

Name: _____ Date: _____ Block: _____

Miller and Spoolman's Living in the Environment 16th ed.

Chapter 10 Reading Guide – Sustaining Terrestrial Biodiversity: The Ecosystem Approach

Case Study – Reintroducing Gray Wolves to Yellowstone

1. Summarize the argument for reintroducing gray wolves to Yellowstone.
2. Summarize the argument against reintroducing the gray wolves.
3. What would be the effects to the ecosystem in Yellowstone if they are reintroduced? (Science Focus p. 235)

Section 10-1 – What Are the Major Threats to Forest Ecosystems?

4. Differentiate between old growth forests and second-growth forests.
5. Describe the major threats for forest ecosystems.
6. What is the natural capital degradation caused by deforestation?
7. Explain how some people put a price tag on nature's ecological services. Is this a good idea? (Science Focus)
8. Describe and explain the major causes of destruction and degradation of tropical forests.

Section 10-2 – How Should We Manage and Sustain Forests?

9. Explain how management practices, reduced demand, and action by governments can each be used to sustain forests.
10. Explain the environmental science principles that govern Wangari Maathai's work. (Individuals Matter)

Section 10-3 – How Should We Manage and Sustain Grasslands?

11. Explain the role of overgrazing on rangelands.
12. Why is this a problem?
13. What can be done to manage rangelands more sustainably?

Section 10-4 – How Should We Manage and Sustain Parks and Nature Reserves?

14. Explain the important role of parks and nature reserves in sustaining biodiversity, including why they are needed and important design considerations.

Section 10-5 – What Is the Ecosystem Approach to Sustaining Biodiversity?

15. Identify the four points of an ecosystem protection strategy, and provide a specific example of each.
16. Explain why protecting ecosystem services is such an important priority.
17. What ecological restoration measures can be used to speed up the natural repair of damaged ecosystems?
18. Explain Costa Rica's tropical dry forest as an example of the ecosystem approach to sustaining terrestrial biodiversity. (Science Focus)
19. Explain the concept of reconciliation ecology, and include examples.

List any questions you have after reading this chapter.