Biodiversity

What is biodiversity?

Definition
Biodiversity refers to all living organisms within a given area.

How many species are there?

Number Identified
Scientists have identified about 1.9 million species alive today.

Number Estimated
Scientists don't know how many species exist, but the current estimates range from 5 to 30 million.

Importance of Biodiversity

Human Needs
Plants, animals, bacteria, and fungi provide for human needs, such as raw material for food, clothing, medicine, industrial processes, and more.

Ecosystem Resilience
Biodiversity contributes to ecosystem resilience because different species, or different gene types within a species, may be able to adapt to disease or disaster in their environment. This prevents the ecosystem from collapsing during hard times.

Biodiversity Beyond Species

Biodiversity in Ecosystems
The differences among ecosystems also reflect biodiversity. Biodiversity in ecosystems is seen across the various biomes.

Biodiversity in Species
Biodiversity includes the genetic differences within species. One example of biodiversity in a species is the variety of traits among dog breeds.