

Chapter Three - Ecosystems, Ecoregions, and Biodiversity

Ecosystems

An **ecosystem** is an environment where populations of living things interact with each other and their non living environment in a self supporting (sustainable) way. Ex. Lake, forest, city, bog, river.

Population - a group of similar creatures living in an area

Community - groups of populations living in the same area

Biodiversity

The abiotic factors found in any ecosystem will determine what organisms you'll find there. Each organism has a "**range of tolerance**" - a set of conditions they can live with, and a preferred set of conditions that's perfect for them.....their "**optimum range**". In other words, the abiotic environment will determine the amount of **biodiversity**.

Different ecosystems have different amounts of biodiversity. Diversity could mean numbers of different species, or it might mean genetic diversity. Remember, more biodiversity makes any ecosystem better able to cope with changes. If one organism were removed from an ecosystem, others dependent on it would fare better if they had a variety of other food options available. Genetic diversity helps stabilize an ecosystem as well. When an environment changes, genetic diversity allows natural selection to work, and some creatures will be able to survive the change and reproduce to keep the system going. If all members of a population were genetically similar, one change could mean the whole population gets wiped out ! (Page 62) (Page 68-69)

CORE LAB : Biodiversity, Why Is It Important ?

Ecoregions

An "ecoregion" is a collection of similar ecosystems that share a similar climate, geology, soil type, topography, plant community, or animal community. NL is divided into ecoregions, 9 in Newfoundland, and 12 in Labrador.

What Eco-region Do I Live In ? (Page 60-61)

