

Accessing & interpreting biodiversity information for high level biodiversity screening

Presenters:

Dr Eugenie Regan, IBAT Manager

Nadine McCormick, Global Business & Biodiversity Programme, IUCN

Moderator:

Bridget John, International Association for Impact Assessment
(bridget@iaia.org)

April 2018

IAIA's Webinars

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- Lost in Time: The Black Hole Between ESIA Completion and Project Implementation
- Understanding Impacts on Vulnerable Populations through Psycho-Social Impact Assessment
- Health Considerations in Impact Assessment
- Resettlement and Impact Assessment – Points of Intersection
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Housekeeping

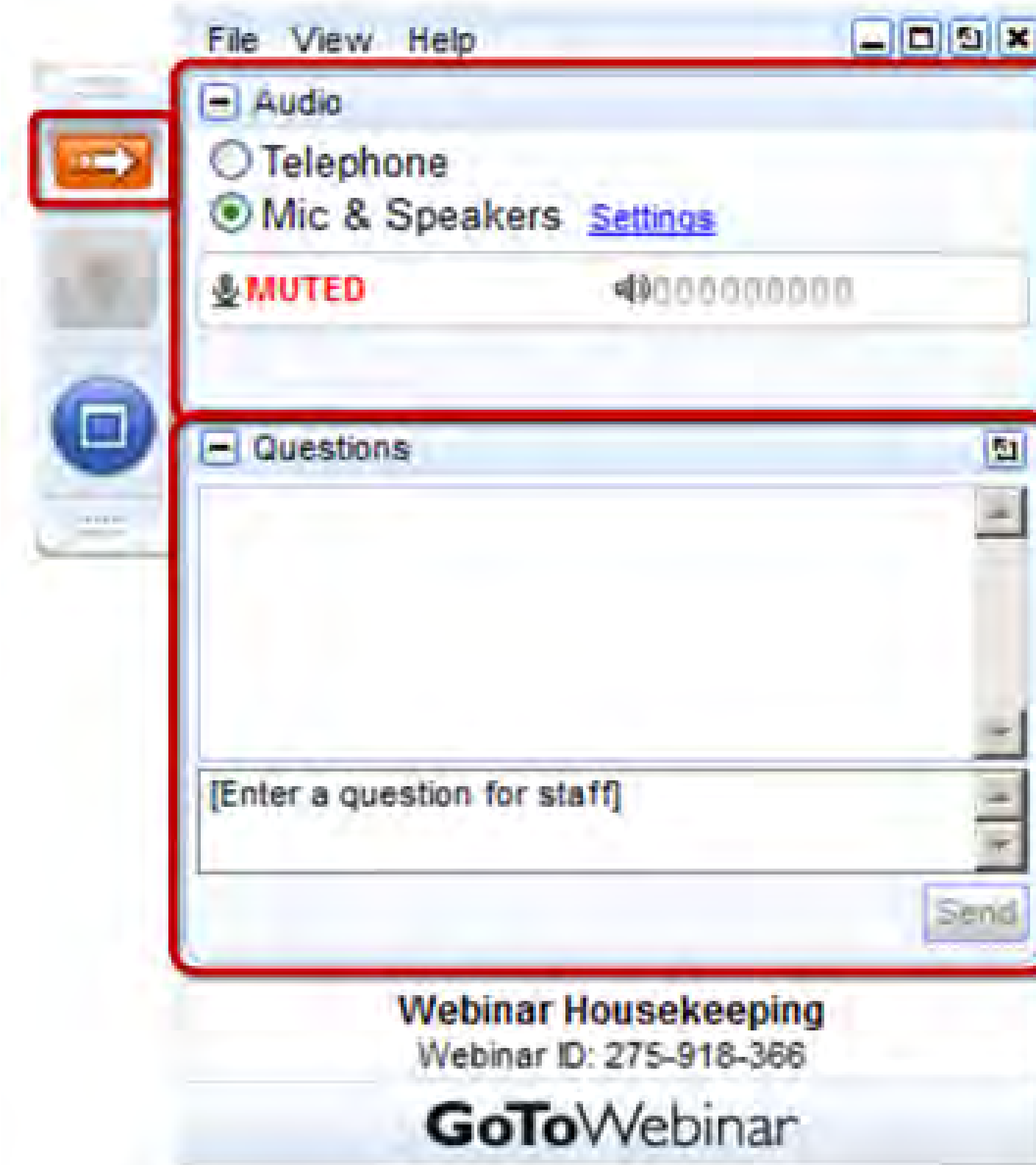
Recording?



Questions?



Slides available?



Accessing & interpreting biodiversity information for high level biodiversity screening

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April 2018

Our questions & your answers:

268 respondents as of yesterday. Thank you!

1. As part of your work, you include information on **protected areas, Key Biodiversity Areas, & Red List of Species.**
2. The tools you use to access these data include: **IUCN, government databases, Protected Planet, Google Earth, GBIF, CONABIO, & SANBI**
3. **How familiar are you with IBAT?** 58% not at all familiar with IBAT, 32% limited familiarity, 10% quite or very familiar

Agenda

1. WHY is biodiversity important to consider
2. HOW to consider biodiversity in project developments
3. ABOUT the new IBAT portal
4. Q&A



Impacts to biodiversity and ecosystem services pose risks to business, including regulatory & reputational.

Over half of delays to oil & gas projects are attributed to non-technical issues, with social conflict over environmental resources being the single biggest factor.



**KNOW YOUR
ENVIRONMENT**

IBAT

Whale Shark
(*Rhincodon typus*)

IUCN Red List - Endangered **EN**



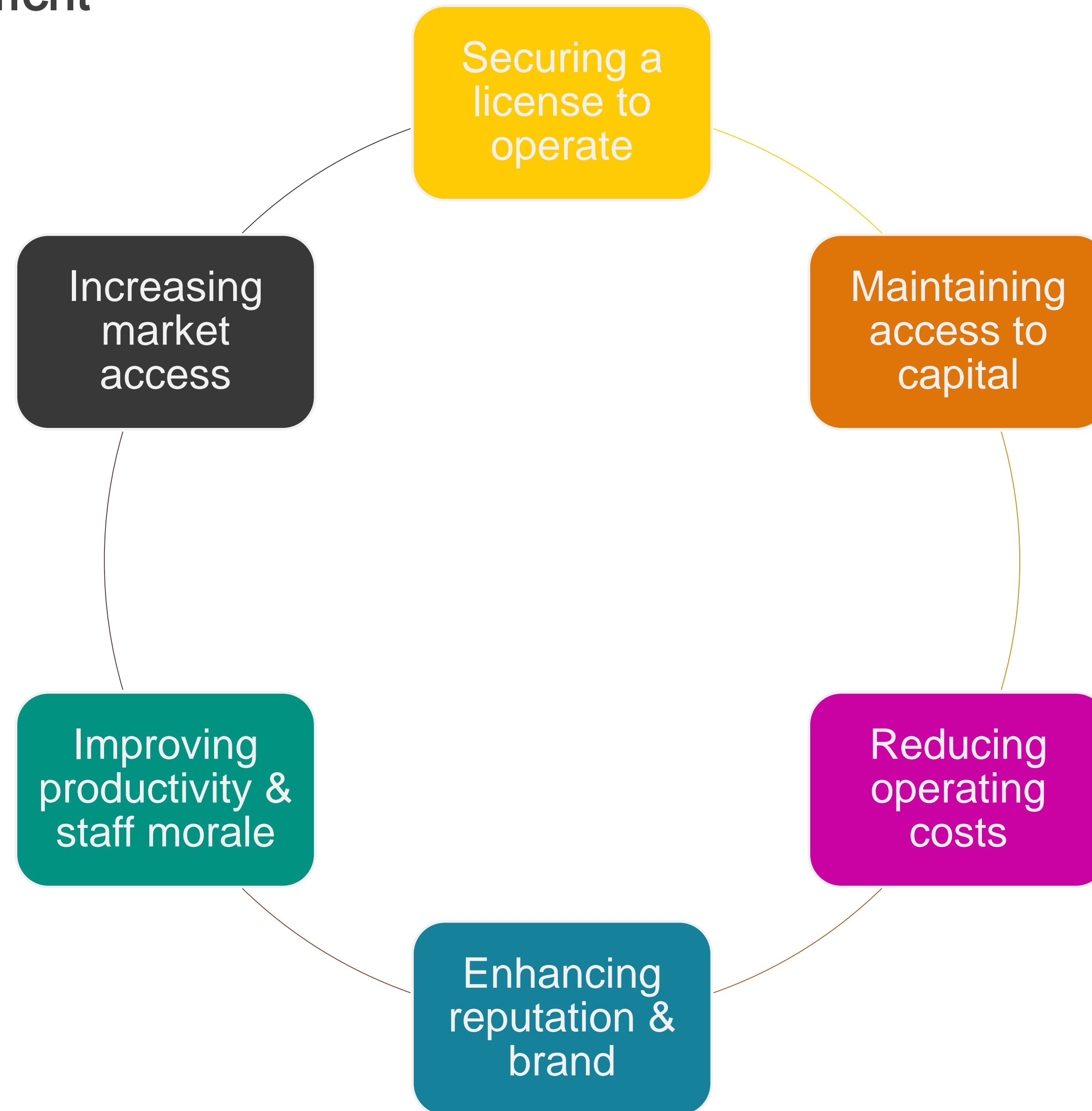
Twenty years of delays in Costa Rica

- A series of delays & mine closures over 20 years were the result of public outcry over impacts to biodiversity at Infinito Gold's Las Crucitas gold mine.
- Protestors were angry about impacts to biodiversity, such as macaws, while successive Costa Rican governments issued and then withdrew open pit mining licences.
- Company losses in investment alone were estimated around USD\$94 million.

Sustainable companies outcompete their competitors

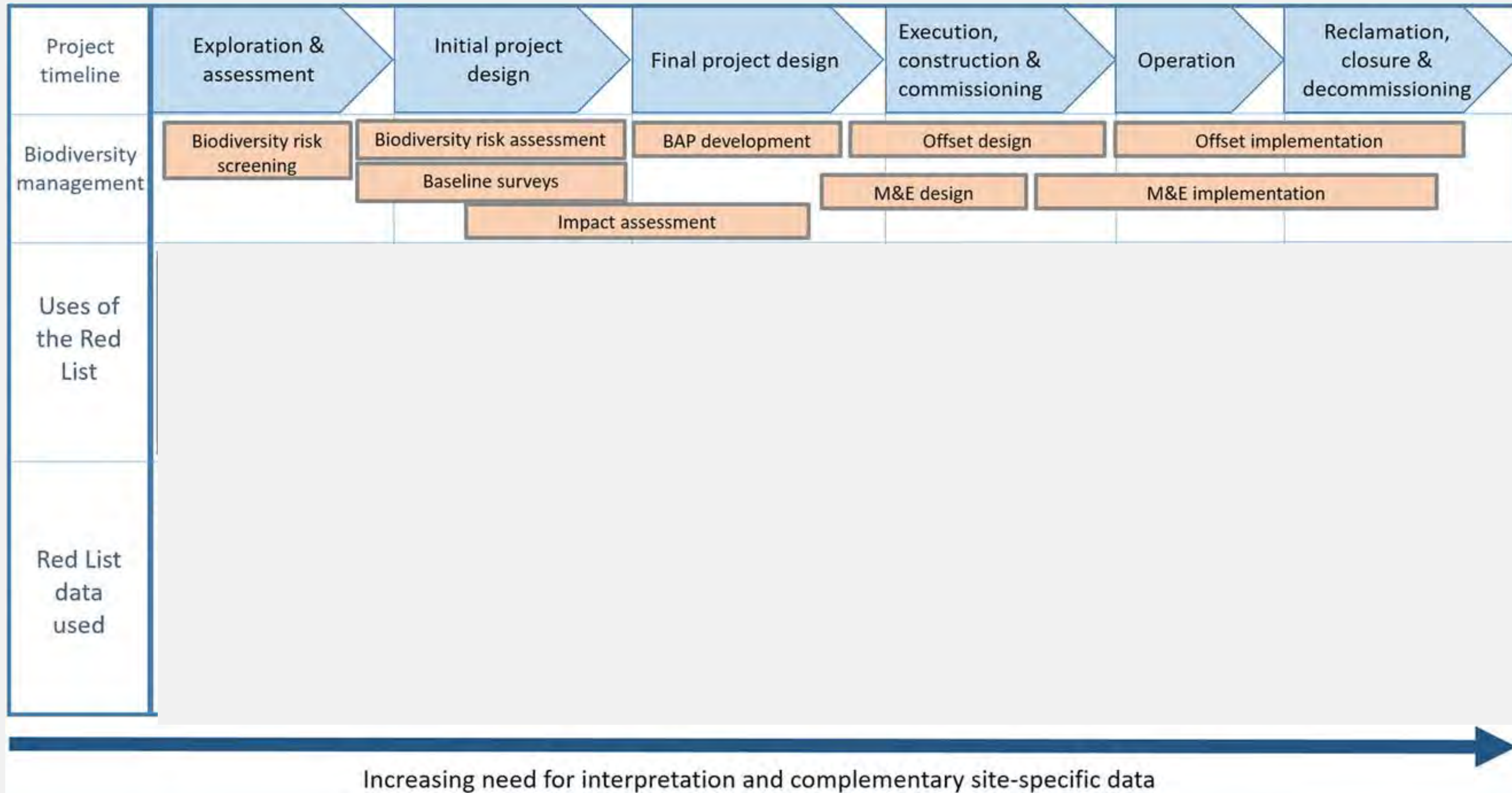
- The Dow Jones Sustainability World Index comprises **global sustainability leaders**.
- For investors, the DJSI is one of the most **significant benchmarks** for measuring the development of **the world's most sustainable companies**.
- Companies with strong sustainability scores **outperform** other companies listed on the DJ World Index.
- **'Protection of biodiversity'** is one of the DJSI criteria.

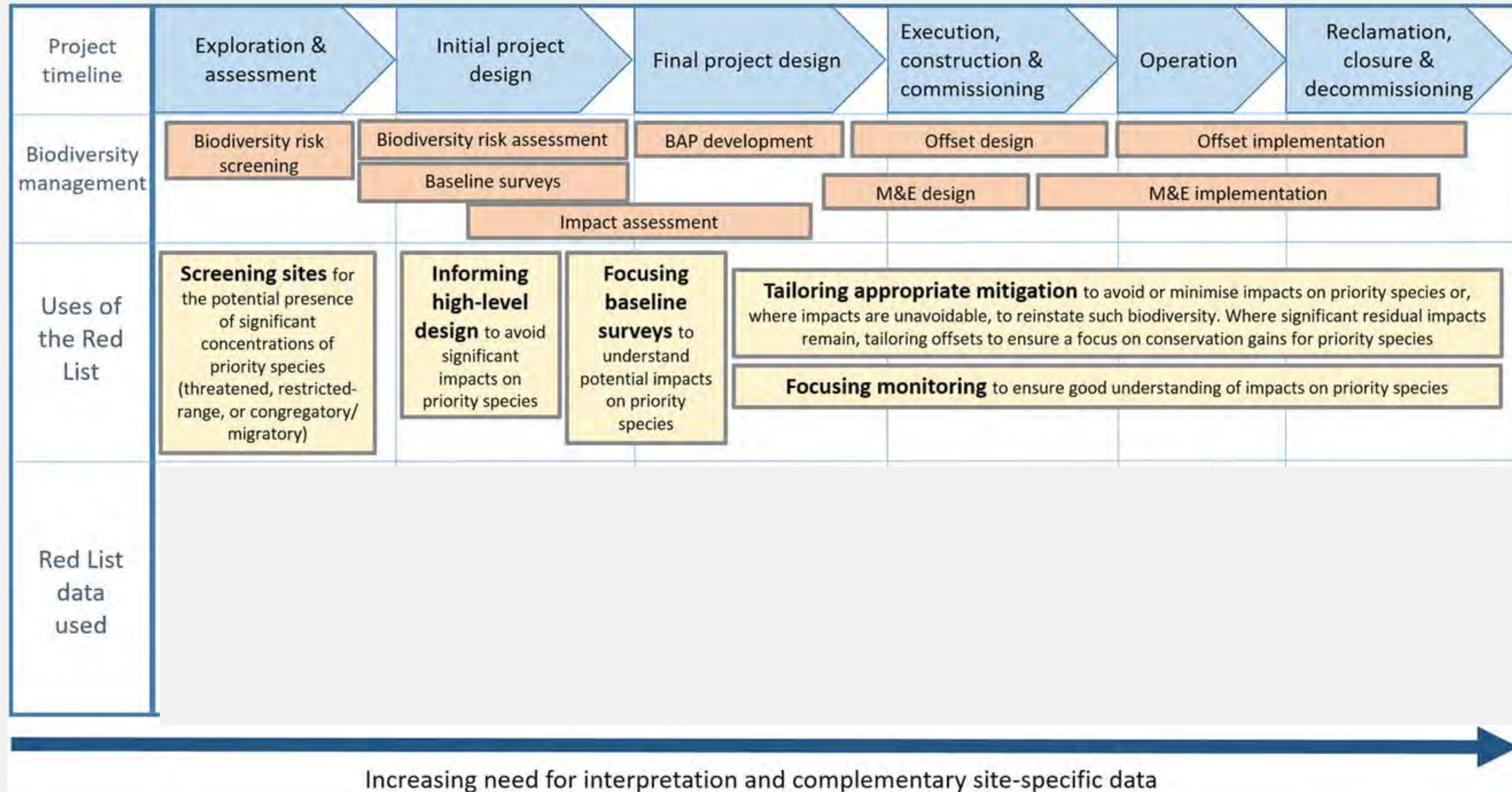
Good practice risk management
creates many positive
opportunities

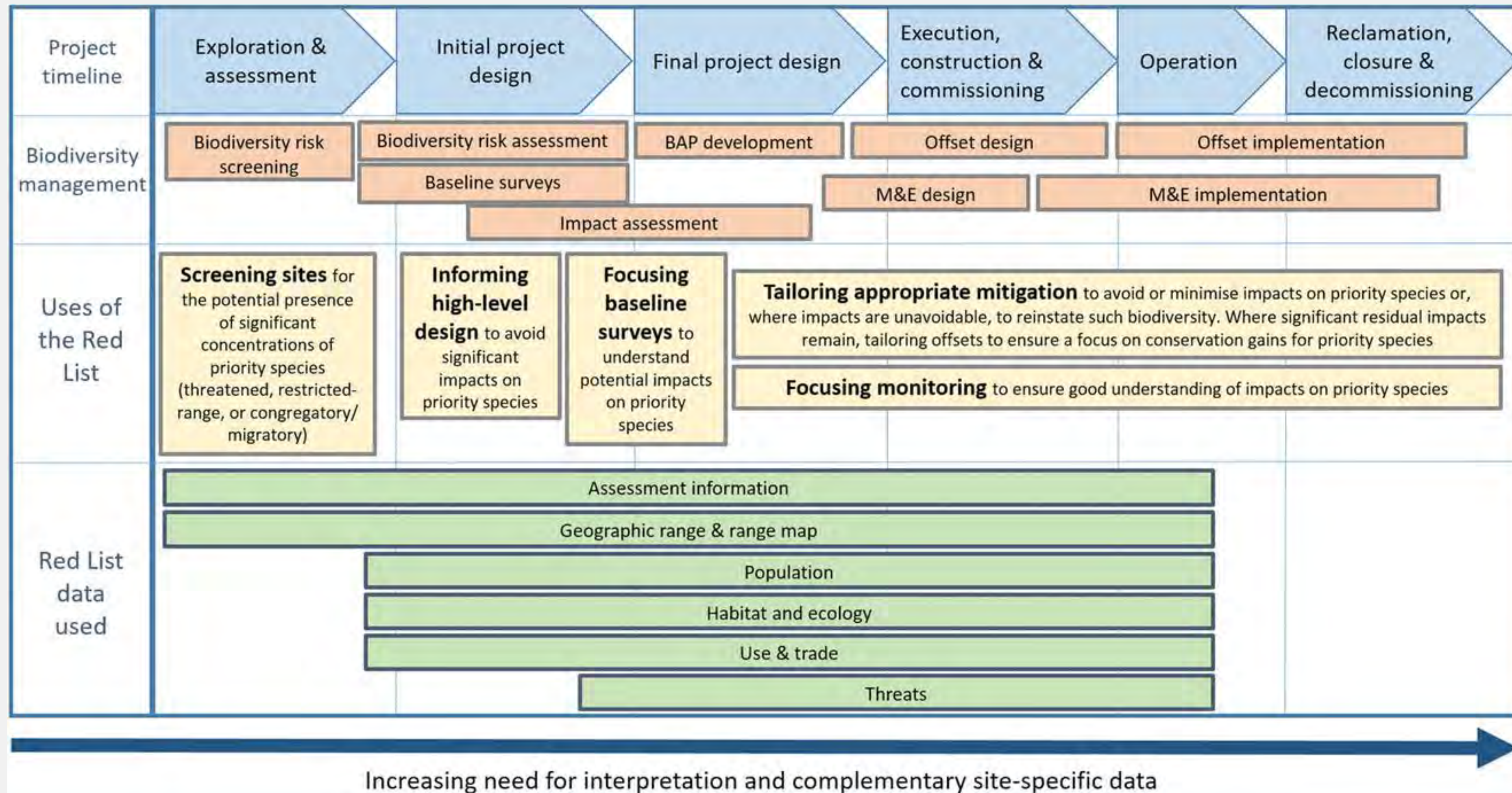


Agenda

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The Value of the IUCN Red List for Business Decision-Making, Volume: 11, Issue: 1, First published: 09 February 2017, DOI: (10.1111/conl.12353)

Poll question 1:

What is your background?

- Consultant
- Government
- Academia or research institution
- NGO or civil society organisation
- Private sector/business
- Other

Poll question 2:

Is accessing biodiversity information a challenge for you?

- Very challenging
- Somewhat challenging
- A little challenging
- Not at all challenging
- Not relevant

Agenda

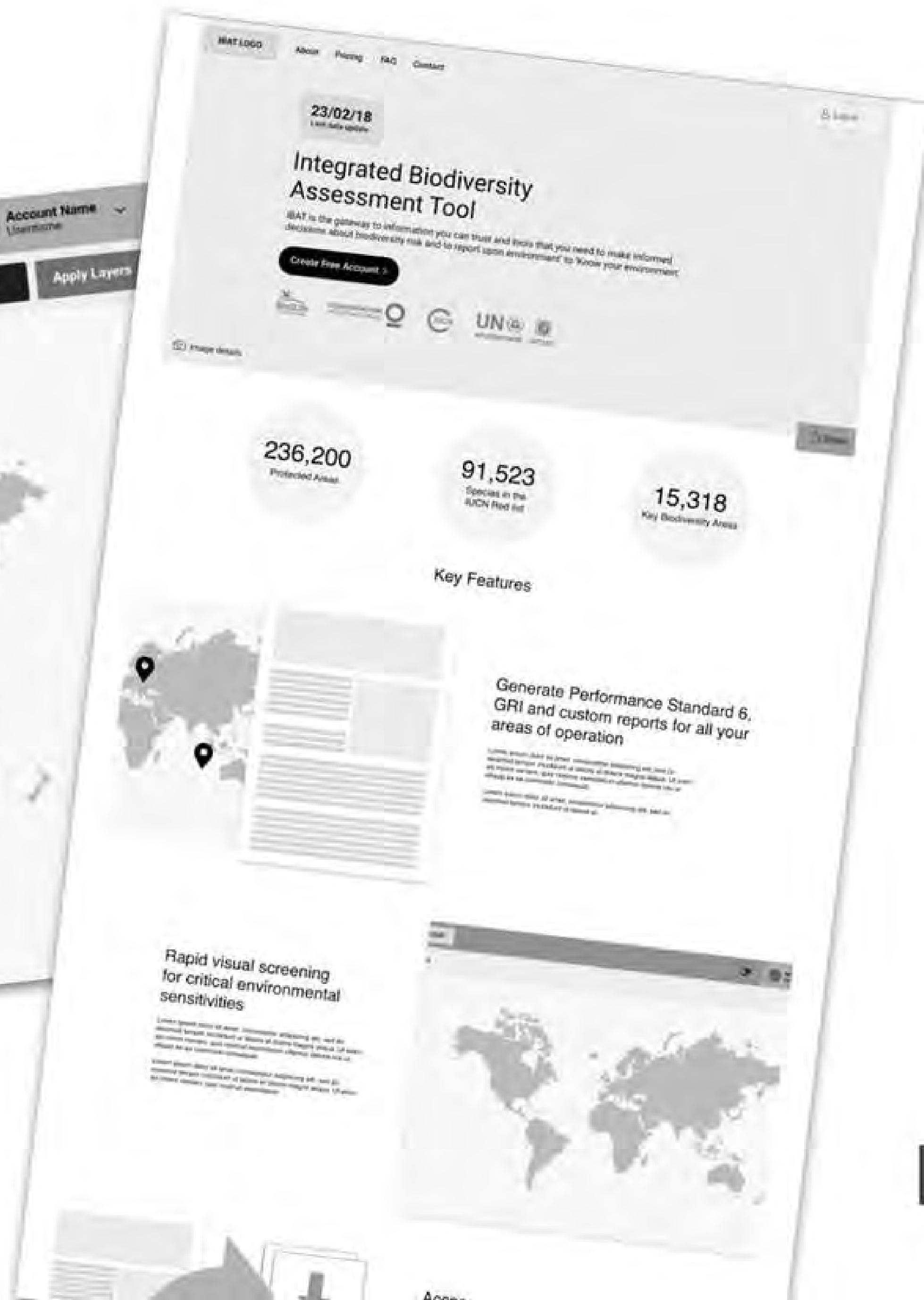
1. WHY is biodiversity important to consider
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Pre-webinar question - What key improvements would you like to see in biodiversity data dissemination?

- Needs to be trustworthy
- Open source
- Regularly updated
- Link with environmental & social safeguards
- Accessibility for consultancy work
- Measurement of change
- Consistency & transparency
- Classification & analysis of impact
- Bigger number of datasets available in one tool
- Minimising the misinterpretation of data
- More affordable & easily available for commercial users



The new IBAT portal



Key features:

- One-stop-shop for protected areas, Key Biodiversity Areas, & Red List of Species data
- The only place to access these data for commercial use
- Generate IFC PS6, GRI & custom reports
- Create portfolio of sites
- Download data direct from source



Username, account name



MY SITES & REPORTS



DATA MAP



DATA DOWNLOADS



COUNTRY PROFILES

My sites

Overlap with
Protected Areas

IUCN Redlist

Overlap with Key
Biodiversity Areas

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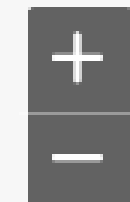
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Location

England, London

51.5074° N, 0.1278° W



Site Name Here



Coordinates:

Location:

Size:

Status:

Operation:

Tags:

Create New Report



Create a Report to view full list

IUCN RED LIST
(within 50km)

228 Species

5 Critically Endangered

10 Endangered

25 Vulnerable

145 Near Threatened

103 Data Deficient

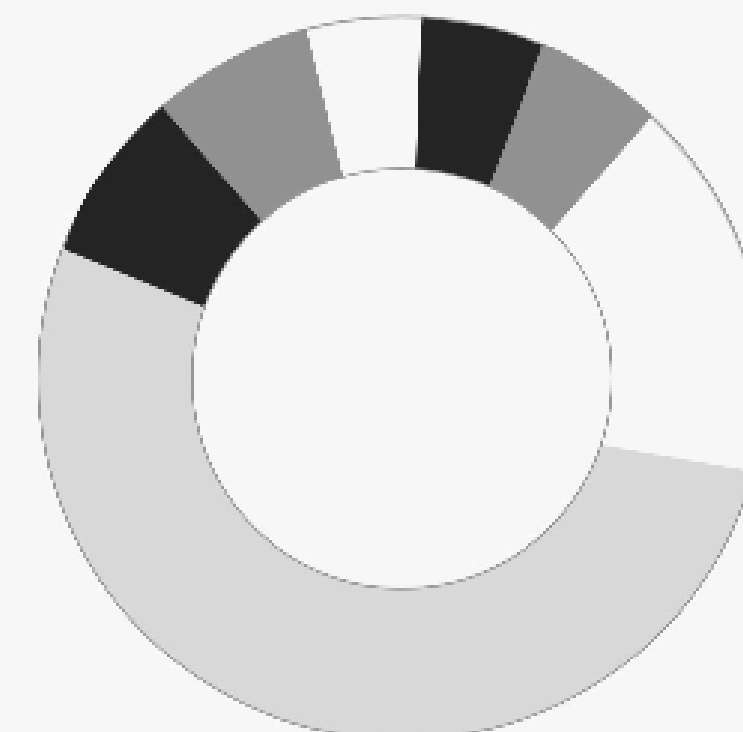
PROTECTED AREAS
(within 50km)

Protected Areas

- National-Level 8%
- Regional conventions & agreements 15%
- International convention & agreements 9%

Key Biodiversity Areas

- Alliance for Zero Extinction sites 10%
- Important Bird Areas 12%
- Non-avian Key Biodiversity Areas 30%



Data Downloads

As an annual subscriber, you can download complete global spatial data sets in shape file format (for use with, for example, ESRI's suite of GIS applications):

[Download All Data](#)

Custom data download

Data downloads are included in some IBAT subscriptions but can also be paid for on a PAYG basis. If you are a PAYG user, please select your polygon and the area and cost will be automatically be calculated.

Select the Polygon tool to draw a shape file on the map.

[Draw Polygon](#)

[Download](#)

[Cancel](#)



Global Spatial Data

As an annual subscriber, you can download complete global spatial data sets in shape file format (for use with, for example, ESRI's suite of GIS applications):

World Database of Protected Areas

The World Database on Protected Areas (WDPA) is the most comprehensive global database on terrestrial and marine protected areas. It is a joint project between the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), managed by UNEP World Conservation Monitoring Centre (UNEP-WCMC). Data for the WDPA is collected from international convention secretariats, governments and collaborating NGOs. The WDPA uses the IUCN's definition of a protected area as the main criteria for entries to be included in the database.

 **DOWNLOAD**

World Database of Key Biodiversity Areas

The World Database of Key Biodiversity Areas is managed by BirdLife International on behalf of the KBA Partnership. It hosts data on global and regional Key Biodiversity Areas (KBAs), including Important Bird and Biodiversity Areas identified by the BirdLife International Partnership, Alliance for Zero Extinction sites, KBAs identified through hotspot ecosystem profiles supported by the Critical Ecosystem Partnership Fund, and a small number of other KBAs. The database was developed from the World Bird and Biodiversity Database (WBDB) managed by BirdLife International.

 **DOWNLOAD**

IUCN Red List Spatial Data

The IUCN Red List of Threatened Species contains global assessments for just over 88,000 species, of which about two-thirds have spatial data. This spatial data provided in this download is for comprehensively assessed taxonomic groups. It is important to note that some species such as those listed as Data Deficient are not mapped and subspecies are mapped within the parental species. The data is available as ESRI shapefiles format and contains the known range of each species. Ranges are depicted as polygons, except for the freshwater HydroSHED tables.

[View Fact Sheet](#)

 **DOWNLOAD**

Pricing

FREE	BASIC	PRO	ENTERPRISE
\$0	\$5,000	\$15,000	Contact Us
<ul style="list-style-type: none">• Access to Country Profiles• Visual Data Map displaying:<ul style="list-style-type: none">- Protected Areas- Key Biodiversity Areas- IUCN Red List Species• Download reports using pay as you go• Download data using pay as you go• Save sites	<ul style="list-style-type: none">• Everything in Free plan:• Access to Site Catalogue• Upload & save points to Visual Data Map• *Unlimited proximity reports <p>*Limited time offer</p>	<ul style="list-style-type: none">• Everything in Basic plan:• Limited Protected Areas & Key Biodiversity Areas data downloads• *Unlimited PS6 & Critical Habitat reports• *Unlimited Freshwater Connectivity reports <p>*Limited time offer</p>	<ul style="list-style-type: none">• Everything in Pro plan:• Unlimited Protected Areas & Key Biodiversity Areas data downloads• Unlimited IUCN Red List Species data downloads
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How consultants can access IBAT?

FREE	BASIC	PRO	ENTERPRISE
\$0	\$5,000	\$15,000	Contact Us
<ul style="list-style-type: none">• Access to Country Profiles• Visual Data Map displaying:<ul style="list-style-type: none">- Protected Areas- Key Biodiversity Areas- IUCN Red List Species• Download reports using pay as you go• Download data using pay as you go• Save sites	<ul style="list-style-type: none">• Everything in Free plan:• Access to Site Catalogue• Upload & save points to Visual Data Map• *Unlimited proximity reports <p>*Limited time offer</p>	<ul style="list-style-type: none">• Everything in Basic plan:• Limited Protected Areas & Key Biodiversity Areas data downloads• *Unlimited PS6 & Critical Habitat reports• *Unlimited Freshwater Connectivity reports <p>*Limited time offer</p>	<ul style="list-style-type: none">• Everything in Pro plan:• Unlimited Protected Areas & Key Biodiversity Areas data downloads• Unlimited IUCN Red List Species data downloads
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Why a cost for some of the IBAT services?

Estimated annual cost of maintaining & updating global datasets is \$6.5 to \$14m

 PLOS ONE

RESEARCH ARTICLE

Assessing the Cost of Global Biodiversity and Conservation Knowledge

Diego Juffe-Bignoli^{1*}, Thomas M. Brooks^{2,3,4}, Stuart H. M. Butchart^{5,6}, Richard B. Jenkins⁷, Kaia Boe⁸, Michael Hoffmann^{1,2}, Ariadne Angulo⁹, Steve Bachman¹⁰, Monika Böhm¹¹, Neil Brummitt¹², Kent E. Carpenter¹³, Pat J. Comer²⁷, Neil Cox¹⁴, Annabelle Cuttelod⁷, William R. T. Darwall⁷, Moreno Di Marco^{15,16}, Lincoln D. C. Fishpool⁵, Bárbara Goettlich⁷, Melanie Heath⁵, Craig Hilton-Taylor⁷, Jon Hutton^{1,17}, Tim Johnson¹, Ackbar Joolia⁷, David A. Keith^{18,29}, Penny F. Langhammer¹³, Jennifer Luedtke⁹, Eimear Nic Lughadha¹⁰, Maiko Lutz¹⁰, Ian May⁵, Rebecca M. Miller^{4,20}, Maria A. Oliveira-Miranda²¹, Mike Parr²⁸, Caroline M. Pollock⁷, Gina Ralph¹³, Jon Paul Rodríguez^{2,21,22}, Carlo Rondinini²³, Jane Smart^{2,24}, Simon Stuart^{1,2}, Andy Symes⁵, Andrew W. Tordoff²⁵, Stephen Woodley²⁶, Bruce Young²⁷, Naomi Kingston¹

 CrossMark

 OPEN ACCESS

Citation: Juffe-Bignoli D, Brooks TM, Butchart SHM, Jenkins RB, Boe K, Hoffmann M, et al. (2016) Assessing the Cost of Global Biodiversity and Conservation Knowledge. *PLoS ONE* 11(8): e0160640. doi:10.1371/journal.pone.0160640

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Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

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1 United Nations Environment Programme, World Conservation Monitoring Centre (UNEP-WCMC), 219 Huntingdon Road, CB3 0DL Cambridge, United Kingdom, **2** International Union for Conservation of Nature (IUCN), 28 rue Mauverney, 1196 Gland, Switzerland, **3** World Agroforestry Center (ICRAF), University of the Philippines Los Baños, Laguna 4031, Philippines, **4** Institute for Marine and Antarctic Studies, University of Tasmania, Hobart TAS 7001, Australia, **5** BirdLife International, David Attenborough Building, Pembroke Street, Cambridge CB2 3QZ, United Kingdom, **6** Department of Zoology, University of Cambridge, Downing Street, Cambridge CB2 3EJ, United Kingdom, **7** IUCN Global Species Programme, The David Attenborough Building, Pembroke Street, Cambridge CB2 3QZ, United Kingdom, **8** Nature-based Solutions Group, IUCN, 28 Rue Mauverney, 1196 Gland, Switzerland, **9** IUCN Species Survival Commission, Amphibian Specialist Group, Toronto M8W 1R2, Canada, **10** Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, United Kingdom, **11** Institute of Zoology, Zoological Society of London, Regent's Park, London NW1 4RY, United Kingdom, **12** Department of Life Sciences, Natural History Museum, London SW7 5BD, United Kingdom, **13** IUCN Marine Biodiversity Unit, Global Species Programme/ Biological Sciences, Old Dominion University, Norfolk, Virginia, United States of America, **14** IUCN CI Biodiversity Assessment Unit, IUCN Global Species Programme, c/o Conservation International, 2011 Crystal Drive, Suite 500, Arlington, VA 22202, United States of America, **15** ARC Centre of Excellence for Environmental Decisions, Centre for Biodiversity and Conservation Science, The University of Queensland, 4072 Brisbane, Queensland, Australia, **16** School of Geography, Planning and Environmental Management, The University of Queensland, 4072 Brisbane, Queensland, Australia, **17** Luc Hoffmann Institute, WWF International, 1196 Gland, Switzerland, **18** Centre for Ecosystem Science, University of New South Wales, Sydney, New South Wales 2052, Australia, **19** School of Life Sciences, Arizona State University, P.O. Box 874501, Tempe, AZ 85287, United States of America, **20** IUCN Global Ecosystem Management Programme, The David Attenborough Building, Pembroke Street, Cambridge CB2 3QZ, United Kingdom, **21** Proviña, Apdo. 47552, Caracas 1041-A, Venezuela, **22** Centro de Ecología, Instituto Venezolano de Investigaciones Científicas, Apdo. 20632, Caracas 1020-A, Venezuela, **23** Global Mammal Assessment Program, Department of Biology and Biotechnologies, Sapienza University of Rome, Viale dell'Università 32, I-00185 Rome, Italy, **24** Biodiversity Conservation Group, IUCN, 28 Rue Mauverney, 1196 Gland, Switzerland, **25** Critical Ecosystem Partnership Fund, 2011 Crystal Drive, Suite 500, Arlington, VA 22202, United States of America, **26** World Commission on Protected Areas IUCN, 64 Juniper Road, Chelsea, QC J9B1T3, Canada, **27** NatureServe, 4600 N. Fairfax Dr., Arlington, VA 22203, United States of America, **28** American Bird Conservancy, 1731 Connecticut Avenue, Washington DC 20009, United States of America, **29** New South Wales Office of Environment and Heritage, Hurstville, New South Wales 2220, Australia

* diego.juffe-bignoli@unep-wcmc.org

Abstract

Knowledge products comprise assessments of authoritative information supported by stan-

Our users

- *"A must for any project on biodiversity conservation"* Mott MacDonald
- *"IBAT gives us access to experts on data and biodiversity that we can't get anywhere else"* Conrad Savy, IFC
- *"making a real contribution to the management of biodiversity issues within our oil and gas operations worldwide."* Paola Maria Pedroni, eni
- *"..invaluable to us and our projects for optimal biodiversity management."* Steven Dickinson, Total

QUESTIONS?



ibat-alliance.org



Contact

Eugenie Regan

eugenie.regan@ibat-alliance.org



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Other biodiversity resources from IAIA

www.iaia.org/publications.php

- Key Citations on Biodiversity – 6 separate topic areas
- FasTips:
 - No. 5: Biodiversity Assessment
 - No. 13: Ecosystem Services in SEA for Spatial Planning
- Best Practice Principles Series:
 - Biodiversity in Impact Assessment
 - Publishing EIA-Related Primary Biodiversity Data: GBIF Best Practice Guide

Thank you!

conferences.iaia.org/wdc2017/presentations.php

- Presentations from IAIA's 2017 biodiversity symposium on "Mainstreaming the Mitigation Hierarchy in Impact Assessment"

