

Focus:

- » Students recognize that plants can produce their own food.
- » Understand that all animals, and some plants, rely on other food sources.
- » Recognize that food chains are sequential.
- » The preservation of a wetland relies on the natural balance within food chains and food webs.

Curriculum Connection:

5.10-6 Identify the roles of different organisms in the food web of a pond or wetland.

- » Producers- green plants that make their own food using sunlight
- » Consumers- animals that eat living plants and/or animals
- » Decomposers- organisms, such as molds, fungi, insects and worms, that reuse and recycle materials that were formerly living

Teacher Preparation:

1. This lesson plan builds upon the teacher preparation materials provided in Lesson Plan 8: "Return to the Source".
2. Review the instructions for the game "Bon Appetite" prior to teaching the lesson and prepare the game cards for student use during the lesson.

Materials and Resources Required:

- » Bon Appetite Card Game

Launch:

Pose the question to students, "If lettuce is a producer and a rabbit is a consumer, what is a coyote?"

Explain to students that there are primary and secondary consumers and discuss how the relationship works.

Pose a further question such as, "If a mouse eats grain, therefore is a primary consumer, and a cat eats the mouse, making the cat a secondary consumer, then what is a wolf that kills and eats the cat?" This will lead to the introduction of final consumers because wolves do not have predators.

Pose the final question to launch the lesson, "So what is a maggot then?" The concept of the decomposer will not be explained to the students.

Explain to students that these decomposers once played an important role for Indigenous people. Buffalo skulls and other bones are left in a field or in the bush to be meticulously cleaned by maggots and other decomposers. As well, maggots were once used to rid people of infections in open wounds as they will not eat living flesh.

Key Learnings:

- » Producers are green plants that make their own food through the process of photosynthesis
- » Primary (first level) consumers eat plants. (Herbivores)
- » Secondary (second level) consumers eat small animals
- » Insects (Carnivores) are often eaten by larger animals and humans
- » Final consumers eat secondary consumers and are not eaten by other animals. Humans are final consumers
- » Decomposers live off of organic matter that is no longer living to break them down and recycle them



DID YOU KNOW :

THAT BEARPAW MEDIA PRODUCTIONS HAS A COMIC BOOK
AND A FILM ABOUT NATURAL LAW FOR KIDS.
CHECK OUT THE “MUSKWA: SAM’S SPEAR OF FATE” COMIC BOOK
AND THE VIDEO “GOING WILD: NATURAL LAW FOR KIDS”, AVAILABLE AT
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Note to Teacher :

The “Bon Appetite” card games can be left out for the students to play at times when other work is finished, during indoor recess sessions or at lunch breaks to better reinforce the students learning about food chains.

Students can also be challenged to utilize all of the cards in one set to demonstrate a food web (interconnection of more than one food chain).

Activate:



Separate the students into groups of four. Distribute sets of "Bon Appetite" playing cards to each group.

Instructions for Bon Appetite Game

Please print the 32 Game Cards provided.

Goal:

To discard all of your cards.

Setup

- » Choose a partner (two partners).
- » One person of the four needs to be the dealer. Decide who is going to be the dealer.
- » Each player is dealt four cards.
- » The remaining cards are placed face down in the center of the table, forming a draw pile. The top card of the draw pile is turned face up to start the discard pile.

Gameplay

- » The player to the left of the dealer goes first. Play moves clockwise.
- » The player must put a card on top of the last card that is discarded. The card played must have a RELATIONSHIP to the last card that is face up. For example: The top card shows "Grass" which is a producer. The next player must place a card on top of "Grass" that is a 1C (first level consumer) which might be a "Rabbit".

- » This game requires the players to recall what they have learned regarding food chains. Thus, each player adds to the discard pile by playing a card that comes next in the food chain. Look for hints on the cards when determining the sequence.
- » Producers (P) start off a new food chain. First level consumers (1C) eat the Producers. Second-level consumers (2C) eat the first levels, and so on. A second-level consumer (2C) can be followed by either a final consumer (FC) or a decomposer (D) card to complete the food chain.
- » A player who cannot follow the top card on the discard pile with the next animal needed to complete the food chain must draw cards until he/she can play one. When the draw pile is empty, a player who cannot add to the discard pile passes his turn.

Winning

- » The first player to discard all of his/her cards wins.

Connect:

For Aboriginal people, understanding “Natural Laws” is very important to maintain the balance of nature.

Please invite a student to come to the front of the class and read the following passage out loud.

Many people in Canadian society are completely disconnected from the hunting and gathering process involved in the foods they eat. For most people, they shop at the grocery store and only see the meat they eat in packages, disconnected from the animal that was harvested. As a result, the idea of humans hunting and predators that kill other animals for food has become disturbing to many people in modern society.

Within the Aboriginal way of life, people still practice traditional food gathering; they hunt and gather foods while observing “Natural Laws”. Natural Laws are the irrefutable laws of nature that humans must follow; if we transgress these Natural Laws, we put our survival at risk. We could all benefit from understanding the

particular Natural Law that teaches us “take only what you need and what the natural environment can replenish”. This Natural Law helps us to understand how important the balance of nature is and how delicate it is.

This Natural Law teaches us to never over-collect plants (for food or medicines) or any other gifts that we are provided by Mother Earth. We must find a way to live sustainably within the natural world; never taking more than we need. For example, if we collect more medicinal plants than we need for the winter, we are at risk of over-harvesting and thus not having those medicines for the following year. Thus we invite sickness (that cannot be healed) if we do not follow the Natural Law that teaches us to “take only what we need”.



Invite students to give examples of practices that we can follow to help to maintain the balance in nature required to preserve wetlands and all environments.

Examples may be given such as:

- » If wolves and coyotes are over-trapped or hunted the deer population in an area can become out of control.
- » If the natural habitat of certain birds is destroyed the birds can't lay their eggs and will become endangered or extinct.
- » If we gather too many eggs, over-hunt or over-trap, certain types of animals they will become at risk of extinction. A good example is what happened to buffalo when the Europeans arrived in Canada.