# Sign Guidelines





The Ontario Trails Council brings the right people together to provide reliable information that advances the management and operation of recreational trails, while providing public access to the largest multi-use trail inventory in Canada.



# **Trailhead Signage**

## **Definitions**

**AODA** – the Accessibility of Ontarians with Disabilities Act and the application of section 80.9 under Ontario Regulation 191/11 Integrated Accessibility Standards

**Blaze** – a wayfinding painted marking on a tree, which may be used as an alternative to a wayfinding sign

**Conduct** – responsible user behavior and operation of any vehicle, watercraft, or animal-powered travel

**Etiquette** – expectations of trail users

**Level Terrain** – is a flat surface (other than designed cross fall and grade) on the trail tread and in the vicinity of the trail that has no part higher than any other

**Motorized** – a trail upon which an Off-Road Vehicle, as referred to in Off Roads Vehicles Act, can operate. A motorized trail may also be a multi-use trail used by hikers, cyclists, equestrian, etc.

**Multi-use** – a combination trail that accommodates more than one type of trail activity

**Non-motorized** – a trail which may be used by hikers, cyclists, snowshoeing, cross-country skiing, dogsledding, paddling (canoe and kayak), winter biking and equestrian

**OTC** – the Ontario Trails Council

**OTM** – the Ontario Traffic Manual series of books

**Roadway** – as defined in the Highway Traffic Act

**Rolling Terrain** – is a condition where the natural slopes, on the trail tread and in the vicinity of the trail, consistently rise above and fall below the tread grade and where occasional steep slopes offer some restriction to normal horizontal and vertical alignment.

**Rugged Terrain** – is a rough irregular surface, on the trail tread and in the vicinity of the trail, that may also be rocky

**Trail Classification** – the application of one of the four trail classes as established by the OTC – provide a link to Trail Class table?

**Trail Steward** – a club, organization, association or municipality who may be staffed by paid personal or unpaid volunteers, who own the land upon which the trail resides or have an agreement or agreements with private property owner(s) for the use of the land and is the club, organization, association or municipality responsible to maintain a trail

**Trailability** – an individuals own level of trail-use readiness, insofar as their physical ability and provisions needed to use the trail

**Trailhead** – the point at which a trail begins, the main source of information and may include car parking, kiosk signs, maps and brochures, rest rooms and so on.

**Tread** – the ground surface upon which users travel and may be a hardened tread (AODA defines hardened as asphalt, concrete or stone dust), a compacted tread (soil stabilizers, aggregate and mineral) or a natural tread (insitu mineral or no treatment)

**Wayfinding** – information systems that aid in trail navigation

**Yield Appropriately** – do your utmost to let your fellow trail users know you're coming

# **Acknowledgements**

## **OTC Risk and Liability Working Group**

Kara Bunn, City of Hamilton (co-chair)
Brian Anderson, Intact Public Entities (co-chair)
Dan Andrews, Lake Simcoe Region Conservation Authority
Patrick Connor, Ontario Trails Council
Jeff Jackson, Direct Bearing Consultants
John Foster, Ontario Parks
Zane Davies, Treadscape
Jeff Price, Intact Public Entities



Mike Muldoon, Northumberland County Scott Langley, Bruce Trail Conservancy

## **OTC Technical Working Group**

Brian Anderson, Intact Public Entities
Zane Davies, Treadscape
Jeff Price, Intact Public Entities
Dan Andrews, Lake Simcoe Region Conservation Authority
Mike Muldoon, Northumberland County

## A special thanks to

Cedar Signs for their input on sign legibility and readability.

## Introduction

Trail risk management is about identifying hazards that exist along a trial, determining the potential for injury or harm to the trail user because of that hazard, then deciding what can be done to eliminate or at least minimize risk and improve trail user safety. OTC's series of sign guidelines will assist the trail steward with risk management by standardizing trail signage and providing information when and where a trail user needs it and in a format that will be consistent across all trails in Ontario. Doing so will allow trail users to go from one trail to another and easily recognize and understand the information provided and improve the trail experience.

This document describes signage located at the trailhead. Trailhead signage provides trail users with information about the trail they are embarking upon. The trailhead is a place where a trail user can learn about points of interest that may be along the trail, what type of trail they will hiking upon, what type of trail users they may encounter and what provisions they may need to have with them to safely traverse the trail.

Trail stewards may have their own trailhead signage policy and may choose to continue following that policy. If the trail stewards decide to adopt these guidelines, trail stewards are encouraged to follow this guideline as close as possible. Signing requirements regarding sign placement and content may vary from the guideline based on local conditions. Where compliance is not possible due to local constraints, the reason for non-compliance must be documented and that document retained by the trail steward.

This guideline does not require trail stewards to comply immediately. If trailhead signs already exist, use this guideline as signs are replaced or updated.

The words must, should and may will be used throughout this document, where: Must indicates a mandatory condition; Should indicates an advisory condition; May indicates a permissive condition.



# **Trailhead Signage**

The trailhead is the official point of entry and the main source of information for a trail system. This document will discuss signage that the trail steward must have at the trailhead and signage the trail steward may place at other intentional access points.

Each trail steward will determine the look and feel of the trailhead signage insofar as colours, graphics, font and so on. This guideline will focus on the content of the signage that the trail steward must have and any optional signage that may be at the trailhead.

# 1.0 Waiver Sign

## **Purpose of the Sign**

The Waiver Sign, Figure 1, advises users that the trail is a Recreational Trail and as such is subject to the lower duty of care as provided in the Occupiers Liability Act. The Waiver Sign also informs the trail user that they assume all risk upon entry onto the trail.

NOTE: The Waiver Sign will not eliminate all risk of liability. The trail must be properly maintained. The trail steward must inspect and repair any defects on the trail and maintain the trail in accordance with the level of service set out for your trail in a Trail Management Plan.

Figure 1



You assume all risk when using this trail

This trail is unsupervised.

You are responsible for your own safety.

Using this Recreational Trail exposes you to the risk of serious injury. Injury—can arise from your own actions, actions of other users, the shape and surface of the trail and technical features, debris on or near the trails, or the surrounding wilderness environment. You assume the risk of injury in using these trails and the features on each trail.

Rain may make the surface slippery, Ice may be present in sub-zero weather, Inclement weather may increase the difficulty of a trail or trail feature. Please exercise caution during high winds,

Your club's name liability is limited as outlined with the information contained in this notice and as set forth in the Occupier's Liability Act, RSBC

## **Guidelines for Use**

Content of the sign will vary based on local circumstances, but certain elements of the sign are mandatory, such as: 1) the sign must identify the trail as a Recreational Trail; 2) contain a notice that reading of this sign is mandatory; 3) that the trail is unsupervised; 4) contain wording that identifies the user as the person or persons that assume all risks and that the user is responsible for their own safety; 5) identify that conditions may change dramatically after a rain, wind or snow event. The content of the sign should identify significant potential risks, but the message should be as brief as possible to ensure trail users read the entire message. See page 15 for details on fabricating this sign.



#### Location

A waiver sign must be posted in a prominent location on a separate post as people enter the trail from the parking area. It should be the first sign they see upon entry. At the discretion of the trail steward, a Waiver Sign may be posted at all intentional access points. In urban areas where a trail crosses many roads a Waiver sign may not be necessary at each road crossing if there are no changes to the trail's level of trailability, see OTC's Trailability Guidelines.

## 2.0 Kiosk Signage

## **Purpose**

The primary purpose of the kiosk sigange is to provide information to trail users about the trail, the level of prepardness they will need to use the trail, the level of difficulty they may experience in using the trail, plus amenities and restrictions on the trail. Secondary information may include points of interest on or along the trial and the expected etiquete trial users should provide to each other.

## **Guidelines for use**

The focal point of the sign will be information related to users and include trail classification (as per OTC Guidelines), preparedness, amenities, restrictions, accessibility and the level of difficulty the user will experience on the trial. This information will be centered on the sign and where possible displayed to users with symbols as opposed to text, Figure 2 and 3. The sidebars on the sign will contain secondary information which may include but is not limited too: trial etiquette, trial maps, description of points of interest and other information as deemed appropriate by the trial steward. The masthead of the sign includes the name of the trial and must include the words Recreational Trial to take advantage of the exemptions in the Occupier Liability Act. Along the bottom of the kiosk sign include information on emergency contacts

Signage may be a mixture of standalone signs and signs groupings. Depending on volume of information that needs to be displayed, the preferred option is to place trailhead signs in a kiosk. If minimal information about the trail is required a large post mounted single sign or a sign grouping can be used as an alternative.

If this trail is designated as a Recreational Trail in accordance with the Occupiers Liability Act the words Recreational Trail must be prominently displayed on the masthead of the kiosk sign and have a minimum letter height of 8X, see Figure 6. The trail steward may consider adding QR code(s) to the kiosk sign to provide additional information without using up real estate on the sign. Suggestions for QR codes are included in various sections of the document.



#### Location

The kiosk or sign grouping must be easily accessible in a prominent location a reasonable distance behind the Waiver Sign, Section 1.0, as users enter the trail.

There may be several points of access to a trail, some will be intentional such as where a trail crosses a highway, while other access points may be forged by others possibly creating a shortcut to the trail. The trail steward must determine the signage requirements at each point of intentional access to the trail, other than the trailhead, to ensure a pleasant trail experience and protect the trail steward from liability. For example, a trail in an urban area where the tread material, width and longitudinal grade does not change from intersection with a roadway to the next roadway intersection may not require any trailhead signage as listed in this document. However, should the trailability of one section of trail change from, for example, a trail that is fully AODA complaint to a trail that is not fully complaint then at a minimum a Trailability sign must be posted on the trail within 15m of the intersection.

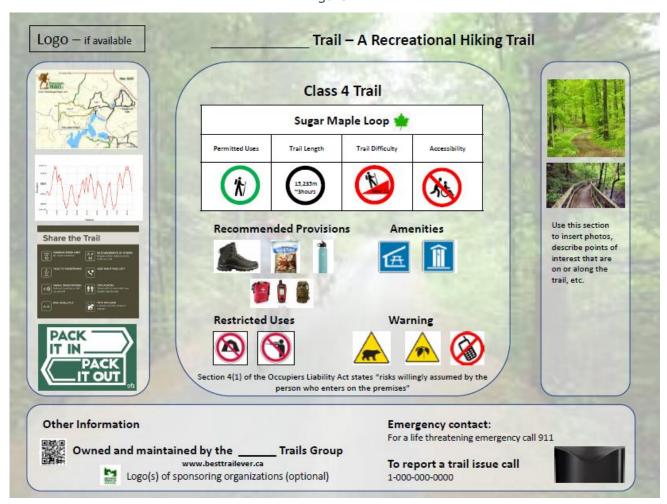
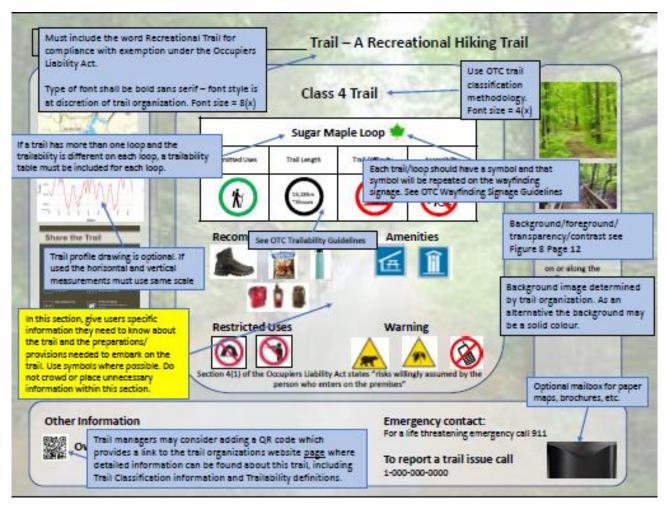


Figure 2



Figure 3



# 2.1 Trailability

Trailability focuses on the individual's own level of trail-use readiness. Recreational trails in Ontario are provided from the perspective of "users assume all risks". The Ontario Trails Council's idea of trailability, Figure 4, is a series best practices that allow users to self compare their level of preparedness with what lays ahead that they should be aware of before embarking on the trail.

## **Guidelines for use**

The colours of the circles are provided as a visual clue as to the level of preparedness for the trail, where Green – lowest level of preparedness and user effort (for a physically fit individual), Blue – low to moderate, Black – moderate to high and Red – highest or restricted level of preparedness. There are two options for posting what provisions a trail user must have with them on the trail: Option 1 show the provisions via symbols on the kiosk sign or Option 2 post a QR code on the kiosk linked to the trail's website page where this information would be posted.



For additional information on Trailability, please refer to OTC's Trailability Guidelines.

Figure 4

Trailability of the trail								
Trail Classification	Permitted Users	Trail Length	Trail Difficulty	Accessibility	Other Amenities			
Class 2	<b>†</b> /	<b>7,253m</b> ~1 ½ hours	Max 1:8	(No.	Rest Area – Yes Washroom – Yes Cell Service – No			

## Location

The Trailability Table, Figure 4, must be posted on the kiosk or sign grouping as shown in Figure 2.

## 2.2 Restricted Uses

## **Purpose**

Where possible trailhead signage should send positive messages to trail users. However, there may be times when Restricted Uses symbols may be required to advise of trail uses which are prohibited.

### **Guidelines for use**

If the trail steward observes or trail users report uses that are not a permitted use, a restricted uses symbol, as shown in the example Figure 5, may be required. The addition of the words, for this example, "No Hunting" is optional.

Location

Restricted Uses must be centered on the kiosk sign, Figure 2, and displayed to users with symbols or symbols and text. An option, in addition to posting restricted uses at the kiosk, is to place restricted uses signs at the entrance to the trailhead affixed to a separate post(s) and prominently displayed so that

the sign(s) is noticed by trail users before they unload equipment (ATV's, camping equipment, etc.) from their vehicle.

Figure 5







## 2.3 Trail Map

## **Purpose of the Map**

The map may provide on-trail and off-trail information along the route of the trail.

#### **Guidelines for Use**

If the map is included on the kiosk sign, it should be in the left sidebar. Paper maps may be made available for users to take with them, if a weatherproof storage container is provided to store the map.

The map should include: the length of the trail and each loop of the trail, a North arrow, whether the route is on-road, follows an abandoned rail line or is a wilderness route. If location markers, see OTC Wayfinding Guideline, are place along the trail, these sign locations must be shown on the map.

## 2.4 Trail Profile

## **Purpose of the Sign**

The trail profile is optional, if used the profile provides a visualization of the longitudinal elevation changes (steepness of the trail) from the start to end of the trail. This information will assist trail users in deciding if the trail is within their ability to use a trail.

## **Guidelines for Use**

The trail profile must be to a scale that will allow trail users to easily visualize the changes in elevation. The same scale should be used for horizontal and vertical measurements. If a trail has more than one loop, each loop must have its own trail profile.

## Location

The Trail Profile sign, if used, should be located on the left sidebar below the trail map.

## 2.5 Etiquette Sign (Optional)

## **Purpose of the Sign**

Etiquette signage sets out the expected behaviour of all trail users.

## **Guidelines for Use**

Etiquette signage may contain all or some of the following information either via pictograms or written out:

Do not litter, Leave No Trace principles.



- Rules for motorized approaching a hiker or equestrian or overtaking and passing a hiker or equestrian.
- Rules for controlling domestic animals, including a stoop and scoop reminder.
- Whether campfires or camping is permitted or prohibited.
- A reminder to obey signs, gates, barriers, etc. they are there for your safety.
- Stay on trail, respect private property.

The information included on the Etiquette Sign should be supported by the trail steward's policy on expected behaviour while on the trail. This will ensure that all staff or volunteers are aware of the required etiquette and can advise users of their responsibility to others and the environment.

#### Location

The etiquette sign must be located in the left or right sidebar.

## 2.6 Other Optional Trailhead Information

Information that the trail steward may want to include at the kiosk or on the sign grouping includes:

- Seasonal restrictions, if any (centered on the sign).
- Wild animals, especially bears, wolves, coyotes, that have been seen recently in the area located in the right sidebar).
- Cell signal availability (centered on the sign).
- Emergency contact information (at the bottom of the kiosk sign) .
- If required, the symbols used and a description which identifies each loop of the trial (centered on the sign).

# 3.0 Sign Fabrication, Colours and Letter Height

For kiosk signs the trail steward can select background colours and apply images as the trail steward deems appropriate. However, the trail steward must follow the guidelines below as certain elements of the kiosk sign will require specific colours and the legibility of the sign is important. Individual signs will require specific background and text colours.

#### **Substrate**

The trail steward may use ¾ inch plywood for the kiosk signage, Figure 2, painted on all sides and edges to improve durability. All other standalone or sign grouping signage at the trailhead whether Figures 1 or 5 may use 0.081m aluminum as this is a durable material that will not rust. Signs produced on an aluminum substrate must have radius corners and should be reflectorized with a minimum Type 1 Engineering grade sheeting.



## Legibility

Legibility means, the physical attributes of a sign that allow for differentiation of its letters, words, numbers, or symbols. At the trailhead, trail users will generally be reading the kiosk signage while standing at the sign. Guidelines include:

- for best legibility, a maximum reading distance of 6m from the sign should be used
- the font used should be sans-serif such Helvetica, Century or Clearview
- text in the body of the message must be a minimum of 10mm in height at the 6m reading distance.
- text should utilize both upper and lower case letters for best readability
- headers, titles, other important information may use a larger text height.
- use pictograms and symbols to replace text as much as possible.
- Be concise with your message, avoid too much verbiage

To be legible the following guideline is provided in Figure 6 to determine message elements sizes.

Figure 6 – Vehicular Speed / Pedestrian Viewing Distance

Vehicular speed	_	_	_	0-15 km/h	20-30 km/h	35-40 km/h	45-60 km/h	65-75 km/h	80-90 km/h	95+ km/h
Pedestrian viewing distance	6 m	9 m	12 m	15 m	30 m	50 m	60 m	75 m	90 m	120 m
The unit "x"	10 mm	15 mm	20 mm	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	200+ mm
Arrow size (3x)	30 mm	45 mm	60 mm	75 mm	150 mm	225 mm	300 mm	375 mm	450 mm	600 mm
Character size (1x)	10 mm	15 mm	20 mm	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	200 mm
Symbol size (4x)	40 mm	60 mm	80 mm	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm	800 mm
Symbol size (8x)	80 mm	120 mm	160 mm	200 mm	400 mm	600 mm	800 mm	1000 mm	1200 mm	1600 mm
Distance size (1x)	10 mm	15 mm	20 mm	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	200 mm

Source – Parks Canada Exterior Signage, Standards and Guidelines



#### **Contrast**

How well one colour stands out from another will determine how well most people can read the information. Colour contrast on signs is the difference between anything in the foreground and its background. Contrast will affect legibility where a low level of contrast will have poorer legibility than a sign with a high level of contrast. The best contrast combinations are: Black / White, Black / Yellow, Red / White, White / Green, White / Blue, White / Black / Red and Brown / Yellow. The Ontario Traffic Manual Book 1B Sign Design Principles – Acceptable Sign Colour Combinations Based on Brightness Contrast has been included in Figure 7 for reference purposes.

Figure 7

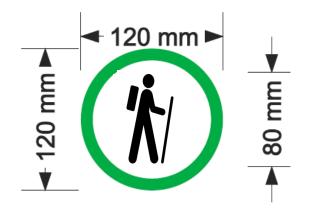
	Legend Colour											
Background Colour	Red	Black	White	Orange	Yellow	Brown	Green	Blue	Purple	Light Blue	Coral	Brilliant Yellow- Green
Red												
Black												
White										D		D
Orange												
Yellow												
Brown												
Green												
Blue												
Purple							D	D				
Light Blue				D								
Coral												
Brilliant Yellow-Green				D								

Legend:		Acceptable for day or night
		Not recommended
	D	Acceptable only for day application or night with external illumination



## **Trailibility signage**

At the kiosk, Trailability symbols when placed with other information on the kiosk signage, the Trailability symbols must have sufficient contrast with the kiosk signage background, to stand out from other messages on the sign. The Pedestrian Viewing distance will be 6m. Each symbol must be black in colour a minimum of 80mm in height placed on a white background with a green border. The green border will have a minimum width of 10mm.



Trailability Symbol Colours							
	С	М	Υ	K	Pantone		
Green	100	0	64	31	354 C		
Black	50	25	0	87	Black 6 C		
Blue	64	54	0	22	2726 C		
Red	0	100	100	0	3546 C		

## **Restricted Uses signage**

Two options are available for the Restricted Uses sign.

Option 1 is a standalone sign. For the standalone sign the Pedestrian Viewing distance will be 30m, Figure 6. The sign will contain a black symbol a minimum of 280mm in height on a white background. The red circle and slash will be a minimum width of 15mm. The addition of a description is optional, if used, the letters will be black and a minimum height of 50mm. The sign blank will have radius corners, a white background with a black border 10mm in width. The standalone sign must be mounted to a post at a mounting height no less than 2m from the ground to the bottom of the sign and at an offset distance of between 0.5m and 2m from the tread to the edge of the sign closest to the tread.

Option 2 is a Restricted Uses symbol centered on the kiosk sign, figure 2. The Pedestrian Viewing distance will be 6m,



Figure 6. Each symbol must be black in colour a minimum of 80mm in height placed on a white background with a red border and slash. The red border will have a minimum width of 10mm.



Restricted Uses Sign Colours							
	С	М	Υ	K	Pantone		
Red	0	100	100	0	3546 C		
Black	50	25	0	87	Black 6 C		
White							

## **Waiver Sign**

The Waiver Sign will be a 60cm x 60cm substrate with a yellow background. The Pedestrian Viewing distance will be 6m, Figure 6. The body text will be black lettering a minimum of 10mm in height. The header bar will be a black background with white lettering a minimum of 38mm in height.

This standalone sign must be mounted to a post at a mounting height no less than 2m from the ground to the bottom of the sign and at an offset distance of between 0.5m and 2m from the tread to the edge of the sign closest to the tread.



Courtesy of Cedar Signs

Waiver Sign Colours								
	С	M	Υ	K	Pantone			
Yellow	0	2	100	0	Yellow 012 C			
Black	50	25	0	87	Black 6 C			

