**Chapter 21: Ecosystems**

Definition

* All of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ elements in a particular place.
* Living elements: incude plants, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and people
* Nonliving elements; include sunlight, soil, air, water, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ecosystems Large and Small

* Large: The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the ocean, a forest
* Small: A puddle, a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a flower

Divisions within an Ecosystem

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: groups of plants and animals adapted to similar conditions
* Populations: found within communities
  + Ex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Organisms: found within \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Ex: one rabbit

Changes in Ecosystems

* Balanced ecosystems:
  + Population sizes of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_species don’t change relative to each other
* Unbalanced ecosystem:
  + A change in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or prey population

Whole System Affected

* A change in one feature can affect the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system
* Ex: forest fire, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ species, deforestation
* The good: ecosystems eventually return to original conditions

Short Term Changes

* Are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reversed
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes: birds migrating, trees lose leaves, animals hibernate

Long Term Changes

* Harder to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Examples: volcanic activity, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, melting ice caps
* How can these change ecosystems?

Changes by Human Activity

* Growing crops, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ roads and buildings, and building dams.
* How can these affect ecosystems?

Nonnative Species

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are from another ecosystem
* Compete with native species for food and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Starlings, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, dandelions