and its habitat, particularly from hunting, disturbance and development.
- Manage wintering and breeding sites in order to meet the species’ requirements.
- Monitor breeding and wintering populations.
- Monitor water levels and quality at breeding sites.
- Create SPAs where breeding colonies exist.
- Research its feeding and dispersal ecology.
- Develop education campaigns for hunters.
- Restore degraded wetlands used by the species.

6.7. European Shag (Phalacrocorax aristotelis ssp.desmarestii)

Current status
This Mediterranean endemic subspecies of the European Shag Phalacrocorax aristotelis desmarestii is present in the western Mediterranean (Balearic Islands, Corsica and Sardinia), and the Adriatic, Aegean and Black Seas, breeding along the coast on rocky islands and islets. The Mediterranean population numbers is less than 9,000 pairs.

Current factors causing loss or decline
Human disturbance; oil pollution; habitat loss; mortality from bycatch; Seine net fishing and long-line hauling close to colonies and moulting areas.

Status under international instruments
European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

Current Action Plans
No national action plans, but a Species Action Plan for the Mediterranean Shag Phalacrocorax aristotelis desmarestii in Europe was prepared by BirdLife International on behalf of the European Commission (final draft December 1999).

Action Plan objectives and target
To ensure the survival of Mediterranean populations.

Proposed action
- Compile an inventory of breeding sites and map critical habitats.
- Confer strictly protected status on the species.
Prohibit all types of disturbances to the breeding colonies.

Carry out rat-eradication programmes at breeding colonies.

Monitor populations.

Create SPAs where the species breeds, and encourage buffer zones surrounding breeding areas including adjacent sea area.

Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to breeding sites.

Take measures to influence fishing policies in order to avoid negative effects on food stocks and food availability, and to avoid mortality from bycatch.

Prevent oil spills and chemical pollution of the sea.

Identify important bird areas at sea for the species.

**Action Plan objectives and target**

To prevent any declines and to increase the population size to a level at which it can be regarded as safe.

**Proposed action**

- Confer strictly protected status on the species and its habitats during breeding and wintering periods in all range states.
- Establish supervised buffer zones around breeding colonies.
- Prohibit all types of disturbance to the breeding colonies.
- Create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
- Manage in a sustainable way or restore where necessary all wetlands where the species occurs.
- Replace overhead electricity wires by thick cables or lay them underground.
- Monitor continually the breeding and wintering populations.
- Develop education campaigns for local fishermen and hunters, and decision-makers.

### 6.8. Dalmatian Pelican (*Pelecanus crispus*)

**Current status**

This species is vulnerable and globally threatened. In the Mediterranean, small populations (totalling 2500-2700 breeding pairs) are found mainly in Albania, Montenegro, Greece and Turkey. Breeds on inland and coastal wetlands and nests on floating islands of reeds and on bare ground on islands, isolated from mainland to be safe from mammalian predators. Up to about 3000 birds winter in Albania, Greece, Syria and Turkey.

**Current factors causing loss or decline**

Wetland drainage resulting in a sharp decline of available breeding sites; collisions with electric wires; persecution due to competition with commercial fisheries; and disturbance.

**Status under international instruments**


European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

Listed in the AEWA Action Plan (Column A Category 1a/1c).

**Current Action Plans**


Albania has a NAP, but it is only partly implemented, while a NAP is in preparation in Turkey.

### 6.9. Great White Pelican (*Pelecanus onocrotalus*)

**Current status**

In the Mediterranean, this species breeds in Turkey and Greece. Numbers have declined in the last thirty years, and now the breeding population in the Mediterranean is down to less than 1000 pairs (810-940bp). It nests on the ground in large reed beds, bare earth or rocky islands, in isolation from the mainland to be safe from mammalian predators. The species was also recorded during its migration in other countries such as Israel and Egypt. The available data indicates that more than 75,000 white pelican have been observed in Israel.

**Current factors causing loss or decline**

Habitat loss and destruction; depletion of fish stocks; persecution and disturbance; pollution; flooding; disease; and collision with electric power lines.

**Status under international instruments**

Class A - African Convention on Conservation and Natural Resources.


Listed in the AEWA Action Plan (Column A Category 1a/3c).

**Current Action Plans**
National action plan is in place and is being implemented in Israel.

**Action Plan objectives and target**
To reverse the decline of the breeding populations in the Mediterranean.

**Proposed action**
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to breeding colonies and their habitat.
- Monitor and supervise breeding colonies.
- Create SPAs where breeding colonies exist.
- Develop education campaigns aimed at local fishermen.
- Create artificial nesting sites close to foraging sites.

6.10. **Kentish Plover (Charadrius alexandrines)**

**Current status**
This predominantly coastal small wader species has an extremely large global range and hence is evaluated by IUCN as of Least Concern. However, the overall population trend is decreasing. It prefers sparsely vegetated, sandy or dry mud areas when breeding. While some populations of this species are sedentary or only disperse short distances, most inland and northern coastal populations have distinct separate breeding and wintering ranges. Small breeding populations breed in most Mediterranean countries with some 5000 pairs in Tunisia, up to nearly 2000 pairs in Spain, Greece, and Italy, and ‘several thousands’ in Morocco.

**Current factors causing loss or decline**
Disturbance of coastal habitats; degradation and loss of wetland habitat; land reclamation; declining river flows; urbanisation and predation by foxes, feral cats and dogs.

**Status under international instruments**

**Current Action Plans**
National action plan is in place and is being implemented in Slovenia.

6.11. **Greater Sand Plover (Charadrius leschenaultii ssp. columbinus)**

**Current status**
This species has an extremely large global range and population size. According to IUCN criteria it is of Least Concern. However in the Mediterranean the subspecies columbinus is known to breed only in Turkey (probably 800-1200bp) and Syria (400-1000bp). As a migrant it is fairly common in Israel, and very scarce or vagrant in some other eastern Mediterranean countries. During the breeding season this species is predominantly found in open, dry, treeless areas and rocky plains. In Turkey the species frequents heavily grazed saline steppe and usually breeds near water but exceptionally also some kilometres away from it.

**Current factors causing loss or decline**
Hunting & disturbance.

**Status under international instruments**

**Current Action Plans**
None

**Action Plan objectives and target**
To ensure the safeguarding and to prompt an increase of the present few breeding populations in the Mediterranean, as well as to provide it with safe passage and wintering grounds where it occurs in other Mediterranean countries.

**Proposed action**
- Confer strictly protected status on the species and on its "lookalike" species, where it occurs on passage and during winter.
- Prohibit all types of disturbance to breeding areas and their surroundings.
- Monitor, warden and afford appropriate protection and management of all breeding, passage and wintering grounds.
- Instruct wardens, ornithologists and hunters in the identification of the species.
Increase public awareness of the species' rare status in the Mediterranean.

6.12. Slender-billed Curlew (*Numenius tenuirostris*)

**Current status**
This is a globally threatened species, which is possibly extinct. Once described as common in the Mediterranean region, it is now one of the rarest and least known species in the Western Palearctic. Used to migrate from Siberia across eastern and southern Europe to winter in North Africa. On passage, occurs in a wide range of habitats: salt marshes, saltpans, brackish lagoons, dry fishponds, steppe and freshwater marshes. Last confirmed documented record in the Mediterranean was in Greece, in 1999.

**Current factors causing loss or decline**
Habitat loss at migrating and wintering areas. Other factors unknown.

**Status under international instruments**
- European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).
- Listed in the AEWA Action Plan (Column B Category 1a/1b/1c).

**Current Action Plans**


Italy has a national action plan.

**Action Plan objectives and target**
To provide safe passage and wintering grounds in the Mediterranean.

**Proposed action**
- Confer strictly protected status on the species and on its "lookalike" species, where it occurs on passage and during winter.
- Monitor and warden wintering sites.
- Afford appropriate protection and management of all passage and wintering grounds.

6.13. Slender-billed Gull (*Larus genei*)

**Current status**
This gull is both resident and/or migratory in the Mediterranean. It breeds colonially on sandy islands in saltpans at the coastal zone but also (as in Tunisia) in inland wetlands including salt lakes. It is found breeding at widely isolated scattered localities in some countries. It is presently known to breed in Spain (1650-1950bp), France (ca.1000bp), Italy (3000-5000bp), Greece (100-130bp) and Turkey (2000-3000bp). In Tunisia, up to 4000bp have been recorded breeding in Thyna salt-pans, and 10,560bp have been recorded breeding in the Golfe of Bou Grara, apart from other scattered sites. It also breeds in Egypt but numbers are unknown; formerly bred in Morocco; and there is no evidence of breeding in Algeria. The European population seems to be decreasing.

**Current factors causing loss or decline**
Disturbance of coastal habitats; degradation and loss of wetland habitats; human disturbance; predation by feral dogs; eggs and chicks of this species are preyed upon by other gull species especially where colonies are frequently disturbed by humans; subsistence egg collecting by local people; pollution and flooding.

**Status under international instruments**

Appendix II of the Convention on Migratory Species and listed under the African Eurasian Waterbird Agreement.

**Current Action Plans**
None. Regional management plans for seabirds including this species are in place and implemented in Spain.

**Action Plan objectives and target**
To maintain and increase a healthy breeding population and increase the number of its colonies.

**Proposed action**
- Compile an inventory of breeding sites and map critical habitats supporting the colonies, particularly in the North African Mediterranean countries.
- Increase management in breeding areas.
- Prevent disturbance from tourism and recreational activities.
- Confer strictly protected status on the species.
Prohibit all types of disturbance to breeding colonies, including the taking of eggs and young.
Monitor and supervise colonies under threat.
Create SPAs where breeding colonies exist.
Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
Control or eradicate invasive competitive species and terrestrial mammals at colonies.
Prevent oil spills and chemical pollution of the sea.
Identify marine important areas for the species.
Develop an Action Plan to reduce mortality at sea especially from bycatch.


Current status
This gull breeds in dense colonies at lagoons, estuaries, coastal as well as inland saltmarshes, and on large steppe lakes and marshes in open lowland areas. It breeds mainly on the Black Sea coast of Ukraine and at scattered localities throughout Europe. In the Mediterranean it breeds in Spain, southern France, Italy, Greece, and Turkey. The Mediterranean also hosts in winter a substantial number of the European population. The Mediterranean breeding population is estimated to be 9400-15,700 pairs

Current factors causing loss or decline
Tourist disturbance at breeding colonies; habitat loss resulting from development; possibly contamination by oil spill and chemical discharges at sea; bycatch from long-line fishing; and the taking of adults and eggs by fishermen.

Status under international instruments
Appendix II of the Convention on Migratory Species and listed under the African Eurasian Waterbird Agreement.

Current Action Plans
None

Action Plan objectives and target
To maintain and increase a healthy breeding population; increase the number of its colonies; and give total protection to the wintering population

Proposed action
Compile an inventory of breeding sites and map critical habitats supporting the colonies.

6.15. Audouin’s Gull (Larus audouinii)

Current status
This is an endemic Mediterranean species, with its main breeding populations occurring in the western Mediterranean in coastal and island sites; an average of 16,800 breeding birds in Spain in the years 2004-2016 being the largest. Other colonies occur in other parts of the Mediterranean including Greece, Turkey, Tunisia and Sardinia. It was close to extinction in the 1970s, but better enforcement of protection measures has resulted in an increase in the breeding population.

Current factors causing loss or decline
Habitat alterations at breeding sites; changes in fishing practices; competition mainly with the Yellow-legged Gull Larus cachinnans; egg collection; rat predation; human persecution and disturbance; and possibly depletion of food resources and contamination by oil pollutants.

Status under international instruments
European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).
Listed in the AEWA Action Plan (Column A Category 1a/3a).

Current Action Plans
Action Plan to restore the Audouin’s Gull Larus audouinii by Government Committee of Palm
Islands Nature Reserve in Lebanon.

Official Working Group in Spain (Ministry of Environment) to review status and propose conservation actions for Larus audouinii.

A national action plan is in place and implemented in Italy; another is in preparation in Turkey and regional implemented management plans are on-going for a number of colonies in Spain. A national action plan exists in France.

**Action Plan objectives and target**

To maintain a healthy breeding population and increase the number of colonies.

**Proposed action**

- Compile an inventory of breeding sites and map critical habitats supporting the colonies, particularly in the eastern part of the Mediterranean.
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to breeding colonies, particularly the taking of eggs and young.
- Monitor and supervise colonies under threat.
- Create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
- Control or eradicate invasive competitive species and terrestrial mammals at colonies.
- Prevent oil spills and chemical pollution of the sea.
- Identify marine important areas for the species.
- Develop an Action Plan to reduce mortality at sea especially from bycatch.

### 6.16. Armenian Gull (Larus armenicus)

**Current status**

This species nests colonially in huge aggregations. Its European population has declined rapidly and is listed by IUCN as Near Threatened. In the Mediterranean it breeds in western Turkey where it is resident, with a breeding population of 8000-10,000 pairs. In the Mediterranean it winters in the eastern part but numbers are not known. It is a common winter visitor and passage migrant to Israel where numbers have also decreased drastically. The species inhabits both coastal and inland waters, frequenting lakes, reservoirs, ponds and rivers. It breeds along the stony and grassy shores of mountain lakes, nesting and foraging in reed-beds and on beaches. In its winter range the species may also forage in agricultural fields and on fishponds.

**Current factors causing loss or decline**

Persecution (due to the damage it inflicted to fisheries); egg harvesting; and loss of habitat quality.

**Status under international instruments**

Appendix II of the Convention on Migratory Species and is covered by the African Eurasian Water bird Agreement.

**Current Action Plans**

None

**Action Plan objectives and target**

To halt the decline of the species and maintain a healthy breeding population.

**Proposed action**

- Identification and designation of important sites for these species.
- Education programmes to fishers to reduce persecution.
- Carry out studies to understand its ecology, including its diet and population trends.
- Compile an inventory of breeding sites and map critical habitats supporting the colonies, in the eastern part of the Mediterranean.
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to breeding colonies, including the taking of eggs and young.
- Monitor and supervise colonies under threat.
- Create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
- Develop an Action Plan to halt the decline of the species and maintain a healthy breeding population.

### 6.17. Little Tern (Sternula albifrons)

**Current status**

This coastal seabird is a strongly migratory species which usually fishes in very shallow water. It has the most inshore distribution of all terns. It breeds in solitary pairs or in very small groups sometimes amidst colonies of other terns. Its European breeding population is estimated at 36,000-53,000 pairs. However the breeding population in all the Mediterranean countries is estimated at 11,000-14,500 breeding pairs with the highest populations in Turkey (3000-5000bp), Spain (2641-2691bp), Italy (2000-3500bp), Greece (1500-2000bp), France (700bp), Albania (200-500bp), and Israel (300bp). The overall global population trend is decreasing.

**Current factors causing loss or decline**

Habitat loss and destruction of breeding sites; human disturbance; and predation (feral cats and dogs and foxes).

**Status under international instruments**

Current Action Plans
None, but national implemented action plans exist in Israel & Slovenia.

Action Plan objectives and target
To maintain healthy breeding colonies and to fill the gaps of knowledge in quantitative data of breeding populations in a number of countries.

Proposed action
- Compile an inventory and map critical habitats supporting the colonies, particularly in the eastern Adriatic and eastern Mediterranean countries where quantitative data are lacking.
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to the breeding colonies.
- Eliminate predation.
- Monitor and warden colonies under threat of disturbance.
- Create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known colonies.
- Establish population size and trends.
- Restore wetlands where the species is known to breed.

6.18. Common Gull-billed Tern (Gelochelidon nilotica)

Current status
This species has an extremely large global range, but its breeding population in the Mediterranean is only 9800-7150 pairs: Spain (3185-3435bp), Turkey (1000-2000bp), France (873bp), Italy (550bp), Greece (180-280bp), Tunisia (150-350bp) and Libya (12bp). It breeds in a variety of locations not only in coastal areas, but also at inland lakes, rivers, marshes and swamps.

Current factors causing loss or decline
Deterioration and loss of habitat, e.g. through wetland drainage, agricultural intensification, pesticide pollution and fluctuating water levels; Development close to breeding and/or at foraging sites; and human disturbance at breeding colonies.

Status under international instruments

Current Action Plans
None

Action Plan objectives and target
To safeguard the breeding areas; maintain a healthy breeding population and if possible increase it.

Proposed action
- Compile an inventory and map critical habitats supporting the colonies.
- Ensure breeding sites protection from disturbance, development and modification.
- Confer strictly protected status on the species.
- Eliminate predation.
- Monitor and warden colonies under threat of disturbance.
- Prevent erosion of islet complexes.
- Create SPAs where breeding colonies exist.

6.19. Caspian Tern (Hydroprogne caspia)

Current status
This species has an extremely large cosmopolitan but scattered distribution. Some populations are sedentary while others are strongly migratory. It prefers nesting on sandy, shell-strewn or shingle beaches, sand-dunes, flat rock-surfaces, sheltered reefs or islands. In the Mediterranean the breeding population is less than 500 breeding pairs, and is restricted to a few countries in the eastern part: Turkey (150-300bp), Syria (100-200bp), Greece (up to 10bp). It is said that it breeds in Egypt, but no numbers are given.

Current factors causing loss or decline
Loss and deterioration of breeding habitat, human disturbance at nesting colonies, contamination by oil spills and marine pollution and bycatch in fishing gears.

Status under international instruments

Current Action Plans
None, but it is listed in the AEWA Action Plan (Column A Category 1a/3a).

Action Plan objectives and target
To strictly protect the small breeding population and possibly to increase it.

**Proposed action**

- Compile an inventory and map critical habitats supporting the colonies.
- Ensure breeding sites protection from disturbance, development and modification.
- Confer strictly protected status on the species.
- Eliminate predation.
- Monitor and warden colonies under threat of disturbance.
- Prevent erosion of islet complexes.
- Create SPAs where breeding colonies exist.

### 6.20. Lesser Crested Tern (*Thalasseus bengalensis ssp. emigratus*)

**Current status**

This Mediterranean endemic subspecies is currently confined to Libya, at 4 colonies: Garah Island (2000 pairs), Ftiha Island (12 pairs) Ulbah Island (16 pairs) and Sabkhat Julyanah (70 pairs). Ocasional breeding was recorded in former years in France, Greece, Italy and Spain.

**Current factors causing loss or decline**

Occasional disturbance by fishermen; probably predation by Yellow-legged Gull *Larus cachinnans*; and possibly contamination by oil pollutants and toxic chemicals.

**Status under international instruments**

- European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).
- Listed in the AEWA Action Plan (Column A Category 1/c).

**Current Action Plans**

None. However a national action plan is in place in Libya but it is not yet implemented. Protocol on Monitoring Mediterranean lesser crested terns *Thalasseus bengalensis emigrates* is was elaborated by SPA/RAC in 2012 within the implementation of MedMPAnet Project.

**Action Plan objectives and target**

To maintain healthy breeding colonies and stop the loss of habitat.

**Proposed action**

- Confer strictly protected status on the species.
- Prohibit all types of disturbance to breeding colonies, including the taking of eggs and young.
- Monitor and supervise colonies regularly.
- Create SPAs where the species’ breeding colonies exist and prohibit access to known sites except for scientific purposes.
- Investigate whether local fisheries impact on breeding success.
- Prevent oil spills and chemical pollution of the sea.
- Establish population size and trends.
- Provide small artificial islands at Sabkhat Julyanah to encourage an increase of the colony size in the lake.

### 6.21. Sandwich Tern (*Thalasseus sandvicensis*)

**Current status**

This species can be found in Europe, Africa, western Asia, and the southern Americas. Whilst the European population is estimated at 79,900-148,000 pairs, the breeding population in the Mediterranean is estimated to be 6300-8800 pairs, nesting in colonies mainly in river deltas, on sandbanks and in salinas. Also migrates from elsewhere into the Mediterranean for wintering.

**Current factors causing loss or decline**

Degradation and loss of habitat mainly due to coastal development; disturbance by humans, animals predation and hunting; and possibly reduction of small pelagic fish abundance.

**Status under international instruments**

- Listed in the AEWA Action Plan (Column A Category 3a/3c).

**Current Action Plans**

None

**Action Plan objectives and target**

To maintain healthy breeding colonies and stop the loss of habitat.

**Proposed action**

- Compile an inventory and map critical habitats supporting the colonies, particularly in the eastern part of the Mediterranean, where breeding surveys are lacking.
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to the breeding colonies.
- Monitor and supervise colonies under threat of disturbance.
- Create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure
development that impact on wetlands and other breeding habitats.

6.22. **Osprey (Pandion haliaetus)**

**Current status**

This is a cosmopolitan species, which is vulnerable in several regions. Whilst the European population is estimated at to 8,400-12,300 pairs, less than 120 pairs breed in the Mediterranean (mainly Balearic Islands, Corsica, Morocco and Algeria). Some local small populations have disappeared from other islands (e.g. Ibiza, Sicily & Sardinia). The 5 pairs breeding presently in Italy have been introduced.

**Current factors causing loss or decline**

Habitat destruction and disturbance at breeding sites related to tourism. Mortality also occurs from illegal poaching and electrocution.

**Status under international instruments**

Class B - African Convention on Conservation and Natural Resources (1968).


European Union Regulation laying down certain technical measures for the conservation of fishery resources in the Mediterranean (1626/94 (EC) 1994).

**Current Action Plans**

None; but a regional species action plan is in place in Spain and a national action plan existed in France between 2008 and 2012.

**Action Plan objectives and target**

Reverse the decline of the breeding population in the Mediterranean.

**Proposed action**

- Make an inventory and map critical habitats supporting the remaining breeding pairs.
- Confer strictly protected status on the species.
- Prohibit the destruction of its habitat, disturbance, and the taking or trade of the species.
- Use area-based measures to protect and restore its habitats.
- Create SPAs where it breeds.
- Plan, regulate and/or manage activities and processes of coastal and infrastructure development near to known breeding sites.
- Research the causes of the decline of the species.

6.23. **Pied Kingfisher (Ceryle rudis)**

**Current status**

This species has an extremely large range. However in the Mediterranean it is restricted to a few countries and is only known to breed in Israel (2500bp), Turkey (100-200bp) and in Syria and Egypt where breeding numbers are unknown. Decreases in populations have been noted in Syria, Israel, and Egypt. It inhabits small and large lakes, large rivers, estuaries, coastal lagoons and sandy and rocky coasts, dams and reservoirs with either fresh or brackish water with available waterside perches. It is generally sedentary with some local movements due to changes in the supply of food.

**Current factors causing loss or decline**

Use of poisons and pesticides; water storage developments; and bioaccumulation of pollution and toxins in the fish they eat.

**Status under international instruments**


**Current Action Plans**

None

**Action Plan objectives and target**

Reverse the decline and maintain a healthy breeding population in the Mediterranean.

**Proposed action**

- Compile an inventory of the breeding areas and populations.
- Protect legally the species and all its key breeding sites.
- Carry out research on the species’ range, ecology, habitat requirements and movements, to be used for the necessary conservation measures.
- Assess the potential threats and their impacts in order to develop appropriate response.
- Develop Regional Action Plans for the protection and management of the species’ key sites.

6.24. **White-breasted Kingfisher (Halcyon smyrnensis)**

**Current status**

This kingfisher has a very large global range. However, in the Mediterranean it is restricted to a few countries, and is only known to breed in Israel (15,000bp), Turkey (170-250bp) and Egypt (10,000bp, but no proper estimates). It inhabits various habitats ranging from water bodies to farmland and palm plantations.

**Current factors causing loss or decline**

Use of pesticides; habitat degradation from various factors; gaps in knowledge of the species’ ecology and behaviour and of the threats facing this species.

**Status under international instruments**

Current Action Plans
None

Action Plan objectives and target
Reverse the decline and maintain a healthy breeding population in the Mediterranean.

Proposed action
- Compile an inventory of breeding areas and populations.
- All breeding sites should be strictly protected and supervised.
- Prohibit any development that would degrade the species’ breeding sites.
- Carry out research on species ecology and habitat needs for future conservation measures.
- Assess the potential threats and their impacts in order to develop appropriate responses.
- Develop Regional Action Plans for the protection and management of the species’ key sites.

6.25. Eleonora’s Falcon Falco eleonorae

Current status
This falcon breeds in colonies along the coast of the mainland or on rocky islands, which are often uninhabited. In Europe, which covers >95% of the breeding range, the population has been estimated recently at 14,300-14,500 pairs ~ the largest number of breeding pairs are found in Greece (12,360), followed by Italy (638-704), Spain (655), Cyprus (90-145) and Turkey (35-50). The North African population has been estimated at approximately 250 pairs (ca.72% of which are found in Tunisia). The current population trend is increasing. Almost all the entire population breeds on rocky Mediterranean islands.

Current factors causing loss or decline
Predation by cats and rats; human disturbance in colonies; habitat degradation; taking of eggs and young; hunting; and accidental poisoning from pest control methods.

Status under international instruments
Class B - African Convention on Conservation and Natural Resources (1968).

Current Action Plans
International Species Action Plan Eleonora’s Falcon Falco eleonorae prepared by BirdLife International on behalf of the European Commission (final draft December 1999). A regional implemented species action plan for the Balearics, which host most of the breeding population in Spain, is in place. A National Action Plan is in place and implemented in Italy.

Action Plan objectives and target
To safeguard the present colonies and encourage the increasing trend, through preserving the breeding sites particularly the uninhabited islands and eliminating any negative impacts on the species.

Proposed action
- Confer strictly protected status on the species.
- Prohibit all types of disturbance to the breeding colonies, including the taking of eggs and young.
- Monitor and warden colonies under threat.
- Create SPAs where breeding colonies exist.
- Plan, regulate and/or manage activities and processes, which may result in loss of habitat and the introduction/spread of invasive species.
- Control and/or eradicate species that have become invasive.
- Carry out breeding surveys in eastern Mediterranean countries.
- Prevent poisoning through awareness campaigns and cooperation with farmers.
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 countries and the European Union) in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol).