

High School OAS Science: Ecosystems Vocabulary
Video Topic: BIOLOGICAL DIVERSITY and ECOSYSTEM STABILITY

Write a definition in your own words & sketch a picture of each term

26 total

HS-LS2-2&6 Core Idea: *Ecosystems have carrying capacities, which are limits to the numbers of organisms and populations they can support. These limits result from such factors as the availability of living and non-living resources and from challenges such as predation, competition, and disease. Organisms would have the capacity to produce populations of great size were it not for the fact that environments and resources are finite. This fundamental tension affects the abundance (number of individuals) of species in any given ecosystem. A complex set of interactions within an ecosystem can keep its numbers and types of organisms relatively constant over long periods of time under stable conditions. If a modest biological or physical disturbance to an ecosystem occurs, it may return to its more or less original status (i.e., the ecosystem is resilient), as opposed to becoming a very different ecosystem. Extreme fluctuations in conditions or the size of any population, however, can challenge the functioning of ecosystems in terms of resources and habitat availability. A complex set of interactions within an ecosystem can keep its numbers and types of organisms relatively constant over long periods of time under stable conditions. If a modest biological or physical disturbance to an ecosystem occurs, it may return to its more or less original status (i.e., the ecosystem is resilient), as opposed to becoming a very different ecosystem. Extreme fluctuations in conditions or the size of any population, however, can challenge the functioning of ecosystems in terms of resources and habitat availability*

Project/Presentation/Experiment: *Students should be able to use numerical data and graphic information to draw conclusions about how various living and non-living factors (resource availability, predators, disease, etc.) affect the numbers and types of organisms in ecosystems over time. The numbers and types of organisms may remain fairly constant when resources and conditions follow normal patterns, but they may change when the normal patterns are disturbed. Students should be able to compare ecosystems of different scales as well as interactions within one ecosystem. Students should be able to evaluate the strength of arguments about how stability is maintained or disrupted in ecosystems based on data provided. Under most circumstances environmental factors ensure that a natural continuity is maintained, but more extreme changes to one or more of these factors can result in major ecosystem changes.*

1. Biodiversity
2. Biological Magnification (biomagnification)
3. Climate- Equinox precession, Volcanic eruptions, Asteroid & meteoroid impacts
4. Construction
5. Deforestation
6. Disturbances
7. Ecosystem
8. Energy production

9. Erosion
10. Extinction
11. Extraction of resources
12. Farming
13. Fishing
14. Genetic variation
15. Habitat destruction & division
16. Hunting
17. Invasive species
18. Native organisms
19. Natural disasters- *Flooding, Droughts & wildfires, Tornadoes & hurricanes, Earthquakes, Landslides & mudslides, Tsunamis*
20. Pollution- Heat pollution, Light pollution, Noise pollution
21. Population
22. Ranching
23. Stable ecosystem
24. Succession – Primary, Secondary, Climax community
25. Urbanization
26. Waste disposal