



Bruce Trail CONSERVANCY

Health and Safety Information for Volunteers

January 2018

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Volunteering Outside

- Be careful, go slow and use common sense
- If possible try to have someone with you, use the buddy system but if you prefer to go out alone tell someone, a friend, partner, family member, where you are going, approx how long you will be away and what time you expect to return.
- Know where you are so you can describe your location. In an emergency, assistance may be delayed if you cannot describe your location in detail.
- Always have a cell phone and know its capability. When on your property take it out and check the reception to ensure you can get a signal.
- If you don't have a phone or can't get a signal, the standard call for distress consists of three short calls, audible or visible, repeated at regular intervals. A whistle, which should be a standard piece of gear for everyone, is particularly good for audible signals and a flashlight for visual signals.
- Carry a basic first-aid kit that can treat scrapes, blisters, sprains, and aches
- Always carry a compass or GPS unit and a map of your property
- Wear appropriate clothing, Personal Protective Equipment (safety glasses, hardhats), hiking boots, hats for sun protection etc
- Suggest applying sunscreen and insect repellent
- Always check your body for ticks after finishing
- Make sure you have adequate water to keep yourself hydrated
- Don't attempt any rock-climbing on cliffs or in crevices or caves. Stay a safe distance from any cliff edges.
- Look overhead and nearby for dead standing trees and dead limbs or dead hung-up limbs (Chicots).
- If you hear thunder or see lightning exit to your car immediately – boulders, rocky overhangs, and shallow caves offer no protection from lightning, which may actually flow through them along the ground after a strike
- Know the local hunting seasons and stay off the property when they are active. Even though we do not allow hunting, neighbouring lands may and bullets can travel far distances. If you do go out wear blaze orange.
- if you encounter or witness any urgent problems or threatening situations, (off road vehicles, fire, weapons, hunting/trapping, unknown hazardous material or pollutant) immediately remove yourself to a safe distance and contact BTC staff and/or the police if warranted. Your safety is the most important consideration, so do not try to confront anyone who is participating in illegal activities.

Volunteer Work Parties

- Work parties such as a cleanup or structure removal/build should have a group leader
- For garbage cleanups, determine type of materials in the garbage, identify any hazardous materials or unknown liquids and leave these items for staff.
- Leaders should go over any safety issues (general and site specific) and proper tool usage at the beginning of the project (or example, if picking up garbage what type, are there any sharp items such as glass, metal edges or unknown liquids?)
- Any needed protective equipment should either be provided by the Club or brought from home by the volunteer. Most of the Clubs have a stock of commonly used tools and safety equipment.

However, some volunteers who go out to work on the properties may find it more convenient to have their own basic equipment.

- For chainsaw and felling operations hard hats must be worn at all times by everybody in the work party. They must be worn from the time you enter the forest to the time you exit the forest.
- Standing dead trees, also known as Chicots should be removed before work starts or do not perform any work within falling distance of a Chicot.
- The Leader or organizer of the project should have a full first aid kit on site and everyone should know where it is kept. Someone in the group should have first aid training and be identified at the start of the project.

If you do injure yourself while performing your volunteer duties please inform your Club Board and fill out an incident report. Incident forms are available from your director, the BTC head office or on the BTC website. The form must be submitted to the BTC head office.

Weather

Heat

Dry hot summers are common along the Trail. Water may be scarce on humid days, sweat does not evaporate well, and many volunteers face the danger of heat stroke and heat exhaustion if proper precautions are not taken. The best measures against heat emergencies are wearing a hat and sunscreen, staying well hydrated as you walk, and drinking plenty of water.

The following are the most common types of heat problems:

Sunburn

Can occur rapidly and can be quite severe; it is surprising how quickly a sunburn can occur in the spring when no leaves are on the trees.

Heat Cramps

During heavy exertion involuntary muscle spasms may occur that are called heat cramps. The pain of heat cramps can affect leg muscles, calves, the abdominal wall, the back and arms. Any muscle groups that are over exerted in heat may feel the pain of heat cramps.

Treatment of Heat Cramps:

- Stop and relax in as cool and shaded an area as possible. Great time to find a cool stream!
- Take in plenty of fluids preferably water and or sports drinks with electrolytes without caffeine
- Gently massage the effected muscles and stretch gently

If the heat cramps do not go away after an hour of rest, fluids and stretching, it is time to seek medical attention.

Heat exhaustion

Can strike suddenly without warning and can range in severity from mild heat cramps to heat stroke. Heat exhaustion is caused by heavy exertion in a hot environment often accompanied by dehydration caused by excessive fluid loss through perspiration.

Symptoms of Heat Exhaustion:

- Feeling faint or dizzy
- Nausea
- Low blood pressure
- A rapid weak heartbeat
- Cool, moist, pale skin
- Low-grade fever
- Sweating Heavily
- Heat cramps
- Fatigue
- Headache
- Dark-colored urine

Treatment for heat exhaustion:

- Get to as cool an area as possible out of the sun
- Hydrate with water and electrolytes
- Cool water is your friend, soak body, hands, wrists and feet in a stream, or wet down loosened clothing and hat or sponge down overheated hiker with damp cloth
- Lay down legs and feet slightly elevated

It is a good idea for anyone who experiences significant heat exertion, especially one with existing medical conditions to be checked out by a professional health practitioner as soon as possible.

Heatstroke

This a potentially deadly heat related syndrome that occurs when the human body loses its ability to deal with heat stress by using its normal mechanisms for dealing with heat such as such as sweating and thermal control and is often caused by improper hydration and heavy exertion in hot weather such as hiking uphill or with heavy packs. Untreated heat exhaustion can rapidly turn into Heat Stroke. The factors that cause, raise the risk factor or can exacerbate heat exhaustion are the same for heat stroke. The main sign that someone is going into heat stroke is that their body temperature can reach 104 F (40 C) and beyond at which point the person may exhibit personality changes, confusion and even go into a coma.

Symptoms of Heat Stroke:

- Skin hot to the touch
- Irritability, confusion or unconsciousness
- Feeling dizzy or lightheaded
- Rapid heartbeat
- Rapid and shallow breathing
- Elevated or lowered blood pressure
- Cessation of sweating
- Headache

- Nausea
- Fainting (Often the first sign in older adults)

Treatment for heat exhaustion:

- Get medical attention immediately for anyone that is suffering from heat stroke
- Cool the victim of heat stroke down by removing them from direct sun
- If possible move them into a stream or creek or soak their clothes with water
- If the person suffering from heat stroke is conscious have them rehydrate by drinking water or sports drink

If you think someone is suffering from heat stroke you must get immediate medical attention! If you don't have someone else to send for help along with you, stabilize the person in heat stroke first but get professional help as quickly as possible.

Hypothermia

Hypothermia begins when exhausted people are exposed to wet and windy conditions outdoors, combined with low temperatures. Under such conditions body heat is lost and internal temperature drops. Hypothermia is even possible on a warm sunny day. For example: If you work up a good sweat hiking all day and your clothes are damp and you are a little tired or exhausted, Hypothermia is a very real threat, particularly when the sun dips late in the day.

Avoiding Hypothermia

You can avoid hypothermia if you guard against dehydration, fatigue, cold winds, and wet clothes. Be sure to:

- Dress warmly, in layers.
- Stay dry.
- Protect yourself from wind, rain, and snow. (This can be done most effectively by wearing clothes that block wind and moisture.)
- Eat high-energy snacks and drink plenty of water.
- Do not over-exert.

Symptoms

You can also guard against hypothermia by being aware of the symptoms and taking action early to treat them. Progressive symptoms include:

- Shivering. An early sign of hypothermia, shivering starts mildly, but can become more severe and finally convulsive before ceasing.
- Slurred speech.
- Loss of coordination. This might begin as difficulty tying one's shoelaces or zipping one's jacket, and eventually include stumbling or falling.
- Confusion.
- Apathy (for example, the victim not taking care of his or her own needs).
- Irrational behavior.

Treatment

If you recognize hypothermia in someone, take action. If the victim is unconscious, seek medical help *immediately*. If the victim is conscious, or *after* medical help has been sent for an unconscious victim:

- Move the victim to shelter. Be very gentle with unconscious victims — their hearts are fragile and sensitive to jarring.
- Remove wet clothes, and replace them with warm, dry garments.
- If the victim is alert enough to hold a cup, give warm, but *not hot*, liquids to drink. Sugary drinks, such as warm Tang or Jello, are especially helpful. *Never* give food or drink to an unconscious victim — he or she may choke.
- If the victim is conscious and able, moderate exercise such as walking will help to generate heat.
- If the victim is unconscious or unable to exercise, place the victim in a sleeping bag to help speed rewarming, and insulate the sleeping bag with a plastic sheet (or a tarp) above and a pad below.

Thunderstorms

Avoid open spaces, hills and high places or steep slopes. If you are in the forest stay there, but keep away from the edge of the forest, clearings or isolated trees. Do not lie down on the ground. Squat low to the ground with your feet together and keep your arms near your body. Tuck your head between your knees and avoid making contact with the ground with any other part of your body. This will reduce your risk of being struck by lightning.

Wind

Wind is a significant danger when working in the forest or in an area with trees. Wind can cause weakened parts of the tree or Chicots (dead standing trees) to fall from above resulting in serious injury or death. A tree may not become dangerous to volunteers until certain wind speeds are encountered. If wind speeds exceed 40 KPH activities should be stopped or suspended until conditions moderate.

Terrain

Rivers, streams and other water bodies

Fording streams and rivers can be deceptively hazardous. Even a very shallow, swiftly flowing body of water can pack enough force to knock you off your feet. Use caution and common sense. Use a walking stick for an extra point of contact to provide stability

Caves, Cliffs and Crevices

Be aware of the location of these areas on the property and do not take risks around them.

Animals

Coyotes

Coyotes are a medium sized member of the Canidae family. Coyotes have grayish fawn coloured coat with black tipped hairs along the back and tail with a whitish tinge to the belly and throat. Have ears that are relatively large as compared to the rest of the head and a black tipped bushy tail that points down when running. Coydogs are a cross between a Coyote and a domestic dog and have a more variable coat

colouring ranging from grayish-brown to yellowish-gray to reddish-brown. These animals keep the predatory nature of the Coyote and the dogs lack of fear of humans and are often to blame for many livestock attacks instead of purebred Coyotes.

Recently there has been a heightened awareness of Coyotes as there are increased sightings in urban areas and a few close calls with people being approached by them. They are generally afraid of humans and will avoid us at all costs but sometimes they become less timid from the chance at an easy meal through our curbside garbage or in some cases people even feeding them. This time of year is when they breeding habits and a shortage of food can bring them closer to residential areas.

If you are approached stay calm, back away slowly and never turn your back or run. If the animal still seems aggressive stand tall, wave your arms and make lots of noise. Carry a flashlight to scare the animals away at night and if they pose an immediate threat, call 911. Always keep your pets on a leash when hiking the Trail as they may get injured if they chase a Coyote.

You can get more information about living with Coyotes by visiting the OMNR website at http://www.mnr.gov.on.ca/en/Business/FW/2ColumnSubPage/STDPROD_088694.html.



Purebred Coyote on the left, Coydog on the right

Black Bears

Tips to avoid black bears include:

- Make noise as you move through wooded areas
- Travel with others if possible
- Carry and have readily accessible a whistle or an air horn, and bear pepper spray. Know how to use this spray.
- Avoid strong fragrances that may cause a bear to be curious; put any food you are carrying in sealed containers in your pack.
- If you encounter a bear and it is not paying any attention to you, slowly and quietly back away while watching the bear to make sure it isn't following you.
- If the bear obviously knows you are there, raise your arms to let the bear know you are a human. Make yourself look as big as possible. Speak in a firm but non-threatening voice while looking at the bear and backing away.
- If the bear continues to try to approach, stand your ground and be aggressive - use your whistle or air horn, yell, stand tall, wave your arms and throw objects – fight back if you have to!
- Do not climb a tree or run!

Rattlesnakes

Rattlesnakes have a brownish grey to dark grey background with dark saddle-shaped blotches on the back with several rows of alternating blotches on the side. They have a diamond shaped head with white stripes along jaw and slitted pupils like a cats. They are a heavily bodied snake with narrower neck and a rattle at the end of their tail.

Tips for avoiding rattlesnakes:

- Wear footwear that covers the ankles and long pants.
- Be careful reaching or walking into brush or under rocks, under logs, in shady areas, or sunny areas where they may be basking.
- If you hear a rattlesnake stay calm, stop walking, determine its location and slowly walk away – give it plenty of room to move away. Do not harm the snake.
- If you are bitten by a rattlesnake remain calm, call 911, reduce activity and lay down to prevent circulation of venom, remove any jewelry from around the bite and wash and cleanse the wound. Do not apply ice or a tourniquet.



Bees/Stinging Insects

Stinging insects have a sting (or stinger) at the posterior end of their abdomen. This group of insects includes honey bees, bumble bees, wasps, hornets, yellow jackets, and ants.

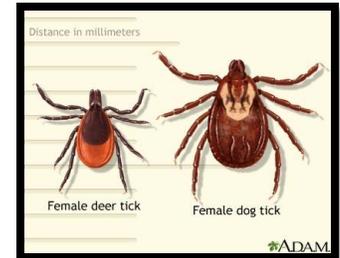
Tips for working around stinging insects:

- Anyone with sting allergies should carry bee sting kits containing epinephrine
- Be aware of potential for hives in brush or hollow logs, hanging in trees or in the ground
- Take a look around. Check to see if there are any visible signs of activity or a hive or nest. If you see a number of insects flying around, check to see if they are entering/exiting from the same hole or place. If so, it is likely a nest or a source of food.
- Wear light coloured clothes, long sleeve shirts, long pants, and closed-toed boots or shoes. Avoid brightly coloured, patterned, or black clothing.
- Do not wear perfumes, colognes, scented soaps, or powders as they contain fragrances that are attractive
- Power tools such as lawnmowers, weed eaters and chainsaws will aggravate the insects. When using these tools, be aware that the tools may provoke the insects or in some cases, cause the insects to swarm.
- Most bees and wasps will not sting unless they are startled or attacked. Do not swat at them or make fast movements. The best option is to let the insects fly away on their own. If you must, walk away slowly, or gently "blow" them away. The only exception is if you have disturbed a nest and hear "wild" buzzing. Protect your face with your hands and run from the area immediately.
- Tie back long hair to avoid bees or wasps from getting entangled in your hair

Ticks and Lyme Disease

Caused by the bite of the Black legged Tick / Deer Tick not Dog Tick.

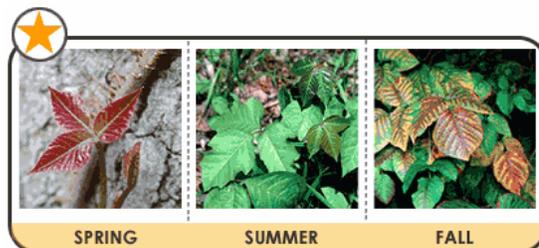
- Use appropriate insect repellants on skin and clothing
- Wear light clothing so you can see them easier
- Clothing should fit tightly at wrists, ankles, and waist. Tuck shirt tails into pants and pant legs into socks.
- After being in the wilderness, promptly check your body for presence of ticks, especially hair, moist, dark places like armpits and groin and clothing
- Use appropriate insect repellants on skin and clothing
- Bathe and/or change clothes after each work day
- Remove embedded ticks properly or seek medical attention for removal.
- Seek treatment promptly if symptoms of tick-borne illness develop later, even if tick bite was not known to occur. Early symptoms include fever, headache, muscle and joint pains, fatigue and a skin rash resembling a bullseye.



Plants

Poison Ivy

Poison Ivy has 3 lobed or smooth edged leaves that can be variable in shape. The middle leaflet has a much longer stalk than the two side ones. The plant can be a vine, shrub or herbaceous plant. It grows on sandy, stony, or rocky shores, thickets, clearings, forests, meadows and along the borders of woods and roadsides.



Giant Hogweed

Giant Hogweed is an extremely large plant growing from 2.5 to 4 metres (8 to 14 feet) high with leaves up to 1 metre (3 feet) in breadth. It has a thick—5 to 10 centimetres (2 to 4 inches)—hollow stem that is mottled with dark purple. Its stem and the undersides of its leaves are covered in coarse hairs. Its large, umbrella-shaped flowers are white in colour and can be more than 30 centimetres (1 foot) in diameter. The seeds of Giant Hogweed are flat and oval in shape. It can be found along roadsides, vacant lots, streams, and rivers. It is often classified as a freshwater weed and is typically found in floodplains.

It produces a noxious sap that sensitizes the skin to ultraviolet light. This is known as photosensitivity, which can result in severe and painful burning and blistering. It is important to avoid any skin contact

with this plant. Since the sap increases the photosensitivity of the skin, it is important to avoid exposure to the sun for at least 48 hours after contact; the sun's radiation and can cause skin that has been exposed to the sap to burn and blister. If blisters form, contact a medical professional for advice and treatment.



Wild Parsnip

Wild Parsnip has a single light green (sometimes purple tinged) deeply grooved, hollow stem and stands between 5 and 150 cm tall. The leaves are alternate on the stem, pinnately compound, approximately 15cm in length, with saw toothed edges. The flowers are small, yellow, 5-petaled and grow in umbrella-like clusters and bloom between June through to October. It occurs throughout Ontario in abandoned yards, waste places, meadows, old fields, roadsides and railway embankments. It has similar health issues as Giant Hogweed but not as severe.

WILD PARSNIP

HEIGHT Up to 5 feet	STEM Yellowish-green with verticle grooves running full length	LEAF Compound, pinnate, 5 to 15 toothed, variably lobed, yellowish-green	FLOWER Single flower stalk with flat-topped umbel of clustered yellow flowers

Tips for dealing with noxious plants:

- Use care removing or handling gloves and other clothing that may have been in contact with plants
- Whenever the skin contacts plant or noxious weed, wash the area with cold water within 1 to 3 minutes or as soon as possible
- While working in a poisonous plant environment, do not use soap and/or hot water that can remove the natural protective oils from your skin.
- Upon returning from the field, use rubbing alcohol to cleanse contacted skin

Chicots (pronounced “shee-ko”)

A chicot is a tree that has either become dry or rotten. There are various reasons for this: either from normal aging or special conditions such as species extinction, climate, insect infestation, disease or human activity. Chicots present a tremendous hazard in the woods and need to be treated with respect. Bruce Trail volunteers need to evaluate the presence and condition of chicots on their property or area of their worksite. To identify these trees, be on the lookout for:

- An absence of leaves (consider the season)
- Missing twigs and small branches
- Trunks or main branches that have:
 1. Presence of shelf-life fungus growth
 2. Detached bark
 3. Easily visible cracks along the trunk
 4. Canker growth on the trunk
 5. Insect infestation
- Signs roots may have rotted out, such as:
 1. Mushrooms growing at the base of the tree
 2. Black filaments under the bark
 3. Spongy material at the base of the tree
- Changing weather conditions, such as:
 1. Excessive wind
 2. Snow or ice-loading on trees
 3. Soil rapidly freezing and thawing (spring and fall)

Any dead tree should be considered dangerous and if it cannot be felled by a certified chain sawyer then no work should be performed within its falling distance.

