## An Organism's Niche

- The unique role of a species within an ecosystem is a niche
  - An ecosystem is all of the organisms living in an area together with their physical environment
  - It includes their physical home, the environmental factors necessary for survival, and all interactions with other organisms
  - It is different than a **habitat** (where an organism lives)

### Ways in Which Species Interact

- Interactions are categorized by how one population interacts with another
- These interactions depend on whether they harm or help one another
- Some interactions are direct, others are indirect
- This is still being studied to better understand its complexities

# Competition

- A relationship in which different individuals or populations attempt to use the same limited resource
- Each individual can be harmed by the competition
- Can occur within or between species
- Ex. Fox and coyote compete for the same prey









## Competition

#### **Indirect Competition**

- Some species may never come in contact with each other and still compete
- Ex. One type of insect during the day and another at night

#### **Adaptations**

- Some species reduce competition with each other by adjusting their niche
- This is called niche restriction

### Predation

- An organism that feeds on another organism
- The organism that is fed upon is called the **prey**
- Ex. Coyote and deer
- Many species have evolved some mechanisms to avoid or defend against predators

