

LAB at home...Eco-Points???

Upsetting the Nutrient Balance in an Ecosystem

Green Text - Page 47

Problem: How will lawn fertilizer affect the balance in an ecosystem?

Materials:

2 - beakers with a 1 L capacity

2L - pond water

6 - strands of *Cabomba*, *Elodea* or other aquatic plant (10-20 cm long)

6 - pond snails

Procedure:

1. Fill both jars with pond water.
2. Add half of the aquatic plants to each jar.
3. Add three pond snails to each jar.
4. Label one jar "Control" and the other "Experimental".
5. Add a **very small pinch** of lawn fertilizer to the "Experimental" jar.
6. Place the jars side by side in a bright location.
7. Observe the jars every day for 2-3 weeks. Make notes on any changes in the appearance of the aquatic plants and snails.



The Future of Biodiversity

'Species at Risk'

Saving Species One at a Time

- Captive-breeding programs
 - Hope of reintroducing such species back into the wild
 - Ex. condors
 - Preserving genetic material
 - Germ plasm is any form of genetic material
 - Used for future use in research and species-recovery efforts
 - Zoos, aquariums, parks and gardens
 - Typically, a last resort for a species' survival
- More study needed

Preserving Habitats and Ecosystems

- The most effective way to save a species
- More species can be targeted in conservation efforts
- Focus on hotspots and those areas that are linked to larger networks

Legal Protection for Species

- Such laws protecting species are recent
- Endangered Species Act
- Habitat conservation plans attempts to target certain species across large areas of land through trade-offs and cooperative agreements
- International agreements happen through the IUCN (International Union for the Conservation of Nature)
 - Red lists
 - CITES (Convention on the International Trade in Endangered Species)
 - The Biodiversity Treaty from the Earth Summit



COSEWIC...
Committee
On the
Status of
Endangered
Wildlife
In
Canada

The 10 most recent animal extinctions in Canada

These creatures have either died out entirely or are extirpated from Canada

by [Blog of Lists](#)



Species of Risk Levels...

There are seven different designations that COSEWIC uses to determine the level of risk for a species. Under the SARA, COSEWIC uses seven categories to indicate the level of danger an at-risk species currently faces:

Extinct - a species that no longer exists anywhere on Earth.

Extirpated - a species that no longer exists in the wild in Canada, but is still living in other areas of the world.

Endangered - a species that is facing imminent extirpation or extinction.

Threatened - a species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.

Special Concern - a species that may become threatened or endangered because of a combination of biological characteristics and identified threats.

Data Deficient - a category that applies when there is not enough available information to determine if the species is at risk or not.

Not at Risk - a species that is not at risk of extinction.

NOTE: SARA
'Species at Risk Act'