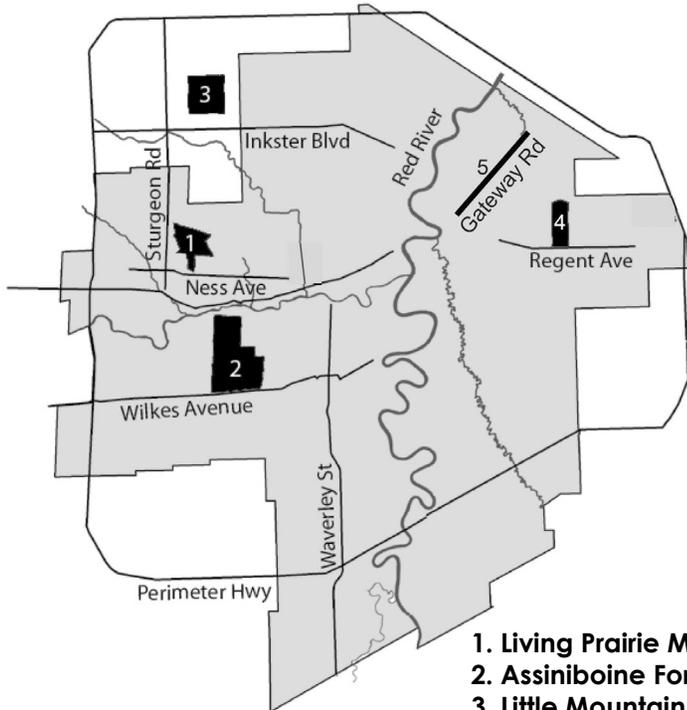


Tall Grass Prairie in Winnipeg

Now that you've learned about the prairie, it's time to visit this amazing habitat and share what you find! There are several locations in Winnipeg where tall grass prairie still exists today.



1. Living Prairie Museum
2. Assiniboine Forest
3. Little Mountain Park
4. Rotary Prairie
5. Northeast Pioneer's Greenway (restored prairie)

Hike self-guiding trails at the Living Prairie Museum by visiting **2795 Ness Ave**, Winnipeg, Manitoba. The City of Winnipeg is located in Treaty No. 1 territory and the traditional homeland of the Métis Nation.

Learn about our location before you visit: Winnipeg.ca/livingprairie

Follow us:

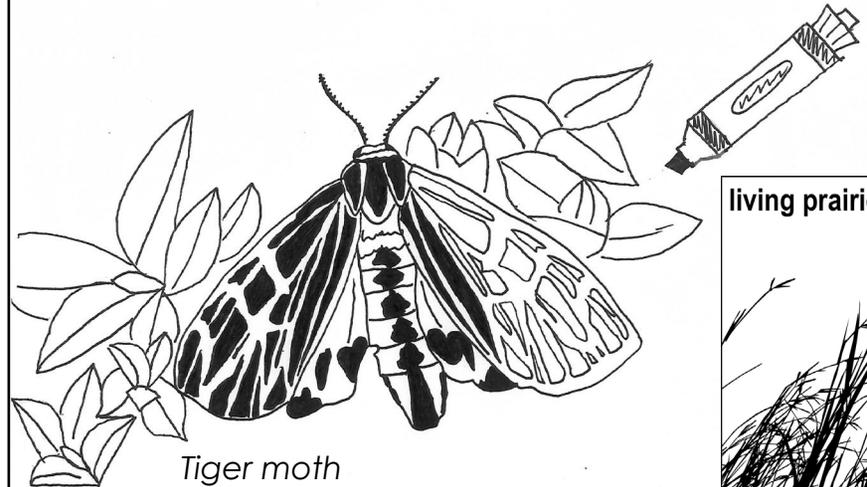
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Living on the Prairies

Colour and Discover!



Bison calf



Tiger moth

living prairie museum



A Nature Activity Booklet for Kids

Winnipeg

Welcome to the Tall Grass Prairie

The tall grass prairie is one of the rarest habitats on Earth. It used to stretch from southern Manitoba down to Texas, but now only 1% of this once vast grassland can be found today.

The tall grass prairie is an interactive community of living and nonliving things that support each other - plants, animals, insects, fungi, bacteria, and much more.



Historical range of the tall grass prairie. Where are you on this map?

The Indigenous Peoples of Turtle Island (North America) have always been a part of this community, interacting with the land, animals, insects, plants, and medicines in a harmonious and reciprocal relationship. From the land they received food, medicine, and materials they needed for trade and daily life. When European Settlers arrived in North America, they were looking for land to farm and develop. Human activity began to change the landscape as they used their steel plows to turn much of the tall grass prairie into cropland. Some pieces were not plowed up, like the Living Prairie Museum.

Local naturalists, scientists, and neighbours worked very hard to make sure that the Living Prairie Museum was protected so that prairie life could continue to exist in Winnipeg.

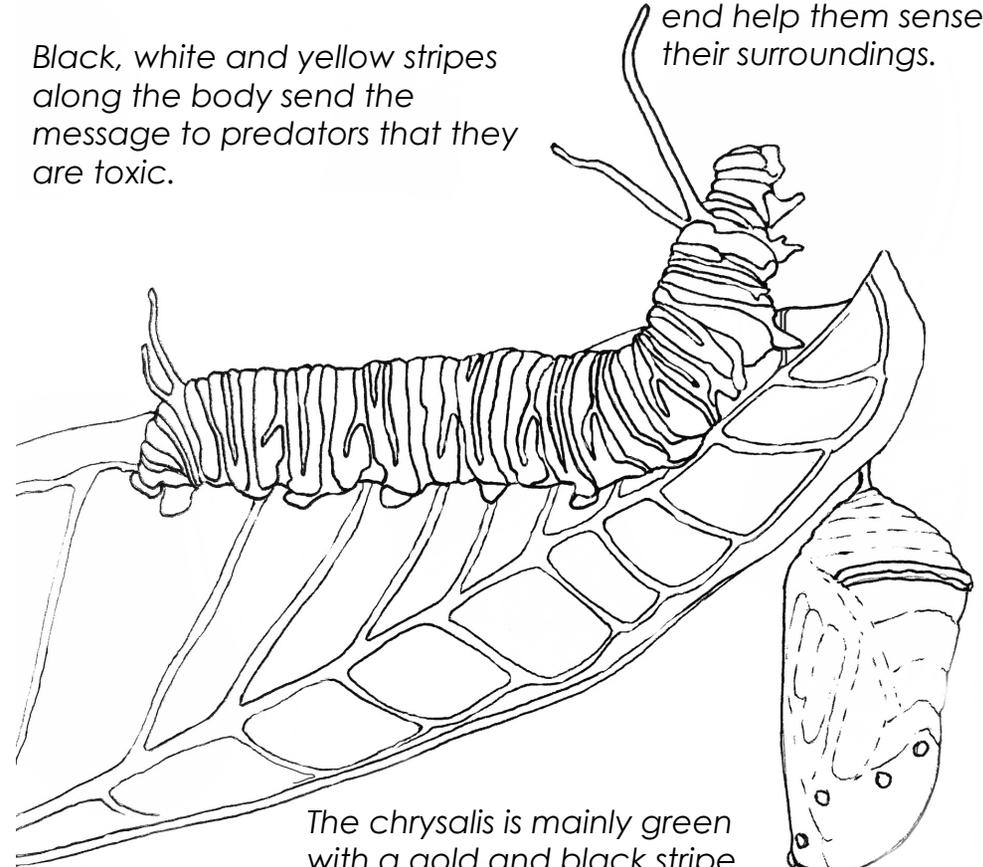
Let's learn a little more about the prairie, and how we can help scientists continue to understand this amazing habitat.

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The monarch caterpillar has adapted to eating milkweed, which makes them a taste terrible and quite toxic to many predators! The green of the chrysalis helps them blend in with surrounding leaves and stems.

Black, white and yellow stripes along the body send the message to predators that they are toxic.

Black filaments at their front and back end help them sense their surroundings.



The chrysalis is mainly green with a gold and black stripe near the top and a number of gold spots near the bottom.

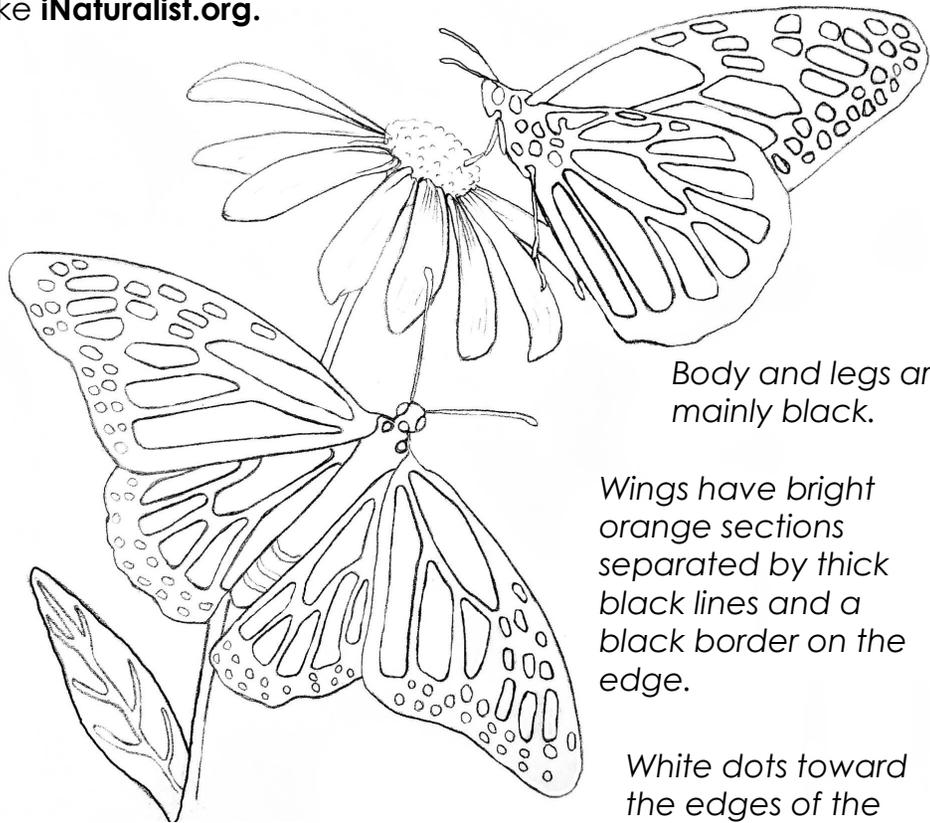
Learn how you can become a more active CITIZEN SCIENTIST by visiting websites like monarchwatch.org, e-Butterfly.org, feederwatch.org, and eBird.org! These sites allow you to share your DATA - information that you've gathered, like date, location, and the kind of the living thing you found.

Become a Citizen Scientist

Scientists can't observe wildlife everywhere, so they rely on citizens like you to record species when you see them! Recording where and when you see wildlife can help scientists understand populations and ranges.

Colour in the life stages of the monarch butterfly (*Danaus plexippus*) to help you learn their identifying features, then record your sightings of these and other plants and wildlife during your next visit to a park or natural habitat.

Next, post your sightings on a citizen science website or app, like **iNaturalist.org**.



Body and legs are mainly black.

Wings have bright orange sections separated by thick black lines and a black border on the edge.

White dots toward the edges of the wings, head and on the side of the body.

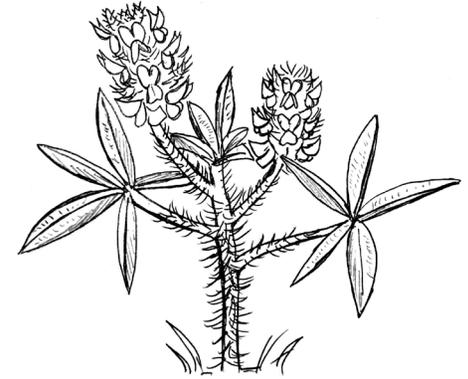
Adult monarchs feed on the nectar of many flowers, including blazingstar and bergamot.

Adapting to Four Seasons on the Prairie

Many plants and animals call the tall grass prairie home year-round. These hardy creatures have developed some amazing ADAPTATIONS to thrive in a wide range of conditions - intense summer heat, frigid winter winds, and everything in between!

How to Beat the Summer Heat

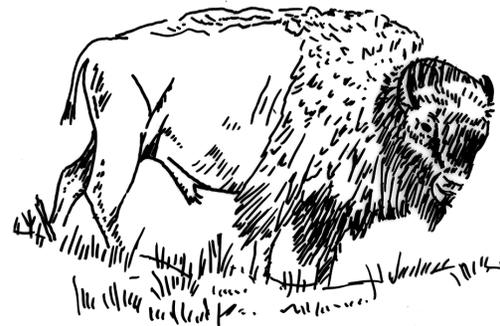
Summers on the tall grass prairie can be long and dry, under a baking, hot sun. Many prairie plants have adapted by making their own forms of sunscreen! Prairie turnip grows a thick, fuzzy layer of silvery hair to reflect the sun's harshest rays. Other prairie plants develop a waxy coating on their leaves and stems to help seal in moisture and stay cool in the summer heat.



Hairy stems and leaves on a prairie turnip (*Pediomelum esculentum*)

Staying Warm in Winter

The plains bison is a well-known resident of the tall grass prairie. Every fall, bison grow a thick layer of fur to help insulate against the winter cold. When spring returns, they shed their heavy coats by rolling or scratching on boulders. Dense fur, feathers, and storing extra fat are all adaptations used by prairie animals in the winter.



A plains bison (*Bison bison*) with a thick coat.

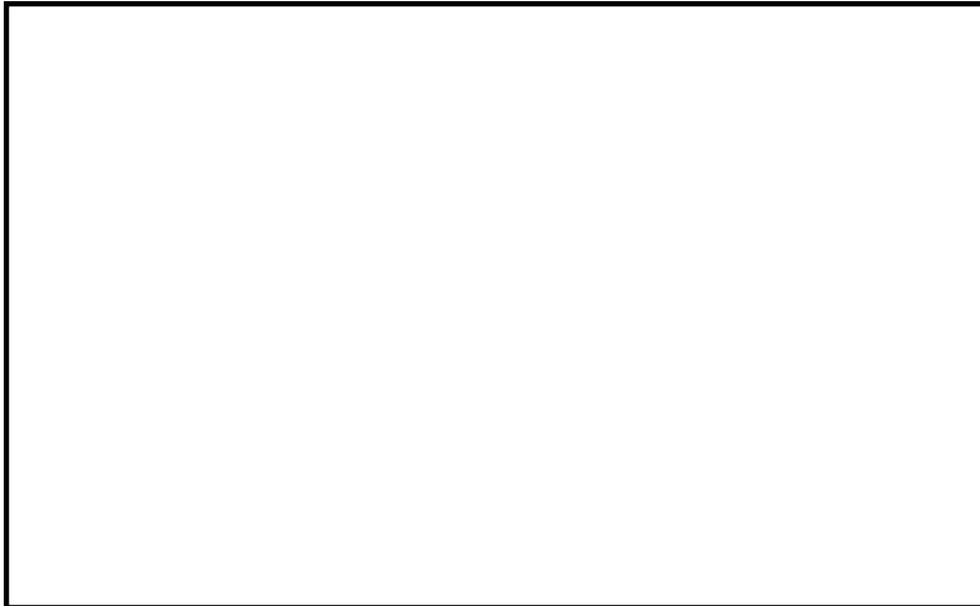
The World Beneith Your Feet

There isn't much shelter on the prairie, and many tall grass residents have adapted by heading underground. From badgers to bumblebees to birds, creatures of all shapes and sizes make their homes beneath the soil. Their nests and burrows are warm in the winter, cool in the summer, and provide protection from predators, wildfires, and other dangers. Many plants also dwell deep below the prairie surface: some tall grass species have roots that reach more than two meters into the ground! This allows them to survive and grow in even the driest of summers.

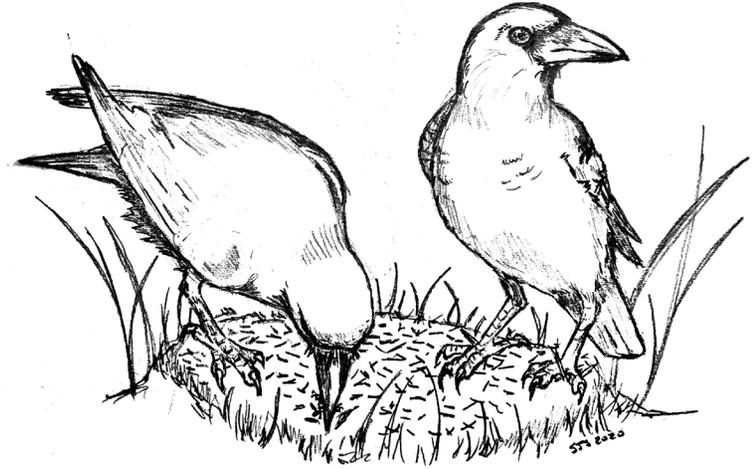


A thirteen-lined ground squirrel (*Ictidomys tridecemlineatus*) emerging from its burrow.

Imagine a brand new species of plant or animal that lives in the tall grass prairie, and draw it below. How has it adapted to the prairie climate?



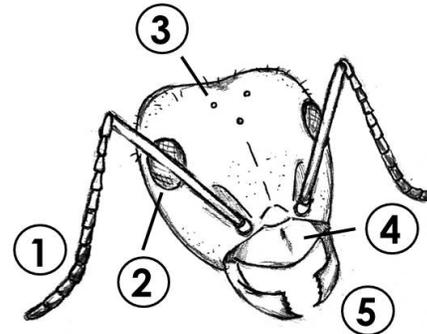
Crows and Ants



Crows (*Corvus brachyrhynchos*) are important decomposers on the prairie. They feed on animals that have died, returning the nutrients from their bodies to the environment. Crows also eat other prairie inhabitants, like thatching ants (*Formica obscuripes*). You might see them perched on an ant hill eating ants by the hundreds!

Like crows, thatching ants are important to the prairie. They do great things for plants, like adding nutrients to the soil and feeding on pests. Their tunnels also create pathways that allow air and water to reach their roots.

Ant Anatomy: Fill in the numbers!



- ___ ANTENNAE for sensing the world
- ___ COMPOUND EYES for seeing images
- ___ SIMPLE EYES (ocelli) for light and movement only
- ___ CLYPEUS, an insect's upper lip
- ___ MANDIBLES, insect jaws

Prairie Birds

Prairies were vast areas without trees, so many of the birds in PRAIRIE habitats are adapted to life in the grass.

If you visit the Living Prairie Museum in summer, you may see a savannah sparrow (*Passerculus sandwichensis*). This little songbird perches on tall grasses and small prairie shrubs to sing. But, it also spends much of its time below the grass in the thatch – a layer of dead plants that builds up every season. Savannah sparrows nest on the GROUND in this layer, and will also scurry through the thatch looking for their favourite food – INSECTS. This species will MIGRATE to spend their winters as far away as Central America



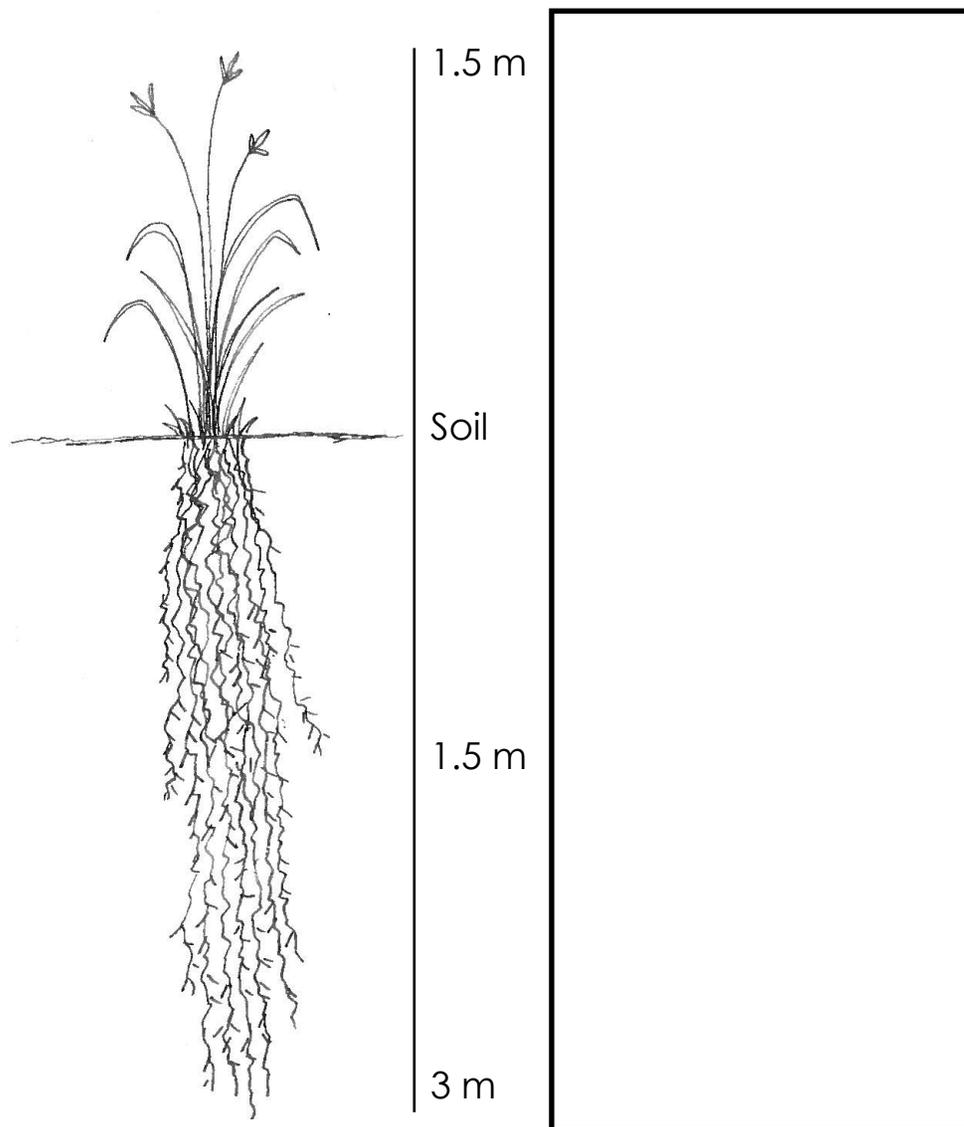
Let's review!

Savannah sparrows are found in _____ habitat.
They nest on the _____ and feed on _____.
Savannah sparrows _____ south for the winter.

Know Your Roots

How deep do prairie roots grow? For some of the plants of the tall grass prairie, their roots are longer than the plant is tall! Big bluestem (*Andropogon gerardii*) has roots that can be more than twice as long as the grass you see above the soil.

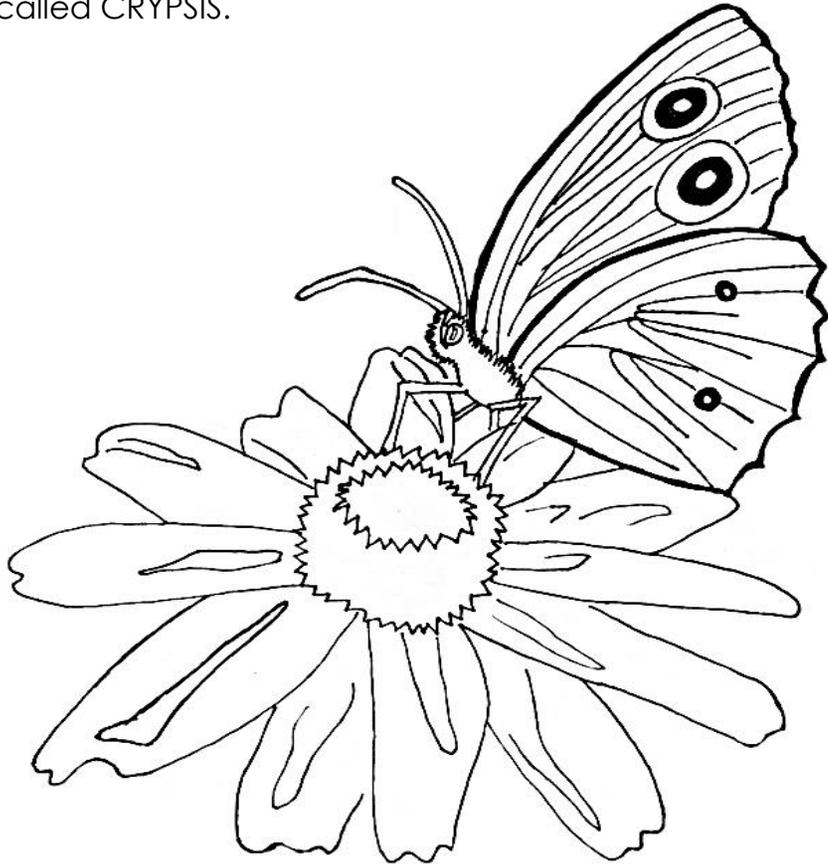
Draw yourself next to this big bluestem based on your height. How many body lengths does it take to match?



Insect Adaptations on the Prairie: COLOUR!

Insects use colour to their advantage. It's one of the many ways they have adapted to survive tough prairie conditions and avoid predation (being eaten).

Some insects have developed colours and patterns that help them blend in with their environment. This makes it harder for predators to see them, especially when they are holding still. This strategy of using colour and behaviour to avoid a predator is called CRYPSIS.

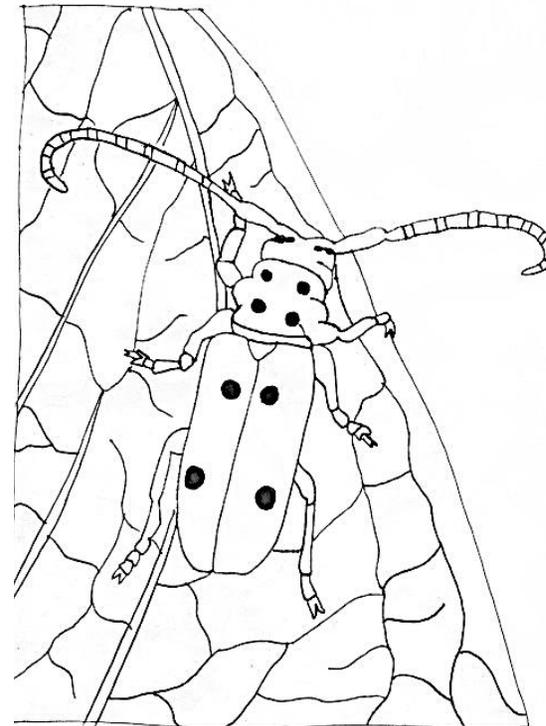


This common wood nymph butterfly (*Cercyonis pegala*) is almost entirely BROWN, which is a great colour to be if you want to hide in prairie and woodland areas. The bright YELLOW eyespots on their wings mimic the eyes of a predator, and are an excellent way to startle interested and hungry birds.

The Carolina grasshopper (*Dissosteira carolina*) has adapted to be totally VISUALLY CAMOUFLAGED on the prairie. Often a mix of light BROWN, TAN, and GREY, this insect can be hard to spot on dry grasses like this big bluestem.



Alternatively, this bright RED-femured milkweed borer (*Tetraopes femoratus*), with its spots and WHITE antennal bands,



completely stands out against the GREEN leaf of its common milkweed (*Asclepias syriaca*) host plant and food source. Since milkweed contains toxic sap, this insect developed colours that brightly advertise that it too is toxic to predators, and therefore not worth eating. This adaptation of using bright colours to ward off a predator attack is called APOSEMATISM.