

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. *Interacting*

- 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 scratch trees.

Competition

- Examples:
- Territory & space.
 - Mates
 - 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.
2. Parasitism - One benefits at the expense of the other
Ex: saculina & crab, tape worm & pig
3. Mutualism - Both benefit

Ex: - Birds/bees & flowering plants

- Lichen → algae & fungus
 ↓ ↓
 food moisture & other nutrients

Populations:

Population - Group of a single species in one region.

Niche - Includes habitat, the way it gets what it needs & interactions.

* - 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 - as predators ↑, prey decrease & vice versa.

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~~ Birds song to mark territory
- Lemmings change behavior - more aggressive
- Owls change behavior - lay eggs according to resources
- Bees - queens will create new colonies when crowded