**Species (Jeff)**

Have you thought about talking about a few example “interesting” species? E.g. you could look for VU/EN/CR species that are represented in different places among the different scenarios and talk about them? E.g. in the blah scenario, species A was represented in (country A?, places with stable climates? Etc) and in the blah scenario it was represented somewhere else? This would help show how the different scenarios affected species and could lead to different outcomes for biodiversity? This might also help readers understand what the scenarios actually mean for the species?

From Scott:

I understand now, that case with the Koreas is striking. I checked but there aren’t too many endangered species in that region. For the Americas, I can think of a few examples that might resonate:

Great Green Macaw (Ara ambiguus) – Endangered, <2500 individuals but range stretches from southern Honduras to western Colombia and so crosses a number of countries differing in political stability. I would expect those results to change with and without risk (IUCN site: <https://www.iucnredlist.org/species/22685553/93079606>)

Wattled Curassow (Crax globulos) – Endangered, < 1000 individuals with small disconnected populations in Colombia, Peru, Bolivia and western Brazil. Suspect the risk of forest loss differs considerably among these regions. <https://www.iucnredlist.org/species/22678537/92777596>

Geoffrey’s Spider Monkey (Ateles geoffroyi) – Endangered, similar situation to the macaw with a broad distribution from Mexico to Panama. <https://www.iucnredlist.org/species/2279/9387270>

Outside of the Americas we would likely get some interesting results in Africa. Charismatic and endangered species like Black Rhino and African Wild Dog have ranges spread across a number of countries that must vary in risk. I’d maybe suggest one bird example from the Americas and one mammal example from Africa assuming the change in area with and without risk comes out strongly?

**Overlap (Jeff + Joe)**

Encouragingly, there was considerable spatial overlap among scenarios, with the same 10.1 million km2 being selected to expand the current protected area portfolio in at least five scenarios and 2.21 million km2 in all eight scenarios.

Could you express this a proportion? If it’s too difficult to express as a proportion of a specific prioritization, then maybe as a proportion of the total amount of land in considered in the prioritizations?

Also, where are these spatial overlaps? Are they just Meyers et al. biodiversity hotspots?

Yes – agree – can we identify a couple and highlight? It may be a good idea because in the end we’re not actually assuming exact km2 but rather implicitly assuming protection within the spatial units.

*Yukon*

*Algeria or Sudan*

*Finland*

*Peru*

*Kazakhstan*

**Biomes (Rachel)**

Might be good to have some discussion around this.

Interesting that temperate conifer forests have the highest variation – does that include boreal forests?

Also, might be worth pulling out quantitatively (from the climate models and land-use change) – why we think there’s more variation between scenarios. Is it driven mostly predicted probability of novel climates, a particular type of land-use change, or political instability?