

SEVEN CHARACTERISTICS OF Effective biodiversity and conservation knowledge products that support (marine) policy

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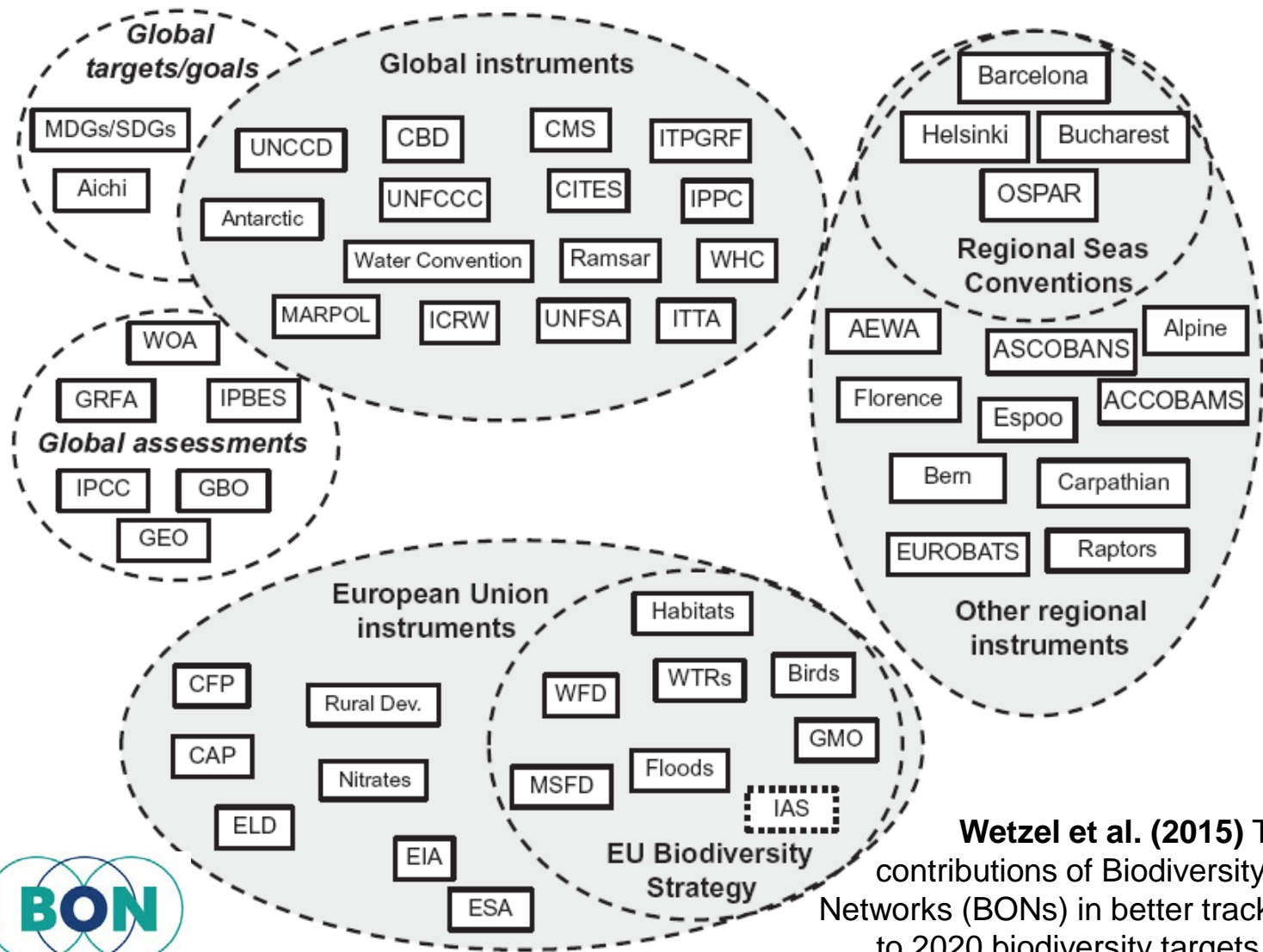
UNEP



WCMC

United Nations Environment Programme
World Conservation Monitoring Centre

A Europe-centric view of biodiversity related policies



Wetzel et al. (2015) The roles and contributions of Biodiversity Observation Networks (BONs) in better tracking progress to 2020 biodiversity targets. *Biodiversity*.



Who are the decision-makers who require biodiversity data?

Local, national, regional and global scale biodiversity data are needed by:

National governments

Policy reporting, spatial planning, natural capital accounting, screening (to site concessions), ...

Inter- & Non-Governmental Organisations

Policy development & implementation, assessments (e.g. IPBES), indicators & targets (e.g. Aichi, SGD), spatial conservation planning, ...

Corporate sector

Screening (concession bidding), Environmental Impact Assessment, ...

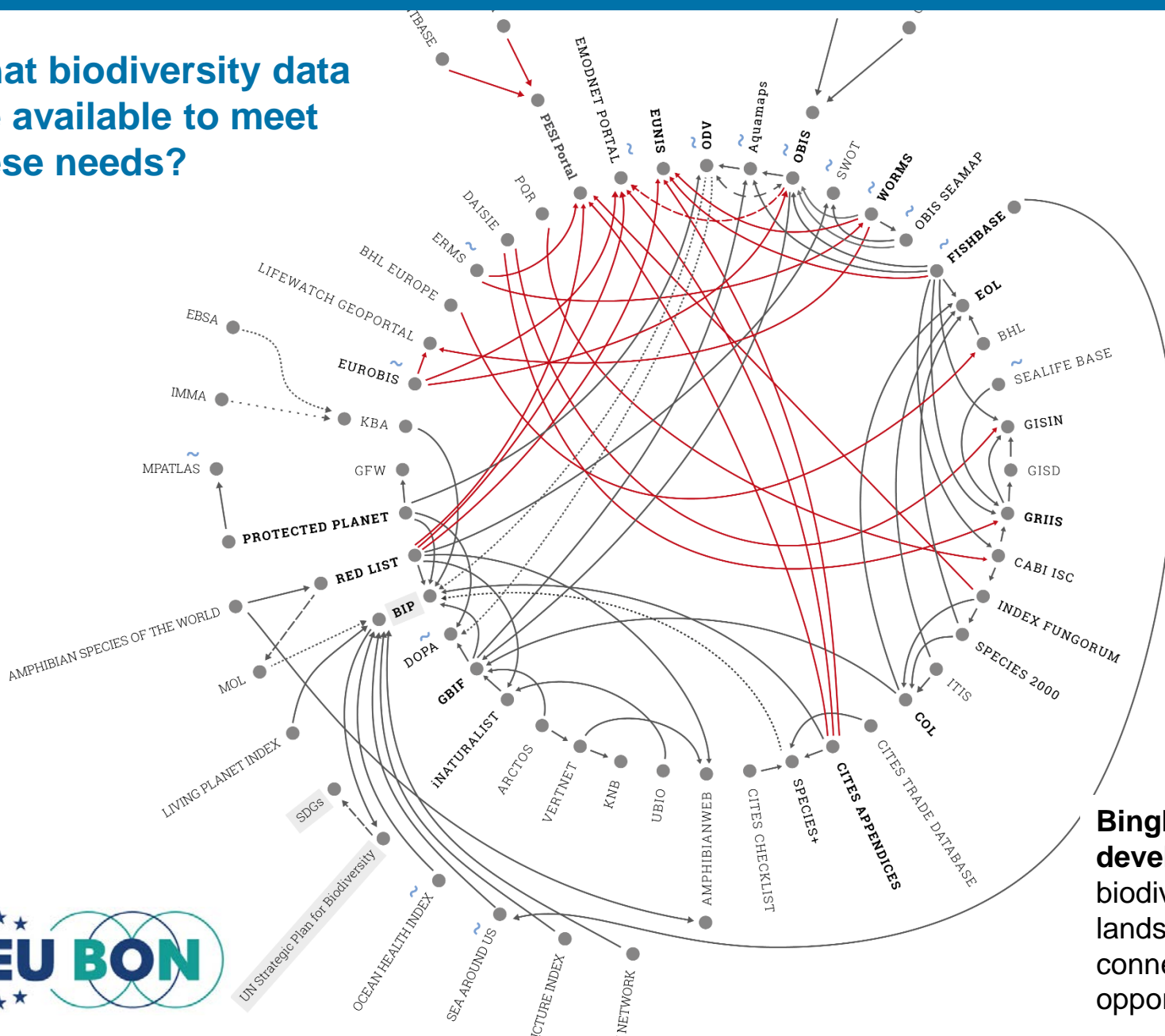
Research bodies

Mapping, species distribution modelling, blue carbon assessment, ecosystem service valuation, protected area design...



Despot-Belmonte *et al.* (2017) Biodiversity data provision and decision-making – addressing the challenges. *Research Ideas and Outcomes* 3: e12165.

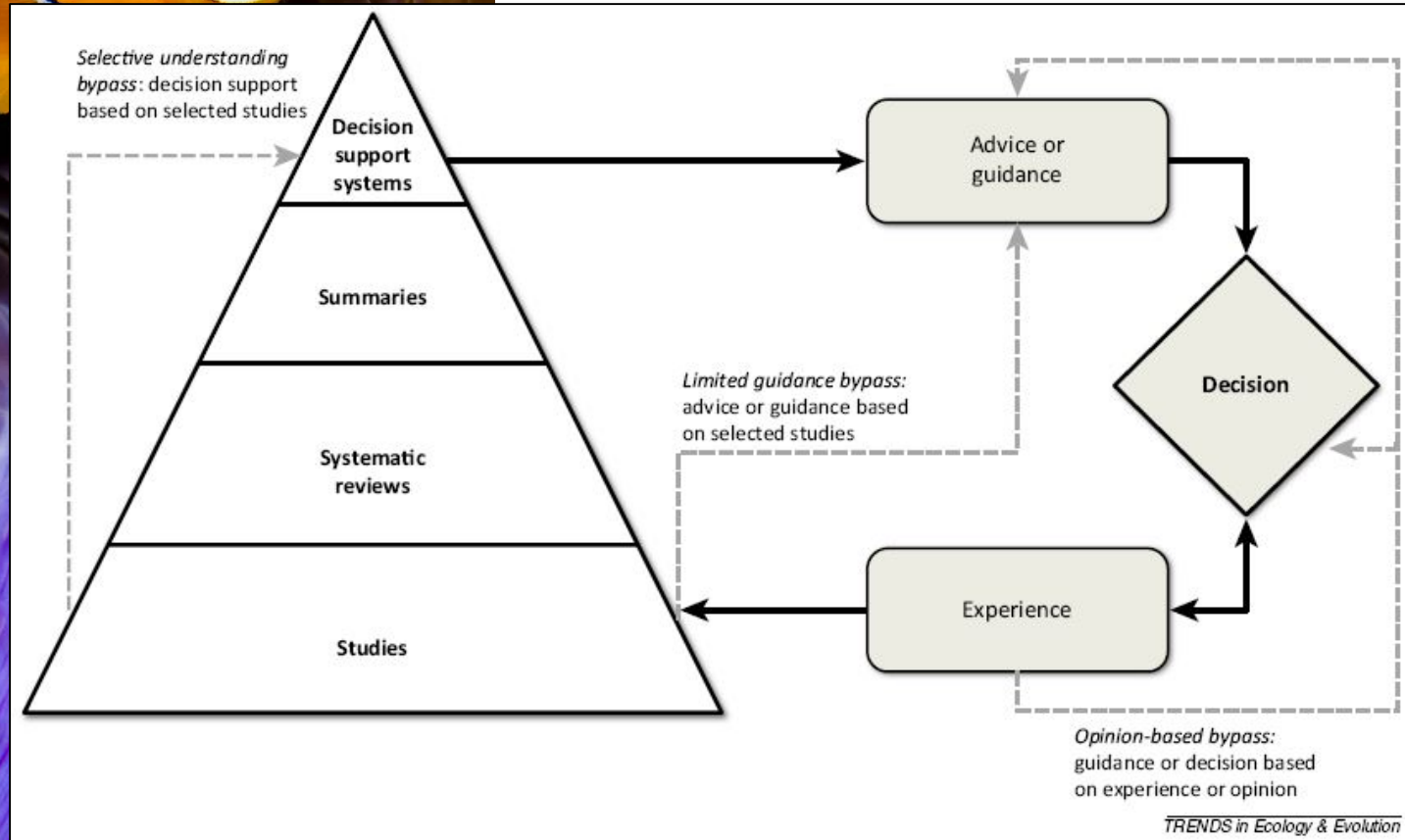
What biodiversity data are available to meet these needs?



Bingham *et al.* (in development) The biodiversity informatics landscape: elements, connections and opportunities.



Review of 'blueprints' of effective biodiversity and conservation knowledge products



Credit: Dan Exton

Dicks *et al.* (2014) Organising evidence for environmental management decisions: a '4S' hierarchy. *Trends in Ecol and Evol*

Search a protected area



WDPA Dataset

Welcome to Species+

Bringing you authoritative information on taxonomy, legislation, distribution and trade in MEA-listed species. [Learn more.](#)

Search for Species

Search for CITES Documents ^{new}

CITES CMS

Species, higher taxon, synonym or common name...

SEARCH

LOCATIONS

Amendments to CITES listings have been made following changes adopted at the Seventeenth meeting of the Conference of the Parties to CITES. The updated Appendices are available here: <https://cites.org/eng/app>

DOWNLOAD SPECIES LISTS

1 Clear policy mandate, recognition, and/or use in indicators or national government processes.



Global Biodiversity Information Facility

Free and Open Access to Biodiversity Data

712,579,437
OCCURRENCES

1,643,948
SPECIES

31,609
DATASETS

872
DATA PUBLISHERS

Sharing biodiversity data for re-use

[Learn about GBIF](#)

Providing evidence for research and decisions

[Using data through GBIF](#)

Collaborating as a global community

[Current Participants](#)



The IUCN Red List of Threatened Species™

2016-3

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[Home](#) » [Gadus morhua](#) (Atlantic Cod, Cod, Codling, Haberdine, Kil'din Cod)



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Gadus morhua

<http://dx.doi.org/10.2305/IUCN.UK.1996.RLTS.T8784A12931575.en>

[Download](#)

NOT EVALUATED (NE) DATA DEFICIENT (DD) LEAST CONCERN (LC) NEAR THREATENED (NT) **VULNERABLE (VU)** ENDANGERED (EN) CRITICALLY ENDANGERED (CR) EXTINCT IN THE WILD (EW)

VIEW MAP

[Summary](#) [Classification Schemes](#) [Images & External Links](#) [Bibliography](#) [Full Account](#)



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Weatherdon et al. (2017), *In review*.



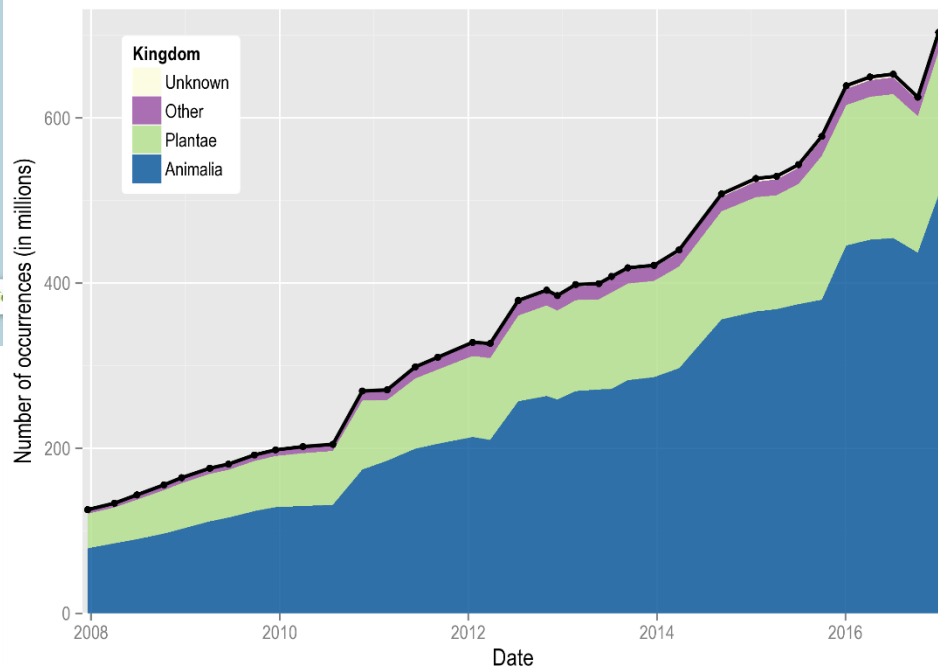
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2 Establish networks of collaborators, experts, and/or monitoring sites.

>500 data providers
>230,000 records
>230 countries
2,500 WCMA specialists

Protected Planet
www.protectedplanet.net

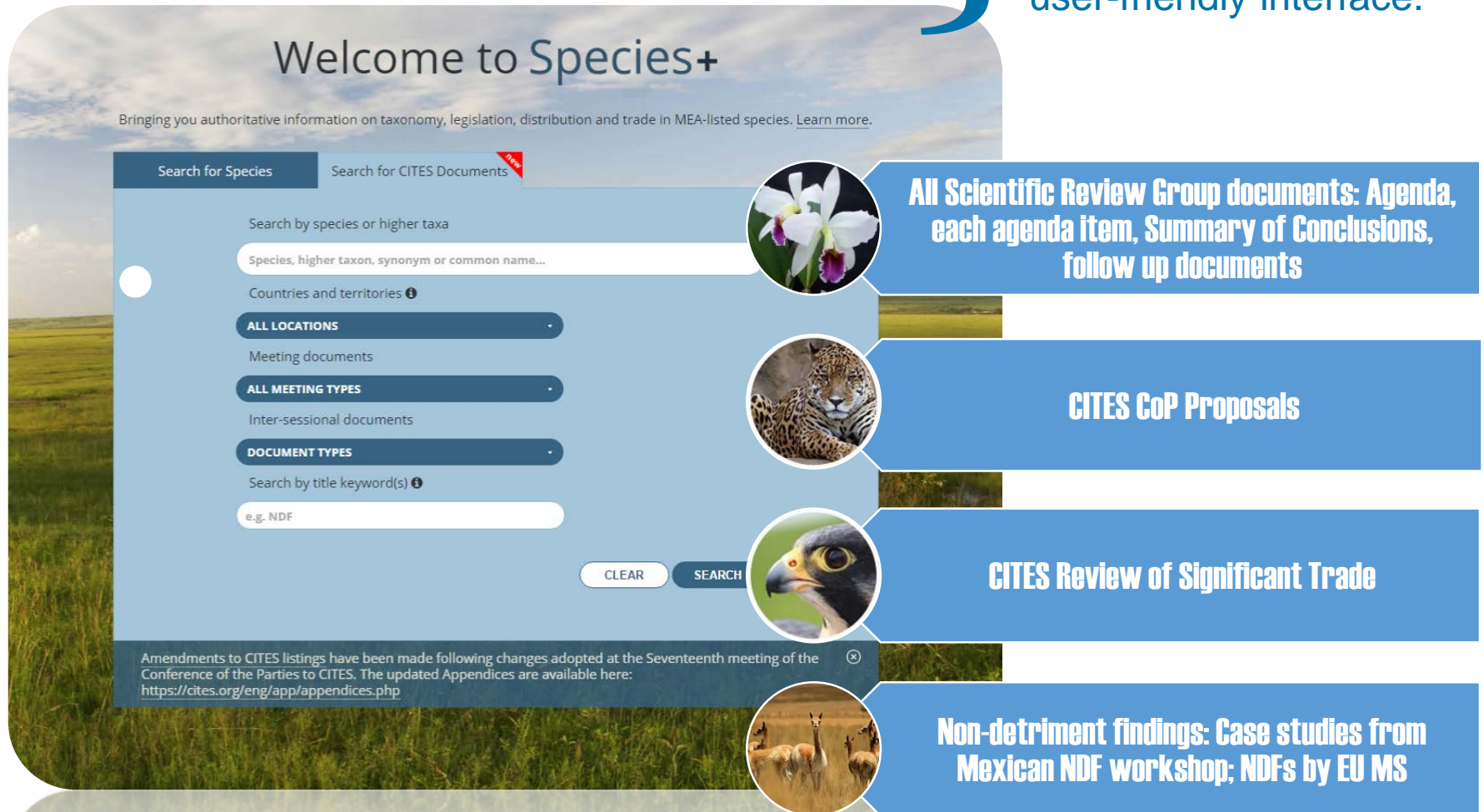
Species occurrence records accessible through GBIF over time



GBIF
www.gbif.org

>712 million occurrences
>1.6 million species
>31,000 datasets
>850 data publishers

3 Iterative co-design of a user-friendly interface.



The screenshot shows the 'Welcome to Species+' page. It features a search bar with tabs for 'Search for Species' and 'Search for CITES Documents'. Below the search bar are filters for 'Species, higher taxon, synonym or common name...', 'Countries and territories' (with a dropdown for 'ALL LOCATIONS'), 'Meeting documents' (with a dropdown for 'ALL MEETING TYPES'), and 'Inter-sessional documents'. There is also a 'DOCUMENT TYPES' dropdown and a 'Search by title keyword(s)' field with the example 'e.g. NDF'. A 'CLEAR' button and a 'SEARCH' button are at the bottom of the search section. A footer note mentions amendments to CITES listings. Five circular callouts with animal images point to specific features: an orchid for 'All Scientific Review Group documents: Agenda, each agenda item, Summary of Conclusions, follow up documents'; a leopard for 'CITES CoP Proposals'; a falcon for 'CITES Review of Significant Trade'; and guanaco for 'Non-detriment findings: Case studies from Mexican NDF workshop; NDFs by EU MS'.

Welcome to Species+

Bringing you authoritative information on taxonomy, legislation, distribution and trade in MEA-listed species. [Learn more.](#)

Search for Species | Search for CITES Documents

Search by species or higher taxa

Species, higher taxon, synonym or common name...

Countries and territories ⓘ

ALL LOCATIONS

Meeting documents

ALL MEETING TYPES

Inter-sessional documents

DOCUMENT TYPES

Search by title keyword(s) ⓘ

e.g. NDF

CLEAR SEARCH

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All Scientific Review Group documents: Agenda, each agenda item, Summary of Conclusions, follow up documents

CITES CoP Proposals

CITES Review of Significant Trade

Non-detriment findings: Case studies from Mexican NDF workshop; NDFs by EU MS

Source: www.speciesplus.net

4 Standardised, comprehensive and documented methods of data collection, analysis, and provision, with quality assurance.

Quality indicators:

1. Percentage of records with polygon boundaries
2. Percentage of data attributes recorded
3. Percentage of records updated, or confirmed without change in the last five years
4. Percentage of records where the polygon area is within 5% of the area reported

Source: IUCN and UNEP-WCMC (2016). The World Database on Protected Areas (WDPA) [On-line], April 2016, Cambridge, UK: UNEP-WCMC. Available at www.protectedplanet.net



Terrestrial protected areas



Marine and coastal protected areas



Weatherdon et al. (2017), *In review*.



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5 Consistent capacity and succession planning.



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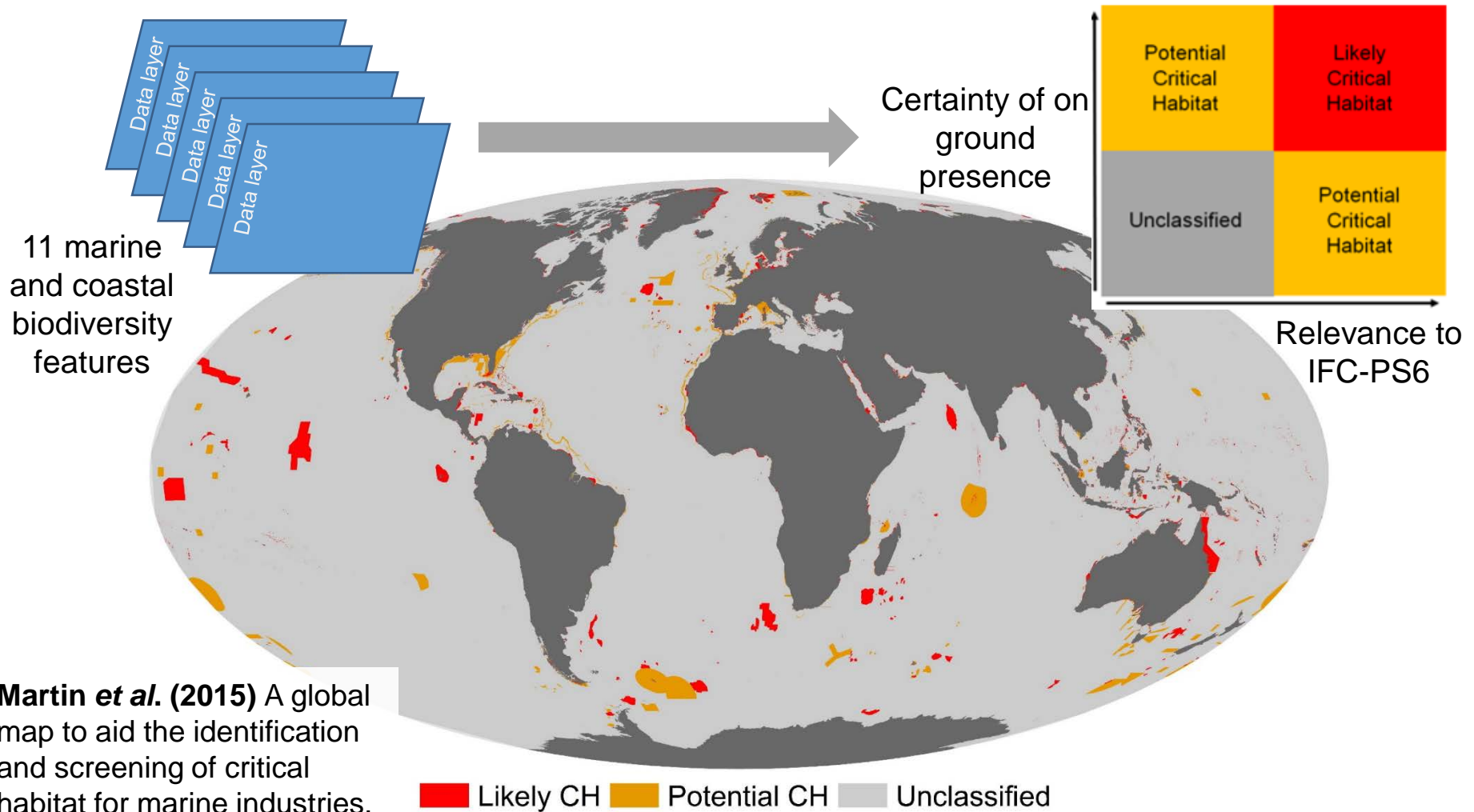
Strategic Plan 2013 - 2020



The IUCN Red List of Threatened Species™



6 Accessible data that are fit-for-purpose, with value-added products that translate data into useful information.



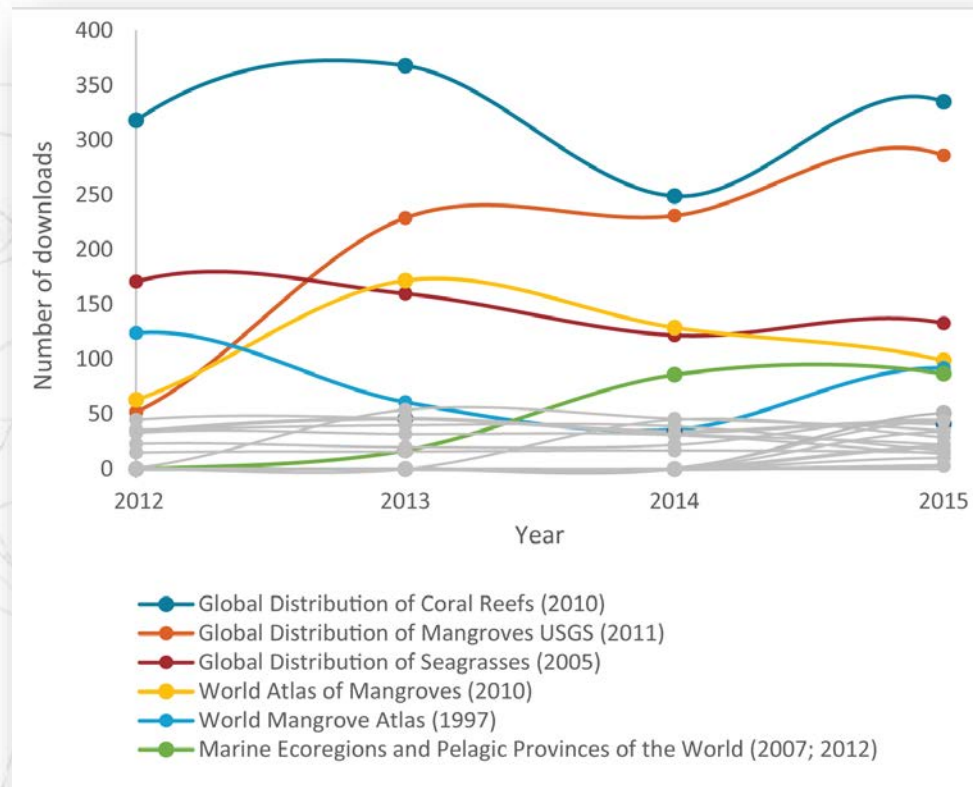
Martin et al. (2015) A global map to aid the identification and screening of critical habitat for marine industries. *Marine Policy* 53: 45-53.

7 Metrics of use collated and reported.

Science Review

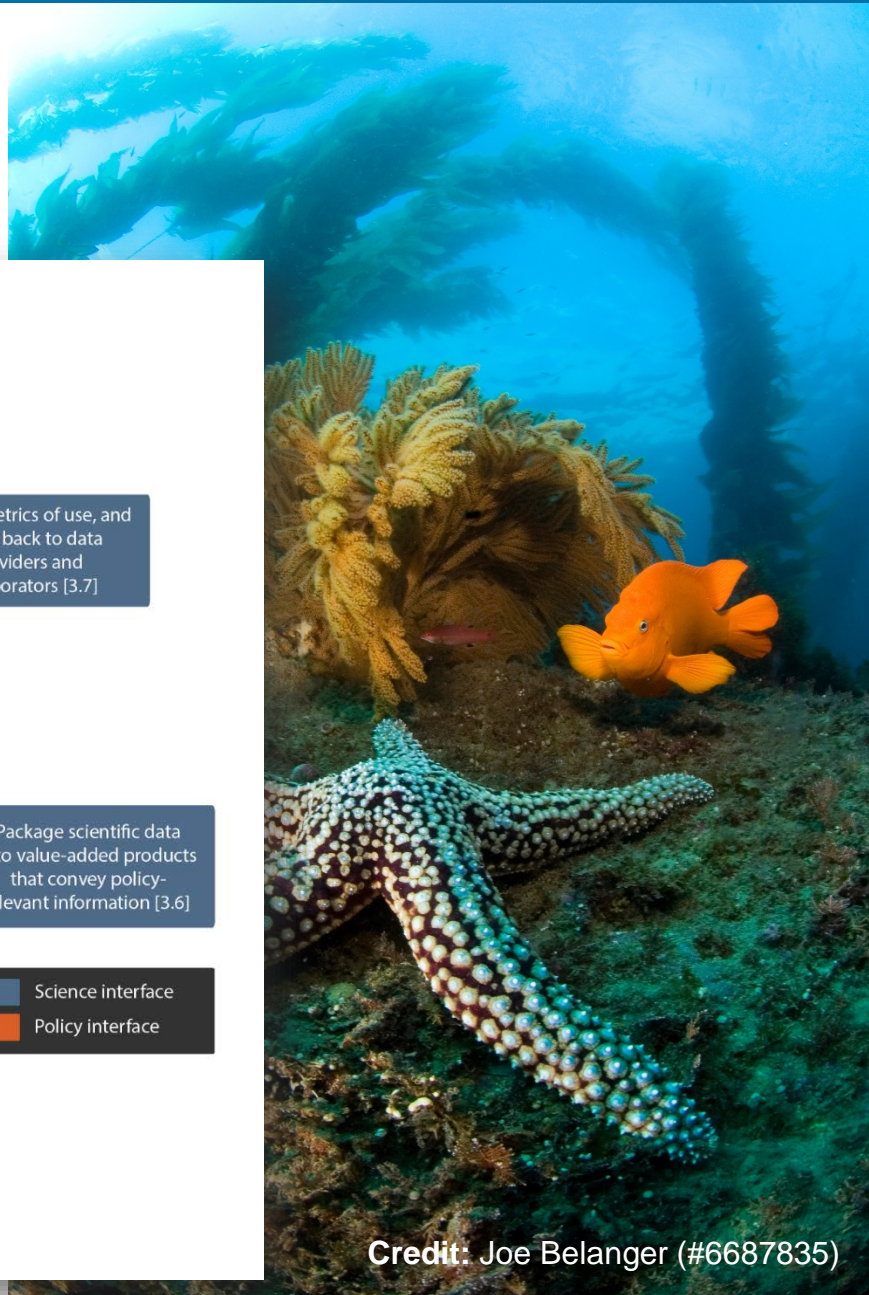
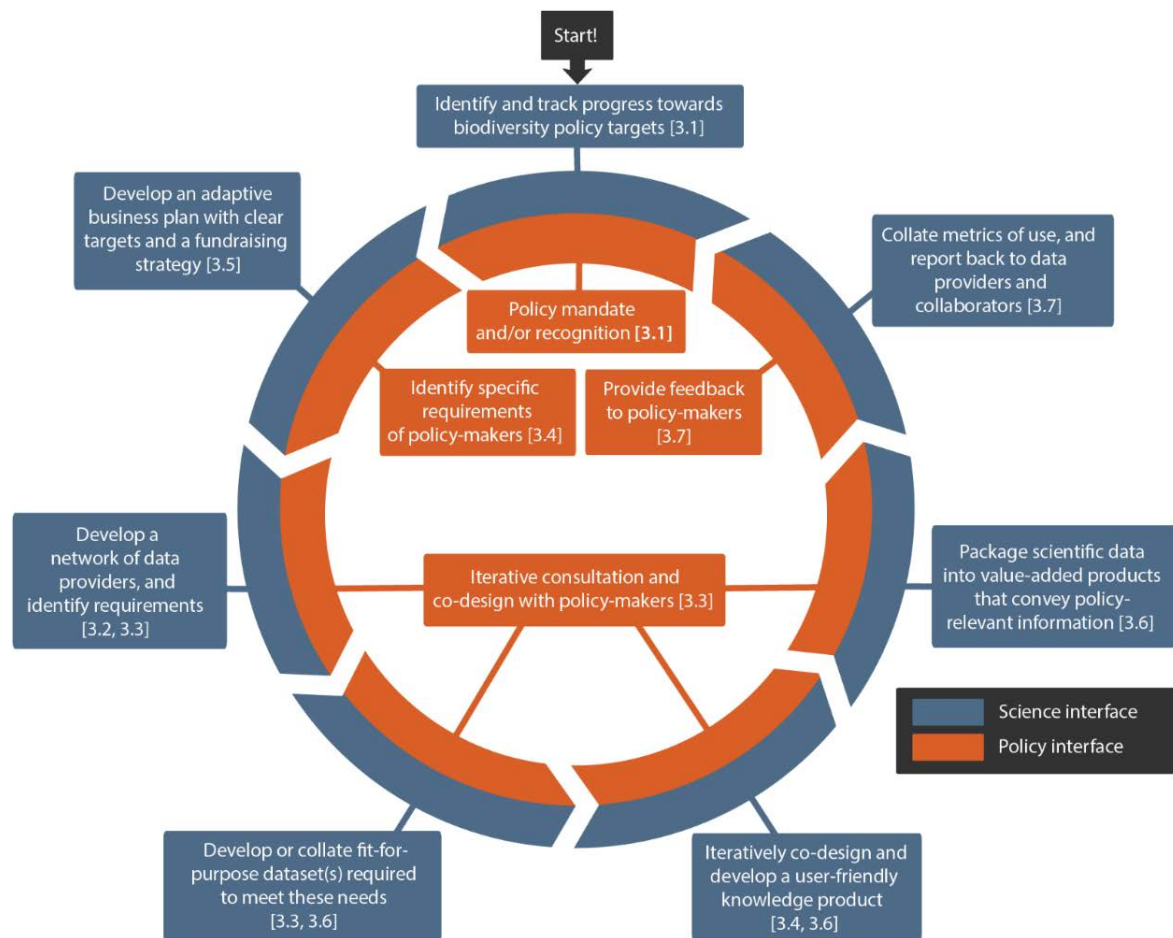
Compiling the year's research uses of data accessed through the Global Biodiversity Information Facility

2016



Biodiversity and conservation knowledge product development cycle

Circular development with ongoing feedback from users on either side of the science-policy interface.



Credit: Joe Belanger (#6687835)

Thank you for listening!



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BID-REX Workshop, Wallonia, Belgium | 22 - 23 February 2017



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United Nations Environment Programme
World Conservation Monitoring Centre

Credit: Holbox