

What is the chance of a fire in the Assiniboine Forest??

Occasionally concerns are raised about the risk of a forest fire in the Assiniboine Forest. The Rotary Club of Winnipeg Charleswood gathered information from online sources and experts with knowledge on forest fires. The City of Winnipeg, Naturalists Services is the lead government agency responsible for the Assiniboine Forest working with Rotary as stewards of the Forest.

<https://legacy.winnipeg.ca/publicworks/parksOpenSpace/NaturalistServices/NaturalAreas/AssiniboineForest.stm> Other government authorities and experts may be consulted as required.

Trees in Assiniboine Forest

There are two main categories of tree: Deciduous and Coniferous. Deciduous trees 'decide' to shed their leaves, and they are also known as hardwoods. Coniferous trees have cones, and needles, and are also known as softwoods. <https://natural-resources.canada.ca/forest-forestry/wildland-fires/fire-ecology>

The Assiniboine Forest is mostly deciduous such as Trembling Aspen, Bur Oak, Balsam Poplar, Manitoba Maple and Green Ash. There is very little softwood in the forest. Vegetation promotes biodiversity, which is healthy. Some provide berries and seeds, which is food for birds and animals.

Below is general listing of the tree types in the Forest and some characteristics of each type. [https://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/formain15744/\\$FILE/tree-species-impact-wildfire-aug03-2012.pdf](https://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/formain15744/$FILE/tree-species-impact-wildfire-aug03-2012.pdf)

Deciduous

- **Trembling Aspen**
 - Short lived
 - Prone to disease
 - Needs full sunlight
 - First to come back after a disturbance.
 - Other species don't mind some shade, so they return later.
- **Bur Oak**
 - Does not like to sit in water
 - Likes drier sites
 - Is a true hardwood
- **Aspen**
 - Usually reproduces by root suckers
- **Oak**
 - Reproduces with acorns
 - Stress results in a bumper crop of acorns
- **Balsam Poplar**
 - Softer wood
 - Likes more moisture

Coniferous

- Very flammable
- High content of resin and sap
- Needles burn quickly and can carry wildfire through a forest acting as kindling
- Dense growth and low hanging branches

- Fires are harder to control and suppress
- Not a big part of the Assiniboine Forest

Fire risk differences between deciduous and coniferous forests

[https://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/formain15744/\\$FILE/tree-species-impact-wildfire-aug03-2012.pdf](https://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/formain15744/$FILE/tree-species-impact-wildfire-aug03-2012.pdf)

- **Flammability:** Coniferous trees (like pine and spruce) have needles that burn quickly and can ignite easily, while deciduous trees (like oak and maple) have leaves that retain moisture and burn less intensely.
- **Fire Spread:** wildfires in coniferous forests can spread rapidly due to their tightly packed nature and low-hanging branches, which can allow flames to climb into the canopy. In contrast, deciduous forests often act as natural fuel breaks, slowing down fire spread.
- **Fire Behaviour:** coniferous trees have flammable resins and needle structure that ignite easily, while deciduous trees have leaves that resist wildfires.
- **Wildfire Management:** Deciduous trees are generally more resistant to wildfires and can help slow the spread of vegetation forest, making them preferable for areas near homes. These differences highlight the importance of understanding the characteristics of different forest types in fire risk assessments.

Canadian Forest Fire Danger Rating System (CFFDRS).

A national system for wildfire danger rating in Canada.

<https://cwfis.cfs.nrcan.gc.ca/background/summary/fdr>. The “Red Book” form of the CFFDRS has mostly been retired in favour of apps such as FBPGO and Red APP that accomplish the same wildfire behaviour prediction results. The CFFDRS has been under development since 1968. Currently, two subsystems –the [Canadian Forest Fire Weather Index \(FWI\) System](#) and the [Canadian Forest Fire Behavior Prediction \(FBP\) System](#) are used extensively in Canada and internationally.

Predicting Fire likelihood and difficulty of suppression

Wildfire is unpredictable, and has an unsteady rate of acceleration. That being said, a fire in the Assiniboine Forest would likely be straight forward to suppress, and may even self-extinguish, due to the nature of the vegetation. If it makes it to the edge of a green lawn, it will almost certainly burn itself out. There is a great deal of resiliency in the Assiniboine Forest, but some vulnerability in spring and fall when fine fuels such as grass are dead.

Fire Prevention – City of Winnipeg

The City of Winnipeg Forestry Department and the City’s Fire Department have successfully responded to small fires in the Assiniboine Forest. In 2020, the WFPS added two new wildland fire vehicles to help battle fires. Wildland fires are different than structure fires. They can spread over a large area of land, making them difficult to fight. *“Specialized training, tools, and equipment can help us contain, confine, and extinguishing fires in grassy areas,”* said Scott Wilkinson, Deputy Chief, Fire Rescue Operations and Training.

<https://www.winnipeg.ca/people-culture/our-city-our-stories/wfps-ramps-fight-against-wildfires>

There is a hydrant in the centre of the Forest and some along the perimeter. The Fire Department can reach sections of the Forest with trucks, smaller equipment and by foot.

<https://www.cbc.ca/news/canada/manitoba/fire-assiniboine-forest-1.5159060>.

The City's '*Green Team*' plays an important role by removing some deadfall strategically. Trails are also thinned as required. Residents who live adjacent to the Forest are also encouraged to engage in safe practices, following burn bans and reporting fires to the Fire Department. <https://www.winnipeg.ca/news/2019-06-03-winnipeg-fire-paramedic-service-update-wildland-fires>

The Rotary Club of Winnipeg, Charleswood has a website with further information about the Assiniboine Forest at www.assiniboineforest.ca