



# Ontario Nightjar Survey

## INSTRUCTION MANUAL

Ontario Breeding Bird Atlas  
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website: [www.birdsontario.org](http://www.birdsontario.org)

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The Ontario Breeding Bird Atlas is a partnership project of:



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Environment and  
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Environnement et  
Changement climatique Canada



Thank you very much to the [Ontario Breeding Bird Atlas Supporters](#)

## Ontario Nightjar Survey: Quick guide.

<b>Skill Level:</b>	Minimum ability to identify Nightjars by sound as well as additional bird species that might be heard during survey.
<b>Timing:</b>	Between June 15 <sup>th</sup> and July 15 <sup>th</sup> . Start 30 minutes before sunset and completed within 3 hours after sunset.
<b>Duration:</b>	Requires 3-4 hours to complete (10 survey stations at 6 minutes each, plus travel between).
<b>Location:</b>	Survey in all three sections of the province (Northern, Central, Southern).
<b><i>Atlas Square:</i></b>	Contact the Regional Coordinator for assignment to an available square.
<b><i>Survey stations:</i></b>	Use numbered Atlas point count stations - the 10 lowest numbered stations with suitable habitat.
<b>Considerations:</b>	
<b><i>Weather:</i></b>	Survey on calm nights with high visibility and little precipitation. Winds should be < 19 km/h (Beaufort <3) and temperatures no warmer than 30°C.
<b><i>Equipment:</i></b>	Nightjar survey data form. See detailed protocol for additional information.

A safety kit and wearing a high visibility safety vest is highly recommended.

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## Introduction

*Thank you for your interest in the Ontario Nightjar Survey. Your contribution will aid in the understanding of these poorly known nightjar species in the province.*

**The Ontario Nightjar Survey is an excellent opportunity for everyone - from new to experienced birders.** While you do need good hearing, the required bird identification skill level is considered as easy to moderate. Participants only need to know or learn the calls of Common Nighthawks and Eastern Whip-poor-wills to complete this survey. It would also be beneficial to learn how to identify a few additional species, such as some of the more common and widespread nocturnal owl species (e.g., Barred Owl, Eastern Screech-Owl, Northern Saw-whet Owl). Other species that may be encountered incidentally include Mourning Dove, American Woodcock, and Wilson's Snipe. Learning how to distinguish between the very similar sounding "peent" calls of the American Woodcock and Common Nighthawk would be beneficial to avoid false detections of the latter species.

The Canadian Nightjar Survey is a national program, coordinated by Birds Canada, designed for the long-term monitoring of nightjar populations across the country (see <https://birdscanada.org/birdmon/nightjars/main.jsp>). This program, and its existing routes, will continue to be surveyed during the period of the Ontario Breeding Bird Atlas-3, from 2021 through 2025. If you are interested in surveying nightjars during the Atlas, please contact the Ontario coordinator of the Canadian Nightjar Survey (<https://birdscanada.org/birdmon/nightjars/main.jsp>) to find an available route in your area. If a route is assigned to you, please follow all of the protocols outlined in the Canadian Nightjar Survey. If no unassigned Canadian Nightjar Survey routes are available in your region and you still wish to survey nightjars in your area, then please contact an Ontario Breeding Bird Atlas [Regional Coordinator](#) to locate an available Atlas survey square. Once a square has been assigned to you, then please follow the Ontario Nightjar Survey protocol to complete your surveys.

Nightjars represent a special challenge to monitor because they are notoriously difficult to survey. They are becoming increasingly uncommon, are generally active only between dusk and dawn, and roost in concealed locations during the day. As a result, special surveys are required to better document the distribution and abundance of Ontario's two breeding nightjar species. Figure 1 shows the part of the province where surveys for Nighjars should take place.

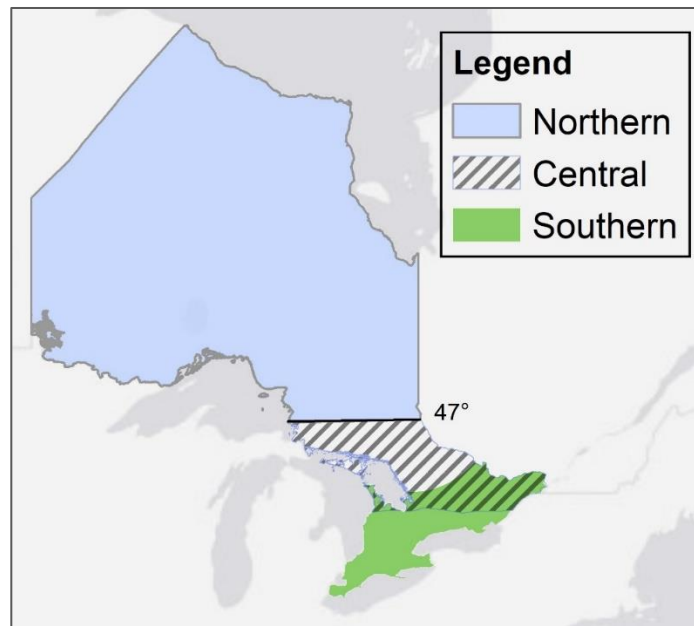


Figure 1. The Ontario Nightjar Survey will be run in all three sections of the province (e.g., Southern, Central, and Northern).

The Ontario Nightjar Survey is a straightforward survey where participants listen for and record evidence of the calls or other breeding signals of two species, the Common Nighthawk and the Eastern Whip-poor-will. Common Nighthawks use their camouflage to roost inconspicuously throughout the day. Near dusk, Common Nighthawks take to the air and combine foraging and calling activity in continuous, acrobatic flights. Common Nighthawks also produce a “booming” sound by flexing their wings at the bottom of an aerial dive. These “booms” are presumably performed by males and may serve as territorial displays or are used when guarding mates or nests. Eastern Whip-poor-wills become vocal shortly after dusk and call almost continually throughout the night. Eastern whip-poor-wills will often call from a perch, usually from a well-hidden location in the forest. Although they will move around during the night, most movements will be over short distances. Nightjar vocal activity peaks during the height of the breeding season between mid-June and mid-July, so surveys should target this period. Eastern whip-poor-wills are also more active around the full moon, so survey timing should be within one week of the full moon in the peak of the breeding season.

Being out in the field between dusk and dawn presents a unique opportunity to document other species that may be active between dusk and dawn. In addition to many owl species, some songbirds, waterbirds, and other species can be active during this time period. Surveyors are encouraged to record any notable species that are incidentally detected during nightjar surveys.

Draft results from the Ontario Nightjar Survey will be posted on the Atlas project website. Maps of Common Nighthawk and Eastern Whip-poor-will relative abundance and breeding distribution will be created based on the survey results and other atlas data and used in the final atlas website and/or book.

*Thank you for contributing to the survey!*

# Ontario Nightjar Survey Guidelines

## Preparing for your survey

### **Training**

Before surveying, familiarize yourself with the calls of the Eastern Whip-poor-will and the calls and wing boom sounds of the Common Nighthawk (See training MP3 files [here](#), and see [Appendix A](#)). It would be worth learning the calls of some of the more common forest owls in Ontario (e.g., Barred Owl, Long-eared Owl, Great Horned Owl), which may be detected incidentally on your nightjar surveys. Also, become familiar with other similar sounding species including birds such as Chuck-will's widow, Wilson's Snipe, Ruffed-grouse, a few frogs (Spring Peeper, Wood Frog, Chorus Frog) and mammals (Coyote, Raccoon, Red Fox). These bird sounds are also available on [Dendroica](#) and [Xeno-canto](#), and phone apps such as Merlin.

### **Equipment**

Make sure you have all the required equipment before heading out. Note that although an app for running nightjar surveys is under consideration, it will not be ready for the 2021 nightjar survey season.

- This manual, either in hard copy or on your phone
- A map of the 10-km square you are to survey showing the survey locations. Either a hard copy map, or the map on the Atlas app.
- The Nightjar survey data form
- Time-keeping device (watch or phone)
- Clipboard
- Compass
- Road map or GPS
- Pen or pencil (and spares)

## Survey area

For the purpose of the Ontario Breeding Bird Atlas-3, nightjar surveys should be run in all 3 sections of the province (Figure 1).

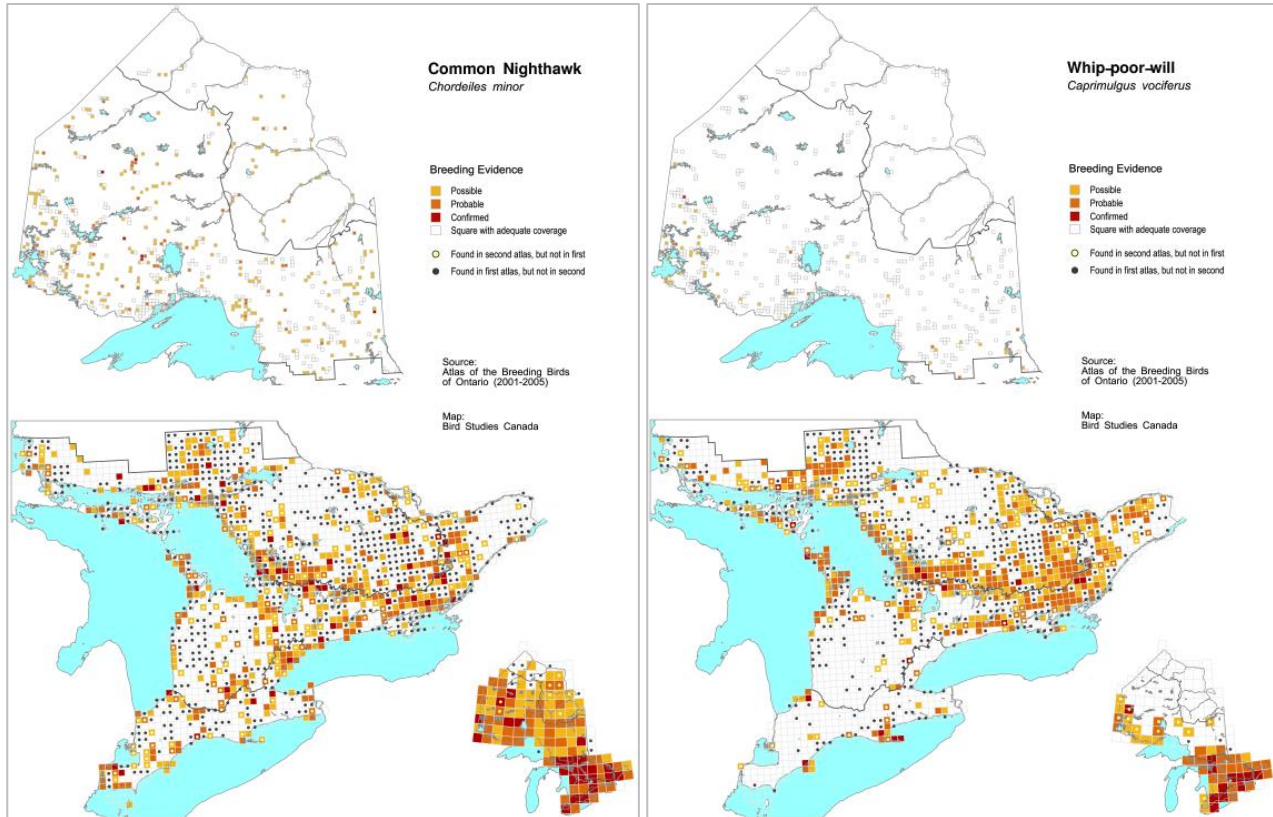


Figure 2. Nightjar survey can be run in all parts of the province; the Common Nighthawk (left) and the Whip-poor-will (right). The maps are from Atlas-2 and shows the breeding evidence for the species by 10-km square.

## Which squares to cover?

We would like nightjar surveys to be undertaken in as many of the 10-km squares in the province. For the first two years of the project (2021-2022), we will not be targeting specific 10-km squares - surveys can be run in any square. After that, we will assess coverage needs and start to pick specific squares to fill in gaps in coverage. A map of 10-km squares is available [here](#).

We encourage you to do as many squares as you like. Please inform your [Regional Coordinator](#) of which square(s) you plan to cover so that duplication of effort can be avoided. Or ask your Regional Coordinator if there are squares needing to be surveyed.

## **Planning your survey**

### **Survey timing**

You should complete your survey between June 15<sup>th</sup> and July 15<sup>th</sup>. Since Eastern Whip-poor-wills are more active around the full moon, surveys should be conducted within one week of the full moon and between the dates mentioned above. For information on specific dates each year, please refer to the survey timing guidelines in the Canadian Nightjar Survey protocol document (<https://www.birdscanada.org/birdmon/nightjars/resources.jsp>).

### **Time of day**

We recommend that nightjar surveys be conducted starting 30 minutes before sunset and completed within 3 hours after sunset. Common Nighthawks will generally be active during the first part of this survey period and Eastern-whip-poor-wills will be more active during the second part, so sites with habitat suitable for Common Nighthawks should be surveyed first, followed by sites suitable for Eastern Whip-poor-wills.

### **Weather conditions**

Weather has a great influence on the activity patterns of nightjars and in our ability to hear their calls. For optimal surveys, calm conditions are always best. Wind and precipitation will reduce nightjar activity and calling rates, in addition to affecting your ability to hear. Surveys should be conducted on evenings with wind less than 19 km/hr (i.e., 3 or less on the Beaufort Scale, which is enough to constantly move twigs and to extend a small flag.). Unusually warm temperatures may also decrease nightjar activity. Surveys should be run on evenings that are calm and not too hot (no warmer than 30°C). There is little point in attempting or continuing a survey if the wind exceeds force 3 or if there is persistent rain or thunder. If you have started a survey and the weather conditions worsen during the survey to a point where they are unsuitable simply stop the survey and finish it another night.

### **Time required**

It takes approximately 3-4 hours to run the full 10-location survey. Ideally, survey all your locations during the same evening. If you are unable to complete the survey in a single evening (i.e., due to bad weather conditions developing), simply complete the remaining locations (to make a total of 10 locations surveyed) on another day and use a separate data form to record your results. For best results please attempt to survey sites for Common Nighthawks within 1 hr after sunset and sites for Eastern Whip-poor-wills beginning 30 minutes after sunset.

## **Completing your survey**

### **Locating designated survey stations**

There are 40 randomly selected, designated roadside survey locations within each square. These are marked on the map of each 10-km square, and their UTM Coordinates are shown on the right side of the map. Maps of each 10-km square as well as survey station coordinates are available [here](#), and on the NatureCounts app. Point Count stations can also be downloaded from the Atlas website: (Coming Soon). See [Appendix B](#) for information on how to navigate to the point count stations.



To select locations for your surveys, start with designated survey location number 1 and check each designated point count location on the map sequentially (1, then 2, then 3, etc.), until you have selected the first 10 designated survey locations that have suitable habitat for Common Nighthawks or Eastern Whip-poor-wills. See [below](#) for a definition of suitable habitat. Ensure that all survey points are at least 1 km apart. It can be helpful to line up a few extra “back up” designated points in case you need to switch points during the survey, e.g., if a location is inaccessible due to current road conditions.

If you arrive at the designated station and realize it is not suitable for one or both species, you should reject this station and find a new one among the designated stations, using the same rules as above (first check number 11, then 12, etc.). Survey sites with habitat suitable for Common Nighthawks first, followed by those suitable for Eastern Whip-poor-wills. If you cannot find 10 suitable survey stations in your square using the rules above, contact the Atlas Office ([atlas@birdsontario.org](mailto:atlas@birdsontario.org)).

Once you arrive at the designated station do the survey as close as possible to designated coordinates. For more information on reading UTM's from GPS units or smart phone see [Appendix B](#).

“No nightjars” is very important data! **Please follow the protocol and complete the full survey.** Once completed, submit survey information, either via the data form for each station, whether or not you detect any nightjars.

### **Determining “suitable” stations**

Suitable stations are those that are:

- physically accessible at the time of year of the survey
- legally accessible (no trespassing)
- near a safe parking spot
- in a quiet location with little traffic
- designated stations should be within 100 m of suitable habitat
- more than 1.0 km from any other nightjar survey station.

### **Suitable Common Nighthawk habitat**

The Common Nighthawk is a long-distance migrant that breeds across much of North America. In Ontario, the breeding range extends across the entire province, occasionally including areas within large cities. This species generally prefers extensive open areas, such as rock outcrops, sand dunes, logged or burned areas, woodland clearings, and grasslands. Sites with one or several of these habitat types, with some wetland habitat in the surrounding area are particularly well suited. In cities, the species is known to breed in areas where flat gravel rooftops, generally found in older building or structures. Any sites fitting these habitat descriptions in the province would potentially be suitable habitat for this species.

### **Suitable Eastern Whip-poor-will habitat**

The Eastern Whip-poor-will is also a long-distance migrant with an extensive breeding range throughout the southern half of North America. In Ontario, the breeding range includes much of the south, extending into some of the forested parts of northern Ontario. The northern limit of the breeding range is currently unknown, so surveys conducted during the Atlas will likely better inform our current understanding of the breeding range in the province. This species

generally prefers dry, open-canopy forests or woodland habitats, with little or no understory vegetation and extensive canopy gaps. Sites with few, but large, forest patches, or smaller patches in close proximity, are equally suitable. Forests can be either conifer-dominated (e.g., pine), mixed, or deciduous-dominated (e.g., oak, maple). Eastern whip-poor-wills also make use of extensive burned or logged areas in central parts of the province. Sites fitting these descriptions would represent potentially suitable habitat.

## **Survey protocol**

At each survey station, count all nightjars detected for a period of **6 minutes**. Surveys should be conducted outside of, and a short distance away from, your vehicle. Each individual bird detected should be recorded immediately to avoid any omissions or errors. To ensure data are comparable between individual volunteers and surveys, please do not try to lure in or coax birds using audio playbacks, whistles, or other methods.

## **Data collection**

We recommend doing all 10 survey points in one evening, but the 10 points can be done over more than one evening should that be necessary or more convenient. Fill in a data sheet even if you recorded no nightjar species. Negative data are as important as nightjar detections – they help us gain insight into the relative abundance of nightjars across the province. See [Appendix D](#) for how to complete the data form.

## **Safety issues**

See [Appendix C](#). Please have fun but make sure you are safe. Carry a cell phone and have a friend accompany you on scouting and survey outings. They provide a safety factor, and can help with the survey – juggling a timer, map, GPS, and data forms can be challenging for one person. It's a good idea to let someone know where you plan to be travelling, and when you expect to return. Double-check the survey in advance and during daylight to ensure the roads are accessible at the time of your survey. Dress appropriately for the weather and wear highly visible clothing; a safety vest is recommended. *Please be careful when standing on roadsides and while driving on wet or muddy roads.* Be careful to ensure your car is pulled completely off the road and, on muddy roads, be careful when pulling off the road as it is easy to slide one or two wheels into the ditch.

**Once you have surveyed the 10 locations and entered the data (see below), you have completed the minimum requirement for the survey in that square. Congratulations, and thank you!**

**If you were not able to complete all 10 stops**, please try to complete the remaining stops on another night. Simply fill out a second data form and submit both forms. If you are not able to complete the remaining stops on another night, please send in the results for the stops you were able to complete. This information will still be usable in the final analysis.

**If you completed 10 stops and would like to do additional surveys**, please select another square to survey. Remember to check with your Regional Coordinator to find a square needing coverage and avoid duplicating effort.

## Entering Ontario Nightjar survey data

In the future, you may be able to enter the data for your survey via an Nightjar survey app while in the field. That option is not available for 2021. Please print off and complete the hard copy data form in the field then enter the data via the Atlas website.

### **Completing the Ontario Nightjar Survey Data Form**

Use dark pencil or pen. You will be entering your data to the computer, so make sure the form is legible. See the sample completed form in [Appendix D](#).

**Missed fields:** Don't miss fields on the forms as missing information may cause a data entry error that prevents you from submitting your data.

**Square ID:** Fill in the 7 digit number, e.g., 17TNU61

**Name:** Fill in your full name and atlasser ID number.

**Date:** Record the year, month and day of your survey. If you have done the survey on more than one night, use a new data form for each night.

**Comments:** Fill in any pertinent information about that night's survey.

**Station # (Point Count #):** Fill in the number of the point count where you did your survey. See Knight *et al.* 2019 for further details on the Canadian Nightjar Survey Protocol on the Birds Canada website (<https://birdscanada.org/birdmon/nightjars/main.jsp>).

**Time:** Record the time you start the survey at that station. Use the 24-hour clock: 7:30 p.m. is 19:30.

**Survey Data:** Each line on the data sheet represents an individual bird. Use a new line for each new bird detected at a stop. Do not record any detection data if no nightjars were heard at a given stop. If you cannot accurately count the number of individuals by sight or by concurrent calls, make a note in the "comments" column of the data sheet. In the example on page 16, at this example station (#1), two nightjar species were heard: one Common Nighthawk and one Eastern Whip-poor-will.

### **Nightjar Species Codes:**

CONI = Common Nighthawk

EWPW = Eastern Whip-poor-will

CWWI = Chuck-will's-widow

**Recording Observations:** The survey period is broken into 6 one-minute intervals on the data sheet. For each bird heard or seen during each one-minute interval, indicate the highest ranked type (see 1-4 below with 1 being the highest rank and 4, being the lowest).

1. **Wing-boom (W):** If the bird performed a territorial wing-boom in that one-minute interval (CONI only)
2. **Call (C):** If you heard the bird call during that one-minute interval
3. **Visual (V):** If you saw the bird, but did not hear it during that one-minute interval
4. **Not detected (N):** If you did not detect the bird during a given one-minute interval

In the example, the CONI wing-boom (W) was heard in the second minute and the EWPW call (C) heard in the third minute.

**Direction:** Please try to **estimate the direction of each individual bird using cardinal directions** (e.g., north, east, south, and west). For detections of Common Nighthawks in the air, please record the direction in which the bird was seen or detected. In the example, the EWPW was heard coming from the East.

**Distance:** Recording the location of particular observations may help us learn more about the specifics of nightjar habitat requirements. Please estimate the distance and direction, as near (< 100 m), or far (> 100 m) to your first detection of each individual:

- Eastern Whip-poor-will
- Common Nighthawk performing repeated wing-booming in the same location (3 or more wing-booms)

You do not need to estimate the distance and direction for Common Nighthawks that are not performing repeated wing-booming. In the example, the CONI was heard at a distance <100 m and the EWPW >100 m.

**Traffic count (# cars):** Record the number of vehicles that passed by that station during the survey period.

**Noise:** Record number 0 to 3 based on the following scale:

0. None.
1. Slight: some interference with listening.
2. Moderate: substantial interference with listening.
3. Excessive: extreme interference with listening.

If there is excessive noise or too much traffic at one station to survey properly, we recommend stopping the survey, erasing any data that you may have recorded from that stop, and selecting a different station using the procedure described on pages 8-9. In the example, no noise was heard and recorded as 0.

**Weather:** For each survey station, record data on the weather conditions because factors such as wind, temperature, and moon visibility can affect your chances of detecting a nightjar. Rate the amount of cloud cover at the time of your survey using codes 0 to 4. Enter yes or no to indicate if the moon can be seen while surveying. This is particularly important to record in deep valleys where the moon is often obstructed by the surrounding hills or mountain ridges. In the example, wind was #1 (light air), cloud cover #2 (25-50%), and the moon was visible.

### **Submitting your data**

*Data are entered on the NatureCounts website [here](#). Please enter your data **within 2 weeks of completing your survey, or, at the latest by August 1<sup>st</sup> each year**. You can review and correct your data using the app or the Atlas website, you can correct the data as long as your region's data reviewer (your RC) has not finalized the submission.*

You can print Nightjar data forms from the web page here:  
<https://www.birdsontario.org/owl-nightjar-surveys/>

If you have any questions, please email [atlas@birdsontario.org](mailto:atlas@birdsontario.org). *Thanks very much!*

## Appendix A - MP3 Owl and crepuscular surveys.

**Owl training.** The owl training MP3 files can be obtained using separate links for each MP3 file available [here](#). It includes recordings of other birds and common frogs you might hear while out surveying for nightjars. Included are: Common Nighthawk; Eastern Whip-poor-will; Great Gray Owl; Long-eared Owl; Great Horned Owl; Barred Owl; Northern Saw-whet Owl; Boreal Owl; Northern Hawk Owl; Short-eared Owl; Eastern Screech-Owl. Wilson's Snipe; American Woodcock; Ruffed Grouse; Mourning Dove; Wood Frog; Spring Peeper; and Chorus Frog. This is the same training recording used by the Ontario Owl Survey.

## Appendix B - Using a GPS, the map or a Smart Phone to determine UTM coordinates

The Universal Transverse Mercator (UTM) grid system is the location system used for the Ontario Nightjar Survey and Ontario Atlas-3.

### **Finding stations using the 10-km square map**

The locations of the numbered Atlas Point Count Station are shown on the Atlas 10-km square map, and the UTM coordinates of each are listed on the right side of the map. You can use a hard copy printed map to navigate to the station. Use the UTM on a GPS or other device (see below) to find the precise coordinates of the station and run the survey as close as possible to the designated coordinates.

### **Finding stations using downloaded Point Count locations**

Coming soon when Atlas-3 point count locations are available for download.

### **Finding stations using the NatureCounts app**

Coming soon when Atlas-3 point count locations are available on the NatureCounts app.

### **Using a GPS unit to determine UTM location**

If you have a GPS unit, set the device to NAD83. Check all 6 digits of the Easting and all 7 digits of Northing. (If your GPS unit gives you 7 digits for Easting, ignore the initial "0").

### **Using a Smart Phone**

#### **iPhone**

On an iPhone you can use the built in Maps app or Compass app or you can download a mapping app such as Google Maps. iPhone defaults to latitude longitude so you will need to set your defaults to UTM.

#### **Android Smart Phone**

Unlike the iPhone, the Android system doesn't have a default, built-in GPS coordinate utility to show you the information that the phone already has, so you have to find an Android app that can provide this functionality. See the google play store for available apps or review your options online. One good review is available at <https://www.androidauthority.com/best-gps-app-and-navigation-app-for-android-357870/>. Remember to set your default to UTM or you will need to convert your coordinates later.

## Appendix C - How to stay safe while conducting owl and crepuscular surveys

**Surveyors, not just birds, are important!** For nocturnal surveys in high traffic areas, in remote locations, or on narrow snowy roads, we cannot overemphasize how important it is to consider YOUR safety and that of other drivers. Please use these tips to help ensure you have a fun enjoyable and SAFE evening:

- Take a Friend, Tell another friend your survey plans and be sure to check in
- Bring a cell phone, know if you have service where you survey
- Keep your eyes on the road while driving – stop and pull over before you survey
- While driving only the passenger should handle tech (gps locations, texts, calls etc.)
- Is your car ready? Is it in good condition, do you have/need snow tires or chains, is your gas tank full, does your battery charge correctly.
- Check the roads IN DAYLIGHT to ensure they are safe to drive and that people can safely pass you when you stop. Consider snow, mud, ruts, bridges, washouts etc.
- Will others be able to see you? Check the forecast for road conditions and for visibility and avoid poor driving conditions
- Wear your reflective Safety Vest!
- Take a flashlight or headlamp and extra batteries
- If you don't like listening to your caution lights leave your headlights on but watch and ensure your alternator is charging your battery
- What else will drain your batteries? Your headlights, stereo system, cell phone, broadcast unit, seat warmers and starting the car every six minutes. You will need to choose what equipment you need and what you don't.
- If there is no snow, check for ticks and/or stay out of the tall grass
- Consider carrying the following particularly for more remote routes:
  - shovel, shovelling is far better than a long walk
  - bring your winter roadside emergency kit. If you aren't sure what goes in an emergency kit, check out [here](#) or [here](#);
  - a blanket or sleeping bag for every participant
  - bring your first aid kit, make sure you know where it is and that it is up to date
  - make sure you have a spare tire and a jack or a tire repair kit. Refresh your memory on how to use this equipment
  - and take more food and water than you think you need
- For further information on safety while atlassing [click here](#)

Taking little ones along? What a great idea! Take lots of fun snacks, bring ear protectors, dress them in light-reflective colours and ensure children remain off the road. As you will be looking up a lot (and not at your child) make sure there is another adult with you to specifically keep an eye on them. **If an owl calls - remember to take their ear protectors off so they can enjoy the moment as well. Above all else, remember that people are important too and if for any reason you are concerned for your safety or the safety of others, please stop your survey! There will always be another day and another year to collect data.**



## Appendix D - Sample data form

### ONTARIO NIGHTJAR SURVEY DATA FORM

**1. SURVEY INFO:** Fill this out before you start. Don't forget to fill in "End Temperature" when you're done your survey!

<b>Atlasser Name:</b>	<b>Co-Atlasser Name:</b>
<b>Address:</b>	<b>Phone:</b>
<b>Atlas Square ID:</b>	<b>Date (yyyy-mm-dd):</b>

Comments: \_\_\_\_\_

**2. STOP CONDITIONS:** Record the conditions at each survey stop in the comments.

Start Temperature: \_\_\_\_\_ 15 °C \_\_\_\_\_

Code	Wind Description	Cloud Description	Noise Description
0	Calm- Smoke rises vertically	No clouds	None
1	Light air - Smoke drifts, leaves and wind vanes are stopped	< 25% cover	Slight (e.g., distant traffic)
2	Light breeze – Wind felt on exposed skin, leaves rustle, wind vanes begin to move	25-50% cover	Moderate (e.g., airplane, moderate traffic)
3	Gentle breeze - Leaves and small twigs constantly moving, light flags extended	50-90% cover	Excessive (e.g., construction, frog chorus)
4	Do not survey	> 90% cover	N/A

Point Count #	Start Time (24 hr)	Wind (circle)	Cloud (circle)	Moon (circle)	Noise (circle)	# Cars	Comments/Stop Conditions
1	21:01	0 ① 2 3	0 1 ② 3 4	④ N	① 1 2 3	0	Partially cloudy, near woodland clearing and a wetland is nearby. Approx. 50m from designated UTM.

**3. NIGHTJAR OBSERVATIONS:** At each stop, listen for 6 minutes and fill out one line for each individual heard. Record the code for the highest ranked detection type you observed in each one-minute time interval: 1. W (Wing-boom), 2. C (Call), 3. V (Visual), 4. N (Not detected). Only record distance and direction for EWPW and repeat wing-booming CONI.

Point Count #	Species	Time Interval						Distance (circle)	Cardinal Direction	Comments
		1	2	3	4	5	6			
1	CONI	N	W	N	N	N	N	< 100 m > 100 m		
1	EWPW	N	N	C	N	V	N	< 100 m > 100 m	E	Could not accurately count number of individuals
								< 100 m > 100 m		
								< 100 m > 100 m		