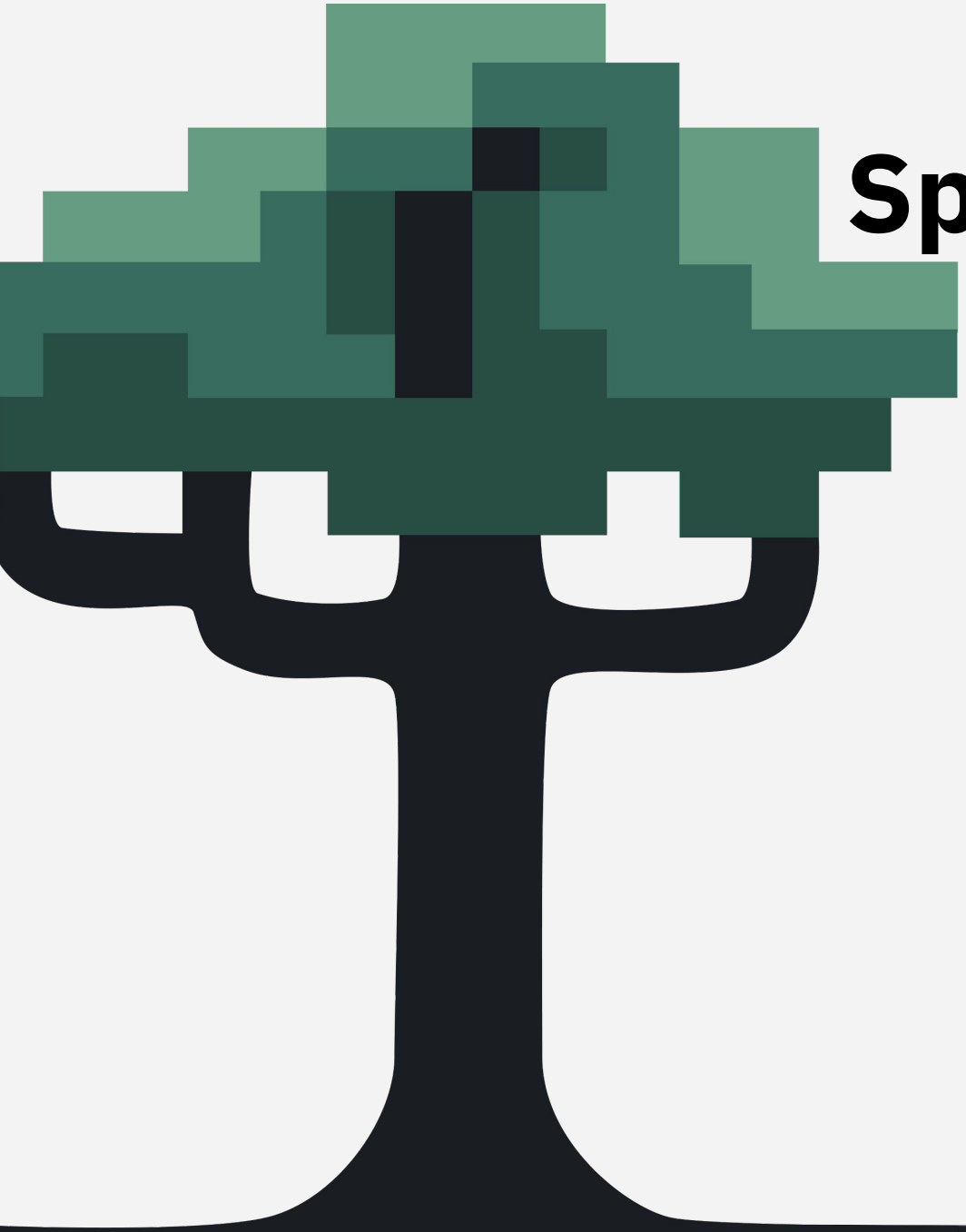

Species Protection Platform

April 2023

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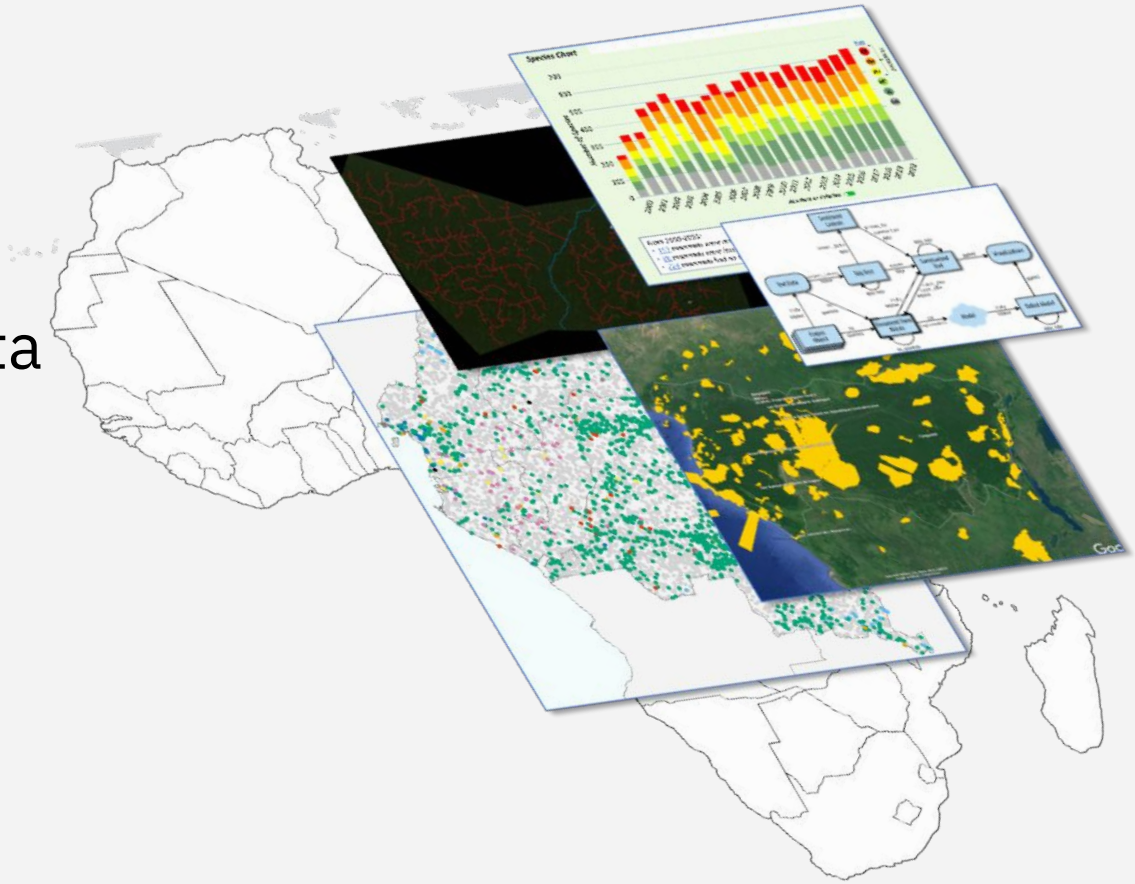
Environmental Intelligence for Africa's Rainforest

Our unique approach to Congo Basin conservation

- We use a threats-based framework
- We integrate spatial and non-spatial data
- We focus on helping local organizations



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What do we need to know about species protection?

- The gaps between scientific extinction risk, national species protection laws and international trade regulation are **unknown**
- This hinders the making of good policy, effective law enforcement, etc
- By comparing IUCN Red List, national laws and CITES, we can ask questions like:
  - What are the *exact species* that are threatened but not protected by national laws?
  - How many are *endemic* to the Congo Basin, or its rainforest habitats?
  - For any Congo Basin country, what would an *up-to-date species protection law* look like?

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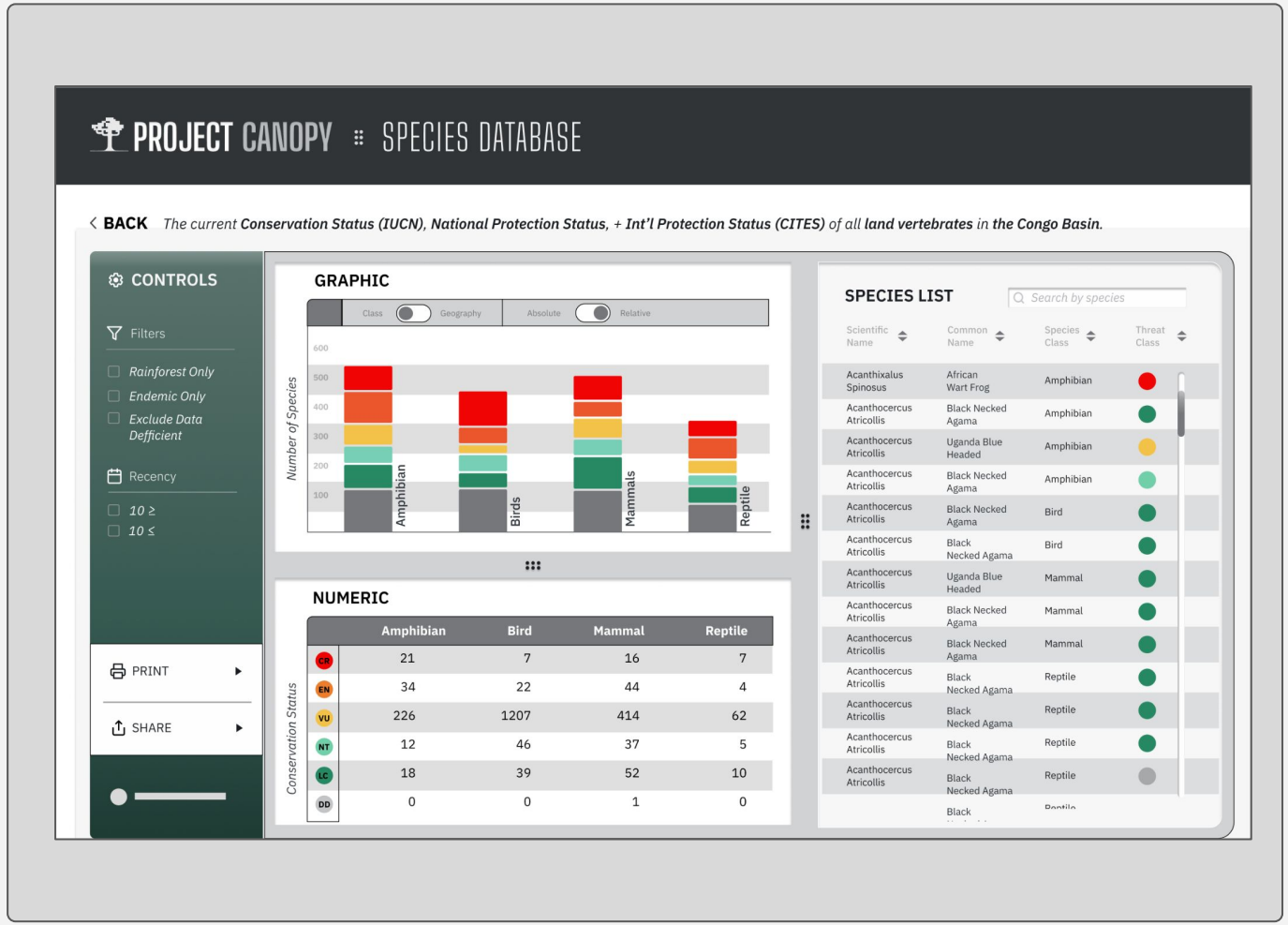
Introducing the **Species Protection Platform**

- **We can identify – in real time – whether science, national and international laws are aligned**
- Users can generate detailed lists of threatened and protected species
- Useful to local governments, capacity-building organizations, law enforcement, advocacy groups



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Mockup Walk-through

Visualizing the platform

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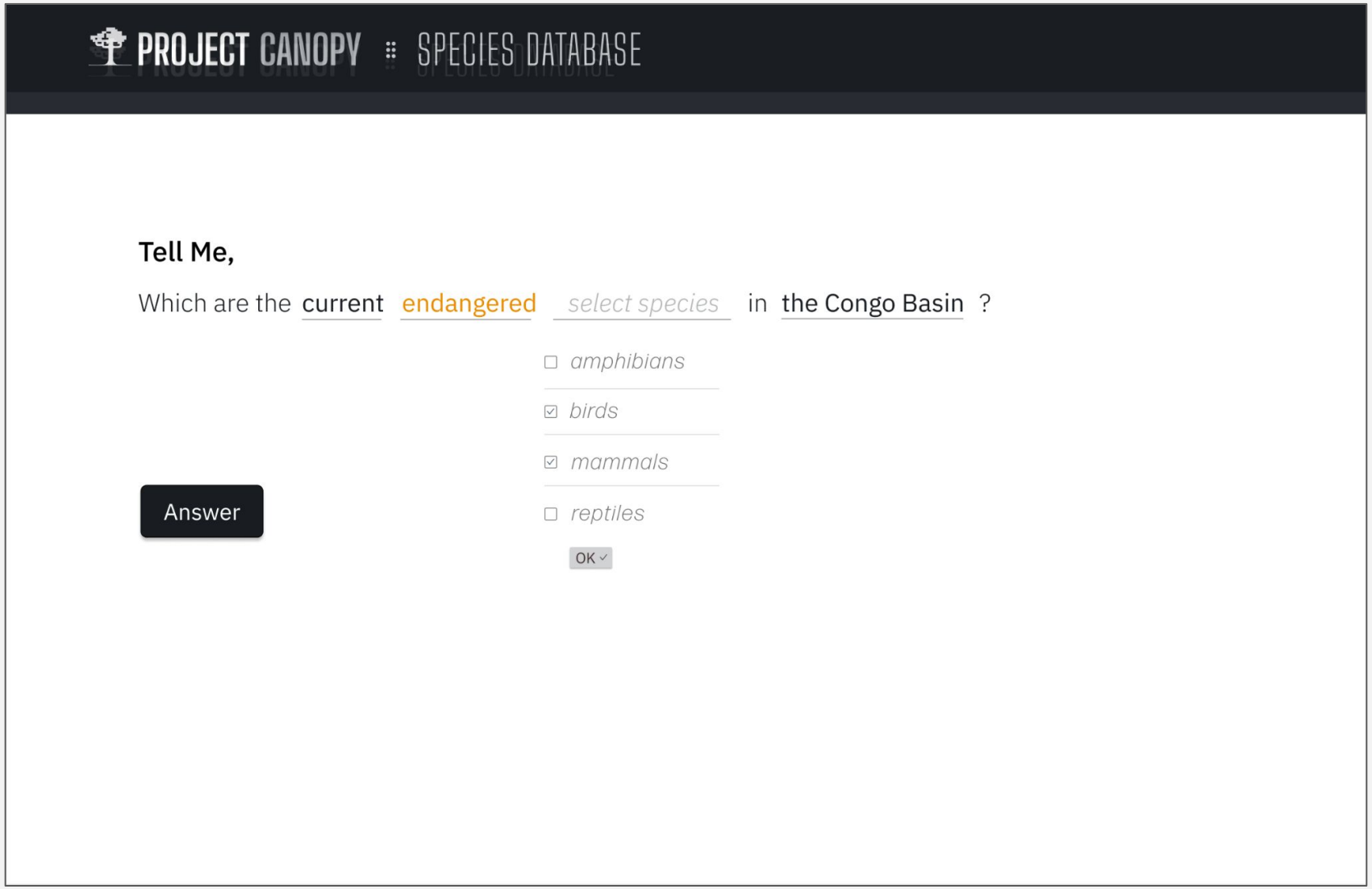
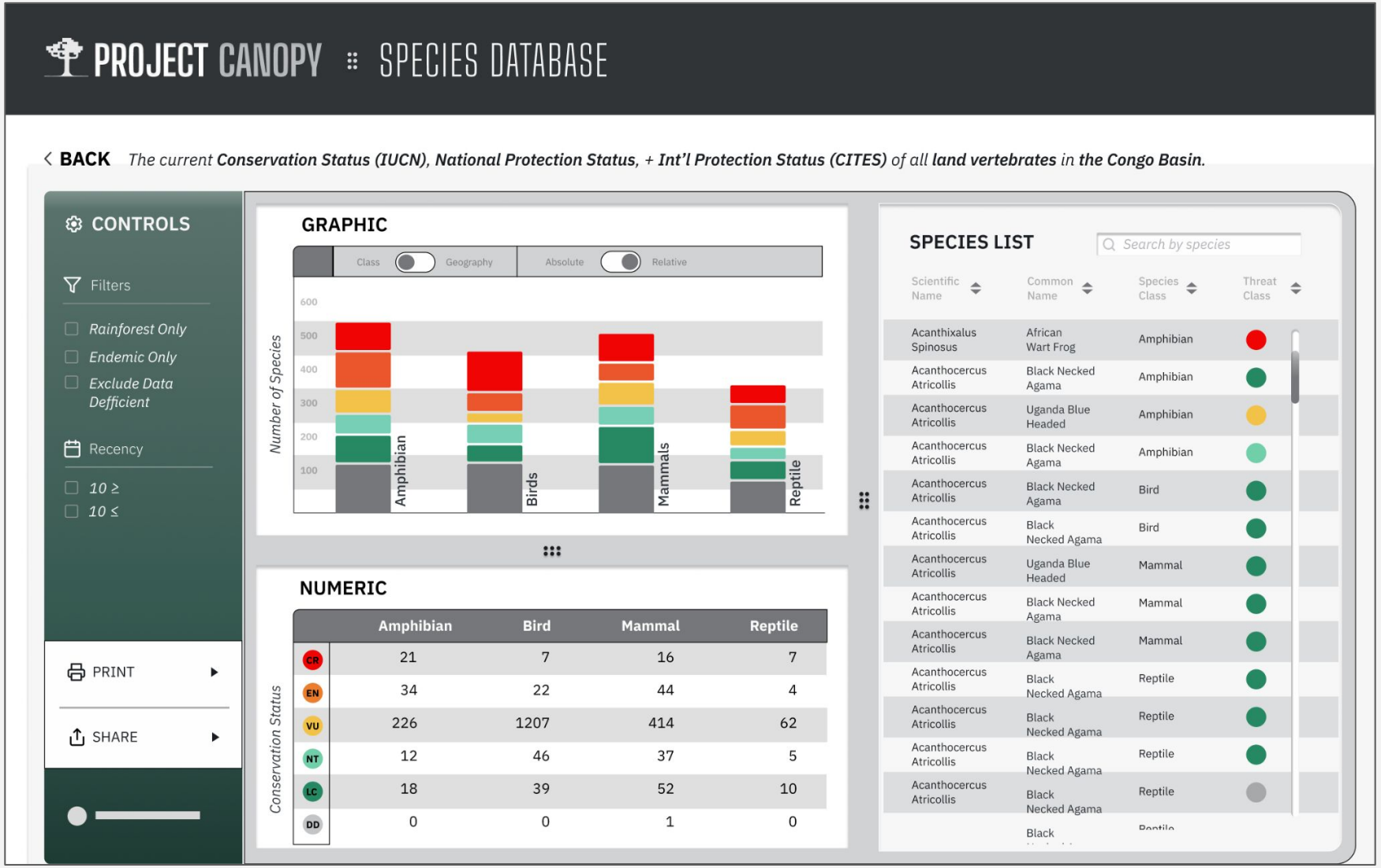
Users can immediately focus their search...



...Which reveals a data-rich but well-organized display...



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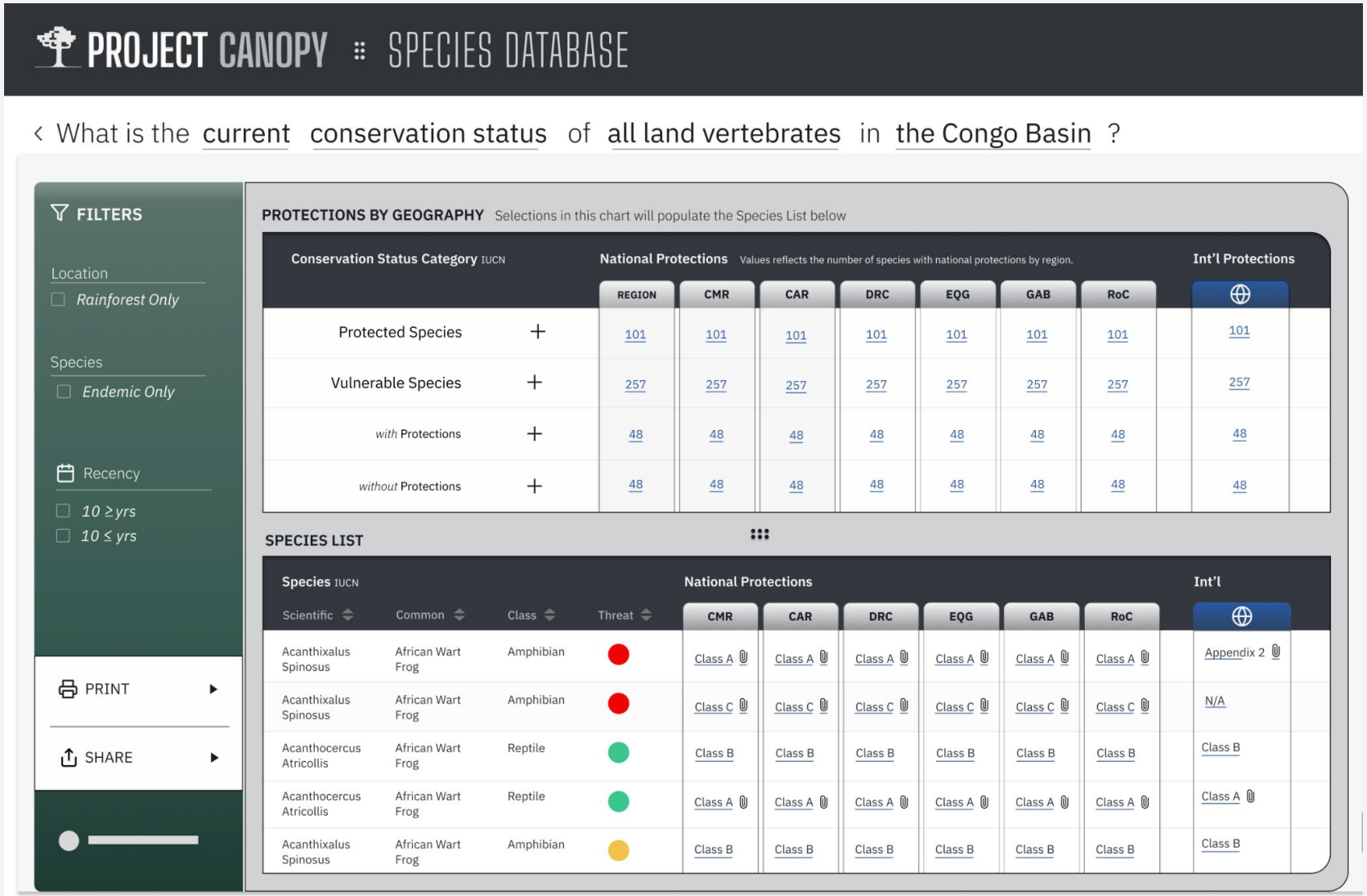
...With instant identification of species – and legal – gaps



National Laws

Initial reading & Findings

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National laws are crucial but difficult to work with

- Laws first have to be found, then read, then *understood*
- Only after the correct names of species have been identified can they be 'mapped' to IUCN and CITES
- This is the **missing link**
- Without this work, gaps cannot be identified…and the data is **dirty**

Manual transcription required (DRC)

C. *aethiopis* (Linnaeus, 1758)	Singe vert
E. patas (Schreber, 1775)	Patas
L. albigena (Gray, 1850) "	Mangabey à gorge blanche
M. *talapoin* (Scrhreber, 1774)	Talapoin
Papio anubis (J.B. FISCHER, 1829)	Babouin
E. elegantulus (LE CONTE, 1857)	Galago élégant
G. *matschiei* (LORENZ, 1917)	Galago du Congo
G. *moholi* (A. Smith,1836)	Galago moholi
G. *senegalensis* (E. Geoffroy, 1796)	Galago du Senegal

Taxonomic errors and ambiguities (Gabon)

Cobe des roseaux	Kobus redunca arundinum	*Redunca redunca*
Daman des arbres	Dendrohyrax arboreus	*Dendrohyrax arboreus*
Galago spp	Galago spp	*Galagoides thomasi*
Galago spp	Galago spp	*Galagoides demidoff*
Potto spp	Potto spp	*Perodicticus edwardsi*
Potto spp	Potto spp	*Arctocebus aureus*
Oryctérope	Orycteropus afer	*Orycteropus afer*
Céphalophe de grimm	Sylvicapra grimmia	*Sylvicapra grimmia*

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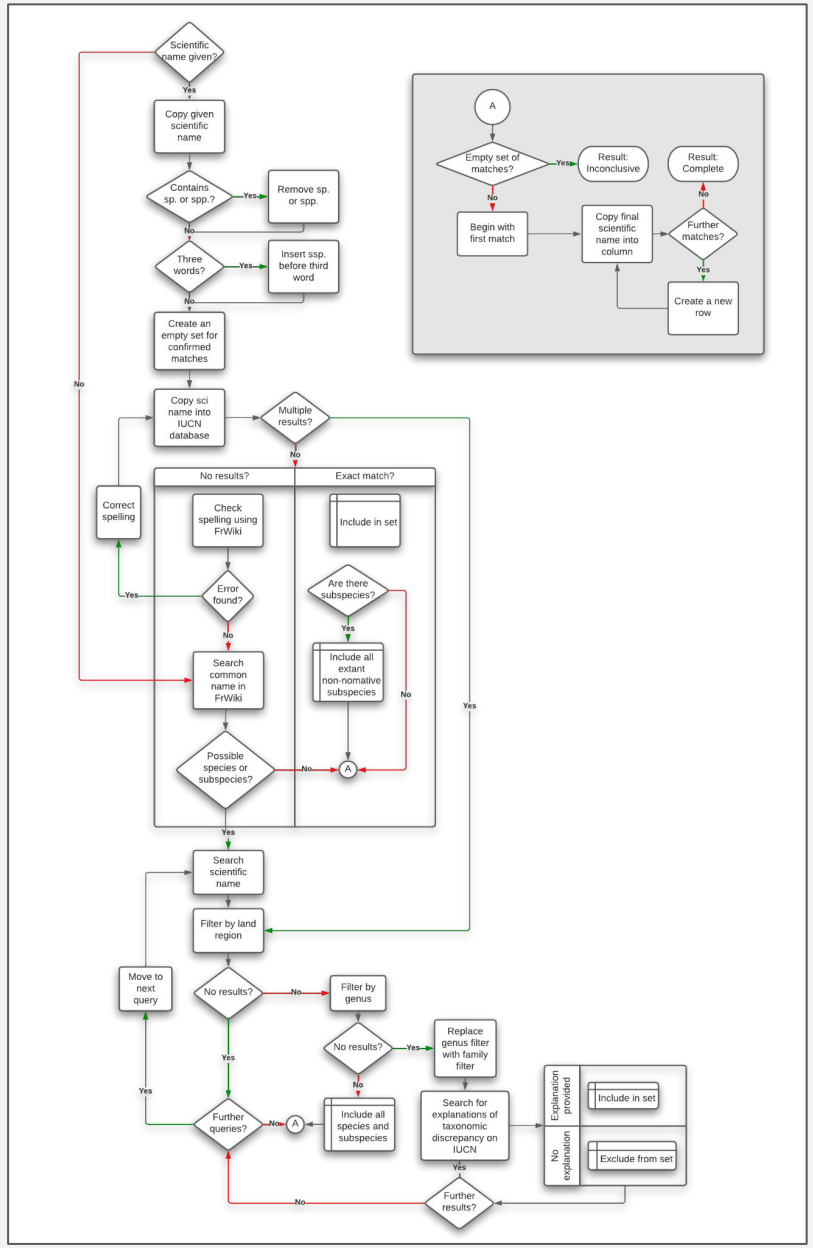
Methodology

- We created a **rigorous decision tree,** to take the species named in laws and map them to what actually exists in IUCN*

- In many cases, the **laws are unclear** about which species they are actually claiming to protect
  - We catalogued 11 types of errors, and many species had more than one!

- Our results are preliminary and we welcome expert input



*Special thanks to Maya Newman-Toker for her hard work here!

Our three key findings: Accuracy, age and utility

- These laws contain **extremely high error rates**
  - Cameroon is the most accurate, achieving only 57%
- Many **laws are old** and this compromises accuracy (eg, CAR's is from 1984)
- Correct **common names** are an afterthought
  - This limits accessibility and utility to non-specialists such as local communities, journalists
- Our brief has much more detail on these issues 🎯

Overall accuracy of national species protection laws is low...

	Cameroon	Republic of Congo	Gabon	DRC	CAR	Totals / Avg accuracy
Given # of species	393	102	44	306	105	**950**
Final # of species	396	105	46	326	210	**1083**
Total # errors	176	57	33	166	221	**653**
Date of adoption	*1 Apr 2020*	*21 Apr 2011*	*19 Jan 2011*	*20 May 2006*	*1984*	**N/A**
Accuracy	**57.32%**	**48.57%**	**34.78%**	**53.37%**	**0.00%***	**38.81%**

* CAR law only gives common names

...and is partly a consequence of the age of legislation

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For example, a preliminary analysis of gaps for Gabon…

Gaps in Gabonese law as written	
Threatened (CR/EN/VU) species in final list	17
Species listed in law but not extant in Gabon	4
Extant threatened species in final list *	15
Extant threatened species (Aves, Mammalia, Reptilia, and Amphibia), by IUCN	53
Extant threatened species not covered by law	**38**

***** includes two additional extant subspecies

…found that **72%** of threatened species are not covered

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Next Steps

Stakeholder feedback

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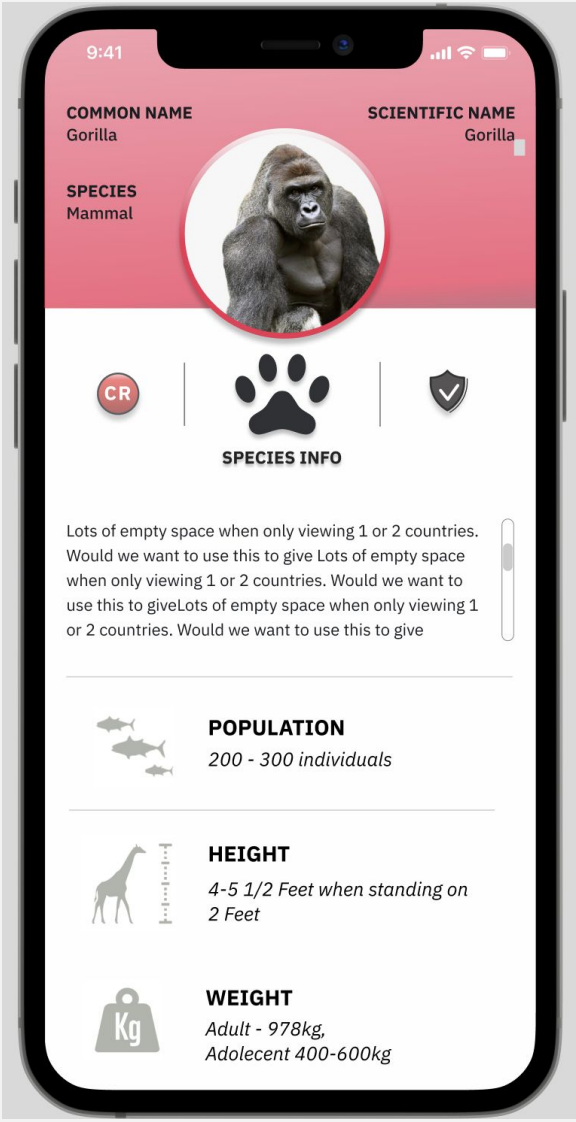
Benefits of a fully operational platform

- This will be an **evergreen resource**
  - Fully automated updates of Red List and CITES
  - Project Canopy will monitor laws, updating as needed
- Can be extended/repurposed to include applications such as species ID cards for LEAs, CSOs
- We are continuing development with volunteers but now we need your help!



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Current roadmap for continued development

2Q2023
- Gather use cases
- Develop prototype

3Q2023
- Develop funding proposals
- Refine prototype based on feedback
- Formalize partnership

4Q2023
- Launch platform with partners
- Begin data-gathering for next iteration

2024+
- Integrate new datasets, end products
- Scale across Congo Basin

Stakeholders: **How can this help your work?**

- What kind of work would you use this platform for?
- What other datasets would you like to see integrated into this platform?
- Can you think of anybody else who would find this information useful?
- Can you help us come up with a better name for the platform?

For example, we can use the same approach to

- Expand the database to include *Congo Basin tree species*, especially those involved in ISL, incorporating key insights such as the minimum felling diameter, and amount of C/m^3 or C/ha.
- Go beyond the Congo Basin to include *land vertebrates for all of sub-Saharan Africa*.