

Eastern Parks

St. Malo Provincial Park

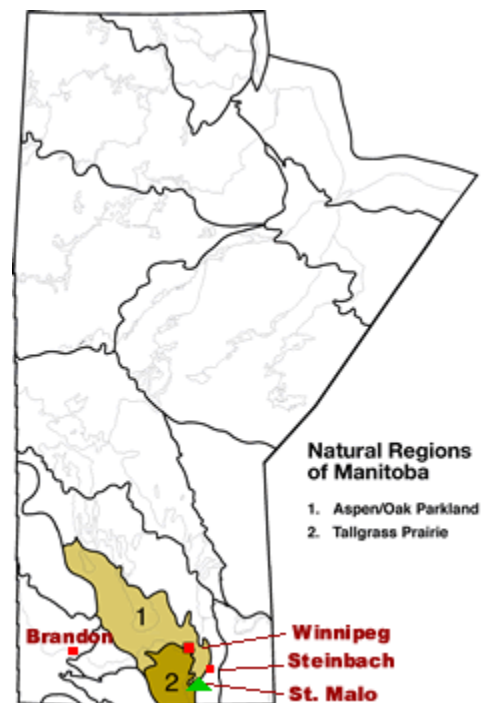


Welcome to the Parkland!

Parkland is a transition zone between prairie and boreal forest that stretches from northwestern Minnesota, through Manitoba as far west as the Rocky Mountains. Covering 13 per cent of Saskatchewan, 12 per cent of Alberta, and 5.3 per cent of Manitoba, it is a mosaic of forest, prairie and wetlands. Most residents of the Prairie provinces live in this zone which is also heavily used for agriculture.

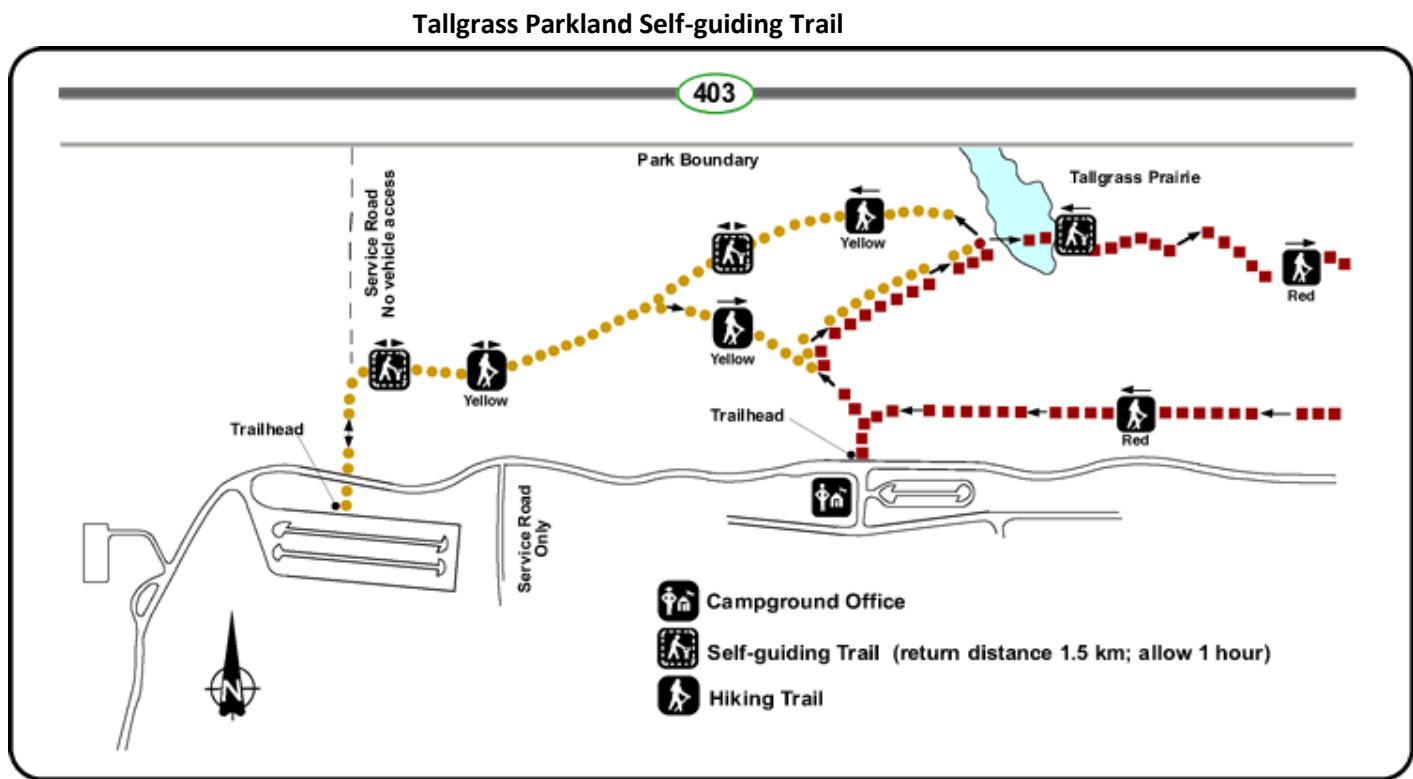
This varied land was shaped during the advance and retreat of the last continental glacier. It's made up of moraines, kettles or potholes, and features like glacial lakebeds, spillways, river valleys and sandy deltas that were formed by glacial meltwaters.

In St. Malo Provincial Park, the ground is a mixture of unsorted clay, sand, gravel and boulders that were dropped in place as glacial ice melted. These materials were somewhat changed when glacial Lake Agassiz covered the area. Sediments settled on its bottom and



wave action sorted the deposits on its shorelines. When the lake drained, it left behind elevated sand-gravel beach ridges.

Parkland vegetation is a patchwork of forest, prairie and wetlands. This trail leads through forest of aspen-oak and remnants of tallgrass prairie. Tallgrass Prairie and Aspen/Oak Parkland-two of Manitoba's twelve natural regions-meet in the park.



1. Trembling Aspen



Aspen leaves have flat stems so the leaves tremble with the slightest breeze.

Trembling aspen is the Parkland's main tree species. When young, its bark is gray-green and smooth. A mature tree's bark is more white with black patches, and furrowed.

Aspen lose their lower branches as they grow. Fungi often invade the resulting scars. Through time these fungi can grow inside of the trunk and cause rot in the heartwood. With a weakened trunk, aspen often die as the top, or crown, is snapped off by strong winds. Look closely at the trunk. You'll also find small patches of crusty orange or gray lichen that have started to grow on the bark.

Although they produce cotton-like seeds in spring, trembling aspen most often reproduce by cloning, sending up new trees from roots of mature trees. Trees in this stand appear to be of the same age and may well be clones of a few ancestors.

Hikers, please check the road for traffic before crossing!

2. Blossoms and Berries

Areas open to sunlight support many shrub species, including poison ivy, dogwoods, downy arrowwood and popular fruit-nut producers like saskatoon, chokecherry, high bush-cranberry, American hazel, hawthorn and wild plum. All are here, in abundance.

In spring, smell the fragrances of white-to-pink blossoms. After the end of June, enjoy the taste of saskatoons and other wild fruits as they ripen. Most non-white berries growing here are edible. White or whitish berries to be avoided include poison ivy, dogwood and snowberry. Do not sample or eat anything in the wild that you are unsure of.

While some wild fruits are inedible or a nuisance to people, all shrubs are beneficial to wildlife by providing food and shelter. Birds that rely on shrub growth near the forest edge for food and shelter includes yellow warbler, gray catbird, eastern kingbird and northern flicker.



Learn to recognize and avoid contact with all parts of poison ivy, in all seasons.

3. Bur Oak

In Manitoba's Parkland, bur oak is the second most common tree. These hardy trees are often found on well-drained soil and on south-facing slopes. They grow slowly, are drought resistant and are long-lived compared to trembling aspen. Thick protective bark and dense heartwood make them resistant to fire.

Leaves are lobed and 4-5 times the size of an aspen leaf. Touch the two sides of an oak leaf. The upper side's shiny, waxy surface is a barrier to evaporation helping to save moisture, which would otherwise be lost to drying winds and sunlight.



Bur oak acorns

4. Shoots and Acorns

Bur oak can also reproduce by cloning. Look for shoots growing from the trunks of mature, dying trees. Look for clusters of several trees growing together at ground level; they may be clones of a single "parent."

Another possibility for oak clusters is that they grew from acorns-seeds-gathered and cached by squirrels and chipmunks. If the gatherer does not use a particular cache, several of the acorns may sprout and grow in a close grouping.



Acorns are nutritious food for whitetailed deer, chipmunks and red squirrels. Its rough bark provides places for insects, which in turn are foraged by nuthatches.

5. Woodland Drummer

Spring to early summer, listen for a rapid drumming sound, lasting 5-10 seconds. This is part of the courtship activity of male ruffed grouse, which is especially well adapted to Parkland forest. The sound is made when the male fans its tail, ruffles its neck feathers and rapidly beats its wings against its breast. The bird is standing on a drumming log-usually a fallen aspen or oak-which is used throughout the courting period. This activity is illustrated on the brochure cover in a drawing by J. Carson.

Aspen leaf-buds and catkins that appear in early spring are an important food source for this year-round resident. Hens make their nests at the base of a tree, using fallen leaves from last year's growth. Occupied nests can be difficult to spot as the bird's colours blend perfectly with the leaf litter.



Grouse hen on a nest

6. Invaders

Left unchecked by fire, aspen, oak and shrub invaders are colonizing this patch, which at one time was dominated by grasses and other soft-stemmed prairie plants. Some tallgrass prairie wildflowers still appear in their disappearing home. In early spring, look for buttercups, crowfoot violets and three-flowered avens. The open and sun-exposed area will be transformed as the shrubs and trees mature, and grow taller. Through natural succession, trees will dominate this space in the future, if fire stays away.

This shifting or transition from prairie to forest is a basic characteristic of the Parkland. Before settlement, fire was a vital agent of change in this living mosaic of plants. Periodic fires helped the prairie by burning built-up accumulations of dead grass, thus returning minerals and nutrients to the soil. Without shade, soils could warm up faster and deeper after winter. Fires also scorched and checked the advance of shrubs and trees into open prairie. For thousands of years this was natural process in the Parkland. The result is what greeted the first European explorers and settlers in western Canada.

Forested areas you've encountered so far, and throughout the park, have undergone this natural process since settlement began. With the restriction of prairie fires in the last 150 years, this process has accelerated. During this time, the balance in parkland has shifted. Shrubs and trees are advancing to prairie. Today clearing for agricultural use is having the greatest impact on Parkland forests. One estimate is that less than 10 per cent, of original high-quality Parkland remains in Manitoba.

7. Losses and Gains

With the practice of fire control, Parkland forests have done well, where they have not been cleared for agriculture. Fire, along with millions of browsing animals like bison and elk used to keep the prairie-invading trees and shrubs in check. Now, white-tailed deer, which are relatively new here, are the main twig browsers, in winter.

Within areas such as parks, wildlife management areas and community pastures, Parkland forest has been invading, crowding into adjacent patches of Parkland prairie. This most affects tallgrass prairie plants, which have lost about 99 per cent of their original "home" area.

8. Turkeyfoot

Remnant tallgrass prairie is the prairie part of Parkland in St. Malo Provincial Park. Its namesake, big bluestem grass-sometimes called turkeyfoot grass-dominated the Red River valley and reached as far south as Texas. Growing to 1.2-1.5 m (4-5 feet) in height in Manitoba, it's usually in its prime in early August. Largely due to agricultural uses, less than one per cent of the original tallgrass prairie ecosystem remains intact. Manitoba Conservation and non-government agencies are trying to preserve whatever is left so that the plants and the animals that depend on them remain with us.



Big bluestem grass is also known as turkeyfoot grass due to the appearance of its flowers.

9. Spring 2003

In St. Malo relatively small, remnant, tallgrass areas can be protected from forest invasion, by imitating nature's former control methods. This area was burned in the spring of 2003. Controlled burning aims to halt invasions of prairie by the trees and shrubs at its margins. It also accelerates the breakdown of dead material, returning nutrients to the soil.



After the first controlled burn, spring 2003

10. Conclusion: Postage Stamp Prairies

While conservation programs and restoration work are on-going, our reliance on agriculture ensures that most of the original tallgrass area will remain changed and continue to serve us through agriculture. Citizens can help by supporting conservation efforts and establishing small native grass plantings in home yards and gardens. Even a metre-square patch provides small islands of food and/or shelter for tallgrass animals and insects. Look for native grasses and wildflowers offered at specialised garden stores.

Note to hikers: Site 10 completes the interpretive trail. You may return the same way to the parking lot or by the park office and the main road. If you wish to continue hiking, you are on the north branch of the Red Trail, heading east.



Look for nests of red-tailed, broad-winged or Cooper’s hawks in the crown of mature aspen. Also in the crown, look for the hard to spot, red-eyed vireo—a sleek, sparrow-sized bird that is greenish-gray. One of the most “talkative” birds in the Parkland, it forages for insects that live on aspen leaves.

Afterword

To see and experience large-scale prairie preservation/restoration/management, visit these places: Manitoba Tall Grass Prairie Preserve, east of Tolstoi; Beaudry Provincial Park, just west of Headingley on the south side of the Assiniboine River; and Lake Francis Wildlife Management Area. In Winnipeg, take a walk at Living Prairie Museum and Little Mountain Park.



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