THE LIVING PRAIRIE MUSEUM





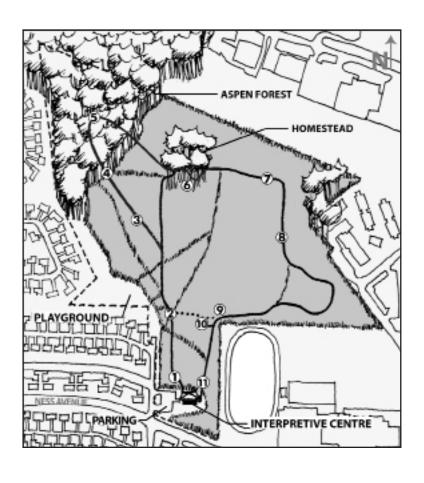
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THE SELF-GUIDED TRAIL

The self-guided trail begins at the northwest side of the Interpretive Centre. If you are walking or snowshoeing, please stay off of the cross country ski trails as much as possible and respect the flora and fauna that you find along the way. We hope you enjoy this wintery landscape as you discover the secrets of the tall grass prairie!



REMEMBER TO TAKE ONLY MEMORIES, LEAVE ONLY FOOTPRINTS.



1. TALL GRASS PRAIRIE REMNANT

Tall grass prairie is characterized by lush grasses, numerous wildflowers and rich Red River Valley soils. At one time, tall grass prairie covered an area one and a half times the size of Manitoba that extended from Winnipeg south to Texas.

Today, less than 1% of tall grass prairie remains in North America. The Living Prairie Museum is one of the few remaining remnants of this endangered habitat. There are 13 hectares (32 acres) of tall grass prairie and 3.2 hectares (8 acres) of aspen forest found within the preserve's boundaries. The plants and animals found here are protected - please help us conserve them by keeping to the designated prairie paths.



2. BELOW THE SNOW



A pristine, white blanket has formed over the tall grass prairie. However, not all of the small creatures beneath the snowy blanket are taking a long winter nap. Many small mammals and insects remain active under the snow.

The small airspace between the ground and the snow layer, called the subnivean zone, provides these creatures with a constant temperature (rarely below 0°C). It is in this zone that these tiny creatures forage for seeds, leaves, roots and insects. Some species even breed, with litters born in early spring.

As you walk, you may see some small, round holes in the snow. These are ventilation shafts for the snow tunnels of voles and shrews.



Masked shrew (Sorex cinereus)

3. PRAIRIES IN TRANSITION

This area is dominated by *Elaeagnus commutata*, or wolf willow. In summer, this shrub is covered with oval, silvery leaves. Though its fruit was only eaten when other food was scarce, the round striped seeds were used by Indigenous peoples to create jewellery and decorate clothing.

This hardy shrub spreads by rhizomes and could easily take over the prairie. The shift from grasses, to shrubs, to forest is called "habitat transition". In the past, roaming bison and natural prairie wildfires would have kept the wolf willow from spreading and the habitat from shifting to forest.

Today, this area is managed using prescribed burns. Small sections of the prairie are burned annually to reduce thatch build-up, release nutrients in ash, and allow sunlight to warm the soil, all of which improve growth and diversity.

4. CLONES ON THE PRAIRIE

Trembling aspen (*Populus tremuloides*) are fast growing native trees that form stands by sending up suckers from their shallow root system. A stand of trees that has grown from a single parent is called a clone. Aspen clones often cover very large areas and can overtake the prairie if left unmanaged. Here you can see the results of aspen girdling used to maintain a border between the forest and the prairie. Trembling aspen

5. LOOK UP, LOOK WAY UP

Red squirrels are familiar residents in the forests of Manitoba. A very adaptable species, red squirrels may make their homes in a variety of situations such as tree cavities, woodpecker holes, grass nests, bark nests, fallen trees, bird boxes, rock piles or underground burrows.

These squirrels are active year-round, though they may restrict their activities to the warmest part of the day in winter. During winter storms, they may stay inactive in their nests for 2 or 3 days. A clear sign of the presence of squirrels in winter, besides their tracks, are drays. Drays are leafy nests 1.8 m (6') to 18 m (60') high in a tree, often close to the trunk. They are about 30 cm (1') in diameter with a small 12 cm (5") cavity in which to rest. How many can you count in this stand of oak trees?

6. PRAIRIE HOMESTEAD

Houses have stood inside this shelter belt of trees and shrubs in the past. Many families have lived on this homestead since St. James was settled, with the last being the Watson family in 1963. The house and families are gone, but the many trees and shrubs that were planted still provide habitat for local wildlife.

The homestead is a favourite place of resident white-tailed deer. Their tracks, droppings and beds (large oval depressions in the snow) can often be seen in this area.

7. LAYERED LIMESTONE



If you look to the right of the prairie path near the apartment buildings, you will see large, snow-covered blocks of stone. These are actually boulders of limestone that were excavated when the apartments were built.

Limestone is the type of rock that lies underneath the prairie. It was formed over 400 million years ago when a huge tropical sea covered this area. As the prehistoric fish and plankton died and fell to the bottom of the sea, they formed layers of debris and sediment. Over thousands of years, the pressure of the water and subsequent created alaciers the sedimentary rock known as limestone. Evidence of these sea creatures can be found as fossils. -Trilobite fossil

8. PRAIRIE HITCHHIKERS



The tall, red-stemmed plants along this trail belong to wild licorice (*Glycyrrhiza lepidota*). The seeds of this plant are contained in a barbed pod called a bur. Burs have tiny hooks that allow the seeds to spread by hitchhiking on the fur of passing animals. Burs were the original inspiration for Velcro!

The roots of wild licorice are edible. They were chewed like candy or used in a tea for sore throats. The licorice-flavoured roots were harvested in the late fall when the starches and flavours had peaked.

Wild licorice

9. INSECT GALLS

Have you noticed ball-like swellings on the stalks of certain plants?

These structures are insect galls. In early summer, goldenrod gall flies (Eurosta solidaginis) lay their eggs on Canada goldenrod (Solidago canadensis). Once the egg hatches, the larvae burrow into the stem. This causes the plants to grow ball-like swellings that the larvae use as a home. The larvae overwinter inside these galls, and then emerge in spring as adult flies. Gall larvae are important food for winter birds.

10. DEER CANDY

The small shrubs you see to either side of the path are western snowberry (*Symphoricarpos occidentalis*). This shrub is native to the prairies and is characterized by its numerous pink flowers that bloom in July. The shrub is home to our resident hares and its berries are a favourite food of white-tailed deer.



A few shrubs are excellent habitat for birds and mammals. If you look carefully, you may see deer tracks or scat, indicating that one of our resident deer came by for a snack.

Western snowberry

11. BISON RUBBING STONES



The two large boulders beside the sidewalk are bison rubbing stones that were brought here from the Morden area in Manitoba. Their smooth surfaces were polished over thousands of years by the magnificent herds of bison that once roamed the area.

Large mammals are an important part of the tall grass prairie ecosystem. In little more than a century, European settlement caused overhunting and habitat loss that led to serious declines in plains bison, pronghorn antelope, and mule deer. Some, like the prairie wolf, are gone forever. The largest mammal you are likely to see on this prairie is the white-tailed deer, a relative newcomer to these great grasslands.

Many prairie species are considered Threatened or Endangered in Manitoba. Plains bison, burrowing owls, Poweshiek skipperling, and western prairie fringed orchids are a few examples. To protect these species from extinction, we must conserve the tall grass prairie habitat that they call home.

