

## Chapter 10: Sustaining Terrestrial Biodiversity: The Ecosystem Approach

1. What was the main goal of Wangari Maathi's "Green Belt Movement" and how did it help poor women in rural Kenya?
2. Distinguish among an **old-growth forest**, a **second-growth forest**, and a **tree plantation** (tree farm or commercial forest).
3. What major ecological and economic benefits do forests provide?
4. What is the annual monetary worth of the **biological income** and **ecological services** provided by forests .
5. Describe the harm caused by building roads into previously inaccessible forests.
6. Distinguish among **selective cutting**, **clear-cutting**, and **strip cutting** in the harvesting of trees.
7. What are the major advantages and disadvantages of clear-cutting forests?
8. What are two types of forest fires?
9. What are some ecological benefits of occasional surface fires?
10. What are four ways to reduce the harmful impacts of diseases and insects on forests?
11. What effects might projected climate change have on forests?
12. What is deforestation and what parts of the world are experiencing the greatest forest losses?
13. List some major harmful environmental effects of deforestation.
14. Describe the encouraging news about deforestation in the United States.
15. What are the major **underlying** and **direct** causes of tropical deforestation?
16. Describe four ways to manage forests more sustainably.
17. What is certified timber?
18. What are three ways to reduce the harm to forests and to people from forest fires?
19. What is a prescribed fire?
20. What are three ways to reduce the need to harvest trees?
21. Describe the fuel wood crisis.
22. List two ways to reduce the severity of the fuel wood crises.
23. What are four ways to protect tropical forests and use them more sustainably?
24. Distinguish between rangelands and pastures.
25. What is overgrazing ?
26. What are three harmful effects of overgrazing?
27. What are three ways to reduce overgrazing and use rangelands more sustainably?
28. Describe the conflict among ranching, biodiversity protection, and urban development in the American West.
29. What makes national parks in the world and in the United States vulnerable to environmental degradation?
30. Describe some of the ecological effects of reintroducing the gray wolf to Yellowstone National Park in the United States.
31. What percentage of the world's land has been set aside and protected as nature reserves, and what percentage do conservation biologists believe should be protected?
32. What do conservation biologists think is the best strategy for designing and connecting nature reserves?
33. Describe what Costa Rica has done to establish nature reserves.
34. What is wilderness and why is it important?
35. Describe the controversy over protecting wilderness in the United States.
36. What is a biodiversity hotspot?
37. What is ecological restoration?
38. Define reconciliation ecology.
39. Give three examples of reconciliation ecology.

