WebPanel 2. Methods
Geospatial analyses
We projected all geographic range and tropical forest maps to the Mollweide world map projection, and subsequently performed all geospatial analyses detailed below with Python code implemented with the ArcPy module in ArcGIS Pro 2.5.0. The range maps were originally a set of overlapping spatial polygons, with thousands of species ranges stacked on top of one another and the range of an individual species comprised of a single or multipart polygon(s). We first calculated the global range area of each species to estimate the extent of overlap of the global range with tropical forests. To minimize the risk of processing errors arising from using complex overlapping range maps for geospatial analyses, we performed an initial step of separating all range maps into individual species feature datasets. We then performed a union of the range map of each species with the map of tropical forests (Dinerstein *et al.* 2017) to distinguish parts of the range of species that overlap with humid, dry, coniferous, and mangrove tropical forests, should there be such overlap for a given species. The range map and tropical forest layers were obtained from disparate sources that were originally created using different projections and underlying data. Consequently, creating a union between these layers resulted not only in the range of a species split into various tropical forest biome attributes (the dataset of interest in this study) but also in extraneous polygons from mismatches between the range map and tropical forest layers. These mismatches included: (a) polygons within the range of a species but not including any of the tropical forest biomes and (b) polygons that included one or more tropical forest biome(s) but not the range of a species. We removed these extraneous polygons, such that the final feature dataset of a species range was analogous to the range map of that species clipped to the tropical forest layer. Finally, we calculated the area in the tropical forest range of a species under each of the forest types with which it overlapped. We performed identical steps for all other terrestrial biomes to distinguish the part of the global range of a species that overlap with a given biome.

WebReferences
Dinerstein E, Olson D, Joshi A, *et al.* 2017. An ecoregion-based approach to protecting half the terrestrial realm. *BioScience* **67**: 534–45.