

### Conserving Biodiversity

The whole world uses natural resources.

Developed countries use much more natural resources compared to developing countries

↳ this:

As the standard of living increases, the amount of natural resource consumption also increases

↓  
USA  
China  
Canada

### Renewable resources

- resources that are replaced faster than they are consumed

- will not run out

Trees, Air, H<sub>2</sub>O, Sun, wind, geothermal

### Nonrenewable resources

- resources that are found in earth in limited amounts or those that are replaced by natural processes over extremely long periods of time

- oil, coal, natural gas, petroleum fossil fuels  
mineral deposits

### Sustainable use



\* Using resources in a way in which you can recycle or reuse them while taking into account the overall health of the biosphere

### Protecting Biodiversity

Protected areas in the United States

Yosemite

Yellowstone - 1872

Internationally protected areas

7 % of world's land set aside as reserve

### Endemic species and Biodiversity Hotspots

species that are only found in a specific geographical areas

areas of the world that contain many endemic species

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#### \* Criteria to become a hotspot

- 1) must have 1500 species of vascular plant that are endemic
- 2) the region must have lost at least 70% of its original habitat

### Biodiversity Hotspot facts

- There are 34 recognized hotspots worldwide
- \* - Over half of all plant and animal species are found in these spots
- originally 15.7% of world's surface but now only about 10% of that remains

Corridors between habitat fragments

### Restoring Ecosystems

- sometimes an area no longer provides the biotic and abiotic factors to sustain life

Ex. cut down a forest and the soil can no longer support life.

#### \* Bioremediation:

- the use of living organisms (prokaryotes, fungi, or plants) to detoxify an area

#### \* Biological Augmentation:

- adding natural predators to a degraded ecosystem

ex. aphids and lady bugs

↓  
Ext  
plants

↓  
Ext  
aphids