

# 14.2 Community Interactions

## KEY CONCEPT

**Organisms interact as individuals and as populations.**



# 14.2 Community Interactions

- ▶ **Competition and predation** are two important ways in which organisms interact.
- **Competition** occurs when two organisms **fight** for the same limited resource.
  - **Intra**specific competition
  - **Inter**specific competition





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- **Predation** occurs when one organism captures and eats another.



## 14.2 Community Interactions

- There are three major types of **mutualistic relationships**.
  - **Mutualism**: both organisms benefit





# 14.2 Community Interactions

- There are three major types of  **symbiotic relationships** .
  - **Mutualism** : both organisms benefit



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- There are three major types of  **symbiotic relationships** .
  - **Commensalism** : one organism benefits, the other is unharmed



**Human** Our eyelashes are home to tiny mites that feast on oil secretions and dead skin. Without harming us, up to 20 mites may be living in one eyelash follicle.

Commensalism



**Demodex** Eyelash mites find all they need to survive in the tiny follicles of eyelashes. Magnified here 225 times, these creatures measure 0.4 mm in length and can be seen only with a microscope.



Organism is not affected



Organism benefits



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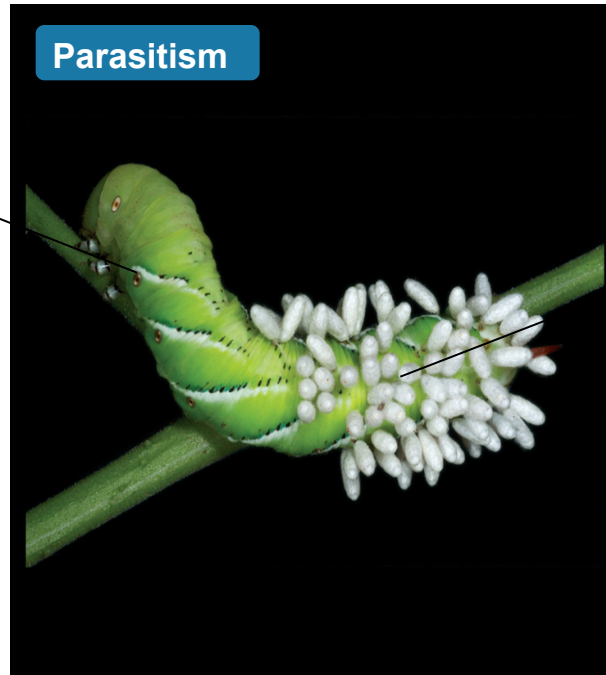
- There are three major types of **sybiotic relationships**.
  - **Commensalism**: one organism benefits, the other is unharmed



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- There are three major types of **sympiotic relationships**.
  - **Parasitism**: one organism benefits, the other is harmed

– **Hornworm caterpillar**  
The host hornworm will eventually die as its organs are consumed by wasp larvae.



0 **Braconid wasp**  
Braconid larvae feed on their host and release themselves shortly before reaching the pupae stage of development.

– Organism is not affected

0 Organism benefits



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- There are three major types of  **symbiotic relationships** .
  - **Parasitism** : one organism benefits, the other is harmed



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- There are three major types of symbiotic relationships.
  - **Parasitism** meet their needs as ectoparasites (such as leeches) and endoparasites (such as hookworms)

