

Nocturnal Owl Surveys (NOS) and Breeding Bird Atlases (BBA) Recommendations to Atlassers

Many atlassers have asked us if the data they collect on Nocturnal Owl Surveys (NOS) can be used for the atlas. We are pleased to announce that we are working on a way to automate data entry such that all NOS data is entered directly into the atlas. This means that with just a little more effort, your volunteer contribution can get double mileage. Following the simple steps below will help us make the most of your data. Since NOS are run annually, with the same observer repeating the same route, they are extremely useful for monitoring change over time. BBAs, on the other hand, provide a precise snapshot (within a five-year window) of distribution and abundance. These surveys complement each other very well and inform conservation efforts. We therefore encourage all atlassers to consider conducting one or more NOS routes.

Following the simple steps below will help us make the most of your data:

1. If you already run a NOS route, find out if your NOS survey stops already have coordinates provided
 - **if so**, please indicate this on your NOS form or separately
 - **if not**, try to arrange a way to borrow a GPS unit to waypoint all stops when you conduct your route. Record all stops locations in the NAD83 datum and in UTM coordinates. Alternatively, if you know a route well, you may be able to derive coordinates using Google Earth. Contact Christian Artuso at 204-945-6816, OR 1-800-214-6497, OR cartuso@birdscanada.org for assistance.
2. If you do not currently have an NOS route assigned, contact Christian Artuso (contact details above). The Manitoba BBA and NOS will team up this year to assign any new routes requested.
3. Conduct your NOS route, making sure that the coordinates for all stops are available. All owls heard on NOS stops will be coded as “S” (S = “singing”, at the level of “possible breeding”) as a default when they are transferred to the atlas. HOWEVER, if you are able to increase the level of breeding evidence you should make a note of this in the comments section of the NOS form. For example, you hear an aggressive territorial encounter (code “A” for agitated) or hear/see a pair whose voices or size dimorphism indicate female + male (code “P” for pair) or if you hear 7 or more singing individuals of one species within what you know to be one Atlas square (code “M” for multiple), or in the unlikely event you see an owl fly to a nest (code “AE” for adult entering nest).

Note: if you have UTM coordinates for each stop it is not necessary to know what atlas square you are in when you conduct your NOS route. Knowing this however can help if you wish to use the M code. Consult your atlas website for details.
4. When you submit your NOS data, indicate your BBA participant number on the form. In addition, you can greatly facilitate our efforts by entering your NOS data online at: <http://www.birdscanada.org/birdmon/mbowls/entry.jsp> (you will need to register for Nature Counts first at <http://www.birdscanada.org/birdmon/default/register.jsp> to have a user name and password).
5. If you are interested in running additional NOS routes for the purpose of the Atlas contact Christian Artuso (contact details above) or see method outlined in point 6 below.
6. Feel free to atlas for owls in your square. However, if you would like to conduct a nocturnal owl survey in your atlas square, you can use the following method:
 - i. There are up to 30 pre-designated roadside point count locations within each square. These are marked on the map of each 10-km square. You can conduct an NOS point count at some of these locations. To select locations for your surveys, start with designated point count 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 are likely to be suitable for owls. Ensure that all survey points are at least **1.6** km apart. We recommend that you actually go the field during daylight hours to locate each point. This makes it easier to find the points when you go back after dark.

- ii.** If you arrive at a point and realize that it is not suitable, you should reject this point and find a new one among the designated points, using the same rules as above. If you cannot find 10 suitable survey points in your square, it is perfectly acceptable to do fewer than 10 stops. You may choose to do stops in a neighbouring square as well. Note that it is essential that you do not include undesignated locations known to have owls, because this would very much bias your results.
- iii.** Try to conduct your nocturnal point count at the designated locations as precisely as you can determine them (using the map or GPS); however, if the habitat is unsuitable at that location but there is habitat nearby, or if parking at that location would be dangerous, you may move anywhere within 100m of that location to do the actual survey. For example, if the designated point count location is 75m from a woodlot, you can move to the edge of the woodlot or up to 25m inside the woodlot to do the survey. If you have a GPS, and you do in fact move more than about 50m from the designated location on your atlas map, you should provide the UTM of the location where you actually did the survey.
- iv.** The 10 points can be surveyed in the most convenient order (not necessarily sequentially 1-10). It is important that you conduct a full NOS protocol at each stop (including playback if your province uses playback) and complete the data form for each location, whether or not you actually find owls. Negative data are as important as owl detections – they help us gain insight into the relative abundance of owls across the province.
- v.** If you find owl in your square during the daytime or opportunistically, please include them on your breeding evidence form; HOWEVER, do not let them influence the way you conduct nocturnal point counts.