



FLORA AND FAUNA OF THE MANITOBA ESCARPMENT AND RIDING MOUNTAIN NATIONAL PARK

Most of the Riding Mountain National Park (RMNP) area is within a vast vegetation transition zone, where the aspen parkland and eastern deciduous forest, consisting mainly of leafy trees fit for a humid continental climate, meet the boreal forest, consisting mainly of coniferous trees fit for the subarctic climate. Within this transition zone, each type of forest intermingles with the other, occasionally interspersed by diminishing prairie grasslands.

The sudden change in altitude represented by the Manitoba Escarpment makes it a microcosm of the vegetation transition zone surrounding it. Changes in altitude tend to mimic the changes in latitudinal gradient. Plainly stated, walking up or down the escarpment, one can observe the same transitions in vegetation he or she would observe driving north or south in the same area.

The higher elevations of the escarpment (uplands) are dominated by mixed-wood boreal forest, while aspen parkland and eastern deciduous forest dominate the areas of lower elevation (lowlands). This reflects the wider vegetation transition zone. The south of RMNP is mostly made up of aspen parkland and eastern deciduous forest and, heading north, the vegetation gradually turns to mixed-wood boreal forest. By the time one gets as far north as the Duck Mountains, the Manitoba Escarpment's northern extension, the vegetation is almost entirely boreal and leafy trees are seldom seen.

This being said, don't be surprised if you see a stand of poplar in the Duck Mountains. Let's not forget that transitions in vegetation are incremental, they occur gradually with breaks and setbacks, very rarely taking the form of fluid change.

Boreal forest

The boreal forest is characterized by a mixture of spruce and aspen. White spruce stands are found scattered throughout RMNP from the dry prairie in the west to the borders of the wet swamps in the eastern uplands. Black spruce communities occur most frequently in the poorly drained peat-filled basins of the plateau. Jack pine, tamarack and balsam fir communities are found in scattered locations throughout the park. Mammals within the boreal forest section of the park are generally representative of those found in the boreal forest belt of Canada. Moose and snowshoe hares are preyed on by timber wolves and lynx. Rodents include red squirrels, flying squirrels, and a variety of smaller rodents on the forest floor. But the boreal forest fauna of the park is also characterized by the lack of several typical species of mammals. Woodland caribou, wolverine and otter were hunted or trapped out of Riding Mountain during late 19th and early 20th centuries. Marten and fisher were also **extirpated** from the park, only to be successfully **reintroduced** in the early 1990's.ⁱ Typical boreal forest birds include spruce grouse, raven grey jays, loons, boreal chickadees and white throated sparrows.



Aspen parkland

The aspen parkland is dominated by trembling aspen (poplar) with a dense understory of rose, hazelnut, and alder. Associated with the parkland are areas of open grassland and meadows of fescue, wheat grass, and prairie wildflowers. Mammals to be found in these regions include elk and coyotes. The northern pocket gopher and the Richardson's ground squirrel along with the badger prefer the open grasslands areas, while the Franklin's and thirteen-lined ground squirrels also utilize the aspen forests. Birds representative of the aspen parkland are the yellow-headed blackbirds, the western meadowlark, Sprague's pipit and the clay-coloured sparrow.

Eastern deciduous forest

A third major forest type occupies the lowest and warmest areas of the park. The eastern deciduous forest grows on the rich soils that have accumulated at the base of the escarpment. This type of forest comprises bur oak, white elm, Manitoba maple, green chokecherry, nannyberry, hazelnut, Canada plum and many species of woodland wildflowers and ferns. These fruits and flowers represent an important source of energy for black bears. Whereas black bears can more easily hover over RMNP's different ecosystems, certain eastern bird species such as the indigo bunting and the golden-winged warbler are restricted to the eastern deciduous woodlands at the base of the escarpment.

Fescue grasslands

Prairie grasslands are biological communities containing very few trees or shrubs and dominated by grasses. Sandy soil, low moisture, fire, and wind are the conditions on the prairie that favour grass cover. Although grasslands in general are diminishing across the globe, there exists a special type of grassland that is disappearing at a particularly alarming rate. It is the fescue prairie, which occupies a moister environment than other grassland types and is the prominent grassland in the aspen parkland. Fescue is named after the principal grass present – rough fescue.

Less than 5% of the original fescue prairie remains in Canada, with approximately 1% of that - about 2500 hectares in all - occurring in RMNP. Animals living in the fescue grasslands include bison, elk, wolves, red foxes, gophers, birds, ants, spiders, beetles, and butterflies. However, as the prairie habitat disappears, so do many of the wildlife species that live there. Remnant grasslands, occasional in the eastern portion of Riding Mountain National Park and more common to the west, remain important contributors to the biological diversity of RMNP as a whole.

ⁱ For more information on the pine marten's reintroduction, consult the lesson entitled "*Weasel Waypoints: Monitoring the Pine Marten's Reintroduction to RMNP*"