

## SUPPLEMENTARY MATERIAL

Payne, B. L. & Bro-Jørgensen, J.: *A framework for prioritising conservation translocations to mimic natural ecological processes under climate change: a case study with African antelopes.*

### Variable list

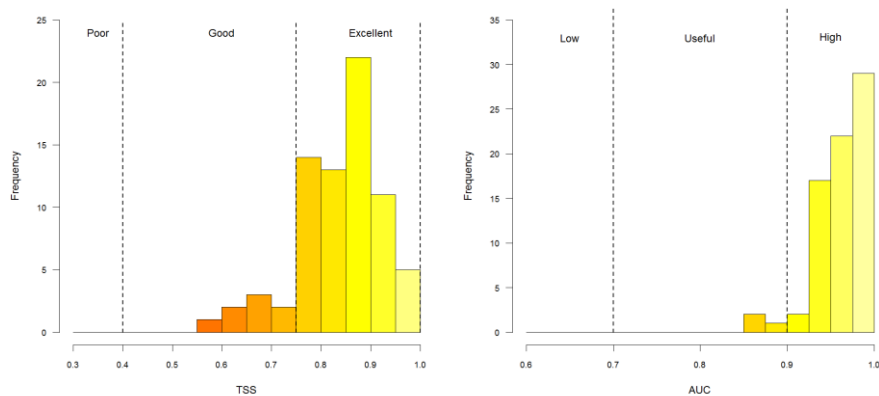
Category	Variable	Source
<i>Climate</i>	Annual precipitation*	(1)
	Mean monthly precipitation*	(1)
	Driest month*	(1)
	Driest 2 consecutive months*	(1)
	Driest 3 consecutive months*	(1)
	Wettest month*	(1)
	Wettest 2 consecutive months*	(1)
	Wettest 3 consecutive months*	(1)
	Seasonal precipitation (DJF, MAM, JJA, SON)*	(1)
	Coldest monthly temperature	(1)
	Hottest monthly temperature	(1)
	Seasonal average temperature (DJF, MAM, JJA, SON)	(1)
	Temperature range (hottest - coldest)	(1)
	Sunshine (average monthly)	(2)
	Relative humidity (average monthly)	(2)
	Wet days (annual)	(2)
	Wet days (average monthly)	(2)
	Ground frost (average monthly)	(2)
	Wind speed (average monthly)	(2)
	Potential evapotranspiration	(3)
<i>Topography</i>	Elevation	(2)
<i>Land cover</i>	Normalized difference vegetation index (NDVI)	(4)
	Enhanced vegetation index (EVI)	(4)
	Leaf area index (LAI)	(4)
	Gross primary productivity	(4)
	Net primary productivity	(4)
	International Geosphere Biosphere Programme (IGBP) land cover (17 categories)	(5)
	United States' Geological Survey (USGS) land use (24 categories)	(5)
<i>Soil</i>	Topsoil Cation Exchange Capacity (TCEC)	(6)
	Subsoil Cation Exchange Capacity (SCEC)	(6)
	Topsoil pH (TpH)	(6)
	Subsoil pH (SpH)	(6)
	Soil texture (3 categories: clay, silt, sand)	(6)
	Soil type (14 categories)	(7)

\*Entered both with and without logarithmic transformation.

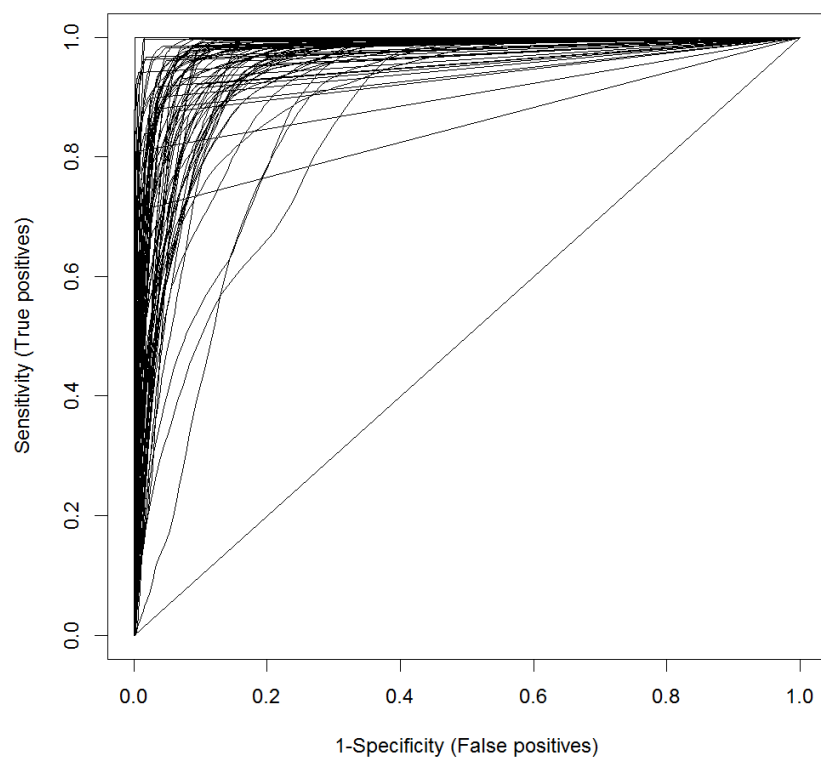
### **Sources:**

- (1) Worldclim & CRU CL2.0
- (2) CRU CL2.0 dataset
- (3) Derived from climate and CRU CL2.0 dataset
- (4) [https://lpdaac.usgs.gov/dataset\\_discovery/modis/modis\\_products\\_table](https://lpdaac.usgs.gov/dataset_discovery/modis/modis_products_table)
- (5) [https://lta.cr.usgs.gov/glcc/globdoc2\\_0](https://lta.cr.usgs.gov/glcc/globdoc2_0)
- (6) [http://webarchive.iiasa.ac.at/Research/LUC/External-World-soil-database/HWSD\\_Documentation.pdf](http://webarchive.iiasa.ac.at/Research/LUC/External-World-soil-database/HWSD_Documentation.pdf)
- (7) [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/?cid=nrcs142p2\\_054013](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/?cid=nrcs142p2_054013)

## Model performance



**Figure S1:** Classification of the accuracy of species-specific models. (Left) True Skills Statistics (TSS). (Right) Area Under the Curve (AUC) statistics. Histograms denote the number of species models found within the categories described by Eskildsen et al (2013) resp. Swets (1988).



**Figure S2:** Receiver Operating Characteristic (ROC) for all species. Also shown represented by the isometric line is the statistics relating to the scimitar-horned oryx (*Oryx dammah*), which is extinct in the wild and thus not included in the analyses. Lines closer to the isometric line indicate poorer fitting models.

## References:

Eskildsen A, le Roux PC, Heikkinen RK, Høye TT, Kissling WD, Pöyry J, Wisz MS, Luoto M (2013) Testing species distribution models across space and time: high latitude butterflies and recent warming. *Global Ecology and Biogeography* 22:1293-1303.

Swets JA (1988) Measuring the accuracy of diagnostic systems. *Science* 240, 1285-93.