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REVIEW OF "A CONSERVATION ASSESSMENT OF THE TERRESTRIAL ECOREGIONS OF LATIN AMERICA AND THE CARIBBEAN" by E. Dinerstein, D.M. Olson, D.J. Graham, A.L. Webster, S.A. Primm, M.P. Bookbinder and G. Ledec (The World Bank, Washington, DC).

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A CONSERVATION ASSESSMENT OF THE TERRESTRIAL ECOREGIONS OF LATIN AMERICA AND THE CARIBBEAN

By E. Dinerstein, D.M. Olson, D.J. Graham, A.L. Webster, S.A. Primm, M.P. Bookbinder and G. Ledec
The World Bank, Washington, DC, 1995. xvii+129 pp.+12 maps.
ISBN 0-8213-3295-3.

This report makes a systematic study of the status of natural ecosystems in Latin America and the Caribbean (LAC) and applies a uniform methodology to assigning priorities to these ecosystems for conservation efforts. The work was done for the United States Agency for International Development (USAID) by the WWF-US Biodiversity Support Program (BSP). The document is based on three workshops, plus consultations with relevant organizations and individual experts. The list of contributors contains 178 names.

The effort is unusual in emphasizing protection of areas with high beta diversity (a measure of the turnover of species along ecological gradients), as well as the more commonly used alpha diversity (species diversity within a habitat). In the case of mangroves, the diversity assessed is ecosystem diversity, including aquatic animal life. This avoids mangroves receiving the unjustly low diversity ratings that tend to result when assessments are restrained to terrestrial organisms, especially trees.

The classification refers to original (Pre-Colombian) vegetation. The classification system adopted differs from that used in the tropical forest assessments of the Food and Agriculture Organization of the United Nations (FAO). Cerrado and Chaco are considered to be savannas rather than dry forests (as by FAO). The assessment strives to not overemphasize tropical moist forest, with high priorities being assigned to savannas and ecotones based on a suite of criteria that includes a variety of considerations in addition to diversity.

The classification system is hierarchical, starting with five "major ecosystem types" (eg. Tropical Broadleaf Forests), which are divided into 11 "major habitat types" (eg. Tropical Moist Broadleaf Forests). These are crossed with nine bioregions (eg. Amazonia) and divided into 191 ecoregions (eg. Rondônia/Mato Grosso moist forests). Ecoregions range in size from the Costa Rican paramo (31 km²) to the Brazilian cerrado (2 X 10⁶ km²). The system allows the priority of some ecoregions to be promoted upward based on uniqueness and regional representation, even if indicators of diversity and vulnerability are not so high.

The situation is not a rosy one: 48% of all ecoregions are either critical (18%) or endangered (30%); 32% are vulnerable, 16% are relatively stable and 5% are relatively intact. Six

ecoregions were left unclassified. Ecuador holds the distinction of being a country wholly covered by ecoregions with top priority at the regional level.

A useful aspect of the report is the effort made to explain the methodology used, rather than merely presenting the maps and tables that contain the results of the assessment. The analysis was performed using the ARC/INFO geographical information system (GIS) software. The document does not state if the GIS data bases are (or will be) publicly available.

Given the finite nature of funds for conservation of biodiversity, it is important that thought be given to mechanisms for allocating these resources in a manner that will maximize their benefits. This document will be a valuable tool for those who must make this kind of choice, both among the countries in the region and within them.

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