



MISSION ISLAND MARSH CONSERVATION AREA



When heading out to explore the outdoors it's nice to know who the players are that you might meet and how they interact. Let's find out more about the ecosystem players at Mission Island Marsh

So what is an Ecosystem? **Ecosystems** are communities of plants and animals living together and interacting with each other through a food web. Each unique ecosystem is characterized by its unique climate, vegetation, and animal life.

Ecosystems are made up of **biotic**, which are living things, and **abiotic**, non-living elements including soil, air, water, wind, temperature, and minerals. Here at Mission Island Marsh there are 3 primary ecosystems to explore; The forest, the meadow and the shoreline.



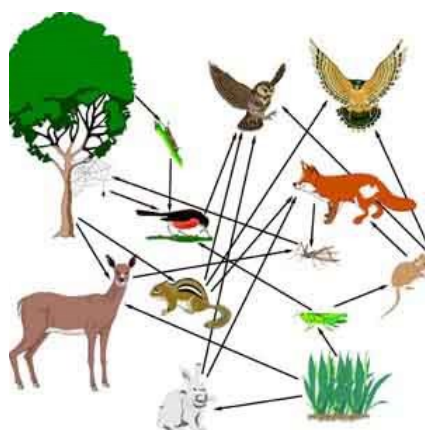
The biotic and abiotic components are linked together through nutrient cycles and energy flows. So who are the players that make this energy flow?

Producers are the ones that bring energy from the sun in to the system through photosynthesis which is incorporated into plant tissue. These organisms which are primarily green plants are called autotrophs, which means they make their own food!

Consumers are the ones that feed on other living things and are called heterotrophs.

- If they feed on plants they are called **herbivores**.
- If they feed on other animals they are called **carnivores**.

Decomposers are also heterotrophs as they feed on living things but for them it has to be dead organic matter. They break down the nutrients to be reused by plants, while at the same time releasing carbon back to the atmosphere.



Food Webs, made up of food chains represent how energy and nutrients flow through an ecosystem and demonstrate how the plant and animal players are interdependent on each other.

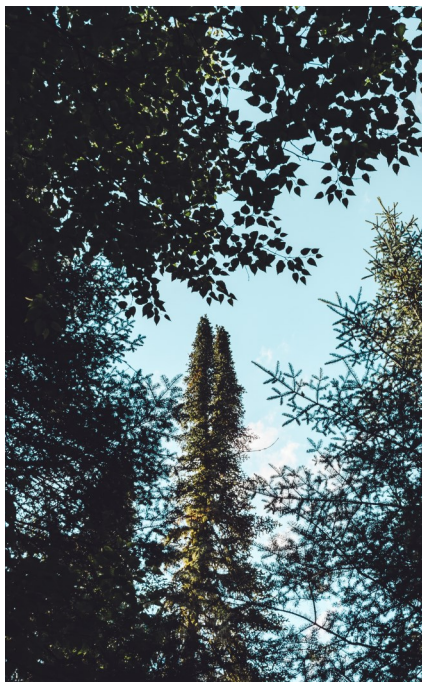


If we look closely we can see right here in the meadow a real life food web in play:

The green grasses have absorbed energy from the sun in order to grow- they are the producers.

The groundhogs feed on the grasses, collecting some of that energy and nutrients from the plant - they are the consumers.

The scat from the groundhog is then decomposed by mushrooms and bugs - they are the decomposers.



Activity: Sit Spot

Find a sit spot and take your time to observe what is around you. Set out an intention for what you want to be aware of. Be aware of your location, weather, human presence/ disturbance. Reflect on the seasonal changes you can see. Take note of animal behavior and ask questions. Ask yourself how you feel and what makes you happy in this spot.

