



## Prairie Ecology

CCSSR1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCSSR2: Determine **central ideas or themes** of a text and analyze their development; **summarize** the key supporting details and ideas.

The prairie is a natural ecosystem. Eco means house. An environment is a home. System is a word that comes from another word meaning place together. A ecosystem is a place where plants and animals fit together. The Tallgrass prairie is a special kind of ecosystem. Read about ways three animals live in the Tallgrass Prairie. Then you will understand more about how things fit together there.

Above the prairie, you will see the skipper butterfly. It depends on the plants here throughout its life. Butterflies begin life as an egg. The female butterfly lays eggs on a plant. She lays them inside a shell to protect them. The larva of a butterfly eat through that shell. What is a larva? It looks like a hairy worm. Its outside is flexible but tough. Scientists also call this stage of the butterfly's life a grub. It has no wings. It also is called a caterpillar. The larva eat the plant leaves. As it eats, the larva grows quickly. The larva molts. That means it sheds its outer layer of skin. It does that because it needs to grow. The old skin is too tight. After some time, the larva makes a pupa. A pupa is a kind of shell. Inside that shell, it does something really surprising and wonderful. It turns into a butterfly with wings. That takes about two weeks.

The butterfly starts out with damp wings. They have been crumpled inside the pupa. So the first thing it does is spread its wings. They are damp from being inside the pupa. So it takes the butterfly about twenty minutes to spread its wings and dry them. Then about two hours later, the butterfly is ready to fly. Then the skipper flies to find food, food it finds growing in the Tallgrass prairie.

On the ground and below it, you will find the ground squirrel. This animal is about one foot long and lives in big families. It has a brown coat to camouflage it when it moves along the ground. Animals use camouflage, color, to blend with their habitat. It is a kind of protection. The ground squirrel is an herbivore. That means it eats plants. It eats grass, so there is much food in the prairie. Sometimes it eats insects, too. It hibernates in winter.

On the ground in the past you would have seen the bison. This big herbivore grazed on the plants. The bison was a kind of gardener for the prairie. It ate weeds. A weed is a plant that is not native to an environment. So when weeds would start to grow in the prairie, the bison would get rid of them. Without the bison, the weeds might take over the land that the prairie plants needed. So the bison helped the prairie to maintain balance. A balanced environment is a place where plants and animals have what they need to survive.

### EXPLAIN WHAT YOU LEARNED

1. Underline the most important information in each paragraph.
2. Decide what the main idea is of the passage.
3. Write a short summary that tells what the passage explains. Include only the most important information.

### *Design a Prairie Plant*

All three of those animals depend on prairie plants. Design a plant that would grow on the prairie. Your flowering plant must resist high wind, have seeds that can float on the air, have strong roots so anchor it on the prairie. Its job is to provide food for animals. After your draw your plant, explain how it has adapted to meet these needs and fit that niche.