Modeling the potential distribution of wildlife species in the tropics.

ABSTRACT

The process of ecosystem destruction during the last century not only caused habitat fragmentation, but also loss of many species. Unfortunately, the traditional strategies for protecting these natural treasures were not successful enough to secure the survival of remaining biodiversity. In this scenario, a rapid assessment for predicting the distribution of the remaining species and habitats is essential. "While tropical rain forests are known as biological hotspots, only few studies have been done to determine the potential distribution of species. Distribution species modelling in tropical areas with high rate of deforestation and loosing connectivity is critically important for endangered wildlife species management program. Habitat modelling using remote sensing plays an important role in measuring and monitoring habitat characteristics in a large scale. This paper highlights and reviews the need of using geospatial modelling techniques to determine endangered species distribution in the tropics.

Keyword: Species distribution model; Habitat models; Conservation; Remote sensing; GIS.