

Chapter 12 – Review Questions

Read Chapter 12 and answer the following questions on a separate sheet of paper.

ANSWERS MUST BE HANDWRITTEN! Typed responses will not be accepted.

1. Describe the ecological and economic problems of Africa's Lake Victoria, and list two ways to reduce these threats.
2. What are the three most biologically diverse habitats found in the world's oceans?
3. Explain what is important about aquatic biodiversity.
4. List four major human impacts on aquatic biodiversity as a result of habitat loss and degradation.
5. Give two examples of how the deliberate or accidental introduction of nonnative species has affected fish populations. Describe the threat to wetlands from invasion by purple loosestrife.
6. How have human population growth and pollution affected the survival of aquatic species?
7. Describe how overfishing has affected the populations of many marine and freshwater aquatic species. Explain how most commercial marine fishing can be viewed as an example of the tragedy of the commons.
8. Describe four major methods used by commercial fishers to harvest marine fish and shellfish. What is *bycatch*, and why is it significant in protecting aquatic biodiversity.
9. List four factors that make it difficult to protect marine diversity.
10. List four threats to marine sea turtles.
11. List four factors that threaten the Florida manatee.
12. Distinguish between *toothed whales* and *baleen whales*. Explain how commercial whaling has been an example of the tragedy of the commons, and list the pros and cons of resuming commercial whaling.
13. Describe factors leading to the near extinction of the blue whale.
14. Describe the role of international agreements and protected marine sanctuaries in helping protect aquatic biodiversity. How successful have these efforts been?
15. Define *integrated coastal management* and state its overall purpose.
16. What are six ways in which U.S ocean policy could be improved, according to two commissions set up to study ocean policy?
17. List ten ways in which to manage fisheries more sustainably and protect marine biodiversity.
18. Describe the estimation and management of fish populations using (a) maximum sustained yield (MSY), (b) optimum sustained yield (OSY), (c) multispecies management, (d) large marine system management, and (e) the precautionary principle.
19. List at least one way each to prevent over fishing and protect marine biodiversity by (a) enacting fishery regulations, (b) using economic approaches, (c) setting aside protected area, (d) providing consumer information, (e) reducing bycatch, (f) controlling aquaculture, and (g) dealing with nonnative invasions.
20. Describe the regulation of fish harvests through *comanagement*.
21. Describe the status of wetland protection in the United States and list six ways to improve wetlands protection.
22. Describe the ecological and water supply problems of south Florida's Everglades and efforts to deal with these problems.
23. Describe the threats to the Great Lakes from invasions by nonnative species.
24. Describe efforts to manage the Pacific Northwest's Columbia River for people and wild salmon.
25. List six ways to manage and sustain freshwater fisheries.
26. Describe the National Wild and Scenic Rivers System in the United States.