



Winter Ecosystems

What causes winter?

- As the earth travels around the sun, different regions receive more direct sunlight than others
- The tilt of the earth on its axis is responsible for the different seasons in the northern and southern hemispheres

How do living things survive winter?

- Adaptations- structures or behaviors that help the organism survive their environment
- Migration, hibernation, resistance/tolerance
- Hibernation- animals sleep through winter in order to conserve energy through a season of no food and water, and cold temperatures
 - Bears, skunks, bees, etc.
- Migration- animals migrate to warmer climates and alter their food source and wait for spring or summer to return to their home
 - Birds, fish, etc.
- Resistance/tolerance- animals not able to migrate have found ways to survive the cold.
 - Beavers, chipmunks, etc.

How do plants survive winter?

- Most (if not all) plants have died back
- Annuals- produced seeds that have fallen to the ground, will germinate next year (mother plant dies)
 - Marigolds, etc.
- Perennials- die back to the ground each year, but their roots live through the winter and plant will grow back each spring
 - Garlic, strawberries, potatoes, etc.
- Biennials- stems and leaves die during their first winter, but their roots will remain alive while the second year plants produce seeds to ensure survival
 - Parsley, cabbage, etc.
- Other plants- seeds that are housed inside the plant will be eaten by birds and other animals. Seeds not ingested/digested will be “planted in new locations
 - Tomatoes, peppers, etc.