Humans in the Biosphere
Ch. 6

6.3 Biodiversity

Biodiversity—sum total of the variety of organisms in the biosphere

Genetic Diversity—sum total of all the different forms of genetic information carried by all organisms living on Earth today

Aug 28 - 9:49 AM
Biodiversity is one of Earth’s greatest natural resources. Species of many kinds have provided us with many foods, industrial products, and medicines—including antibiotics, heart drugs, and anticancer drugs.

Rosy periwinkle—used for cancer treatment

Threats to Biodiversity

Human activity can reduce biodiversity by altering habitats, hunting species to extinction, introducing toxic compounds into food webs, and introducing foreign species to new environments.
Extinction—when a species completely disappears from all or part of its geographical range

Endangered Species—species whose population size is declining in a way that places it in danger of extinction

Pollution—anything potentially harmful that humans add to the environment

Invasive Species—seemingly harmless plants and animals that are transported to places where they are not native
  • One of the most important threats to biodiversity
Conserving Biodiversity

Conservation - management of natural resources, including the preservation of habitats and wildlife

- Conservation efforts are aimed at managing individual species to keep them from becoming extinct.