

Guide for Avon Trail Workers 2016



Introduction

Members of the Avon Trail both enjoy benefits of hiking and accept a sense of stewardship for the trail. No special skills are needed for routine trail maintenance; but there are certain recommended methods which you will need to know. The purpose of this guide is to provide you with this information.

Support Team: The Avon Trail Board of Directors & Trail Coordinator:

The Board's responsibility is to:

- Appoint a Trail Coordinator who with Board approval, appoints and oversees
 - Trail Monitors,
 - Maintenance Crew
 - Trail Auditors

The Trail Coordinator will

- Coordinate the activities of the Trail Monitors (TM)
- arrange for the Maintenance Crew (MC) to perform larger tasks such as
 - removal of downed trees
 - building stiles, bridges, boardwalks as required
- organize workshops for the purpose of training workers for TM
- maintain a comprehensive register of landowners whose property the trail accesses
- contacting landowners re: trail maintenance matters such as removal of fallen trees, etc.
- ensure authorized signs are posted at all access points
- provide financial support for TM & MC as needed
- receive and analyze Trail reports for future actions
- arrange for a Trail Audit every four or five years.

Liability

Liability and the management of risk are increasingly important in trail maintenance. Three parties are involved each having a part in minimizing risk: the landowner, the trail maintenance worker and the Avon Trail Board of Directors

1. Landowners: landowners are protected by the provisions of the Occupiers' Liability Act, which says that individuals using a recreational trail in a rural area and paying no fee for its use, assume the liability for their actions onto themselves. The landowner has an obligation to not deliberately and knowingly create a hazardous situation with apparent disregard for the public's safety. For example, they are not allowed to set traps in the immediate proximity of the Trail.
2. Avon Trail General Comprehensive Liability insurance protects landowners in the event of hiker accident while on the landowner's property.
3. Trail Monitors undertake the task of regular inspection of their designated section in order to keep the trail in a reasonable and safe condition for hikers. They report at least twice a year to the Trail Coordinator on their inspections and maintenance work using the Trail Monitor Report form. Hazards are reported and dealt with promptly. A construction crew is engaged to build structures that ensure safe passage along the trail – structures such as stiles, footbridges, and

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boardwalks. Trail maintenance workers are cautioned not to deliberately create any situation which might be construed to be hazardous, for instance placing rocks or logs across the trail to discourage bikers. Such actions could be detrimental to the landowner's and the Association's legal position.

4. The Avon Trail Board of Directors: The organization carries liability insurance to protect it from claims for damages incurred in connection with the use of the Trail. As an organization managing a recreational trail, the Avon Trail has a duty to act in a responsible manner, and to act as a reasonable person would under the circumstances. The Trail Coordinator, acting on the authority of the Board ensures regular inspection and maintenance of the Trail, reports hazards and deals with them, and keeps records of all maintenance activities. It is the Board's duty to adopt reasonable standards of trail grooming. The Avon Trail has adopted the Bruce Trail Conservancy standards as the standard for our trail. These actions reduce our exposure to insurance risk and claims.

What does being a trail worker involve?

Grooming and maintenance of the trail is carried out by two groups: Trail Monitors, and the Maintenance Crew. Trail Monitors are assigned a specific section of the trail to look after and carry out lighter grooming and trimming. The Maintenance Crew will carry out heavier, larger tasks anywhere along the length of the trail.

Trail Monitors: The Trail is divided into 15 sections with varying lengths. Our goal is to assign two Trail Monitors per section.

Expectations of Trail Monitor:

- Walk your section three times during the hiking season – April, June and October
- Send in a report to the Trail Co-ordinator twice a year – end of May and mid October using the Trail Monitor Report form found on the Avon Trail website (www.avontrail.ca)
- Immediately report hazards or unsafe conditions to the Trail Coordinator.
- Be alert to ways the trail might be improved:
 - minor re-routes to avoid perennially wet areas,
 - avoid proximity to barbed wire fencing

Basic tools for trail grooming:

- pruning shears, short and long handle
- saws – greenwood saw, bow saw
- basic first aid kit, cell phone, work gloves
- blazing kit (see p.4 for items contained in a kit)

Other tools and equipment:

- brush cutters with hardhat, ear protection and face shield
- BearCat with hardhat, ear protection and face shield
- shovels, rakes
- posthole digger.

An inventory of tools available for loan can be found at the end of this document.

For safety reasons and for a case of emergency, it is a requirement that no member goes out on the Trail alone to do trail work. It is safer should an emergency arise to always go in the company of another trail member and it is more fun and conducive to club morale. A team should consist of no less than two people going out together to work on a site and then one of the team send in a report to the Trail

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Coordinator. For safety reasons, when power equipment is being used, it is strongly recommended the Crew be made up of a minimum of three persons. The Avon Trail Board of Directors encourages Trail Monitors and Maintenance Crew volunteers to take first aid training with a certified trainer such as the Canadian Red Cross or St. John's Ambulance. Costs for such training may be partially subsidized by the Board on receipt of such requests.

If you are looking after a section of the trail that needs more than pruning and needs the use of the brush cutter or other maintenance, please contact the Trail Coordinator who will call in the Maintenance Crew or other specialized crew for tasks such as removal of downed trees, construction of stiles, bridges, boardwalks etc.

Maintenance Crew

Who gets to do trail maintenance? Any one - men or women - who enjoy more strenuous physical activity such as digging holes for posts, working with wood to build stiles, footbridges and boardwalks, brush cutting, chain sawing dead fall trees, and other such jobs associated with trail work. These folks are the Maintenance Crew (MC).

All MC are required by the terms of our insurance to annually sign a Release of Liability Waiver Form. Landowners may also need to be contacted in the event of tree fall in case they wish to harvest the logs. Any member who would like to become part of the Maintenance Crew is encouraged to contact the Trail Coordinator to arrange for training.

Due to the inherent risk involved with power equipment (brush cutters, BearCat, chain saw) only those persons who have read and signed the annual Release of Liability Waiver Form and received training by the designated Avon Trail Maintenance Crew person or other authorized training personnel shall use this equipment. Any person wishing to be trained to use the brush cutters may request training by contacting the Trail Coordinator. All operators are required to wear protective wear such as hardhat, ear protection and face shield.

The use of this equipment is for the control of burdock, thistles and brambles that are a nuisance to hikers. This power equipment should **only be used for these purposes**; great care should be exercised to avoid cutting, damaging or otherwise disturbing the natural beauty of the forest floor. Specifically, care should be taken to avoid unnecessarily cutting wild flowers, ferns and other fauna found under a mature forest canopy. Where the footpath is clear of impediments to walking, power equipment **should not** be used.

Special Chain Saw Note: To use a chain saw for trail work, the user is required to have taken the basic Chain Saw Safety Certification course by an authorized instructor such as Battlefield. Courses are offered periodically in the area. Contact the Trail Coordinator for details.

We are concerned for the safety of the hikers and our trail workers. Your safety is our prime consideration while working on the trail. If there is any activity which you think endangers you, avoid doing it and immediately report it to the Trail Coordinator.

Construction projects are carried out by the Maintenance Crew. Stiles, bridges, boardwalks, and step construction are to be done in accordance with the Bruce Trail Conservancy¹ standards. Avon Trail

¹ <http://brucetrail.org/pages/volunteer/training-resources>. There are two downloadable PDF versions – the complete manual (31 MB) and a shorter 'Basic Trail Maintenance Guide for Trail Captains' – recommended.

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members are invited to be trained in these area. Opportunities to become involved in these kinds of projects will be offered periodically to volunteers wishing to receive training.

The ABC's of Trail Grooming

A. Trail width: How wide should the trail be?

The Avon trail is normally a single-file footpath, with a 2 ft (0.6 m) width; the treadway should be solid, stable, and clear of obstacles. To prevent weeds from growing in too quickly, weeds should be cut back to at least 5 ft (1.5 m). Keep debris well away from the trail so as not to encourage weed growth. While the 2 ft width would be ideal, trees and rocks are a natural part of the trail and would be considered exceptions, in creating the ideal footpath. Thistles, burdock, bramble and goldenrod are a nuisance for hikers and should be cut down later in the summer (late July). Prune as high as you can reach – or up to 8 ft, if possible, remembering that we don't want to clear off the canopy of tree branches as this will allow too much sunlight and cause further weed growth. When grooming trees cut branches at right angles close to the base of the branch so the tree can heal its wound and also not leave sharp points for a hiker to get caught on. Cut sucker tree growth at ground level leaving the roots to stabilize the ground. If trees are 'in the way' of the trail, re-route the trail around the tree, rather than cut the tree down.

B. Weed control: Due to the aggressiveness of raspberry growth trail workers can either cut down or pull out the raspberries by their root. Pulling by the root does slow down the growth. Once the root is pulled, make an attempt to step down on the treadway to reinforce the soil. Do not pull out any plants by their root if the root is on a slope whether the slope is on a hill or on the treadway itself as this could cause the soil to erode onto the treadway. Cutting down the raspberries in April, will mean another visit to the trail late May and again in August.

C. Trees: We value trees for the shade they afford the hiker, for shelter afforded wild life and for their sheer beauty. Trees enhance the allure of the trail. From the viewpoint of the Trail Monitor, trees may seem to be in the way. However, the Avon Trail policy is to **protect trees**. Trail Monitors and Trail Maintenance Crew will make every reasonable effort to not cut down live trees. Trimming **deciduous** tree branches (i.e. maples, aspen etc.) in order to clear sight lines for blazes is acceptable and will encourage the tree to send out growth above the blazes. Trail workers will **not** use immature **coniferous** trees (spruce, hemlock, pine) for blaze marks. Removing branches from coniferous trees in order to blaze results in an unsightly, unbalanced tree. Where no other alternative exists, contact the Trail Coordinator who will arrange with the Maintenance Crew to insert a cedar post to mount the required blaze.

D. Blazes: *Please refer to the Appendix of this document for blaze dimensions and blaze positioning relative to one another in the case of turn blazes.* Blazes are the key to finding the route on the trail. The blazes on the Avon Trail are to be 2 x 6, oriented vertically with straight, not rounded lines. A template is included in the blaze kit to assist in making sharp corners. White latex semi-gloss paint should be used on trees; white metal or vinyl blazes may be used on posts. Maples, beech and iron wood are excellent trees on which to paint blazes. Poplar trees have a wax in the bark which causes the paint to peel. **Do not put blazes on immature conifer trees.**

- a. Blazing is most easily done with a team of three
- b. Turn blazes: *Please refer to the Appendix of this document for blaze dimensions and blaze positioning relative to one another especially in the case of turn blazes.*

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- c. White & Blue blazes: The blaze on the main trail is white, while the blaze on the side trails will be blue.
- d. Confirmation blazes: They are normally single blazes on a tree or post *shortly after* a turn in the trail (after a turn blaze) and confirm that a hiker is on the correct trail.
Confirmation blazes are especially important in locations where there may be several intersecting footpaths or spots where the extra pathway(s) are animal paths.
- e. Blazes should be about 1.5 – 1.7 m (5 – 5.5 ft) above the ground preferably on the right side of the trail. Trails on roads should be on the left hand side as the hiker is walking facing the oncoming traffic, if possible.
- f. Avoid using the same tree for blazes marking both directions; should this tree fall, the trail then loses two blazes.
- g. The frequency of blazes depends on the nature of the trail. A trail with a well defined treadway will need less frequent blazing than a trail with a non-distinct treadway which may need more frequent blazes due to twists and turns, alternative paths or dense bush. The general rule is that as you pass one blaze the next blaze should be visible.
- h. Note when blazing in early spring, in a month or two vegetation growth and leaves may obscure your blazes. Trim back branches and vegetation in the vicinity of the blaze. Plan on hiking through the area with someone else in the lead to have fresh eyes view the blazing and foliage growth.
- i. Removal of abandoned blazes: When the route of the trail is changed it is necessary to remove all blazes marking the abandoned route. Methods of obliterating old blazes will vary according to the condition of the paint and what kind of tree or post the blaze is located. Camouflage paint is included in one of the loaner blaze kits. To make your own latex camouflage paint, mix 1-part blue with 3 parts medium brown paint.
- j. Blaze kits may be borrowed from the tool inventory. Trail Monitors may find it convenient to make their own kit. A blazing kit contains:
 - i. An empty kitty litter container with lid makes a suitable blaze kit container
 - ii. 2 – 1.5” brushes (one for white, one for camouflage)
 - iii. 2 empty yogurt containers - for white & camouflage paint.
 - iv. Blaze template: Cardboard or wooden with 2”x6” cut-out
 - v. Paint scraper for gently removing rough bark before painting a blaze
 - vi. Small screw lid jar water container for rinsing brushes
 - vii. Supply of rags for rinsing brushes
 - viii. Supply of metal &/or vinyl blazes to be used on posts
 - ix. Nails – 1” aluminum
 - x. Supply of ‘diamond’ signs – 3.5” x 3.5” for use at trail heads
- k. Metal or vinyl blazes are mainly to be used on cedar posts or hydro poles.
- l. While the trail may be obvious to you, once you become familiar with it, have someone not familiar with it lead you along the trail and take note of when they hesitate – as this would be a spot that blazing may be needed to avoid confusion on the trail.
- m. Your confidence and competence with blazing will grow the more experience you gain. Try it first with one of the experienced hiking members.

E. Special circumstances

- a. Windfall across the trail: When a log falls across the trail if it is less than 20 cm above ground level just leave it as it is easy for the hiker to step over it. If it is greater than 20 cm above ground level, it should be removed by swinging it or sawing it into two or three

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sections or sawing it half way down so that hikers have an easy step over it. The landowner should be contacted if the fallen tree is large since many landowners harvest the lumber.

- b. Wet areas on the trail: Choosing a path for the trail to steer clear of a wet area is the easiest way to deal with this. Warning the hikers ahead of time in the Guide Book that they could be experiencing a wet area will help. Providing stepping stones is the most permanent solution if they are readily available. Boardwalks are an expensive solution.
- c. Side logging: Side logging can be used in an area where the trail narrows with a drop off close to the one side. Set up the side log on the side closest to the drop off edge and add branches to raise the height of the “railing”. Secure the logging with angle irons or stakes.

Signage

Avon Trail signs measuring 12” x 16” must be mounted at every trail head. These signs are to be mounted 30 meters in from the trail head and approximately 7 ft. up a tree or post so as not to be obvious and conspicuous to the casual motorist driving by on the road. Where these signs are affixed to trees, plastic screws must be used. Signage of this nature is a requirement of the Avon Trail’s risk management policy. Every Trail Monitor should ensure these signs are in place as part of the regular trail monitoring duties and report any missing signs. Arrangements to replace missing signs can be made by contacting the Trail Coordinator.

The Avon Trail diamond sign measuring 3.5” x 3.5”, should be secured at the actual trail head wherever the entrance to the trail may not be obvious and easy to spot, for example, where the trail enters a woodlot.

All signs must be approved by the Avon Trail Board

Support personnel

President,
Trail Coordinator,
Maintenance Crew Chief,
Tool Inventory Warden

To contact any one of these, please email: info@avontrail.ca

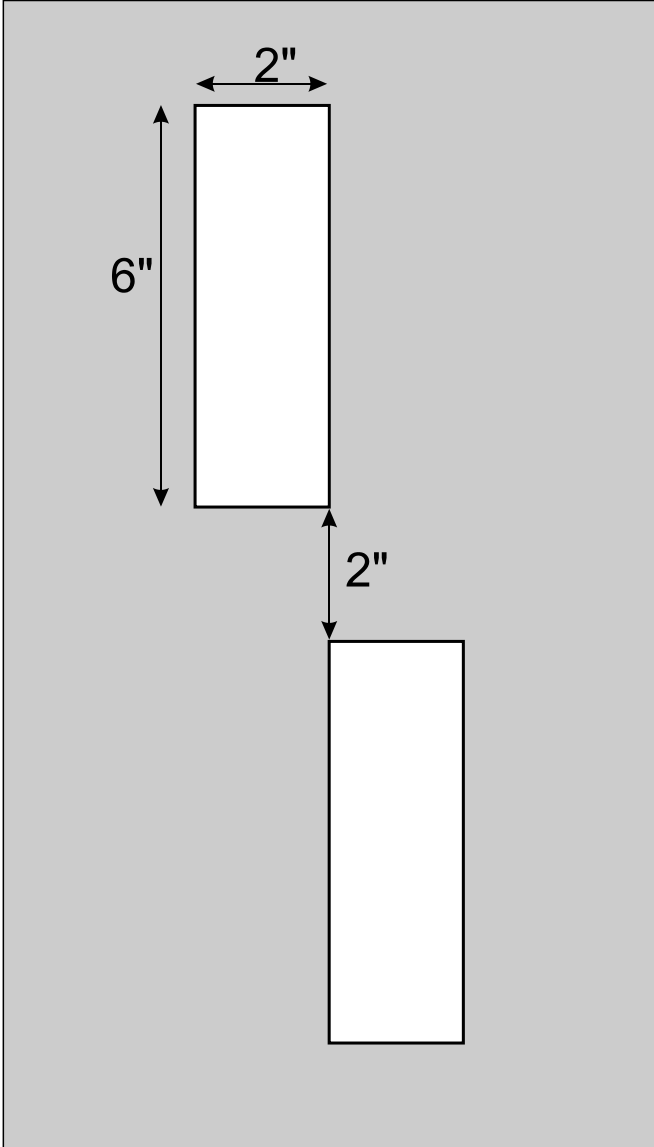
Revised – 2016

Acknowledgement to the *Bruce Trail Guide to Trail Workers* as found on the Bruce Trail website: www.brucetrail.org Select the tab ‘Volunteers’ and then ‘Training Resources’. Two versions of the manual for trail maintenance are listed, one extensive and the other abbreviated but nevertheless useful.

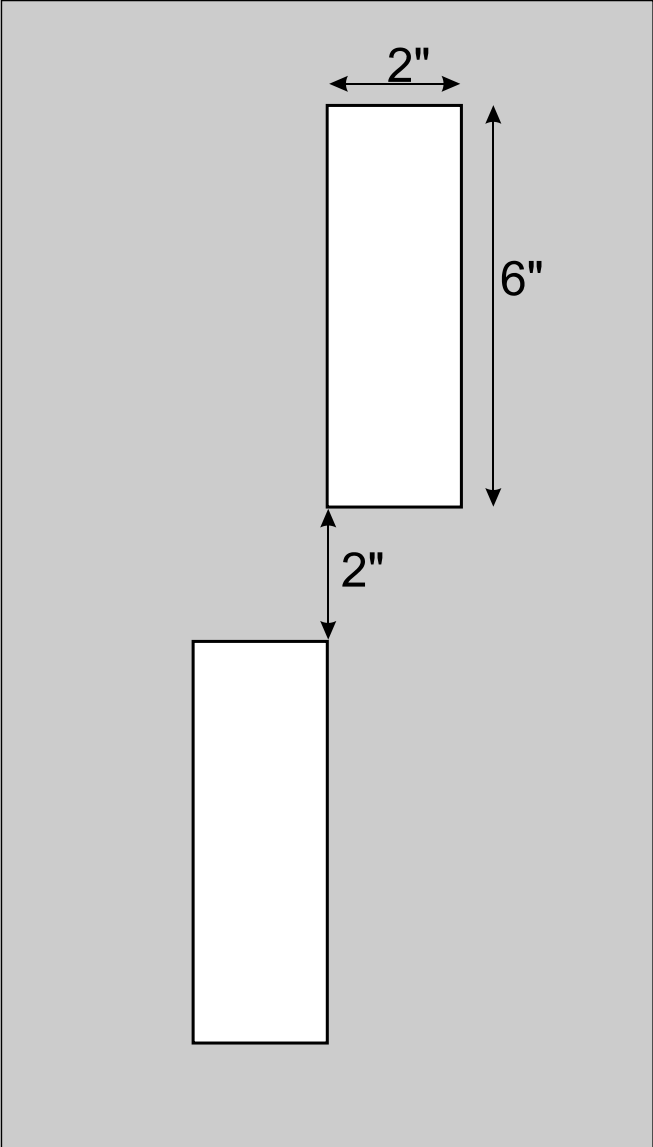
APPENDIX

See the notes below the diagram.

Left turn blaze



Right turn blaze



NOTES

For all turn blazes there is a 2" **vertical** gap between the upper and lower blazes.
For the left turn blaze, the right side of the upper blaze lines up with the left side of the lower blaze.
For the right turn blaze the left side of the upper blaze lines up with the right side of the lower blaze.