

The Human Impact on the Environment



- <http://thesolutionsproject.org/infographic/#nv>

Biodiversity -

- The total of all the different species living in a given area.



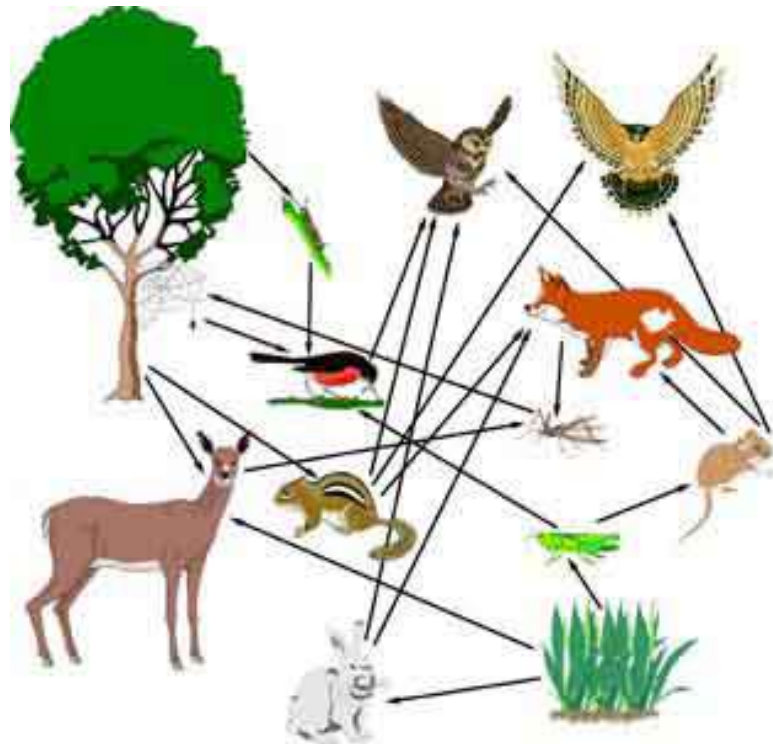
Where do we find the greatest biodiversity?

RAINFOREST



Biodiversity = Stability

- The greater the biodiversity the greater the stability of an ecosystem.



Ecosystems will have a greater chance of maintaining equilibrium over a long period of time if they have

(1) organisms imported by humans from other environments

(2) a sudden change in climate

(3) a diversity of organisms

(4) predators eliminated from the food chains



Threats to Biodiversity

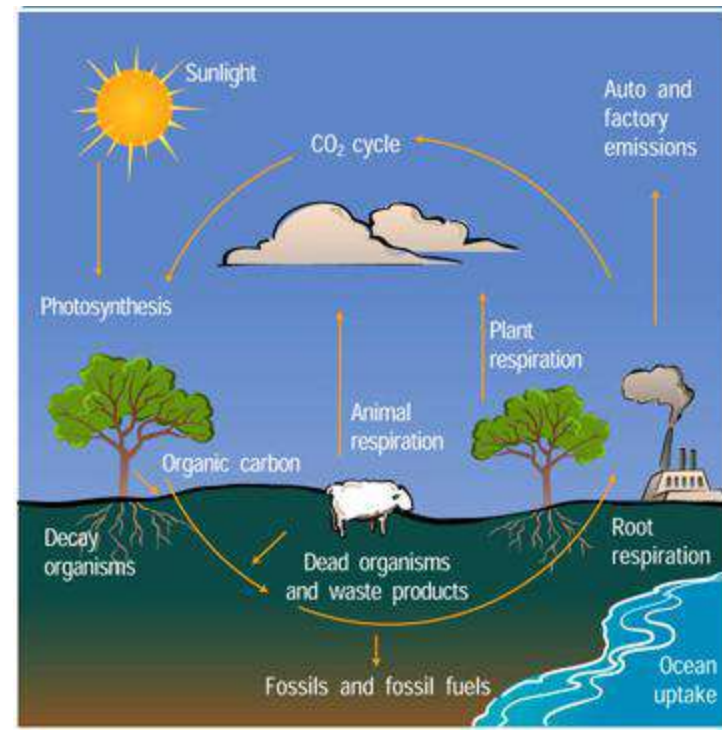
- Habitat destruction
- Deforestation
- Global Climate Change
- Species Exploitation
- Species Extinction

Amazon Deforestation



Deforestation

- Upsets Carbon Cycle
- More CO₂ into atmosphere
- Less O₂ into the atmosphere



Deforestation



Extinction vs. Endangered Species

- Extinction is when a species is completely wiped out of its habitat
- Endangered species is when a species' **population** is **declining** rapidly and they are close to extinction

Extinct Species



Endangered Species

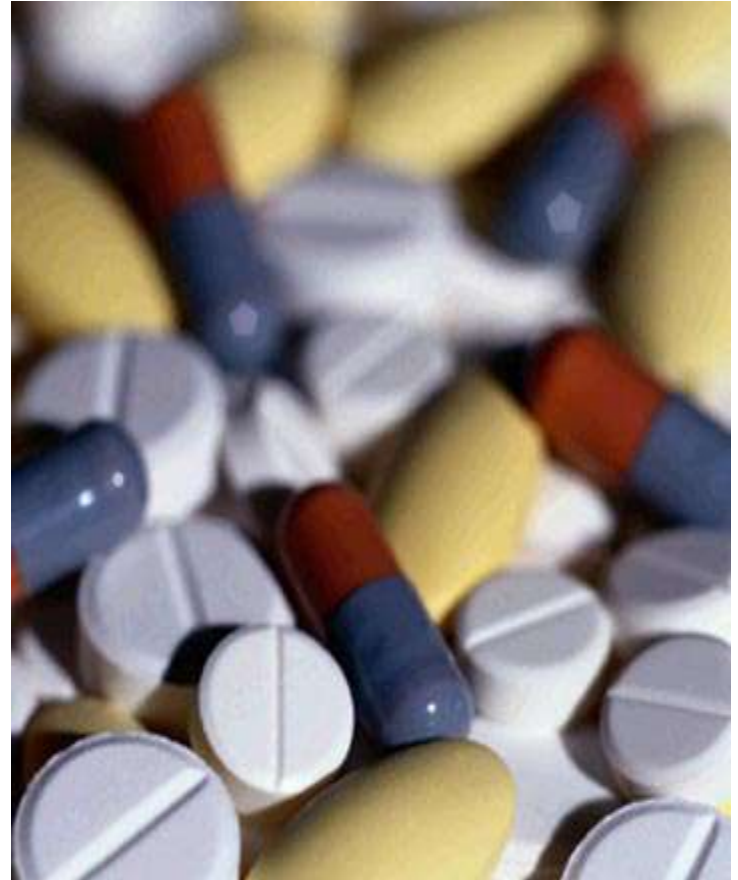


Every hour a species becomes extinct!

- According to the U.S. Fish and Wildlife Service, as of May 2015, in the United States there are a total of 488 animal species and 728 plant species listed as endangered and 202 animal species and 158 plant species listed as threatened.

Why is Biodiversity important to me?

- Most of our pharmaceuticals or **medicines** come from plants, animals, and fungi that are found in the **rainforest**.



One irreversible effect of both deforestation and water pollution on the environment is the

- (1) extinction of species
- (2) thinning of the ozone shield
- (3) depletion of atmospheric carbon dioxide levels
- (4) increase in renewable resources



What can we do about protecting biodiversity?

- Plant trees
- Protect species with laws about poaching
- Stop deforestation
- Protect habitats
- <http://www.fws.gov/midwest/endingpl.html>



Human activities have had a major impact on biodiversity. Scientists cannot solve this problem alone. Concerned individuals need to be involved in restoring and maintaining biodiversity.

Explain how a loss of biodiversity today can affect the survival of humans in the future.

State *one* specific action that you as a student can take in your community to help maintain or increase biodiversity. [1]

Which ecosystem is more stable a potato field or a forest? Why?



Renewable Resources

- These are resources that can **regenerate** or **replace** themselves.



Non-renewable Resources

- A resource that can **NOT** be **replaced** or replenished by natural processes
 - **Fossil Fuels**



In order to reduce consumption of nonrenewable resources, humans could

- (1) burn coal to heat houses instead of using oil
- (2) heat household water with solar radiation
- (3) increase industrialization
- (4) use a natural-gas grill to barbecue instead of using charcoal



To Drill or Not to Drill!



Over the past few decades, many oil companies have discovered oil below the seafloor near the coasts of many states. Some states, however, refuse to permit offshore oil drilling, fearing it might damage the environment. Discuss both sides of this issue. In your answer, be sure to:

- state *one* way in which offshore oil drilling might have a long-term **negative** effect on the environment [1] *pollute H₂O killing arg*
destroy habitats
- state *one* way in which offshore oil drilling could benefit society [1] *Resource of oil to heat home*
Economy \$ *Jobs*