

# Ecological Relationships

There are 3 main types of relationships between individual organisms within a community

### 1. Symbiotic (3 sub-types)

- When one or more organisms live in close contact or live with one another.

### 2. Predator-Prey (1 sub-type)

- When one organisms consumes a second organism.

### 3. Competitive (2 sub-types)

- Where organisms compete for an important resource such as food, shelter or possibly mates.

# Symbiotic Relationships

When one or more organisms live in **close contact** or **live with** one another.

3 main types:

- **Commensalism**

- benefits one species, other not affected

- **Mutualism**

- benefits both species

- **Parasitism**

- benefits one species but harms the other

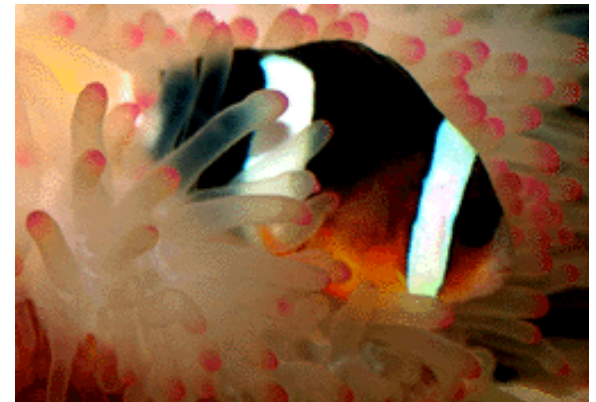
# Commensalism

+ / 0 relationship

One partner benefits without significantly affecting the other



Ex. clown fish & anemone



# Mutualism

+ / + relationship

Both organisms benefit

Ex. bees & flowers, crocodiles & dikkop birds



# Parasitism

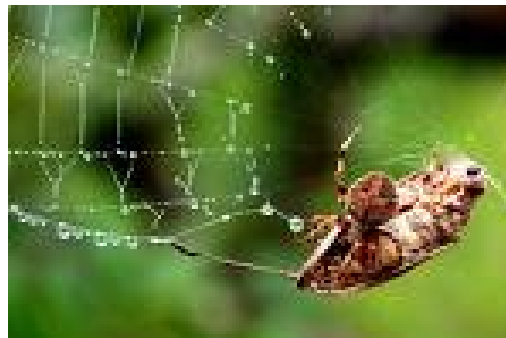
+/- relationship

one organism, the parasite, harms the host



# Predator – Prey Relationships

When one organism **consumes** a second organism.



# Competitive Relationships

Where organisms **compete** for an important **resource** such as food, shelter or possibly mates.

May have negative effects on one another.

- Actual fighting or exploitative competition

2 main types:

## –Intraspecific

- Between members of the same species

## –Interspecific

- Between 2 or more species



# Intraspecific Competition

Individuals may compete over food, water, light, space, safe sites, or mates.

Important factor **limiting** the **population** size of many species.



# Interspecific Competition

As the population of one species increases, it may limit the density of the competing species



**Give 2 examples of each relationship.**

# What happens here?

1. Desert

2. Rainforest

3. Local park

4. Ocean

**Classify them!**

# Make this chart in your notes.

| Interacting Species                   | Prediction | Actual |
|---------------------------------------|------------|--------|
| Clip 1<br>Tiger shark & Turtle        |            |        |
| Clip 2<br>Shark & Jack                |            |        |
| Clip 2<br>Shark & Mackerel            |            |        |
| Clip 2<br>Shark & Suckerfish          |            |        |
| Clip 2<br>Hammerhead & Barber<br>fish |            |        |
| Clip 3<br>Shark & Fisherman           |            |        |