



**Raven, Berg, Hassenzahl: Environment, 7th Edition**  
**Chapter 18 Land**

1. What two new U.S. national parks were founded in 2003 and 2004?
  - a) Congaree and Sand Dunes
  - b) Mojave and Yellowstone
  - c) Yosemite and Sand Dunes
  - d) The Grand Canyon and Congaree
  - e) none of these

Ans: a

Difficulty: Easy

**Response:**

Chapter Opener; 18.0

2. Which organization(s) helped preserve Congaree National Park over the years?
  - a) The Nature Conservancy
  - b) The Sierra Club
  - c) The Audubon Society
  - d) all of these
  - e) none of these

Ans: d

Difficulty: Easy

**Response:**

Chapter Opener; 18.0

3. Which of the following national parks preserves the largest remaining intact Difficultwood bottomland forest in the U.S.?
  - a) Great Sand Dunes
  - b) Joshua Tree
  - c) Yosemite
  - d) Congaree
  - e) Yellowstone

Ans: d

Difficulty: Easy

**Response:**

Chapter Opener; 18.0



4. What is the current percentage of land used by humans for agriculture?
- a) 28%
  - b) 42%
  - c) 55%
  - d) 31%
  - e) 38%

Ans: e

Difficulty: Medium

**Response:**

World Land Use; 18.1.1

5. Cities make up what percentage of the world's total land area?
- a) 5%
  - b) 17%
  - c) 3%
  - d) 12%
  - e) 7%

Ans: c

Difficulty: Medium

**Response:**

World Land Use; 18.1.1

6. Which U.S. government agency manages the federally owned land?
- a) Bureau of Land Management
  - b) U.S. Fish and Wildlife
  - c) National Park Service
  - d) U.S. Forest Service
  - e) all of these

Ans: e

Difficulty: Easy

**Response:**

Land Use in the United States; 18.1.2

7. Which of the following statements is not true about public planning of land use?
- a) Land use decisions are complex because they have multiple effects.
  - b) Public planning of land should take all repercussions into account.
  - c) Public planning is concerned primarily with immediate effects.
  - d) Initial land development spawns additional land development.
  - e) all of these are true

Ans: c

Difficulty: Medium

**Response:**

Land Use in the United States; 18.1.2



8. All of the following are benefits of coastal wetlands except:
- a) reduced flooding through their ability to hold excess water
  - b) improved water quality
  - c) reduced impact of ozone depletion
  - d) provide habitat for endangered species
  - e) produce important commercial products

Ans: c

Difficulty: Easy

**Response:**

Wetlands and Coastal Areas; 18.5

9. Which of the following is not one of the top 5 countries with the greatest tree harvests?
- a) United States
  - b) Canada
  - c) China
  - d) Germany
  - e) Brazil

Ans: d

Difficulty: Medium

**Response:**

Forest Management; 18.3.1

10. Which of the following statements about clear cutting is false?
- a) It is the most cost-effective way to harvest trees.
  - b) When done on a small scale, it can benefit some wildlife species.
  - c) It increases soil erosion and causes mudslides.
  - d) Clear-cutting forests at higher altitudes is more Difficult to regenerate than low altitudes.
  - e) none of these are false

Ans: e

Difficulty: Medium

**Response:**

Forest Management; 18.3.1



11. Which of the following is a direct cause of deforestation?

- a) insects
- b) indigenous people
- c) decrease of agriculture
- d) diseases
- e) both insects and diseases

Ans: e

Difficulty: Easy

**Response:**

Deforestation; 18.3.2

12. Which organization is a provision of the 1990 Farm Bill which helps landowners protect environmentally important forestlands from development?

- a) Forest Legacy Program
- b) Bureau of Land Management
- c) Environmental Protection Agency
- d) Department of Environmental Management
- e) Sierra Club

Ans: a

Difficulty: Easy

**Response:**

Forest Trends in the United States; 18.3.3

13. Which of the following statements about forest ownership in the United States is true?

- a) The federal government owns the majority of the forests.
- b) State and local governments own about 25% of the forests.
- c) Private individuals own the majority of the forests.
- d) Corporations own about half of the forests.
- e) none of these are true

Ans: c

Difficulty: Medium

**Response:**

Forest Trends in the United States; 18.3.3

14. Which of the following is not a method currently used to harvest trees?
- a) clear-cutting
  - b) selective cutting
  - c) seed tree cutting
  - d) shelterwood cutting
  - e) none of these

Ans: e

Difficulty: Easy

**Response:**

Forest Management; 18.3.1

15. The natural or human-induced process that decreases the future ability of the land to support crops or livestock is known as:
- a) desertification
  - b) land degradation
  - c) overgrazing
  - d) clear cutting
  - e) undergrazing

Ans: b

Difficulty: Easy

**Response:**

Rangeland Degradation and Desertification; 18.4.1

16. Approximately 55 percent of the land in the United States is owned by:
- a) the federal government, as national parks
  - b) Native Americans
  - c) citizens, corporations, and non-profit organizations
  - d) state and local governments
  - e) the federal government, as national forests and rangelands

Ans: c

Difficulty: Easy

**Response:**

Land Use in the United States; 18.1.2



17. Most of the federally owned land in the United States is located in:

- a) Alaska and 11 western states
- b) Alaska and the Rocky Mountain area
- c) 11 western states and the Upper Midwest
- d) Alaska and Texas
- e) Alaska, Arizona, California, and Nevada

Ans: a

Difficulty: Easy

**Response:**

Land Use in the United States; 18.1.2

18. The Wilderness Act of 1964:

- a) established five new national parks
- b) limits the percentage of an area that can be developed for human habitation and other activities
- c) gives designated wilderness areas the highest protection of any public lands
- d) established wilderness areas, but only within existing national parks
- e) safeguards mountain areas but not tundra or desert

Ans: c

Difficulty: Easy

**Response:**

Wilderness, Parks, and Wildlife Refuges; 18.2

19. National parks may include:

- a) significant modern architecture
- b) economically significant areas or buildings
- c) historic battlefields
- d) farm land
- e) none of these

Ans: e

Difficulty: Easy

**Response:**

National Parks; 18.2.1



20. Which of the following is not a threat to national parks?
- a) ecosystem services
  - b) vandalism
  - c) collecting plants, minerals, and fossils
  - d) declining wildlife populations
  - e) proliferating wildlife populations

Ans: a

Difficulty: Easy

**Response:**

National Parks; 18.2.1

21. The National Wildlife Refuge System was established by which President of the United States?
- a) Abraham Lincoln
  - b) Woodrow Wilson
  - c) Harry Truman
  - d) Herbert Hoover
  - e) Theodore Roosevelt

Ans: e

Difficulty: Easy

**Response:**

Wildlife Refuges; 18.2.2

22. Forests:
- a) fix large amounts of oxygen, removing it from the atmosphere
  - b) promote soil erosion
  - c) maintain watersheds
  - d) provide habitat for few animal species
  - e) release large amounts of carbon monoxide into the atmosphere

Ans: c

Difficulty: Easy

**Response:**

Forests; 18.3



23. Timber companies prefer to harvest trees by:
- a) clear-cutting
  - b) seed tree cutting
  - c) selective cutting
  - d) shelterwood cutting
  - e) even-age harvesting

Ans: a

Difficulty: Easy

**Response:**

Forest Management; 18.3.1

24. The removal of all mature trees in an area over an extended period of time is known as:
- a) clear-cutting
  - b) even-age harvesting
  - c) selective cutting
  - d) seed-tree cutting
  - e) shelterwood cutting

Ans: e

Difficulty: Easy

**Response:**

Forest Management; 18.3.1

25. Tropical dry forests are being destroyed largely due to demand for:
- a) food
  - b) pharmaceutical products
  - c) mining ores
  - d) industrial wood and wood fiber
  - e) fuel

Ans: e

Difficulty: Easy

**Response:**

Trends in Tropical Forests; 18.3.5

26. Boreal forests:
- a) comprise the world's largest biome
  - b) are currently the primary source of the world's industrial wood and wood fiber
  - c) are harvested primarily by clear-cut logging
  - d) are comprised of evergreen trees, such as spruce, fir, cedar, and hemlock
  - e) all of these

Ans: e

Difficulty: Easy

**Response:**

Boreal Forests and Deforestation; 18.3.6





27. Public rangelands in the United States:
- a) have been on the decline since the early 1900s
  - b) are maintained exclusively by fees collected from private livestock operators
  - c) do not currently support large populations of free-ranging grazers
  - d) make up approximately 50% of the total land area in the United States
  - e) can be used for grazing private livestock for a fee if you have a permit

Ans: e

Difficulty: Easy

**Response:**

Rangeland Trends in the United States; 18.4.2

28. Which of the following is not a commercial product of freshwater wetlands?
- a) blueberries
  - b) cranberries
  - c) grapes
  - d) peat moss
  - e) wild rice

Ans: c

Difficulty: Easy

**Response:**

Wetlands and Coastal Areas; 18.5

29. Which of the following includes a provision to protect and restore freshwater wetlands?
- a) Wilderness Act
  - b) Wild and Scenic Rivers Act
  - c) Federal Land Policy and Management Act
  - d) Land and Water Conservation Fund Act
  - e) Food Security Act

Ans: e

Difficulty: Easy

**Response:**

Wetlands and Coastal Areas; 18.5

30. Conservation strategies that set aside ecosystems for preservation:
- a) are the best way to preserve an area's diversity
  - b) increase the likelihood that a given ecosystem will be exploited
  - c) decrease the number of endangered species living in that ecosystem
  - d) can only be carried out by government agencies
  - e) are impractical and not encouraged

Ans: a

Difficulty: Easy

**Response:**

Conservation of Land Resources; 18.6

31. A legal agreement that protects privately owned forests or other property from development for a specified number of years is termed:
- a) a public range land
  - b) a sanctuary deed
  - c) a conservation easement
  - d) an ecosystem lien
  - e) a habitat right of way

Ans: c

Difficulty: Easy

**Response:**

Forest Trends in the United States; 18.3.3

32. According to the Defenders of Wildlife, the top three most endangered ecosystems in the U.S. include:
- a) Northwestern grassland, Heartland savanna, and California native grassland
  - b) South Florida landscape, Southern Appalachian spruce-fir forest, and longleaf pine forests and savannas
  - c) Alaskan tundra, Hawaii's rainforest, and coastal wetlands
  - d) Bogs, Arizona's deserts, and Rocky Mountain evergreen forests
  - e) Freshwater lakes, prairie lands, and volcanic landscapes

Ans: b

Difficulty: Easy

**Response:**

Conservation of Land Resources; 18.6

33. An ecological simplification in which only one type of plant is cultivated over a large area is called a:
- a) wildlife corridor
  - b) natural regulation
  - c) wise-use move
  - d) monoculture
  - e) single species standard

Ans: d

Difficulty: Easy

**Response:**

Forest Management; 18.3.1

34. Which of the following is not an ecosystem service performed by rural lands?
- a) flood and erosion control
  - b) waste recycling
  - c) leaching of mineral nutrients
  - d) wildlife habitat
  - e) groundwater recharge

Ans: c

Difficulty: Medium

**Response:**

Land Use; 18.1

35. The controversy involving the decline of white pine trees (source of a major part of the grizzly bears' diet) is based on:
- a) the popularity of the grizzly bears compared to their destruction of the local forest community
  - b) the fact that global warming and ozone depletion are responsible for the trees' decline
  - c) the exotic nature of the fungus that is killing the trees
  - d) the provision of the Wilderness Act that intentional ecological management will be avoided
  - e) none of these

Ans: d

Difficulty: Medium

**Response:**

Wilderness, Parks, and Wildlife Refuges; 18.2

36. Which of the following statements regarding trees and climate change is true?
- a) The oxygen produced by trees helps to moderate climate change.
  - b) When trees act as carbon "sinks," they accelerate climate change.
  - c) There is much more carbon stored in trees than there is in the atmosphere.
  - d) The process of photosynthesis removes greenhouse gases from the atmosphere.
  - e) Trees take greenhouse gases and turn them into CO<sub>2</sub>, an important compound for many living organisms.

Ans: d

Difficulty: Easy

**Response:**

Forests; 18.3



37. Which of the following federal agencies is not charged with the managing of federally owned lands?
- a) Department of Agriculture
  - b) Department of Interior
  - c) Bureau of Land Management
  - d) U.S. Forest Service
  - e) Department of Commerce

Ans: e

Difficulty: Medium

**Response:**

Land Use in the United States; 18.1.2

38. According to recent climate projections, how is Amazonia likely to be affected by deforestation?
- 1) rainfall will decrease
  - 2) temperatures will increase due to a negative feedback loop between forest cover, drought, and air temperature
  - 3) drought frequency could increase forest loss
  - 4) all of these
- a) 1
  - b) 2
  - c) 3
  - d) 4
  - e) Both 1 and 3

Ans: e

Difficulty: Medium

**Response:**

Conservation and Land Resources; 18.6;

39. The purpose of the National Wildlife Refuge System is to:
- a) preserve lands and waters for the conservation of wildlife
  - b) preserve historically significant buildings
  - c) maintain quality drinking water for urban areas
  - d) raise money to protect wilderness areas of the United States
  - e) more than one of the above

Ans: a

Difficulty: Medium

**Response:**

Wildlife Refuges; 18.2.2

40. What prompted the 88th Congress to implement the Wilderness Act of 1964?
- a) the need to preserve areas of land for future timber harvest
  - b) concern that human population expansion could drastically reduce the amount of land remaining in pristine condition
  - c) lobbying by individuals such as John Muir
  - d) the need to make more land accessible to citizens for recreational purposes
  - e) a decrease in land prices, facilitating purchases of large areas by the Federal Government

Ans: b

Difficulty: Medium

**Response:**

Wilderness, Parks, and Wildlife Refuges; 18.2

41. Forests play an important role in the hydrologic cycle by:
- a) returning most moisture to underground storage as groundwater
  - b) recycling small amounts of water to the atmosphere
  - c) recycling 75% of precipitation to the atmosphere by transpiration and evaporation
  - d) removing large amounts of carbon monoxide from the atmosphere
  - e) increasing runoff to local streams

Ans: c

Difficulty: Medium

**Response:**

Forests; 18.3

42. Forest management for timber production:
- a) includes the harvesting of trees
  - b) results in forests with high biodiversity
  - c) maintains the natural species composition of the forest
  - d) results in forests less susceptible to disease
  - e) specifically avoids producing monoculture forests

Ans: a

Difficulty: Medium

**Response:**

Forest Management; 18.3.1



43. Habitat corridors are intended to provide:
- a) further habitat fragmentation
  - b) increased species richness within forest monocultures
  - c) a means for controlling insect pests and invasive species
  - d) increased timber production
  - e) opportunities for larger animals to establish larger territories

Ans: e

Difficulty: Medium

**Response:**

Forest Management; 18.3.1

44. Deforestation is linked to all of the following except:
- a) release of CO<sub>2</sub>, which may contribute to an increase in global temperature
  - b) decreased soil fertility
  - c) the extinction of many species
  - d) increasingly dry local climates
  - e) decreased surface water flow into streams and rivers

Ans: e

Difficulty: Medium

**Response:**

Deforestation; 18.3.2

45. Why are tropical rain forests considered so important to global ecology?
- a) they contribute greatly to the world's carbon and oxygen cycles
  - b) they retard soil erosion
  - c) they contain much of the world's biodiversity
  - d) they mitigate floods and droughts
  - e) all of these

Ans: e

Difficulty: Medium

**Response:**

Trends in Tropical Forests; 18.3.5

46. The countries of Indonesia and the Philippines have which of the following in common?
- a) desertification
  - b) drought
  - c) rare cold fronts during winter
  - d) high rates of deforestation
  - e) extensive dry tropical forests

Ans: d

Difficulty: Medium

**Response:**

Trends in Tropical Forests; 18.3.5



47. Subsistence agriculture:
- a) has little or no impact on deforestation since it is a small-scale approach
  - b) is where a family produces just enough food to feed itself
  - c) is only used by 1 to 2 million farmers today since it is an outdated farming practice
  - d) does not use the slash-and-burn agriculture method
  - e) is a typical land use practice in highly developed countries

Ans: b

Difficulty: Medium

**Response:**

Trends in Tropical Forests; 18.3.5

48. Which of the following is not a way to slow deforestation?
- a) replant trees
  - b) allow the land that has been under slash-and-burn agricultural practices to rest for 20 to 100 years
  - c) promote additional slash-and-burn agricultural practices
  - d) harvest trees only at the time they reach harvestable size
  - e) promote land reform changes

Ans: c

Difficulty: Medium

**Response:**

Trends in Tropical Forests; 18.3.5

49. Which of the following statements is true?
- a) Temperate forests are currently the primary source of the world's industrial wood and wood fiber.
  - b) Temperate forests in the eastern United States are holding steady or even expanding.
  - c) Government protection is responsible for the expansion of virgin stands in the eastern United States.
  - d) Well over sixty percent of U. S. forests are owned and supervised by the government.
  - e) The Forest Legacy Program is a provision of the 1990 Farm Bill that helps to further protect public lands.

Ans: b

Difficulty: Medium

**Response:**

Forest Trends in the United States; 18.3.3

50. Which of the following statements about Tongass National Forest is false?
- a) A single large Sitka spruce from Tongass may yield as much as 10,000 board feet of high-quality lumber.
  - b) Tongass is the largest forest in the National Forest System.
  - c) Tongass is a prime logging area because it was clear-cut in the early 1900s and has now fully re-grown.
  - d) The modified Tongass Land Management Plan calls for reduced road density to protect wildlife habitat.
  - e) The 1999 modified Tongass Land Management Plan increased timber harvest rotations to 200 years.

Ans: c

Difficulty: Medium

**Response:**

Case in Point: Tongass National Forest; 18.3.4

51. Which of the following statements about rangelands is true?
- a) Rangelands have native grasses with fibrous root systems that can survive extended periods of drought.
  - b) Rangelands are valuable for food production but yield no other economically valuable resources.
  - c) Rangelands can benefit from overgrazing by cattle since it may actually increase the plant diversity.
  - d) Rangelands are found in temperate regions, but not in tropical climates.
  - e) About 10% of the human population lives in rangelands that border deserts.

Ans: a

Difficulty: Medium

**Response:**

Rangeland Degradation and Desertification; 18.4.1

52. All of the following are benefits of coastal wetlands except:
- a) providing food
  - b) acting as nurseries for many marine organisms
  - c) reducing the impact of ozone depletion
  - d) protecting coastlines from erosion
  - e) reducing the damage from hurricanes

Ans: c

Difficulty: Medium

**Response:**

Coastlines; 18.5.1



53. The policy of no net loss of wetlands in the U.S. is only partially successful because:
- 1) wetland dynamics are not totally understood; reconstructed wetlands do not always provide the essential elements necessary to attract the species of the original habitat
  - 2) wetlands developed for the drinking water supply do not have to be replaced; this contributes to overall net loss of wetland
  - 3) there is no routine tracking of compliance to document success
  - 4) the definition of wetland was broadened by Congress, adding marginal wetlands in addition to swamps and marshes
- a) 1
  - b) 2
  - c) 3
  - d) 4
  - e) Both 1 and 3

Ans: e

Difficulty: Medium

**Response:**

Wetlands and Coastal Areas; 18.5

54. What is the relationship of overgrazing to desertification?
- a) overgrazing is the destruction of vegetation; desertification is the destruction of a desert ecosystem
  - b) overgrazing results in barren exposed soil; if erosion continues, it contributes to desertification
  - c) overgrazing is brought about by cattle; desertification is brought about by temperature
  - d) overgrazing is caused by too fertile rangeland; desertification is caused by too fertile agricultural land
  - e) overgrazing is a synonym for desertification

Ans: b

Difficulty: Medium

**Response:**

Rangeland Degradation and Desertification; 18.4.1