

*The IUCN Red List of Threatened Species: a
review of its role in aiding protected area
network planning, management and
monitoring*



**THE VALUE OF IUCN'S RED LISTS IN PROTECTED AREA
PLANNING AND MONITORING
IUCN SPECIES SURVIVAL COMMISSION AND
IUCN COMMISSION ON ECOSYSTEM MANAGEMENT**

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The Challenge of the 2020 Targets

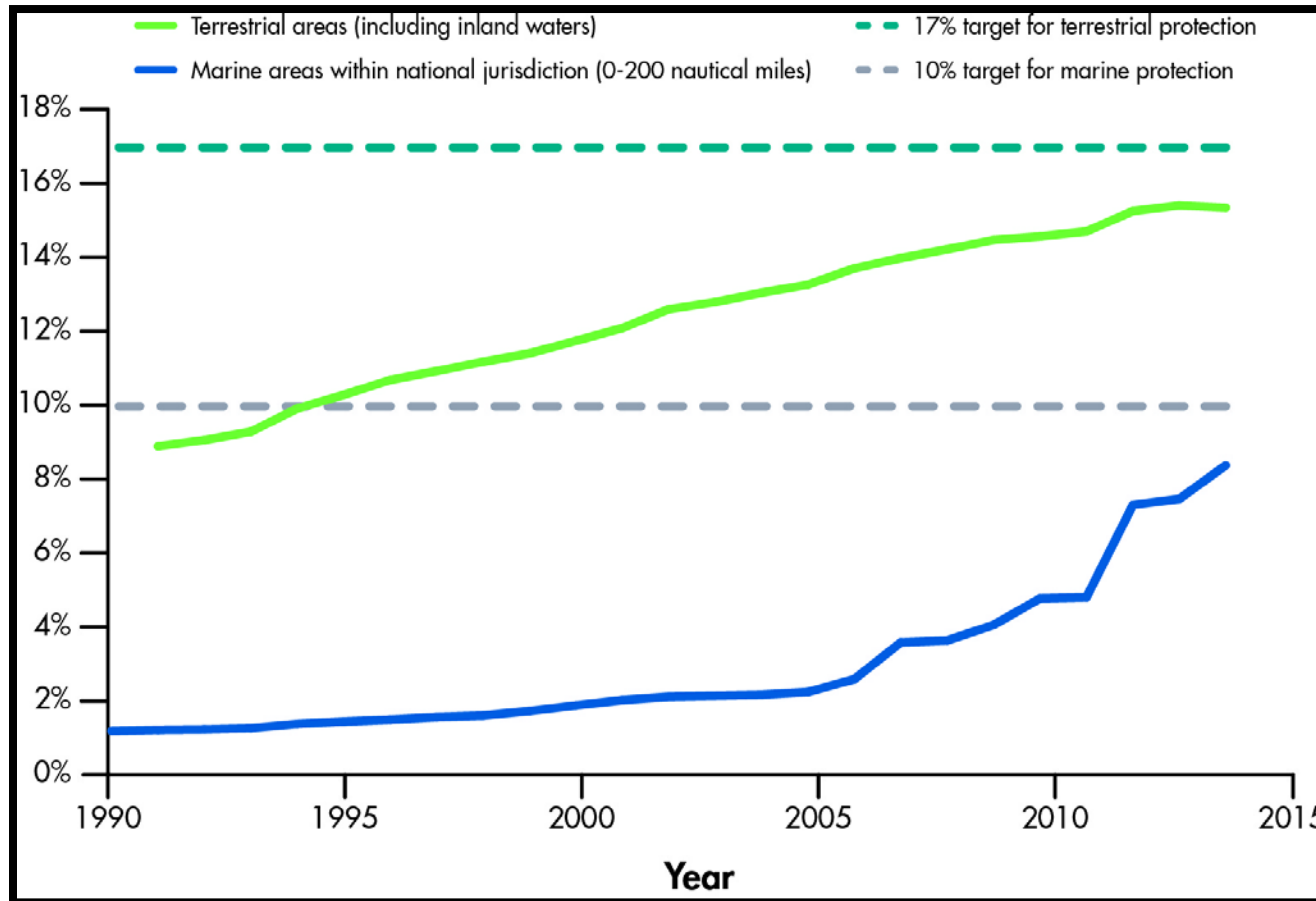


- ***Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity***
 - **Target 11**

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
 - **Target 12**

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

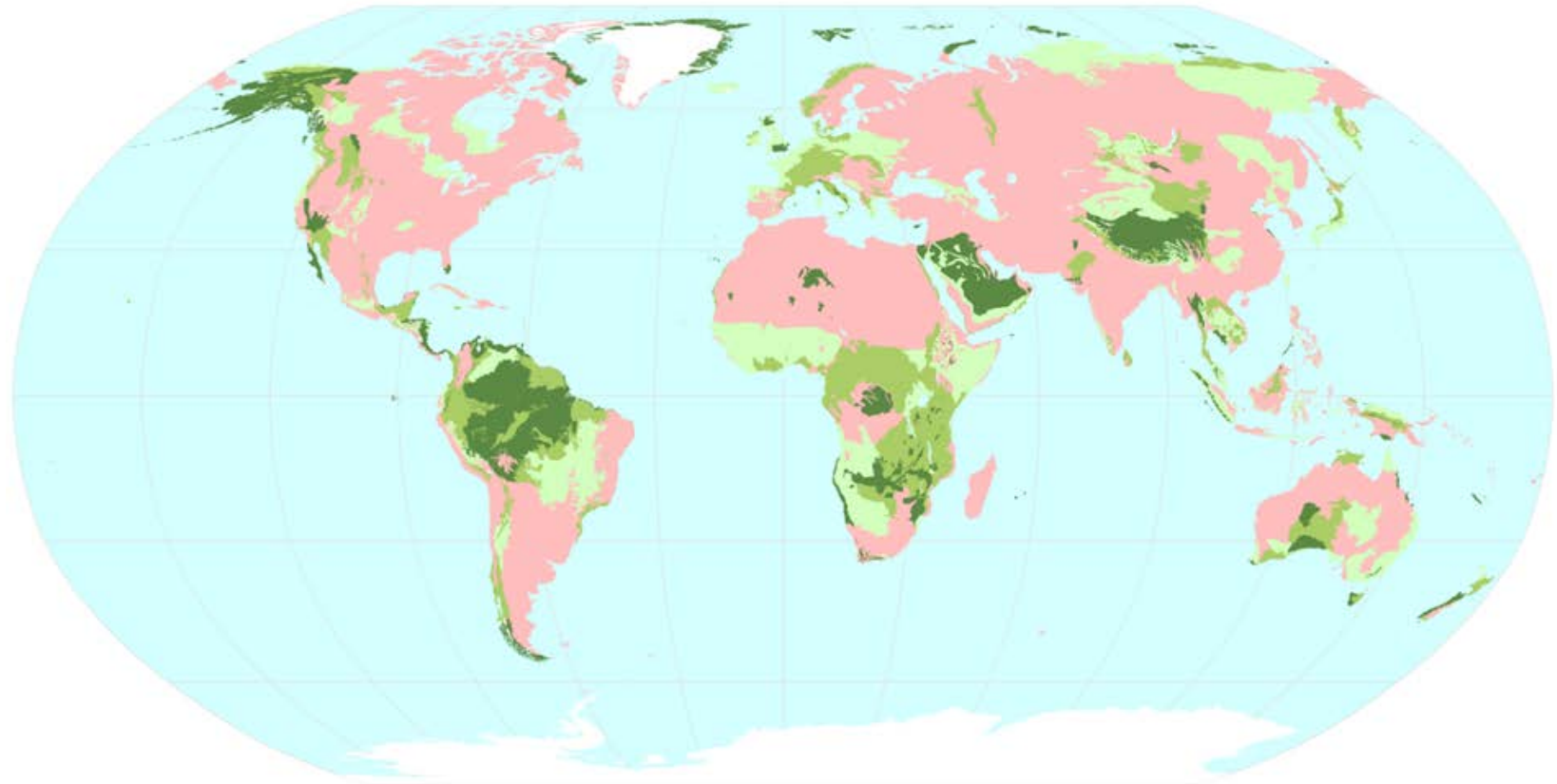
Coverage of protected areas has increased to 15.4% in 2014 for terrestrial and inland waters. In the seas, 8.4% of all marine area under national jurisdiction and 10.9 % of all coastal waters are covered by protected areas. but global ocean coverage remains low at only 3.4%.



Progress?

Source: UNEP-WCMC (2014). Global statistics from the World Database on Protected Areas (WDPA), August 2014. Cambridge, UK: UNEP- WCMC.

Percentage of each terrestrial ecoregion covered by nationally designated protected areas in 2010 (Antarctic and Greenland ice sheets shown in white). Source: Bertzky et al. 2012



Under 10% 10-17% 17-30% Over 30%

84 terrestrial eco-regions and 137 marine eco-regions still had less than 1% protection in 2010.

Applying the IUCN Red List for Biodiversity Conservation



- *Rodrigues et al. 2004. Nature. Effectiveness of the global protected area network in representing species diversity.*
 - First gap analysis to demonstrate that the global protected area system does not effectively account for biodiversity patterns.
 - Need to develop strategic, focused targets.
- *Rodrigues et al. 2004. Bioscience. Global gap analysis: priority regions for expanding the global protected area network.*
 - Spatial identification of threatened sites of irreplaceable vertebrate biodiversity for conservation prioritization.
- *Rondinini et al. 2005. Conservation Biology. Habitat suitability models and the shortfall in conservation planning for African vertebrates*
 - Effectively modeled IUCN distribution maps allow for detailed spatial analyses of African carnivores and protected areas..
 - Site vulnerability and irreplaceability.

2004 Representation of Gaps

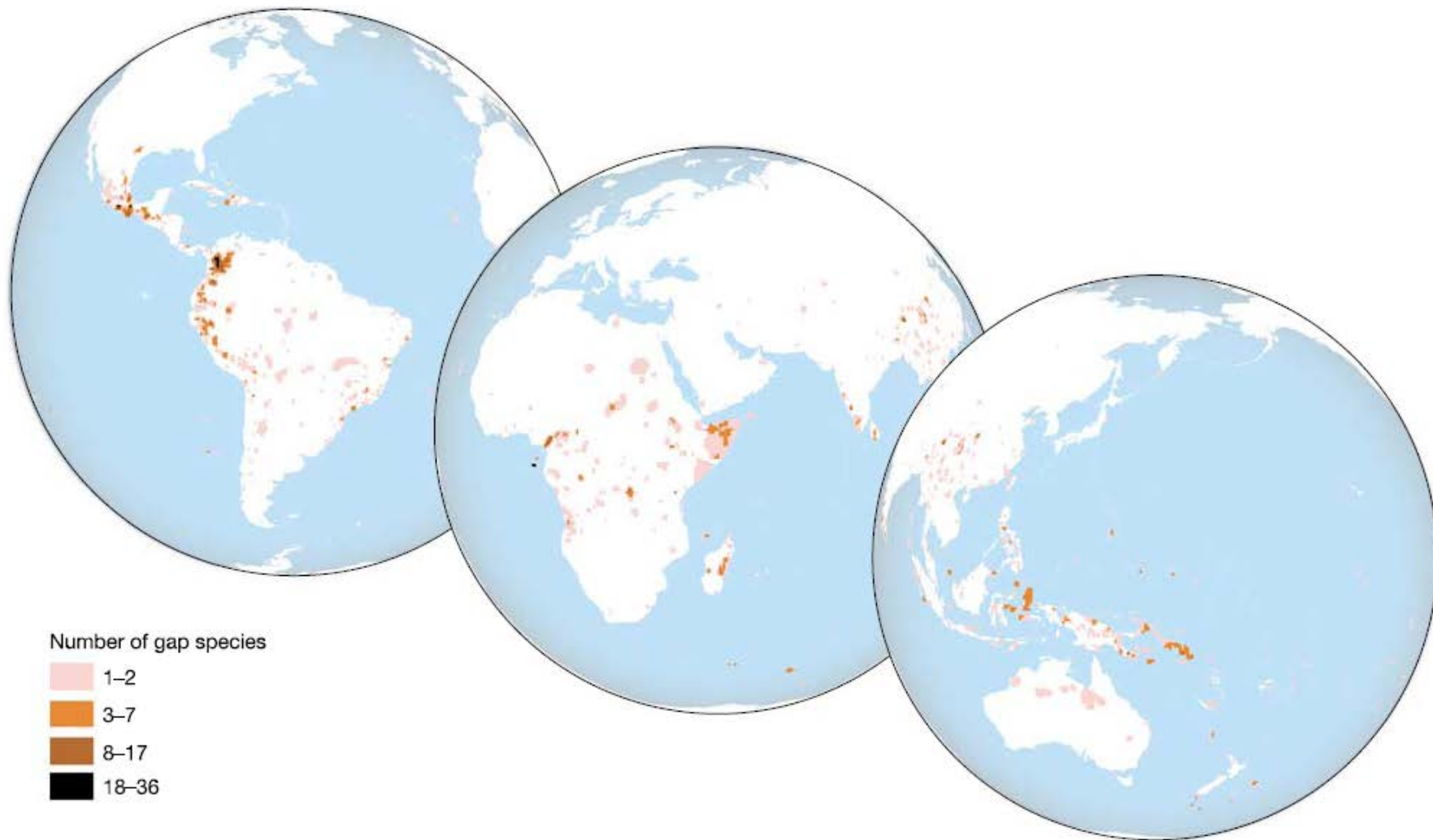
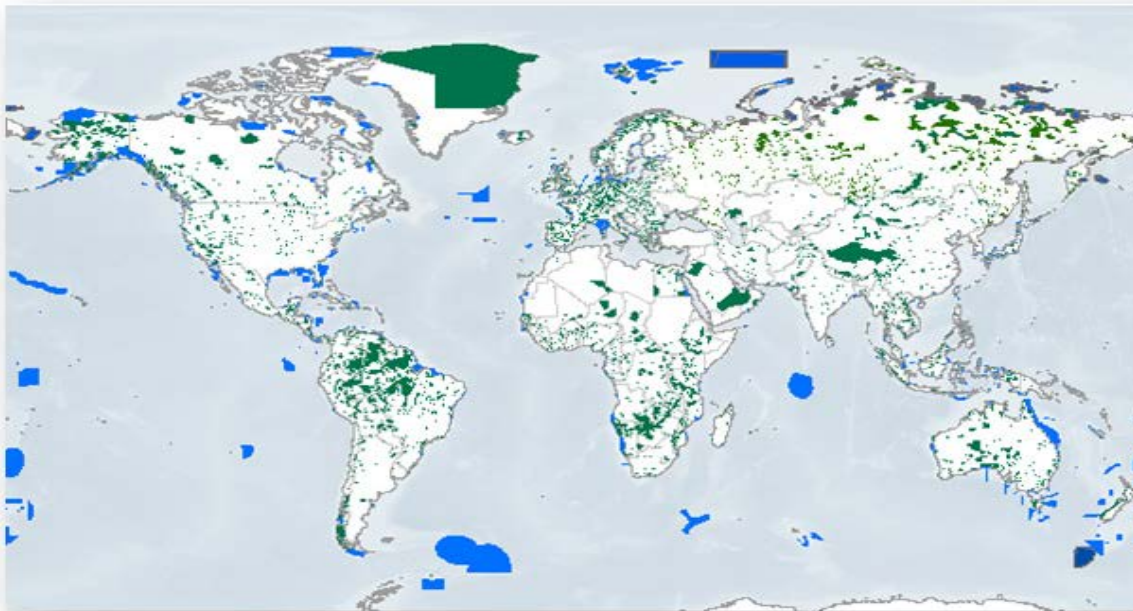


Figure 1 Density map of gap species per half-degree cell, created by overlaying the ranges of all species not covered by any protected area.

Addressing the Gaps in Protected Area Coverage



How to best utilize Red List data sets and spatial information to address these gaps in protected area coverage and attain better biodiversity conservation.



Approaches to Designating Critical Spaces for Conservation



IUCN WCPA Categories

- Ia – Strict Nature Reserve
- Ib – Wilderness Area
- II – National Park
- III – National Monument or Feature
- IV – Habitat/Species Management Area
- V – Protected Landscape/Seascape
- VI – Protected Area with Sustainable Use of Natural Resources

Others, including site based

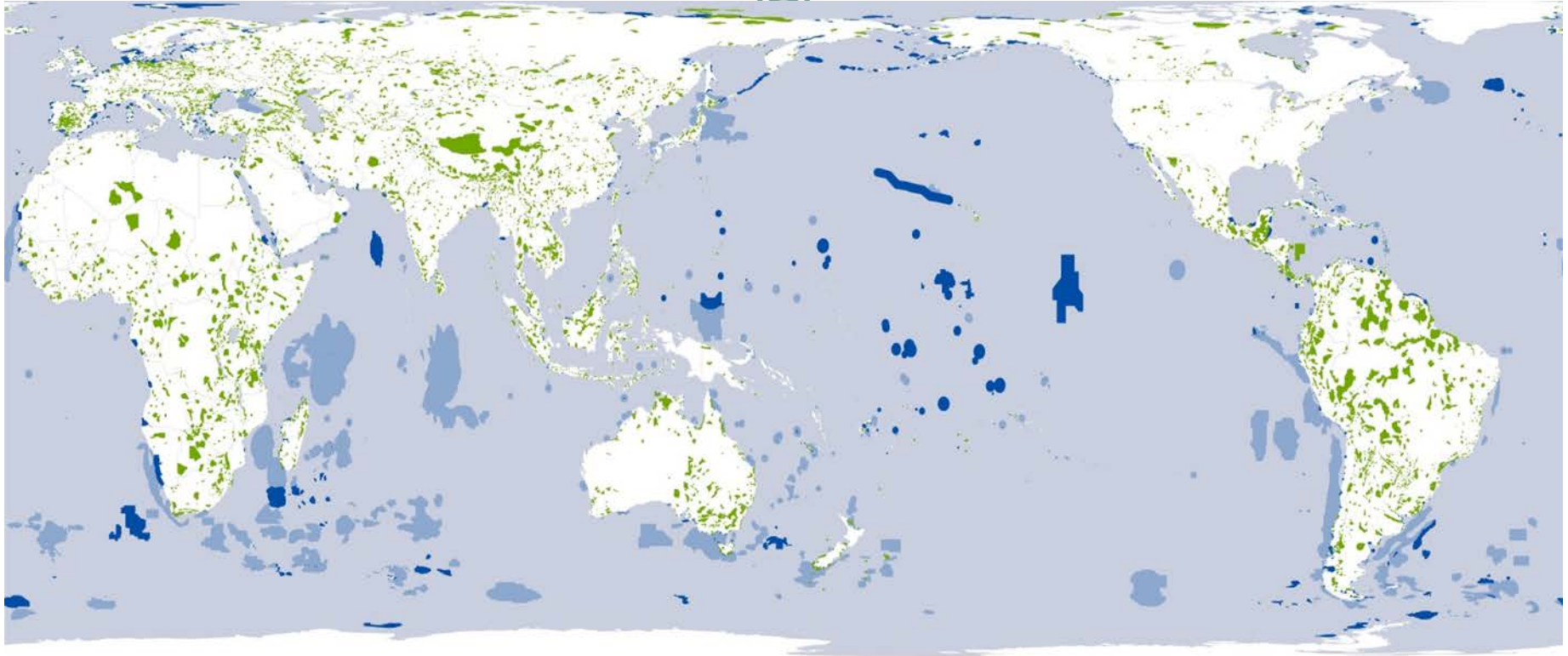
- UNESCO - MAB
- Ramsar
- Alliance for Zero Extinction (AZE)
- Important Bird and Biodiversity Areas (IBA)
- Key Biodiversity Areas (KBA)

Defining Important Bird and Biodiversity Areas



- Sites that are significant for the global persistence of biodiversity, identified using data on birds
- Globally standardized criteria with quantitative thresholds based on populations of globally threatened, restricted-range, biome-restricted, and/or congregatory species
- Two-thirds of IBAs qualify under the threatened species criterion, drawing on IUCN Red List assessments for birds
- Actual or potential management units, i.e. candidates for protected areas
- Identified nationally through multi-stakeholder processes, coordinated by BirdLife International and its Partners

Global Distribution of IBAs



- ✘ Over 12,000 terrestrial, freshwater and marine sites identified in nearly 200 countries & territories worldwide
- ✘ www.birdlife.org/datazone/sites



BIRDLIFE IMPORTANT BIRD
AND BIODIVERSITY AREA

*Four decades of
conservation action*

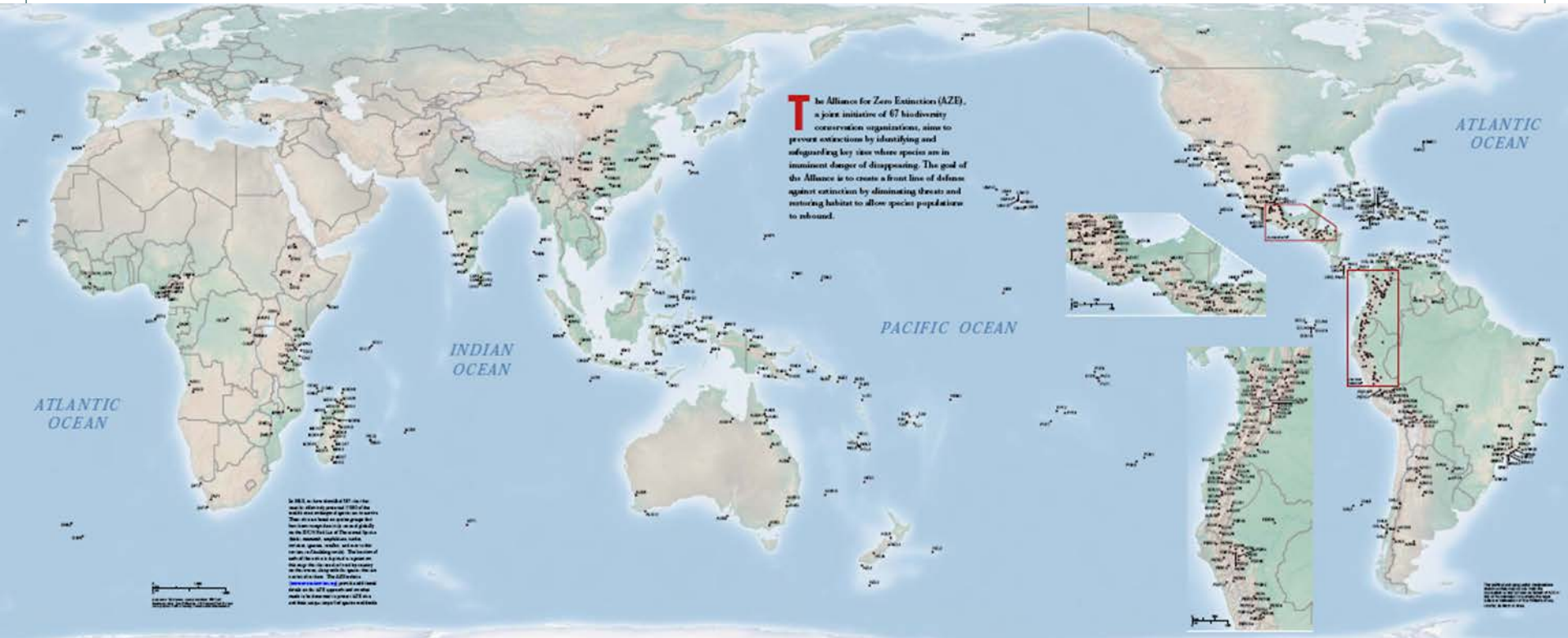
Defining Alliance for Zero Extinction Sites



- Sites holding the last known population of at least one species listed as Endangered or Critically Endangered on the IUCN Red List
- Currently 588 sites protecting 920 species of mammals, birds, reptiles, amphibians, reef-building corals and conifers.
- Sites selected based upon:
 - Endangerment – EN or CR
 - Irreplaceability – Last remaining site
 - Discreteness – Definable boundary

www.zeroextinction.org

Global Distribution of AZE Sites

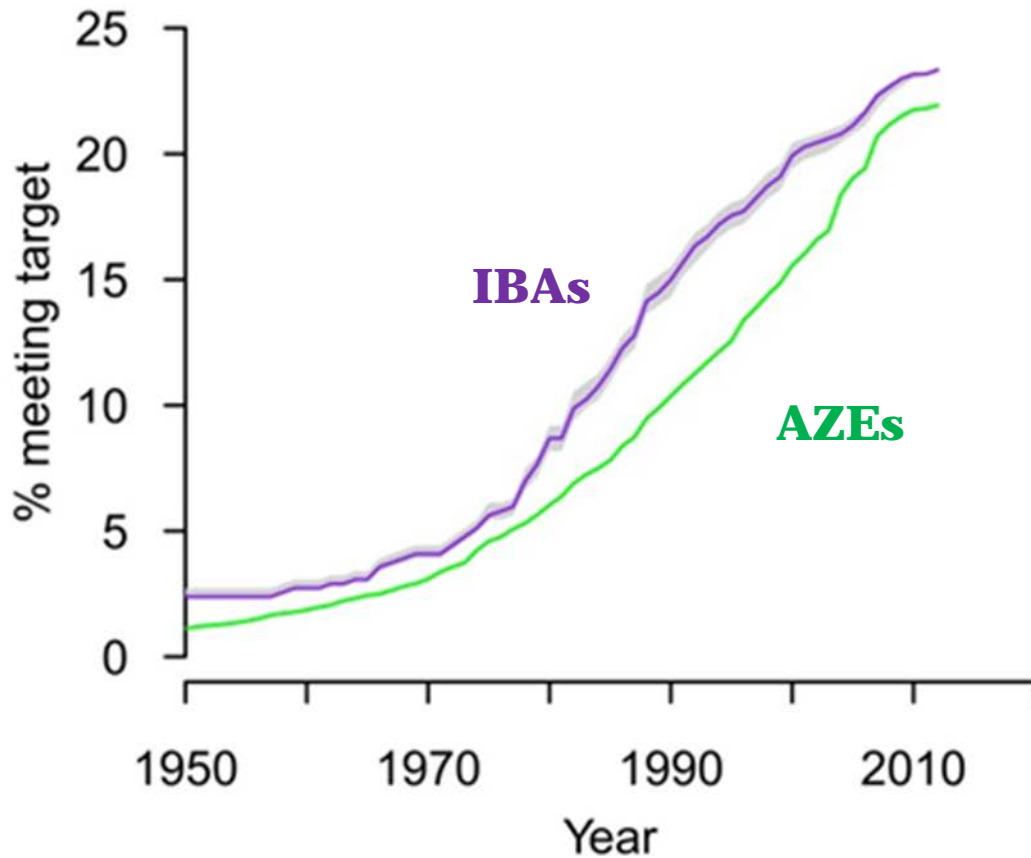


Relevance of IBAs and AZE sites to Target 11



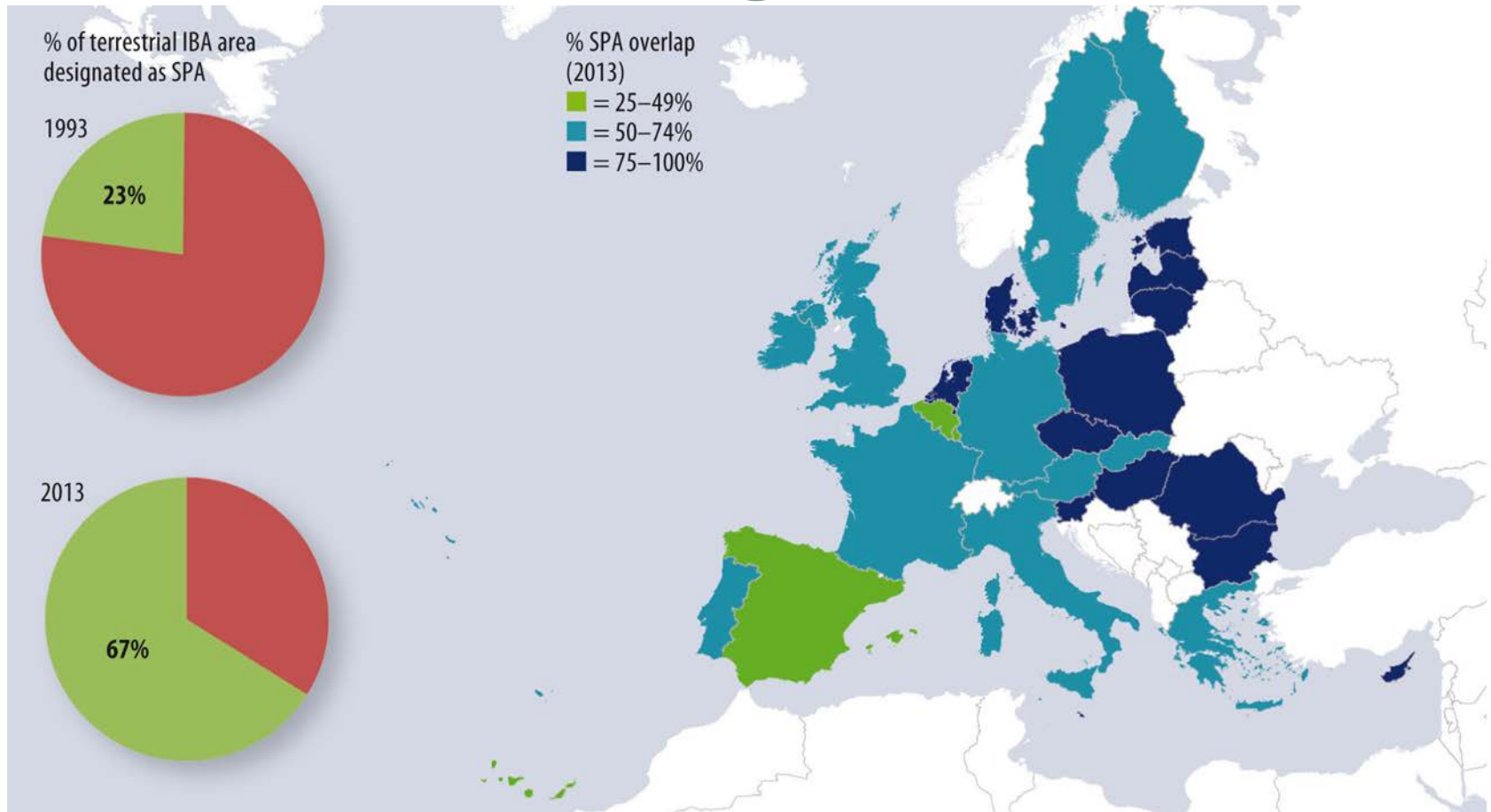
- ✘ Target 11 commits governments to expanding protected areas to cover “areas of particular importance for biodiversity”
- ✘ IBAs and AZEs are the only systematically identified network of such sites
- ✘ But 22% of IBAs and 23% of AZEs remain entirely unprotected (& 35-45% are partially protected), despite growing coverage by protected areas

Relevance of IBAs and AZE Sites to Target 11



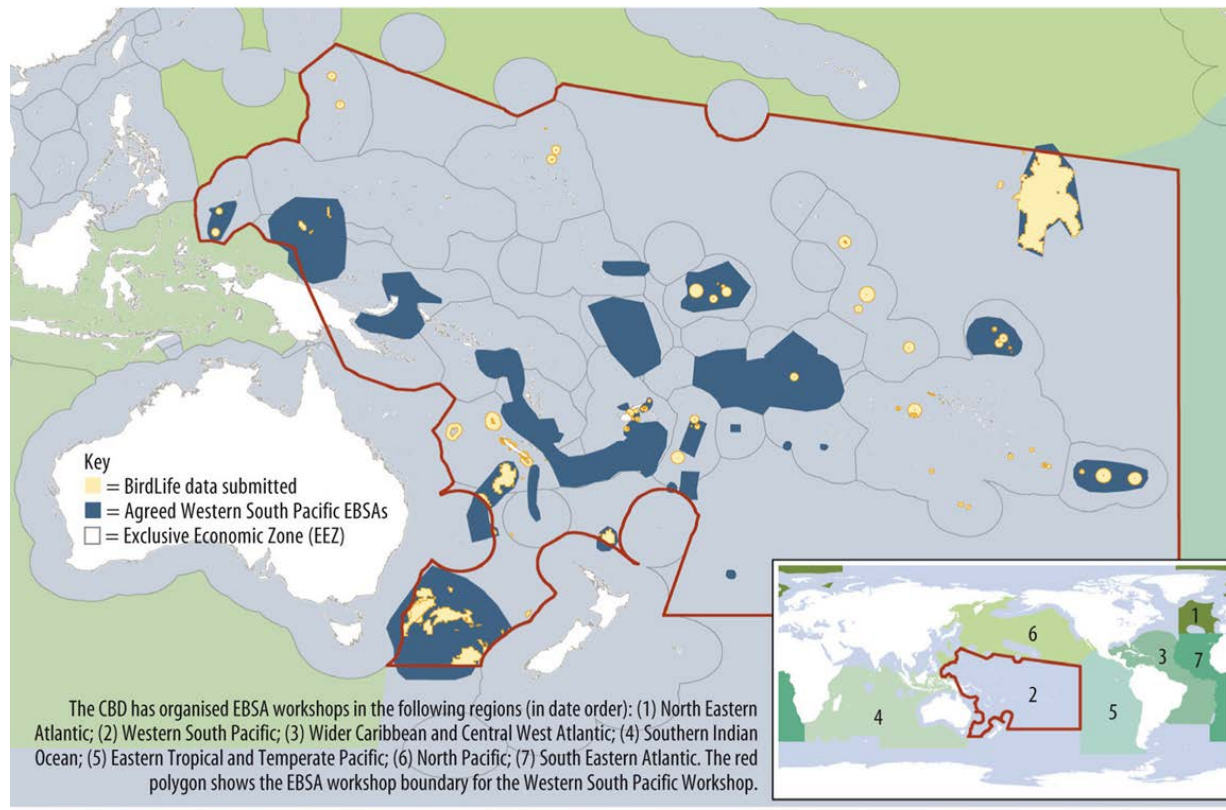
**% of sites
completely
(>98%) covered
by protected
areas**

Relevance of IBAs in the European Union



IBA inventories have been widely used by governments to inform the establishment of Special Protection Areas under EU legislation

Relevance of IBAs to EBSAs



Ecologically or Biologically Significant Marine Areas are being identified worldwide through the CBD

IBAs have been very influential in defining EBSAs to date – providing robust data on marine areas of high vulnerability and irreplaceability for seabirds

Key Biodiversity Areas

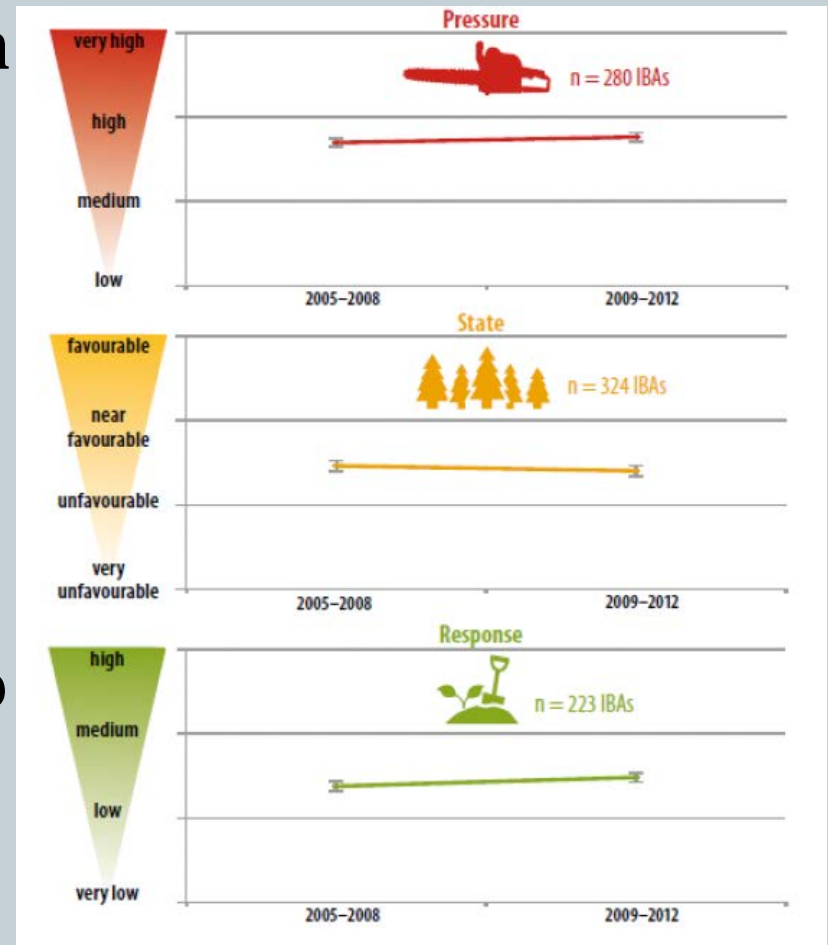


- IUCN are convening a consultation to produce a 'standard' for the identification of Key Biodiversity Areas, building on the criteria and their application for IBAs, AZEs and related approaches, bringing these initiatives under a single umbrella
- KBA Criteria relate to:
 - A. **Threatened Biodiversity**
 - B. Geographically Restricted Biodiversity
 - C. Ecological Integrity
 - D. Biological Processes
 - E. Biodiversity through Quantitative Analysis

Hence the
IUCN Red List
underpins
KBAs

KBA Data Support Protected Area Management

- Data on the species for which KBAs are identified, the threats to them and actions required, can help to set protected area management priorities
- Systematic monitoring is underway at thousands of KBAs (IBAs), providing up to date data on trends in condition of sites, pressures upon them and adequacy of responses



Data from a sample of >200 IBAs in 24 countries



The IUCN Red List provides essential information required to address Target 11 and Target 12

