

TROPICAL FOREST CONSERVATION

An Economic Assessment of the
Alternatives in Latin America

DOUGLAS SOUTHGATE

New York Oxford

Oxford University Press

1998

Contents

Introduction: Responding to the Challenge of Habitat
Destruction in Latin America ix

Part I Deforestation and Its Causes and the Challenge of Sustainable Forest-based Activities

1 Deforestation in the American Tropics: The Regional and Global Stakes 3

The Magnitude of Land Use Change 5

The Impacts of Deforestation 8

2 The Causes of Excessive Habitat Destruction 11

Macroeconomic Crisis and Competition

for Space 11

The Contribution of Market Failure 13

The Role of Misguided Government Policies 17

Factors Contributing to Ecosystem Mining 21

3 Putting an End to Ecosystem Depletion 25

The Articulation of Formal Tenure 27

What Happens to Pioneer Nutrient Miners? 28

Saving Tropical Forests while Helping

the Rural Poor 30

Part II The Economic Returns of Environmentally Sound Harvesting of Forest Products and of Nature-based Tourism

4 Harvesting of Nontimber Products 43

The Movement to Establish Extractive Reserves 44

	<i>Impediments to Economically and Environmentally Successful Extraction of Nontimber Products</i>	45
	<i>Vegetable Ivory Production in Western Ecuador</i>	49
	<i>Extraction of Nontimber Products and Rain Forest Conservation</i>	56
5	Environmentally Sound Timber Production	59
	<i>Logging in the Eastern Amazon</i>	60
	<i>The Palcazú Forestry Project</i>	70
	<i>Prospects for the Sustainable Development of Tropical Timber Resources</i>	78
6	Genetic Prospecting	83
	<i>What the Pharmaceutical Industry Might Be Willing to Pay for Biological Raw Material</i>	85
	<i>Controlling Access to Species-Rich Habitats</i>	91
	<i>The Risk of Counting on Riches from Bioprospecting</i>	92
7	Nature-Based Tourism	95
	<i>The Ecotourism Boom in Costa Rica</i>	98
	<i>Conservation, Tourism, and Local Interests in the Galápagos</i>	107
	<i>Ecotourism, Habitat Protection, and Local Economic Development</i>	118
 Part III Key Elements of an Integrated Strategy for Habitat Protection and Economic Progress		
8	Another Approach to Habitat Conservation: Agricultural Intensification	123
	<i>Agroforestry in Tropical Forest Settings</i>	125
	<i>The Impacts of Sectorwide Improvements in Productivity</i>	127
9	Paying for Habitat Conservation and Investing in Human and Social Capital	135
	<i>The Importance of Productivity-Enhancing Investment</i>	138
	<i>The Lessons To Be Learned in El Salvador about Environmental Depletion and Conservation</i>	143
	<i>The Inextricable Ties Binding Habitat Protection to Economic Improvement in the Countryside</i>	147
 Abbreviations 151		
References 153		
Index 167		