



Instructions for the North American Nightjar Survey

2025 Season

nightjars.org

Thank you for participating in the Nightjar Survey Network (part of the North American Nightjar Survey). The primary objective of this program is to determine the population distribution and trends of Nightjar species across the United States. There is a general sense that populations of these species are declining. Information on the precise scale and magnitude of population changes are necessary if we are to plot a course for conservation. This effort is coordinated by **Maine Natural History Observatory and Birds Canada**, however the success of this monitoring effort can only be achieved with dedicated volunteers willing to conduct these surveys.

Nightjar surveys are standardized counts conducted along roadside routes at night. A route only needs surveyed **one time per year**, but during a very specific time window and conditions. Surveys should not take much more than an hour to complete. The only experience necessary is a familiarity with each nightjar's characteristic vocalizations.

Please read all of the instructions carefully. Your commitment to following these instructions will ensure that data is collected such that it is comparable between all routes in the Nightjar Survey Network and our partner efforts.

Conducting Surveys

Survey data can be recorded and reported in two ways (visit nightjars.org for more details):

1. You can record and submit your results in the field using a smartphone and the NatureCounts mobile app.
2. You can record your observations on a physical data sheet and enter your results on the NatureCounts website.

Seasonal and Daily Timing:

- 1) Begin each survey at least 30 minutes after sunset and end no later than 15 minutes before sunrise.
- 2) Surveys must only be conducted during these **2025 survey dates**:
Window 1: FL, TX, and low elevation AZ* and NM: 4 Apr – 20 Apr
Window 2: Southern US (MO and all areas south): 4 May – 20 May
Window 3: Any location in the country: 2 Jun – 18 Jun
Window 4: Areas north of AZ, FL, NM, and TX, high elevation areas in northern US: 2 Jul – 17 Jul
Window 5: WA, OR, ID, MT, WY, Dakotas, MN: 1 Aug – 16 Aug
**For AZ-specific dates: nightjars.org/participate/arizona-specific-survey-dates/*

Contact nightjars@nightjars.org if you have a question about how these dates apply to your area. These dates are specifically chosen to coincide with the brightest moonlight and greatest nightjar calling frequency. These are important dates to use so survey conditions are standardized across all regions of the NSN.

- 3) **Surveys *must* only be conducted when the moon is above the horizon and not obscured by clouds.**

Nightjars call less frequently when the moon is still below the horizon or hidden by dense cloud cover. Check your local times for moonrise at the US Naval Observatory (aa.usno.navy.mil) or in a local newspaper. Please note that the moon rises later each successive date. The moonrise may occur after 11:00pm or later. Your survey must be completed when the moon is above the horizon.

Route Logistics:

Each survey route consists of 10-12 stops. The starting point of your route will be named stop 1. All other stops are sequentially numbered and spaced 1 mile apart. You may vary the exact distance up to 2 tenths of a mile between stops to find a safe place to park. It is better to add space between points rather than shortening this distance to avoid counting the same birds twice. Not all of your stopping points need to be on the same road. We recommend scouting your route during daylight to become familiar with the stops. Your safety is paramount. If you do not feel safe at a particular stop, skip the stop and proceed to the next stop.

Conducting Nightjar Surveys using Nature Counts:

State: Record the state where your survey was conducted.

Observer and Observer Email: Record your name and email address.

Route: Record route name here.

Date: Indicate the date of the survey.

StartTime: Indicate the time at which you began your survey efforts.

Survey Conditions:

Wind: Beaufort scale (0-4) and direction. DO NOT conduct surveys during high winds (>18 mph). High winds diminish your ability to hear nightjar vocalizations.

Code	Wind Speed	Description
0	Calm (0-1 mph)	Smoke rises vertically
1	Light (1-3 mph)	Direction of wind shown by smoke drift, but not by wind vanes.
2	Light Breeze (4-7 mph)	Leaves rustle; ordinary vanes moved by wind.
3	Gentle Breeze (8-12 mph)	Leaves and small twigs in constant motion; wind extends light flag.
4	Moderate Breeze (13-18 mph)	Raises dust and loose paper; small branches are moved.

Sky: DO NOT begin a survey if the sky is completely overcast, during heavy fog, or persistent rain. All of these conditions will diminish calling rates of nightjars and hamper your survey.

Code	Sky	Description
0	0%	Clear, can see stars and moon clearly
1	10%	
2	20%	
3	30%	
4	40%	
5	50%	
6	60%	
7	70%	
8	80%	
9	90%	
10	100%	Overcast. Do not conduct survey.
11	100%*	*Dense Fog. Do not conduct survey.

Noise Level: Codes indicate the level that background noise impairs your ability to hear nightjars.

Code		Description
0	None	Relatively quiet, little interference
1	Moderate	Some interference with listening.
2	High	Substantial interference with listening.
3	Excessive	Extreme interference with listening.

Moon Visible (Y or N): Enter Y for YES or N for NO to indicate if the moon can be seen above the horizon while counting nightjars at the stop. This is particularly important to register when in deep valleys because the moon may be obstructed by mountain ridges.

Vehicle Count: Indicate the number of vehicles that passed during the duration of the survey effort at each stop.

Air temperature: Indicate the air temperature (in Celsius) at each stop location.

Counting Nightjars:

At each point, count all Nightjars seen or heard for a period of **SIX MINUTES**. Do not include nightjars you see or hear anytime before or after the six minute counting period. Counting nightjars and recording data should be done from a stationary position outside of your automobile. Most importantly, be consistent. Use the same technique at each stop including how you focus your listening for nearby birds and distant birds.

The counting period is broken into six 1-minute listening periods on the data sheet. Record the detection history of each individual Nightjar seen or heard from the time of their first detection through their last detection in the appropriate 1-minute block of the Count Sheet.

Detection: Indicate how each individual is detected in each listening period: W - Wing Boom (*Common Nighthawk only*), C - Call, V - Visual, or N - Not Detected.

Distance ("Dist") and Direction ("Dir."): Provide an estimate of distance (0-100m or 100m+) along with your best estimate of the direction ("Dir.") of each bird.

Repeat? ("Rep.?"): Birds will sometimes move during the counting period. Use your best judgment in determining new detections from those of birds that have simply moved during the count and aim to record each new individual on a separate line. Indicate (Y) if you when you believe an individual bird is a repeat from another stop when necessary.

DO NOT use whistles, audio-calls, or any method of that coaxes birds to call or come closer to you. Also, DO NOT use a flashlight to search for reflections of Nightjars eyes. These practices will bias your survey and make it difficult to compare your data to other routes. Record birds as you hear them, rather than waiting for the end of the six minute period to avoid data omission errors.

To save time and space, consider using the following abbreviations for each species on your data sheet:

ANNI = Antillean Nighthawk

CWWI = Chuck-will's-widow

BCNI = Buff-collared Nightjar

LENI = Lesser Nighthawk

CONI = Common Nighthawk

EWPPW = Eastern Whip-poor-will

COPA = Common Pauraque

MWPPW = Mexican Whip-poor-will

COPO = Common Poorwill

Please remember that surveys should be conducted during the allotted survey windows and daily timeframe described above (see "Seasonal and Daily Timing"). Always remember the moon should be above the horizon. Surveys should not be conducted under overcast skies, during strong wind, or when there is persistent rain or snow. If conditions deteriorate after a route is started for more than 3 stopping points, we advise you to abort the survey and attempt it on another night with better conditions.