**Change and Stability in Ecosystems**

* organic substances must contain carbon and hydrogen and usually contains nitrogen and oxygen
  + examples include proteins, sugars and fats
  + matter that does not contain carbon and hydrogen are inorganic
    - carbon dioxide, ammonia, etc.

* Decomposers break down the organic matter in dead bodies and feces into small, inorganic molecules.
* pesticides are used to kill pests
  + pests are considered to be harmful to people and/or their environment.
    - ex.weeds, insects, fungi, etc.
* up to 30% of Canada’s crops use pesticides.
  + by using them, less crops get harmed so more profit can be made.
* first generation pesticides use elements and compounds to control pests.
  + not altered by adding synthetic materials.
* second generation pesticides are made in a lab.
  + biggest example is DDT.
  + classifications are: insecticides, herbicides, fungicides, and bactericides.
* bioamplification occurs due to feeding relationships.
  + the concentration of pesticides increases at each trophic level.
    - the level of concentration becomes greater which may result in death of an organism.