

Biodiversity: variation of life forms across a system

- genetic diversity: total num of genetic characteristics in genetic makeup of a species
- Species: diversity within ecological community
- Ecosystem: variety of different habitats on the planet

Keystone vs indicator species

- Keystone: has huge impact on environment, but may have low population numbers, supports entire ecosystems
- otters
- Indicator species: indicate health of an environment
- Lichen: sensitive to certain pollutants

Threats to biodiversity

- HIPPO (bolded ones are the 3 largest threats)
- Habitat loss
- Invasive species
- Population of humans
- Pollution
- Overexploitation

Humans and the environment

- Global climate change
- Plastics/single-use water bottles
- ~1000 years to begin to biodegrade plastic water bottle
- Tropical rainforest deforestation
- Global impact of developed nation's food choices
- Biodiversity loss
- Species loss caused by human activity (current mass extinction)
- Pollution
- Oil at peak right now, only going to decline from here
- Clean air act of 1970
- Photochemical smog
- Temp inversion: cool air trapped under warmer air (prevent air from circulating)
- Asbestos, formaldehyde, radon -> sick building syndrome (due to poor ventilation)

- Chlorofluorocarbons contribute to depletion of ozone layer
- Human overpopulation
- ~10 billion people by 2050
- Zero growth: each couple only produces 2 offspring, education on birth control, govt incentives to limit children, education (biggest contributor)

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