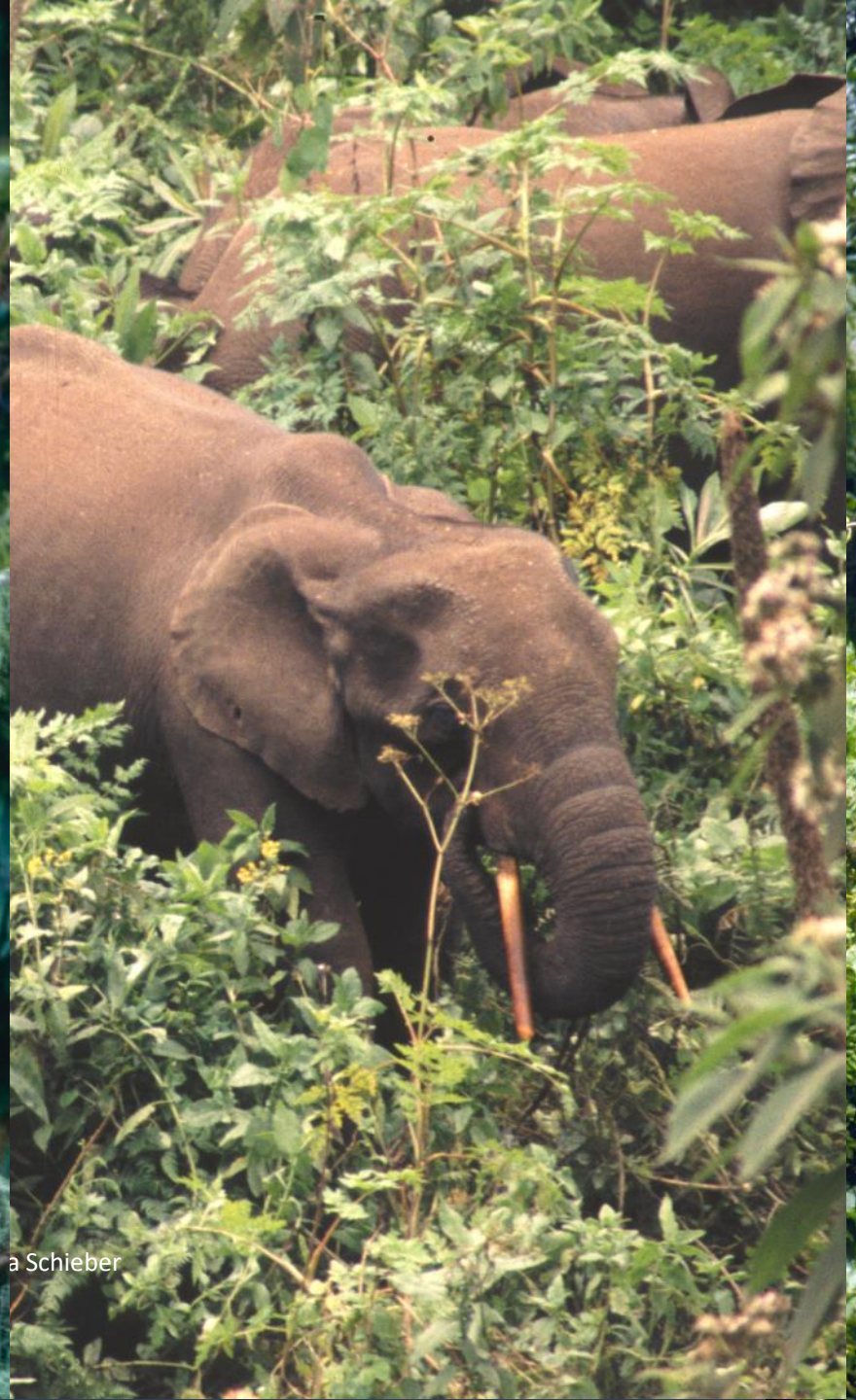
KBA
KEY BIODIVERSITY AREAS

Identifying important sites for biodiversity in Africa: the Key Biodiversity Area Programme

Andy Plumptre,
Head KBA Secretariat

1st March 2024



a Schieber

Modelling impacts of population changes

Plumptre, A.J. (1996) Modelling the impact of large herbivores on the food supply of the mountain gorilla and implications for management. *Biological Conservation* 75, 147-155

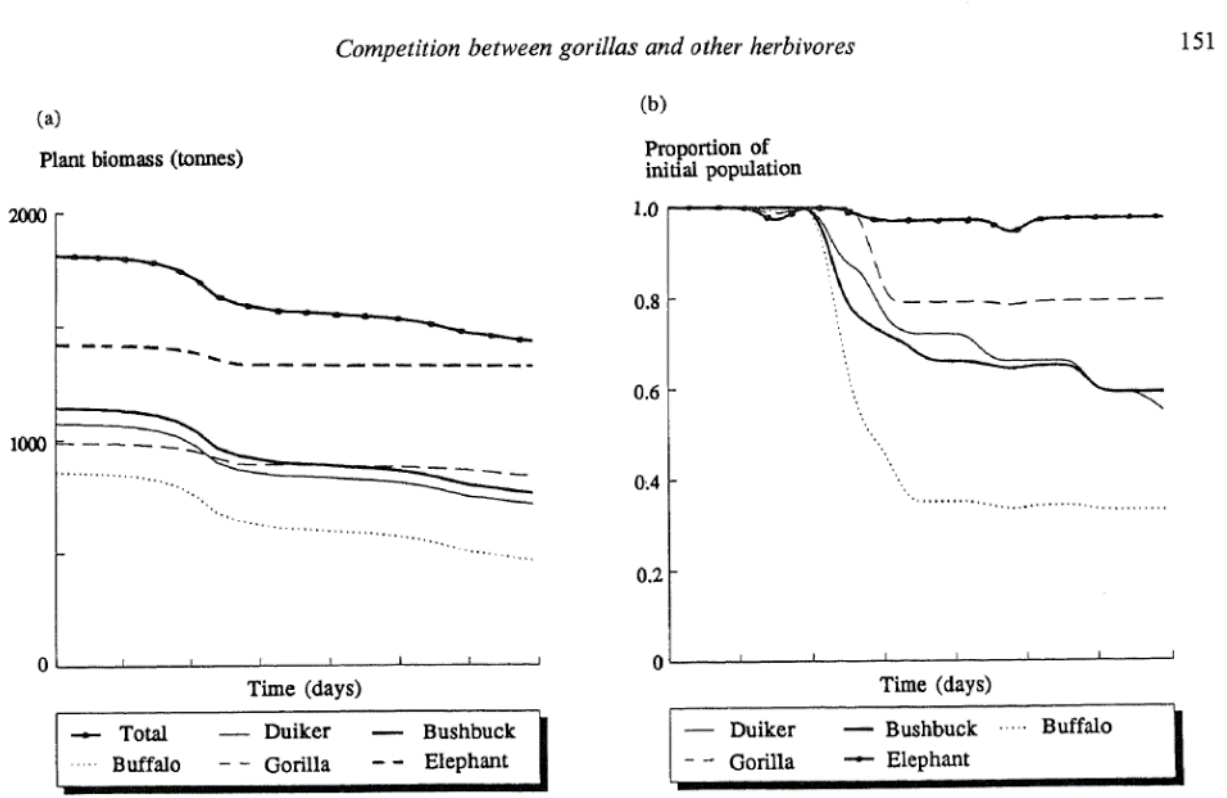
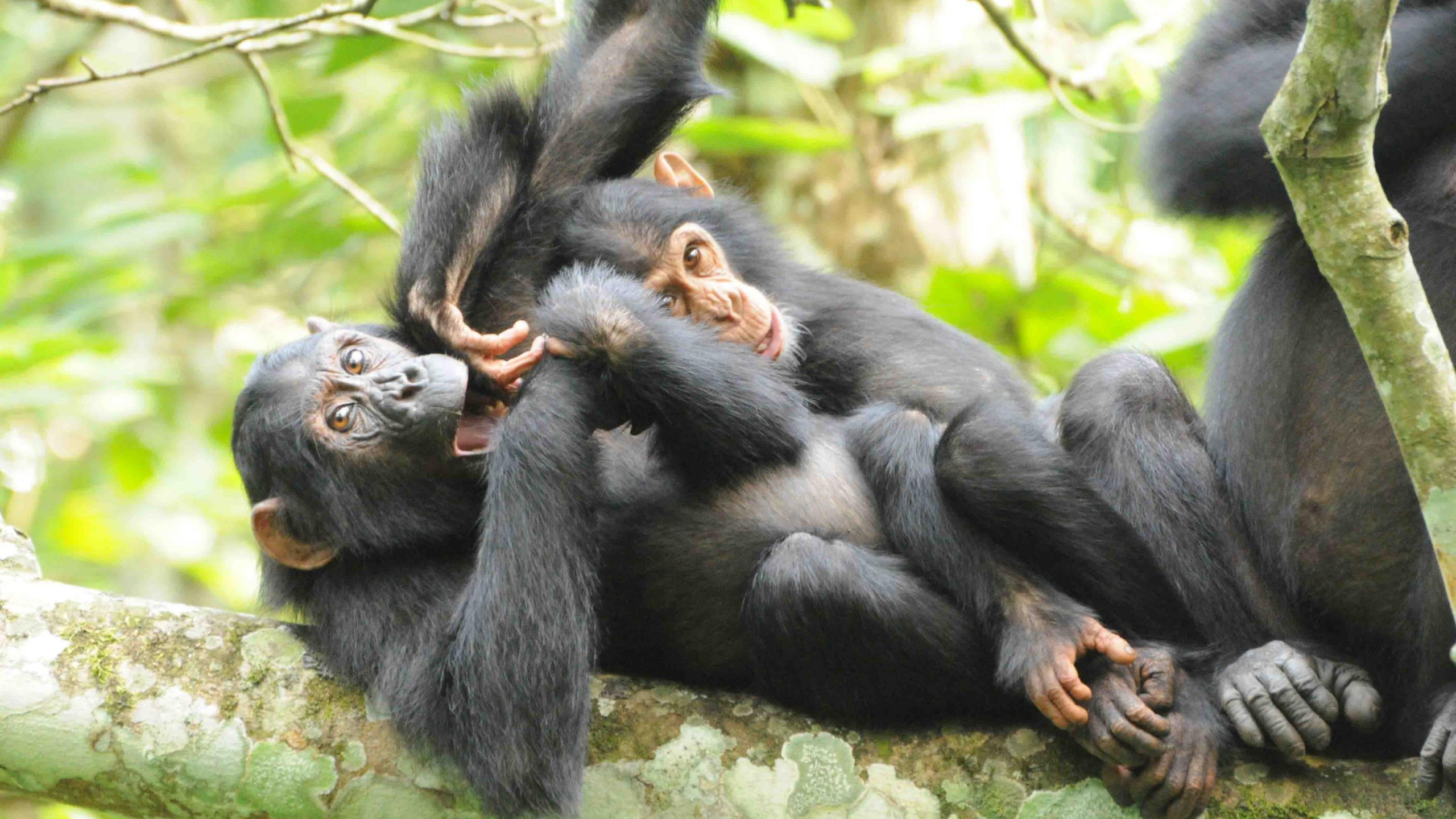


Fig. 3. The results of modelling an increase in the buffalo population (20% increase): (a) the decrease in the food supply of the five herbivores; (b) the decrease in the populations of the herbivores.

- Predicted changes in vegetation with increases in herbivore species
- Revisited study area in 2010 and compared vegetation data
- *Galium* spp., the most frequently consumed food species for gorillas, was present in 43% of the plots in the 1989 study, but only in 30% of the plots in the 2010 study, and it declined by more than 50% in biomass

Greuter, C.C., Ndamiyabo, F., Plumptre, A.J., Abavandimwe, D., Mundry, R., Fawcett, K.A., and Robbins, M. M. (2013). Long-term temporal and spatial dynamics of food availability for endangered mountain gorillas in Volcanoes National Park, Rwanda. *American Journal of Primatology*, 75, 267-280



History of selective logging known

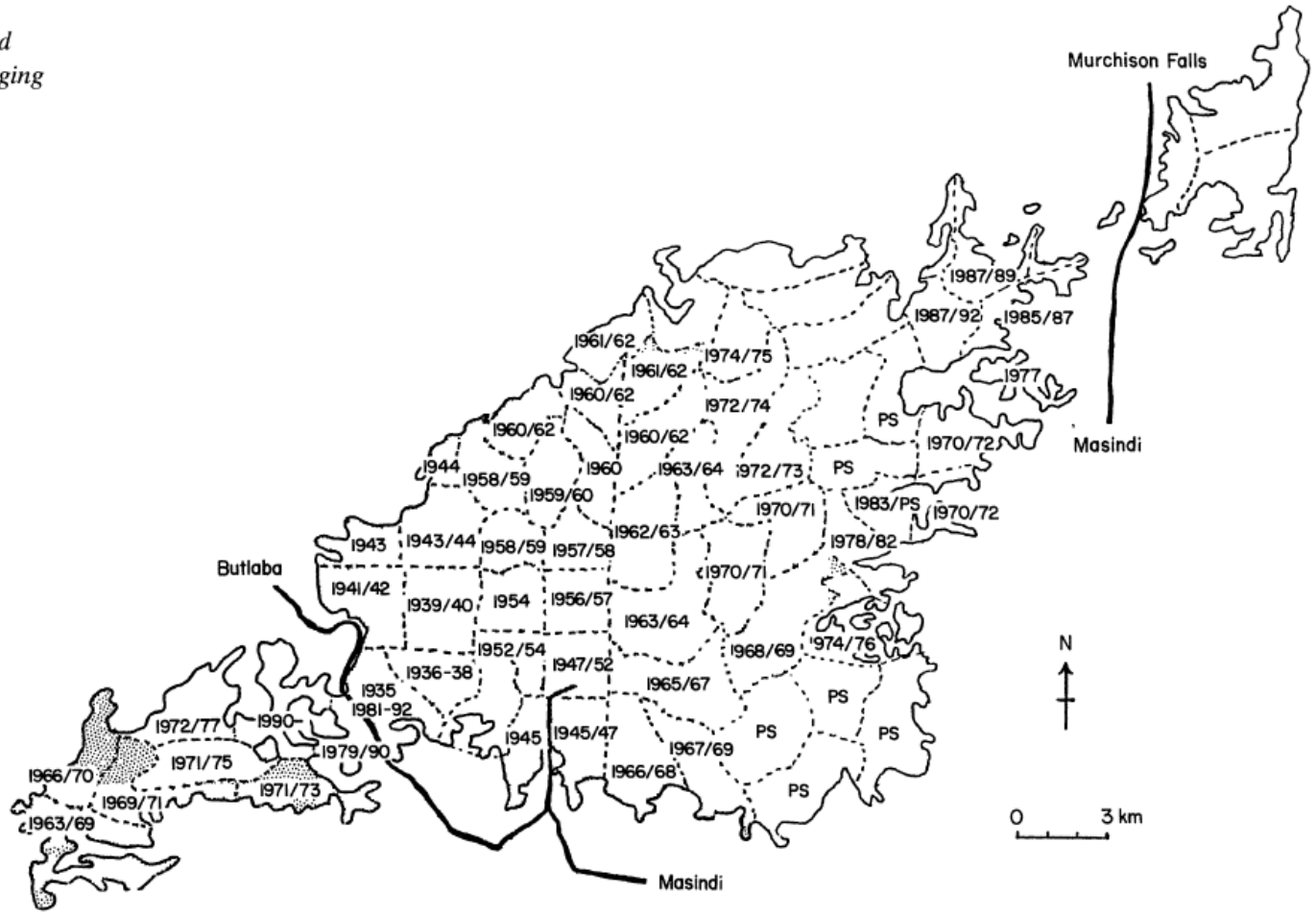
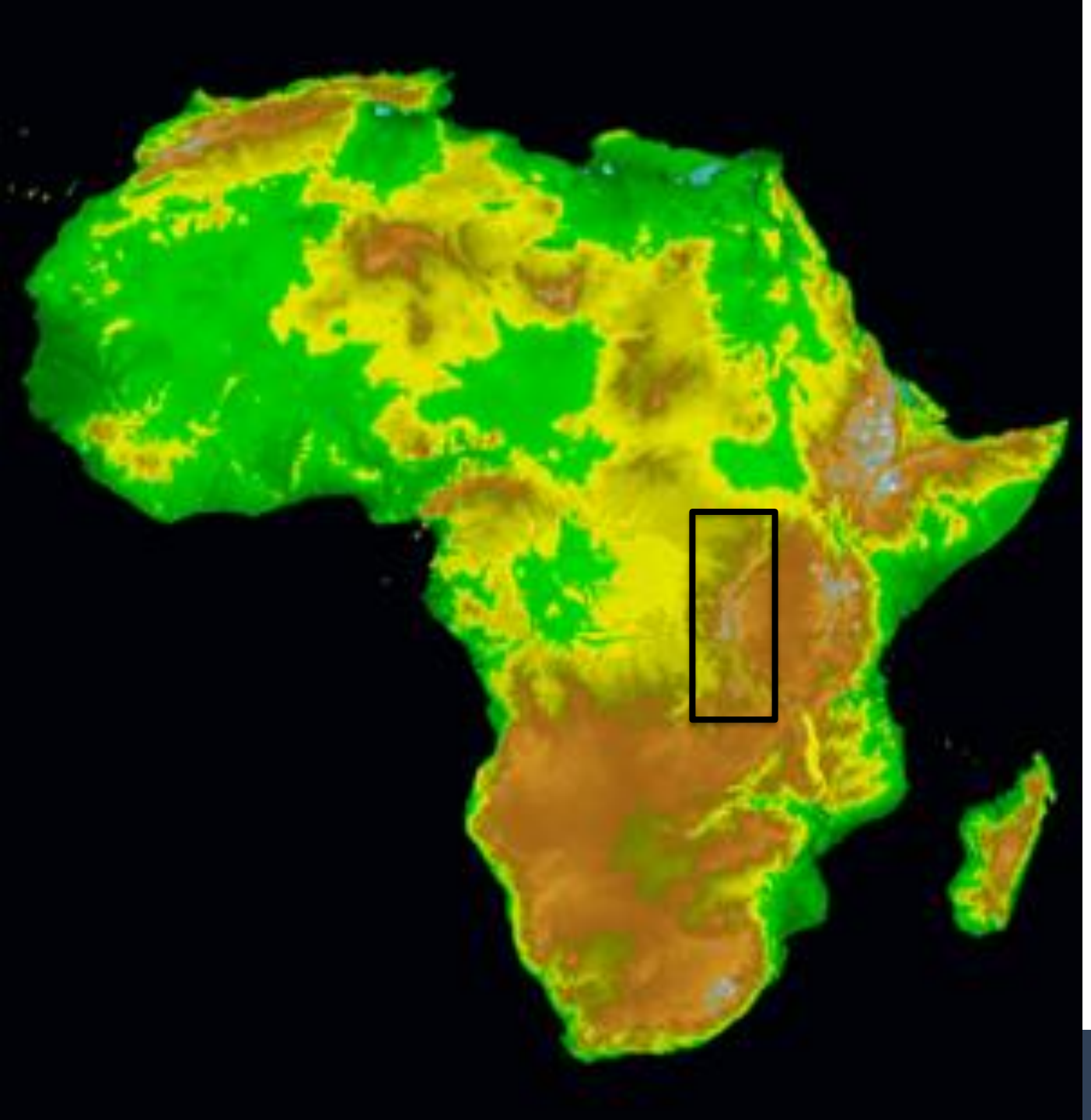


Fig. 2. The distribution of the compartments in the Budongo Forest. Dates of mechanized logging this century are given for each compartment and those compartments treated with arboricide are shaded. PS, compartments that have been heavily logged by pitsawyers.

Plumptre, A.J. & Reynolds, V. (1994) The impact of selective logging on the primate populations in the Budongo Forest Reserve, Uganda. *Journal of Applied Ecology* 31, 631-641



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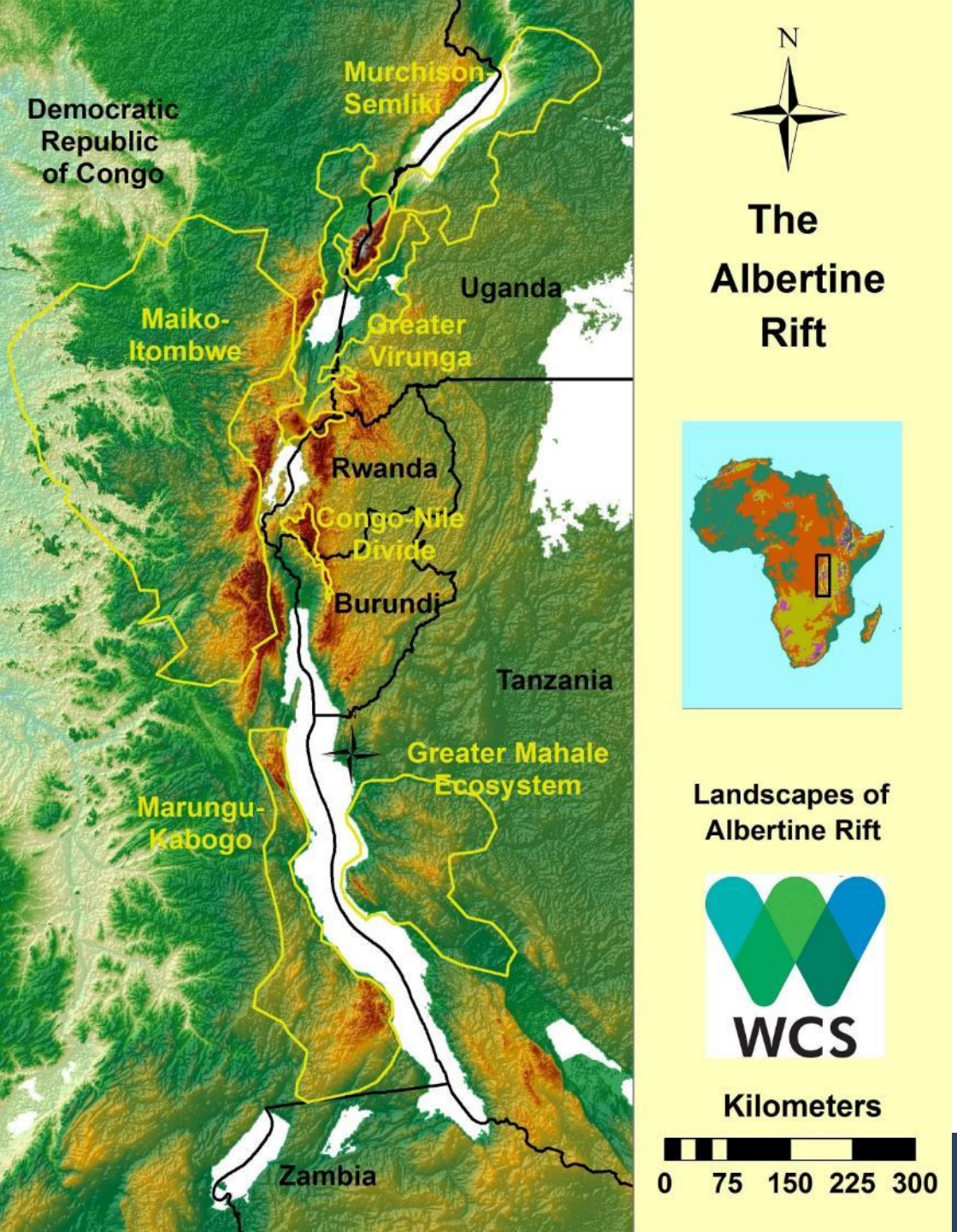
Africa's Western Rift Valley: 'Albertine Rift'

16 years of conservation and research with WCS



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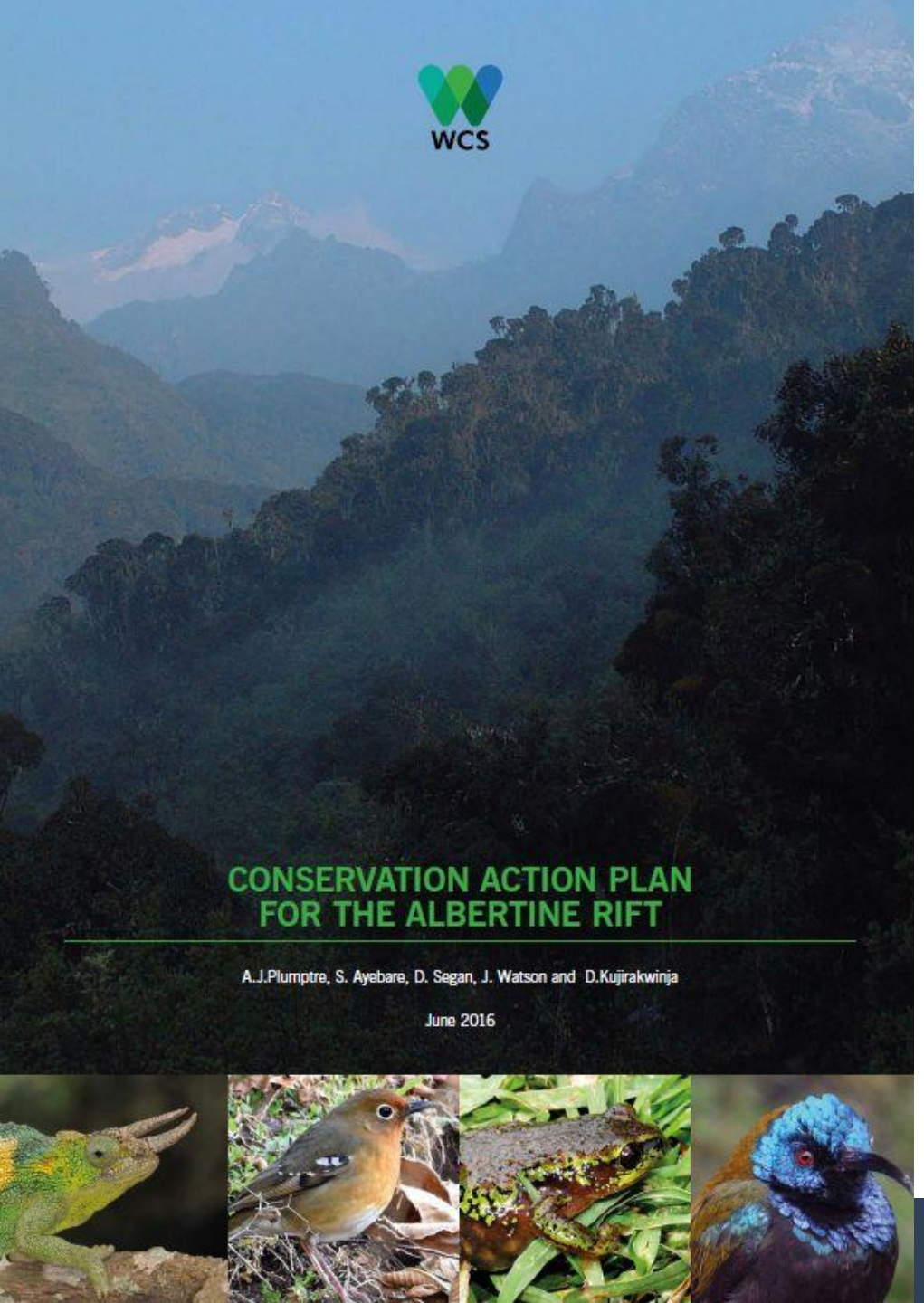
Identified six key landscapes where connectivity remained and might be conserved in 2002

Compiled lists of species for all sites from historic literature

Started biodiversity surveys of all sites which were at least 100 km^2



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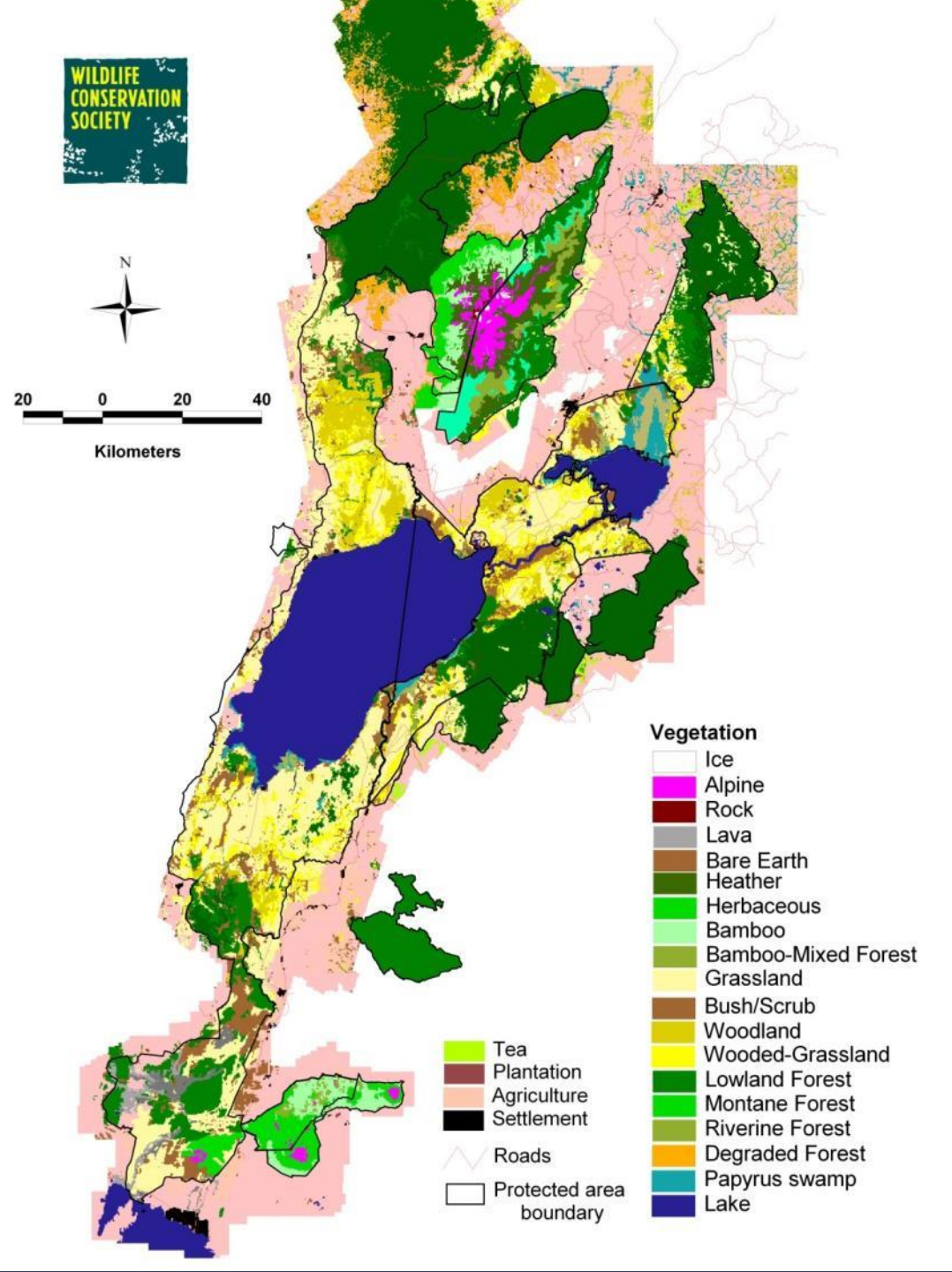
Published conservation action plan in 2016 that developed detailed plans for each of six key landscapes of the Albertine Rift, and their threatened and endemic species

Landscape plans developed



Endemic Species	Threatened species		
	High	Medium	Low
High	Virunga NP, Virunga Volcanoes, Itombwe Massif Kahuzi Biega NP, Kibale NP, Bwindi Impenetrable NP, Nyungwe NP, Mt Kabobo	Rwenzori Mountains NP W. Lake Edward Mahale Mtns NP	
Medium	Kasyoha-Kitomi FR Queen Elizabeth NP Semuliki NP	Lendu plateau, Budongo FR Kibira NP Kalinzu-Maramagambo	Mafuga FR Bururi FR Gombe NP Mbizi FR Idjwi Island
Low	Mweru-Wantipa NP Murchison Falls NP Sumbu NP	Bugoma FR Semliki WR Kagombe FR Kyambura WR	Bugungu WR Kitechure FR Itwara FR Matiri FR Ibambaro FR Marungu Massif Karuma WR

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Convention on Biological Diversity

- Established in 1992
- Goals: the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources
- Signed up to by 196 nations
  - USA and Holy See only nations not to have signed
- Developed 10 year plan 2010-2020
  - Set of 20 Aichi targets established

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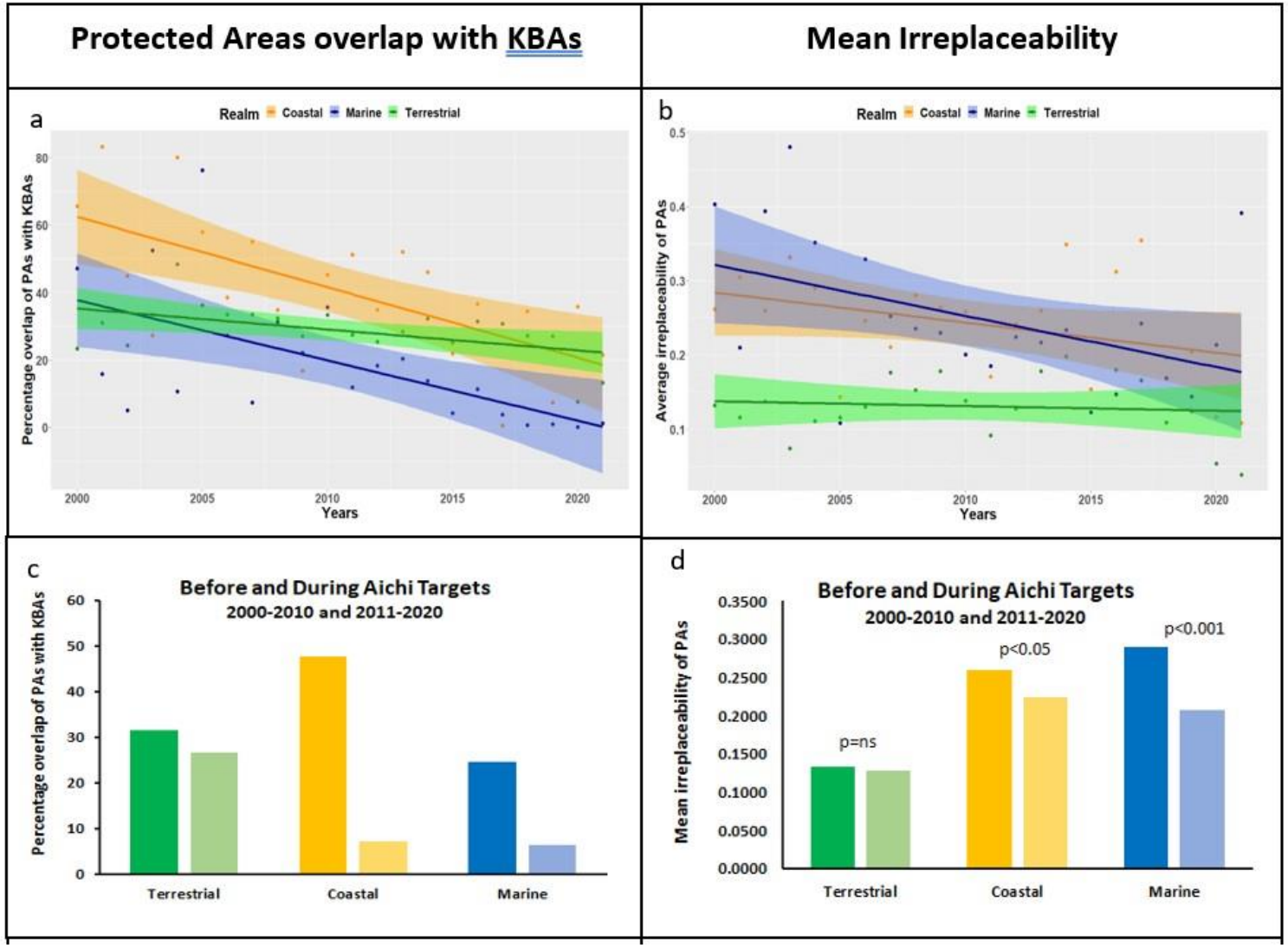
Areas of importance for biodiversity

Aichi Target 11:

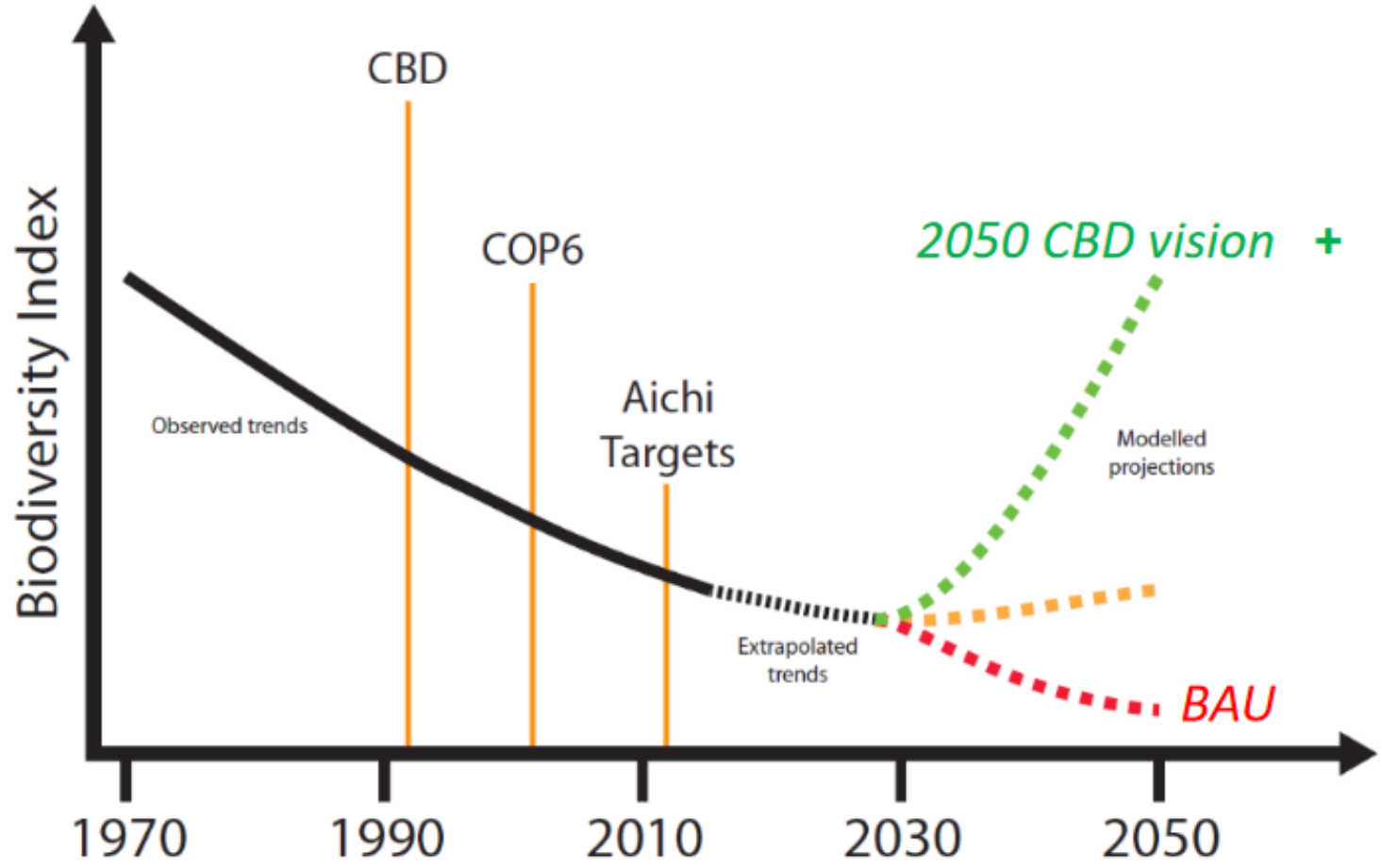
By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, ***especially areas of particular importance for biodiversity*** and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected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

Results of Aichi Target 11



- Yes we achieved nearly 17% on land and about 8% of seas
- But biodiversity values of new protected areas declined over time
- We must conserve areas important for biodiversity to achieve Goal A and several targets of the GBF

Bending the curve of biodiversity loss



From: Mace, G. M et al. *Aiming Higher to bend the curve of biodiversity loss. Nature Sustainability 1: 448-451*

Post2020 Global Biodiversity Framework

- New set of goals and targets being developed for a 30 year plan – The Global Biodiversity Framework
- 21 interim targets set for 2030
- Target 1. – Spatial planning and intact landscapes
- Target 3. – Expansion of protection to 30% by 2030

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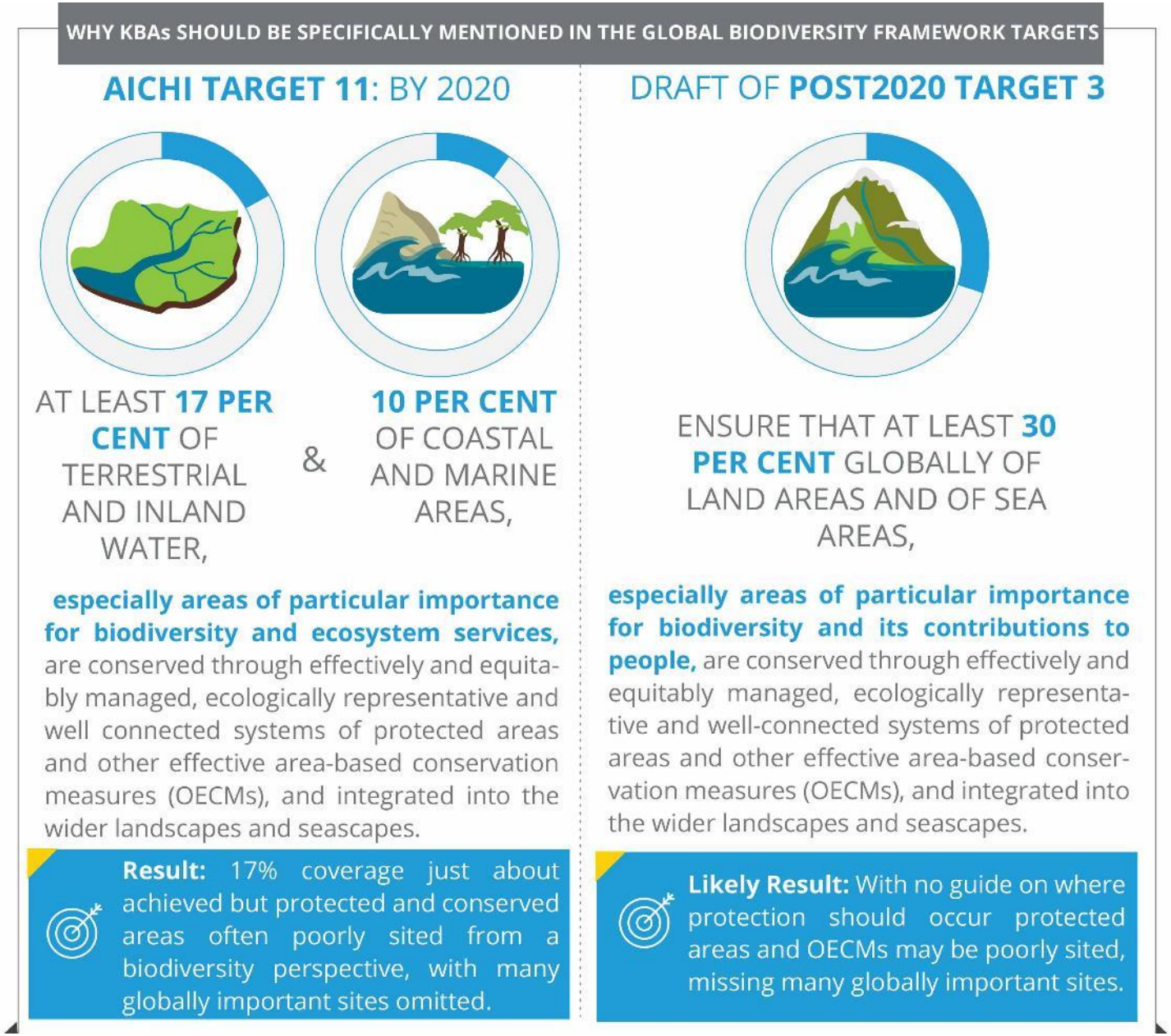
Current language in post2020 GBF

- Target 3 of new Global Biodiversity Framework is almost identical to Aichi target 11
- Need to guide governments on what **'areas of particular importance for biodiversity'** should be



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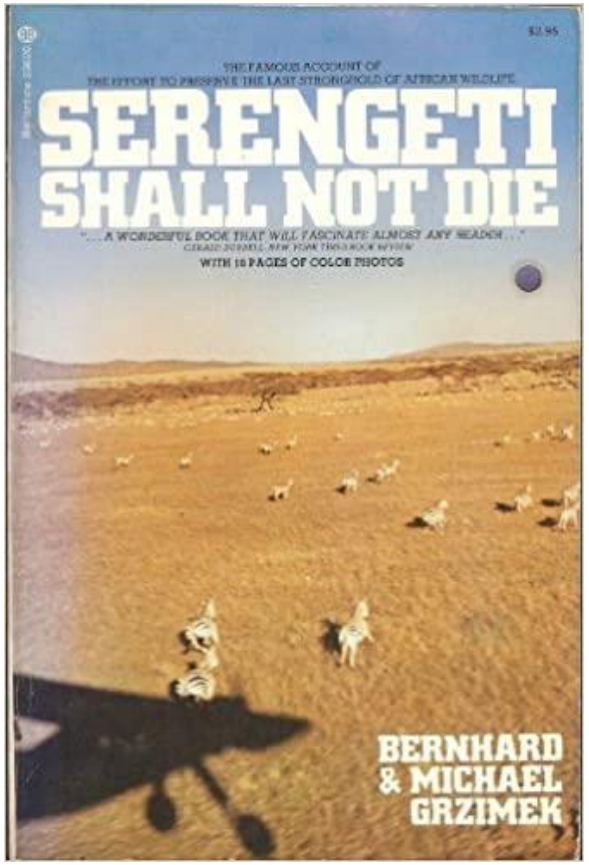
How have areas been identified in the past?

- Initially sites of scenic beauty and wilderness are what defined first national parks – 1890s

Important sport hunting areas – 1910-1950s

Large mammal tourism 1950s-1970s

Long term research at sites – 1960s-present



Gombe National Park

Smithsonian Tropical Research Institute, Barro Colorado, Panama

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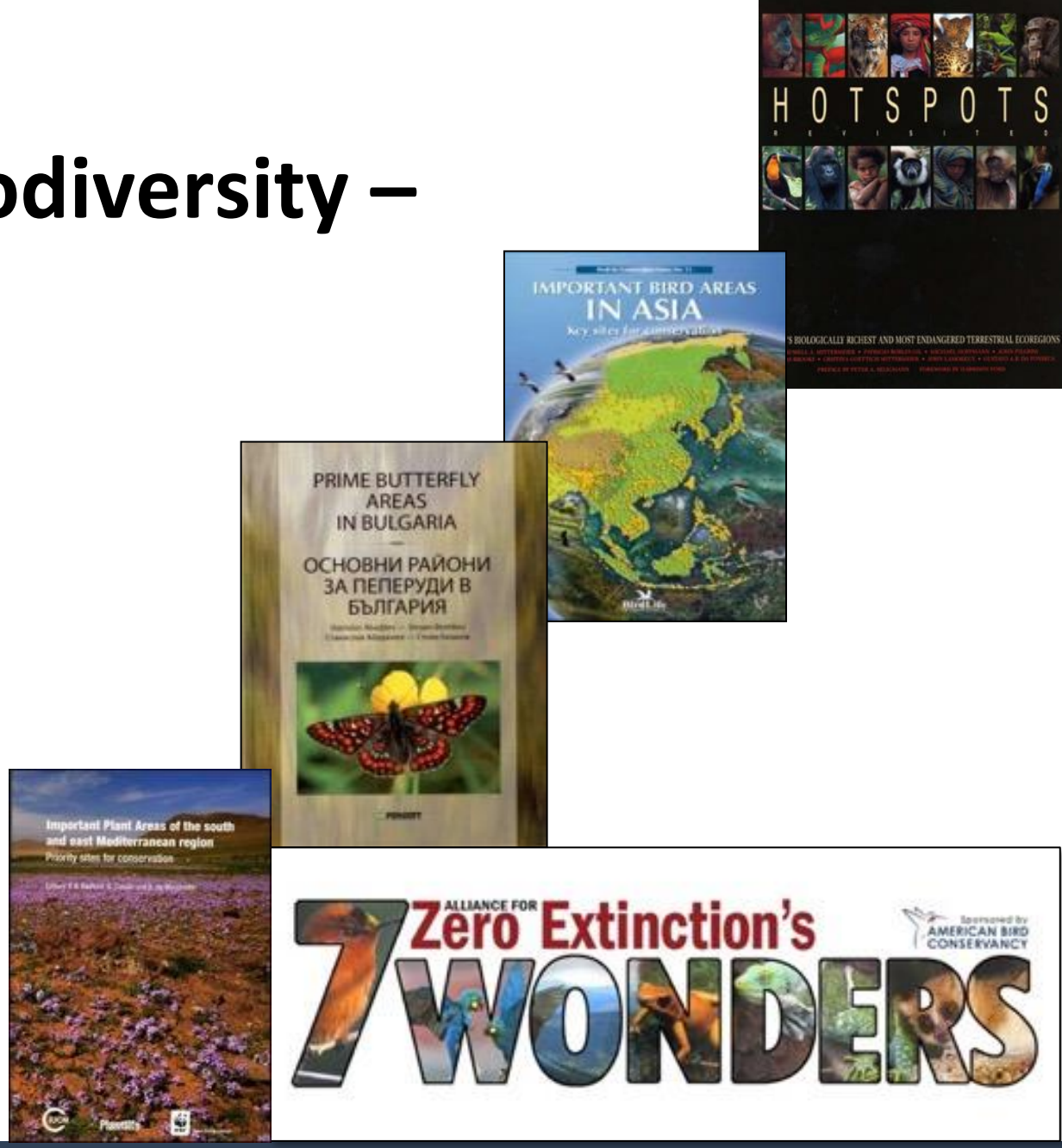
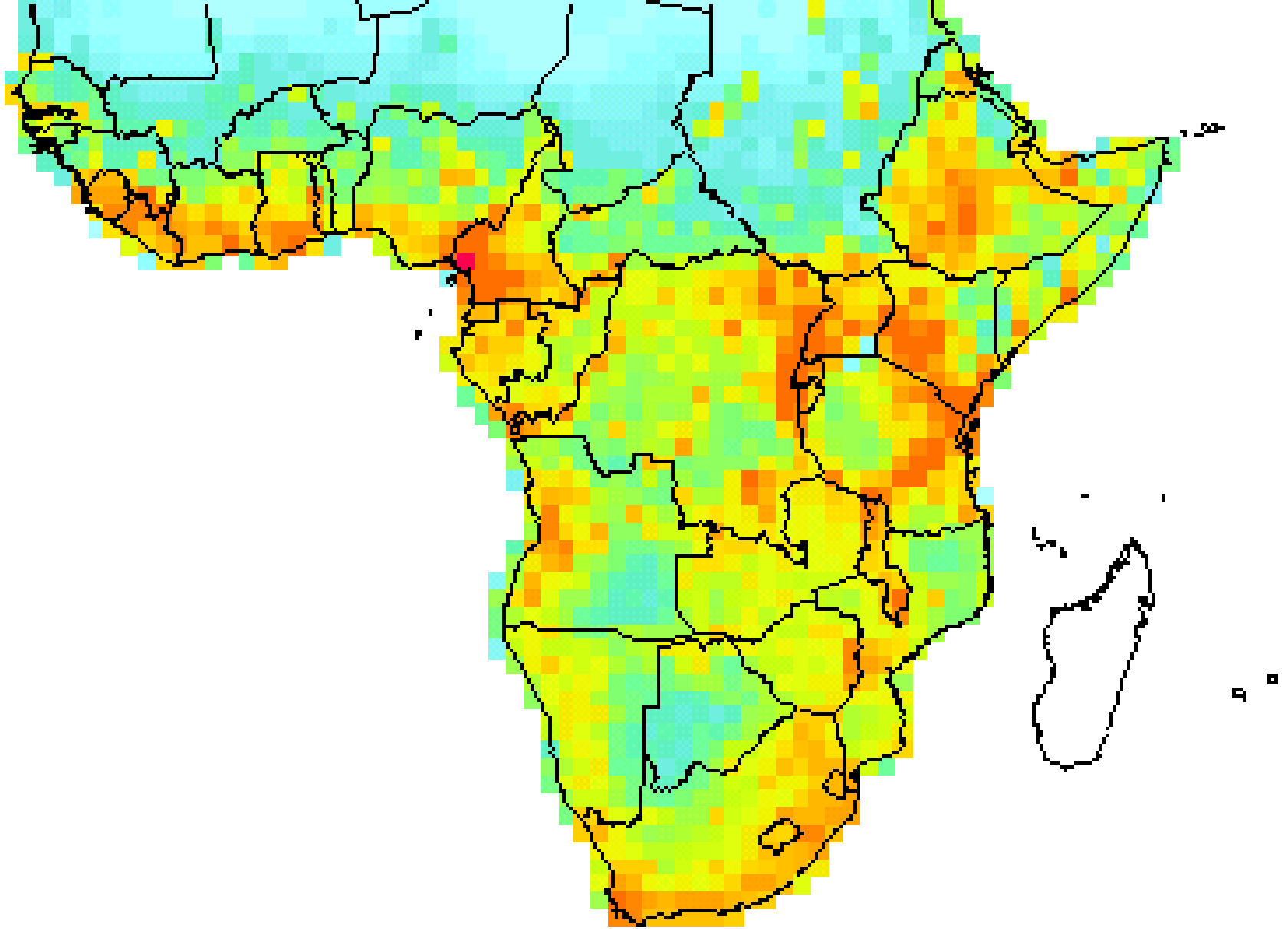
Areas of importance for biodiversity – since 1970s

- Many different approaches at various scales
- Most conservation action occurs at the site scale
- BirdLife International's success has led to similar approaches for other taxa
- But, this can be confusing for decision-makers…





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Restricted Range Species

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Need for a global standard

World Conservation Congress in Bangkok in 2004:

- IUCN members recognized the need for a unifying framework for identifying important sites across all biodiversity

Stakeholder engagement

Technical papers

Framing workshop

Regional Consultations

End Users Consultations

Technical Working groups

Criteria & Delineation

Rules & procedure

Thresholds

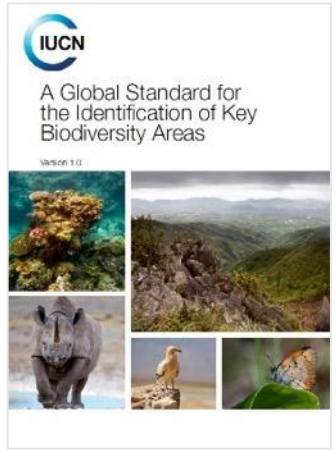
Marine

Online consultation

Testing

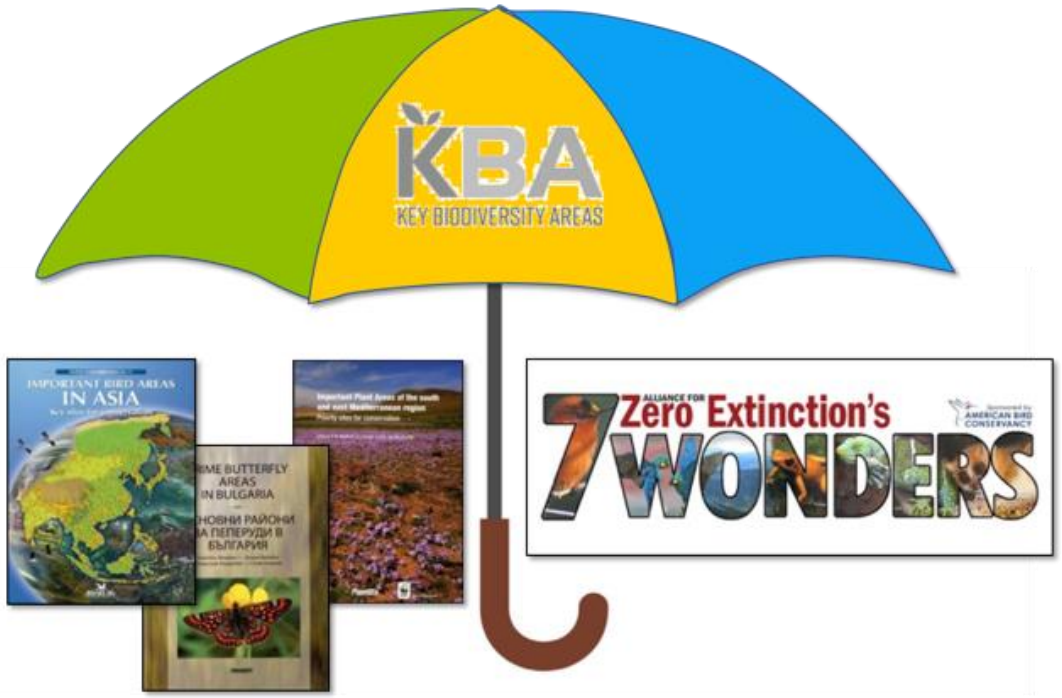
Editorial team

KBA Standard



Global consultation process

A unifying framework



- Key Biodiversity Areas provide an umbrella framework designed to harmonize existing approaches
- For the first time, the conservation community has rallied around a common approach

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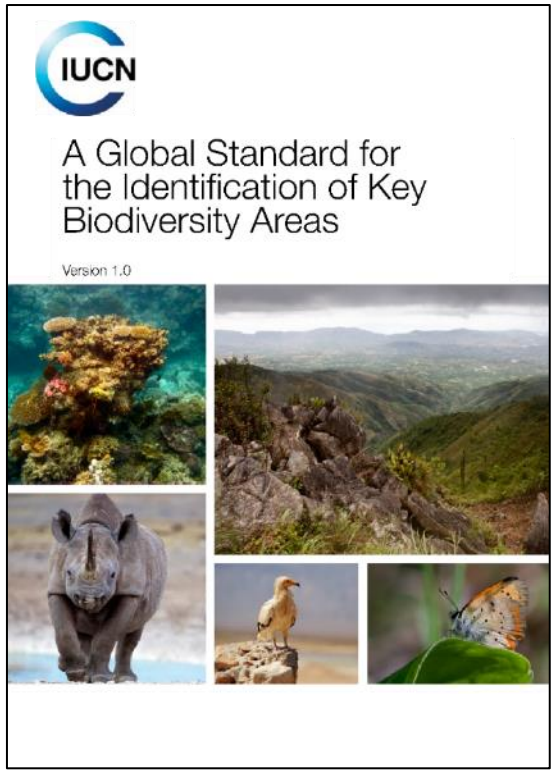
IUCN World Conservation Congress Hawai'i 2016

A Global Standard

- The KBA Standard: adopted by IUCN Council and launched at the World Conservation Congress in Hawaii in 2016



BirdLife INTERNATIONAL · IUCN · AMERICAN BIRD CONSERVANCY · asa amphibian survival alliance · CONSERVATION INTERNATIONAL · CRITICAL ECOSYSTEM PARTNERSHIP FUND · gef · GLOBAL WILDLIFE CONSERVATION · NatureServe · RAINFOREST TRUST · rspb giving nature a home · WCS · WWF

KBA PARTNERSHIP

BirdLife INTERNATIONAL

IUCN

AMERICAN BIRD CONSERVANCY

asa amphibian survival alliance

CONSERVATION INTERNATIONAL

CRITICAL ECOSYSTEM PARTNERSHIP FUND

gef

NATURESERVE

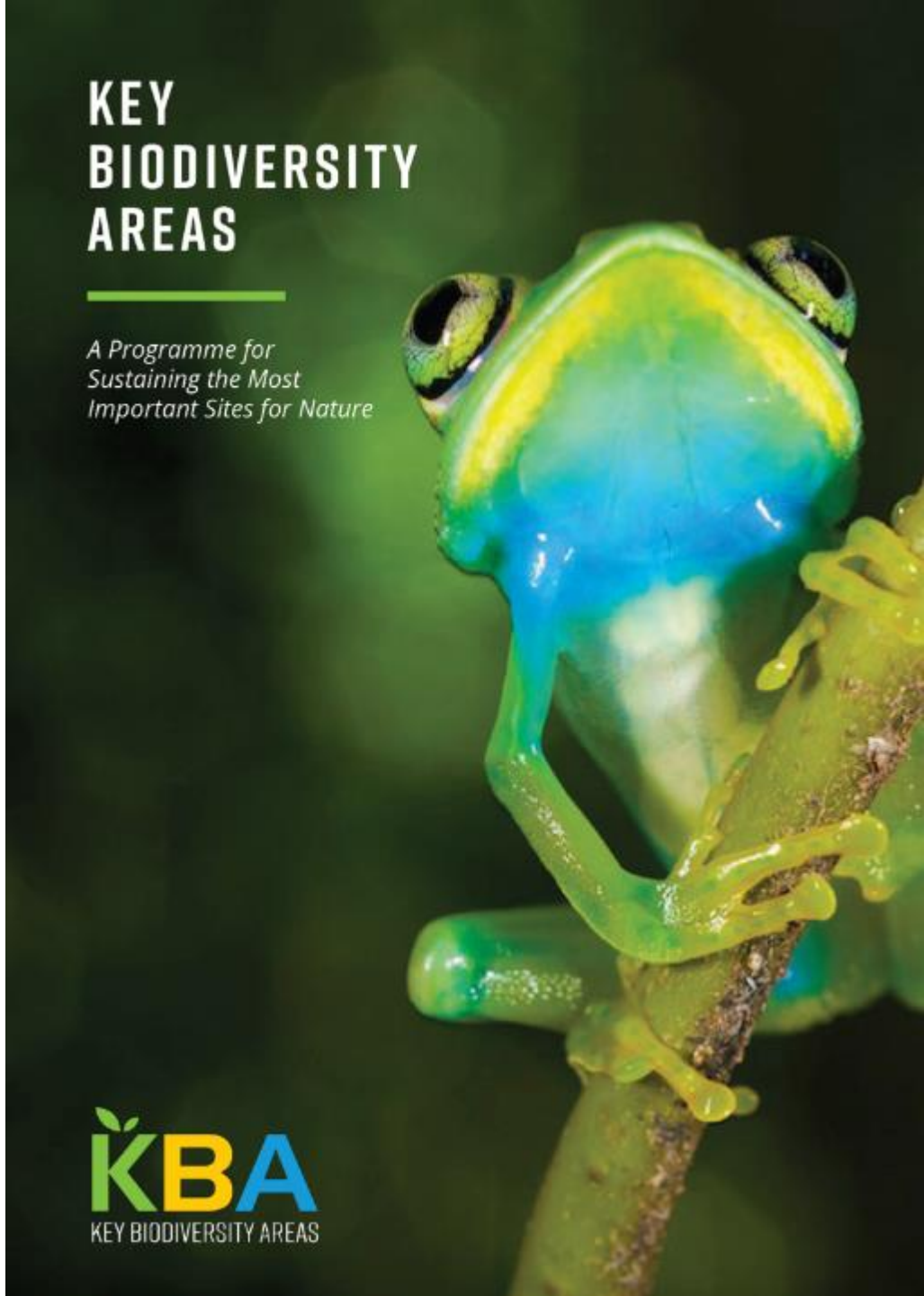
RAINFOREST TRUST

re:wild

rspb giving nature a home

WCS

WWF



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Key Biodiversity Areas (KBAs) are defined as:

"sites contributing significantly to the global persistence of biodiversity"

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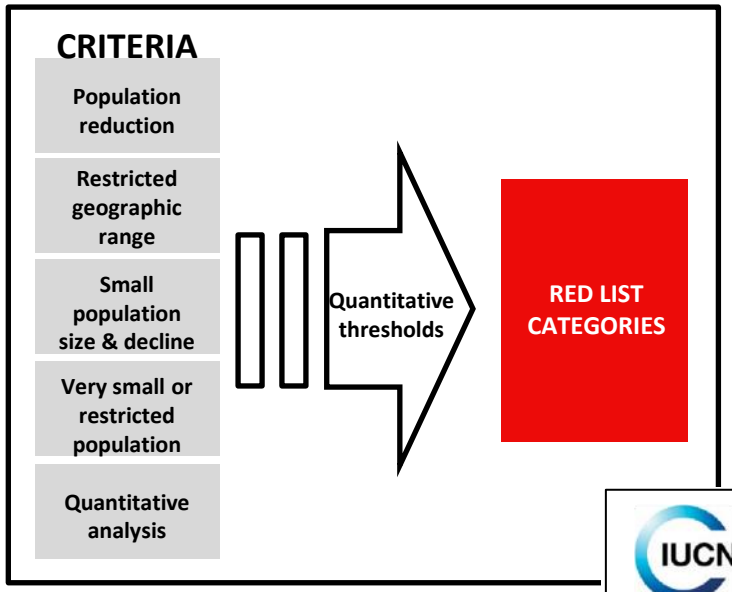
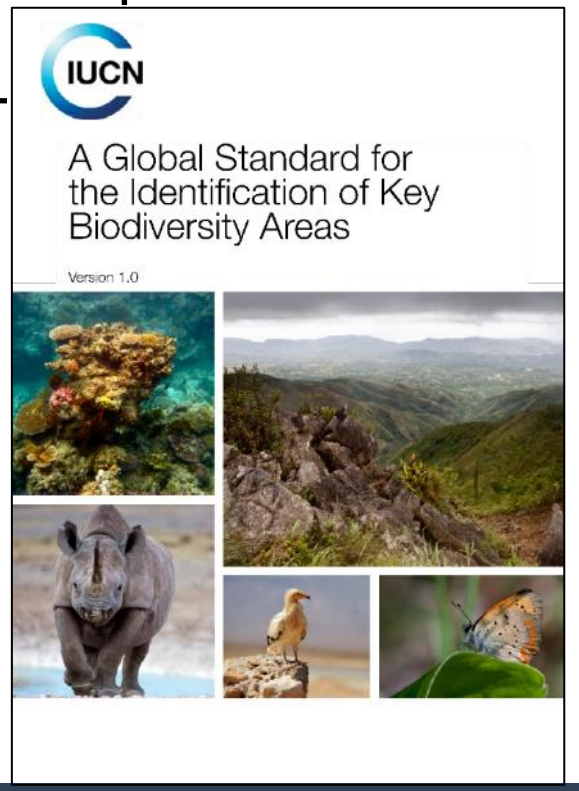
A Global Standard

A globally standardized science-based approach for identifying KBAs

Definitions, criteria and quantitative thresholds designed to ensure that KBA identification is:

- objective
- repeatable
- transparent



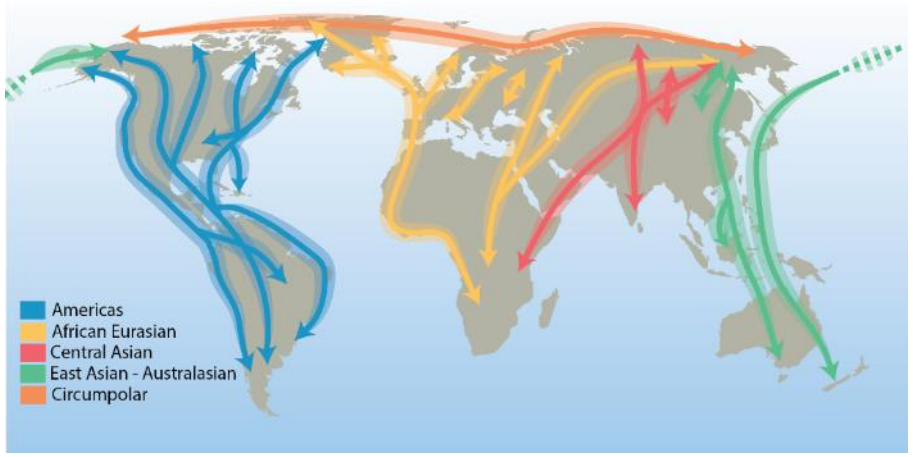


KBA Criteria

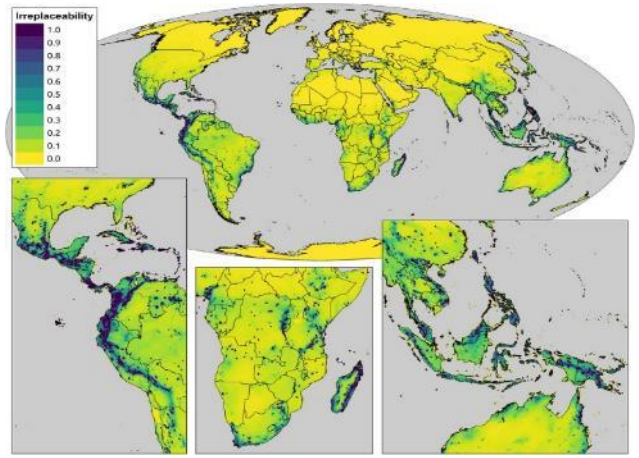
A: Threatened biodiversity

B: Geographically restricted biodiversity

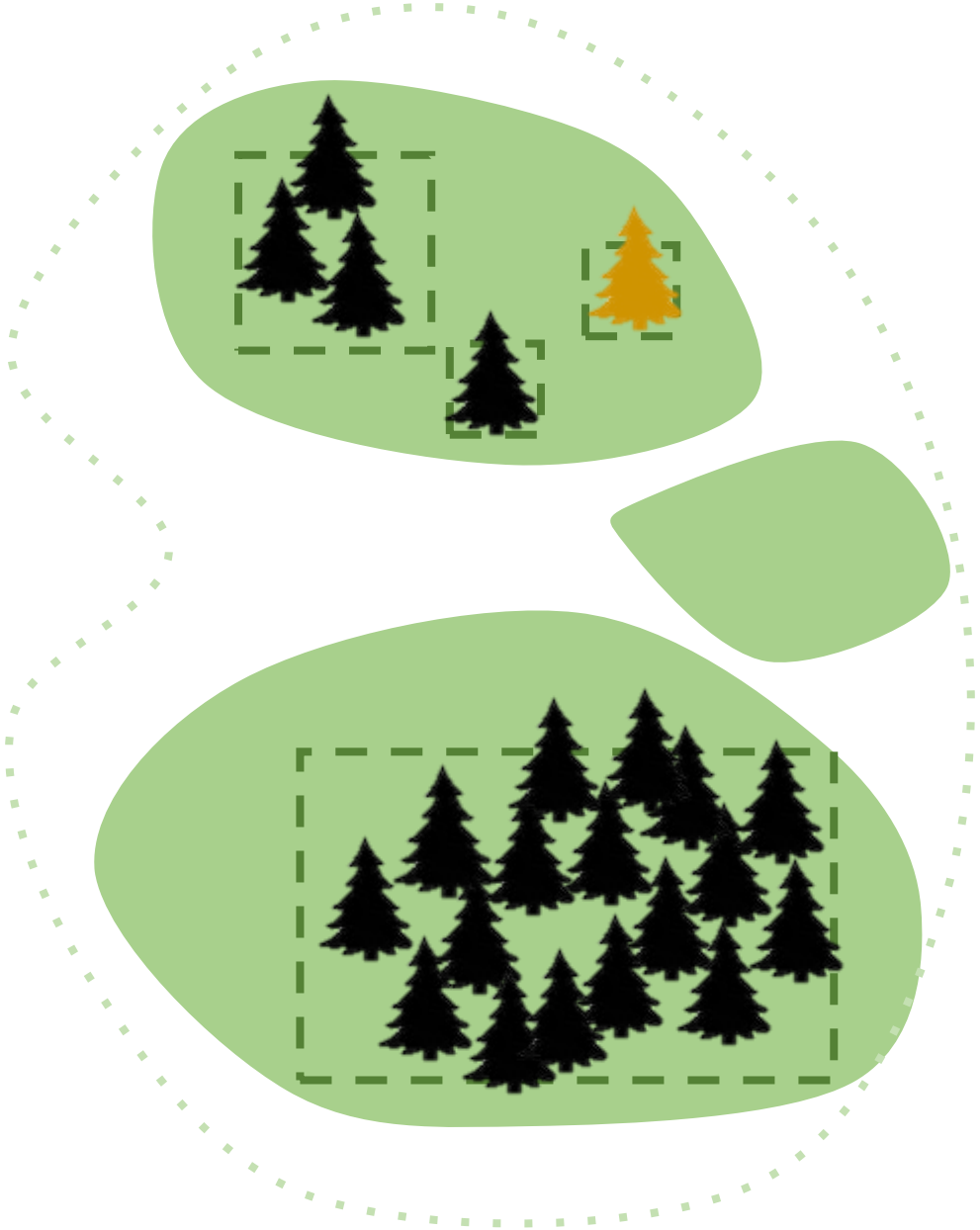
C: Ecological integrity



D: Biological processes



E: Irreplaceability

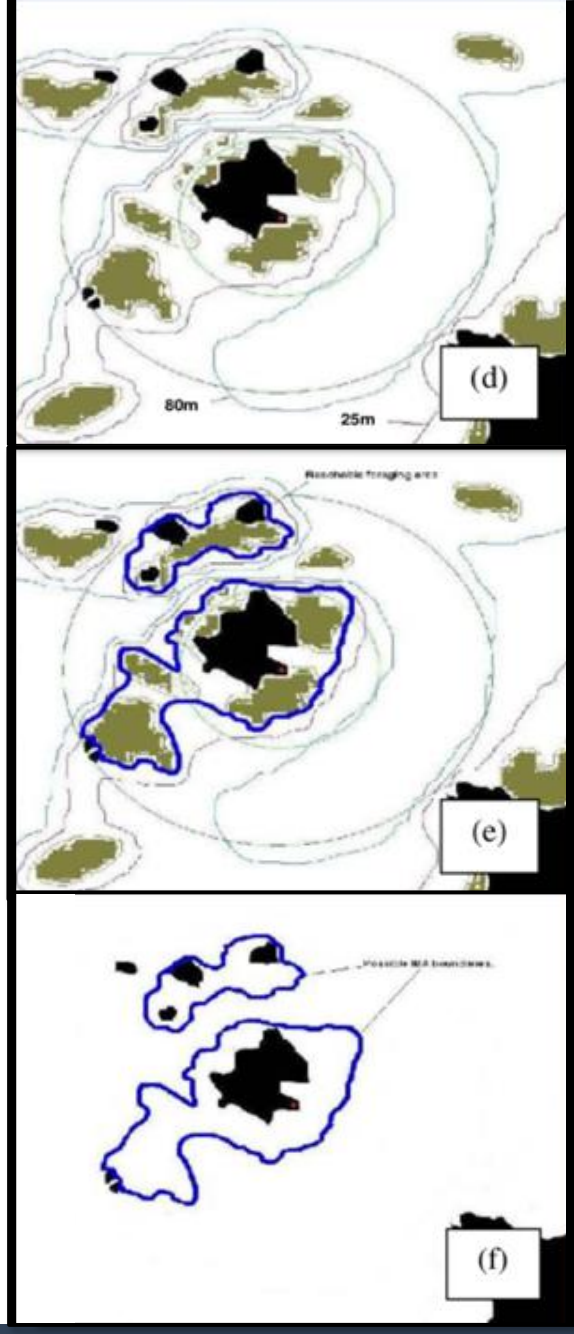


Assessment parameters

i. number of mature individuals
ii. area of occupancy
iii. extent of suitable habitat
iv. range
v. number of localities
vi. distinct genetic diversity

Delineating KBAs

- Delineation is the process of defining the geographic boundaries of a KBA
- Aim is to derive KBA boundaries that are ecologically relevant yet practical for management - manageable sites
- Required step in KBA identification
- It occurs in consultation with rights-holders and other relevant stakeholders



KBAs inform national, regional, and global decision-making

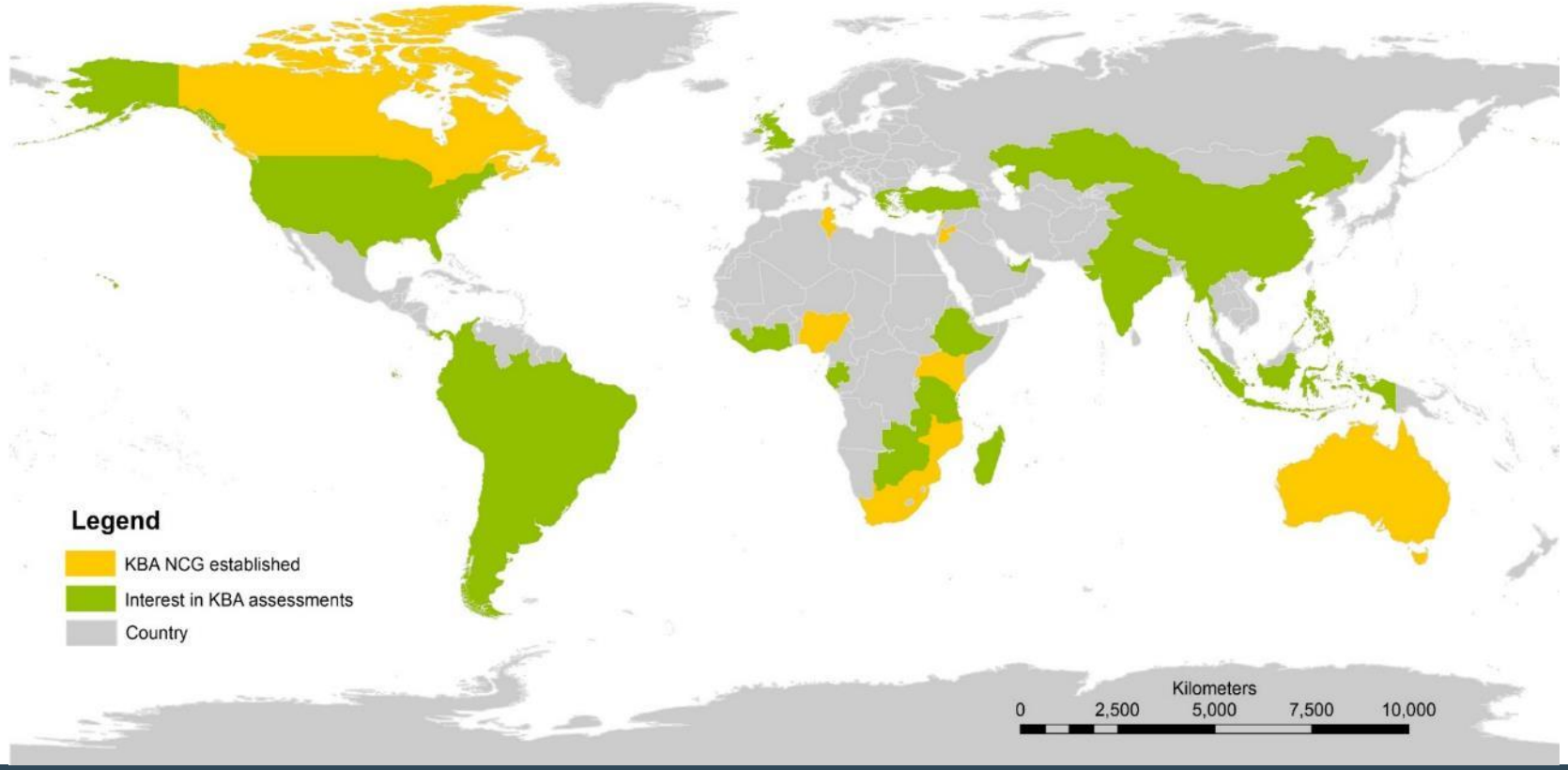
- Policy support to description of sites under international conventions
- Targets and indicators for CBD biodiversity targets and Sustainable Development Goals (14.5, 15.1, 15.4)
- Protected area creation & expansion
- Allocation of conservation funding
- Private and public sector environmental safeguards

gef

IFC
International Finance Corporation
WORLD BANK GROUP

KBAs identified nationally

- KBAs are identified at a national level
- Encourage the establishment of KBA National Coordination Groups



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HOME NEWS NATIONAL COORDINATION GROUP PROPOSE A KBA CONTACT

KBA | birdlife

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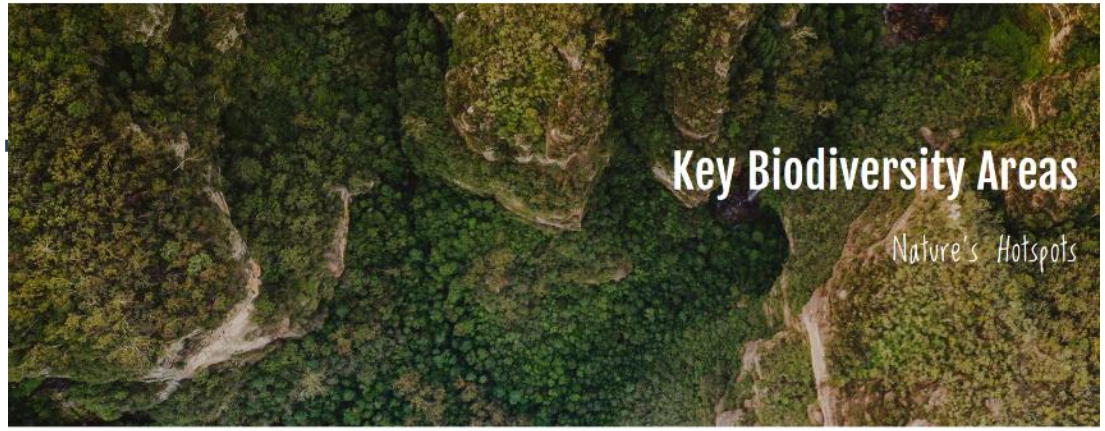

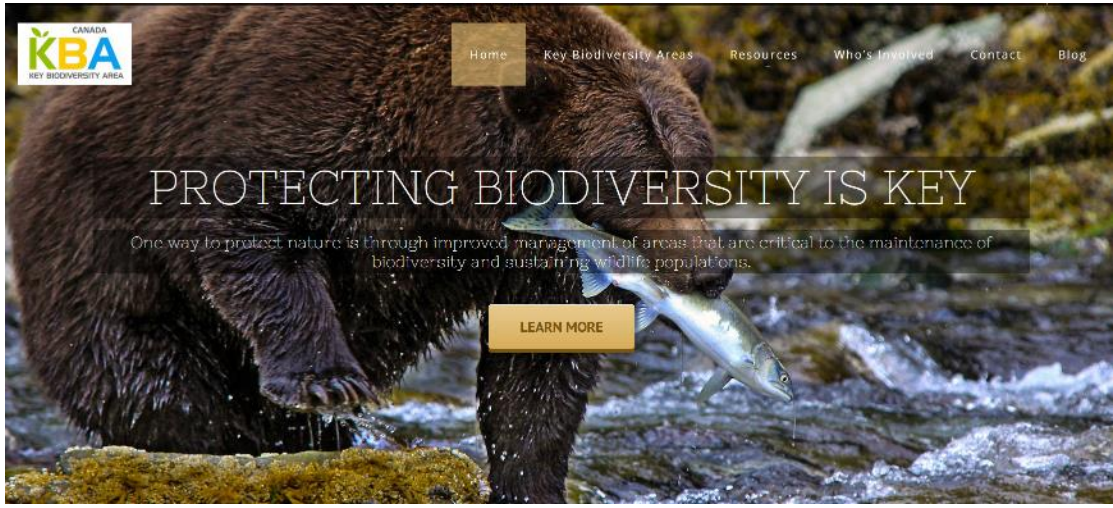

A Story Map

KBA USAID

Key Biodiversity Areas

Key Biodiversity Areas (KBAs) are sites that contribute significantly to the global persistence of biodiversity. Global standards for the KBAs identification were set in 2016 through the KBA Partnership, which is currently made up of 13 of the world's leading nature conservation organizations, including the Wildlife Conservation Society (WCS). As a member of this Partnership, WCS has the responsibility to support the identification, mapping, conservation and promotion of KBAs, raising funds to develop projects in the regions in which it operates.

SANBI
Biodiversity for Life
South African National Biodiversity Institute

GARDENS BIODIVERSITY RESOURCES COMMUNITY INITIATIVES NEWS ROOM EVENTS

Home » Biodiversity » Building Knowledge » Biodiversity Monitoring & Assessment » Key Biodiversity Areas in South Africa

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The identification and delineation of Key Biodiversity Areas is an important process, and SANBI and BirdLife South Africa are leading the initiative for South Africa.

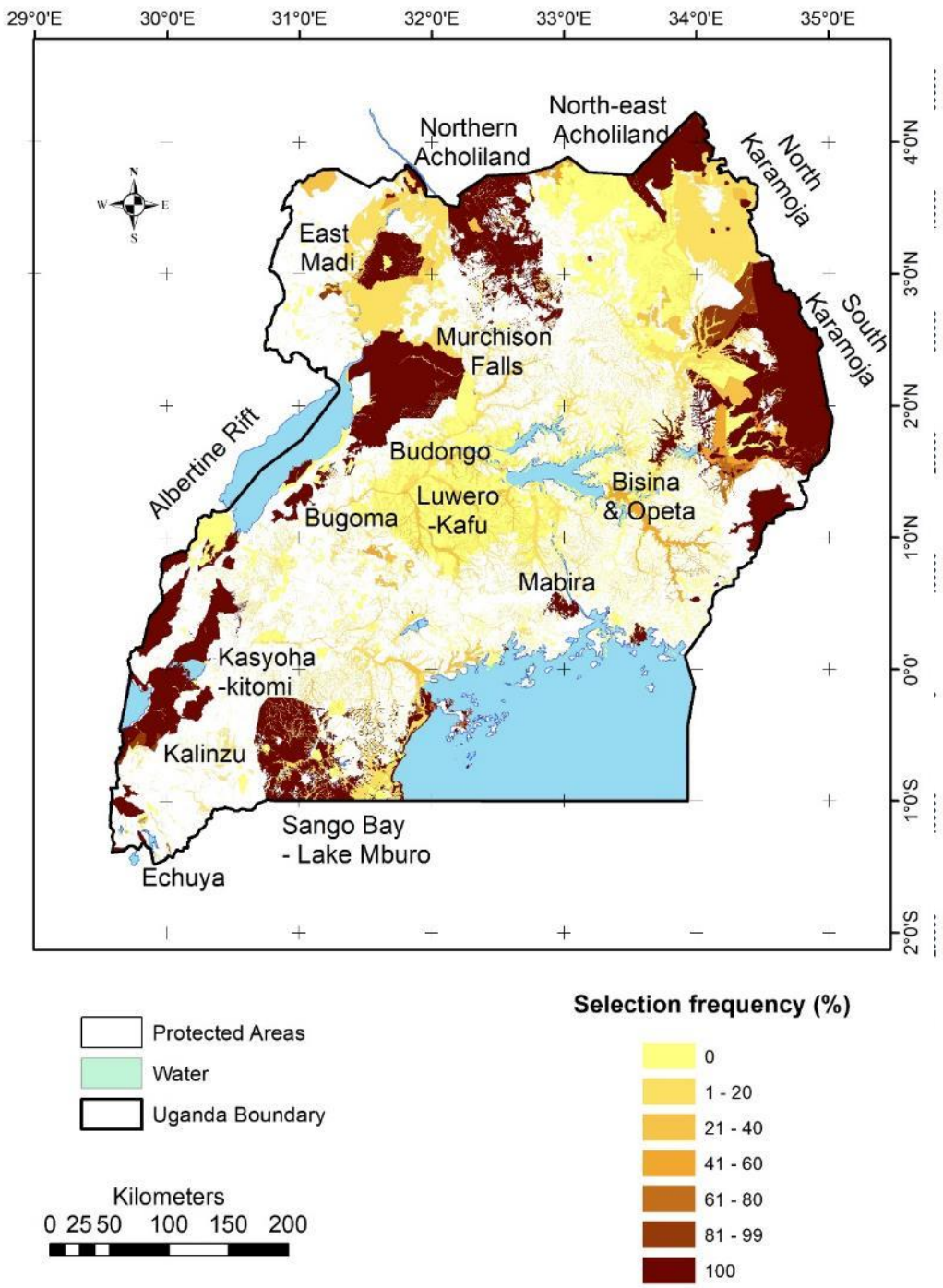
FOUNDATIONS
BUILDING KNOWLEDGE
SCIENCE INTO POLICY/ACTION

Identifying KBAs for Uganda

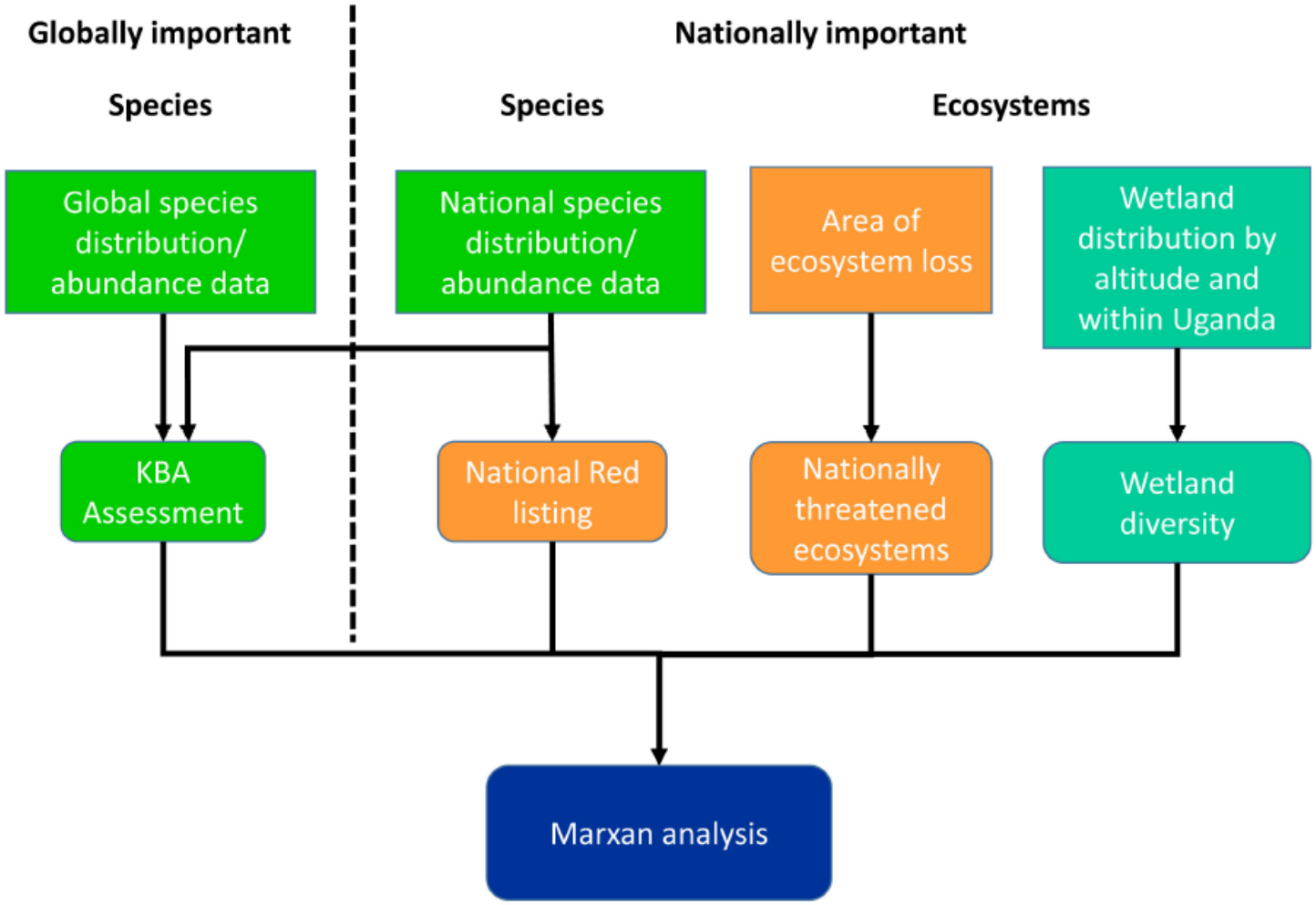
Applied the KBA criteria in Uganda to identify KBAs for mammals, birds, herps, plants and freshwater species (IUCN FW unit)

45 KBAs identified

Systematic Conservation Planning assessment also identified irreplaceable sites for Global and National priorities



Sites of Global and National Importance should be considered in spatial planning



Congo Basin Overview

- NCGs are established in Gabon, Republic of Congo and Democratic Republic of Congo with 54 member institutions
- 112 Taxonomic experts engaged
- 979 trigger species
- 156 sites assessed

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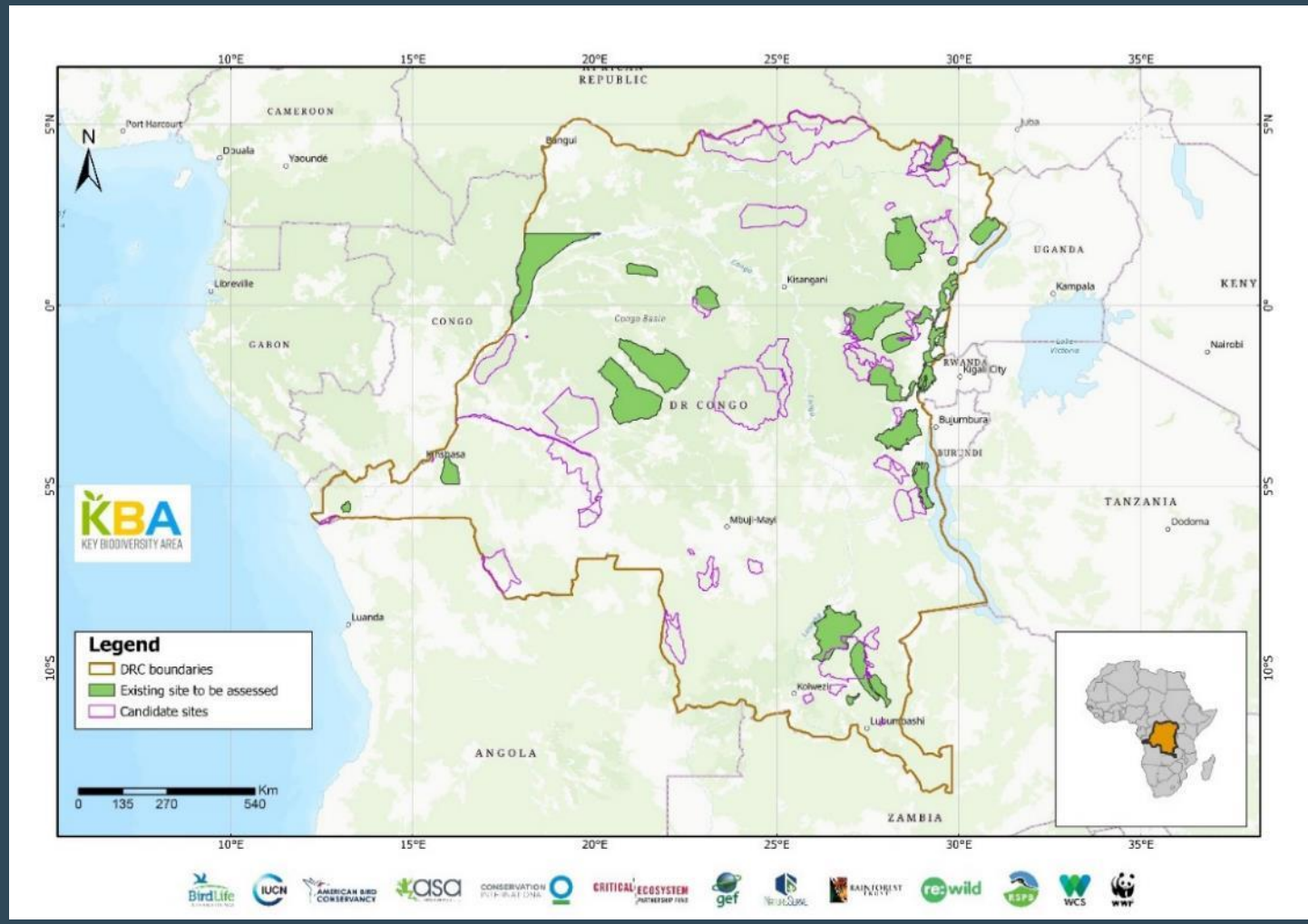
Democratic Republic of Congo

- 49 experts
- 155 trigger species in five taxonomic groups
- 24 KBAs reassessed
- 56 candidate KBAs
- 6 meetings of the NCG



Photograph by @Matt Muir

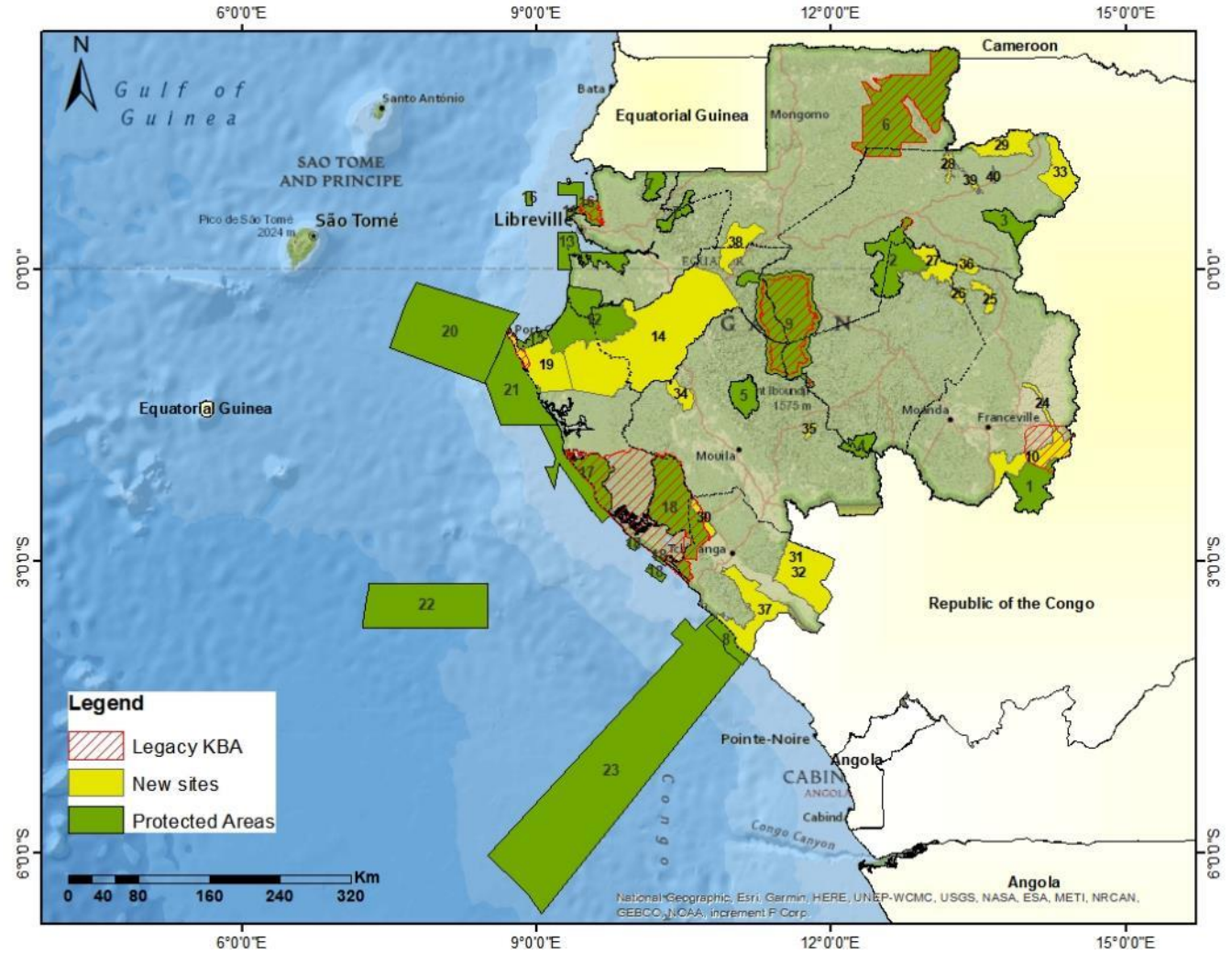
Congo Republic

- NCG was established with 15 members, very government-heavy
- 44 experts in 8 taxonomic groups
- 340 trigger species in seven taxonomic groups
- 10 KBAs reassessed (one split)
- 23 candidate KBAs


Photograph by @Simon Pierce

Gabon

- 19 experts in eight taxonomic groups
- 400 plant and 84 animal trigger species
- 53 sites assessed and grouped into 40 KBAs



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Query information: World Database of KBAs

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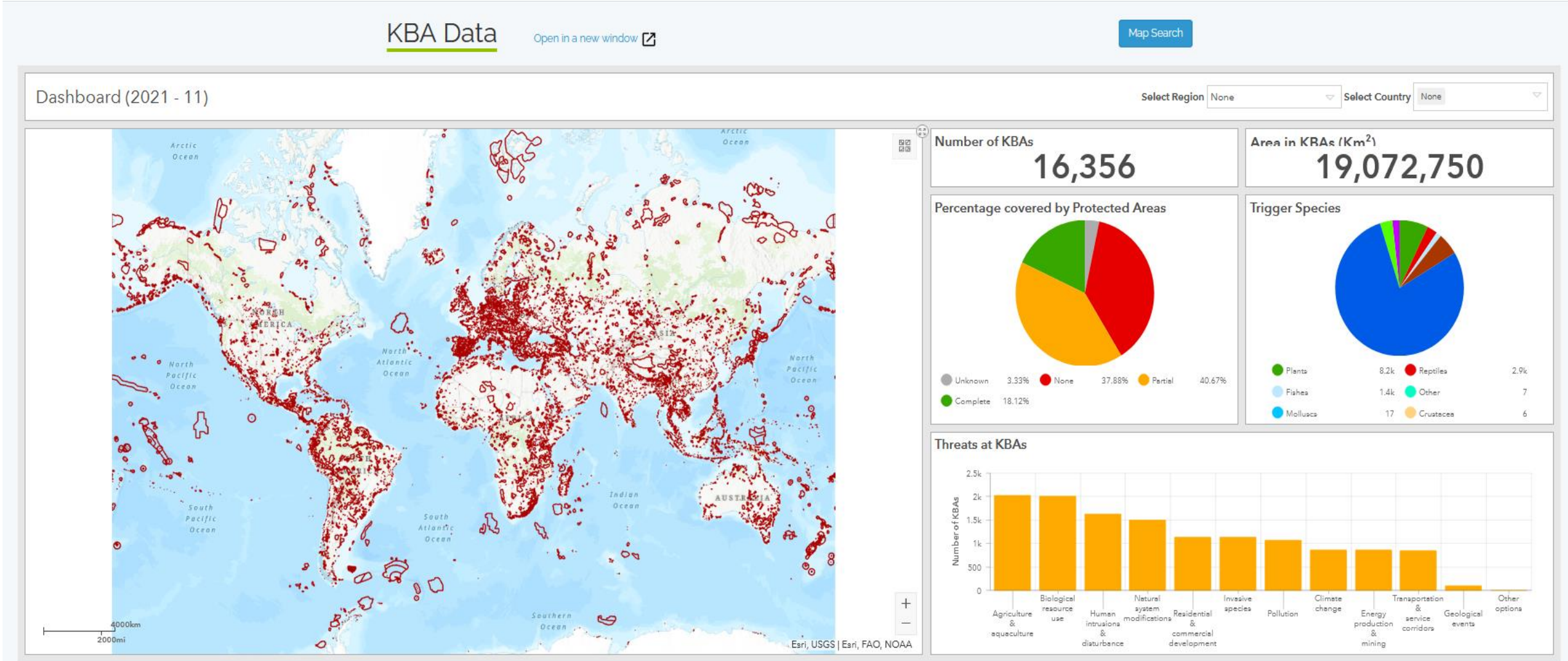

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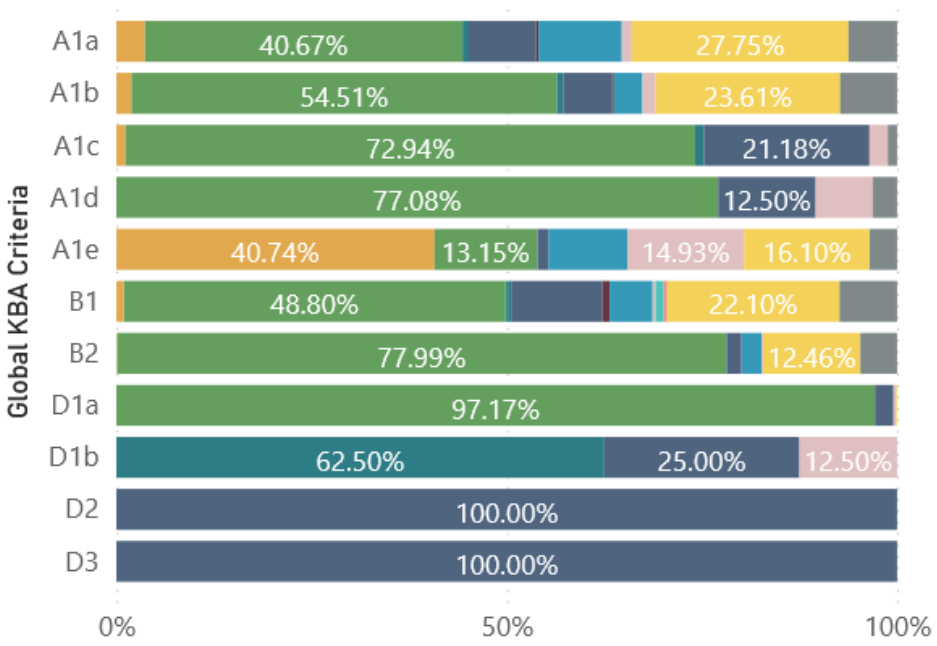
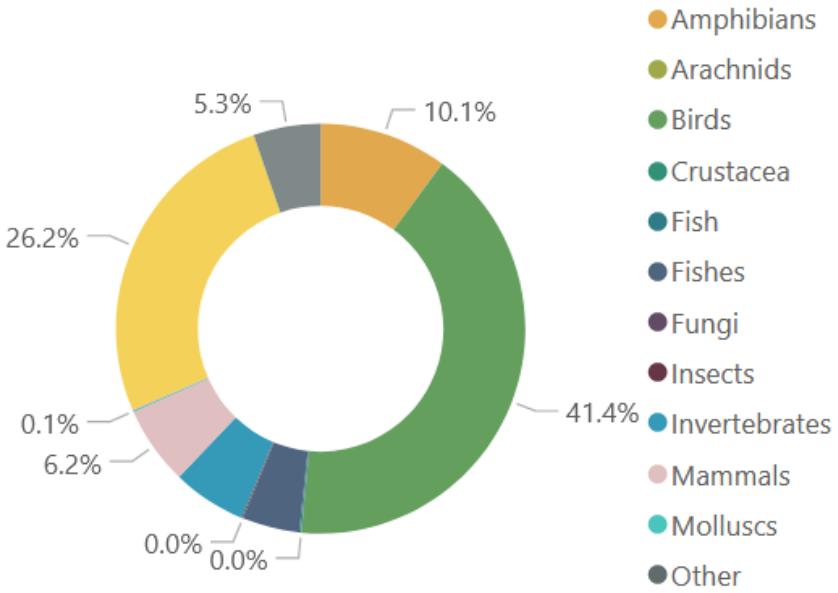
Global KBA Criteria composition by taxonomic group



Distinct species triggering KBA Criteria (incl. Legacy)



Site ID	Region	Country	Site Name	Taxonomic Group	Taxon ID	Scientific Name	Common Name	Red List Category	Re
11	Europe	Portugal	Ponta de São Lourenço	Birds	22686806	Apus unicolor	Plain Swift	LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22694601	Sterna dougallii	Roseate Tern	LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22694623	Sterna hirundo	Common Tern	LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22698132	Bulweria bulwerii	Bulwer's Petrel	LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22698261	Puffinus assimilis		LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22698501	Hydrobates castro		LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22718508	Anthus berthelotii	Berthelot's Pipit	LC	
11	Europe	Portugal	Ponta de São Lourenço	Birds	22720056	Serinus canaria	Island Canary	LC	
12	Europe	Portugal	Ilhéus do Porto Santo	Birds	22686806	Apus unicolor	Plain Swift	LC	

16,356
Number of KBAs

20,466,360
KBA Area (sq. km.)

42.37%
Avg. PA & OECM Coverage %

13,235
Trigger species

4,151
KBAs with identified threats

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Donors using KBAs to guide investment

- USAID funding KBA identification processes
- EU using language promoting using KBAs to guide where protection occurs under 30 by 30 and in EU Sustainable Finance Taxonomy
- KfW using KBAs to guide their locations of Legacy Landscapes

CRITICAL ECOSYSTEM PARTNERSHIP FUND

RAINFOREST TRUST

gef
GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

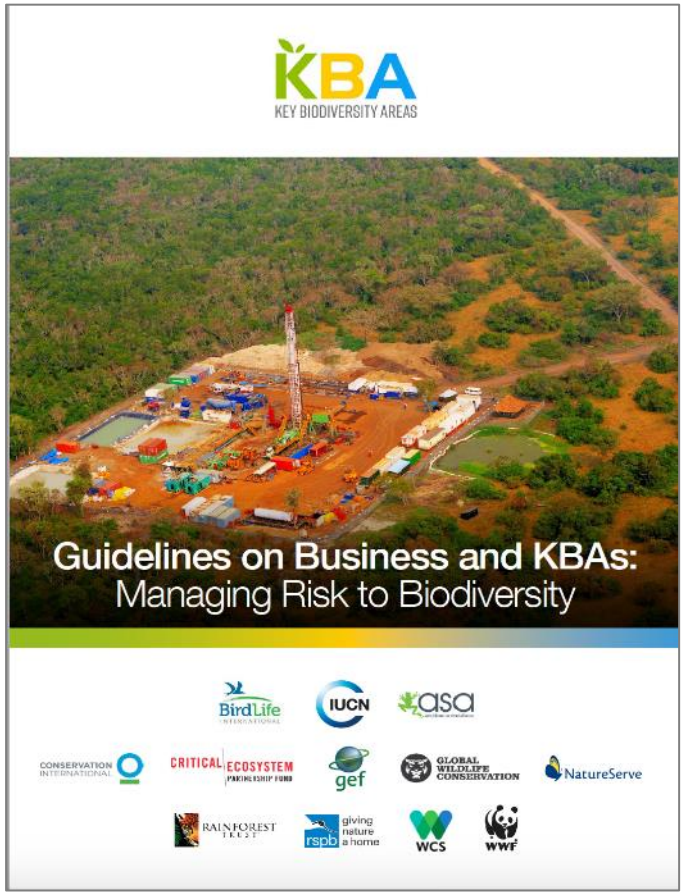
LEGACY LANDSCAPES FUND

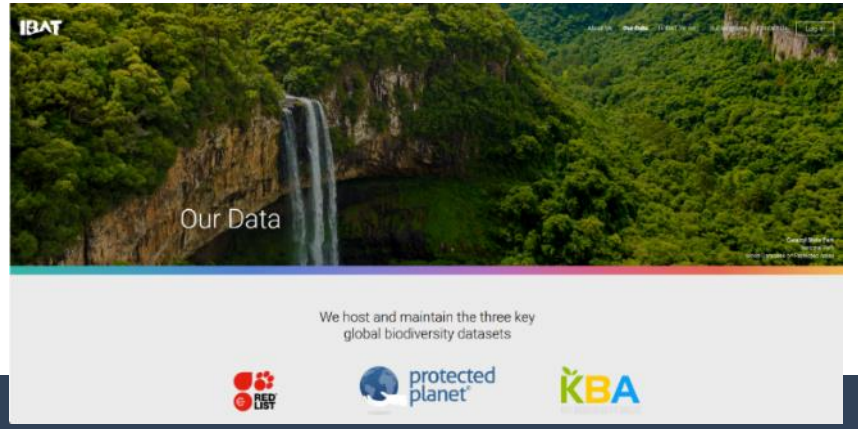
Fondation Franklinia

BirdLife INTERNATIONAL · IUCN · AMERICAN BIRD CONSERVANCY · asa · CONSERVATION INTERNATIONAL · CRITICAL ECOSYSTEM PARTNERSHIP FUND · gef · NATURESERVE · RAINFOREST TRUST · re:wild · rspb giving nature a home · WCS · WWF

Making KBA data available to Private sector

- Guidelines for Businesses and governments developed around KBAs
- KBAs – Critical Habitat (IFC, Equator Principles, Société Générale)
- Banks and biodiversity no-go policy: http://banksandbiodiversity.org
- KBA data provided through the Integrated Biodiversity Assessment Tool (IBAT) for commercial use – supports cost of maintaining database

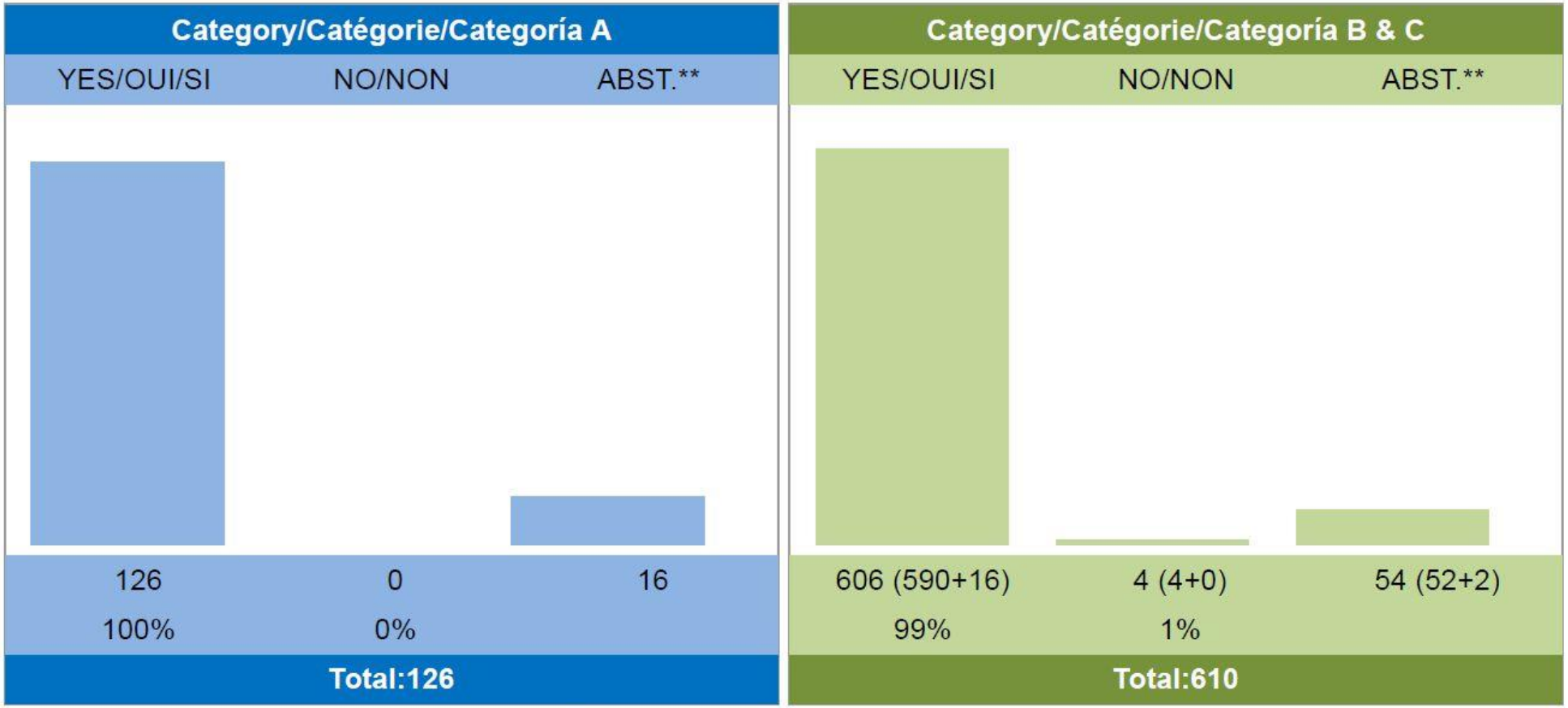




Using KBAs in national spatial planning
IUCN WCC 2020 Resolution 081

- Calls upon governments at all levels to:
  a) develop or update spatially explicit conservation plans to incorporate sites and areas of importance for the global persistence of biodiversity across multiple taxa and ecosystems (KBAs), along with the connectivity required to ensure biodiversity persistence, and use these to inform plans to expand networks of protected areas and other effective area-based conservation measures; and
  b) incorporate these plans into National Biodiversity Strategies and Action Plans (NBSAPs), and integrate them through cross-sectoral planning across government and non-governmental institutions, using them prior to, and at all stages of, national land- and sea-use planning, to avoid or otherwise minimise negative impacts on biodiversity;

Motion strongly supported by votes

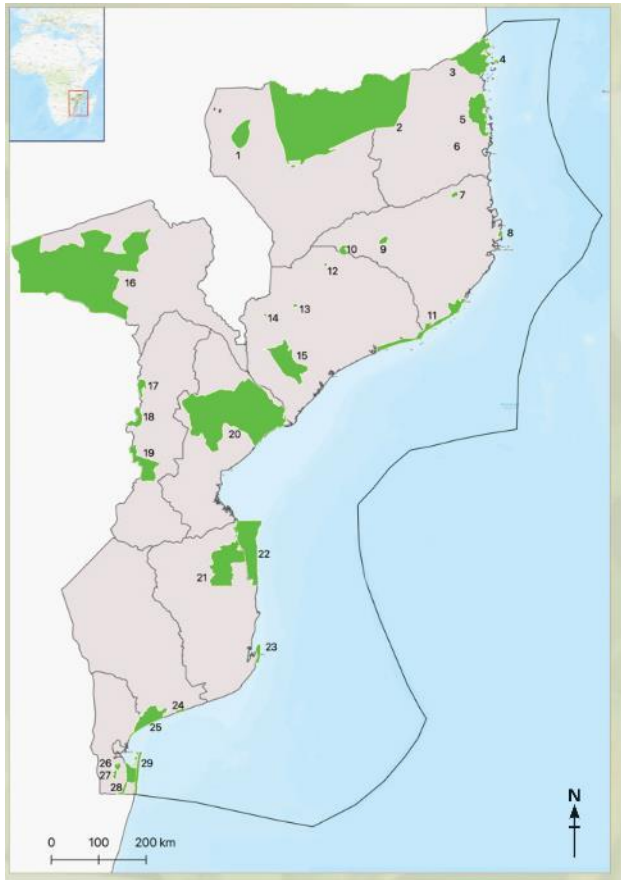


** Abstentions are not counted as votes cast (Art. 32) /
Les abstentions ne sont pas comptées comme suffrages exprimés (Art.32) /
Las abstenciones no se contabilizarán como votos emitidos (Art.32)

KBA
KEY BIODIVERSITY AREAS

KBAs being incorporated in national spatial planning

- Target 1 of Global Biodiversity Framework aims for spatial planning across all nations
- Mozambique - Using KBAs to expand their protected area networks
- Donors are using KBAs to guide where investment occurs in Mozambique also
- The Private sector is using KBAs to minimise risk, and offsets on impacts will be used to support financing of KBAs

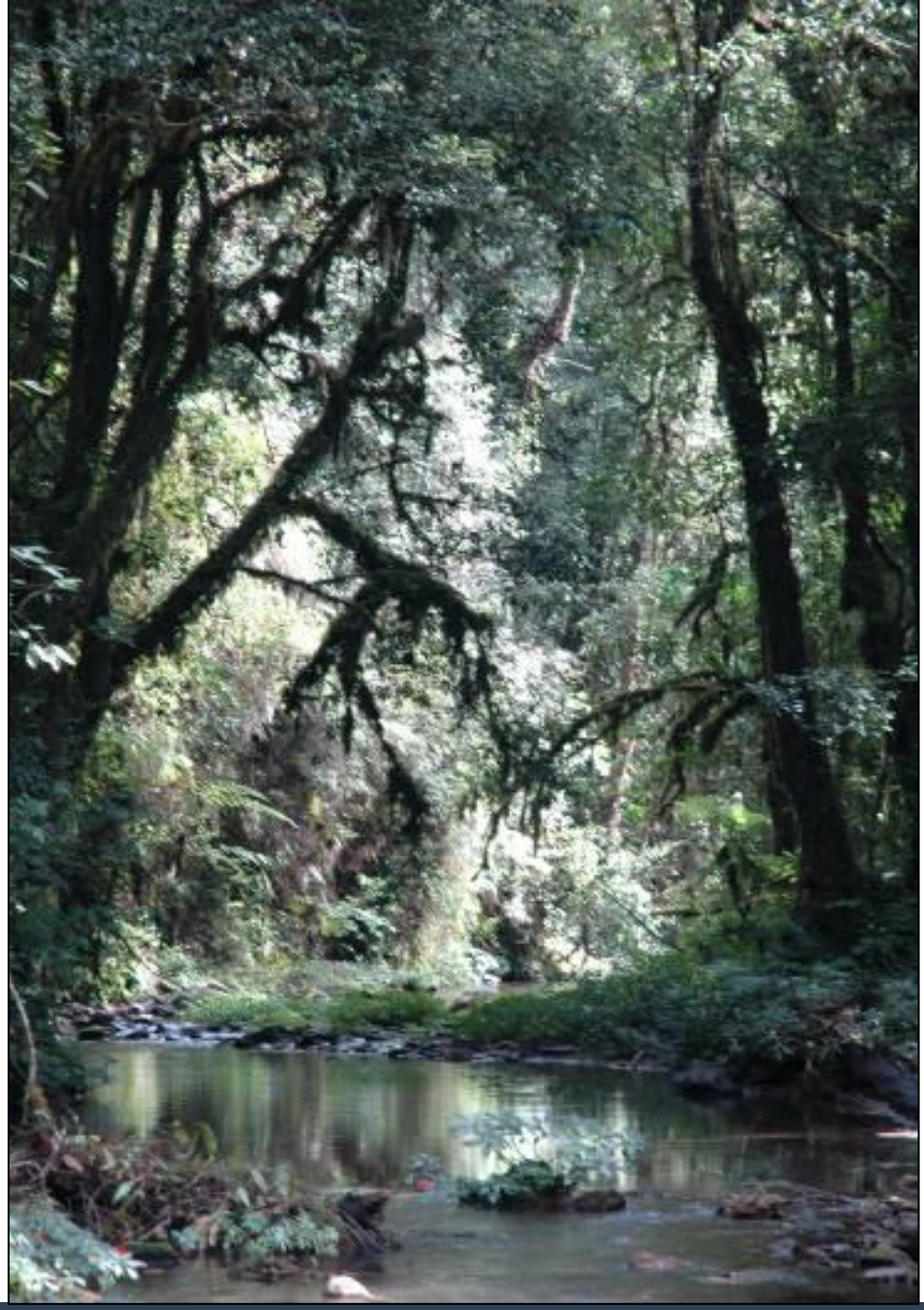


KBA	PROVINCE
1. Njesi Plateau	Niassa
2. Niassa Special Reserve	Niassa
3. Palma	Cabo Delgado
4. Vamizi	Cabo Delgado
5. Quiterajo	Cabo Delgado
6. Taratibu	Cabo Delgado
7. Eráti	Nampula
8. Matibane Forest Reserve	Nampula
9. Ribáuè-Mphalwe	Nampula
10. Mount Inago	Nampula
11. APAIPS	Zambezia
12. Mount Namuli	Zambezia
13. Mount Mabu	Zambezia
14. Mount Chiperone	Zambezia
15. Derre Forest Reserve	Zambezia
16. Tchuma-Tchato-Cahora Bassa Lake	Tete
17. Serra Choa	Manica
18. Machipanda	Manica
19. Chimanimani National Park	Manica
20. Gorongosa and Marromeu Complex	Sofala
21. Inhassoro-Vilankulos	Inhambane
22. Great Bazaruto	Inhambane
23. Tofo	Inhambane
24. Chongoene	Gaza
25. Manhiça-Bilene	Gaza
26. Matutuine	Maputo
27. Licuáti Forest Reserve	Maputo
28. Maputo Special Reserve	Maputo
29. Ponta do Ouro Partial Marine Reserve	Maputo

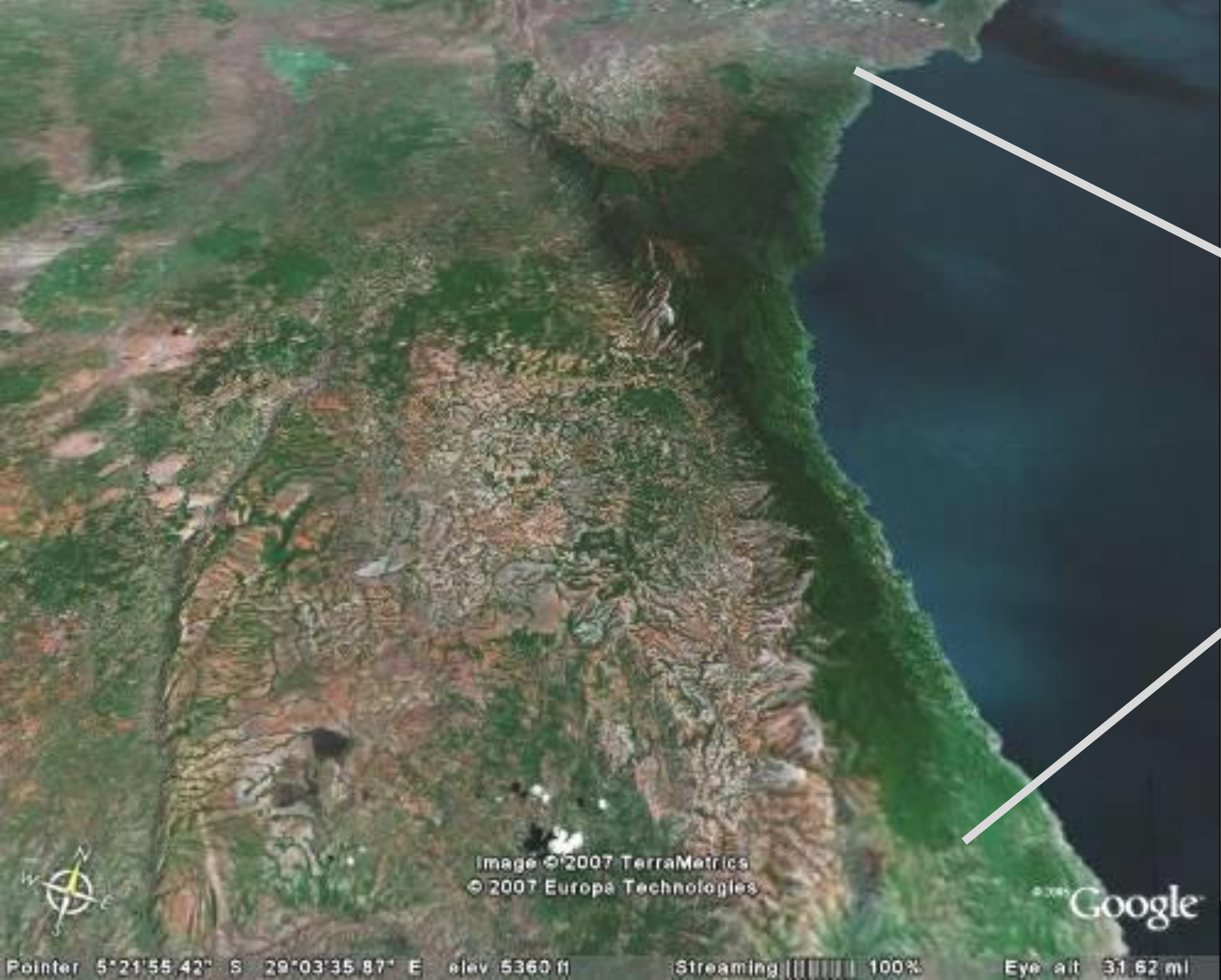
KBA
KEY BIODIVERSITY AREAS

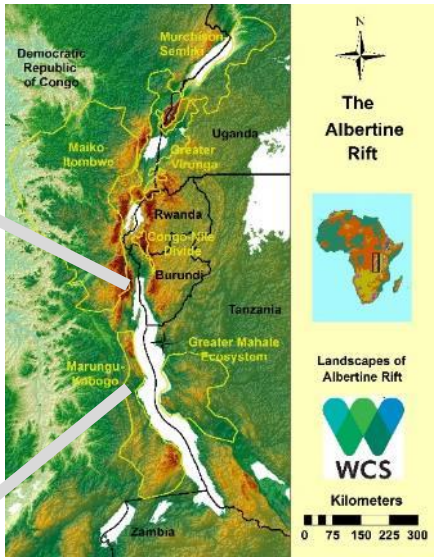
Conserving the sites once identified

- Identifying a site as a KBA is just the first step
- Need to work with local community to look at options for management
- Source the funds to enable that management to happen
- Work with the management authority to manage the site



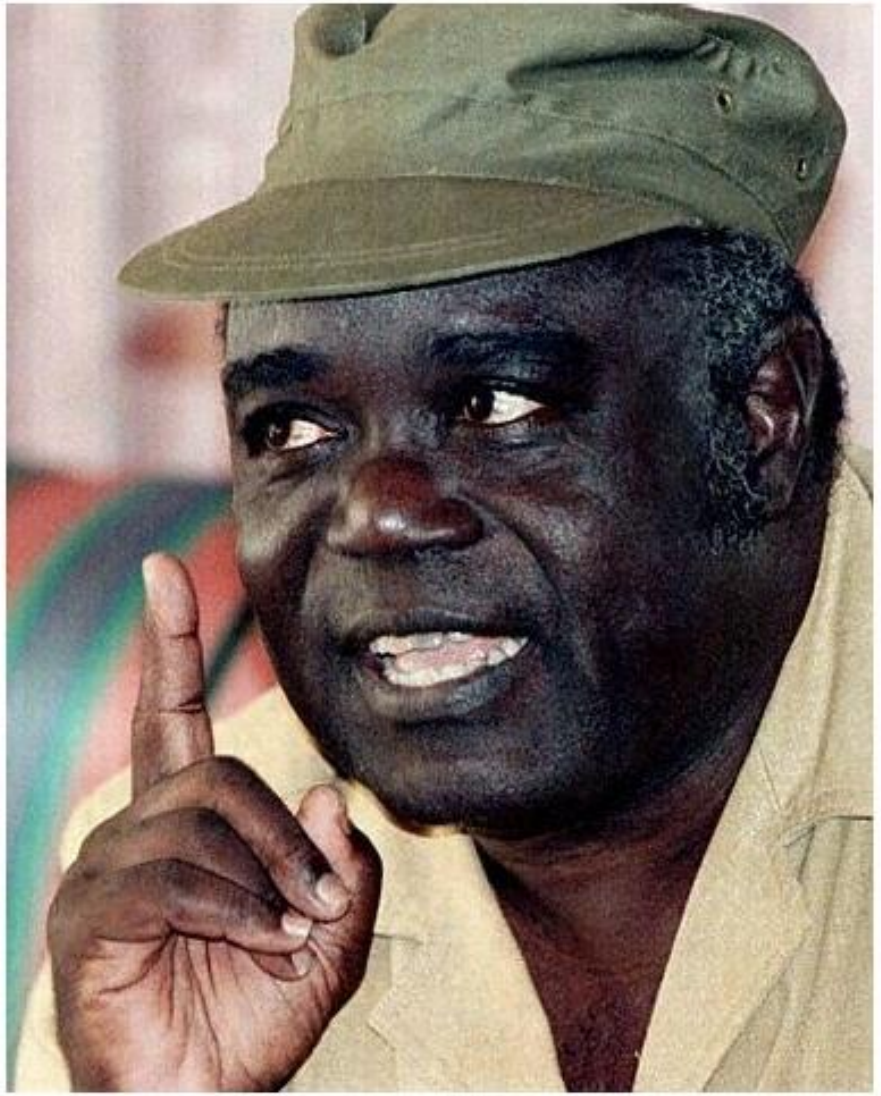
KBA
KEY BIODIVERSITY AREAS

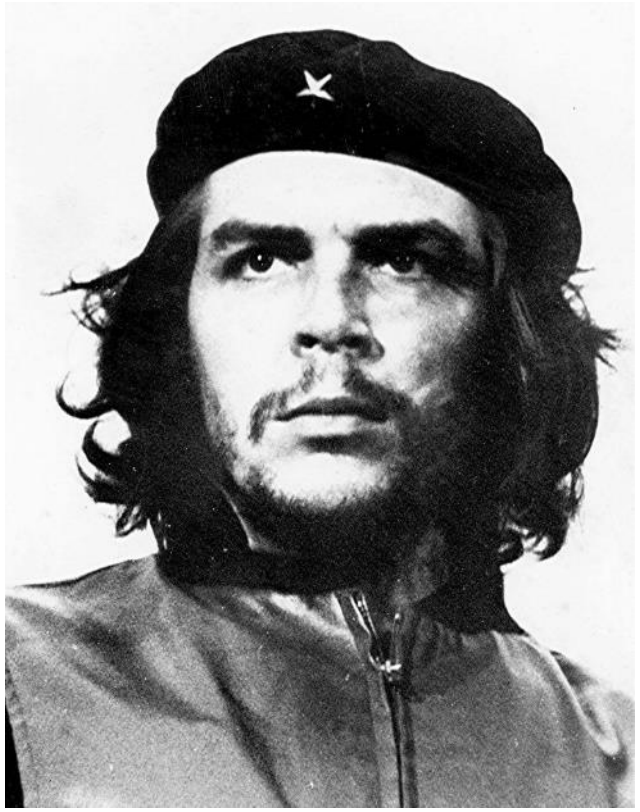




Kabobo Forest Biodiversity surveys 2007

Jane Goodall’s lucky escape in mid 1970s





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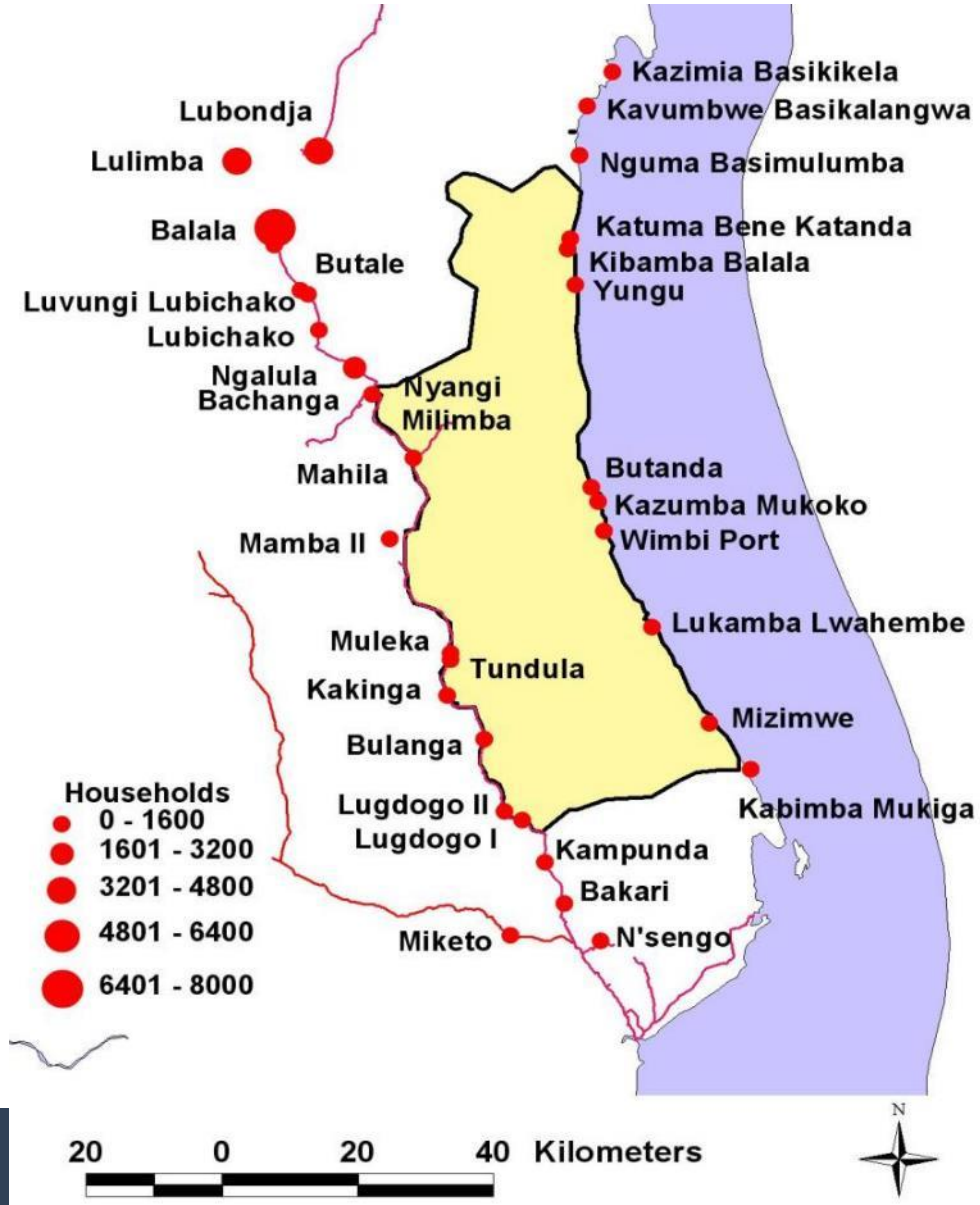
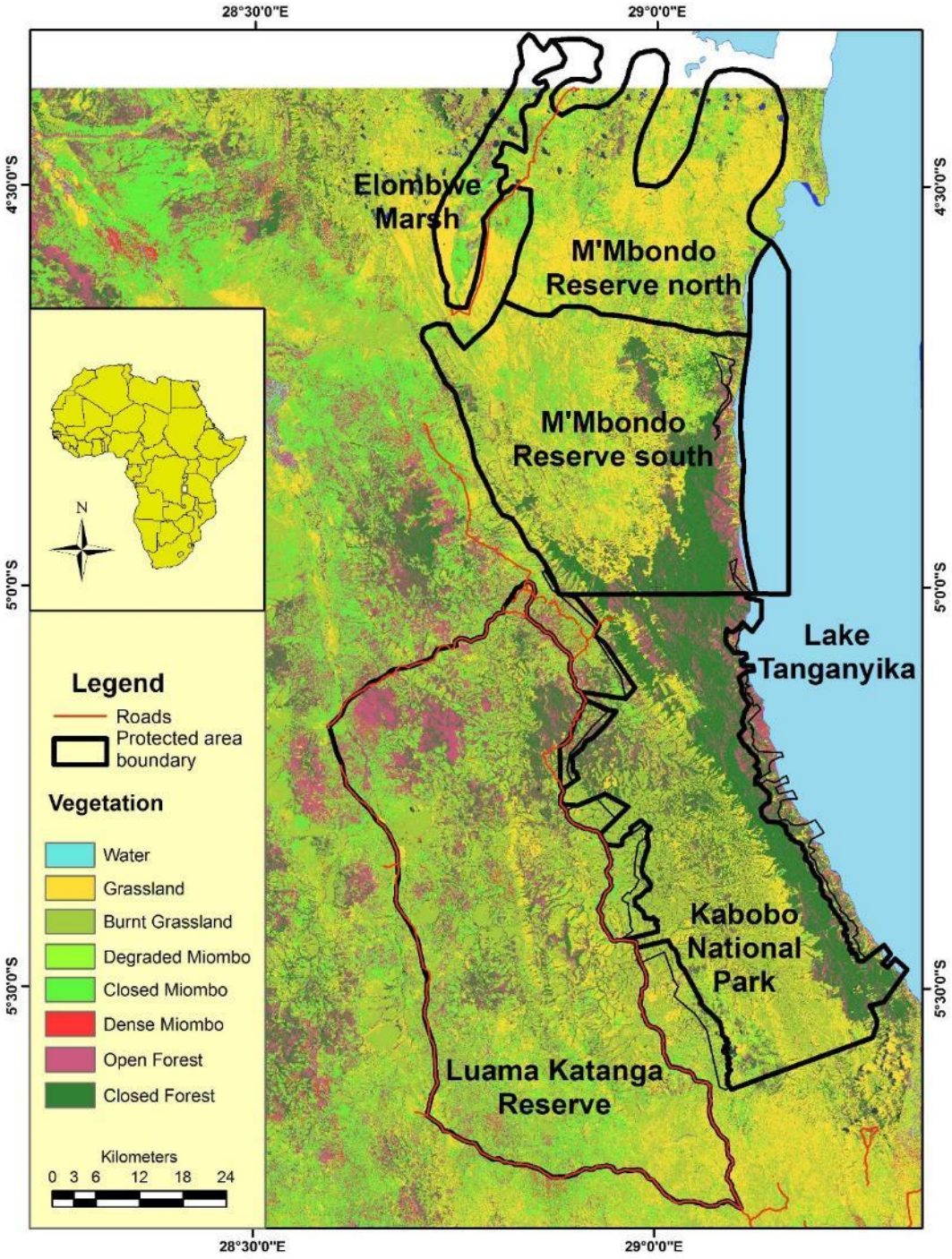
Socio-economic surveys 2008



Questionnaire surveys about livelihoods, use of forest, and interest in conserving forest

Income sources	Lake ($US)	Road ($US)
Total income from Agriculture	7,900	9,600
Forest income	572	405
Cash income from agriculture	3,089	659
Cash income from forest	310	382



KBA
KEY BIODIVERSITY AREAS

Final design of reserves agreed and established in law in 2016

Funds available now to manage the site with the communities

KBA
KEY BIODIVERSITY AREAS

About KBAs ▾ Working with KBAs ▾ Explore Data ▾ News

KBA
KEY BIODIVERSITY AREAS

Key Biodiversity Areas: keep nature thriving

Key Biodiversity Areas (KBAs) are the most important places in the world for species and their habitats. Faced with a global environmental crisis we need to focus our collective efforts on conserving the places that matter most. The KBA Programme supports the identification, mapping, monitoring and conservation of KBAs to help safeguard the most critical sites for nature on our planet – from rainforests to reefs, mountains to marshes, deserts to grasslands and to the deepest parts of the oceans.

Website: www.keybiodiversityareas.org