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Abstract

A simple, straightforward, cartographic modelling technique is presented for measuring relations between environmental characteristics and rare species distribution patterns. This approach is corroborated by digitiz- ing rare bird distribution data for Tanzania and statistically analyzingthese patterns in relation togeographic and environmental variables. Of the available natural resource data for Africa, only the vegetation and soils data appeared accurate enough to represent regional natural resource distribution patterns. Available data for Tanzania at the regional scale is not currently precise or comprehensive enough to analyze ongoing dy- namic ecological processes. Statistical relations, associated with a study quadrangle within Tanzania, are documented for these parameters. Final confirmation of the accuracy of predictions about rare species diversity patterns will ensue from future field observations. When confirmed, this methodology can be used for setting conservation pri- orities in biologically little known regions of the world.