Ecology Terminology

- **Ecosystem:** all the interacting parts of a biological community and its environment
- <u>Sustainable Ecosystem:</u> an ecosystem that is capable of withstanding "pressure" and gives support to a variety of organisms
- Biotic: the living parts of an ecosystem
 eg fish, aquatic plant, insect larva,
 phytoplankton (aquatic ecosystem)
- Abiotic: the non-living parts of an ecosystem
 eg water, temperature, inorganic nutients,
 sunlight, substrate (escarpment)
- Lithosphere: the hard part of Earth's surface
 (earths crust)
- Hydrosphere: all the water found on Earth,
 including lakes, oceans, and ground water

Atmosphere: the layer of gases above Earth's
 surface, contains:

nitrogen 78.08 %
oxygen 20.95 %
argon 0.93 %
carbon dioxide 0.04 %
plus others

Biosphere: the regions of earth where living
 organisms exist, thin layer of life, includes
 oceans

Terrestrial Ecosystem: any land based ecosystem

Aquatic Ecosystem: an ecosystem that occurs in
water (lakes, oceans, streams)

Autotroph: (self feeding) any organism that is
 capable of producing its own food (food
 energy): all plants and phytoplankton and
 cyanobacteria

Heterotroph: (other feeding) any organism that
 eats other organisms

- Bioaccumulation: occurs when a toxin enters a
 organism faster than the organism can excrete
 the toxin (or metabolize...)
- Bioamplification or Biomagnification: occurs when toxins trapped in plant and animal tissues are passed upwards through the food chain. The animals higher on the food chain retain the toxins from their food and in this way end up with a higher toxin level than their prey.
- Producer: any organism that is able to derive
 energy directly from the sun, all plants,
 phytoplankton and cyanobacteria, at the first
 trophic level
- Primary Consumer: any organism that eats a
 producer, also known as a herbivore, at the
 second trophic level
- Secondary Consumer: any organism that eats a
 primary consumer, also known as a carnivore,
 at the third trophic level

- Decomposer: any organism that consumes dead
 plants or animals, eg are mushrooms, other
 fungus, bacteria, snails, some insects and
 worms
- Scavenger: any animal (larger than decomposers)
 that eats dead animals or plants
- Detritus: accumulation of abiotic and biotic
 material that makes up soil