Information paper
How seabird information can help Regional Seas Organisations and Fisheries Management Bodies to deliver the Aichi Biodiversity Targets

This paper presents a summary of the BirdLife International's technical and scientific data and analyses that can inform policy support tools and mechanisms of Regional Seas Organisations and Fisheries Management Bodies to deliver conservation goals. This box outlines the conservation work developed by BirdLife Marine Programme, the possible uses of data BirdLife holds and the indicators developed by the organisations to track conservation changes.

The BirdLife Marine Programme works to:
- Identify and monitor areas of high biodiversity value
- Provide information on status and threats to seabird species
- Find solutions for reducing impacts of fisheries on biodiversity, including development of bycatch mitigation devices

With the objectives to:
- Protect and manage seabird breeding sites and adjacent foraging areas in coastal waters and high seas
- Find ways to protect biodiversity within resource management, including through marine spatial planning and other area-based management measures
- Improve the status of threatened seabird species
- Reduce seabird bycatch in longline, trawl and gillnet fisheries

Data informing action:
The information collated, managed and analysed by BirdLife can contribute to the delivery of the global 2020 conservation goals by, for example:

• Identifying potentially sensitive areas that need to be considered in and **integrated with development strategies and planning processes** (Aichi Target 2)

• **Supporting private and financial sectors** to manage their environmental risks related to biodiversity impact (Aichi Target 4)

• **Gap analysis of Protected Area networks**, and informing the selection of sites for protection under national and also international legislation (Aichi Target 11)

• **Describing** the CBD's Ecologically or Biologically Significant Marine Areas (EBSAs) (Aichi Target 11)

• Taking steps to prevent the extinction of known threatened species and improve their conservation status (Aichi Target 12)

• **Restoring and safeguarding** ecosystems providing essential services – since IBAs have been shown to be particularly important for providing ecological services to people, as well as for biodiversity (Aichi Target 14)

• Managing stocks sustainably, legally and **applying ecosystem based approaches** (Aichi Target 6)

• **Indicating areas and practices** where fisheries can reduce or have no significant adverse impacts on threatened species and vulnerable ecosystems (Aichi Target 6)

• Technical alternatives to fundament the **creation of positive incentives**, such as economic, legal or institutional measures designed to reduce bycatch of non-target species (Aichi Target 3)

BirdLife International and the Marine Programme

BirdLife is the world's largest nature conservation partnership, comprising 120 national nature conservation organisations in 118 countries worldwide. Our unique structure – a democratic partnership of grassroots organisations – and the solid scientific foundation to our conservation programmes help us to deliver high impact and long-term conservation that benefits both nature and people.

BirdLife's Strategy is built on four pillars to save species, conserve sites and habitats, encourage ecological sustainability and empower people for positive change – which taken together constitute BirdLife's approach to conservation. BirdLife's strategy is delivered through its nine Global Programmes, including the Marine Programme, as a framework for the planning, implementation, monitoring and evaluating of our conservation work.

The BirdLife Marine Programme drives solutions to protect seabirds, marine life and the habitats they depend on, making major inputs to: i. identifying and protecting the most important sites for seabirds and ii. Reducing seabird bycatch for sustainable fisheries management

Seabird Status:

Of the 359 species of seabirds species, 105 (29%) are classified as globally threatened (i.e. Vulnerable, Endangered or Critically Endangered). This places this group amongst one of the most threatened of all birds. Pelagic species are particularly at risk – many populations of albatrosses, petrels and penguins have faced medium to severe declines over the last decades. Two main threats have driven these declines: incidental bycatch in fisheries and the predation by introduced mammals at the colonies.

BirdLife International has been working collectively to identify, document and protect all places on earth of greatest significance for the conservation of the world's birds. As a result, over 12,000 terrestrial and over 3,000 marine Important Bird and Biodiversity Areas (IBAs) have been identified. Marine sites are outlined in the E-atlas of Marine IBAs, through which conservation practitioners, decision makers and productive sector can access these data to help with their planning and action.
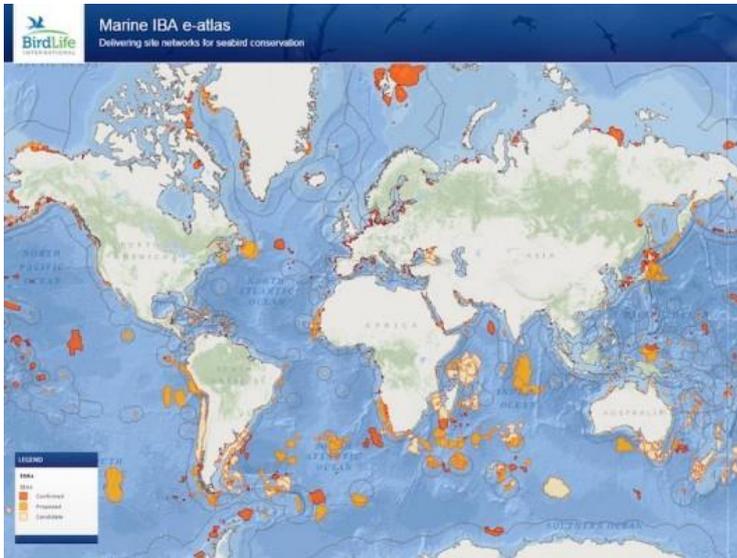
Figure 1 e-Atlas of Marine Important Bird and Biodiversity Areas

IBAs are identified using a standardised set of data-driven criteria (based on threat and irreplaceability) and thresholds, ensuring that the approach can be used consistently worldwide.

Different aspects of seabird lifecycles are captured by the marine IBA network through the identification of: i. Important breeding colonies, ii. Seaward extensions around breeding colonies, iii. Non-breeding (coastal) concentrations, iv. Migratory bottlenecks and v. Areas for pelagic species.

Together these sites show where potential threats may have population level impacts to seabirds. Best practice management of activities, such as through bycatch mitigation or the designation of marine protected areas, can make a vital contribution to the conservation of seabirds (and other marine life found in these areas) and prove once more that science-based conservation is the way forward to halt and reverse the declines many species have undergone in recent decades.

Birds and other biodiversity: IBAs have been found to capture a large and representative proportion of other biodiversity, providing a reliable and easily monitored way of identifying priorities for conservation. In the marine realm, this is likely to include other mobile pelagic taxa, such as whales, turtles and sharks. Effective management of IBAs will therefore help conserve a wider range of taxa and habitats.

Benefits of a network of sites: Since biodiversity is not distributed evenly across the globe, the protection of a carefully chosen network of sites can represent a cost-effective and efficient approach to conservation because a relatively small network can support disproportionately large numbers of species. Effective protection of sites can address habitat loss and over-exploitation, two major causes of biodiversity loss.

Accurate knowledge of the location of marine IBAs can be used to inform marine spatial planning through the designation of MPAs, and help identify areas where shipping, renewable energy, fisheries, and oil spills are likely to have the greatest impacts on biodiversity.

IBAs and EBSAs: There is overlap and congruence between the criteria used to identify marine IBAs and those adopted by the CBD to identify EBSAs in Areas Beyond National Jurisdiction (ABNJ). This is particularly so for criteria relating to vulnerability and irreplaceability. Thus, marine IBAs have formed an important input to describing sites that meet the EBSA criteria at the CBD workshops to date. So far over 600 IBAs have been used to inform the scientific basis for EBSAs agreed at the workshops, while many other IBAs could be used in other regions.

Seabirds have a worldwide distribution meaning they can act as proxies for oceanic areas where few or no other data exist.

EBSAs can make a valuable contribution towards meeting Aichi **Target 5** (halve the rate of loss of habitats), **Target 6** (sustainably manage and harvest all fish and invertebrate stocks and aquatic plants), **Target 10** (minimize the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification) and **Target 11** (conserve at least 10% of coastal and marine areas that are ecologically representative).

The tracking database:

In 2004 BirdLife International created the **Tracking Ocean Wanderers– the global Seabird Tracking Database**. This Database is the largest collection of seabird tracking data worldwide, thanks to the collaboration of global seabird researchers. Analysis of seabird movements and distribution, both when breeding on land and feeding at sea, allowed for the identification of key sites for seabirds, that now compose the E-atlas of Marine IBAs.

Understanding the distribution of seabirds is often the first step when attempting to address a certain threat.

For example, identifying the overlap between the major world fishing fleets and albatross distribution was has played an important role in addressing the by-catch of albatrosses. Along with at sea-surveys, tracking studies provide an essential layer of information in any Marine Spatial Planning exercise, or when identifying Marine Protected Areas.

Figure 2 Tracking Ocean Wanderers database cover all seabird species – and is a preeminent example of cooperation between scientists and conservationists. It counts on 566 datasets, 7.3 million data points, 17.600 tracks, of 104 species, from contributions from 161 researchers.

ii.   Reducing seabird bycatch for sustainable fisheries management

Incidental capture in fisheries (bycatch) is recognised as the primary threat to seabirds at sea, particularly impacting albatrosses and petrels. Fifteen of the world's 22 albatross species are Globally Threatened. The jurisdiction of the world's five tuna Regional Fisheries Management Organisations overlap with 80% of global albatross distribution. Therefore, these organisations have clearly a vital role to play in reducing bycatch threats to albatross populations. BirdLife has been engaging with tuna RFMOs since 2004.

BirdLife has estimated that global longline and trawl fishing fleets kill an estimated 300,000 seabirds every year as bycatch, and a further 400,000 seabirds caught per year in gillnet fisheries, with hot spots around the Baltic Sea, Nordic regions and the Northwest Pacific.

BirdLife's conservation work focuses on developing practical solutions with fishers and others to find and implement the right measures to find common solutions to address impacts affecting seabirds. The Albatross Task Force, led by RSPB (BirdLife in the UK), is an international team of seabird bycatch mitigation instructors that works at-sea on commercial fishing vessels. The Task Force develops best practices and bycatch mitigation tools for the fisheries, and works in bycatch "hotspots" such as South Africa, Namibia, Argentina, Uruguay, Chile, Brazil and Peru. The work is developed in collaboration with fishing companies and

associations, governments and national fisheries observer programmes. The model has proved to be successful and is now being incorporated for seabird conservation to Europe, where it's known as the 'Seabird Task Force'.

The example below demonstrates a joint effort between BirdLife and the International Commission for the Conservation of Atlantic Tunas (ICCAT) to identify spatial and temporal overlap between albatross and petrel distribution and ICCAT pelagic longline fishing effort, in order to identify species, areas and seasons of highest bycatch risk. ICCAT will use this study to inform future fisheries management measures in the region.
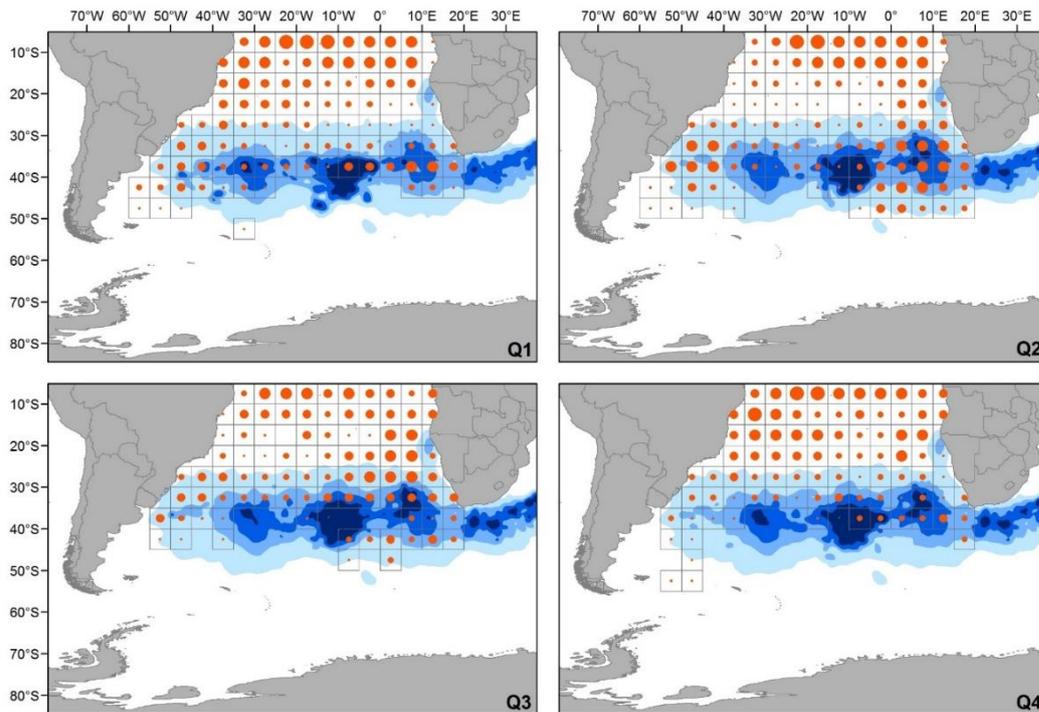

Figure 3: Tristan albatross (Gough Islands population) density distribution in the ICCAT area by year quarter (Q1=Jan-Mar, Q2=Apr-Jun, Q3=July-Sep, Q4=Oct-Dec), and overlap with ICCAT longline fishing effort 2010-2014 (average number of hooks set per 5x5° grip square per quarter per year). Highest densities of bird distribution are shown in dark blue. Data ownerss: Alex Bond, Ross Wanless

ICCAT Longline Effort
Estimated number of hooks

- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- > 1,000,000

Bird Utilization
Distribution

- 25%
- 50%
- 75%
- 95%
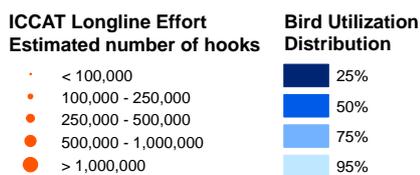
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