BOOK REVIEWS

Tropical Rain Forest Use and Preservation: A Study of Problems and Practices in Venezuela

By Lawrence A. Hamilton. v + 72 p. + 7 appendices & 6 maps. 1976. Sierra Club, San Francisco. \$4.00.

This monograph, which presents the results of a two-year study, includes 18 pages of introductory material and recommendations intended to be applicable to much of the tropics, followed by 54 pages concerned specifically with Venezuela. There is no bibliography, but some references are cited in footnotes.

The project was guided by a technical advisory group (30 individuals, 18 from Venezuela) plus special observers (13 individuals, 6 from Venezuela). The list of 43 people reads like a Who's Who of tropical forestry and conservation; to have assembled such a highly qualified group speaks well for the project director (Hamilton). It is perhaps inevitable, though, that the caliber and size of the advisory group should be inversely proportional to the quality of the final product, which is a disjointed series of paragraphs lacking punch or originality.

The introductory sections remind us once again of all the virtues of tropical forests, and they also tell us that these forests are being cut at an alarming rate for shifting agriculture, grazing, chipping, charcoal production, and permanent agriculture. To turn this trend around, suggestions are made for developing education programs, fostering conservation groups, and establishing Youth Conservation Corps. This last seems especially naive to me, and Hamilton never suggests what magic might be employed to implement it. The rest of the general recommendations are well intended and much needed, but they are old and worn out, and we are not told how to bring them about. Curiously, all-species chipping is attacked briefly but quite vigorously as the new Great Evil of the tropics. Yet I know of no silvicultural study designed to explore the possible application of the practice to narrow bands of tropical forest, with care taken to assure that only boles are removed from the site.

The Venezuelan situation is discussed, properly I think, in two sections: areas north of the Orinoco (where most Venezuelans live) and areas south of it, much of which is undisturbed wilderness. These sections do not flow evenly and, like the rest of the report, would have benefitted from some editorial effort (e.g., "this project" is repeatedly used as a personal pronoun). The current problems associated with parks, forest reserves, public lands, private forests, zones of protection, wildlife, and native peoples are discussed. Most of them seem attributable to a lack of proper kinds and amounts of input: the units are understaffed, unprotected, unsurveyed, and underfunded. In spite of these universal limitations, much of the report speaks out for the protection of additional lands, but we are not told why the new areas might be expected to fare any better than their predecessors. An unexpected surprise in the midst of a section called "Allocating the Baldio (public lands) to Uses" was Wadsworth's hierarchical list of seven use considerations by which land might be judged—a substantive contribution. His scheme for selecting an appropriate silvicultural practice based on a sequence of binary decisions is also included, and is certain to be of interest to tropical foresters.

One of the appendices, by Veillón, documents the rate of deforestation between 1950 and 1975 in the western llanos. In this area of high-value forests and moderately good soils, deforestation is going on at a rate of about 500 square km per year, out of a total area of 88,000 square km. Veillón includes a map of what he thinks the extent of forested land in his study area was in 1825; he feels that the forests of the western llanos are almost all of second-growth origin and that there was less than half as much forest in 1825 as in 1950! Having made that bold step, he produces a map showing the extent of forest in the year 2000. In both cases his techniques are undisclosed, but he is certainly a wellqualified speculator.

A book whose contents measure up to the title of this one is much needed. This effort falls far short of the mark. In the words of its author: "There is probably nothing said in this report that has not previously been written on or talked about by knowledgeable Venezuelans." I hope that new ventures by temperate-zone conservation groups into the tropics are not soured by this attempt; future efforts are sure to benefit from the Sierra Club's Venezuelan baptism.

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National Forest Guide

Len Hilts. 217 p., illus. Rand McNally, Chicago, 1976. \$4.95 (paperback).

In what probably is the most complete and descriptive guide to America's 155 national forests, author Len Hilts gives the reader a glimpse into each forest and describes what it has to offer. He spells out not only the camping, hiking, and auto touring possibilities, but also the other attractions. The variety of things to do is endless, ranging from rockhounding and cave exploration to mountain climbing and whitewater canoeing.

This is more than just a guide to the national forests. So that the reader can be aware of all recreational possibilities in a specific geographical area, Hilts has listed and briefly described hundreds of other places operated by the federal government. National parks, national wildlife refuges, battlefield parks, scenic riverways, seashores, lakeshores, monuments, cemeteries, scenic trails and a scientific reserve are all mentioned.

To simplify planning for a trip, the guide is broken down by the main geographical sections of the country beginning with the Northeast and ending with the Pacific States. Each section is

sorted by the states within it, and then the national forests and other federal facilities within states are described. A map shows each geographical section, national forests within it, and major roads. As a campanion to these maps, however, a traveller will need road maps for detail.

Two chapters in the beginning are devoted to the history of the national forest system, the people responsible for its existence, and the multiple-use principle conceived 75 years ago by Gifford Pinchot. Additional chapters are devoted to the proper use of fire and the types of camping areas available in the national forests. As an aid to campers and hikers seeking solitude away from the most heavily used areas, a table shows the number of visitor days tallied during 1974 on each national forest, national wilderness, and primitive area. The headquarters address of each forest is provided; travellers planning a trip are advised to write in advance to secure latest data on the areas they plan to visit.

The volume includes some excellent photos and closes with an index of major recreational facilities.

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