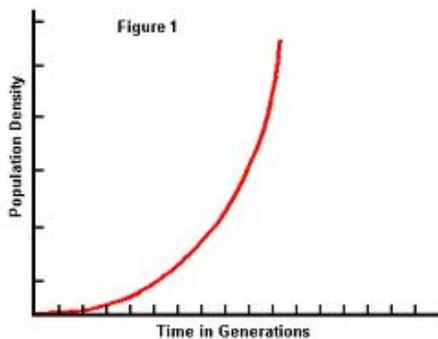


## Ecology Part 2 Test Review

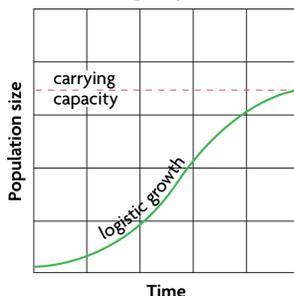
1. What is a population?
2. What is an ecosystem?
3. What is the difference between biotic and abiotic factors? Provide at least one example of each.
4. Explain the difference between a density- dependent factor and density-independent factor.
5. Provide three examples of density- dependent factors.
6. Provide three examples of density- independent factors.
7. Sketch a graph showing exponential population growth.
8. Sketch a graph showing logistic population growth. Be sure to indicate the carrying capacity.
9. Explain the difference between primary and secondary succession.
10. What is a pioneer species?
11. What are trees that lose their leaves during the cold seasons called?
12. What is a renewable resource? Provide 3 examples.
13. What is a nonrenewable resource? Provide 3 examples.
14. What would the earth be like without the greenhouse effect?
15. What is the greenhouse effect? Is it manmade?
16. How is smog created?
17. What is an invasive species? Provide an example of an invasive species in Florida.
18. What chemicals can be found in water that can impact an aquatic ecosystem?
19. When does a population increase (use the words births, deaths, immigration, and emigration)?
20. When does a population decrease (use the words births, deaths, immigration, and emigration)?
21. What happens when a population grows larger than the carrying capacity?
22. Why is biodiversity valuable to the biosphere and humans?
23. Explain why it is better for a population to be genetically diverse.
24. What is succession?
25. When does primary succession occur? Provide an example.
26. When does secondary succession occur? Provide an example.
27. What types of organisms usually grow in the early stages of secondary succession?
28. Why do scientists think global climate is changing?
29. How can humans live in a sustainable way?
30. Why do invasive species usually thrive in their new environment?
31. Propose a solution for managing fisheries sustainably.
32. What determines the carrying capacity of an ecosystem?

# Ecology Part 2 Test Review

1. What is a population?
  - **A group of the same species that lives in that same area.**
2. What is an ecosystem?
  - **The interaction of all of the abiotic and biotic factors in an ecosystem.**
3. What is the difference between biotic and abiotic factors? Provide at least one example of each.
  - **Biotic= living; Ex: plants, animals, bacteria, etc.**
  - **Abiotic= nonliving; Ex: Water, rocks, temperature, etc.**
4. Explain the difference between a density- dependent factor and density-independent factor.
  - **Density- dependent factor: An event that occurs because there are so many animals living close together.**
  - **Density- independent factor: An event that occurs regardless of how close animals are together.**
5. Provide three examples of density- dependent factors.
  - **Food shortage, lack of shelter, predation, disease, etc.**
6. Provide three examples of density- independent factors.
  - **Storms, natural disasters, cold winters, etc**
7. Sketch a graph showing exponential population growth.



8. Sketch a graph showing logistic population growth. Be sure to indicate the carrying capacity.



9. Explain the difference between primary and secondary succession.
  - **Primary Succession: Occurs where no life has ever been before.**
  - **Secondary Succession: Occurs after a disturbance has altered an ecosystem.**
10. What is a pioneer species?

- **Organism that is the first to colonize new land by breaking down rock to create soil they are small and fast growing.**

11. What are trees that lose their leaves during the cold seasons called?

- **Deciduous Trees**

12. What is a renewable resource? Provide 3 examples.

- **Resource that is constantly being replaced. Ex: Wind, sun, water**

13. What is a nonrenewable resource? Provide 3 examples.

- **Resource cannot be replaced in a reasonable period of time – it can only be used once.**

14. What would the earth be like without the greenhouse effect?

- **Cold, frozen, uninhabitable**

15. What is the greenhouse effect? Is it manmade?

- **The greenhouse effect is natural occurrence.**
- **The warming of the surface and lower atmosphere of Earth that occurs when carbon dioxide, water vapor, and other gases absorb radiation from the sun (heat).**

16. How is smog created?

- **Pollutants from fossil fuels and sunlight**

17. What is an invasive species? Provide an example of an invasive species in Florida.

- **A species not native to an area that causes problems because it does not have any natural predators to control its growth. Ex: Brazilian Pepper, Burmese Python**

18. What chemicals can be found in water that can impact an aquatic ecosystem?

- **Salinity, oxygen, and nutrients**

19. When does a population increase (use the words births, deaths, immigration, and emigration)?

- **Births rate greater than deaths and immigration.**

20. When does a population decrease (use the words births, deaths, immigration, and emigration)?

- **Death rates greater than births and emigration.**

21. What happens when a population grows larger than the carrying capacity?

- **Deaths**

22. Why is biodiversity valuable to the biosphere and humans?

- **Medicine, food, timber, ecosystem stability, etc.**

23. Explain why it is better for a population to be genetically diverse.

- **Makes the population more resistance to death.**

24. What is succession?

- **Progression change of an ecosystem.**

25. When does primary succession occur? Provide an example.

- **Ex: Volcanic island, glacier retreat**

26. When does secondary succession occur? Provide an example.

- **Ex: Fire, hurricanes, tornado, farming, etc.**

27. What types of organisms usually grow in the early stages of secondary succession?

- **Fast growing grasses**

28. Why do scientists think global climate is changing?

- **Humans are releasing CO<sub>2</sub> (carbon dioxide), CH<sub>4</sub> (methane), and H<sub>2</sub>O (water vapor) into the atmosphere. These gases are increasing the impact of the greenhouse effect and increasing the global temperature.**

29. How can humans live in a sustainable way?

- **Reduce, reuse, recycle; developing new technology, slowing population growth, etc.**

30. Why do invasive species usually thrive in their new environment?

- **They do not have predators in their new ecosystem.**

31. Propose a solution for managing fisheries sustainably.

- **Limiting the number of fish that can be caught, closing the fishing season until the fishery can recover.**

32. What determines the carrying capacity of an ecosystem?

- **The limiting factor**