

SETTING CONSERVATION PRIORITIES IN PUERTO RICO

Yogani Govender, Soledad Gaztambide, Glorimar Toledo, Myriam O'Neil and Julio Verdejo

Para la Naturaleza, a new unit of the Conservation Trust of Puerto Rico.

P.O. Box 00902-3554, San Juan, PR, 00902.

yogani@paralanaturaleza.org

Spatial prioritization in conservation is required to direct limited resources to where actions are most urgently needed and most likely to produce effective conservation outcomes. In an effort to advance the protection of highly threatened and vulnerable hotspots of terrestrial biodiversity in Puerto Rico, we provide a framework for the purpose of helping decision makers to evaluate current opportunities and to help planners develop long term conservation strategies. Identified conservation priority areas will be used for further analyses and collaborative planning. The framework applies GIS technology using spatial analyst, to map conservation value based on seven criteria: 1) species richness 2) distance from natural protected areas 3) predicted habitat of vulnerable/threatened species 4) distance from rivers 5) ecosystems types 6) hydric reserves and 7) areas susceptible to flooding. Our model identifies biological corridors at Sierra de Panduras, northern karst region, central mountainous region and important coastal areas. Results are consistent with previous prioritizations proposed by Department of Natural and Environmental Resources. These areas represent top priorities for immediate conservation action in Puerto Rico. Furthermore, results from this study can be strategically used to develop site prioritization depending on the resources the site contains, the threat to those resources (urban growth and climate change) and the conservation cost of mitigating these potential threats.