



The Agassiz Interpretive Trail

**Manitoba
Tall Grass
Prairie Preserve**



Cathy Shaluk/Gene Fortney/John Morgan

*Take a walk into
the past and into
the future...*



Effective conservation is a partnership

The Manitoba Region of the Nature Conservancy of Canada (NCC) has taken the lead role in the management of the Manitoba Tall Grass Prairie Preserve, which originated in 1989 through the creative and cooperative efforts of the Critical Wildlife Habitat Program Partners:

- Nature Conservancy of Canada
- Manitoba Naturalist Society
- Canadian Wildlife Service
- Manitoba Habitat Heritage Corporation
- Manitoba Conservation
- World Wildlife Fund
- Wildlife Habitat Canada

About the Nature Conservancy of Canada

The Nature Conservancy of Canada is a national non-profit organization dedicated to the preservation of areas of ecological significance in Canada, and to the long-term stewardship of the living natural communities that inhabit them. NCC is currently the largest private steward of lands conserving species at risk in Canada, having secured and protected over 1,400 properties for a total of 1.8 million acres from coast to coast since 1962. NCC is distinguished from many conservation and environmental groups by its non-advocacy, non-confrontational approach.

More than 70% of Canada's species at risk live on the 10% of the land base that is most densely populated by human beings: that which straddles the Canada/United States border. The remaining natural areas in this slim band of land support the highest level of at risk native species and habitats in the country. NCC is able to secure and protect properties through land donation and purchases, donated or purchased conservation agreements, and cash donations.

Indian Grass

A detailed botanical illustration of a stalk of Indian Grass, showing the stem, leaves, and a panicle of seed heads.

Imagine a photograph of yourself.

Does a single still photograph capture who you really are? Does it convey all your moods and talents, your ups and downs? Could anybody know you, just by seeing you in a picture?

Now imagine an entire community, or better yet, a community of distinct communities. Could one picture tell all of their stories?

The Manitoba Tall Grass Prairie Preserve is a meeting place for several communities - grassland, forest, wetland, sedge meadow and oak savannah - all of them constantly changing. What you see on one visit to the Preserve is a single snapshot. To know the Tall Grass Prairie, you will want to see it as it moves and changes over time: watch and listen as each season, each week, brings forth different populations of plants and animals. Imagine the transformations that occur as rain, snow and drought, the reproductive efforts of plants, and the disturbances of fire and grazing, constantly shift the boundaries between forest, field and marsh.

Gene Fortney



*A picture
changing with
time...*



The Agassiz
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Big Bluestem

Look to the horizon, lose yourself in the undulating waves of tall blue grass swaying in a gentle breeze... when one hears the words “Tall Grass Prairie” this is what immediately comes to mind: a sea of grass...

One of the characteristic features of the Tall Grass Prairie is Big Bluestem, a bluish-green grass that stands one to two metres high by mid summer. Nicknamed Turkey Foot for its seedhead’s resemblance to a bird’s foot, Big Bluestem is fire and drought resistant, due to roots that extend as deep as four metres into the ground. This allows the grass to survive even the most extreme drought conditions. Dry periods help to keep the Tall Grass Prairie grassland, because grasses and wildflowers are better able to survive periods of drought than are woody plants.

Though dry seasons are not uncommon, the Tall Grass Prairie gets much more precipitation than the dry, Mixed and Short Grass Prairies of Western Manitoba, Saskatchewan and Alberta. That’s why a short summer can bring such explosive growth among the grasses and flowering plants in this region.



Big Bluestem



The sea of grass...

With every visit, a new Tall Grass Prairie unveils itself.

In early spring, the prairie is covered with flattened, dried grass from the previous year. Many small flowering plants grow quickly then, before two-metre-high Big Bluestem grass blots out the sun.

The Prairie Crocus, is one of the first plants to flower in spring, joined shortly after by Early Blue violets, Heart-leaved and Golden Alexanders, Yellow Stargrass and Large Yellow Lady's-slipper by early June. The endangered Western Prairie Fringed Orchid make their stunning debut in early July along with orange-red Wood lilies. By this time the Tall Grass species are now approaching their mature height and the Preserve will resemble the "sea of grass" that once covered 6,000 square km of southern Manitoba.

In late summer, Great Plains Ladies'-tresses, goldenrods, wild sunflowers, lavender-coloured asters, and vibrant, purple gentians bloom in one final display of colour before the frost.

With each step of this walk, as moisture and light levels change, you will pass through different ecosystems, each with its own adapted species, and all constantly changing. For that reason, you won't really know the Tall Grass Prairie until you have walked this trail many times, in various seasons.

Wood Lily



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*A medley of colour
and texture...*

With every step, comes a new experience.

When the sweet aromas of orchids and zesty mint hit your senses, and the squishing sound of water is heard at your feet, you know you have arrived at the sedge meadow!

Within a few steps, you can travel from a dry, upland area to an area that is too moist to support trees. Low-lying areas remain wet throughout the summer, especially in years of heavy rainfall or following heavy snowmelts.

Yellow Rail

These moist areas in the grass are marked by changes in vegetation creating a unique society of plants and animals.



Low growing sedges are common, as well as Prairie Cord Grass, field horsetail, willow, orchids, and the mints.

In and around the sedge meadows you will find countless insects, rodents, and birds including the nesting Sedge Wren, Marbled Godwit, and the foraging Sandhill Crane. Listen carefully for the sound of two small pebbles clicking together, for when you do, you've located the elusive Yellow Rail.

These areas are a valuable connection to the prairie communities surrounding them, providing shelter, food, and water to these special prairie residents.

Gene Fortney

*Prairie
Cord Grass*

*Western Prairie
Fringed Orchid*



*The fragrant air of
the sedge meadow*

Fields and forests are not static features on the landscape. Their boundaries and makeup are always changing as each plant competes to disperse its offspring.

Forests are continually advancing and growing, as the dominant tree species of this region, the Trembling Aspen and Bur Oak, spread by seed dispersal (oaks) and by cloning (aspen). When you look at a stand of aspen trees, look for the largest tree; this is the oldest. This tree sends suckers up from its roots creating all of the smaller trees surrounding it which are genetically identical.

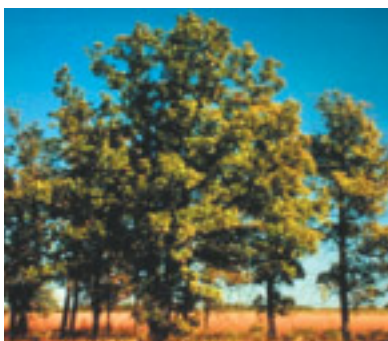
As the forest spreads, it elbows aside plants that are adapted to the bright sunlight of the open areas and animals that are adapted to the meadows. If left unchecked, eventually the open grassland would be taken over by a forest.

Many of the prairie ecosystem's bird species, including the Great Crested Flycatcher, Baltimore Oriole, dozens of warbler species, hawks, owls, and woodpeckers depend upon the forest habitat for nesting and food.

This special habitat also provides the necessities of life for countless other species of animals and plants.



Bur Oak



Orioles and acorns



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Wetlands

When you hear the orchestra of frogs and blackbirds on a summer morning, you know you're in another special component of a Tall Grass Prairie ecosystem: the Wetland.

Wetland ecosystems encompass many different habitats including ponds, marshes, swamps, and peatlands. Plants and animals present in wetlands are from both land and water habitats, which combined make them highly productive environments.

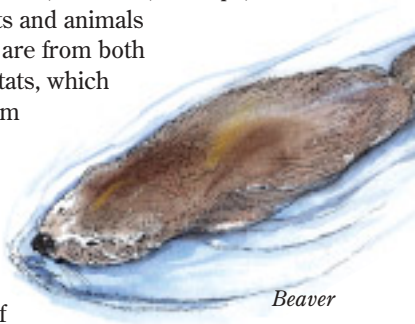
Wetlands have often been described as the kidneys of the landscape because of the role they play in water and chemical cycles. Wetlands collect excess water from the landscape, and filter out sediment and pollutants from the surrounding environment. The water that is discharged is cleaner than the water that enters the wetland.

Wetlands attract different communities of creatures including frogs, snakes, turtles, fish, many insect species such as dragonflies, damselflies and mosquitoes that breed in the marshes, and the Red-winged Blackbirds and various waterfowl species that eat these insects.

One of the most spectacular sights at the Preserve is the tall Sandhill Crane, which breeds in the wetlands. Areas of standing water support water-loving plants such as cattails, grasses, and sedges.

Wetlands are an important component in maintaining the health of a Tall Grass Prairie ecosystem, by providing needed food, water and shelter for many prairie species.

Sandhill Crane



Beaver



*A symphony of
song*

A travel through time.

Over 12,000 years ago, much of central Canada and the northern United States, including this region of Manitoba, was covered by a sheet of ice over 2 km thick. During this ice age, as the glaciers advanced and retreated, the land was scoured down to bedrock, and the rocks and boulders were picked up and pushed along in front of the ice sheet, like a bulldozer.

As the climate warmed, the glacier started to melt and retreat, and the rocks and other glacial debris it had been carrying and pushing were dropped along the ground. The resulting melt waters from the glacier collected along the front edge of the ice sheet, forming a huge lake, now called glacial Lake Agassiz. As the lake receded, rocky beach ridges were left behind leaving permanent land forms marking the extent of this massive inland sea.

These beach ridges are quite dramatic in this region of southeastern Manitoba. The eastern escarpment runs northeast of Winnipeg down through the Tall Grass Prairie region and into the northern United States.

The name “Agassiz Trail” is quite appropriate for this project, as the old rocky beach ridges of this region allowed the preservation of remnants of the Tall Grass Prairie. Too rocky to be valuable farm land, most of this region was left to grazing of livestock, which maintained some of the prairie habitats we see in southeastern Manitoba today.

Field boulders known locally as sleeping sheep



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*A lake, a beach,
and then a
prairie*

History

For thousands of years, this region of southern Manitoba has had a rich and diverse history of aboriginal culture.

The lifestyle of the aboriginal peoples who lived along the prairie-parkland transitional zone was one of seasonal living and movement. Due to the mobility of the local aboriginal populations, they left no standing buildings or structures. What is left behind is their imprint on the cultural heritage of the region passed on by oral traditions and spiritual connection with sites of special significance. Several of these sites are found around the Roseau River to the northwest of the Preserve. The aboriginal peoples of the region lived off the many plants and animals of the Tall Grass Prairie for food, shelter, transportation, clothing and medicines.

The Prairies' newest arrivals

Southeastern Manitoba possesses a microcosm of the province's rural settlement groups including the Métis, French Canadian, Anglo-American, Mennonite, Ukrainian and German. The Ukrainian settlers pioneered the district that now includes the Manitoba Tall Grass Prairie Preserve in 1896.

When the first Ukrainian farmers came here, they expected rich, dark soil like that of the Red River Valley further west. What they found was thin topsoil over a mix of clay and gravel, with numerous large boulders - locally known as "sleeping sheep". The boulders made this land difficult to farm, and as a result, many of the farmers moved on and the land was left for pasture.

Ukrainian home



Prairie mammals

Listen for the distant cries and yelps of the coyote at dusk. They are but a few animals that let their presence be known to us. Most of the prairie mammals are generally very secretive, as you are likely to see signs than to actually view the creatures. If you look closely, you will detect their subtle signatures throughout the prairie. Watch for the cloven prints, and scrapes and rubs of Moose, Elk or White-tailed Deer, or the flattened patches of grass that indicate the areas where they have bedded down.

In the summer and fall, watch for mounds of bear droppings filled with berry seeds along the trail, or coyote scat filled with the fur of rabbits and rodents. Look for earthen mounds scattered across the grassland from the tunnelling Plains Pocket Gopher, or the “snipped” off ends of shrubs from the White-tailed Jackrabbit.

The prairie is home to the Grey Wolf, American Black Bear, Coyote and Red Fox, several species of bats, skunks, weasels, moles, voles, mice and many other fur bearing creatures. Each individual leaves behind a sign that it was there. All we have to do is look closely for them.

Grey Wolf



Each habitat that makes up the Tall Grass Prairie ecosystem is equally important in maintaining a balanced and healthy population of animals.

Badger



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*The original
residents*

Migration

While some birds, such as Chickadees and Blue Jays, are year-round residents, the sky truly comes alive in the spring with the arrival of over 150 different species of birds passing through the Tall Grass Prairie ecosystem.

The parade of feathers typically starts in March with the arrival of Northern Harriers, Red-tailed Hawks, and other birds of prey that can be seen soaring above the prairie in search of food. Perching birds that sport names that include Phoebes, Pewees and Flycatchers, arrive to sample the first emerging insects of the season.

Spring doesn't officially arrive until we hear the familiar honking of the Canada Goose! Waterfowl with their dazzling colourations strut their stuff in the ponds in April. Listen for the "Daffy Duck" laugh of the Mallards, or the thin whistled tsee-tsee of the Blue-winged Teals.

Culver's Root

Early in the morning in April, male Sharp-tailed Grouse will gather on patches of grass, called leks, to perform their courtship displays. From the forested areas of the preserve, the whomp-whomp-whomp of the Ruffed Grouse can be heard in the spring and summer.

Summer brings the familiar songs and colourful displays of the Western Meadowlark and the Red-winged Blackbird, the bright, yellow American Goldfinch, and the Cedar Waxwing.

Fall arrives in dramatic fashion as most of the prairie birds congregate in preparation for their southerly departure.

Indian Grass

Sharp-tailed Grouse



*Fanciful
feathers*

Brown bison and red buffalo?

The eradication of the bison in the 19th century was perhaps the most significant change to the animal population of the prairie. Bison are voracious eaters, and will consume aspen suckers and other woody plants. This process has always been important in maintaining the open prairie.

In order to simulate the past grazing effect of the bison, NCC practices “managed grazing” using cattle on certain areas of the Preserve. Used together with “prescribed burns”, it helps keep the prairies from gradually filling in with shrubs and trees.

The red buffalo tamed

It takes a powerful force such as fire to stop the relentless spreading of the forests. In the past, when lightning started prairie fires, they burned unchecked. These wildfires were called the *Red Buffalo* by the aboriginal people. The NCC now conducts prescribed burns during the spring and fall to mimic this once natural occurrence.

Besides reducing the spread of forests, fire also benefits plants and animals by killing weed species, releasing plant seeds and nutrients back into the soil and, by removing the old dead layer of grass, the heat of the sun is able to penetrate directly to the ground resulting in the rapid new growth of grasses and flowers.

In this way, fire traditionally promoted biodiversity by preventing a single habitat type from expanding throughout the Tall Grass Prairie.

Bison

The diversity of the grasses and forbs is best for the birds, animals and plants that live here, creating a balanced environment.



NCC



The Agassiz
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*The conservation
toolbox*



The Agassiz Interpretive Trail

The Tall Grass Prairie

The Tall Grass Prairie ecosystem is ranked as one of the three most threatened ecologically significant habitats in Canada. It is the most biologically diverse and productive type of grassland in North America. This unique prairie biosphere is disappearing at an alarming rate, at one time extending from the Interlake region of Manitoba all the way down to Texas.

Until the late 1980s, it was thought that it had disappeared forever due to settlement of the region during the later 19th and early 20th Century. Significant remnants of Tall Grass Prairie were discovered in 1989 in southeastern Manitoba, representing less than 1/2 of 1% of what was once nearly 1.5 million acres of prairie. Since then, through partnerships, NCC has secured over 16,000 acres of this endangered prairie in southeastern Manitoba, within the RM of Stuartburn.

Preserving the past and future

The Manitoba Tall Grass Prairie Preserve is home to a fascinating and dynamic plant and wildlife community. The Agassiz Interpretive Trail has been groomed to enable people of all ages, including researchers and school children whose studies include Manitoba's natural history, to walk among 500 species of plants and animals, including rare and endangered species that are found within their natural habitats.

The Preserve provides us with something else equally valuable. It shows us who we are and who we have been, by preserving the world of the past. The 13-part television series *Canada: A People's History*, was filmed on location at the Manitoba Tall Grass Prairie Preserve for realistic prairie settings for First Nations encampments and Métis ox carts.

Plains Pocket Gopher





The Manitoba Region of the NCC has concentrated most of its attention on the Province's southern ecosystems and on the streams and valleys that traverse them. Manitoba's Tall, Mixed and Fescue Prairies have been reduced to tiny remnants of their former expanse. To date, the Manitoba Region, through partnerships, has secured over 85 properties totalling over 23,000 acres.

In cooperation with The Nature Conservancy in the United States and a number of other partners, NCC is working on establishing an international corridor of remaining Tall Grass Prairie that will extend into the Midwest United States.

The Manitoba Region of the NCC now offers curriculum based, in-class educational programming to raise students' awareness and appreciation of Manitoba's natural heritage.

The Nature Conservancy of Canada needs your continuing help in securing our natural heritage. Through land donations or purchases, donated or purchased conservation easements, cash donations or volunteering your time in stewardship programs, you can help to preserve future ecologically significant areas.

White-tailed Deer



Illustrations: Fran Carmichael

Within the next several years, the Agassiz Interpretive Trail will grow in size. With the addition of another phase of the trail, the experience of this fascinating ecosystem will continue to develop.



The Agassiz Interpretive Trail

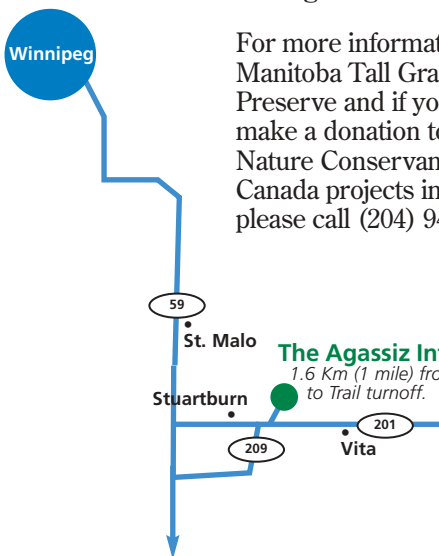


Manitoba Tall Grass Prairie Preserve

How to get there -

From highway #59 travel 11.5 km (7 miles) east on highway #201, watch for the trail signs.

For more information on the Manitoba Tall Grass Prairie Preserve and if you wish to make a donation to The Nature Conservancy of Canada projects in Manitoba, please call (204) 942-6156.



to the Canada/US border

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