

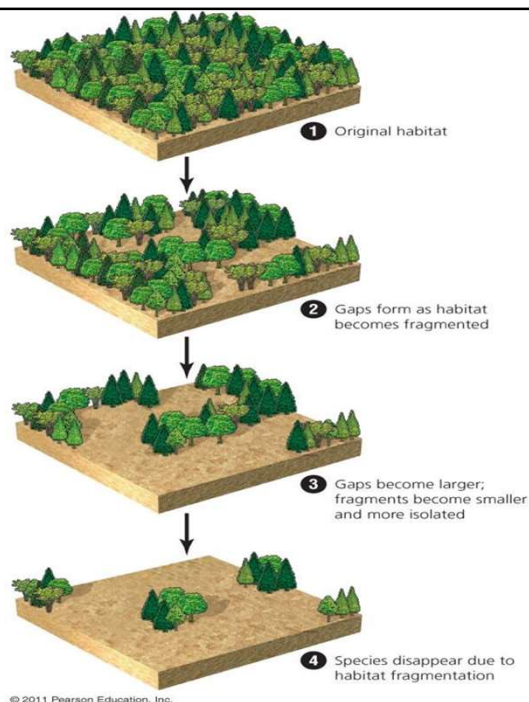
Day 6: Invasive Species

Habitat alteration causes biodiversity loss

- *The greatest cause of biodiversity loss*
- *Habitats are destroyed, fragmented, and degraded*
 - *Farming simplifies communities*
 - *Grazing modifies grassland structure and composition*
 - *Clearing forests removes resources organisms need*
 - *Hydroelectric dams turn rivers into reservoirs*
 - *Suburban sprawl replaces natural communities*

Habitat fragmentation

- *Habitat fragmentation = Continuous habitats are broken into patches*
 - *Farming, roads, logging, etc.*
 - *Species needing that habitat disappear*



Overharvesting causes biodiversity loss

- *Vulnerable species: are large or provide food*
 - *Large, few in number, long-lived, and have few young*
- *The Siberian tiger & rhinos are hunted without rules and regulations*
 - *Powerful economic incentives increase poaching*
- *Many other species are affected*
 - *Whales, sharks, gorillas*
 - *The oceans contain only 10% of the large animals they once did*

Climate change causes biodiversity loss

- Emission of greenhouse gases warms temperatures
 - Modifying global weather patterns
- The frequency of extreme weather events increases
 - Droughts, floods, etc.
- Increased stress forces organisms to shift their geographic ranges
 - Most animals and plants will not be able to adapt
 - 20–30% of species are at increased risk of extinction

Warming has been the greatest in the Arctic



Because of melting ice, polar bears can't hunt seals, so they were added to the endangered species list in 2008



Keystone species:

- *Their strong interactions with other species affect the health and survival of these species*
 - *Keystone species:*
 - *Pollinate*
 - *Scatter seeds*
 - *Modify habitats*
 - *Predation to control prey populations*
 - *Help plants get nutrients*
 - *Recycle animal waste*

Keystone species:

