10/25/11

* Chapter 16 Conservation and Biodiversity
  + Biodiversity benefits humans in many ways
    - Vinblastine and vincristine
      * Madigascar Periwinkle
        + Leukemia & hodgkins Lymphoma
    - Ancrod
      * Malayan Pit Viper
        + Blood clots heart attack & stroke
    - Epidatidine
      * Poison Dart Frog Spit
        + Pain relief 200X and non-addictive
  + Biodiversity is not easily defined
    - Eco systems
    - Number of species
  + Biodiversity hotspots
    - Less than 1% of land mass but contains 20% or more of the world’s species
  + Extinction reduces biodiversity
    - There are multiple causes of extinction
      * Passenger pigeons were hunted to extinction
        + The last one, named Martha, died in the Cincinnati zoo in 1914
    - Two categories
      * Mass extinction
      * Background extinction
    - We are in the midst of a mass extinction!
      * Current rates of extinction in every well-studied group of plants and animals
      * The result of the activities of one species is the cause: Humans
    - Human interference generally reduce biodiversity
    - Some ecosystem disturbances are reversible, others are not
  + Loss of biodiversity
    - Deforestation
      * Reducing biodiversity
      * Increasing greenhouse gases
    - Planting new trees can undo some of the damage done by deforestation