

Appendix A: Putting Safety First

COVID-19

Please read our factsheet on Participating in Ontario Breeding Bird Atlas-3 during the COVID-19 pandemic before participating in atlas activities – [click here](#)

Liability Statement

The following statement is adapted from the Terms and Conditions provided in the online volunteer registration ([click here](#)). Please register if you have not already done so.

As a volunteer participant in our programs you are fully responsible for your own safety, and for your own personal insurance and care in case of injury. You are not considered an employee of Birds Canada, or any of the [partner organizations](#) or sponsors. Please exercise great caution and care in the field when collecting data. The partners are also not responsible for damage and/or loss to vehicles or equipment incurred while conducting field activities. Participants may be held responsible for damage to lands and property, so please be respectful and exercise caution when treading on private land. Where appropriate always be sure to obtain explicit permission before accessing lands. Be friendly and polite with landowners and remember that their permission is voluntary and that they are helping us all to achieve our goals for good coverage.

General Safety Guidelines

It is important that atlassing be enjoyable, but **safety must always come first**. Plan your route ahead of time and prepare for hazards you might expect to encounter along the way. No matter where your atlassing activities take you, we recommend planning ahead in relation to your communication tools and coverage, and inform a friend or family member of where you plan to survey, the time you expect to return, and how to contact you in case of emergency.

Note that your surveying activities may take you into areas commonly used for recreation, hunting and other purposes. We recommend that you check the Ontario Ministry of Natural Resources and Forests' hunting website ([click here](#)) for the regulations in your area. During active hunting seasons, always wear high visibility clothing to make sure you are easily seen.

We recommend that you survey with others, particularly if you will be working in remote areas, or if you expect to be off-road.

If you must survey alone, we recommend you reflect on the following questions:

- Have you told someone where you are going and when you will be back? Are they prepared to serve as your emergency contact?

- Do you have reliable methods of communication and information on who to contact in the event of an emergency?
- Have you assessed your personal limitations, and the hazards that you might encounter?
- Do you have the necessary safety equipment and do you know how to use it?
- Have you checked the weather forecast for the area(s) you intend to survey to ensure incoming weather will not pose a threat to your safety (e.g., heavy snow, rain, lightning, or high winds)?

If atlassing near roads, be aware of traffic. Park safely (off-road or use reflective cones). Follow all traffic laws and do not drive distracted! Wear bright/reflective clothing (e.g., a high visibility safety vest) when working near roadsides. Consider snow, mud, ruts, bridges, washouts, and other road conditions, and make sure your vehicle is suitable for the conditions.

If atlassing or accessing sites by water, be aware of boat traffic and weather. Follow all marine regulations. Wear a life jacket and be sure to carry required safety equipment ([click here](#)). Ensure you create and share your boat trip plan with your emergency contact before you leave.

If atlassing in remote areas, consider working with a partner or team and ensure each person is carrying all necessary equipment to ensure they can be self-sufficient. This includes a roadside emergency kit (see an example list [here](#)), shovel, blanket/sleeping bag for each participant, extra food and water, and consider carrying an emergency signalling device (e.g., SPOT Messenger or inReach device). Ensure your vehicle is in good running order, has appropriate tires (including a functional spare tire), and that you have a plan in the event you get stuck or stranded. It is important to **know how to navigate** with your map and compass (and GPS if you have one) prior to going off-road by foot. Marking your vehicle as a waypoint in your GPS and bringing spare batteries is always a good idea prior to entering the woods. Courses are available on orienteering, wilderness safety, and wilderness first aid – check with your local community college or outdoor clubs for upcoming classes. Ensure all emergency communication and navigation devices are properly charged prior to going out.

If atlassing at night, we cannot overemphasize how important it is to consider YOUR safety. Take a flashlight or headlamp and extra batteries. Wear your reflective vest. Consider checking roads in daylight prior to your night survey to ensure they are passable and that you will have a safe place to park. Be careful not to drain your car battery with such things as seat warmers, headlights, or cell phone charging.

If in doubt, don't survey!

Safety Kit Suggestions

Always carry a safety kit with you and know how to use its contents! Items should be relevant to the area(s) you will be travelling through and may include:

- Compass and topographical map of your square
- First Aid kit ([click here](#) for an example list of contents)
- Bear/dog spray

- Waterproof lighter and/or waterproof matches
- Pocket knife
- Small flashlight with batteries
- Pencil and paper
- Signalling device (e.g., whistle or mirror)
- High energy snacks (e.g., granola bars, dried fruit or chocolate)
- Drinking water
- Emergency “space blanket” or bivy
- Mosquito repellent or head net and bug jacket
- Sun protection (e.g., sunscreen, sunglasses, hat, long sleeves and pants)
- GPS unit and cell phone (share your emergency #), if you expect to have cell service). Alternatively, a Satellite phone, VHF radio or two-way satellite communication device (e.g., SPOT or inReach) should be considered when heading into areas where cell coverage is unreliable.

Common Safety Issues

Although formal training in First Aid, Wilderness First Aid, bear safety, and navigation is recommended, we offer the following brief reminders and suggestions to assist with your preparations for atlas surveys.

General First Aid Reminders

Consider obtaining formal First Aid training (e.g. [St. John Ambulance](#), [Canadian Red Cross](#)) or refreshing your basic First Aid knowledge prior to heading out.

To provide effective First Aid, responders need to:

- Be aware of the risks to oneself and others
- Keep oneself safe
- Provide aid only when it is safe to do so
- Stay informed and updated on first aid/CPR skills and evolving protocols (particularly as the pandemic situation evolves)
- Remember ones own needs.

A number of online resources and First Aid apps are also available for download to your smartphone as a handy reference for response to an emergency (see also Additional Resources below).

Bears & Other Wildlife

Black bears occur throughout much of Ontario. We suggest reviewing [Ontario's Bear Wise Program](#) and considering obtaining formal bear awareness and safety training.

Please be Bear Aware while conducting your atlassing:

- Travel in groups of two or more when possible—people who travel alone are most vulnerable
- Scan your surroundings and do not wear music headphones. Be particularly aware of your surroundings when conducting point counts, or using recording units as they will draw your attention for an extended period of time.
- When entering or hiking to a site, alert bears to your presence so they can avoid you. Make noise, such as singing, whistling or talking while in areas with restricted visibility or with high background noise, such as near streams and waterfalls.
- Watch for signs of bear activity such as tracks, claw marks on trees, flipped-over rocks or fresh bear droppings
- If you have a dog with you, make sure it is on a leash, as uncontrolled, untrained dogs may actually lead a bear to you
- Rise slowly if you are in a crouched position so that you don't startle nearby bears
- Avoid strong fragrances that may cause a bear to be curious
- Put any food you are carrying in sealed containers in your pack

Be aware that Ontario is home to one venomous snake, the Massasauga Rattlesnake. Although bites are not common, it is recommended that you have an emergency response plan if Massasauga Rattlesnakes are known to occur in the area you will be surveying. More information about Massasauga Rattlesnakes and treatment for bites can be found on the [Ontario Anti-venom website](#).

Also be aware of other wildlife you might expect to encounter, including wolves and large ungulates (e.g., moose and elk). It is best to provide all wild animals with ample space, and be especially careful to provide space to any animals with young.

Raccoon rabies has been identified in southern Ontario, particularly in the Hamilton and Golden Horseshoe area. In these areas, please be cautious around strange-acting wildlife, or wildlife found dead for no apparent reason. If you come into contact with a strange-acting animal, please contact the local animal control agency, or the Ministry of Natural Resources and Forestry wildlife disease reporting line at 1-888-574-6656. Bat and fox rabies is also found in the province, so please be cautious of all strange-acting wildlife, and report any bites or scratches obtained by wildlife to your local health unit as soon as possible. Rabies is almost always fatal if not treated quickly.

Environmental Exposure

Cold, Hypothermia, and Frostbite

Hypothermia is the lowering of the body temperature and can result in death if not treated in time. Victims of hypothermia first start to shiver, then feel drowsy, weak, and confused. They also experience impaired judgment and vision.

Frostbite is an injury caused by freezing of the skin and underlying tissues. At first, skin becomes very cold and appears red, then turns numb, hard and pale. Frostbite is most common on the fingers, toes, nose, ears, cheeks, and chin. Exposed skin in cold, windy weather is most vulnerable to frostbite.

Prevention:

- Wear suitable clothing to keep you warm and dry. Ensure extremities are suitably covered when weather turns cold and/or windy.
- Always pack extra layers and a raincoat, even if the day starts off warm and sunny, because weather can change rapidly and without warning.

More information about hypothermia, windburn and frostbite can be found on the [Health Canada website](#).

Heat, UV Radiation, Heat Stress, Dehydration

Prevention is your best defence against heat exposure and related illnesses. Be sure to pack appropriate sun protection (hat, sunglasses, long sleeve shirt and pants, sunscreen with at least SPF30), carry ample drinking water, and try to avoid being out in the sun during the hottest times of the day, if possible.

More information on sun safety can be found on the [Canadian Cancer Society website](#).

Sunburn – Prevention is the best cure for sunburn. Use sunblock daily and with repeated applications. Sunburn is treated in much the same way as other burns. If the sunburn is severe, an antiseptic emulsion can be applied freely and covered with a dressing or bandage. Leave the dressing on. Do not break any blisters that form.

Working in hot weather with exposure to direct sunlight and high humidity puts stress on your body's internal cooling system. The body normally cools itself by sweating. When the humidity is high, sweat will not evaporate as quickly, preventing or slowing the body's ability to cool down. When heat is combined with other stresses, such as physical work, fluid loss, fatigue or certain medical conditions, it may lead to serious heat-related illnesses. This can happen to anybody - even the young and physically fit.

Tips to consider for controlling heat stress:

- Drink more fluids. Don't wait until you are thirsty. Avoid liquids that contain alcohol or caffeine as they can cause your body to lose water.
- Wear light clothing that will allow cooling of the skin as well as protection from the sun.
- If you are on medication, pregnant or have a pre-existing medical condition, you may be more susceptible to heat stress and should consult with your physician.

Windburn – Windburn can also be a problem outdoors. It can be treated in much the same way as sunburn, but it too can be prevented by wearing proper clothing and by covering exposed areas of flesh with a lotion or cream to prevent skin from drying out on windy days.

Extreme Weather: Thunder, Lightning and High Winds

If bad weather is in the forecast, do not plan to go atlassing! In the event you get caught in an unexpected storm, take the following precautions:

- If you hear thunder, then lightning may be close enough to be dangerous – take shelter in an enclosed building or metal-topped vehicle.
- Avoid water, high ground, isolated trees, power lines and picnic shelters – small, open structures won't protect you from lightning.
- If there's no shelter nearby, go to a low-lying area away from tall, isolated objects – crouch down and put your feet together – do not lie down.
- Be aware of, and take precautions to remain safe from, potential dangers that may accompany high winds (e.g. unsafe boating conditions, fallen trees blocking roads or trails).

More information about thunderstorms and remaining safe can be found [click here](#).

Illnesses & Allergies

Perhaps the most common illnesses during surveys are diarrhea and constipation due to the change of habits and food. Please check your First Aid kit and ensure it contains medication to combat either of these afflictions.

People with known allergies should carry necessary medications with them and make their travelling partners aware of their allergies and how to treat them.

Poisonous Plants

When atlassing off-road, keep an eye out for poisonous or noxious plants such as poison ivy, poison sumac, giant hogweed, wild hemlock, wild parsnip, and pokeweed. On a related note, see the tips [click here](#) to help avoid spreading invasive plants through your atlassing activities.

Ticks and Lyme Disease

When travelling off-trail through grasses, shrubs, forests or wooded areas, be aware of ticks which can carry Lyme and other diseases. Always check your entire body for ticks and remove them quickly using approved methods if any are found. Wear light coloured long-sleeved shirts and pants, and keep pant legs tucked in to minimize exposure to ticks; this also makes it easier to spot ticks before they attach to skin. Consider using an insect repellent containing DEET (N, N-diethyl-meta-toluamide) to exposed skin whenever you are outdoors. Treating clothes with repellents containing permethrin or DEET will give extra protection from ticks. Tick removal kits have been found to be an effective means of detaching an embedded tick, and can be purchased through outdoors stores or online.

For information on Lyme disease, prevention and treatment, refer to the [Government of Canada's Lyme disease website](#).

Transportation

In addition to following the rules of the road and practising safe driving, atlassers should be careful to match their vehicles to their anticipated driving conditions. Many passenger cars have low ground clearance and other design characteristics that make them unsuitable for rough roads. Perhaps consider including a tow strap, shovel, saw and other equipment in your vehicle if you do intend on surveying beyond the reach of all-season paved roads.

West Nile Virus

It is possible to contract West Nile virus from infected mosquitoes, or even through handling infected birds.

Human illness from West Nile virus is rare, even in areas where the virus has been reported. You can reduce your chances of becoming ill by protecting yourself from mosquito bites.

To avoid mosquito bites:

- Apply insect repellent containing DEET (N, N-diethyl-meta-toluamide) to exposed skin whenever you are outdoors. When possible, wear long-sleeves, long pants and socks when outdoors.
- Treating clothes with repellents containing permethrin or DEET will give extra protection, since mosquitoes may bite through thin clothing. Do not apply repellents containing permethrin directly to skin. Do not spray repellent containing DEET on the skin under your clothing.
- Consider alternatives to DEET-based repellents, particularly if you have a known sensitivity.
- You may also wish to use a “bug jacket” or shirt containing a screened hood and face shield (these can be found in most outdoor recreation supply stores).

- The hours from dusk to dawn are peak mosquito biting times. Take extra care to use repellent and protective clothing during evening and early morning.

For additional information on West Nile Virus, refer to the [Government of Canada's WNV website](#).

A Few Additional Resources

- Ontario Provincial Police (anywhere in Ontario): 1-888-310-1122 (or call 9-1-1)
- Trip Planning Guides: www.adventuresmart.ca
- Canadian Red Cross First Aid Training and Certification: www.redcross.ca/training-and-certification
- Orienteering Ontario: www.orienteeingontario.ca/learn
- [Preparing an Emergency Kit for your Car: getprepared.gc.ca](http://getprepared.gc.ca)
- Search “First Aid App” on your Android or iPhone device