

How to Atlas for Owls

Owls are secretive, primarily nocturnal birds that breed as early as February. Thus, atlassing for owls in June and July is not the most effective way to assess Maritimes owl populations. To maximize detections (and to get a true “snapshot” of Maritimes owl distributions), you’ll need to visit your square a few times over the course of the winter. Below are some owl atlassing tips to help you get started.

Where to survey

Begin by examining your square map for any roads through significant amounts of forest; our common owls are forest dwelling and need large dead trees for nesting. Choose roads that are safe for night-time travel but not too busy because traffic can be dangerous for those standing on the side of the road at night. As well, the excess noise will make it difficult to hear owls. If you can, scout out your route ahead of time to determine which roads are accessible (some roads are not cleared of snow in the winter).

When to survey

Owls begin breeding as early as February and continue on through May. Ideally, visiting your square once per month should catch all owl species at their breeding peak. However, if you only have one or two nights for owling, choose a night in early April (NS and southern NB) or mid- to late April (northern NB and Cape Breton) that is clear and not too cold, with very little wind. Excessive wind will make it hard to hear owls and owls are not active in rain or heavy snow. (Also we don’t want to disturb owls incubating eggs or warming young on a stormy night; besides, who likes to be out in that weather anyway?) Most owl species are active a half hour after sunset until a half hour before sunrise (check your local newspaper or online “www.hia-ihh.nrc-cnrc.gc.ca/sunrise_e.html” for sunset times).

The big night

Dress warm; pack some hot chocolate, your map, a flashlight, a cell phone (if you have one), your owl CD and CD player (most vehicles CD players are loud enough for playback). In your square, stop every kilometre or so in good habitat and use your CD to conduct a playback.

If you are using your own owl recordings/CD, we suggest playing Boreal Owl calls for approximately 30 seconds (this will bring about responses from both Saw-Whets and Boreal Owls if they are in the area) followed by two minutes of silent listening. Then play Barred Owl calls for 30 seconds followed by another 2 minutes of silent listening. Repeat the Barred Owl call (followed by silent listening) several times as Barred Owls often take several minutes to respond (as long as 10 minutes).

If you use the CD provided by the Atlas office (CDs are available from the office call or email to receive a copy; cds are the same as those used to conduct the NS, NB and PE owl surveys), simply play the first track all the way through as the timed silences are included.

If you detect an owl, note the location so you can return later to increase the breeding evidence to “T” (territory).

A WORD OF CAUTION:

Song broadcasts are effective in locating owls but should not be used indiscriminately. Responding birds may continue to vocalize after playback ends and thus can be more easily located by predators. Plus, frequent and persistent playback may affect the owl’s normal activities. Enjoy the experience but please keep disturbance to a minimum. The health and welfare of each owl is the utmost priority.



Owls commonly encountered in NB

Barred Owl - Highly vocal, giving a loud and resounding "Who, cooks, for-you? Who, cooks, for-you, all?" The last syllable drops off noticeably. Found most commonly (but not exclusively) in mid-aged to mature mixed deciduous-coniferous forests with closed canopies. Avoids open habitats like marshes and agricultural land.

Great Horned Owl - Male's resonant territorial call of, "hoo-ho-hoo hoooooo hoooooo," is most common. Prefer open secondary-growth forests of any kind that are near open habitat such as wetlands or fields. Typically do not respond to playback.

Northern Saw-whet Owl - Primary courtship call is a monotonous, whistled "hoop, hoop, hoop, hoop...", given at a rate of 1½ notes per second. Commonly found in forests dominated by conifer trees.

Owls rarely encountered in NB

Long-eared Owl - Main call is a low "hoo, hoo, hoo, hoo ...," repeated 10 to 200 times, with one note every 2 to 3 seconds. When alarmed, Long-eared Owls bark "whek-WHEK-whek" or shriek like a cat. Usually prefers dense coniferous or mixed forests in close proximity to more open habitats, however, its habitat choices seem highly variable.

Boreal Owl - A rapid, high-pitched, "to-to-to ...," Similar to the sound made by Wilson's Snipe during display flight. Found in mature mixed deciduous-coniferous forest.

Eastern Screech Owl - Most common call is an eerie, mellow, muted trill. When in the nest with young, adults give a descending whinny call, instead of the normal call. Found in most tree-dominated habitats. More likely to be detected in southern areas of the Maritimes.

Short-eared Owl - Most active 2-3 hours before dusk in open, agricultural areas and will not be detected using the protocol detailed here. The "Guide to Atlassing for Species at Risk in the Maritime Provinces" contains a protocol for detecting Short-eared Owls.

Northern Hawk Owl - Gives a whistle-like call, "Ulululululu..." reminiscent of the Eastern Screech Owl trill. Most active during the day. Found in moderately dense conifer or mixed forests that are close to open habitat. More likely to be found in northern areas of the Maritimes.

Other species you might encounter while surveying for owls

Wilson's Snipe - Winnowing sound "huhuhuhuhuh..." (produced by wings directing air through the tail as it dives) that changes in pitch, distinguishing it from the Boreal Owl's call. Also a vocalization "kik-kik-kik-kik..." Found in shallow marshes and bogs.

American Woodcock - Buzzy or nasal "peeent" and wing twittering display. Found in damp deciduous forests or swamps.

