

Tree Giveaway

Trees provide a variety of climate **adaptation** and **mitigation** benefits. Adaptive benefits are those that will help increase community resilience to climate changes that are already baked into our collective future. Mitigative benefits are those that will help to prevent further change.

Just a few of the adaptive benefits of trees include that they help to:

- **manage stormwater** and **runoff** from roads in areas with a lot of impervious (hard) surfaces,
- **reduce flooding** by intercepting rainfall, promoting higher soil infiltration rates, and increasing hydrological “roughness” (i.e., water experiences increased frictional resistance when passing over land),
- reduce the impact of vehicle emissions by **trapping airborne pollutants** and buffering toxins while purifying the air,
- **provide shade** to off-set the ‘heat island effect’ in heavily paved areas with limited tree canopy, essentially reducing or **regulating high temperatures** in local areas,
- **control soil erosion** with their roots, and
- improve water quality.

A few of the climate change mitigation provided by trees include that they:

- **remove carbon dioxide** from the air, and release oxygen, and
- can reduce **energy usage** by providing shade and reducing the need for air conditioning.

Trees also provide countless additional services beyond those associated with climate change. They support and enhance **biodiversity** and **ecological resilience**; beautify landscapes; provide spiritual and cultural oases; and can support economic stability, just to name a few. They also are inherently valuable for their own sake, are living organisms, and important members of the communities wherever they grow.

Species Specific Tree Stats

<p>Red oak (<i>Quercus rubra</i> or <i>Mimkwonmooseel</i>)</p> <p>Red oak is the only species of oak native to Nova Scotia. Though not usually recognized as an old growth species in Wabanaki-Acadian forests, it plays an important role in the lifecycle of these ecosystems. It is a windfirm species, not prone to blow down in hurricanes. Red oak is a culturally significant species to the Mi'kmaq people, it has been used for making dyes, medicine, and food.</p>		<p>RED OAK ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 25-30 metres • Flowering season: Mid-May to June • Moisture and soil preference: Well-drained, rich and sandy • Shade tolerance: Low to moderate • Site selection tip: Red oaks like full sun and space to grow and spread. If you can, choose a fairly open planting site. • Companion planting tips: Trembling aspen, Eastern white pine 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 20 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 9 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 109 liters of runoff avoided ○ 5,765 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>	

<p>Sugar maple (<i>Acer saccharum</i> or <i>Snawei</i>)</p> <p>Sugar maple is an excellent shade tree and produces vibrant displays of colour in the fall. It is a characteristic old growth species in the Wabanaki-Acadian forests of Nova Scotia with a life expectancy of up to 400 years! The Sugar maple was first prized by the Mi'kmaq people for its sweet sap, the harvest of which was copied by early colonizers and continues to this day.</p>		<p>SUGAR MAPLE ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 35 metres • Flowering season: late-April to early June • Moisture and soil preference: Well-drained, deep and moist, though highly adaptable • Shade tolerance: Moderate to high • Site selection tip: Though Sugar maples are tolerant of shade, they will thrive in full sun. Plant shade tolerant trees around it for a thriving garden! • Companion planting tips: Yellow Birch, native Ferns 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 20 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 8 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 89 liters of runoff avoided ○ 4,622 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>	

<p>Red maple (<i>Acer rubrum</i> or <i>Malsnawei</i>)</p> <p>Red maple is an early- to mid-successional species of the Wabanki-Acadian forest region, which means it is often one of the first to establish and at the end of its lifespan (about 100 years), gives way to longer-lived species like Sugar maple. It is a mid-sized tree whose leaves turn a brilliant red in the autumn. In the 1800s African Nova Scotian weavers used Red maple for making baskets.</p>	<p>RED MAPLE ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 25-30 metres • Flowering season: May • Moisture and soil preference: Prefers moist to wet areas but can thrive in a variety of soils and sites. • Shade tolerance: Moderate • Site Selection tips: If there are no wet areas on your property, try to choose a place where eaves drain or down slope from a frequently watered garden so it can catch the drainage. • Companion planting tips: Native Ferns like Bracken, Bunchberry, Trembling aspen 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 20 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 13 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 75 liters of runoff avoided ○ 3,875 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>

<p>American basswood or linden (<i>Tilia americana</i>)</p> <p>Basswood is native to the Wabanki-Acadian forests of New Brunswick and is the only <i>Tilia</i> species native to Canada. Its showy, fragrant flowers are favorites of pollinators and people alike! Its bark has been used for rope weaving and medicinal purposes by the Mi'kmaq people.</p>	<p>BASSWOOD ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 25 metres • Flowering season: July to August • Moisture and soil preference: Moist, but well-drained deep, fertile soil • Shade tolerance: High • Site selection tip: Basswood's deep and spreading roots make it very windfirm and a good choice for sloped sites to aid against erosion. • Companion planting tips: Canada violet, Black cherry 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 20 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 6 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 91 liters of runoff avoided ○ 4,703 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>

<p>Yellow birch (<i>Betula alleghaniensis</i> or <i>Mnnoqon</i>)</p> <p>Yellow birch is a characteristic old growth species in the Wabanaki-Acadian forests of Nova Scotia known to live up to 300 years! Its leaves turn a brilliant yellow in the autumn and its bronze bark grows increasingly handsome with age. Yellow birch has many medicinal uses making it a culturally significant tree for the Mi'kmaq people.</p>	<p>YELLOW BIRCH ILLUSTRATION</p> <p>Reference 1</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 25-30 metres • Flowering season: May to June • Moisture and soil preference: Moist and rich soil • Shade tolerance: Moderate • Site selection tip: Filtered light is ideal for a growing birch, so planting your new tree in the partial shade of another tree would be ideal. • Companion planting tips: Lady fern, Canada goldenrod, Red spruce 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 20 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 7 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 120 liters of runoff avoided ○ 6,204 liters of rainfall intercepted <p><small>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</small></p>

<p>Canadian serviceberry (<i>Amalanchier canadensis</i> or <i>Glamuejmnaqsi</i>)</p> <p>Canadian serviceberries are shrubby trees, often prized for their showy displays of spring flowers, summer production of berries, and vivid fall colours. It is a preferred host of many species including Red-spotted purple butterflies. The fruit of serviceberries is edible and has been an important food source for Indigenous communities across the country since time immemorial.</p>	<p>SERVICEBERRY ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 7-9 metres • Flowering season: Mid-May to early June • Moisture and soil preference: Though often found in moist soils when growing wild, serviceberries are tolerant of a variety of moisture and nutrient regimes. • Shade tolerance: Moderate to high • Site Selection tips: This low maintenance tree will thrive just about anywhere, but regular watering during its first growing season will give it a boost! • Companion planting tips: Ferns, Black cherry, Rough goldenrod 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 10 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 4 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 48 liters of runoff avoided ○ 2,490 liters of rainfall intercepted <p><small>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</small></p>

<p>Black cherry (<i>Prunus serotina</i> or <i>Waqwonuminokse</i>)</p> <p>Black cherry is an essential species for supporting native wildlife. Its flowers are important for pollinators and its fruit provides food for songbirds like cedar waxwings and thrushes, as well as small mammals like squirrels. The inner bark and berries of the Black cherry are essential ingredients in Mi'kmaq medicine.</p>	<p>BLACK CHERRY ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 30 metres • Flowering season: June • Moisture and soil preference: Grows best on rich moist soils but tolerates a wide variety of soil conditions. • Shade tolerance: Low • Site Selection tips: Black cherries are sun-loving, so open planting areas suit it best. Its leaves contain prussic acid, which is toxic if consumed by humans and livestock, so avoid planting in areas where domestic animals may reach its canopy (deer are safe!). • Companion planting tips: Yellow birch, Pin cherry, any flowering native wildflower species like Twinflower 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 10 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 5 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 60 liters of runoff avoided ○ 3,088 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>

<p>Red spruce (<i>Picea rubens</i> or <i>Mekwe'k kawatkw</i>)</p> <p>Red spruce is the provincial tree of Nova Scotia and a characteristic old growth species of the Wabanaki-Acadian forests of the region with a lifespan of 300 to 400 years! It provides important overwintering habitat for a variety of species. Red spruce has been used for medicines, crafts, and fibre by Mi'kmaq peoples since time immemorial.</p>	<p>RED SPRUCE ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 25-35 metres • Flowering season: mid-May to mid-June • Moisture and soil preference: Moist but well-drained slightly acidic soils • Shade tolerance: Very high • Site Selection tips: Red spruce is a relatively shallow rooted species, especially when first establishing. Planting it in a sheltered area or alongside companion tree species will increase stability. • Companion planting tips: Yellow birch, Sugar maple, White pine. 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 20 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 7 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 48 liters of runoff avoided ○ 2,498 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>

<p>Apple tree (<i>Malus species</i> or <i>Wenju'su'naqsi</i>)</p> <p>There are only two apple species native in Canada: the Pacific and Wild crab apples native to coastal British Columbia and southern Ontario respectively. However, there are hundreds of apple cultivars planted in orchards and elsewhere across Canada, many of which are now considered naturalized. Apple species have grown in importance as a food and nectar source for birds and pollinators, and of course are prized by people!</p>	<p>APPLE TREE ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 10 metres • Flowering season: late-May to early June • Moisture and soil preference: Well-drained, loamy soil. • Shade tolerance: Moderate • Site Selection tips: Most Apple cultivars are low maintenance. They can withstand partial shade and most soil types without fertilizing. However, a site with 8 hours of full sun will likely result in the best fruit production. • Companion planting tips: Other fruit trees or native flowering plants to attract pollinators. Planting Marigolds nearby may help reduce likelihood of aphid infestations. 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 10 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 4 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 45 liters of runoff avoided ○ 2,312 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>

<p>Peach tree (<i>Prunus persica</i>)</p> <p>This species is native to China but is not expected to become invasive in this region. It has been distributed across the world for its showy displays of spring flowers and juicy summer fruit. They do well in hot and humid weather and can start producing fruit as quickly as 2 years after planting!</p>	<p>PEACH TREE ILLUSTRATION</p> <p>Reference 1</p> <p>Reference 2</p>
<p>QUICK FACTS AND TREE CARE:</p> <ul style="list-style-type: none"> • Typical max height: 4 metres • Flowering season: late-May to early June • Moisture and soil preference: Moderately moist, but well-drained soils. Fertilizing with natural compost may be needed. • Shade tolerance: Low to Moderate • Site Selection tips: Choose an area with full sun for the best fruit production. As this species can be sensitive to cold, covering through the winter with landscape burlap or similar is recommended. • Companion planting tips: Other fruit trees or native flowering plants to attract pollinators. 	<p>CLIMATE CHANGE STATS:</p> <p>When this tree reaches 10 cm in diameter, it will provide the following benefits yearly*:</p> <ul style="list-style-type: none"> • 6.7 lbs carbon sequestered • Stormwater mitigation: <ul style="list-style-type: none"> ○ 51 liters of runoff avoided ○ 2,651 liters of rainfall intercepted <p>*Stats provided by : https://mytree.itreetools.org/#/benefits/individual</p>