



# Understanding and protecting connectivity in the ocean



Global Ocean  
Biodiversity Initiative  
Science • Policy • Conservation

# GOBI Mainstreaming ecosystem connectivity

The Global Ocean Biodiversity Initiative (GOBI) is developing and advancing new methods for generating and accessing actionable knowledge to support improved practices in marine conservation and management of migratory marine species. These include:

- **Important Bird and Biodiversity Areas (IBAs)**, developed by BirdLife International;
- **Important Marine Mammal Areas (IMMAs)**, developed by the IUCN Marine Mammal Protected Areas Task Force;
- **The Migratory Connectivity in the Ocean (MiCO)** system, developed by Duke University and University of Queensland.

GOBI's work supports the efforts of The Convention on the Conservation of Migratory Species of Wild Animals (CMS), in particular taking forward Resolutions from COP12 and supporting the Strategic Plan for Migratory Species 2015-2023. Specifically, this includes scientific work relevant to:

**UNEP/CMS/Resolution 12.7: The Role of Ecological Networks in the Conservation of Migratory Species** acknowledges IBAs as 'the most comprehensive ecological networks of internationally important sites for any group of migratory species'. GOBI's work, through BirdLife International, ensures that IBAs inform marine protected area proposals and regional integrated ocean planning. The Resolution also welcomes GOBI's review of the relevance of migratory species to the CBD's ecologically or biologically significant marine areas (EBSAs).

**UNEP/CMS/Resolution 12.13: Important Marine Mammal Areas (IMMAs)** recognises IMMAs as an advisory, expert-based classification, complementing and contributing to the CBD's EBSA process. GOBI has supported a series of regional workshops organised by IUCN Marine Mammal Task Force to identify IMMAs, select IMMA pilot areas and disseminate the results via the web-based IMMA eAtlas.

## Seabird Tracking Database

The Seabird Tracking Database is the largest collection of seabird tracking data in existence. It serves as a central store for seabird tracking data, which supports the identification of Important Bird and Biodiversity Areas (IBAs) that are significant to birds at different life stages.

Over **12 million** data points

**833** datasets

**202** contributors

**119** seabird species

more than **25,000** tracks



➤ [www.seabirdtracking.org](http://www.seabirdtracking.org)

## Important Marine Mammal Areas eAtlas

The eAtlas displays the location of Important Marine Mammal Areas (IMMAs), representing discrete portions of habitat important to marine mammal species. Marine areas meeting IMMA criteria are identified through regional, expert-led workshops and results are independently reviewed before achieving IMMA status.

**114** IMMAs identified to date

**22** candidate IMMAs

A further **110** Areas of Interest

IMMAs cover **4,072,536 km<sup>2</sup>** of ocean

and range from **45 km<sup>2</sup>** to **431,498 km<sup>2</sup>**



➤ [www.marinemammalhabitat.org/immas](http://www.marinemammalhabitat.org/immas)

## Migratory Connectivity in the Ocean (MiCO)

MiCO is developing a system that aggregates and generates actionable knowledge to support worldwide conservation efforts for marine migratory species. Drawing on information published in scientific literature and supplemented by data supplied by a wide network of partners, MiCO's online tool enables innovative visualisation of the locations, pathways and corridors that are important for migratory marine animals worldwide.

**95,632** data points from **999** publications

**382** individuals from **80** species

**62** datasets

**50+** contributors

**23** nodes and **17** corridors for **7** species

➤ [www.mico.eco](http://www.mico.eco)

**UNEP/CMS/Resolution 12.26: Improving Ways of Addressing Connectivity in the Conservation of Migratory Species** recalls the Strategic Plan's emphasis on a migration systems approach, taking into account full migration routes and the functioning of the migration process. It highlights BirdLife's Seabird Tracking Database, and outputs from the MiCO system will have direct relevance for implementing this Resolution.





## The Global Ocean Biodiversity Initiative

The Global Ocean Biodiversity Initiative is an international partnership of organisations committed to advancing the scientific basis for conserving biological diversity in the marine environment. In particular, GOBI contributes expertise, knowledge and data to support the Convention on Biological Diversity's efforts to identify ecologically and biologically significant marine areas (EBSAs) by assisting a range of intergovernmental, regional and national organisations to use and develop data, tools and methodologies. GOBI also undertakes research to generate new science that will enhance the value of EBSAs and their utility for promoting environmental protection and management for specific areas of the world's oceans. The intention is ultimately to reduce the rate of biodiversity loss through the application of ecosystem approaches to the management of human activities, and to support the establishment of networks of representative marine protected areas in national and international waters.

The GOBI community is supported by a Secretariat. For more information please contact us:

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