

– **Species** → Only one type of organism



– **Population** → All members of one species that live in the SAME AREA



– **Community** → all the DIFFERENT SPECIES that live in the same area



– **Ecosystem** → Includes both the community AND ABIOTIC factors

Community Relationships

- **1. Predator-Prey**
 - When one organisms hunts another and kills quickly
- **2. Symbiosis**
 - Two species are closely associated to one another over a period of time
- **3. Competition**
 - Species compete with one another for resources

1. Predator-Prey

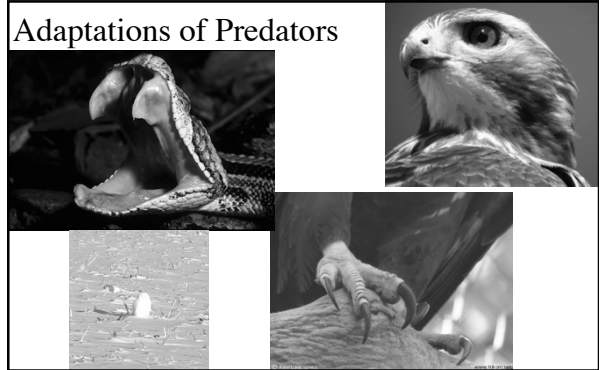


- Nature favors more **effective** predators (hunter)
- Nature favors more **evasive** prey (hunted)
- Videos:
 - Python <https://www.youtube.com/watch?v=x0rk5zh7RaE>
 - Eagle snatches kid: <https://www.youtube.com/watch?v=Xb0P5t5NQWM>

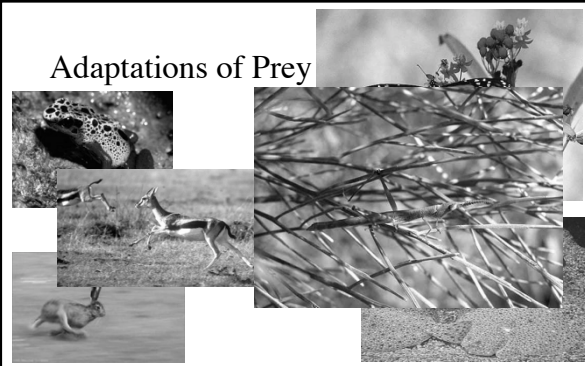
Predator-Prey



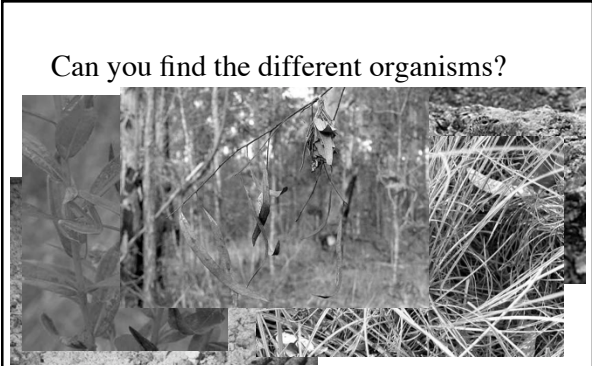
Adaptations of Predators



Adaptations of Prey



Can you find the different organisms?



Which is the predator and which is the prey?



Community Relationships

- **1. Predator-Prey**
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- **2. Symbiosis**
 - Two species are closely associated to one another over a period of time. One or both benefit.
- **3. Competition**
 - Species compete with one another for resources

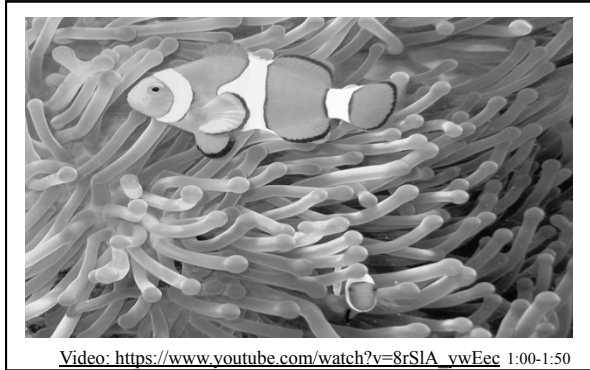
There are three types of Symbiosis

- **Mutualism**
 - Both organisms benefit (+/+)
- **Commensalism**
 - One organism benefits, while the other is neutral (+/N)
- **Parasitism**
 - One organism benefits, while another is harmed (+/-)

Mutualism

- Acacia Ants - Acacia Plants





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Commensalism

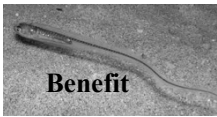
- Barnacle – Oyster

- Video: https://www.youtube.com/watch?v=jM9Y4ww2O_s

Sea Cucumbers and Pearlfish



Pearlfish hide in the Anus of the sea cucumber



Benefit



**No harm
No benefit**

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- Video: <https://www.youtube.com/watch?v=vMG-LWvNcAs>

Parasitism

- Tomato hornworms eat tomato plants
- *Cotesia* (wasp) lays eggs in the worm



Niche

--The role (job) of an organism within its community



Niche

**NO TWO SPECIES CAN OCCUPY
THE SAME NICHE IN THE SAME
ENVIRONMENT FOR A LONG
PERIOD OF TIME...if so you get...**

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Competition

- A demand by two or more organisms for limited resources
 - Plants – Water, Nutrients, Sunlight
 - Animals – Food, Shelter, Mates



Competition

- Strangler Fig

