Contents

ACKNOWLEDGMENTS vii

What and Where Are the Tropics? 6

Biogeography and Evolution in the Tropics 38

1

15

3	inside Tropical Rain Forests: Structure /9
4	Inside Tropical Rain Forests: Biodiversity 109
5	A Study in Biodiversity: Rain Forest Tree Species Richness 154
6	A Shifting Mosaic: Rain Forest Development and Dynamics 188
7	Biotic Interactions and Coevolution in Tropical Rain Forests 227
8	Trophic Dynamics in Evolutionary Context 272
9	Carbon Flux and Climate Change in Tropical Ecosystems 323
10	Nutrient Cycling and Tropical Soils 359
11	Tropical Savannas and Dry Forests 390
12	Other Tropical Ecosystems: From the Mountains to the Rivers to the Sea 422
13	Humans as Part of Tropical Ecosystems: Focus on the Neotropics 469
14	Forest Fragmentation and Biodiversity 500

APPENDIX: GEOLOGIC TIME CHART 565
LITERATURE CITED 566
ILLUSTRATION CREDITS 594
INDEX 606

Conservation Outlook for the Tropics 530