Focus Questions Sustaining Biodiversity Chapters 9-11 APES

Focus Questions

Chapter 9

- Explain the human activities that speed up extinction. (9-1)
- Describe the difference between endangered and threatened species. (9-1)
- What characteristics make species more prone to extinction. Provide examples. (9-1)
- Explain the reasons we should attempt to prevent extinctions. (9-2)
- What is HIPPCO? Explain and provide examples. (9-3)
- What problems are birds currently facing? (9-3)
- Describe the problems honeybees are facing. (9-3)
- Explain the international treaties that exist to protect species. (9-4)
- · Describe the Endangered Species Act. What are the strengths and weaknesses? (9-4)
- What are the advantages and disadvantages of zoos? (9-4)

Chapter 10

- Describe the ecological and economic services forests provide. (10-1)
- Describe the different methods of logging and the advantages and disadvantages of each. (10-1)
- What threats to forests face? (10-1)
- What are the major causes of tropic forest destruction? (10-1)
- Explain how forest fires could be better managed. (10-2)
- Who is Wangari Maathai and why was she an important environmental figure? (10-2)
- Explain how grasslands can be better managed. (10-3)
- Explain the problems that National Parks and Nature Reserves face. How can these problems be addressed? (10-4)
- Explain how Costa Rica has become one of the leaders in the global conservation movement. (10-4)
- What specific ways can ecosystems be protected? (10-5)
- How can degraded ecosystems be restored? (10-5)

Chapter 11

- Explain specific ways humans impact aquatic biodiversity. (11-1)
- Describe the different ways fish are harvested and the advantages and disadvantages of each. (11-1)
- Explain the laws and treaties that protect aquatic species. (11-2)
- What approaches have been attempted to protect whales? Explain the successes and limitations of these approaches. (11-2)
- How can marine ecosystems and species be protected? (11-2)
- Explain how fishery populations can be monitored. (11-3)
- Explain how governments encourage overfishing. (11-3)
- Explain how wetlands can be better managed. What problems have been encountered in the Florida Everglades? (11-4)
- Explain the ways the Great Lakes have been impacted by invasive species. (11-5)

Key Terms

Chapter 9

background extinction extinction rate mass extinction endangered species threatened species instrumental value intrinsic value HIPPCO environmental indicators Endangered Species Act of 1973 Convention of Biological Diversity CITES habitat conservation plan captive breeding precautionary principle

Chapter 10

old-growth forest second-growth forest tree plantation clear-cut selective cutting deforestation tipping point debt-for-nature swaps rangelands pastures overgrazing undergrazing rotational grazing riparian zones conservation easements buffer zone concept habitat corridors

wilderness

biodiversity hotspots endemic ecological restoration restoration rehabilitation replacement creating artificial ecosystems reconciliation

Chapter 11

fishprint biological extinction trawler fishing purse-seine fishing longlining drift-net fishing

cetaceans toothed whales baleen whales reconciliation ecology Marine Protected Areas (MPAs) integrated coastal management maximum sustainable yield (MSY) optimum sustainable yield (OSY) multispecies management individual transfer rights (ITRs)