

Central Parks

Birds Hill Provincial Park

Cedar Bog Self-guiding Spring / Summer / Fall

1. Introduction

Welcome to the Cedar Bog Self-guiding Trail. It winds through grasslands, areas of aspen and oak trees and a magnificent stand of eastern white cedar. The trail starts at a relatively high elevation, passes through an aspen forest and descends about 25 m to an unusual cool and damp cedar bog. This 1 1/2-hour walk will acquaint you with Manitoba's Aspen/Oak Parkland Natural Region.

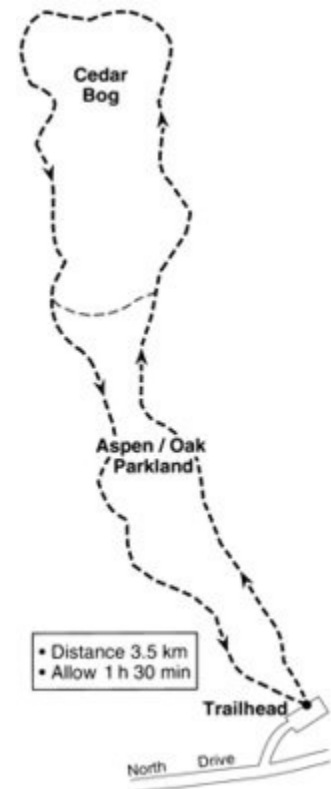
Along this trail you may come across poison ivy. Skin contact with any part of this plant, be it leaves, stems, roots, and berries—even in winter, may produce a rash. Learn to recognize it in all seasons. The plant has a woody stem and three jagged-edged leaflets per leaf. In late summer the leaves turn orange-red. The cream-coloured berries remain attached to the woody stem throughout the winter.

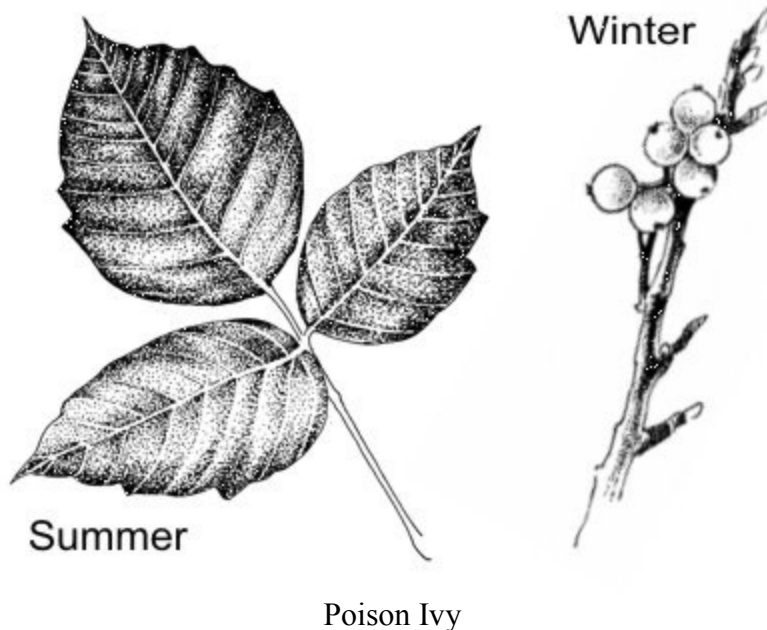
The animals, plants and landforms along this trail are protected. Look, smell, feel and listen to enjoy them, but please do not disturb them.

2. Aspen/Oak Parkland

Extending over a significant part of Manitoba, including Birds Hill Provincial Park, is one of Manitoba's 12 natural regions known as the Aspen/Oak Parkland. Two types of plant communities meet in this region but the boundary changes depending on the amount of moisture, the frequency of fires, and human activity.

What animals and plants live in the Parkland? Listen, and look around you.





3. Trembling Aspen

One of the most common trees of the parkland is the trembling aspen. This tree has smooth grayish-green bark. In mature stands, the branches on the lower two-thirds of the tree die because they cannot tolerate shade, leaving only the top third with leafy branches.

Listen. Do you hear the rustling of leaves? The leaf-stalks of the trembling aspen are flat, not round like those of other trees. When wind hits these flat surfaces the leaves tremble. That is how trembling aspen got its name.

4. Bur Oak

The bur oak is another important tree in the Aspen/Oak Parkland. It can be identified by its deeply-furrowed bark, its large round-lobed leaves and its fruits, or acorns. The acorns are a staple food of red and ground squirrels, chipmunks and mice.

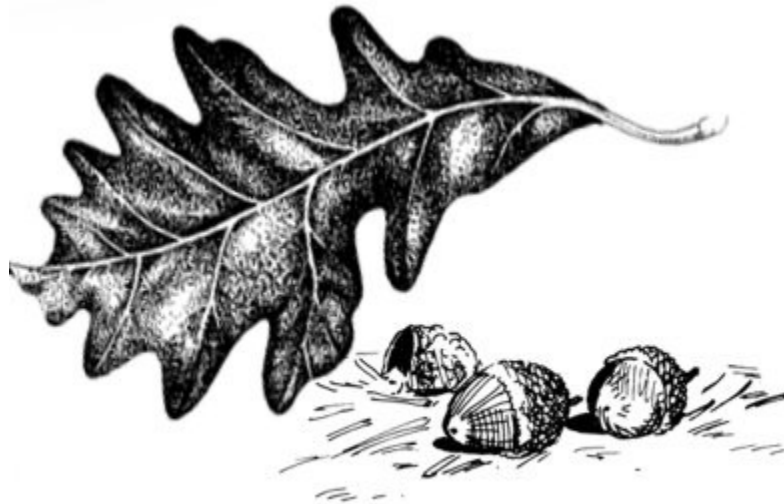
The gnarled and twisted trunks of these trees are indicative of their struggle to survive. Reduced moisture here, due to well-drained soils, evaporation and drying winds, has stunted their growth. However, in a more favourable site, bur oaks develop long straight trunks.

5. The Grasslands

Before you is the grassland of the parkland. Various species of grasses, herbs and flowering plants grow here with the occasional shrub of snowberry or silverberry. The colours of the grassland change with the seasons. In spring it is the silver mat of sage. Common in summer are the yellow hoary puccoon and the purple wild bergamot. The yellow flowers of the goldenrods mark the approach of fall.

The boundary between the forest and grassland is not clearly defined. Notice the aspen growing in the area. It is likely that some originally sprouted from seeds established on earth dug out by a burrowing animal, but now vegetative reproduction through root suckers is enlarging the area covered by aspen.

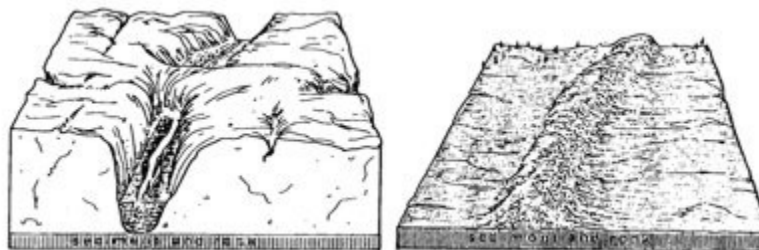
People have also changed the area by planting jack pine. Normally, jack pine seeds are released from the cones by high temperatures caused by wildfire. Intense sunlight heating the sandy soil has created the same result. Notice the young jack pine, growing at the base of older trees.



Acorns and oak leaf

6. Change in Level

About 10,000 years ago a stream flowing beneath a glacier deposited the sand and gravel on which you are standing. This is part of the esker-delta which forms the "hill" of Birds Hill Park. Notice that the trail begins to descend slightly. Beyond this point in the trail the plants are different. The greater amount of moisture and a cooler climate make it more suitable for dense aspen forest than for grasslands. At the lowest level the conditions are ideal for the formation of a cedar bog.



Subglacial level river showing disposition of material

7. Understory

There are natural levels in the heights of different plant species. Here trembling aspen form a canopy at the top level through which sunlight and precipitation filter through in varying amounts. This affects the plants below. More moisture is retained by the soil, so the understory or shrub layer is more dense here.

This second level of shrubs includes young aspen, American hazel, downy arrowwood, hokecherry, pincherry, saskatoon, high bush-cranberry, red-osier dogwood and nannyberry.

Below the shrub layer are the herbs at ground level. Here baneberry, bedstraw, aster, bunchberry and poison ivy are common.

8. Birds of the Parkland

Throughout the region birds are abundant where their food of berries and insects is plentiful. Look and listen for warblers, sparrows, common flickers and downy, hairy and pileated woodpeckers.

Red-tailed hawks, broad-winged hawks and goshawks may be observed wheeling over the forest and grasslands looking for small mammals or, perhaps, in the case of the goshawk, for forest birds.

Ruffed grouse live on the forest floor where they forage for snowberry seeds, their favourite food.

9. Animals of the Parkland

Animals are usually difficult to find in a forest for many are night-hunters, ground-dwellers or very secretive. Not all animals, though, remain hidden during the day. The abundant white-tailed deer are frequently seen in the park. Occasionally, a red squirrel may be heard chattering from a branch, or a snowshoe hare may be spotted on a trail.

Mice and voles move quietly through the herb layer. These animals rarely remain visible for long as they must protect themselves against such predators as the coyote, fox and hawk. Look on the ground for the red-sided and the western plains garter snakes, or the American toad.

10. Change of Site

This site is cool and damp. The scattered eastern white cedar indicate that the bog is near. Formerly cedar was more common here, but a fire destroyed them.

The fire also created the right conditions for a new type of plant growth. Aspen will grow well in a burned-out site because it can sprout from roots and suckers in the ground. However, since the soil is still very moist, fewer aspen and more willows survive here.



Tamarack

11. Bog Formation

The ground here is wetter than at the previous site. The pools of water which are abundant in the spring may disappear in the hot summer. The ground cover is a thick spongy cushion of sphagnum or peat moss. This acidic layer is suitable for tamarack, one of the few deciduous conifers. Tamarack leaves turn a brilliant yellow in the fall before they drop. Here it is slightly too damp for aspen, but is ideal for willow, birch and white and black spruce.

12. Cedar Bog

The imposing eastern white cedar create an "enchanted forest." The dense canopy allows very little sunlight to penetrate. Notice that shrubs are sparse, and occupy only the open patches where sunlight can filter through.

The cedar's leaves are different from those of other conifers; they are flattened and reduced in size. Both the leaves and wood are aromatic.

The soil in this cool, damp environment is very rich, and covered by a heavy layer of peat. Beneath the peat lies an impervious layer of clay deposited at the edge of the eskerdelta. Water remains near the surface, held in place by the sponge-like peat.



Cedar bough with seeds

Cedar bogs are not common in our province as ideal

conditions are scarce. They are more abundant east of Manitoba.

13. Cedar Succession

Here the soil is well-drained and there is less peat. Birch and balsam poplar, rather than eastern white cedar, are the trees that thrive here. The shrub layer, though, contains some cedar. Young cedar require sunlight to take root, yet must be protected by some shade. The shade is provided by the mature balsam poplar. The area will change with time. Which type of forest will eventually dominate the landscape?

14. Conclusion

Although the surrounding landscape appears to be permanent, the parkland is an active and ever-changing environment. Look for differences between the various areas and you will notice the subtle changes that are occurring.

You can discover more about the cedar bog trail online at manitobaparks.com.