

Arctic Migratory Birds Strategy Africa-Eurasian Flyway Implementation Strategy¹

Version 1.1: July 2019

Notice: This Implementation Strategy is intended to remain a living document, reflecting the implementation process of the AMBI African-Eurasian Flyway Workplan, as well as the evolving needs of Arctic migratory bird conservation in the African-Eurasian Flyway.

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List of acronyms

| | |
|--------|--|
| ABA | Arctic Biodiversity Assessment |
| AEWA | Agreement on the Conservation of African-Eurasian Waterbirds |
| AFEU | AMBI African-Eurasian Flyway |
| AMBI | Arctic Migratory Birds Initiative |
| BMU | Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit (German Ministry for the Environment, Conservation, and Nuclear Safety) |
| CAFF | Conservation of Arctic Flora and Fauna |
| CBD | Convention on Biological Diversity |
| CBird | CAFF's Seabird Expert Group |
| CBMP | Circumpolar Biodiversity Monitoring Programme |
| CMS | Convention on Migratory Species |
| CNRS | Centre National pour la Recherche Scientifique |
| COP | Conference of the Parties |
| CSN | Critical Site Network |
| CWSS | Common Wadden Sea Secretariat |
| EC | European Council |
| EU | European Union |
| GIS | Geographic Information Systems |
| HELCOM | Helsinki Convention |
| IBAP | Instituto da Biodiversidade e das Áreas Protegidas |
| ICARUS | International Cooperation for Animal Research Using Space initiative |
| ISSAP | International Single-Species Action Plan |
| IUCN | International Union for the Conservation of Nature |
| IWC | International Waterbird Census |
| IWG | International Working Group |
| IWSG | International Wader Study Group |
| JNCC | Joint Nature Conservation Committee |
| LIFE | European Union's Programme for the Environment and Climate Action |
| LWfG | Lesser White-fronted Goose |
| MOP | Meeting of the Parties |
| NGO | Non-Governmental Organization |
| ODZH | Organização para o Desenvolvimento das Zonas Húmidas (Organization for the Development of Wetlands) |
| OSPAR | Convention for the Protection of the Marine Environment of the North- East Atlantic |
| PECBMS | Pan-European Common Bird Monitoring Scheme |
| PRISM | Programme for Regional and International Shorebird Monitoring |
| RAIPON | Russian Association of Indigenous Peoples of the North |
| RSPB | Royal Society for the Protection of Birds (BirdLife United Kingdom) |
| TMAP | Trilateral Monitoring and Assessment Programme |
| TWSC | Trilateral Wadden Sea Cooperation |
| UN | United Nations Organization |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Educational, Scientific, and Cultural Organization |
| VBN | Vogelbescherming (BirdLife Netherlands) |
| WCMC | World Conservation Monitoring Centre |
| WH | World Heritage |
| WSFI | Wadden Sea Flyway Initiative |

Arctic Migratory Birds Initiative: Africa-Eurasian Flyway Implementation Strategy

The Arctic Migratory Birds Initiative

The Arctic Migratory Birds Initiative (AMBI), is a project designed to improve the conservation status and secure the long-term sustainability of declining Arctic breeding migratory bird populations. Through the conservation of a shared natural and cultural resource, AMBI will have a positive impact on societies for whom migratory birds are a source of livelihood and spiritual inspiration.

In 2013, AMBI was launched to address the recommendations arising from the Arctic Biodiversity Assessment². The ABA found that “many Arctic migratory species are threatened by overharvest and habitat alteration outside the Arctic” and recommended to “reduce stressors on migratory species range-wide, including habitat degradation and overharvesting on wintering and staging areas along flyways and other migration routes.” AMBI seeks to conserve Arctic migratory bird species throughout their ranges using a collaborative approach, working with Arctic and non-Arctic countries and other initiatives. AMBI is based on the recognition that effective conservation of migratory birds requires the joint action of each of the governments along the entire migratory range, as failure to protect the birds in any one location is likely to have disruptive implications along the whole flyway.

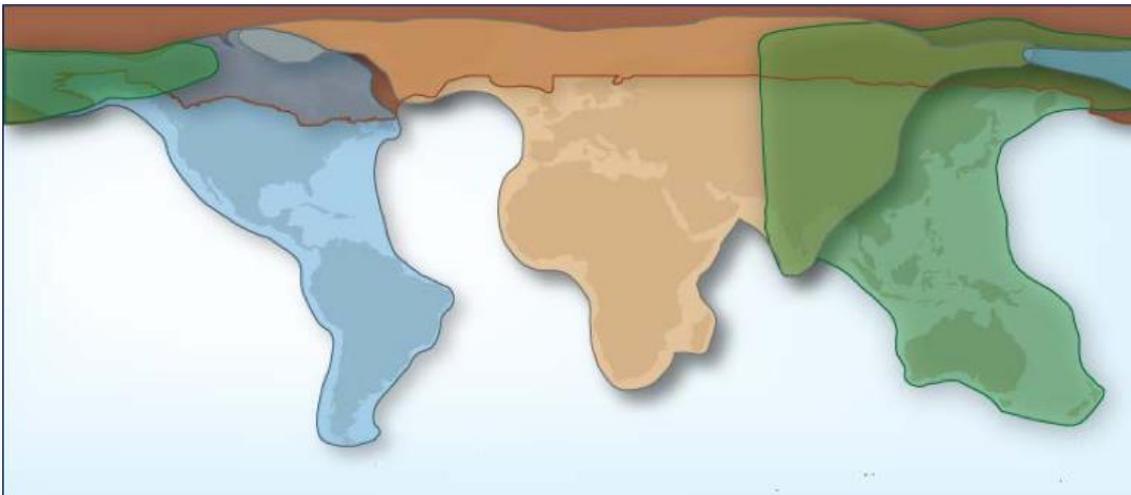


Figure 1. AMBI flyways: Americas (blue), African-Eurasian (orange), East Asian-Australasian (green), and Circumpolar (brown).

AMBI organizes activities across four flyways:

- East Asian-Australasian Flyway;
- African-Eurasian Flyway;
- Americas Flyway; and

² Conservation of Arctic Flora and Fauna (CAFF). 2013. *Arctic Biodiversity Assessment. Status and trends in Arctic biodiversity*. Conservation of Arctic Flora and Fauna, Akureyri, Iceland: ISBN: 978-9935-431-22-6. URL: <https://www.arcticbiodiversity.is/index.php/the-report>

- Circumpolar Flyway.

AMBI has brought together experts from across the globe to develop workplans for each of the above flyways that address priority conservation needs of AMBI priority species in each respective geography. Priority conservation issues and species were identified within each flyway, and flyway-specific workplans were prepared to guide the identified actions and objectives. In February 2019, the CAFF Board approved the AMBI Workplan 2019-2023³, which will guide AMBI activities during this time period.

Actions proposed by AMBI are designed to bring added value to ongoing conservation programs, or to address issues that are currently underrepresented. While each of these flyway workplans are intended to stand alone, there are several crosscutting themes that are relevant for all flyways. At an implementation meeting in October 2018 in Rovaniemi (Finland), AMBI representatives and experts identified four cross-cutting actions that need to be implemented in all flyways, and which are reflected in this workplan:

1. Increase **data sharing and standardization** along and across flyways;
2. Assess **cumulative effects** on Arctic-breeding migratory bird populations including climate change, pollution, shipping, fishing, infrastructure development, habitat loss, and harvest;
3. Support conservation actions for Arctic-breeding migratory birds in non-Arctic countries through **coordinated cooperative efforts** with embassies and other diplomatic efforts, including supporting on-going actions and initiatives; and
4. Support the **sharing of experiences and expertise** between wetlands that support Arctic-breeding migratory bird populations.

It is important to note that while the workplans address certain issues and focal species, AMBI is interested in conservation of all Arctic breeding migratory bird species, and, in future, the species and issues of focus may change as needed to address new or worsening conservation concerns. Indeed, AMBI may take advantage of unexpected opportunities to advance Arctic breeding bird conservation, should they arise.

The AFEU Flyway

Under AMBI, the African-Eurasian Flyway is defined to a great extent by the geographical scope of the African-Eurasian Migratory Waterbird Agreement (AEWA), encompassing the East Atlantic, Black Sea-Mediterranean, and West Asia-East Africa Flyways. It should be noted, however, that the African-Eurasian flyway as defined under AMBI extends further to the East than AEWA, partially covering the so-called Central Asian Flyway as well (Figure 2).

³ Conservation of Arctic Flora and Fauna (CAFF). 2019. *Arctic Migratory Birds Initiative (AMBI): Workplan 2019-2023*. CAFF Strategies Series No. 30. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. ISBN: 978-9935-431-79-0. URL: <https://www.caff.is/strategies-series/467-the-arctic-migratory-birds-initiative-work-plan-2019-2023>

Priority activities have been selected where AMBI can potentially add significant value to existing initiatives through engagement of Arctic Council member and permanent observer countries. Value can be added through diplomatic interventions, channelling funds (e.g., from development aid or Arctic budgets that might not otherwise be available for flyway conservation) and through capacity building and exchange of information and experience.



Figure 2. African-Eurasian flyway under the AMBI framework.

Priority species

Priority species (Table 1) for AMBI conservation efforts were identified, as informed by the Revised AMBI Workplan 2015-2019⁴ and subsequent consultation and agreement at the AMBI expert workshop held in the auspices of the Arctic Biodiversity Congress (Rovaniemi, 2018).

These birds have been chosen as flagship species as all but Dunlin are listed as globally threatened or near-threatened on the IUCN Red List. **Dunlin**, **Red Knot**, and **Bar-tailed Godwit** were included in the AMBI Workplan 2015-2019⁵ (also referred to as “AMBI Phase 1”) along with the Black-tailed Godwit (which has now been removed together with the action

⁴ Conservation of Arctic Flora and Fauna (CAFF). 2018. *Arctic Migratory Birds Initiative (AMBI): Revised Workplan 2015-2019*. CAFF Strategies Series No. 6. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. ISBN 978-9935-431-72-1. URL: <https://www.caff.is/strategies-series/295-arctic-migratory-birds-initiative-ambi-work-plan-2015-2019>

⁵ Conservation of Arctic Flora and Fauna (CAFF). 2015. *Arctic Migratory Birds Initiative (AMBI): Workplan 2015-2019*. CAFF Strategies Series No. 6. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. ISBN: 978-9935-431-40-0.

concerning Icelandic afforestation⁶). **Lesser White-fronted Goose** also featured prominently in the AMBI Phase 1 Workplan, being a flagship species for flyway conservation efforts not only in the African-Eurasian Flyway, but also in the East Asian-Australasian Flyway. It represents the complexities of tackling illegal killing across boundaries, and the challenge of transboundary migratory species conservation.

Curlew Sandpiper, Velvet Scoter, and Long-tailed Duck have been added to reflect their updated status in the IUCN Red List and the AEWA Action Plan⁷. The **Curlew Sandpiper** was added to reflect both its priority for the Central Asian Flyway and the Bijagós Archipelago (which hosts one of the largest wintering populations of this species), and because it represents key challenges facing Arctic-breeding migratory birds in the African-Eurasian Flyway. The **Velvet Scoter** and **Long-tailed Duck** were included in this Workplan due to the concerns about the trends of the populations of these species that winter in the Baltic Sea, where they are the most common seabird species found in fisheries by-catch^{8 9}.

Table 1. AMBI AFEU priority species.

| Species | IUCN ¹⁰ | CMS ¹¹ | AEWA Action Plan ³ |
|---------|--------------------|-------------------|-------------------------------|
|---------|--------------------|-------------------|-------------------------------|

⁶ Conservation of Arctic Flora and Fauna (CAFF). 2017. *Arctic Migratory Birds Initiative mid-term evaluation*. CAFF International Secretariat, Akureyri, Iceland. ISBN: 978-9935-431-60-8. URL: <https://www.caff.is/strategies-series/411-ambi-mid-term-evaluation-2017>

⁷ AEWA. 2019. *AEWA Strategic Plan 2019-2027*. Doc AEWA/TC Inf. 15.3.

⁸ AEWA. 2015. *International Single Species Action Plan for the Conservation of Long-tailed Duck (Clangula hyemalis)*. AEWA Technical Series No. 57, Bonn, Germany.

⁹ AEWA 2018. *Final draft: International Single Species Action Plan for the Conservation of the Velvet Scoter (Melanitta fusca) Western Siberia & Northern Europe/NW Europe population*. AEWA Technical Series No. XX, Bonn, Germany.

*indicates species was included in AMBI work plan 2015-2019 (AMBI Phase 1)

¹⁰ [IUCN Red List Category](#): CR Critically Endangered, EN Endangered, VU Vulnerable, NT Near Threatened, LC Least Concern of global population

¹¹ [Convention on Migratory Species Appendices](#). Appendix I lists species for which Parties should endeavour to provide immediate protection;

Appendix II lists species for which Parties should endeavour to conclude Agreements covering the conservation and management.

³ Listing from the [Agreement on the Conservation of African-Eurasian Migratory Waterbirds, Table 1. Status of the population of migratory waterbirds in the Action Plan](#)

Column A

Category 1:

- (a) Species, which are included in Appendix I to the Convention on the Conservation of Migratory species of Wild Animals;
- (b) Species, which are listed as threatened on the IUCN Red list of Threatened Species, as reported in the most recent summary by BirdLife International; or
- (c) Populations, which number less than around 10,000 individuals.

Category 2: Populations numbering between around 10,000 and around 25,000 individuals.

Category 3: Populations numbering between around 25,000 and around 100,000 individuals and considered to be at risk as a result of:

- (a) Concentration onto a small number of sites at any stage of their annual cycle;
- (b) Dependence on a habitat type, which is under severe threat;
- (c) Showing significant long-term decline; or
- (d) Showing large fluctuations in population size or trend.

Column B

Category 1: Populations numbering between around 25,000 and around 100,000 individuals and which do not fulfil the conditions in respect of A, as described above.

Category 2: Populations numbering more than 100,000 individuals and considered to be in need of special attention as a result of:

- (a) Concentration onto a small number of sites at any stage of their annual cycle;
- (b) Dependence on a habitat type, which is under severe threat;

| | | | |
|---|----|--------------|------------------|
| Bar-tailed Godwit* (<i>Limosa lapponica taymyrensis</i>) | NT | App II | B 2a 2c |
| Dunlin* (<i>Calidris alpina arctica</i> and <i>schinzii</i>) | LC | App II | A 1c, 3a, B1, C1 |
| Red Knot* (<i>Calidris canutus</i> and <i>islandica</i>) | NT | App II | B 2a 2c |
| Lesser White-fronted Goose* (<i>Anser erythropus</i>) | VU | App I, II | A1a 1b 1c, 2 |
| Long-tailed Duck (<i>Clangula hyemalis</i>) | VU | App II | A 1b |
| Velvet Scoter (<i>Melanitta fusca</i>) | VU | App II | A 1b, 1c |
| Curlew Sandpiper (<i>Calidris ferruginea</i>) | NT | App II | B 2c |

AMBI AFEU Flyway Committee

AMBI Flyway Committees are tasked with implementing the AMBI AFEU workplan 2019-2023, and are comprised of interested Arctic states, Permanent Participants, Observer states and organizations, and other relevant partners. The current¹² members of the African-Eurasian Flyway Committee are:

- Mr. Mark Marissink (Swedish Environment Agency), CAFF Chair
- Dr. Evgeny Syroechkovskiy (Russian Ministry of Natural Resources and Ecology), AMBI Chair
- Mr. Tom Barry (CAFF Secretariat), CAFF Chair
- Mrs. Courtney Price (CAFF Secretariat), AMBI Global Coordinator
- Mr. Sergio Rejado Albaina (CAFF Secretariat), AMBI AFEU Flyway Coordinator
- Mr. Jo Anders Auran (Norwegian Environment Agency)
- Mrs. Nicola Crockford (Royal Society for the Protection of Birds)
- Mrs. Nina Mikander (AEWA)
- Dr. David Grémillet (Centre for Ecology and Functional Evolution, France)
- Dr. Andrés Barbosa (National Museum of Natural Sciences, Spain)
- Mr. Gerold Luerßen (CWSS)
- Mr. Danny Heptinstall (JNCC, United Kingdom)
- Mrs. Wilmar Remmelts (Ministry of Economic Affairs, the Netherlands)

Flyway Committee membership can be modified to add new members if deemed appropriate by the Flyway Committee, and sanctioned by the AMBI Steering Group and CAFF Management Board.

(c) Showing significant long-term decline; or

(d) Showing large fluctuations in population size or trend

Column C: Populations numbering more than around 100 000 individuals which could significantly benefit from international cooperation and which do not fulfil the conditions in respect of either column A or column B.

¹² As from June 2019.

AMBI AFEU Implementation Strategy

The overarching goal of this Implementation Strategy is to detail the steps and activities necessary to implement the objectives and actions detailed in the AFEU AMBI Workplan 2019-2023, and provide a framework for AMBI members and partners to undertake focused and concerted conservation efforts that will provide on the ground conservation of Arctic-breeding migratory bird species. This strategy is also intended to provide a platform for continued input from stakeholders throughout the Africa-Eurasia region to ensure conservation actions are undertaken in a meaningful way.

Links to other initiatives

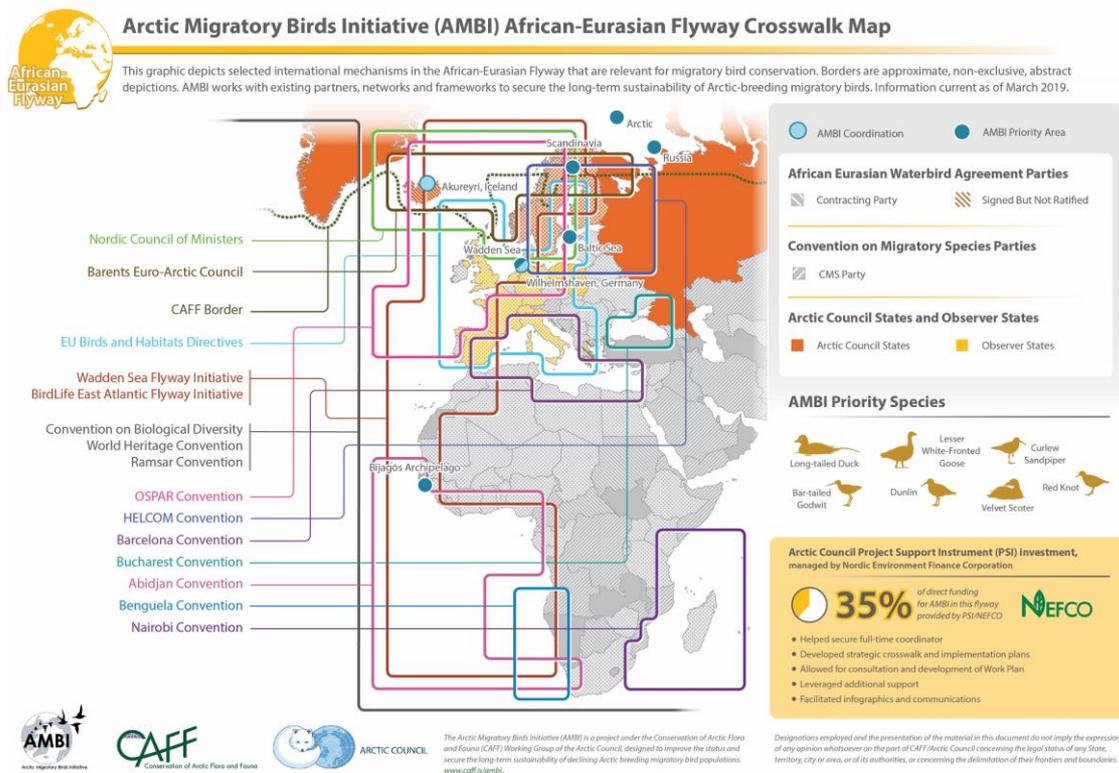


Figure 3. Outcomes of the crosswalk exercise undertaken for the AMBI AFEU Flyway, showing relevant international environmental cooperation frameworks, instruments, mechanisms, and organizations relevant to migratory bird conservation in the African-Eurasian Flyway. It also depicts Arctic Council Members and Observers, AMBI priority species and sites, and AEWA and CMS signatories.

AMBI is designed to build on, complement and support existing international, regional and local bird conservation initiatives. Implementation of the AMBI AFEU workplan will help governments meet these and other commitments under Multilateral Environmental Agreements. CAFF has official mechanisms for cooperation with many partners, including Resolutions of Cooperation and Memorandums of Cooperation with several MEAs and instruments (GBIF, Ramsar Convention, AEWA, EAAFP, CMS, CBD, and Arctic Spatial Data Infrastructure), ensuring a collaborative framework on AMBI.

Importantly, objectives and actions identified in the AMBI AFEU workplan and implementation strategies are designed to bring added value to ongoing conservation programs, address gaps and needs as identified by flyway partners, create synergies, and work in close partnership with other actors and stakeholders within the flyway. These include, but are not limited to, CMS, AEWA, CBD, Ramsar Convention, OSPAR, HELCOM, WH Convention, European Commission, AEWA, WSFI, IWSG, BirdLife International, and Wetlands International.

The identified actions also create links and synergies with activities in the AMBI East Asian-Australasian and Circumpolar Flyways, helping the exchange of expertise and knowledge and contributing to joint efforts across flyways.

Objective 1: Improve conservation and management of wader sites throughout the African-Eurasian flyway.

Action 1: Secure intertidal habitat of Arctic-breeding waders in Bijagós Archipelago, Guinea-Bissau

- a) Advance and potentially coordinate international engagement to support the Bijagós World Heritage nomination process, as appropriate.
- b) Provide technical support to and enhance the capacity of IBAP and other national partners for strengthening the conservation management of the Bijagós Archipelago, including through its nomination and designation as a UNESCO World Heritage site.

Introduction

The Bijagós Archipelago (11°14'N–16°02'W) emerges from the shelf off Guinea-Bissau, not far from the mainland coast. It is the only active deltaic archipelago on the Atlantic coast of Africa¹³. It includes 88 islands and islets, some of which are mangrove islands flooded during spring tides, and some of which have several permanently emerged portions linked by intertidal mangroves¹⁴. Twenty-one of the islands are permanently inhabited by communities of the Bijagós ethnic group. The islands are separated by a network of channels, and in general are surrounded by mangroves and extensive mud and sand flats, which together represent the most extensive intertidal area in Africa. Sediments originate mostly from the Corubal and Geba rivers and are deposited and moved around by a complex system of currents and wave action. The region is under the seasonal influence of the upwellings linked to the Canary current but also benefits from an important input of organic matter and nutrients via continental runoff and from the productivity of the mangroves. The Archipelago and its surrounding flats and channels (covering an area of approximately one million hectares) harbors a rich biodiversity.

Prominently, the area is a hot spot for birds, of which 282 species have been recorded. It is significant both for breeding species, as well as many wintering migratory species that breed in the Arctic and which are undergoing alarming population decline, such as the Red Knot (*Calidris canutus*, NT), Bar-tailed Godwit (*Limosa lapponica*, NT), Dunlin (*Calidris alpina*, LC), and Curlew Sandpiper (*Calidris ferruginea*, VU). It hosts one of the largest concentrations of waders in the East-Atlantic flyway and is one of the most significant sites in the Flyway.

Besides birds, the Archipelago harbors an extraordinary diversity of vertebrates, including 175 fish, 17 reptile, 13 anuran, and 29 mammal species known to inhabit the site, with new species still being recorded¹⁵. The Archipelago is a key haven for multiple endangered species: the largest African rookery for Green Turtle (*Chelonia mydas*, EN) is found in the Archipelago, hosting also populations of African Manatee (*Trichechus senegalensis*, VU) and Atlantic

¹³ Pennober, G. 1999. *Analyse spatiale de l'environnement côtier de l'Archipel de Bijagós (Guinée-Bissau)*. PhD thesis, Institut Universitaire Européen de la Mer, Université de Bretagne occidentale.

¹⁴ Limoges B, Robillard M. 1991. *Proposition d'un plan d'aménagement de la réserve de la biosphère de l'archipel des Bijagós*. Bissau: CECI/UICN/MDRA.

¹⁵ Campredon, P. & Catry, P. 2016. Bijagós Archipelago (Guinea-Bissau). In *The Wetland Book*. DOI 10.1007/978-94-007-6173-5_158-1.

Humpback Dolphin (*Sousa teuszii*, CR) that are key for the long-term conservation of these species.

For centuries, the Archipelago has benefited from conservation measures based on local beliefs and customs. The traditional management of the natural resources of this area by the animistic Bijagós ethnic group is based on strong cultural and religious values¹⁶, and has allowed the long-term conservation of the site. In particular, restrictive access and use rules led to the effective protection of sacred islands, islets, and sacred forest patches where initiation rites take place, and which remain true oases of biodiversity¹⁷. These sites maintained important biodiversity values, as is the case with the island of Poilão, and its sea turtle rookery, or with several small islets where waterbirds nest.



Figure 4. The Boloma-Bijagós Biosphere Reserve¹⁸.

These traditional rules inspired the zoning of the Bolama-Bijagós Archipelago Biosphere Reserve, created in 1996. The central zones of the reserve were declared national parks: the Orango National Park (158,235 ha) and the João Vieira–Poilão Marine National Park (49,500 ha), both officially created in 2000 – although the Orango National Park was managed as such since 1997 under a different status: the Community Marine Protected Area of the Urok Islands (54,500 ha). The Biosphere Reserve as a whole, however, is a UNESCO label, not formally

¹⁶ Henry C. 1994. *Les îles où dansent les enfants défunts. Âge, sexe et pouvoir chez les Bijogo de Guinée-Bissau*. CNRS-Éditions, Paris.

¹⁷ Organismo Autónomo de Parques Nacionales & Instituto para a Biodiversidade e as Áreas Protegidas. 2012. *La Reserva de la Biosfera de Boloma-Bijagós: un patrimonio a conservar*.

¹⁸ Campredon, P. & Catry, P. 2016. Bijagós Archipelago (Guinea-Bissau). In *The Wetland Book*. DOI 10.1007/978-94-007-6173-5_158-1.

recognized in the national legislation. In 2012 the archipelago was identified as an Important Bird Area (classified with a “high” threat score)¹⁹. The archipelago is also listed, since 2014, as a Wetland of International Importance under the Ramsar Convention²⁰.

Current threats are related to fisheries, tourism, and natural resource extraction. The waters of the Bijagós Archipelago are exploited by migrant fishermen from neighboring countries (particularly Senegal) which target, among others, sharks and rays for their fins that are traded in Asian markets²¹. According to sports fishing club owners, there is already a clear reduction in the abundance and size of sharks in the Archipelago. Sawfishes have virtually disappeared. Many fishing camps of foreign fishermen have been illegally implanted in various islands with sociocultural impacts on the local communities, and causing environmental disturbances, for example, through the cutting of mangrove wood used for smoking fish, or through the disturbance of nesting colonies of birds. Large fishing nets are also responsible for bycatch of endangered marine megafauna, such as sea turtles or manatees.

Tourist operators keep trying, sometimes with success, to purchase uninhabited islets, originating conflicts among traditional owners (generally local village communities) and weakening or destroying the traditional rules of access to sacred sites. Mass tourism has not developed this far, but the risk remains.

Longer-term threats involve the hydrocarbon sector and mining. Prospecting carried out so far and planned prospecting suggests the possibility of future oil exploitation offshore, in the immediate vicinity of the archipelago. There are plans to build a major port in the Rio Grande de Buba for the exportation of bauxite, and the vessels using this port would cross the Archipelago in close proximity of the João Vieira–Poilão Marine National Park. Environmental security compliance and impact mitigation may be problematic.

Project overview

The main immediate challenge for the future of the site is to reinforce the management of the Archipelago by involving all stakeholders, mobilizing them through a common vision that harmonizes access to resources for development and conservation initiatives. For the long term, it is necessary to build a development model that values common heritage and natural resources to benefit the sustainable development of local communities and the Country.

The Government of Guinea-Bissau nominated the Bijagós Archipelago as a mixed (cultural and natural) WH site in 2012. However, UNESCO deferred the nomination with recommendations

¹⁹ BirdLife International. 2019. Important Bird Areas factsheet: Arquipélago dos Bijagós. *BirdLife DataZone*. URL: <http://datazone.birdlife.org/site/factsheet/arquip%C3%A9lago-dos-bijag%C3%B3s-iba-guinea-bissau>

²⁰ Ramsar Convention. 2019. *Country profiles: Guinea-Bissau*. URL: <https://www.ramsar.org/wetland/guinea-bissau>

²¹ Campredon P, Cuq F. 2001. Artisanal fishing and coastal conservation in West Africa. *Journal of Coastal Conservation*, 2001; 7: 91–100.

on how to strengthen the submission²². Ever since, and after a period of inactivity, the international interest for the enhanced protection of this site gained momentum, and the nomination of the Bijagós Archipelago as a natural WH Site was relaunched in 2017. International partners have supported Guinea-Bissau in this process through different means, including capacity building (WSFI)²³ and financial support (Mava Foundation), but the process is stalled due to staff limitations (lack of human resources) and technical capacity gaps in IBAP.

AMBI proposes to help fill the technical support gaps that are impeding the progress of the Bijagós Archipelago WH Site nomination process. AMBI will help ensure the compilation of a comprehensive nomination dossier and a sound, strong management plan that will lead to the successful designation of the Archipelago as a WH Site and improves its long-term conservation.

Expected outcomes

The expected results are:

- A management plan for the Boloma-Bijagós Biosphere Reserve and WH Site, as an immediate conservation action and capacity building exercise, and as a preliminary stage to the compilation of the WH Site Nomination Dossier;
- A finalized WH Site Nomination Dossier;
- The full WH Nomination package (including the Nomination Dossier and the Management Plan) is compiled and submitted to UNESCO by 2020;
- The site is officially designated by UNESCO as a WH Site; and
- Capacity for the management of the site is increased through workshops and technical backstopping during the WH nomination process

Activities to be undertaken

Under CAFF's Arctic Migratory Birds Initiative (AMBI)'s Work Plan 2019-2023, the project aims to improve conservation and management of wader sites throughout the African Eurasian flyway, including to secure intertidal habitat of Arctic-breeding waders in the Bijagós Archipelago (Guinea-Bissau). This goal is further expressed in two sub-actions:

- **Sub-action 1:** Advance and potentially coordinate international engagement to support the Bijagós WH nomination process, as appropriate, including the submission of a complete nomination dossier and management plan for the Bijagós Archipelago WH Site in 2020.

²² UNESCO World Heritage Committee. 2013. Decision - 37 COM 8B.17. URL: <http://whc.unesco.org/en/decisions/5132>

²³ WSFI. 2017. *Relaunching the process for World Heritage nomination of the Boloma-Bijagós Archipelago, Guinea-Bissau.*

- **Sub-action 2:** Provide technical support to and enhance the capacity of IBAP and other national partners for strengthening the conservation management of the Bijagós Archipelago, including through its nomination and designation as a UNESCO WH Site. The project aims to provide technical support and capacity building to key governmental officials and stakeholders who will be involved in the nomination process, in order to enhance management skills and overall knowledge of the UNESCO WHC (Paris Convention, 1972) process, instruments, and tools. Upon project completion, they will own the capacity and know-how in order to adequately fulfil the nomination dossier and the site management plan, as well as to undertake the management of the WH Site, once the property will be officially designated.

IBAP has requested cooperation with CAFF/AMBI on this matter via an official letter. They have identified that AMBI could potentially play an important role providing:

- Technical expertise to support their WH nomination process, including: task identification and prioritization, workshop organization, content review, etc; and
- Liaising and coordinating with AMBI international partners interested in supporting this process via expert and technical contributions (such as the Common Wadden Sea Secretariat, where the AFEU coordinator is currently based).

Field visits to Bissau and the Bijagós Archipelago will be necessary to work closely with the appointed officials on the dossier and helping them to advance the process and grow their capacities. The funding will also be used to support additional activities contributing to the elaboration of the nomination dossier and management plan of the WH Site, such as field visits and workshops with relevant partners and stakeholders, as well as field visits to consult and involve relevant actors.

Risk analysis

- **Partner involvement and stakeholder engagement:** local partners will have to be engaged in the process. For this, presence in the field (albeit in a non-permanent basis) will be required. Interactions up to now with IBAP have led to an official invitation to visit them and cooperate, condition without which will prove impossible to identify the concrete ways in which this cooperation may take place.
- **Support from partners:** the support of AMBI partners will be instrumental in this process through:
 - o The provision of diplomatic and official endorsement and validation to the initiative, in the case of Arctic Council member and observer states. In the case of States with diplomatic and/or development aid presence in the country (France, Spain, Russia, and China) they can also provide valuable advice on how to best engage with the country's authorities, recommendations on local customs and protocol, and official and logistical support in the field.
 - o The provision of concrete technical support. For instance, WSFI has strong expertise in data gathering and analysis, GIS, and WH nominations, and their active participation and contribution to migratory bird conservation and

monitoring activities in the country. AEWA, BirdLife, and Wetlands International are also valuable partners to engage in this process.

- **Adequate funding and financial support for the project:** in order to guarantee that the activities can take place and presence in the field leads to a positive, constructive engagement of local partners and stakeholders in the process. Adequate financial resources would permit working with the local partners in the field: it is strongly encouraged to be able to be physically present in the field to undertake the dossier drafting work, field visits, workshops, and capacity building activities in order to advance the objectives of this project, due to the intrinsic challenges and characteristics of implementing conservation work in Africa, and to foster engagement and participation of local partners and stakeholders.
- **Lack of determined action:** lack of determined action by CAFF and partners to support IBAP and the Guinea-Bissau Government to advance and successfully achieve the nomination of the Archipelago as a WH Site.

Key partners

The main local partner and beneficiary of this project is the **IBAP (Instituto da Biodiversidade e das Áreas Protegidas)**, the Government institution in charge of protected area management in Guinea-Bissau. They are the responsible party for document compilation, submission and nomination. IBAP has replied positively to the inclusion of the Bijagós focal geography in the AMBI Work Plan 2019-2023 and the offer of technical support, having invited CAFF officially to work together to help provide the technical assistance needed to accomplish this process in partnership with other flyway partners.

Local and flyway partners are a key part of the success of this initiative. AMBI will work closely with the following local groups and their stakeholders, involving them in workshops and actively engaging them in the drafting and provision of technical advice and knowledge for the nomination dossier:

- **Boloma-Bijagós Biosphere Reserve:** the organization currently in charge of the management of the area as a Biosphere Reserve, they will actively contribute towards the dossier, as well as liaising and consulting with local communities and other stakeholders and interest groups
- **ODZH (Organizaçao para a Defesa e Desenvolvimento das Zonas Húmidas)**, Organization for the Defense and Development of Wetlands, a local NGO from Guinea-Bissau focused on wetland conservation, which has been an active advocate for the nomination of the site as a WH Site. They have been identified as the potential future BirdLife partner in the country.
- **BirdLife International:** The BirdLife Regional West Africa Office has provided support to AMBI in identifying the key challenges and adequate measures to proceed with this project, and will be active in supporting the process and providing technical content to the nomination dossier.

- **Wetlands International:** the organization joined the AMBI Steering Group and African-Eurasian Flyway Committee in February 2019. They are active in the field in Guinea-Bissau, where they provide technical backstopping to local partners with bird census and capacity building. Their Regional Office for West African will also be actively participating in the process, contributing expertise and content to the dossier.
- **Wadden Sea Flyway Initiative (WSFI):** WSFI has been an active supporter of AMBI. In 2017 they conducted a workshop in Guinea-Bissau that officially re-launched the site nomination process. Besides, they have been active in the country with capacity building activities for waterbird monitoring and conservation.

Arctic Council State and Observer presence in Guinea-Bissau

Russia, Spain, China, and France are the only Arctic Council State and Observer countries with diplomatic presence physically located within Guinea-Bissau. Russia is the Chair of AMBI, and this provides a good opportunity to engage Russian leadership. Spain has suggested their interest in advancing cooperation in AMBI, in particular on the Guinea-Bissau issue. Spain has previously undertaken projects related to ecological research, biodiversity research, and biodiversity conservation in Guinea-Bissau. The AMBI AFEU Coordinator is a Spanish national, and has been engaging Spanish institutions for greater cooperation in AMBI.

Other Arctic Council State and Observer diplomatic presence can be found in nearby countries (for example in Senegal), however, due to the on-site concerns of health and safety it is advised to cooperate with those closest, both from a logistical and strategic standpoint.

Indicative budget

| Item | Cost (€) | Quantity | Total (€) |
|---|----------|----------|-----------|
| Travel and health insurance | 500 | 1 | 500 |
| Return travel Wilhelmshaven-Bissau | 1400 | 3 | 4200 |
| Travel Wilhelmshaven-Bissau | 600 | 2 | 1200 |
| Travel Bissau-Dakar-Wilhelmshaven | 800 | 2 | 1600 |
| Accommodation | 140 | 100 | 14000 |
| Daily expenditures | 50 | 100 | 5000 |
| Workshop organization | 1500 | 3 | 4500 |
| Car rental in Guinea-Bissau | 100 | 25 | 2500 |
| Fuel costs | 1500 | 1 | 1500 |
| Total | | | 35000 |

This budget comprises the following items:

- 5 total missions of the AMBI AFEU Coordinator to Bissau, of which 2 include a detour through Senegal aiming at facilitating coordination and liaison with regional partners

based in Dakar (Wetlands International, Mava Foundation, Wetlands International, and UNESCO). It considers the missions to be long-lasting, accounting for a total of 100 days in the country during the project. This is needed in order to ensure enough time to work together with national partners in the dossier.

- In order to support the efforts of the Government and to complement the funding already made available by Mava Foundation, funds for the organization of 3 workshops in Bissau.
- Due to the difficulties of travel within the country, considerations are taken for the rental of adequate vehicle (4x4) and its fuel costs for field missions and/or visits to participate in workshops or meeting with local stakeholders.

Action 2: Ensure identification and documentation of key sites for shorebirds in available format as a tool for national/international sustainable site management.

Introduction

Although adequate platforms and formats exist within the flyway for accomplishing this objective, these are often lacking information or outdated due to either unavailability of reliable data, or lack of capacity and/or means of Range States to collect and contribute their data to them. AMBI can help to address this issue by facilitating technical support as well as through the mobilization of resources to support the collection and submission of information to these platforms.

One of these platforms is the Critical Site Network Tool 2.0²⁴ (hereinafter referred to as “CSN Tool”). The original version of the CSN Tool was developed under the “Wings over Wetlands” project by BirdLife International, Wetlands International, and UNEP-WCMC, with the objective to support the implementation of the African-Eurasian Migratory Waterbird Agreement (AEWA) and the Ramsar Convention on Wetlands. At a later stage, this online platform was updated to the current 2.0 version under the “Climate Resilient Site Network in the African-Eurasian Flyway” project, with support of the Germany’s IKI (International Climate Initiative) financing instrument.

The CSN Tool makes it easy to obtain information on the sites critical for waterbird species by accessing several independent databases and analyzing information at the biogeographical population level, so providing a comprehensive basis for management and decision making. It is designed to help a range of different users from site managers to national authorities and international organizations. The CSN Tool is also an important example of the added value of cooperation between likeminded conservation organizations, international conventions and agreements, governments, UN agencies and other donors.

The CSN Tool was conceived as a living instrument. As such, the platform and the databases upon which it is built require of adequate baseline information paired with frequent updates in order to appropriately deliver its function. However, the CSN Tool currently suffers of

²⁴ <http://criticalsites.wetlands.org>

information and knowledge gaps as well as, often, outdated information. For some sites, the latest surveys undertaken date from as late as the early 1990ies, whereas there is an absolute lack of information about the critical sites in certain countries. This action aims at addressing these shortcomings.

Under this action, the AFEU Coordinator will approach partners in the flyway such as Wetlands International to assess where such gaps exist and then facilitate the in-country assessment of sites, for example by engaging the embassies of Arctic Council members and permanent observer countries in these Range States. This action would contribute to Target 3.1 of the AEWA Strategic Plan to document nationally and internationally important sites for populations listed on Table 1 in Annex 3 to AEWA by MOP8 (2021) and to conduct gap-filling surveys by MOP10 (2027).

Project overview

A first scoping exercise was undertaken together with Szabolcs Nagy and Tom Langedoen (from Wetlands International) and Nina Mikander (from AEWA), in order to identify information and knowledge gaps in the CSN Tool that concern AMBI priority species. The data holdings of the CSN Tool were hence queried and analyzed in order to identify the critical sites (according to the Ramsar 1% criterium: the site hosts 1% or more of the known population of a given species) for the 4 AMBI wader species in the flyway (Red Knot, Dunlin, Curlew Sandpiper, and Bar-tailed Godwit), according to two different analytics:

- Information availability on critical sites in the different countries, and
- For countries with critical sites identified, date of the last IWC count from the site.

Concerning availability of recent census information in the CSN Tool, the query identified a total 12 sites located in Northern Europe: continental Denmark (1 site), Iceland (4 sites), Norway (2 sites), and the Russian Federation (5 sites). Table 2 summarizes the critical sites (relevant for AMBI priority species) for which no recent census is available.

Table 2. Critical sites for AMBI priorities lacking of updated census information.

| Site | Country | AMBI Species recorded | Last information available on CSN Tool |
|-------------------------------|--------------------|--|--|
| Northwestern Kattegat | Denmark | <i>Calidris alpina</i> | 1994 |
| Skardsfjörður | Iceland | <i>Calidris alpina</i> | N/A |
| Álftanes-Akrar | Iceland | <i>Calidris canutus</i> | 1990 |
| Álftafjörður-Hofsstadavogur | Iceland | <i>Calidris canutus</i> | 1990 |
| Melrakkaslétta | Iceland | <i>Calidris canutus</i> | 1990 |
| Sørkjosen | Norway | <i>Calidris canutus</i> | 1998 |
| Inner part of Porsanger fjord | Norway | <i>Calidris canutus</i> | 1989 |
| Torna - Shoina watershed | Russian Federation | <i>Calidris alpina</i> , <i>Calidris ferruginea</i> | 1995 |

| | | | |
|--|--------------------|------------------------|------|
| Dvuob'ye | Russian Federation | <i>Calidris alpina</i> | 2001 |
| Lover Ob' | Russian Federation | <i>Calidris alpina</i> | 1995 |
| Kolguev island | Russian Federation | <i>Calidris alpina</i> | 1995 |
| Pestchanka River delta, Kolguev Island | Russian Federation | <i>Calidris alpina</i> | 2006 |

Concerning gaps in knowledge about critical sites relevant for AMBI priority species, the main gaps were identified along the West Asia-East Africa Flyway: Mozambique, Eritrea, Somalia, and Yemen. There is not a consistent, reliable inventory of critical sites available for these four countries. Due to their complex political and security landscapes, it was decided that Yemen and Somalia should be left out of this project, prioritizing Eritrea and Mozambique.

Expected outcomes

- Data gaps in the CSN Tool are adequately addressed and filled:
 - o Sites without recent IWC count undertake censuses, and the information of this censuses is uploaded into the CSN Tool by 2021;
 - o The critical sites in Mozambique and Eritrea are successfully identified and mapped, and this information uploaded into the CSN Tool by 2021; and
 - o The first censuses in Mozambique and Eritrea take place by 2023.
- Systems are put into place to guarantee regular update of information in the CSN Tool for the identified sites and countries:
 - o For countries in the northern part of the flyway, the sites identified are incorporated into their regular bird monitoring activities and reporting schemes; and
 - o For Mozambique and Eritrea, national partners are identified and engaged, and their capacity is built and developed for them to independently undertake yearly waterbird censuses.

Activities to be undertaken

The activities to be undertaken will differ according to the two different gaps identified: lack of updated census information, or lack of knowledge about critical sites in a given country.

Lack of updated census information:

For the lack of census information identified in the northern edge of the flyway, the steps to take will include:

- Identify national actors in Iceland, Norway, Denmark, and Russia responsible for bird census. A first scoping exercise has identified the following entry points:

- National focal points for the PECBM:
 - Norway: BirdLife Norway and Norwegian Institute for Nature Research
 - Iceland: Icelandic Museum of Natural History
 - Denmark: DOF/BirdLife Denmark (Danish Ornithological Society)
 - Russia: Zoological Museum of Moscow State University, Program “Birds of Moscow and the Moscow Region”
- National focal points for the IWC:
 - Norway: Svein-Hakon Lorentsen (Norwegian Institute of Nature Research)
 - Iceland: Icelandic Institute of Natural History
 - Denmark: Preben Clause (Aarhus University)
 - Russia: Alexander Solokha (State Information-Analytical Center of Game Animals and Habitats)
- Discussion with the identified actors of the needs required to include the identified sites in their national census schemes; and
- Establishment of a roadmap for the realization of censuses and counts in the identified critical sites.

For countries lacking knowledge about critical sites:

The two countries that were identified for addressing this shortcoming of information were Mozambique and Somalia. The steps to take will be:

- Resource mobilization in order to undertake field missions (a country-wide scoping study) to identify the key sites for waterbirds in these countries;
- Engagement with relevant local authorities and actors in the country; and
- Capacity building of key stakeholders in the country, through their participation in the country-wide scoping studies and census, in order to guarantee the future sustainability of these efforts as well as the regular updates of information into the CSN Tool.

Risk analysis

- Funds will be required to undertake the necessary field surveys (data filling of critical sites and first census) in Mozambique and Eritrea, as well as to undertake the necessary capacity building activities required to ensure the sustainability of these efforts and that the information will continue to be updated in the future.
- In order to advance government support for activities in the field in Mozambique and Eritrea, it is advised to engage Arctic Council members’ and observers’ embassies to contribute to diplomatic action for the success of the project and sustained efforts by recipient Governments (Mozambique and Eritrea).

- Engage with the Governments of Russia, Denmark, Iceland, and Norway, as well as with BirdLife partners and the authorities responsible for bird monitoring and conservation in these countries, in order to address the information gaps identified for critical sites in their territories.

Key partners

The key partner for this project is **Wetlands International**, the organization that developed and maintains the CSN Tool. However, for the success of this project, the following partners will also play a key role:

- AEWA
- BirdLife International
- The Governments of Mozambique and Eritrea, and their Ministries of the Environment
- BirdLife Norway
- Norwegian Institute for Nature Research
- Icelandic Museum of Natural History
- DOF/BirdLife Denmark (Danish Ornithological Society)
- Zoological Museum of Moscow State University, Program “Birds of Moscow and the Moscow Region”
- Aarhus University
- State Information-Analytical Center of Game Animals and Habitats of Russia

Indicative budget

The budget for this activity is being determined in consultation with Wetlands International and AEWA. Preliminary conversations have resulted in the following rough estimate:

- Cost of a first gap-filling survey in Mozambique to address knowledge about critical sites in the country: €20,000.
- Cost of a first gap-filling survey in Eritrea to address knowledge about critical sites in the country: €40,000.

AMBI African-Eurasian Flyway Implementation Strategy, Objective 2: Increase quality and quantity of population status assessment data of Arctic breeding waterbirds in the African-Eurasian Flyway.

Action 1: Support the implementation of the Circumpolar Biodiversity Monitoring Programme (CBMP) and the revised AEWA Guidelines on Waterbird Monitoring with respect to those Arctic-breeding waterbirds for which optimal data are still lacking, through cooperation with the African-Eurasian Waterbird Monitoring Partnership and the Wadden Sea Flyway Initiative by providing financial and/or technical support.

Action 2: Support improved population delineation of Arctic-breeding waders by collating Arctic breeding wader migration data (tracking, color-marking, geolocator, ringing data, etc.) and presenting it on the CSN tool to improve flyway delineation data.

Alike to Objective 1, this objective is composed of two differentiated actions. However, unlike the case of Objective 1 (for which both actions received separate attention during the strategic planning process, and having each a separate Implementation Strategy), in Objective 2 both actions appear grouped on a single Implementation Strategy. This is due to the fact that, during the preparatory process of this implementation strategy, it was identified that numerous synergies and linkages could be established between both actions, and it was therefore chosen to draft one common implementation strategy for both.

Introduction

The most common tool used for assessing the population sizes, health, and trends of waterbirds are the winter counts: birds that scatter over large distances in their breeding grounds tend to group and concentrate at a few wintering and staging sites, allowing for accurate counting. However, the wintering ranges of some Arctic bird species populations overlap, reducing the reliability of population estimates based on winter counts. A good example is Dunlin (*Calidris alpina*), for which the wintering ranges of some of its populations are not precisely known and are thought to overlap, hence difficulting the work of estimating the trends of the separate populations.

As a consequence, sampling-based surveys in the breeding grounds have potential to provide more statistically robust estimates than the wintering counts for some species. However, due to the large distances over which these bird species scatter during the breeding season, and the difficult access of many of these Arctic habitats, our knowledge about Arctic-breeding

populations is either scarce, outdated, or non-existing. In the case of Greenland, many of the population estimates are still based on the work that Meltofte published in 2001²⁵.

It is therefore necessary to support the production of statistically robust breeding population estimates for Arctic waders in Eastern Canada, Greenland, Iceland, Fennoscandia, and Russia. Ideally all Arctic countries would set up a sampling protocol, drawing experience from successful frameworks such the North American PRISM Programme²⁶, which incorporates an Arctic component. AMBI is strategically placed to support this, since it is the only forum that brings all these countries together. Besides, breeding monitoring can provide valuable insight on other threats and cumulative impacts specific to breeding areas, including harvest, pollution, climate change, or habitat degradation.

Moreover, flyway delineations of many biogeographic populations of Arctic migratory birds are still insufficiently known. Since population estimates are mainly based on counts in the wintering grounds, these are likely to be inaccurate where there is insufficient data to support flyway delineations. For example, the Sanderling (*Calidris alba*) in Namibia are traditionally assigned to the South-west Asia, Eastern & Southern Africa wintering population. However, color-marking and geolocator data has recently indicated that a significant proportion of those birds may actually belong to the East Atlantic Europe, West & Southern Africa wintering population²⁷. However, in the absence of similar studies being carried out also in Russia, the degree of overlap between the two populations cannot be estimated. CAFF/AMBI can play a major role in pulling together the available data that can be presented on the CSN Tool²⁸ (based on the experience of the SEATRACK project²⁹).

Project overview

The project will address the challenge of monitoring and population delineation data availability in the northern extreme of the Flyway. A prioritization exercise identified the Russian High Arctic as the first priority to be tackled, due to the multiple populations of AMBI priority species breeding there and belonging to two different flyways: African Eurasian and East Asian-Australasian.

²⁵ Meltofte, H. 2001. Wader Population censuses in the Arctic: getting the timing right. *Arctic* 54: 367-376.

²⁶ <https://www.shorebirdplan.org/science/program-for-regional-and-international-shorebird-monitoring/>

²⁷ Reneerkens, J., Benhoussa, A., Boland, H., Collier, M., Grond, K., Günther, K., Hallgrímsson, G.T., Hansen, J., Meissner, W., de Meulenaer, B., Ntiamoa-Baidu, Y., Piersma, T., Poot, M., van Roomen, M., Summers, R.W., Tomkovich, P.S. & Underhill, L.G. 2009. Sanderlings using African–Eurasian flyways: a review of current knowledge. *Wader Study Group Bulletin* 116(1): 2–20.

²⁸ <http://criticalsites.wetlands.org>

²⁹ <http://www.seapop.no/en/seatrack/>

Expected outcomes

By the end of the workplan timeframe, in 2023, the project will be successful if:

- Knowledge of breeding success of Arctic-breeding waterbirds in the Arctic is enhanced;
- Robust estimates of breeding success, as well as trends, are produced for Arctic-breeding waterbirds;
- Threats and stressors to migratory birds in the Arctic are adequately identified and quantified;
- Conservation measures and priorities are identified; and
- Knowledge about populations, including distribution, flyways, and population size estimates is improved.

Activities to be undertaken

Background and preparatory work

The WSFI organized a first workshop on bird monitoring, research, conservation, and cooperation in the Russian High Arctic, which took place in Bonn in November 2018. This meeting brought together migratory bird specialists and representatives from Russia, the Netherlands, Germany, Denmark, and CAFF to help shape a future workshop to take place in Russia, identifying key partners to be invited to participate, as well as undertaking a first scoping of priority actions to implement. It laid the foundation to Objective 2 of this workplan, and identified the main issues to discuss at a future second workshop.

Next steps

Discussions are ongoing to organize a workshop in Russia in 2020 focused on Arctic breeding migratory bird monitoring in the Russian Arctic and international cooperation along the flyway. The workshop would be organised by CAFF-AMBI and WSFI in cooperation with the Russian Ministry of Natural Resources and Environment and the Yamal-Nenets District Administration with a possible location of Salekhard (Yamal-Nenets, Russia), and it is expected to count with the financial support of BMU. The workshop will feature on the agenda for the September 2019 CAFF Board meeting for further guidance and planning.

The preliminary objectives of this workshop will be:

- Connect Arctic and non-Arctic actors to better collect and assess data on Arctic-breeding birds in the Russian Arctic in order to inform flyway-level conservation initiatives and develop cooperation schemes along the flyway with the key role and support of the Russian Ministry of Natural Resources and Environment.
- Bring together and support a network of key Western Russian Arctic representatives from nature reserves, conservation agencies, and research and conservation institutions, and key flyway monitoring experts to establish migratory bird monitoring cooperation and coordination within Russia and along the flyway.
- Contribute to a needs assessment to assess priority issues and actions to enhance monitoring and conservation of Arctic-breeding migratory birds in Russia:

- Research and monitoring, capacity building, management;
- Site prioritization for conservation planning and activities; and
- Species prioritization for activities.
- Help identify cost-effective methodologies for monitoring Arctic-breeding migratory birds, and the parameters to be assessed.
- Explore which Russian government and non-government bodies could partner in monitoring and conservation planning matters with key conservation players at the flyway scale.
- Analyse how to align existing monitoring efforts and frameworks. For example, consider how the TWSC TMAP, CBMP's Arctic Terrestrial Biodiversity Monitoring and others could link and cooperate with Russian monitoring entities.
- Consider how to map and identify Russian bird ringing, tracking, and geolocator data, and analyse how to feed it into existing platforms and data-sharing initiatives, i.e., the CSN Tool and the Eurasian African Bird Migration Atlas.
- Consider the development of an implementation plan identifying actions and partners to further advance this work.

The following organizations will be invited to participate:

- CAFF / AMBI / CBMP
- TWSC / CWSS / WSFI
- Russian Ministry of Natural Resources and the Environment (focal departments)
- Institutes of the Russian Academy of Sciences (including Bird Ringing Centre of Russia)
- Russian Nature Reserves, including the Heads of Nature Reserves and key experts in bird monitoring of Gydanskiy, Zapoverdnyk of Taimyr, Nenetskiy Zapovednik, Russian Arctic National Park
- High level representatives of Regional Conservation Departments of Western Russian Arctic
- Moscow State University
- BirdsRussia (Russian Society for Bird Conservation and Study), Russian Network of Wetland Centres, Birds and People Partnership, and other Russian NGOs
- BMU
- Dutch Ministry of Agriculture, Nature, and Food Quality
- Danish Environmental Protection Agency
- CMS
- AEWA
- IWSG
- PECBMS
- IWC
- BirdLife International
- VBN
- ICARUS Initiative
- WetlandLink International
- Wetlands International
- EURING
- Dutch Ringing Centre

The workshop will identify the next steps to be taken towards the implementation of this activity, setting the basis for future cooperation between actors and identifying the financial needs to successfully accomplish the expected outcomes.

Risk analysis

Two main challenges have been identified for the success of this activity:

- Financial resources, which are needed for the celebration of the 2020 Workshop as well as for the subsequent activities and projects. After financing the 2019 Bonn workshop, BMU has already expressed his interest in contributing to the next iteration of the process, contributing financially to the 2020 Russia workshop.
- Engagement of the Russian authorities will be essential for the success of this initiative. Preliminary conversations have already taken place, and have been received with keen interest by the Russian authorities (Ministry of External Affairs; Ministry of Natural Resources and the Environment; and Government of Yamal-Nenets). However, the next steps will need to formalize this support and engagement.

Key partners

- CBMP
- TWSC / CWSS / WSFI
- Wadden Sea Flyway Initiative
- Russian Ministry of Natural Resources and the Environment
- Institutes of the Russian Academy of Sciences (including Bird Ringing Centre of Russia)
- BirdsRussia (Russian Society for Bird Conservation and Study)
- Russian Nature Reserves of the High Arctic
- Regional Conservation Departments of Western Russian Arctic
- Moscow State University
- BirdsRussia (Russian Society for Bird Conservation and Study), Russian Network of Wetland Centres, Birds and People Partnership, and other Russian NGOs
- BMU
- Dutch Ministry of Agriculture, Nature, and Food Quality
- Danish Environmental Protection Agency
- CMS
- AEWA
- IWSG
- PECBMS
- IWC
- BirdLife International
- VBN
- ICARUS Initiative
- WetlandLink International
- Wetlands International
- EURING

- Dutch Ringing Centre

Indicative budget

To be determined at a later stage. The future budget will include:

- The costs of the workshop happening in Russia in 2020 (the budget for this workshop is currently estimated at €50,000); and
- The costs of the activities to be undertaken as a follow-up on the recommendations of this workshop.

Objective 3: Development and dissemination of information and awareness materials addressing priority target

Action 1: Support the development of communication products (in collaboration with flyway partners) showcasing migratory connectivity, knowledge gaps, and threats in the African-Eurasian flyway area.

Introduction

CAFF has experience in producing high-quality communication materials, which could transport key messages to a wider audience and could be used by various partners to showcase migratory connectivity, knowledge gaps, and threats facing Arctic-breeding migratory birds across their range. Sharing that experience and know-how with the flyway would bring much added value to ongoing conservation efforts.

Expected outcomes

- Communication materials (infographics, videos, articles, leaflets...) are produced and made publicly available through the relevant means and platforms.

Activities to be undertaken

Activities under Objective 3 of this workplan will aim at the production of prioritized, targeted communications materials as per identified through a communications analysis. The production of this materials shall be undertaken in partnership with CAFF and AMBI partners.

In order to advance the execution of this Objective, a communications analysis was performed. The analysis identifies key priority issues and elements under the AMBI-AFEU workplan 2019-2023 that may be subject to specific communication actions. It begins to scope out issues to be communicated, priority audiences, potential partners, and possible channels and communication tools that could be used. This analysis is shown in the Table 3.

Table 3. Communications analysis for the AMBI-AFEU Workplan 2019-2023.

| Objective/Action | The issue: what do we want to communicate | Target audience: who do we want to communicate the issue to | Potential partners | Possible channels and communications tools |
|---|---|---|---|--|
| O1: Improve conservation and management of wader sites throughout the African-Eurasian flyway | Current threats to migratory birds and their habitats in the flyway (habitat loss, ecosystem degradation, illegal take, | - Citizens of Arctic and flyway countries - Decision makers of Arctic and flyway countries | - WSFI (Gerold Luerßen) - Wetlands International (Taej Mundukur) | - Executive reports / leaflets / summaries - Infographics - Social media |

| | | | | |
|--|--|--|---|---|
| | accidental take, microplastics...) | (Government, EU, AEWA MoP, CMS CoP) | - BirdLife (Barend van Gemeerden) - RSPB (Nicola Crockford) - VBN (Jaime García Moreno) - AEWA (Nina Mikander) - JNCC (Danny Heptinstall) - BMU (Thomas Borchers) - The Netherlands (Wilmar Remmelts) | - Executive reports / leaflets / summaries - Infographics |
| | Need for measures to preserve wader habitat in the flyway | - Decision makers of Arctic and flyway countries (Government, EU, AC, AEWA MoP, CMS CoP) | | |
| <p>A1.1: Secure intertidal habitat of Arctic-breeding waders in Bijagós Archipelago, Guinea-Bissau</p> <p>c) Advance and potentially coordinate international engagement to support the Bijagós World Heritage nomination process, as appropriate.</p> <p>d) Provide technical support to and enhance the capacity of IBAP and other national partners for strengthening the conservation management of the Bijagós Archipelago, including through its nomination and designation as a UNESCO World Heritage site.</p> | International relevance of the site for nature conservation in general (and Arctic waders in particular) and the threats facing the site | - Guinea-Bissau politicians and decision-makers - Parties to the UNESCO WH Convention conference - Guinea-Bissau stakeholders not directly involved in nature conservation | - WSFI (Gerold Lüerßen) - Wetlands International (Taej Mundukur) - UNESCO Dakar Regional Office (Guiomar Alonso Cano) - VBN (Jaime García Moreno) - IBAP (Justino Biai) | - Executive reports / leaflets / summaries - Posters - Infographics - Press releases |
| | Important traditional practices and customs that contribute to conservation of the site | | | |
| | The process to nominate the site as a WH site | - Wider audience interested in nature conservation - Guinea-Bissau stakeholders not directly involved in nature conservation | - WSFI (Gerold Lüerßen) - Wetlands International (Taej Mundukur) - UNESCO Dakar Regional Office (Guiomar Alonso Cano) | - Documentary / video - Social media |

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| | | | <ul style="list-style-type: none"> - VBN (Jaime García Moreno) - IBAP (Justino Biai) | |
| A1.2: Ensure identification and documentation of key sites for shorebirds in available format as a tool for national/international sustainable site management. | Importance of adequately document important shorebird habitat | - Decision makers of Arctic and flyway countries (Government, EU, AEWA MoP, CMS CoP) | <ul style="list-style-type: none"> - Wetlands International (Taej Mundukur) - BirdLife (Barend van Gemeerden) - RSPB (Nicola Crockford) - VBN (Jaime García Moreno) - AEWA (Nina Mikander) - JNCC (Danny Heptinstall) - The Netherlands (Wilmar Remmelts) | <ul style="list-style-type: none"> - Executive reports / leaflets / summaries - Infographics - Videos |
| | Information gaps about important shorebird habitat along the flyway | | | |
| | Guidelines on assessment and inventory of key sites | - Technical experts (protected area managers and workers, scientists) | <ul style="list-style-type: none"> - Technical document on guidelines and best practices | |
| O2: Increase quality and quantity of population status assessment data of Arctic breeding waterbirds in the African-Eurasian Flyway | Flyway delineation | - Decision makers of Arctic and flyway countries (Government, EU, Arctic Council, AEWA MoP, CMS CoP) | <ul style="list-style-type: none"> - CBMP - WSFI (Gerold Luerßen) - Wetlands International (Taej Mundukur) - BirdLife (Barend van Gemeerden) - RSPB (Nicola Crockford) - VBN (Jaime García Moreno) - AEWA (Nina Mikander) - CMS - JNCC (Danny Heptinstall) - BMU (Thomas Borchers) | <ul style="list-style-type: none"> - Executive reports / leaflets / summaries - Infographics - Videos |
| | Migratory birds' stories "the trip of the red knot" | - Wider audience interested in nature conservation in Arctic and flyway states - Arctic local communities | <ul style="list-style-type: none"> - Social media - Videos | |
| | Information about where do these birds exactly go when they go North | - Wider audience interested in nature conservation in flyway states | <ul style="list-style-type: none"> - Social media - Videos | |

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| | | | - The Netherlands (Wilmar Rimmelts) | |
| A2.1: Support the implementation of the Circumpolar Biodiversity Monitoring Programme (CBMP) and the revised AEWA Guidelines on Waterbird Monitoring with respect to those Arctic-breeding waterbirds for which optimal data are still lacking, through cooperation with the African-Eurasian Waterbird Monitoring Partnership and the Wadden Sea Flyway Initiative by providing financial and/or technical support. | Information and knowledge gaps | - Decision makers in Russia (Government, EU, AEWA MoP) Arctic Council decision-makers - Technical experts (protected area managers and workers, scientists) in Russia | - CBMP - WSFI (Gerold Lüerßen) - Wetlands International (Taej Mundukur) - BirdLife (Barend van Gemeerden) - RSPB (Nicola Crockford)- VBN (Jaime García Moreno) - AEWA (Nina Mikander) - CMS - JNCC (Danny Heptinstall) - BMU (Thomas Borchers) - The Netherlands (Wilmar Rimmelts) | - Executive reports / leaflets / summaries - Infographics - Videos |
| A2.2: Support improved population delineation of Arctic-breeding waders by collating Arctic breeding wader migration data (tracking, color-marking, geolocator, ringing data, etc.) and presenting it on the CSN tool to improve flyway delineation data. | Flyway and population delineation | - Decision makers of Arctic and flyway countries (Government, EU, Arctic Council, AEWA MoP, CMS CoP) - Technical experts (protected area managers and workers, scientists) in Russia | - CBMP - WSFI (Gerold Lüerßen) - Wetlands International (Taej Mundukur) - BirdLife (Barend van Gemeerden) - RSPB (Nicola Crockford) - VBN (Jaime García Moreno) | - Executive reports / leaflets / summaries - Infographics - Videos |
| | Status of Arctic-breeding migratory birds | - Decision makers of Arctic and | - AEWA (Nina Mikander) - CMS | - Technical inventory on the status of non- |

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| | | flyway countries (Government, EU, Arctic Council, AEWA MoP, CMS CoP) - Technical experts (protected area managers and workers, scientists) | - JNCC (Danny Heptinstall) - BMU (Thomas Borchers) - The Netherlands (Wilmar Remmelts) | goose Arctic-breeding migratory birds |
| | Representation of migratory connectivity | - Decision makers of Arctic and flyway countries (Government, EU, Arctic Council, AEWA MoP, CMS CoP) - Technical experts (protected area managers and workers, scientists) | | - Executive reports / leaflets / summaries - Infographics - Videos |
| O3: Development and dissemination of information and awareness materials addressing priority target, including A3.1: Support the development of communication products (in collaboration with flyway partners) showcasing migratory connectivity, knowledge gaps, and threats in the African-Eurasian flyway area. | N/A | N/A | N/A | N/A |
| O4: Reduce bycatch of seabirds in the Baltic Sea, including A4.1: Support the implementation of the AEWA Long-tailed Duck and Velvet Scoter International Single Species Action Plans with respect to the identified activities regarding bycatch | Threats facing seabirds in the Baltic Sea and the wider Arctic | - Baltic Sea stakeholders: fishermen, hunters, tourists, decision makers | - CBird - HELCOM - BirdLife (Barend van Gemeerden) - RSPB (Nicola Crockford) | - Executive reports / leaflets / summaries - Infographics - Videos - Social media |
| | Best practices and mitigation measures to | - Baltic Sea fishermen and hunters | - AEWA (Nina Mikander) | - Technical reports, posters, leaflets, and |

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| under the auspices of the AEWA European Seaduck International Working Group. | prevent accidental killing | | - CMS - European Seaducks IWG | infographics showcasing best practices |
| O5: Support measures under the AEWA Lesser White-fronted Goose (LWfG) International Working Group (IWG) to prevent illegal killing | LWfG migration routes, habitats, stop-over sites, knowledge gaps, and threats | - Hunters in range states - Decision makers in range states | - AEWA (Nina Mikander) - Arctic Council Permanent Participants - Russia, Sweden, Finland, Norway - LWfG IWG | - Executive reports / leaflets / summaries - Infographics - Videos - Social media |
| A5.1: Assist the AEWA LWfG IWG with the translation and dissemination of awareness-raising and education materials in key areas for the species within the Russian Arctic amongst indigenous and local communities | N/A | N/A | N/A | N/A |
| A5.2: Support the UNEP/AEWA Secretariat in engaging key Range States on a diplomatic level through Arctic Council member and observer country embassies | Threats facing LWfG in key Range States, and how to address them (priority conservation actions, mitigation measures) | - Hunters in range states - Decision makers | - AEWA (Nina Mikander) - Arctic Council Permanent Participants - Russia, Sweden, Finland, Norway - LWfG IWG | - Executive reports / leaflets / summaries - Infographics - Videos - Social media |

The next step will involve the consultation with the identified partners in order to choose the most relevant contents to be produced, and the establishment of an action plan for their implementation.

Risk analysis

The most limiting constrain for the successful implementation of this objective will be the **availability of funds** that allow for the creation of high-quality communications materials. Secondly, the objective aims at the production of these materials in close cooperation with our partner organizations. Hence, **partner engagement** paired with close communication with them will play a key role in the successful implementation of this Objective.

Key partners

The following organizations have already cooperated with CAFF in the elaboration of communications materials in the past:

- Arctic Council Secretariat
- Cornell Lab of Ornithology

A second set of partners have expressed their intention of cooperating on the production of communication materials under the AMBI framework:

- AEWA
- VBN
- Government of the Netherlands

Besides, the following partners are relevant to the other objectives under the AMBI Workplan 2019-2023, and can therefore be potentially be involved in the creation of communication materials related to the different objectives on the workplan.

- BirdLife International
- Wetlands International
- WSFI
- RSPB
- IBAP
- JNCC
- CBMP
- CMS
- CBird
- HELCOM
- LWfG IWG
- European Seaduck IWG

Indicative budget

The budget will have to be assessed according each communication material chosen.

Objective 4: Reduce bycatch of seabirds in the Baltic Sea

Action 1: Support the implementation of the AEWA Long-tailed Duck³⁰ and Velvet Scoter³¹ International Single Species Action Plans with respect to the identified activities regarding bycatch under the auspices of the AEWA European Seaduck International Working Group.

Introduction

Gillnet fisheries globally are estimated to kill 400,000 birds every year, with a substantial proportion of this mortality taking place in high latitudes, particularly in the Northern Hemisphere (estimated annual bycatch mortalities from Iceland, the Baltic Sea, and the Northwest Pacific are 100,000, 76,000 and 140,000 respectively)³². Longline and trawl fisheries are responsible of 300,000 seabird deaths globally each year. While there is a suite of best practice mitigation measures to reduce this toll in longline and trawl fisheries³³, the same does not exist for gillnets fisheries and, to date, there has been little research in this regard.

In addition, the lack of directly observed bycatch data from fisheries is a barrier to achieving progress in bycatch reduction. Broadly speaking, observer effort in fisheries worldwide is far below the minimum levels (20% of the fleet) that would give satisfactory estimates of seabird bycatch, and data collection protocols are frequently not well-designed for the purpose of estimating fishery-wide bird mortality. Further, observer coverage in gillnet fisheries is often even lower than in other fleets because they tend to be (though are not always) smaller-scale operations with lower quota shares, making them a lower priority for national monitoring programmes. Under the EU Common Fisheries Policy³⁴ there is no requirement for catch monitoring of vessels smaller than 8 meters, which are the majority in the Baltic Sea.

The Baltic Sea has been identified as a global ‘hotspot’ for bird bycatch in gillnet fisheries, affecting mostly benthivorous and piscivorous seabirds, loons, grebes, and auks, which are susceptible because their foraging frequently occurs in shallower water areas favored for gillnet fishing³⁵. This high incidence of bird bycatch in gillnets in the Baltic Sea is due to two

³⁰ AEWA. 2015. *International Single Species Action Plan for the Conservation of Long-tailed Duck (Clangula hyemalis)*. AEWA Technical Series No. 57, Bonn, Germany.

³¹ AEWA. 2018. *Final draft: International Single Species Action Plan for the Conservation of the Velvet Scoter (Melanitta fusca) Western Siberia & Northern Europe/NW Europe population*. AEWA Technical Series No. XX, Bonn, Germany.

³² Żydelski, R., Small, C., and French, G. 2013. The incidental catch of seabirds in gillnet fisheries: a global review. *Biological Conservation* 162:76-88.

³³ <https://www.acap.aq/en/resources/bycatch-mitigation/mitigation-advice>

³⁴ [Regulation \(EU\) No 1380/2013](#) of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC.

³⁵ Żydelski, R., Bellebaum, J., Österblom, H., Vetemaa, M., Schirmeister, B., Stipniec, A., Dagys, M., van Eerden, M. & Garthe, S. 2009. Bycatch in gillnet fisheries – An overlooked threat to waterbird populations. *Biological Conservation*, 142: 1269-1281.

factors: the global importance of the Baltic for wintering seabirds and the very large number of gillnets being used by many commercial and artisanal fishermen³⁶.

Populations of Long-tailed Duck (*Clangula hyemalis*), Velvet Scoter (*Melanitta fusca*) and other seabird species have undergone precipitous declines in the Baltic region in recent years: between censuses in 1992-93 and 2007-09, declines of over 50% were recorded for Long-tailed Ducks, Velvet Scoters, Common Eider (*Somateria mollissima*), and Steller's Eider (*Polysticta stelleri*)³⁷. In the HELCOM red list³⁸ of species, Long-tailed Duck features as endangered (EN), Velvet Scoter as vulnerable (VU), Common Eider as vulnerable (VU), and Steller's Eider as endangered (EN), but this classification (dating from 2013) is likely to be outdated on the light of the recent literature.

Given the potentially significant effect of gillnet bycatch on seabird populations in the region, effective measures to reduce bycatch in gillnets are urgently needed. However, only few technical bycatch mitigation measures have been tested for gillnets³⁹. In the case of the Baltic Sea, a recent study found that mitigation measures based on contrast panels and lights did not reduce bird bycatch in Baltic Sea gillnet fisheries⁴⁰.

Project overview

The two AEWAs already identify the agreed priority actions in relation to bycatch in the Baltic Sea for the Long-tailed Duck and the Velvet Scoter. These actions were agreed by all Range States during the action-planning processes, taking into consideration the various national and international actors already engaged in activities for seabirds in the area (EU, HELCOM, etc.). All Range States to these species are members of the inter-governmental AEWAs European Seaduck IWG – regardless of whether they are Parties to AEWAs or not (including Russia). The European Seaduck IWG is coordinated by Richard Hearn, from Wildfowl & Wetlands Trust.

³⁶ Field, R., Crawford, R., Enever, R., Linkowski, T., Martin, G., Morkūnas, J., Morkūnė, R., Rouxel, Y., Opiel, S., (Accepted for publication). High contrast panels and lights do not reduce bird bycatch in Baltic Sea gillnet fisheries, *Global Ecology and Conservation* (2019), doi:

<https://doi.org/10.1016/j.gecco.2019.e00602>.

³⁷ Skov, H., Heinänen, S., Žydelis, R., Bellebaum, J., Bzoma, S., Dagys, M., Durinck, J., Garthe, S., Grishanov, G., Hario, M., Jacob Kieckbusch, J., Kube, J., Kuresoo, A., Larsson, K., Luigujoe, L., Meissner, W., Nehls, H., Nilsson, L., Krag Petersen, I., Mikkola Roos, M., Pihl, S., Sonntag, N., Stock, A. & Stipniece, A. 2011. *Waterbird populations and pressures in the Baltic Sea*. Nordic Council of Ministers.

³⁸ HELCOM 2013 *Red List of Baltic Sea species in danger of becoming extinct*. Available online at:

<http://www.helcom.fi/baltic-sea-trends/biodiversity/red-list-of-species/>

³⁹ Løkkeborg, S. 2011. *Best practices to mitigate seabird bycatch in longline, trawl and gillnet fisheries—efficiency and practical applicability*. *Marine Ecology Progress Series*, 435: 285-303.

⁴⁰ Field, R., Crawford, R., Enever, R., Linkowski, T., Martin, G., Morkūnas, J., Morkūnė, R., Rouxel, Y., Opiel, S., (Accepted for publication) High contrast panels and lights do not reduce bird bycatch in Baltic Sea gillnet fisheries, *Global Ecology and Conservation* (2019), doi:

<https://doi.org/10.1016/j.gecco.2019.e00602>.

Under this framework, CAFF and AMBI are ideally placed to provide the Working Group and relevant Baltic Range States with support in implementing their activities related to bycatch (complementing AMBI's success in the Circumpolar Flyway). AMBI will thus bring added value by further speeding up delivery of this priority result, for example in relation to Poland which is not an AEWA Party but is an observer to the Arctic Council, which opens an additional channel for advancing the involvement of Poland in this IWG and in the implementation of the activities and priorities that derive from it.

Expected outcomes

The expected outcomes could not be identified at the stage of drafting this section, due to the fact that the European Seaduck IWG has not met for their first time yet. The final list of participants in the IWG is yet to be finalized, but their first meeting will happen in Vilm Island (Germany) on the 1-4 April 2020, being hosted by BMU. The meeting will include a session on bycatch. AMBI will participate in this meeting in order to assess how it can best contribute to achieve the objective of addressing seaduck bycatch in the Baltic Sea.

Activities to be undertaken

The activities to be undertaken will be identified in consultation with the European Seaduck IWG, after their first meeting (scheduled in April 2020).

Risk analysis

To be performed after the first reunion of the European Seaduck IWG.

Key partners

The key partner organizations in this project are:

- AEWA
- AEWA European Seaduck International Working Group
- The Governments of Germany, Poland, Denmark, Sweden, Finland, Russia, Estonia, Latvia, and Lithuania

Indicative budget

To be determined after the priority activities are identified.

Objective 5: Support measures under the AEWa Lesser White-fronted Goose (LWfG) International Working Group (IWG) to prevent illegal killing.



Figure 4. Global distribution map of Lesser White-fronted Goose⁴¹. Major flyways for the respective breeding and wintering ranges of the populations defined here are shown by different colours. Dark green indicates the Fennoscandia route for successful breeders, orange the moult migration route of this flyway (see section D2). Blue arrows show the inferred routes taken by the Western Main (D3) and Eastern populations (D1). Cream shows the introduced Swedish population (D4). For all flyways, breeding areas are shown in green, staging and wintering areas in light blue and moulting sites in orange. Particular thanks to Tomas Aarvak and Ingar Jostein Øien of BirdLife Norway for the preparation of this map.

The Lesser White-fronted Goose has been an AMBI priority since AMBI Phase 1. The global population of Lesser White-fronted Goose has declined rapidly since the middle of the 20th century. The decrease in numbers has been driven by fragmentation and loss of habitat in the the breeding and wintering ranges coupled with overhunting⁴². The fast pace of decline and small current population of the species have led to its assessment as Vulnerable at the Global Level⁴³, with the Western Palearctic Population considered Endangered and, within it, the Fennoscandian population being listed as Critically Endangered. The global population of the species is estimated on 16,000-27,000 individuals, which includes 10,000-21,000 individuals in

⁴¹ CAFF. 2018. *A Global Audit of the Status and Trends of Arctic and Northern Hemisphere Goose Populations (Component 2: Population accounts)*. Conservation of Arctic Flora and Fauna International Secretariat, Akureyri, Iceland. ISBN 978-9935-431-74-5

⁴² AEWa. 2008. *International Single Species Action Plan for the Conservation of the Western Palearctic population of the Lesser White-fronted Goose (Anser erythropus)*. AEWa Technical Series No. 36, Bonn, Germany.

⁴³ BirdLife International. 2018. *Anser erythropus*. *The IUCN Red List of Threatened Species 2018*: e.T22679886A132300164. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22679886A132300164.en>

autumn in its Western Palearctic range⁴⁴ and 14,000-19,000 individuals from the East Asian Flyway⁴⁵. The Fennoscandian population is estimated in 120-150 individuals⁴⁶.

In order to address the decline of the Western Palearctic population of Lesser White-fronted Goose, AEWA launched an ISSAP to address the challenges facing this concrete population of the species. As part of the implementation of this ISSAP, the AEWA Lesser White-fronted Goose International Working Group (LWfG IWG) was formed. The LWfG IWG met for the first time in 2010 in Helsinki (Finland), for the second time in Lake Kerkiní (Greece) in 2012, and for the third time in Trondheim (Norway) in 2016.

At the second meeting of the AEWA LWfG IWG in November 2012, range states agreed that the scope of the current ISSAP⁴⁷ should be revised and expanded to cover all sub-populations i.e., to include the Eastern main sub-population, estimated at 14,000-19,000 individuals, which breeds in the Eastern Russian Arctic and winters in China and Japan. Although much is still unknown, the threat from illegal killing also appears to be severe along the eastern edge of LWfG range, with incidental reports of illegal harvest using poisons (such as Alpha-Chloralose). In addition, habitat loss is one of the main threats to the species in China, with the wintering population progressively concentrating in only one site: East Dong Ting Lake. Considering in particular the diminished status of the other sub-populations, having a comprehensive international conservation framework for the entire species is a matter of urgency.

AMBI already included LWfG as a priority species for both the African-Eurasian and East Asian-Australasian Flyways in its first phase (2015-2019). It aimed at contributing through the Arctic Council member and permanent observer countries and the CAFF Secretariat in liaison with the AEWA and the AEWA LWfG IWG, through diplomatic interventions, channeling funds (e.g., from development aid or Arctic budgets that might not otherwise be available for species conservation), and through the exchange of information and experience.

As a consequence, there already are various previous links between LWfG conservation and several Arctic Council countries:

- Finland, Norway, Russia, and Sweden are represented in the AEWA LWfG IWG at governmental and/or expert level.

⁴⁴ Fox, A. D.; Ebbinge, B. S.; Mitchell, C.; Heinicke, T.; Aarvak, T.; Colhoun, K.; Clausen, P.; Dereliev, S.; Faragó, S.; Koffijberg, K.; Kruckenberg, H.; Loonen, M. J. J. E.; Madsen, J.; Mooij, J.; Musil, P.; Nilsson, L.; Pihl, S.; van der Jeugd, H. 2010. Current estimates of goose population sizes in western Europe, a gap analysis and an assessment of trends. *Ornis Svecica* 20(3-4): 115-127.

⁴⁵ Jia, Q.; Koyama, K.; Choi, C.-Y.; Kim, H.-J.; Cao, L.; Gao, D.; Liu, G.; Fox, A. D. 2016. Population estimates and geographical distributions of swans and geese in East Asia based on counts during the non-breeding season. *Bird Conservation International* 26: 397-417.

⁴⁶ Fox, A.D., Ebbinge, B.S., Mitchell, C., Heinicke, T., Aarvak, T., Colhoun, K., Clausen, P., Dereliev, S., Faragó, S., Koffijberg, K., Kruckenberg, H., Loonen, M., Madsen, J., Mooij, J., Musil, P., Nilsson, L., Pihl, S. & van der Jeugd, H. 2010. Current estimates of goose population sizes in the western Palearctic, a gap analysis and an assessment of trends. 20: 115-127.

⁴⁷ AEWA. 2008. *International Single Species Action Plan for the Conservation of the Western Palearctic population of the Lesser White-fronted Goose (Anser erythropus)*. AEWA Technical Series No. 36, Bonn, Germany.

- Norway and Finland provide funding for the post of the Lesser White-fronted Goose Coordinator situated at the UNEP/AEWA Secretariat as well as for various international conservation projects implemented within the framework of the LWfG ISSAP.
- Norway provides funding to LWfG projects in Russia via bilateral funding frameworks.
- The LIFE+ Nature Project “*Safeguarding the Lesser White-fronted Goose Fennoscandian population in key wintering and staging sites within the European flyway*” (LIFE10 NAT/GR/000638) developed from 2011 and 2016, as a follow-up of a previous project undertaken between 2005 and 2009. Lead by the Hellenic Ornithological Society, it involved multiple implementing partners: WWF Finland, Bulgarian Society for the Protection of Birds; Ministry of Environment, Energy, and Climate Change (Greece); Hortobágy National Park (Hungary); AEWA; and Natural Heritage Services of Metsähallitus (Finland). Besides the funds from the LIFE+ Programme, the project counted with co-financing by the Norwegian Directorate for Nature Management.
- A proposal for a new international LWfG LIFE+ project is currently being developed by AEWA and the implementing partners.

Action 1: Assist the AEWA LWfG IWG with the translation and dissemination of awareness-raising and education materials in key areas for the species within the Russian Arctic amongst indigenous and local communities.

Introduction

The Lesser White-fronted Goose has been chosen as a model/flagship species in the flyway, highlighting the comprehensive conservation efforts needed to tackle the threat of illegal killing. Awareness-raising and education materials have already been developed under the EU LIFE+ Nature “*Safeguarding the Lesser White-fronted Goose Fennoscandian population in key wintering and staging sites within the European flyway*” project. Support is still needed, however, with the translation and appropriate dissemination of such materials in the vicinity of sites used by the species throughout the Russian Arctic and sub-Arctic. CAFF is uniquely placed to support the IWG with this task, as it can provide in particular contacts with the local indigenous communities.

Project overview

Under the EU LIFE+ Nature “*Safeguarding the Lesser White-fronted Goose Fennoscandian population in key wintering and staging sites within the European flyway*” project, a series of educational and awareness raising materials were produced by project partners (under the lead of the Hellenic Ornithological Society). The materials include games, posters, stickers, booklets, and educational activities targeting primary school audiences. During the LIFE+ project, the educational component proved to be a big success, and the materials are now available in English, Greek, Norwegian, Farsi, and (some of them) Russian. However, due to extensive migratory journey of this species, including breeding, moulting, staging, and

wintering sites scattered across many countries, it is needed to expand the coverage of this educational and awareness raising materials.

One of the priority regions for these educational efforts is the Yamal-Nenets region, one of the key breeding regions for the Western Palearctic population. CAFF will support AEWA its partners under the EU-LIFE+ FWfG Project (including the Hellenic Ornithological Society) in the translation of educational and awareness raising materials into Russian and Nenets languages, and their distribution amongst teachers, schools, educational institutions, and local communities in the Yamal-Nenets region.

Expected outcomes

- Available materials are translated to Russian and Nenets languages; and
- Translated materials are made available to target indigenous peoples through distribution across educational centers, and couple with capacity building activities for teachers to be able to use the materials as part of their lectures.

Activities to be undertaken

This Action will encompass two differentiated activities:

1. Translation of the educational and awareness materials developed by the Greek Ornithological Society under the EU-LIFE LWfG project into Russian (when required, as some of the materials are already available in this language) and Nenets language:
 - “The Lesser White-fronted Goose Colour Book: Drawing, Painting and Crafts”;
 - “The Lesser White-fronted Goose: a goose gone wild and global”;
 - “The Lesser White-fronted Goose floor game”;
 - “A goose no less... a Lesser White-fronted Goose!”;
 - “Visit from the past: from the Archaeopteryx to The Lesser White-fronted Goose”; and
 - Educational poster and stickers.
2. Distribution and dissemination of materials in schools, teachers, educational institutions, and local communities of the Yamal-Nenets region.
3. Capacity building for teachers in the target regions on the use of the translated materials for educational and awareness raising purposes.

Risk analysis

- Funds will need to be mobilized in order to undertake the translation, distribution, and capacity building required to undertake this activity. AEWA is already working towards a new LIFE+ project application to follow up on the results of the 2011-2016 project.
- Stakeholder engagement and support: the participation of the following authorities and organizations will be paramount for the success of the project:

- RAIPON;
- Russian Ministry of Natural Resources and the Environment; and
- Yamal-Nenets Ministry of the Environment.

CAFF can use its Arctic Council links in order to engage with these actors and catalize their active involvement and support for the project.

Key partners

- Russian Association of Indigenous Peoples of the North (RAIPON)
- Government of Russia
- Federal Government of Yamal-Nenets
- AEWA
- AEWA LWfG IWG
- Hellenic Ornithological Society

Indicative budget

| Item | Cost (€) |
|---|---------------|
| Utilization rights from Hellenic Ornithological Society (open graphic files, images, and files) | 15,000 |
| Translation to Russian language | 2,000 |
| Translation to Nenets language | 3,000 |
| New graphic design needs | 3,000 |
| New illustration needs | 2,000 |
| Printing and distribution | 5,000 |
| Total | 30,000 |

Action 2: Support the UNEP/AEWA Secretariat in engaging key Range States on a diplomatic level through Arctic Council member and observer country embassies.

Introduction

Although legally protected throughout most of its range, mortality due to illegal and accidental killing plus disturbance caused by hunting at key staging and wintering sites along the Flyway are thought to be the key driver of the decline of the global population of LWfG. Unsustainable harvest practices (in Central Asia in particular) continue to have a serious impact on the many threatened migratory waterbird populations in the region, as well as the many Arctic waterbird populations open for hunting such as the Taiga Bean Goose (*Anser fabalis fabalis*). Continued oil and gas exploration and development have increased infrastructure development and increased access to key sites along migration routes in the Russian Arctic and

sub-Arctic. This has also been linked to higher hunting pressure on migratory waterbirds in the region.

The long-term constructive engagement of authorities dealing with hunting as well as the regional hunting communities is therefore a key challenge and is considered essential for the future of sustainable use and conservation of migratory waterbirds in the region. Tackling unsustainable harvest is in itself a large challenge, but an additional challenge for the protection of the LWfG remains that many of the key sites – especially in the staging and wintering areas – are still unknown. Without this knowledge, the implementation of urgent conservation activities – such as the sufficient protection of sites, awareness-raising, etc. – is virtually impossible.

Project overview

Further support is needed to engage key Range State governments in the conservation work for the species – particularly in relation to illegal killing along the West Asian part of the Flyway. For example, Arctic Council member and observer country embassies situated in key Range States could support ongoing efforts to increase government engagement in the region by approaching in-country Foreign Office and Environment Ministry counterparts.

The legal remit and subsequent mandate of the AEWA ISSAP for the Conservation of LWfG and the intergovernmental AEWA LWfG IWG is limited to the Western Palearctic populations of the species occurring in the African-Eurasian Flyway. In relation to conservation efforts for the Eastern main population of LWfG within the East-Asian Australasian Flyway, the AEWA IWG continues to offer support in terms of sharing best practice on conservation interventions, the establishment of a discreet Species Action Plan under the EAAFP as well as providing templates for awareness-raising and environmental education materials. China and Japan have been invited to the IWG as permanent observers and currently participate on expert level.

Expected outcomes

- A global ISSAP covering all LWfG populations is achieved or, in its absence, an ISSAP for the Eastern population of the species is established under the auspices of EAAFP;
- Number of range countries preparing national actions plans (and not having them before 2019) and implementing them;
- Actions undertaken under the newly prepared national actions plans;
- Number of diplomatic actions undertaken by AC Member and Observer countries in LWfG range countries, targeting conservation action advocating for the conservation of LWfG; and
- Population trends of LWfG between 2019-2023 showing population growth.

Activities to be undertaken

To mobilize CAFF's diplomatic links through the Arctic Council to harness Embassy involvement (concerning Arctic Council Member and Observer States) in the Central Asian Flyway for raising awareness about LWfG conservation. The concrete activities will be scoped, identified, and prioritized together with the AEWA Secretariat.

Risk analysis

The determining elements for the success of this activity are:

- Adequate prioritization of activities, interventions, and countries to intervene in. This shall be done together with AEWA and other partners involved in International LWfG conservation; and
- The support and engagement of AC Member and Observer States, which will need to be briefed on the need for their support to this activity and the possible modalities of engagement.

Key partners

For this activity, the key partners will be:

- Governments of Arctic Council Member States: Russia, Iceland, Sweden, Norway, Finland, Denmark, United States of America, and Canada;
- Governments of Arctic Council Observer States: Spain, France, the Netherlands, United Kingdom, Italy, Switzerland, Germany, Poland, India, Singapore, Japan, Republic of Korea, China; and
- AEWA and AEWA LWfG IWG

Indicative budget

Resources will be provided by the diplomatic institutions that decide to support this activity, at their own discretion according to the activities and interventions identified.

AMBI AFEU Implementation Strategy review process

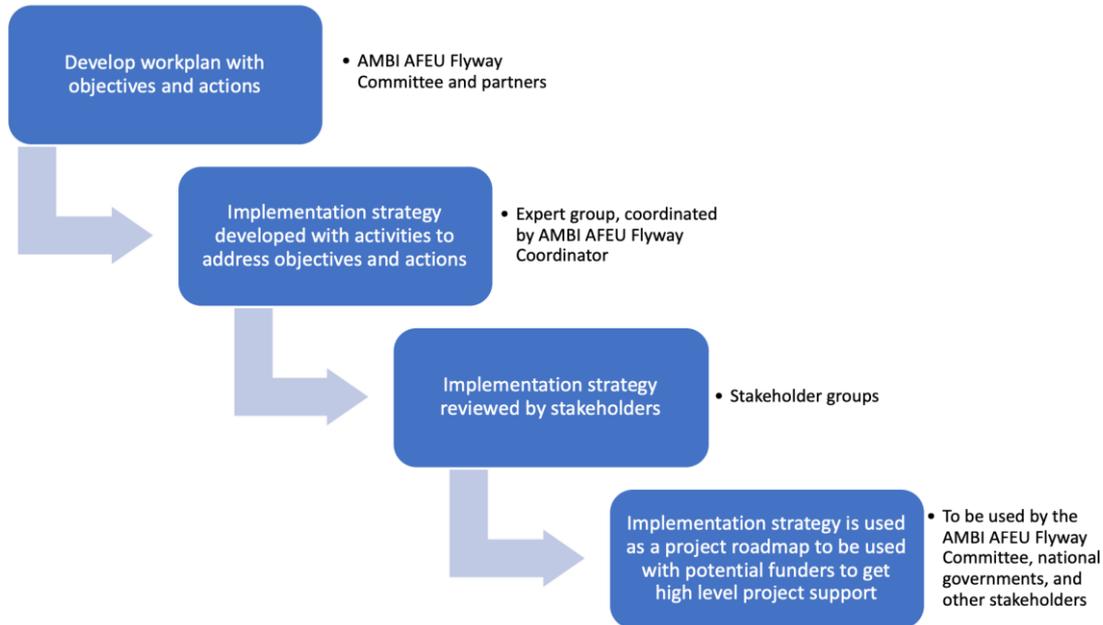


Figure 5. AMBI 2.0 AFEU Implementation Strategy review process overview.

The AFEU Flyway Committee designed the creation of the Implementation Strategy to include a wide range of stakeholders. First, a draft Implementation Strategy was developed by using the AMBI workplan 2019-2023 as the guiding document. For that, the AMBI AFEU Flyway Committee appointed expert groups to prepare the implementations strategies for the different Objectives and (where necessary) Actions under the coordination of the AMBI AFEU Flyway Coordinator. These expert groups were asked to outline the specific needs and actions required to implement projects that addressed AMBI’s objectives (Table 4).

Table 4. Participants of the expert groups that developed the implementation strategy for the AMBI AFEU workplan.

| Name | Title | Affiliation | Email |
|-----------------------|------------------------------|------------------------|--|
| Action 1.1 | | | |
| Sergio Rejado Albaina | AMBI-AFEU Flyway Coordinator | CAFF | sergio@caff.is |
| Courtney Price | AMBI Global Coordinator | CAFF | courtney@caff.is |
| Gerold Luerßen | Programme Officer | CWSS | luerssen@waddensea-secretariat.org |
| Geoffroy Citegetse | Project Manager | BirdLife International | Geoffroy.citegetse@birdlife.org |
| Justino Biai | Director | IBAP | Justinobiai.ibap@gmail.com |
| Action 1.2 | | | |
| Sergio Rejado Albaina | AMBI-AFEU Flyway Coordinator | CAFF | sergio@caff.is |

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|--|---|------------------------|--|
| Courtney Price | AMBI Global Coordinator | CAFF | courtney@caff.is |
| Nina Mikander | Associate Programme Officer | AEWA | Nina.mikander@unep-aewa.org |
| Szabolcs Nagy | Associate Expert | Wetlands International | Szabolcs.nagy@wetlands.org |
| Objective 2 (Actions 2.1 and 2.2) | | | |
| Sergio Rejado Albaina | AMBI-AFEU Flyway Coordinator | CAFF | sergio@caff.is |
| Courtney Price | AMBI Global Coordinator | CAFF | courtney@caff.is |
| Nina Mikander | Associate Programme Officer | AEWA | Nina.mikander@unep-aewa.org |
| Szabolcs Nagy | Associate Expert | Wetlands International | Szabolcs.nagy@wetlands.org |
| Gerold Luerßen | Programme Officer | CWSS | luerssen@waddensea-secretariat.org |
| Objective 3 (Action 3.1) | | | |
| Sergio Rejado Albaina | AMBI-AFEU Flyway Coordinator | CAFF | sergio@caff.is |
| Courtney Price | AMBI Global Coordinator | CAFF | courtney@caff.is |
| Nina Mikander | Associate Programme Officer | AEWA | Nina.mikander@unep-aewa.org |
| Jaime García Moreno | Senior International Conservation Officer | VBN | Jaime.garciamoreno@vogelbescherming.nl |
| Objective 4 (Action 4.1) | | | |
| Sergio Rejado Albaina | AMBI-AFEU Flyway Coordinator | CAFF | sergio@caff.is |
| Courtney Price | AMBI Global Coordinator | CAFF | courtney@caff.is |
| Nina Mikander | Associate Programme Officer | AEWA | Nina.mikander@unep-aewa.org |
| Objective 5 (Action 5.1 and 5.2) | | | |
| Sergio Rejado Albaina | AMBI-AFEU Flyway Coordinator | CAFF | sergio@caff.is |
| Courtney Price | AMBI Global Coordinator | CAFF | courtney@caff.is |

| | | | |
|---------------|-----------------------------|------|--|
| Nina Mikander | Associate Programme Officer | AEWA | Nina.mikander@unep-aewa.org |
|---------------|-----------------------------|------|--|

A second draft Implementation Strategy will be shared with a wide range of stakeholders beyond the members of the AFEU Flyway Committee (Table 5) who will be asked to review and provide input. Feedback from these groups will then be incorporated into the draft implementation strategy as presented here:

- CMS
- AEWA
- RSPB
- Wetlands International
- BirdLife International
- VBN
- BMU
- EC
- EEA
- CWSS
- WSFI
- JNCC
- Global Flyway Network
- CNRS
- MAVA Foundation
- IBAP
- ODZH
- UNESCO
- SOVON

Final considerations

This Implementation Strategy was conceived as a living document. This document represents a draft of the implementation strategy that we continue to seek input and guidance on, including from CAFF, the AMBI African-Eurasian Flyway Committee, AC Member States, AC Observer States, and other stakeholders in the region. However, it is intended to remain a living document, reflecting the evolving needs of Arctic migratory bird conservation in the African-Eurasian Flyway, as well as the implementation process of AMBI.

The purpose of this implementation strategy is to create road maps for groups to use to initiate projects that address AMBI and regional priorities, and to attract funding and high-level support. A number of the projects identified in the Arctic implementation strategies are already being used to apply for funding and garner project support.

Annex – Implementation Strategy Summary Matrix

Objective 1: Improve conservation and management of wader sites throughout the African-Eurasian flyway.

- Contributing to/Alignment:**
- SDGs: 14, 15, 17
 - Aichi Biodiversity Targets: 1, 2, 4, 5, 7, 11, 12, 14, 15, 18, 19
 - CMS Strategic Plan 2015-2023: Objectives 1, 2, 3
 - AEWA Strategic Plan 2019-2027: Objectives 1, 2, 3, 4, 5
 - Ramsar Strategic Plan 2016-2024: Strategic Goals 1, 2, 3
 - Others: AEWA Plan of Action for Africa, World Heritage Convention Strategic Plan of Action 2012-2022, UNESCO Man and the Biosphere Programme Strategy 2015-2025, CMS Programme of Work on Migratory Birds and Flyways 2014-2023, EU LIFE multi-annual work programme 2018-2020, EU Biodiversity Strategy 2020

Action 1: Secure intertidal habitat of Arctic-breeding waders in Bijagós Archipelago, Guinea-Bissau:

- a) Advance and potentially coordinate international engagement to support the Bijagós World Heritage nomination process, as appropriate.**
b) Provide technical support to and enhance the capacity of IBAP and other national partners for strengthening the conservation management of the Bijagós Archipelago, including through its nomination and designation as a UNESCO World Heritage site.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|--|---|---|---|-------------------|----------|
| <ul style="list-style-type: none"> - A management plan for the Boloma-Bijagós Biosphere Reserve and World Heritage site, as an immediate conservation action and capacity building exercise, and as a preliminary stage to the compilation of the World Heritage Site Nomination Dossier; - A finalized World Heritage Site Nomination Dossier; - The full World Heritage Nomination package (including the Nomination Dossier and the Management Plan) is compiled and submitted to UNESCO by 2020; - The site is officially designated by UNESCO as a World Heritage Site; and | <ul style="list-style-type: none"> - Advance and potentially coordinate international engagement to support the Bijagós WH process as appropriate, including the submission of a complete nomination dossier and management plan for the Bijagós Archipelago World Heritage Site in 2020. - Provide technical support to and enhance the capacity of IBAP and other national partners for strengthening the conservation management of the Bijagós Archipelago, including through its nomination and designation as a UNESCO World Heritage site. The project aims to provide technical support and capacity building to key governmental officials and stakeholders who will be involved in the nomination process, in | <ul style="list-style-type: none"> - Partner involvement and stakeholder engagement. - Support from partners. - Adequate funding and financial support to the project. - Lack of determined action. | <ul style="list-style-type: none"> Boloma-Bijagós Biosphere Reserve; ODZH; IBAP; BirdLife International; Wetlands International; WSFI | €35,000 | N/A |

- Capacity for the management of the site is increased through workshops and technical backstopping during the World Heritage nomination process

order to enhance management skills and overall knowledge of the UNESCO World Heritage Convention (Paris Convention, 1972) process, instruments, and tools. Upon project completion, they will own the capacity and know-how in order to adequately fulfil the nomination dossier and the site management plan, as well as to undertake the management of the World Heritage site, once the property will be officially designated.

Action 2: Ensure identification and documentation of key sites for shorebirds in available format as a tool for national/international sustainable site management.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|---|--|--|---|---|------------|
| <p>- Data gaps in the CSN Tool are adequately addressed and filled:</p> <ul style="list-style-type: none"> - Sites without recent IWC count undertake censuses, and the information of this censuses is uploaded into the CSN Tool by 2021; - The critical sites in Mozambique and Eritrea are successfully identified and mapped, and this information uploaded into the CSN Tool by 2021; and - The first censuses in Mozambique and Eritrea take place by 2023. <p>- Systems are put into place to guarantee regular update of information in the CSN Tool for the identified sites and countries:</p> <ul style="list-style-type: none"> - For countries in the northern part of the flyway, the sites identified | <p>For the lack of census information identified in the northern edge of the flyway, the steps to take will be:</p> <ul style="list-style-type: none"> - Identify national actors in Iceland, Norway, Denmark, and Russia responsible for bird census. A first scoping exercise has identified the following entry points: - Discussion with the identified actors of the needs required to include the identified sites in their national census schemes; and - Establishment of a roadmap for the realization of censuses and counts in the identified critical sites. <p>The two countries that were identified for addressing this shortcoming of information were Mozambique and Somalia. The steps to take will be:</p> | <ul style="list-style-type: none"> - Funds availability. - Engagement of Arctic Council members and observers’ embassies. - Engagement of key partners in Russia, Iceland, Denmark, and Norway. | <p>AEWA; BirdLife International; The Governments of Mozambique and Eritrea, and their Ministries of the Environment; BirdLife Norway; Norwegian Institute for Nature Research; Icelandic Museum of Natural History; DOF/BirdLife Denmark; Zoological Museum of Moscow State University, Program “Birds of Moscow and the Moscow</p> | <ul style="list-style-type: none"> - Cost of a first gap-filling survey in Mozambique to address knowledge about critical sites in the country: €20,000. - Cost of a first gap-filling survey in Eritrea to address knowledge about critical sites in the country: €40,000. | <p>N/A</p> |

| | | |
|---|--|---|
| <p>are incorporated into their regular bird monitoring activities and reporting schemes; and</p> <ul style="list-style-type: none"> - For Mozambique and Eritrea, national partners are identified and engaged, and their capacity is built and developed for them to independently undertake yearly waterbird censuses. | <ul style="list-style-type: none"> - Resource mobilization in order to undertake field missions (a country-wide scoping study) to identify the key sites for waterbirds in these countries; - Engagement with relevant local authorities and actors in the country; and - Capacity building of key stakeholders in the country, through their participation in the country-wide scoping studies and census, in order to guarantee the future sustainability of these efforts as well as the regular updates of information into the CSN Tool. | <p>Region”; Aarhus University; State Information-Analytical Center of Game Animals and Habitats of Russia</p> |
|---|--|---|

Objective 2: Increase quality and quantity of population status assessment data of Arctic breeding waterbirds in the African-Eurasian Flyway

Contributing to/Alignment:

- SDGs: 13, 14, 15, 17
- Aichi Biodiversity Targets: 19
- CMS Strategic Plan 2015-2023: Objectives 1, 3
- AEWA Strategic Plan 2019-2027: Objective 5
- Ramsar Strategic Plan 2016-2024: Strategic Goal 4
- Others: CMS Programme of Work on Migratory Birds and Flyways 2014-2023, UNEP Pan-European 2020 Pan-European Strategy for Biodiversity, EU Biodiversity Strategy 2020, EU H2020 Work Programme 2018-2020

Action 1: Support the implementation of the Circumpolar Biodiversity Monitoring Programme (CBMP) and the revised AEWA Guidelines on Waterbird Monitoring with respect to those Arctic-breeding waterbirds for which optimal data are still lacking, through cooperation with the African-Eurasian Waterbird Monitoring Partnership and the Wadden Sea Flyway Initiative by providing financial and/or technical support.

Action 2: Support improved population delineation of Arctic-breeding waders by collating Arctic breeding wader migration data (tracking, color-marking, geolocator, ringing data, etc.) and presenting it on the CSN tool to improve flyway delineation data.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|-------------------|-----------------------------|---------------|--------------|-------------------|----------|
|-------------------|-----------------------------|---------------|--------------|-------------------|----------|

- Knowledge of breeding success of Arctic-breeding waterbirds in the Arctic is enhanced;
- Robust estimates of breeding success, as well as trends, are produced for Arctic-breeding waterbirds;
- Threats and stressors to migratory birds in the Arctic are adequately identified and quantified;
- Conservation measures and priorities are identified; and
- Knowledge about populations, including distribution, flyways, and population size estimates is improved.

- Workshop with partners in Russia in April 2020.
- Follow-up measures will be identified at the workshop.
- Availability of funds.
- Engagement and participation of Russian authorities.

CBMP; TWSC / WSFI; Russian Ministry of Natural Resources and the Environment; Russian Academy of Sciences; Bird Ringing Centre of Russia); BirdsRussia; Regional Conservation Departments of Western Russian Arctic; Moscow State University; Russian Network of Wetland Centres, Birds and People Partnership; BMU; Dutch Ministry of Agriculture, Nature, and Food Quality; Danish Environmental Protection Agency; CMS; AEWA; IWSG, PECBMS; IWC; BirdLife International; VBN; ICARUS; WetlandLink International; Wetlands International,

To be determined. N/A

Objective 3: Development and dissemination of information and awareness materials addressing priority target

Contributing to/Alignment:

- SDGs: 13, 14, 15, 17
- Aichi Biodiversity Targets: 1, 19
- CMS Strategic Plan 2015-2023: Objective 3
- AEWA Strategic Plan 2019-2027: Objective 5
- Ramsar Strategic Plan 2016-2024: Strategic Goal 4
- Others: AEWA Plan of Action for Africa, World Heritage Convention, CMS Programme of Work on Migratory Birds and Flyways 2014-2023, UNEP Pan-European 2020 Pan-European Strategy for Biodiversity, EU Biodiversity Strategy 2020, EU LIFE multi-annual work programme 2018-2020

Action 1: Support the development of communication products (in collaboration with flyway partners) showcasing migratory connectivity, knowledge gaps, and threats in the African-Eurasian flyway area.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|--|-----------------------------|---|---|-------------------|----------|
| - Communication materials (infographics, videos, articles, leaflets...) are produced and made publicly available through the relevant means and platforms. | To be determined. | - Availability of funds. - Partner engagement. | Arctic Council Secretariat; Cornell Lab of Ornithology; AEWA; VBN; BirdLife International; Wetlands International; WSFI; RSPB; IBAP; JNCC; CBMP; CMS; CBird; HELCOM LWfG IWG; European Seaduck IWG; Government of the Netherlands | To be determined. | N/A |

Objective 4: Reduce bycatch of seaducks in the Baltic Sea

Contributing to/Alignment:

- SDGs: 14, 17

- Aichi Biodiversity Targets: 4, 5, 6, 12, 19
- CMS Strategic Plan 2015-2023: Objectives 1, 2, 3
- AEWA Strategic Plan 2019-2027: Objectives 1, 2, 4
- Ramsar Strategic Plan 2016-2024: Strategic Goals 1, 2, 3, 4
- Others: CMS Programme of Work on Migratory Birds and Flyways 2014-2023, HELCOM Baltic Sea Action Plan 2007-2021, UNEP Pan-European 2020 Pan-European Strategy for Biodiversity, EU Biodiversity Strategy 2020, EU LIFE multi-annual work programme 2018-2020

Action 1: Support the implementation of the AEWA Long-tailed Duck and Velvet Scoter International Single Species Action Plans with respect to the identified activities regarding bycatch under the auspices of the AEWA European Seaduck International Working Group.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|-------------------|-----------------------------|-------------------|--|-------------------|----------|
| To be determined. | To be determined. | To be determined. | AEWA; European Seaduck IWG; the Governments of Germany, Poland, Denmark, Sweden, Finland, Russia, Estonia, Latvia, and Lithuania; HELCOM | To be determined. | N/A |

Objective 5: Support measures under the AEWA Lesser White-fronted Goose (LWfG) International Working Group (IWG) to prevent illegal killing.

Contributing to/Alignment:

- SDGs: 15, 17
- Aichi Biodiversity Targets: 1, 4, 5, 6, 12
- CMS Strategic Plan 2015-2023: Objectives 2, 3
- AEWA Strategic Plan 2019-2027: Objectives 1, 2, 4, 5
- Ramsar Strategic Plan 2016-2024: Strategic Goals 1, 2, 3
- Others: CMS Programme of Work on Migratory Birds and Flyways 2014-2023, UNEP Pan-European 2020 Pan-European Strategy for Biodiversity, EU Biodiversity Strategy 2020, EU LIFE multi-annual work programme 2018-2020

Action 1: Assist the AEWA LWfG IWG with the translation and dissemination of awareness-raising and education materials in key areas for the species within the Russian Arctic amongst indigenous and local communities.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|---|---|--------------------------|-----------------------|-------------------|----------|
| - Available materials are translated to Russian and Nenets languages; and | - Translation of the educational and awareness materials developed by the Greek | - Availability of funds. | RAIPON; Government of | €30,000 | N/A. |

| | | | |
|---|---|--|--|
| <p>- Translated materials are made available to target indigenous peoples through distribution across educational centers, and couple with capacity building activities for teachers to be able to use the materials as part of their lectures.</p> | <p>Ornithological Society under the EU-LIFE LWfG project into Russian (when required, as some of the materials are already available in this language) and Nenets language.</p> <p>- Distribution and dissemination of materials in schools, teachers, educational institutions, and local communities of the Yamal-Nenets region.</p> <p>- Capacity building for teachers in the target regions on the use of the translated materials for educational and awareness raising purposes.</p> | <p>- Partner engagement and support.</p> | <p>Russia; Federal Government of Yamal-Nenets; AEWA; Hellenic Ornithological Society</p> |
|---|---|--|--|

Action 2: Support the UNEP/AEWA Secretariat in engaging key Range States on a diplomatic level through Arctic Council member and observer country embassies.

| Expected outcomes | Activities to be undertaken | Risk analysis | Key partners | Indicative budget | Comments |
|---|--|---|--|-------------------|------------|
| <p>- A global ISSAP covering all Lesser White-fronted Goose populations is achieved or, in its absence, an ISSAP for the Eastern population of the species is established under the auspices of EAAFP;</p> <p>- Number of range countries preparing national actions plans (and not having them before 2019) and implementing them;</p> <p>- Actions undertaken under the newly prepared national actions plans;</p> <p>- Number of diplomatic actions undertaken by AC Member and Observer countries in LWfG range countries, targeting conservation action advocating for the conservation of LWfG; and</p> <p>- Population trends of LWfG between 2019-2023 showing population growth.</p> | <p>To mobilize CAFF’s diplomatic links through the Arctic Council to harness Embassy involvement (concerning Arctic Council Member and Observer States) in the Central Asian Flyway for raising awareness about LWfG conservation.</p> | <p>- Adequate prioritization of activities, interventions, and countries.</p> <p>- The support and engagement of AC Member and Observer States.</p> | <p>AEWA; Governments of Arctic Council Member and Observer States.</p> | <p>N/A</p> | <p>N/A</p> |