

Chapter 11 and 12 Review

-Key

1. Define Endangered Species and Threatened Species and provide 3 examples of each.

ES	Species categorized by IUCN Red List as likely to become extinct	Ex. Amur Leopard, Asian Elephant, Ca. Condor,
TS	Vulnerable to endangerment	Ex. Caracara-bird, Mexican spotted owl, polar bear

2. Identify and describe 3 benefits of biodiversity

Increase Stability
Increase Resilience - able to adapt
Increase Food Security

3. What is causing the 6th mass extinction on Earth? Humans
4. Explain how biodiversity changes as you change latitude.

at 0 = equator is highest biodiversity as latitude increases biodiversity decreases
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5. Identify and Describe 6 causes of biodiversity loss. Hint: HIPPOC

Habitat Loss
Invasive Species
Population
Pollution
Overconsumption
Climate Change

6. Identify and Describe 2 laws that are used in conservation biology.

Endangered Species Act
CITES

7. What is a biodiversity hotspot? Supports a greater # of endemic species
8. Why are islands usually locations of greater species diversity?
allow for greater variety of niches & adaptations
9. What is mitigation? Reduce severity of something
10. Identify and describe 3 ecological benefits of forests.

Hold soil - Prevent Erosion

Water Cycle sink - Transpiration

Carbon Cycle sink - photosynthesis

11. Identify and describe 4 forest types (review biomes).

1 Coniferous	3 Deciduous
2 Tropical	4 Temperate Rain Forest (Pacific Northwest)

12. Identify 5 ecosystem services of forests.

Purify water
fuel wood / timber
support biodiversity
store carbon
produce oxygen

13. What is deforestation? loss of forest habitat
14. What is an old-growth forest? Natural forest - uncut by people
15. What is secondary forest? trees after old growth is cut. Smaller trees less complex
16. Which type of forest is more stable: Even aged stands or uneven aged stands? Why?

Uneven-aged p. 317

17. Identify and describe 3 methods for harvesting timber.

Clear-cut	Seed-tree/ shelter wood	Selectional
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Which one is the most sustainable? Selectional

18. Identify and Describe 4 types of land reserves and indicate who manages them.

National Parks
National Forests
National Monuments
Wildlife refuges

19. Are all forest fires bad? No Explain your answer:

Low intensity fires eliminate underbrush & allow for new germination
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20. Describe the edge effect. diff. habitat on edge / Fragmentation increases edges

21. What is the Theory of Island Biogeography? How can it be applied to fragmented habitats.

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11. Which of the following characteristics would make a species less prone to extinction?

E is the correct answer

- A) nesting in large flocks
- B) requiring large amounts of unfragmented habitat
- C) possessing a valuable skin
- D) serving as a food source for humans
- E) producing many offspring when environmental conditions are favorable

1. The Endangered Species Act of 1973

- A) is one of the world's toughest environmental laws.
- B) allows the use of endangered species for approved scientific purposes or if the use enhances the survival of the species.
- C) authorizes identification of endangered species solely on a biological basis.
- D) requires all commercial shipments of wildlife enter or leave the U.S. through one of nine designated ports.
- E) All of these answers.

8. The current extinction crisis differs from previous mass extinctions in that

- A) ecosystems which store genes for future radiations are being protected.
- B) the current crisis is caused by the human species.
- C) it is taking place at a slower rate.
- D) recovery is likely to be faster because of genetic engineering.
- E) it is making the planet healthier.

9. The Wilderness Society and the National Parks and Conservation Association suggested all of the following proposals *except*

- A) providing funds for the backlog of park system maintenance and repairs.
- B) significantly increasing the pay and number of park rangers.
- C) buying private lands inside parks and adding land near the most threatened parks.
- D) locating most commercial park facilities only along the main road through the park.
- E) None of these answers.

Completion

Complete each statement.

Word bank:

- a. habitat corridors
- b. trawl fishing
- c. invasive species
- d. safe harbor agreements
- e. endangered
- ab. gene banks
- ac. seed bank
- ad. endemic species
- ae. deforestation
- bc. selective cutting
- bd. Endangered Species Act
- be. threatened

24. A(An) ab. threatened species is still abundant in its natural range but because of declining numbers it is vulnerable to extinction.
25. Landowners voluntarily agree to take specified steps to restore, improve, or maintain habitat for threatened or endangered species located on their land under safe harbor agreements.
26. habitat corridors permit migration of individuals and populations in order to support species that need larger ranges.
27. A method of logging that removes mature trees singly or in small groups in an uneven-aged forest is called selective cutting.
28. In trawl fishing a bag is raked across the ocean floor and whatever is in the way gets captured.
29. Places to preserve genetic information and endangered plant species are called seed banks.
30. endemic are found only in one location, particularly on islands.
31. seed bank preserve plant species, which are the only remaining means of maintaining long-term genetic progress.
32. deforestation contributes to the greenhouse effect by destroying plants that use carbon dioxide.
33. African honeybees in Brazil are invasive species and have displaced the established honeybees.
34. E.S.A was designed to identify and legally protect endangered species in the US and abroad.
35. A(An) endangered species has so few individual survivors that the species could soon become extinct over all or most of its natural range.