Biodiversity, Habitats, Invasive, Management Notesheet

Name: Hour Date:

1. All life on earth has one thing in common: . Every of every

living species is a result of that species’ DNA. All the of living species is due to

 in that species’ DNA
2. The the genetic diversity, the the ecosystem
3. List and describe the 3 levels of diversity that comprise biodiversity:

1.

2.

3.
4. Define Biodiversity:
5. Write the basic formula for biodiversity:
6. Which has more biodiversity, a corn field with 10,000 stalks or a garden with 5 individuals of 5 different plants? Explain
7. Biodiversity matters because it is a of the of an ecosystem.
8. For an ecosystem to function, it must be able to serve different and provide various

 .
9. Provide 1-2 examples for each category of ecosystem service listed below

	1. Energy flow
	2. Nutrient Cycling
	3. Filtration and removal of waste products:
	4. Reproduction and genetic diversity:
10. Provide a caption that explains the meaning of this graph:
11. How are losses to a community like losses of biodiversity? Compare and contrast the functioning of an ecosystem to the functioning of a community as it relates to the diversity of its members.
12. As biodiversity , so do ecosystem (energy flow, nutrient cycling, filtration, resource renewal, reproduction, etc.)
13. The role of a is to maximize and

minimize .

HABITAT-PART 2

1. Define Habitat:
2. Define Population:
3. Define Community:
4. Define Ecosystem:
5. Define Niche:
6. Provide 3 examples of species and their niches below:
7. List and describe the four kinds of Niche Interactions:
8. List and describe the four kinds of components of a habitat:
9. What are examples of abiotic resources? List 6:
10. List 5 biological aspects of habitats:
11. What is structure?
12. Provide examples of structure:
13. How does the moose example illustrate that quality of habitat matters as much as quantity?
14. What is succession in a habitat?
15. Succession occurs over of years; it is a process
16. Using turkeys as an example, explain why succession is crucial to the survival of living species:
17. How is succession different from the human disturbance of habitat?
18. The higher the , the more the habitat. Biodiversity is

 when habitat size is
19. Define Patchiness:
20. The more “ ” a habitat, the better
21. Define Edge:
22. More habitat = interior habitat
23. Explain why (A) is better than (B) using patchiness and edge:
24. Why is edge habitat not as valuable as interior habitat?
25. Define fragmentation:
26. Higher = Lower
27. What is the Island Biogeography Model?
28. Why would a narrow road through the middle of a forest cause more damage than is immediately obvious?

PART 3-Invasives

1. How much money did the federal government intend to spend to stop the Asian Longhorned Beetle in1999?
2. How does the gypsy moth kill trees?
3. How does the Emerald Ash Borer kill trees?
4. What are invasive species?
5. What are native species?
6. What are 5 other names for an invasive species?
7. Are all invasive species introduced? Explain:
8. Are all introduced species invasive? Explain:
9. Do most introduced species become established? Explain:
10. What percentage becomes invasive? %. How much do they create economic losses? $
11. List and describe 8 characteristics of invasive species:
12. What does it mean to say that invasive species tend to be habitat generalists?
13. Why are invasive species able to spread so easily?
14. List and describe 6 traits that help invasive species to spread to and take over new habitats:
15. What two things are indicated by the Biological Invasion Curve?
16. Draw the Biological Invasion Curve below and label all components
17. What are the two key ways in which humans aid the spread of invasive species?
18. How does transportation aid the spread of invasive species?
19. What is habitat disturbance?
20. What are examples of habitat disturbance?
21. How could a road through the middle of a habitat increase the spread of an invasive species like garlic mustard? Explain thoroughly below:

PART 4 – Wildlife Management

1. Better management of land will result in resources for everyone to enjoy.
2. Why is it important that private landowners care for their habitats and raise their carrying capacities?
3. Of Wisconsin’s forests, % are privately owned.
4. Different favor different
5. What are five things that affect which wildlife can exist in a habitat?
6. Wildlife management starts with
7. All species require , and

	1. However, each species has its own
8. Do not set for a particular species or for a level of population.

	1. Provide an example of what this means:
9. To support a particular species on a habitat, you must first
10. Patience is a in wildlife management. What does this mean?
11. Severe , wet cold , and other

will affect wildlife more negatively than any of your
12. The surrounding your property may be more important than your own habitat.
13. What does this mean?
14. Your neighbor Floyd wants to maximize his deer population so that it is as large as possible. His reasoning is that if he paid to buy land for hunting, he should be able to get a good-sized deer every single year. Is this a good idea or a bad idea? Explain:
15. Who should you consult before undertaking a major wildlife management project?
16. What are seven management practices that can increase the carrying capacity of a habitat?
17. What could you do to improve a habitat through plantings?
18. What could you do to improve a habitat through feedings?
19. Should you feed species other than songbirds? Explain:
20. What is a ‘den tree’ and how can you use it to improve a habitat?
21. How should you construct a brushpile for improving a habitat?
22. What are three species that benefit from nesting boxes?
23. How can you improve the habitat diversity of your land?
24. How can grazing affect a habitat?
25. Think of your home or an area near your home. 1) Describe it. 2) Then list five things you could personally do to improve its carrying capacity: