

Biodiversity

Sustainability

- * **Sustainability:** when a population of plants, animals and other living organisms can continue to interact and reproduce indefinitely

Biodiversity

- * **Biodiversity: number of different types of organisms in an area**
- * **The greater the number of organisms in an area, the greater the biodiversity of that area**
- * **High biodiversity levels are connected with a healthy, sustainable**

Biodiversity

- * Species richness (the number of species in one area) is a common measure of biodiversity.
- * Often higher at the equator.



Biodiversity

- * 5 Major Causes of Decreased Biodiversity
- * Habitat change
- * Overexploitation
- * Pollution
- * Invasive species
- * Climate change



Classification System for Species at Risk

- * When a population's size decline below a certain number, the species will no longer be able to fill it's ecological niche.**
- * This has consequences for the rest of the ecosystem.**

*** Ecological niche: a role or position a species has in the environment.**



*** In Canada, the status of species is monitored by the Committee of the Status of Endangered Wildlife in Canada (COSEWIC).**

Extinct

- * A species that is no longer found anywhere.
- * Ex: Blue Walleye



Endangered

- * A species that is close to extinction in all parts of Canada or in a significantly large area.
- * Ex. Eastern Cougar, Barn Owl, Swift Cricket Frog



Extirpated

- * Any species that no longer exists in one part of Canada but can be found in others.
- * Grizzly bear no longer in Manitoba or Saskatchewan but still in parts of Alberta and BC



Threatened

- * Any species that is likely to become endangered if factors that make it vulnerable are not reversed.
- * Example: Tuberculosis has recently placed the wood bison on the threatened list.



Vulnerable

- * Any species that is at risk because of low or declining number at the fringe of its range or in some restricted area.
- * Example: Grey fox is beginning to return to south Ontario but needs more woodlands.

