Notes for Videodisc, "Communities, Populations and Succession"

Define or give examples to describe each of the following:

**Community**
- All species (populations) that live in one area.
  - Closed community: "Permanent residents" don't move freely to other communities. Ex: Tide pool.
  - Open community: Can move freely. Interact with other communities.

**Territory**
- Defended habitat. Ex: Nesting space, dogs marking with urine, birds singing, bears scratching trees.

**Competition**
- Territory & space
- Notes
- Food
- Other resources

**Symbiotic relationships:**
- A general term for 2 organisms that interact with each other.
- 3 Types and examples:
  1. Commensalism
     - One benefits, the other is not significantly affected.
     - Ex: Saguinus & crab, tapeworm & pig
  2. Parasitism
     - One benefits at the expense of the other.
     - Ex: Saguinus & crab, tapeworm & pig
  3. Mutualism
     - Both benefit.
     - Ex: Birds/bees & flowering plants

**Populations:**
- **Population:** Group of a single species in one region.
- **Niche:** Includes habitat, the way it gets what it needs & interacts.
  - The role an organism plays in its community.
- **Habitat:** A specific environment & place an organism lives in.
- **Carrying capacity:** Maximum # of species a niche can support.

**Limiting Factors which determine the carrying capacity:**
- Climate and space
- Predators
- Nutrients
- Diseases
- Interactions: Such as predator & prey
- Crowding: Makes it easier for predator to catch
  - Can change behavior
- Territory: Defended territory reduces competition for resources

Examples of density regulations in some populations:
- Birds change territory
- Lemmings change behavior - more aggressive
- Owls change behavior - lay eggs according to resources
- Bees - queens will create new colonies when crowded