

- Part I Humans and Sustainability: an Overview p. 1
- 1 Environmental Issues, Their Causes, and Sustainability p. 2
- 2 Environmental History: An Overview p. 23
- Part II Scientific Principles and Concepts p. 43
- 3 Science, Systems, Matter, and Energy p. 44
- 4 Ecosystems: Components, Energy Flow, and Matter Cycling p. 71
- 5 Evolution and Biodiversity: Origins, Niches, and Adaptation p. 102
- 6 Biogeography: Climate, Biomes, and Terrestrial Biodiversity p. 120
- 7 Aquatic Ecology: Biodiversity in Aquatic Systems p. 152
- 8 Community Ecology: Structure, Species Interactions, Succession, and Sustainability p. 173
- 9 Population Dynamics, Carrying Capacity, and Conservation Biology p. 198
- 10 Geology: Processes, Hazards, and Soils p. 211
- Part III Human Population, Resources, and Sustainability p. 237
- 11 The Human Population: Growth, Demography, and Carrying Capacity p. 238
- 12 Food Resources p. 261
- 13 Water Resources p. 294
- 14 Geologic Resources: Nonrenewable Mineral and Energy Resources p. 320
- 15 Energy Efficiency and Renewable Energy p. 358
- Part IV Environmental Quality and Pollution p. 395
- 16 Risk, Toxicology, and Human Health p. 396
- 17 Air and Air Pollution p. 417
- 18 Climate Change and Ozone Loss p. 446
- 19 Water Pollution p. 476
- 20 Pesticides and Pest Control p. 502
- 21 Solid and Hazardous Waste p. 518
- Part V Biodiversity, Land Use, and Conservation p. 549
- 22 Sustaining Wild Species p. 550
- 23 Sustaining Terrestrial Biodiversity: The Ecosystem Approach p. 585
- 24 Sustaining Aquatic Biodiversity p. 629
- 25 Sustainable Cities: Urban Land Use and Management p. 658
- Part VI Environment and Society p. 687
- 26 Economics, Environment, and Sustainability p. 688
- 27 Politics, Environment, and Sustainability p. 715
- 28 Environmental Worldviews, Ethics, and Sustainability p. 740
- Appendices p. A1
- Glossary p. G1
- Index p. I1