

**OAK RIDGES TRAIL ASSOCIATION (ORTA)**



# **GUIDE FOR TRAIL MAINTENANCE**

Revised: September 2024 (supersedes: June 2003; October 1999)

## Objectives and Responsibilities

The Oak Ridges Trail Association established a number of Chapters along the Moraine. Each Chapter is responsible for PLANNING, DEVELOPING AND MAINTAINING a section of the Oak Ridges Trail.

## Guidelines

The following provides guidelines for

1. Trail Appearance
2. Blazes
3. Signage
4. Built Structures
5. Trail Condition Report

Trail Workers must adhere to the Safety Policy for Trail Workers and complete and sign the Acknowledgement of Risk and Waiver of Liability Form. Both documents are attached to these Guidelines (Appendix A and B).

### 1. Trail Appearance

#### ***How wide and high should the trail be?***

The trail should be cleared to at least 1.5 meters (5 feet) wide and the actual treadway 0.6 m. (2 feet) wide. Where public or private existing trails are less than 1.2 meters wide, they should be evaluated and, in most cases, left as they are. This helps to preserve the environment and discourages other means of use.

Each trail should be cleared as high as you can reach, **up to 2.5 m. (8 feet) high**. Remember when clearing to keep the natural canopy in mind, i.e., not to create gaps in the overhead forest canopy. Use the 2.5-meter height as a guideline. Use a common-sense approach.

For sections that have **intensive growth on the trail (weeds, grass etc)**, a program for regular, more frequent maintenance should be set out and closely followed.

Trails should also be free of litter and cleaned up promptly. Excessive waste should be reported to the Chapter Chair for follow up. If sharp objects (sharps), such as used needles and syringes, razor blades, broken glass, and other used items are encountered, please refer to your municipality for guidance on their safe handling and disposal, or see [Safe Handling & Disposal of Sharps & Medical Supplies in Home Health Settings](#), published by Public Services Health & Safety Association.

### ***What about treadway surface and windfalls across the trail?***

Trail surface should be uncluttered for safe passage of hikers. Logs, for example, that are less than 8 inches in diameter can be left and stepped over. If the tree log is greater than 8 inches in diameter, the log should be removed or cut the width of the treadway to leave an opening for hikers to pass through.

Note: It is not the policy of the Oak Ridges Trail Association to deliberately place logs or other obstructions across the treadway to discourage mountain bikers and motorized vehicles. This could create a liability issue for the Association.

### ***What to do about wet areas?***

There are several options on how to deal with wet areas. Your first option should be to ask the question: Is this the best location for the trail? It is better to reroute, if feasible, than to disturb the surrounding environment. Only after this first option is intensely scrutinized should you proceed to other possibilities. These other options could be as follows: stepping-stones, wood chips, corduroy, trenching or board walking. For detailed guidance, please refer to the Bruce Trail Association publication, [\*Basic Trail Maintenance Guide for Trail Captains and Trail Workers\*](#) (3<sup>rd</sup> Edition).

## **2. Blazes**

### **Main Trail Blazes:**

#### ***Why are the blazes 5 x 15 cm (2 x 6 inches), rectangular and painted white?***

The size, colour and shape of the blazes used by ORTA Bruce and Appalachian trail associations. Note the blazes must have clear-cut lines so that they stand out from the irregular shapes of natural features. Note also that trees will grow over time and the blazes will grow with them, so you may need to scrape off the paint on some of the blazes to keep their size at 5 x 15 cm. In addition, blazes that are faded will need to be repainted.

Where there is a problem with blazing on lightly coloured surfaces, use the tuxedo blaze which is a white blaze framed with a larger black rectangle. This is still a white blaze except it is framed with a larger (3x7 inch / 8 x 18 cm) black rectangle.

Take your time to ensure that all blazes are neat, have straight lines and are the same size. Carelessly painted blazes imply a lack of respect for the landowner and the beauty of the natural environment, and reflect badly onto our Association.

Paint is used for blazes because of its durability. Use an exterior semi-gloss latex paint. Latex paint is water-soluble and the brushes and blaze equipment can be cleaned with water.

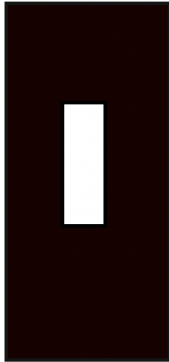
***What equipment do you need for blazing?***

<b>Type of Tool</b>	<b>Use</b>
Paint Scraper	To clean and smooth the bark in preparation for painting
Pruners and Loppers	To prune small branches that may hide the blaze
Safety Glasses	To protect your eyes when scraping, painting, scrubbing or pruning at eye level
Wire Brush	To scrub old blazes off rocks, concrete posts, etc.
Sand Paper	To remove blazes from lampposts
Screwdriver	To install, loosen and remove screws from signs.
Template	For painted blaze
Template	For tuxedo blaze
Black Marker	Could be used for outlining before blazing and tuxedoing existing blazes. A black paint stick could be used also
Paint Brushes	1 to 1-1/2-inch natural bristle paintbrush 1/4 to 1/2-inch natural bristle paintbrush for tuxedo Extra brushes for back up
Paint	White semi-gloss latex paint (exterior) for main trail blazes Blue semi-gloss latex paint for side trail blazes (Pantone 2915) Black semi-gloss latex or alkyd paint for tuxedos. Grey spray paint for painting out blazes on metal posts
Water	To clean up paint
Cloth	To correct mistakes and clean up
Latex or Cotton Gloves	To keep hands clean
ORTA Brochures	To give to potential members
Basket or container	For carrying tools

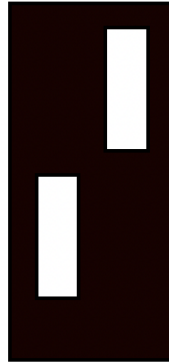
***What are the types and meaning of the blazes used?***

**Blaze Colours:** White for main trail  
Blue for side trails

Straight Ahead



Right Turn



Left Turn



T-Blaze (End of trail)



These are the only blazes that are acceptable for marking the Oak Ridges Trail. A double blaze straight above the other is not acceptable. **PRIOR TO THE PAINTING OF ANY NEW BLAZES, IT IS THE POLICY OF THE OAK RIDGES TRAIL ASSOCIATION TO OBTAIN PERMISSION FROM THE LANDOWNER (I.E., A CONSERVATION AUTHORITY, TOWN, CITY, OR PRIVATE LANDOWNER.**

**Side Trail Blazes:**

Side trails are secondary trails that are not part of the main trail. The side trails are blazed with ORTA approved blue paint (Pantone 2915). The type of paint to use is exterior semi-gloss latex.

Immediately before reaching the side trail intersection, paint a blue double blaze on the main trail to advise hikers to indicate that the side trail is coming up.

Upon turning on to the side trail, the first blue blaze should be visible from the junction point and should have a side trail sign above it. When the hiker reaches the termination point, place a T blaze as close as possible to the main trail junction.

***Where should the blazes be located?***

- Blazes should normally be located at eye level, 1.5 m (5 to 6 feet) above the treadway and preferably on the right side of the trail. The exception to this is on roads where the blazes should be on the left side of the road to encourage hikers to walk facing oncoming traffic.
- Do not blaze both directions at the same time. Blaze one direction and then blaze the other direction.

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- Pay particular attention to blazing at the intersections of trails. For curves in the trail, use common sense. All curves in the trail do not need turn blazes.
- As you pass one blaze you should be able to see the next blaze, but the distance may be extended if there is no cause for confusion. It is best to add an extra blaze if needed to avoid the possibility of hikers getting lost, while taking care not to over-blaze.
- If you select a dead tree, ensure that it is solid and sturdy.
- If you blaze in the summer, you should check to see if the blazes are also visible in the other three seasons of the year.
- For new trails it is recommended that more blazes be used.
- Where there are insufficient trees or existing posts to paint blazes on, metal T-bars or U-bars can be pounded in and blaze boards attached, or cedar posts can be dug in.

### 3. Signage

#### *Why do we have signs?*

Signs are used by ORTA to:

- identify the trail to the public,
- remind hikers of the Trail User's Code, and
- provide information on how to contact the Association.

#### *What are the Official ORTA signs and when should they be used?*

##### **Trail Markers 15 x 13 cm (6 x 5 inch)**

Trail Markers are available in two colours:

- green on white background for Main Trail Marker
- black on blue background for Side Trail Marker

The purposes of these signs are to:

- indicate the route of the trail,
- advise hikers of intersecting trails, and



- make hikers feel comfortable that they are on the correct trail.

Generally, these small signs should be placed at least 3/4 to 1 km apart where possible keeping in mind the above three reasons. In areas where the trail is flat and straight, you may decide to mount these signs two kms apart.

**Trail Access Signs 30.5 x 30.5 cm (12 x 12 inch)**

The colour of this sign is green on a white background.

The purposes of these signs are to:

- identify entry and exit points,
- inform trail users that Trail is built and maintained by volunteers,
- make hikers aware of trail etiquette, and
- provide information about the Association.



Install these signs at access locations such as road crossings, places where a trail leaves a traveled road, or in a parking lot that leads directly to the trail.

**Side Trail Access Signs 30.5 x 30.5 cm (12 x 12 inch)**

The colour of this sign is black on a blue background.

The purposes of these signs are to:

- identify entry point and name of a side trail, and
- inform trail users of the distance of the side trail and/or loop

**Installation of signs**

All new signs should be mounted on 12 mm (1/2-inch) pressure treated plywood backing. The plywood backing helps to prevent damage to the signs by vandals, and eliminates the problem of trees growing out around the sign and its nails or screws. Attach the signs to the backing with 1/2-inch #8 square head wood screws.

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Before going out to the trail, pre-drill two holes one above the other (not side by side) through the sign and backing. Use 2½ inch #10 square head wood screws (#2 Robertson - red). Coated deck screws could also be used. Use a washer at the front of the sign.

When the sign is to be attached to a hardwood tree, it is recommended that holes in the tree be pre-drilled.

Leave the sign out from the tree at least ¼ -inch to allow room for the tree to grow. When that space is used up, the screws can then be backed off to allow for future growth.

### Source of Signs

All signs must be obtained from the Trail Director. Prior to use, the ORTA Board of Directors must approve any sign that is not in accordance with this policy.

## 4. Built Structures

Built structures, such as bridges, boardwalks, stiles and steps, are located on many ORTA trails. These should remain in good condition, stable and well anchored. Built structures that are in disrepair or showing signs of decay should be addressed promptly. Structures that cannot be easily be repaired or that need to be replaced should be reported to the ORTA Chapter Chairs for follow up. For detailed guidance, please refer to the Bruce Trail Association publication, [\*Basic Trail Maintenance Guide for Trail Captains and Trail Workers\* \(3<sup>rd</sup> Edition\)](#).

## 5. Trail Condition Report

The Trail Condition Report is a tool to ensure that the Oak Ridges Trail is safe. It should be filled out for each section that a trail captain is responsible for. The Trail Condition Report can be found at Appendix C, downloaded from the ORTA site, or accessed [online](#).

Each ORTA trail must be formally **inspected twice per year, once in the spring and once in the fall**. Following the inspection, a Trail Condition Report is completed describing the nature of the work done on the trail, and any issues that have been identified on the trail (such as downed trees, hazardous branches, erosion issues, etc.), along with their precise location and urgency of the necessary corrective action.

Trail Condition Reports are then submitted to the Chapter Chair (s) and kept on file for reference. Once all inspections are completed within the chapter, the Chapter Chair must send the reports or a summary of the reports to the Trail Director. For some Chapters, the reports are also sent to the local forestry or conservation authority for follow up.



## **OAK RIDGES TRAIL ASSOCIATION (ORTA)**

### **SAFETY POLICY FOR TRAIL WORKERS**

#### **1.0 INTRODUCTION**

##### **1.1 PURPOSE**

The purpose of this policy is to ensure that volunteers and employees participating in the construction and maintenance of the Oak Ridges Trail do so in a safe manner, thereby minimizing risk of injury and associated liability to the ORTA and its officers.

It is ORTA's duty to adopt reasonable standards, and to ensure that they are being applied on the Trail. All volunteers and employees shall be made aware of this policy.

##### **1.2 TRAIL WORK**

- (a) Trail workers should be made aware of the hazards and risks involved in the work to be done.
- (b) Trail workers participating in trail building or maintenance should sign an acknowledgement of risk and waiver of liability form (Appendix B).
- (c) Written documentation should be prepared for the project, describing the work; when, where, who is involved, expectations. This should be filed along with the above-mentioned waiver forms.
- (d) Trail work must only be done at the instruction of a Trail Captain or Chapter Chair. The Trail Captain, Chapter Chair or their designate shall be present and undertake responsibility for all trail work.
- (e) New trail construction must be done with the landowner's prior knowledge and approval including approval of the specific details of the physical construction planned.
- (f) Maintenance of the existing trail must be conducted within the restrictions and limitations specified in any land use agreement signed by the association and the landowner.
- (g) Trail building and maintenance should be done only by those who have been trained and equipped for the tasks at hand.
- (h) Trail workers should not work alone in situations involving the use of power equipment, climbing, or other increased risk activities.
- (i) Power equipment (e.g. chainsaws, brush cutters) must only be operated by trained persons or those whose experience with such machinery can be

verified (examples: groundskeeper, farmer). Power equipment must never be used by inexperienced operators.

- (j) Safety equipment must be worn at all times when using powered equipment.
- (k) When repairs are required to the trail, the Trail Captain or Chapter Chair should determine who has the primary responsibility to make the repair. For example, removal of a large fallen tree may be the responsibility of a conservation authority, on whose land the trail exists, and which has the trained and experienced staff to remove the tree.

## 2.0 USE OF EQUIPMENT

### 2.1 SAFETY

- (a) Power equipment includes, but is not limited to, chain saws, string trimmers, brush cutters, and any other machinery which is powered by gasoline or electricity. Battery-operated equipment is not included.
- (b) All operators of power equipment shall be properly trained in the safe use of the equipment (see Training).
- (c) All operators of power equipment shall use appropriate safety equipment and protective clothing. ORTA will provide same if the operator does not possess it.
- (d) All work crews should include at least one person trained in first aid and this person should not be operating power equipment.
- (e) In the case of chainsaws and brush cutters, appropriate safety equipment consists of a minimum of:
  - hard hat with eye and ear protection
  - CSA approved safety boots
  - chainsaw pants or chaps
  - chainsaw gloves

In the case of string trimmers, appropriate safety equipment consists of a minimum of:

- eye and ear protection
- high top safety boots
- long pants made of heavy material
- heavy-duty, non-slip gloves

### 2.2 TRAINING

- (a) Operators of chainsaws must have verifiable experience or have completed an approved chainsaw safety course.
- (b) ORTA may arrange training courses depending upon need and availability.
- (c) The Trail Director will maintain a list of approved chainsaw safety courses.
- (d) ORTA will reimburse the cost of required training courses.

- (e) Training courses are offered by some community colleges, equipment manufacturers and distributors, the Bruce Trail Association, the Ontario Forestry Safe Workplace Association, the Construction Safety Association of Ontario, Landscape Ontario Horticultural Trades Association, and others. Courses may also be offered by your local Ministry of Natural Resources or Conservation Authority office.
- (f) A list of trained, qualified persons will be kept by ORTA.

### 2.3 OPERATING TIPS

- (a) During the use of a chainsaw, two people besides the operator should be present to ensure safety of the operator and any other persons in the vicinity. One person should be positioned on the trail to each side of the chainsaw operator to warn any approaching hikers.
- (b) The brush cutter operator must be given a wide berth; concentration on controlling the swath and the direction of the blade coupled with the noise of the machine will make the operator oblivious to other workers "in the way".
- (c) Operating a brush cutter can be tiring when used continuously for long periods. It is recommended that a second qualified person be present to take turns operating the machine.
- (d) One person should precede the cutter to remove rocks, branches, bottles, cans and other debris which could become a projectile or damage the equipment.

**APPENDIX B**

**OAK RIDGES TRAIL ASSOCIATION TRAIL WORK  
ACKNOWLEDGEMENT OF RISK AND  
WAIVER of LIABILITY**

Those signing below acknowledge that there is some level of risk in working on the project described below and releases ORTA and its officers from liability in case of accident or injury.

Description of project \_\_\_\_\_

Date of Project \_\_\_\_\_ Expected duration (hrs.) \_\_\_\_\_

Work Project Leader \_\_\_\_\_

Worker's Name	Signature	Telephone	Emergency Contact Name & Phone

Retain a copy of this and forward the original to ORTA's Trail Director

APPENDIX C

**ORTA TRAIL CONDITION REPORT**

**NAME OF ORTA CHAPTER:** \_\_\_\_\_

Name of Trail Section Inspected: \_\_\_\_\_

Map Number: \_\_\_\_\_ Date of Inspection: \_\_\_\_\_

Name of Trail Captain(s) Completing Inspection: \_\_\_\_\_

Trail Captains please note:

- Refer to the ORTA Guide for Trail Maintenance for additional information
- Advise Chapter Chairs or Trail Director immediately of any land for sale on or near the Oak Ridges Trail
- Use the comments and observations section to describe the nature of the work done and any interesting observations, including suggestions for improvements of any kind
- Complete report on or within a week of the inspection date - your Chapter Chair will arrange any assistance needed and report conditions to the Trail Director

**TRAIL CONDITION**

Check YES for items in satisfactory condition

Check NO if the item is in unsatisfactory condition and add comments in the next section

Check N/A if the item is not applicable to your trail

<b>ITEM</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Litter collected and disposed of (including parking areas)			
Grass and/or shrubbery trimmed			
Branches pruned back, stumps removed and/or windfalls cleared			
Safety hazards eliminated (dead limbs, leaning trees, loose rocks etc.)			
Stiles safe and firmly in place			
Fences in need of repair reported to landowner			
Slope erosion under control			
Wet areas have adequate drainage			
Bridges in good repair with decking intact			
Blazes properly placed and in good condition (freshened up if necessary).			
Blazes (size and shape) conform to ORTA standards			
Old unnecessary blazes - scraped off or painted over			
Signage on trail in good condition and installed properly			

**TRAIL CONDITION COMMENTS**

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If an item is checked NO in preceding section, please add further comments on the issue, including action taken:

### SIGNAGE

If additional signs are required, please indicate number of signs needed in the space provided

<b>SIGN TYPE NEEDED</b>	<b>YES &amp; NUMBER</b>	<b>NO</b>
Additional Small (6x5) ORTA signs		
Additional Large (12x12) ORTA signs		
Other signs needed (Describe and attach drawing with dimensions)		

### OTHER ISSUES

<b>ITEM</b>	<b>YES</b>	<b>NO</b>
Any signs of vandalism or misuse of trail?		
Any problems with fires in unauthorized places?		
Any parking problems, e.g., laneways obstructed?		

### COMMENTS AND OBSERVATIONS

If you have identified any issues on the trail (such as a fallen tree or erosion issue), please use the forestry map to note their precise location and the severity of the issue

Once completed, please send to your Chapter Chair, along with any pictures of issues identified.