

Smithsonian Institution's Permanent Monitoring Plot: Research Opportunities in a Rare, Semi-Evergreen Dry Woodland

By Francisco Dallmeier and Gary Ray

In March, 1990, the Smithsonian Institution's Man and the Biosphere Biological Diversity Program (SI/MAB), with NPS cooperation, established a forest monitoring plot 1-ha in size, within the boundaries of the Virgin Islands NP. The permanent plot encompasses a stand of dry forest, an ecosystem which is underrepresented in the Smithsonian Institution's international network of forest monitoring plots.

Dr. Francisco Dallmeier, Director of the Smithsonian's SI/MAB Biological Diversity Program, and Gary Ray, a graduate student from U/WI-Madison, initiated

the project. The interest in St. John's dry forest is based on its status as a minimally disturbed ecosystem protected by a national park and located within a biosphere reserve, which can serve as a reference study site for comparable ecosystems elsewhere in the Caribbean.

Among the objectives of the SI/MAB program are the establishment of sampling protocols so that widely differing sites may be compared temporally and spatially, and to enhance the professional training capabilities of the host-country. The biosphere reserve on St. John exhibits two elements, location and management, which provide an excellent case study for the

Caribbean. Information gathered from the study plots is intended as a standard for evaluating future ecological changes against a matrix of human-altered ecosystems.

Since the Caribbean's dry forests have largely been eliminated, and the remaining stands degraded, forest relicts under study bear significant conservation value, both regionally and globally. Information on the composition and structure of St. John's dry forests can be used in many Caribbean developing countries where degraded forests need to be managed and restored.

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