Chapter 1

1. The authors have expanded coverage on sustainable development and Agenda 21.

Chapter 2

- 1. The authors have added a new section "Do We Consume Too Much?"
- 2. More information has been added to the section on the Global Reporting Initiative.
- 3. A new Global Perspective boxed reading, The Gray Whales of Neah Bay, has been created.

Chapter 3

- 1. The section on public perceptions of environmental risks has been expanded.
- 2. More information has been added to the material on extended product responsibility.

Chapter 4

- 1. The section on the scientific method has been completely rewritten.
- 2. The authors added material on isotopes and included a new illustration.
- 3. A new section on the molecular nature of matter has been added.
- 4. The usage of the words molecule, compound, ions, etc., has been corrected per reviewer input.
- 5. Material on endothermic and exothermic reactions has been added.
- 6. Authors have written new text on chemical reactions for photosynthesis and respiration.

Chapter 5

- 1. Authors added a section entitled Genes, Populations, and Species.
- 2. Examples of lodgepole pine and herbicide resistance have been added to the material on evolution.
- 3. A new herbicide resistance illustration has been included.
- 4. Information on polyploidy has been added to the speciation section.
- 5. The term biogeochemical cycles has been introduced to the nutrient cycles section.
- 6. Information about the operation of the carbon cycle in aquatic systems has been added.

Chapter 6

- 1. The authors rewrote the discussion of succession.
- 2. New content on the ways that humans affect the process of succession has been added.
- 3. Mediterranean shrublands (Chaparral) and Tropical Dry Forests are now included in the biomes.

Chapter 7

- 1. Authors have updated human population information with new data from the Population Reference Bureau's 2002 Population Data Sheet.
- 2. Per reviewers' requests, more explanation on how the population growth rate is calculated has been included.
- 3. A new illustration on survivorship curves has been added, and the survivorship section was moved to a more appropriate place in the chapter.
- 3. Material on age distribution has been revised.
- 4. Fig 7.1 now includes new data from the Population Data Sheet.
- 5. The Issues and Analysis reading on Wolves and Moose on Isle Royale has been updated.

Chapter 8

- $1. \quad \text{The information on human population issues has been updated}.$
- 2. Includes a new table (8.1) on population characteristics of the 20 most populous countries.
- 3. The authors have altered the section on Population Growth and Standard of Living.
- 4. More information from the 2000 census has been included.
- 5. New figure 8.2 now includes a table of the twenty most populous countries, their total fertility rate, female literacy rate and GNI PPP.
- 6. Old figure 8.7 on U.S. population growth has been replaced.
- 7. The authors have updated the boxed reading on AIDS.

Chapter 9

- 1. The authors have added coverage of variations in yearly gasoline prices.
- 2. The section on the instability of global oil production has been expanded.
- 3. Two new figures, 9.6 (What We Pay For in a Gallon of Regular Gasoline), and 9.9 (World Oil Market Chronology: 1970-2000), have been added to this chapter.
- 4. Two new tables have been included, one on Drive Time, and one on Sources of U.S. Imported Oil.
- 5. Statistics on oil consumption by the world have been added.

Chapter 10

- 1. The authors have expanded coverage on wind, tidal and hydropower.
- 2. Information on the Arctic National Wildlife Refuge, and gasoline price swings has been updated.
- 3. A new Global Perspective boxed reading on Hydrogen Fuel Cells has been added to this chapter.

Chapter 11

- 1. The authors have written a new Environmental Close-up boxed reading—The Hanford Facility: A Legacy of Contamination.
- 2. The text on Chernobyl and worldwide nuclear power plants has been updated.
- 3. The section on decommissioning policies for nuclear facilities has been expanded.
- 4. The authors have added more information about nuclear terrorism.

Chapter 12

- 1. The authors have completely rewritten the section on plantation forestry.
- 2. The definitions of marine, brackish, and freshwater were clarified.
- 3. Figure 12.1 has been modified.
- 4. Figure 12.2 has been updated with new photos and captions.
- 5. A new figure (12.5) on changes in forest area has been created.
- 6. Figure 12.10 has been replaced by a new figure showing trends in world fish production including capture and aquaculture.
- 7. The authors have rewritten the section on aquaculture.
- 8. A paragraph has been included in the waterfowl management section on the African Eurasian waterbird agreement.
- 9. Information has been added on the role of keystone species and how their elimination alters ecosystems.
- 10. References to President Bush's administrative policy have been updated.

Chapter 13

- 1. The authors have added a new section entitled Smart Growth.
- 2. A new table on state comprehensive growth legislation has been created.
- 3. A new Issues and Analysis box called Decision Making in Land Use Planning: Growing Smarter to Protect Habitats has been added to this chapter.

Chapter 14

- 1. Table 14.1, Percentage of Land Suitable for Agriculture, has been updated.
- 2. Information on land degradation has been expanded.

Chapter 15

- 1. An Environmental Close-Up boxed reading on industrial livestock production has been created.
- 2. At the suggestion of reviewers, the section on integrated pest management has been divided by sub-titles.
- 3. The authors have rewritten the information on genetically modified organisms in the integrated pest management section.

Chapter 16

1. A new Global Perspective boxed reading on the dead zone in the Gulf of Mexico has been created.

- 2. The authors have expanded coverage on the topic of global water issues.
- 3. More information has been added on water treatment in the Salina Valley, California.
- 4. The section on chemicals entering drinking water sources has been increased.
- 5. The discussion of the New York City water supply has been bolstered by additional information.
- 6. The authors have updated text on the water diversions and extractions section.
- 7. Material on wetlands has been expanded.
- 8. A new table on the population of the world's ten largest watersheds has been created.
- 9. A new table has been included on international water disputes.
- 10. The authors have included new coverage of the National Research Council's report, "Envisioning the Agenda for Water Resource Research in the 21st Century."

Chapter 17

- 1. The authors have fully reorganized this chapter.
- 2. The text has been changed to include discussions on the six criteria air pollutants rather than five.
- 3. Figure 17.1 was modified.
- 4. New figures 17.8 (Photochemical Smog), 17.9 (Changes in Pollutants During a Photochemical Smog Incident), 17.10 (Thermal Inversion), and 17.11(Air Quality) have been created.
- 5. The authors have updated figure 17.17 (formerly figure 17.15).
- 6. Figure 17.19 (formerly figure 17.18) has been improved with more accurate data.
- 7. Per reviewer suggestion, the section on ozone now precedes the global warming section.
- 8. Causes of pollution have been moved under its own heading, separating it from programs to control pollution.
- 9. The authors have added the Kyoto protocol to this chapter.
- 10. A new table on national air quality standards has been created.

Chapter 18

- 1. The authors have added introductory material on solid waste other than municipal, such as mining, manufacturing, and agricultural.
- 2. Information about Fresh Kills landfill has been updated.
- 3. The authors have reworked the material on kinds of composting.

Chapter 19

- 1. The material on waste minimization and pollution prevention has been consolidated under the heading, "Reducing the Amount of Waste at the Source."
- 2. Information on the different agencies that set regulations has been added.
- 3. A paragraph has been included on the success of Superfund.
 - 4. The information on incineration has been transferred from the treatment method section to the disposal method section.
- 5. The authors have updated the table, Top Fifteen Hazardous Substances.
- 6. The table on hazardous waste management methods has been modified.
- 7. Figure 19.4 on toxic releases now includes new 2000 data.
- 8. Figure 19.5 on the pollution-prevention hierarchy has been completely revised.
- 9. The authors have added an Environmental Close-Up reading on brownfields.

Chapter 20

- 1. A section on biological, chemical, and eco-terrorism has been added.
- 2. The table, Major U.S. Environmental and Resource Conservation Legislation, has been updated.
- 3. The authors have added an Environmental Close-up reading on United States environmental policy.
- 4. Information on global environmental agreements has been expanded.