

Ecological Disturbances: What happens to ecosystems when the environment changes?

I. What is a disturbance?

A. Disturbance = an event by a biotic or abiotic factor that changes the population size or community composition. (_____.)

a. Can be _____

Example: Tree falling in a forest creating a gap that lets in light and alters conditions for plants and animals.

b. Can be _____

Example: hurricane, tornado or volcanic eruption.

c. Can be _____ (landslides), _____ (climate change), or _____, regularly re-occurring (periodic fire, seasonal storms, sustainable logging and farming)

B. Moderate Disturbances

a. Frequency allows recovery. (_____)

b. Some _____ species remain

c. _____ left in tact

Examples of Moderate Disturbances

Sustainable _____ and _____

- Limit the amount of trees/land cleared.
- Limit the frequency of logging/farming in an area.

Examples of Moderate Disturbances

Periodic Forest Fires from Lightning

- Jack pine cones produce seed when under extreme heat
- Fire eliminates dead wood
- _____
- Sprouts feeds certain animals
- _____

Biodiversity is actually dependent on natural disturbance for survival, limiting competition, and allowing for new growth. Disturbances can be used to preserve or increase biodiversity.

C. High Intensity/Magnitude Disturbances