Conservation planning for Africa's Western Rift: conserving a biodiverse region in the face of multiple threats

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SUPPLEMENTARY TABLE 1 Covariates used for modelling the distribution of endemic and threatened species in the Albertine Rift.

Covariate	Description of Variable
Bio2	Mean daily temperature range
Bio7	Annual temperature range
Bio6	Minimum temperature of coldest month
Bio5	Maximum temperature of warmest month
Bio12	Annual precipitation
Bio17	Precipitation of driest quarter
Bio16	Precipitation of wettest quarter
Cloud mean	Mean annual cloud cover (%)
Cloud max	Maximum cloud cover (%)
DEM	Digital elevation model
Aspect	Cardinal direction a slope is facing
Slope	Rate of maximum change in elevation along a slope
Eastness	Orientation east–west
Northness	Orientation north–south
Drainage basins	Topographically delineated area drained by a stream system
Roads	Distance to nearest road
Lithology	Geological parent material
Rivers	Distance to nearest river

SUPPLEMENTARY MATERIAL 1 Data sources.

We obtained climate layers at a spatial resolution of 1 km^2 from the WorldClim database (Hijmans et al., 2005). Additional variables used in model prediction included mean cloud cover, maximum cloud cover, digital elevation model, aspect, slope, eastness, northness, distance to rivers, drainage basin, lithology and distance to roads. We computed mean and maximum cloud cover from MOD09GA Surface Reflectance (Vermote & Wolfe., 2015) data, which are provided in Hierarchical Data Format (HDF) at daily temporal resolution and were calculated by G. Picton-Phillipps. We obtained a 90-m digital elevation model from the U.S. Geological Survey (Lehner et al., 2006) from which the slope, aspect, eastness and northness were derived. We obtained drainage basins data from USGS Global data set of 2003 U.S. Geological Survey global data set of 2003 (Lehner et al., 2006). The distance to roads and rivers were derived by computing the Euclidean distance from each point in the study area to the nearest road or river. We obtained rivers and roads data layers from the African data sampler dataset (WRI, 2010). Lithology reflects key geological parent materials that are determinants for vegetation distribution (USGS, 2009). Predictor variables were resampled to a 1 km^2 resolution using *ArcGIS 9.3* (Esri, Redlands, USA).

References

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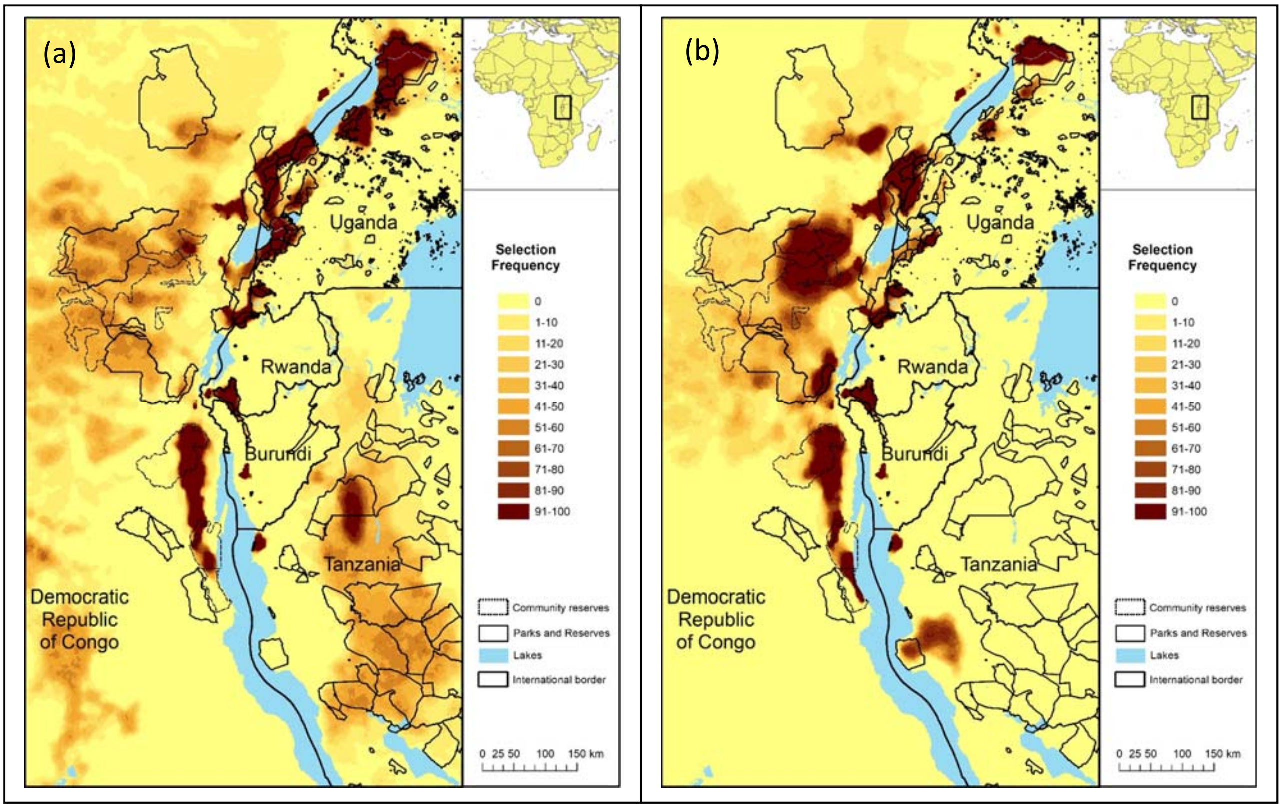
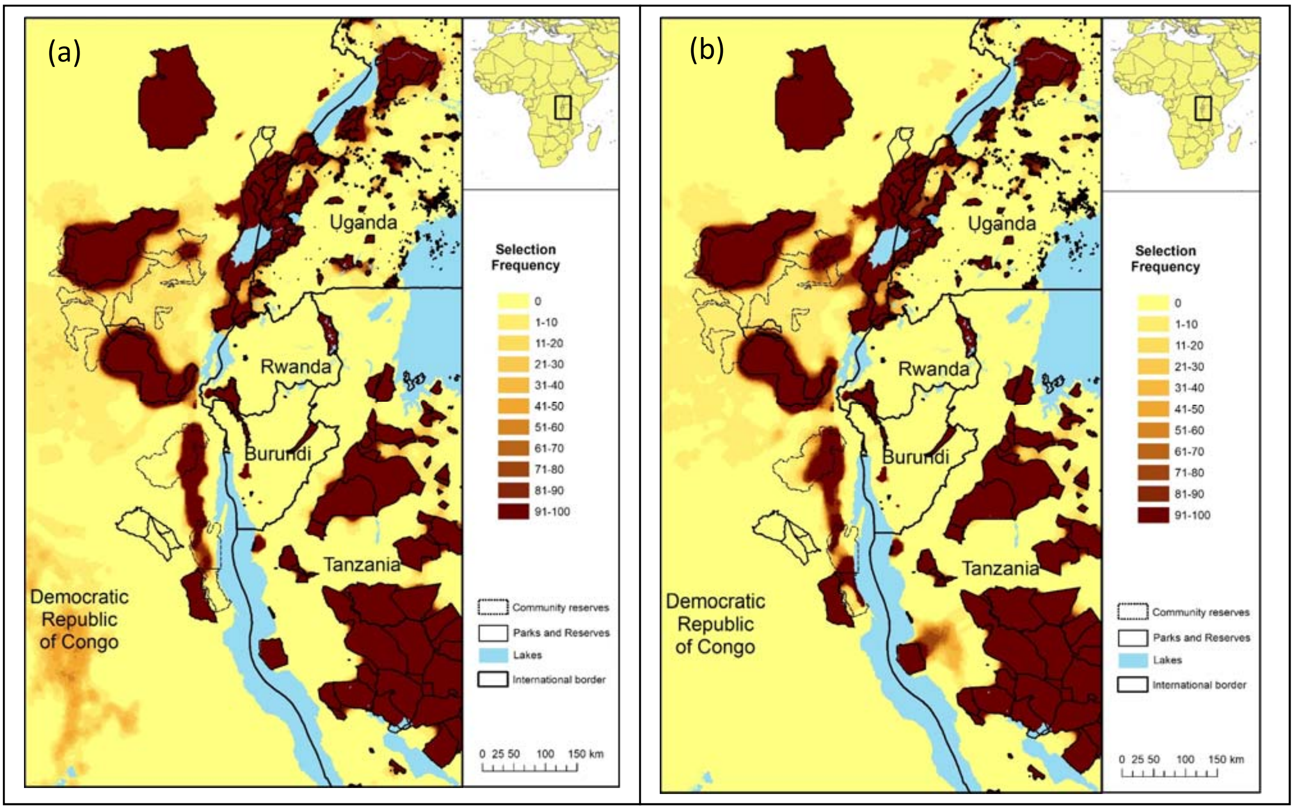
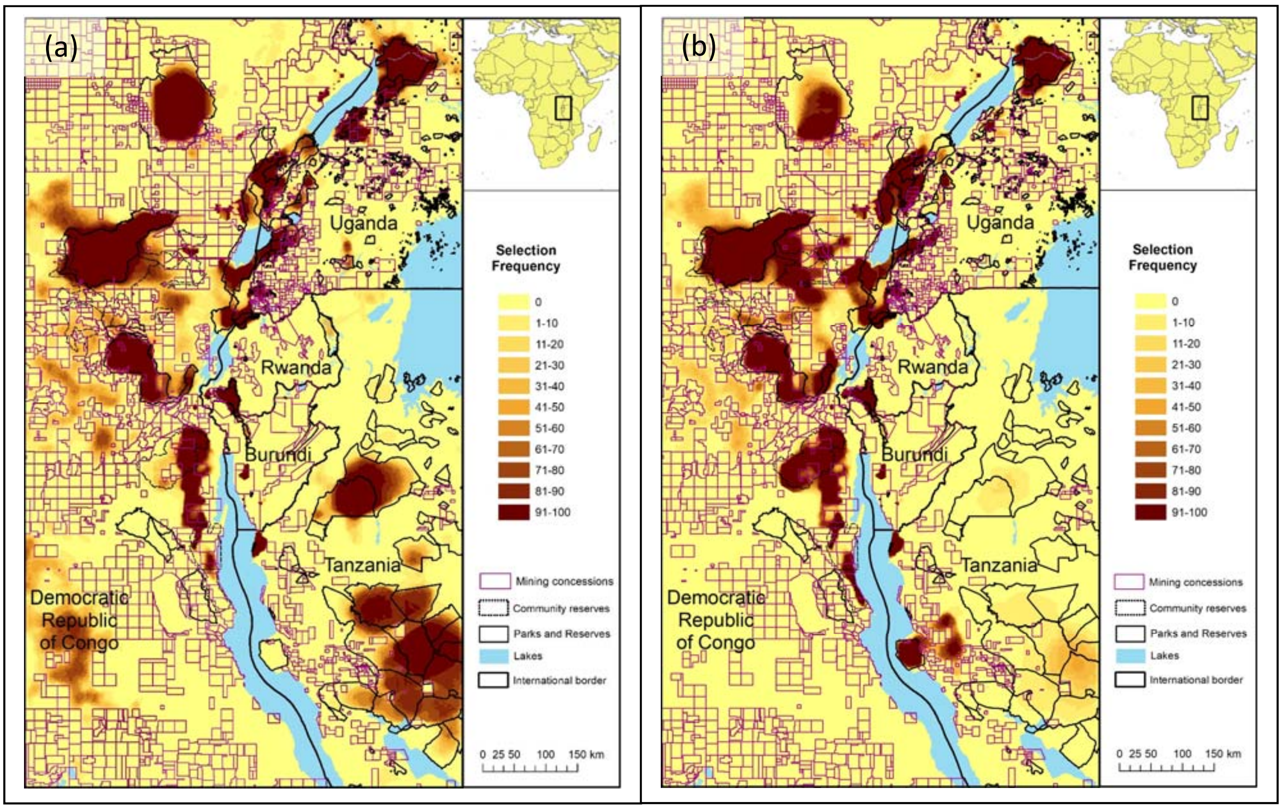


SUPPLEMENTARY FIG. 1 Selection frequency of cells for (a) globally threatened species and (b) endemic species.



SUPPLEMENTARY FIG. 2 Selection frequency of cells with protected areas locked in initially for (a) threatened species and (b) endemic species.



SUPPLEMENTARY FIG. 3 Selection frequency of cells where mining concessions are avoided where possible, for (a) threatened species and (b) endemic species.