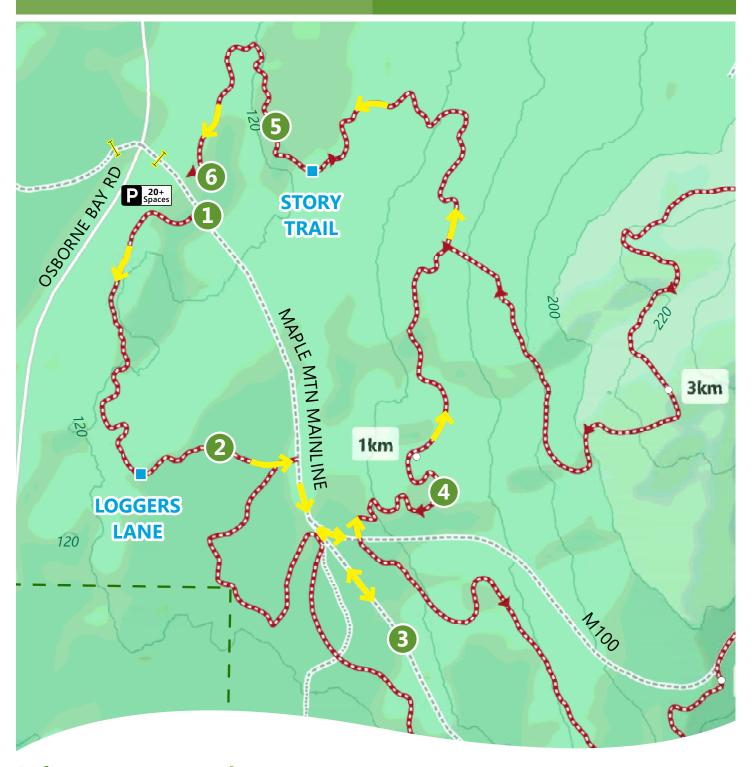
SELF-GUIDED FORESTRY TOUR

MAPLE MOUNTAIN FOREST RESERVE



Before you get started:

- Allow about two hours to walk the tour route.
- Suitable for all ages.
- Walking tour includes sections of dirt trail that may not be suitable for all abilities.
- Cell phone service may not be available within the forest.
- Download this PDF document to your smart phone/device, or print on paper.







About the Municipal Forest Reserve (MFR)

- The Municipality of North Cowichan is one of the few communities in North America that has privately owned forest lands that are managed for the benefit of residents.
- The MFR is approximately 5,000 hectares of feesimple private land owned by the Municipality and managed by the Forestry Department.
- The lands were acquired from non-payment of taxes during the 1930s and 40s, and in 1946, Council put them into a Municipal Forest Reserve. North Cowichan's MFR includes six major land holdings: Mount Prevost, Mount Sicker, Mount Tzouhalem, Mount Richards, Maple Mountain, and Stoney Hill.
- The forestry department was established by Council in 1981 and is currently self-funded, with no costs to North Cowichan taxpayers. The program is responsible for all aspects of this land including forest planning, harvesting, silviculture activities, road system maintenance, fire protection, security, and forestry education.
- Funds generated from the land base cover the associated expenses of managing forest activities, plus community supports such as secondary school scholarships and annual wood working contest, and firewood donations.

About Maple Mountain

The Maple Mountain portion of the MFR is just under 1000 hectares in size and is a recreational destination for hiking, biking and horseback riding:

- There are about 30km of trails on Maple Mountain with approximately 35,000 annual visitors.
- Maple Mountain is the only area within the MFR
 with a Council-adopted forestry management
 plan, adopted in 1992. It started as a pilot study
 to incorporate Integrated Resource Management
 Planning as recommended by the Forestry Advisory
 Committee.
- Integrated resource management balances uses such as public access, archaeological considerations, water management, aesthetics, bird watching, education, recreation, wildlife, and timber – while maintaining the area as a working forest.

Respect our parks and forests

- Motorized vehicles are not permitted on Maple Mountain.
- Pick up after your dog and deposit feces in designated garbage cans (located at trail heads).
- Please stay on designated trails.
- Cutting trees and picking plants is not permitted.
- Overnight camping, campfires, and fireworks are not permitted.



LEAVE NO TRACE

Take nothing but pictures. Leave nothing but footprints.



Forestry and bylaw staff regularly patrol the Municipal Forest Reserve and look out for unauthorized vehicles, tree poaching, and other infractions. If you see unauthorized activity in the forest, call 250-746-3100

Visit <u>northcowichan.ca/forestry</u> for more information, background, and resources related to Maple Mountain and the Municipal Forest Reserve.





Cutblock M-81 – 6.1ha – Harvested in 2011 and planted in 2011 with primarily Douglas fir (Fdc) with some white pine (Pw), red cedar (Cw) and grand fir (Bg).

General silviculture practices

- Harvest areas are planted to an overall target of 1100 stems per hectare (sph) during the earliest possible planting window which is generally in the spring between March-April:
 - > Stems per hectare is a density measurement of the amount of trees in the planation.
 - > The last survey showed that M-81 had over 1,300 sph.
- The majority of the trees planted throughout the MFR are Douglas fir with some white pine and Western red cedar:
 - > Seedlings are sourced from Island Tree Nurseries.
 - > The goal is to mimic the tree profile that was harvested.
- Forestry staff monitor and survey the plantations until the planted trees are considered to be at a "free to grow" state. This is when the planted trees are tall enough to not be impeded by competing vegetation and are "free-to-grow" into a mature tree, generally achieved between 8 and 13 years after planting. M-81 was considered free growing in 2019.
- Browse protectors/cones are installed in some areas to protect trees from animals such as such as deer and elk. You will notice protectors/cones on this tour route.
 - Maple Mountain is particularly prone to browsing related issues as a result of a healthy deer population.
 - > Browse protectors/cones are removed between 2-4 years, or when the tree leader has grown outside of the cone.
- The lower branches of white pine are pruned to help prevent a species of rust fungus that is transmitted primary by adjacent low growing vegetation. Look around in this plantation, and you will see where some of the white pine are missing lower branches as the result of pruning.
- Competing vegetation such as Scotch broom and red alder is removed by manual brushing with chain saws or clippers/loppers. This better allows the trees to reach a free-to-grow state.

Parks and recreation

This stop highlights the importance of recreation on Maple Mountain.

North Cowichan's Parks and Recreation Department is responsible for the maintenance, operation, development, and upkeep of approximately 200 kilometres of recreational trails within the MFR.

The Parks and Trails Master Plan was adopted in 2017 and guides these recreational activities.

The Cowichan Trial Stewardship Society (CTSS) works closely with North Cowichan seeking input and advice on new trail development and on potential impacts due to harvesting activities. CTSS is also responsible for maintenance of sanctioned trails within the MFR.

North Cowichan also works with many other user groups, citizens and neighbours in providing access to recreation, coordinating programs and services, and developing sport/recreation infrastructure for activities such as horseback riding and kayaking.

Most main trail entrances and parking lots now have large trailhead kiosks with overview maps that show the trail networks, directional flow, and if the trails are hiking, biking or both.

North Cowichan's extensive trail network can also be explored on the free "North Cowichan Trails" app. This app provides maps of all the sanctioned trails within the MFR.





2018 Maple Mountain fire

- In 2018, 5.9 hectares were burned at two separate locations. The cost was approximately \$330,000 (shared between North Cowichan (\$110,000) and BC Wildfire Service (\$220,000).
- Arson is suspected as several ignition sites were found by fire inspectors. After RCMP investigation, a suspect was identified, arrested, and interviewed, but there was insufficient evidence to proceed with charges and the investigation has been concluded.
- The fires at this location involved a nine-year-old plantation.
- The second location is about 500 metres from here, down road M-325 in an area with mature forest. This fire came within 200 to 300 metres of residential houses and resulted in evacuation orders.
- The burnt timber was salvaged in 2019.
- The intensity of the fires burned the vegetation down to the mineral soil resulting in tree root damage and creating a safety hazard for the public recreating in the area.

North Cowichan hazard abatement practices

After timber harvesting, small accumulations of fuel (woody debris) are scattered throughout the harvest area where possible. Larger fuel accumulation are piled and then burnt in the fall when weather conditions are optimal, reducing the overall fuel hazard. Smaller accumulations of fuel are scattered throughout the harvest area where possible.

North Cowichan forest practices aim to reduce the amount of waste during timber harvest by ensuring most of the timber is used and making non-merchantable timber available as firewood to residents.

Fire protection in the forest

- Taking quick action on a wildfire is a top priority for North Cowichan's four fire halls.
- Neighbouring fire departments can also support and supply equipment if needed.
- Mount Prevost and Mount Sicker are outside of North Cowichan's fire protection boundary, so we have an agreement with BC Wildfire Service that they action any fire within those forests
- North Cowichan's Forestry Department funds fire protection in the MFR through the Forest Reserve Fund. This reserve was established to ensure that the forestry department could continue to operate even at times when timber markets are low. Since 1981, a percentage of the MFR revenue profits are allocated to the Forest Reserve Fund.
- It also was put in place to help fund forest fire protection should a wildfire occur. At the end of 2021, the forest reserve fund is around 1 million.







Blowdown salvage harvesting

- An intense windstorm in December 2018 resulted in large areas with blown down and damaged trees both here, and across southern Vancouver Island.
- Here on Maple Mountain, it resulted in trail closures until the blowdown timber and danger trees could be safely cleaned up.
- The windstorm created scattered pockets of blowdown that ranged in size and location.
- In this spot, about 90 per cent of the trees were blown over in a long narrow swath.
- Look closely and see the evidence of blowdown by the angled stumps with parts of the roots exposed.
- During clean-up, wildlife habitat was maximized by leaving high-cut stumps. This was a recommendation by the Forestry Advisory Committee, who reviewed the blowdown salvage harvest plans.
- The clean-up and salvage harvesting of blown-down timber and danger trees began in 2019 and was completed in 2020, and mainly focused on areas that impacted trails. Looking around this area, you can see the trees that we were able to leave in place.
- This area was planted in early Spring 2020, and more trees are planned for 2022. As an area that is susceptible to deer browse, planting more trees will help ensure seedlings survive.



Tree planting on Maple Mountain after the 2018 windstorm

Salvage harvesting – skid trail rehabilitation

- A skid trail (a temporary trail used by logging equipment) was established here to salvage pockets of blowdown timber. Look closely and see the path where a grapple skidder was used to move salvaged timber to the main road.
- The understory vegetation had mostly grown back by the following year.
- This skid trail was placed on higher ground in order to avoid the sensitive wet zone lower down to the left as you continue on the tour.



Blowdown timber salvage

You will notice a different kind of tree protector in this location. These green nylon mesh protectors are Khowutzun Freegro Tree Shelters and are made by members of Cowichan Tribes in Duncan, BC. The ones here were installed by a Cowichan Tribes silviculture crew who planted the Maple Mountain blowdown areas in 2020. For more information about the Khowutzun Freegro Tree Shelters, please visit khowutzunfreegro.ca





Story Trail

The final stop is at Story Trail, marked with entrance way totem poles.

The Story Trails program was a collaboration between North Cowichan, School District 79, and Hiiye'yu Lelum (House of Friendship) Society), to connect First Nations youth with their traditional land, and provide them with team building skills in an outdoor learning environment.

Close to 20 students took part in Story Trails and helped create some of the trails nearby.

The totem poles you see here were erected in 2016 to celebrate the success of the program and there is another set of totem poles at the main entrance to the other trail system.



Story trail entrance

This concludes the tour

We hope you enjoyed your tour on this portion of Maple Mountain. This is the first in what will be a series of self-guided tours that explain North Cowichan's municipal forest reserve, programs, and practices.

Periodically, the municipal forester will host in-person walking tours. Watch northcowichan.ca for updates and news.

Thank you!

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