

Year Three is Key: Breeding Season 2008

By **Becky Stewart**, Coordinator

Before you read any further, please put this newsletter down and give yourself a pat on the back. Now gather your friends and family and have them give you a standing ovation. In 2007, you collectively spent a total of 9,235 hours surveying for breeding birds in 1,056 squares. No doubt, the MBBA is the largest bird monitoring effort in the Maritimes. In addition to this incredible survey effort, Regional Coordinators, other volunteers and Atlas staff organized and led presentations, training workshops, trips and square bashes across the Maritimes before and throughout the breeding season. Nearly 400 Atlassers participated in these events. The fruits of your labor are apparent when we look at the updated species distribution and effort maps—there are far fewer grey (i.e., “unsurveyed”) squares than at this time last year.



Barred Owl nestlings, photo by Scott Makepeace

So now, with a great deal of experience under our belts and hopefully a bit more knowledge, we approach our third Atlas season. While we have accomplished much, there is still more to

do and it is time for our efforts to become more focused in terms where we are spending our survey hours as well as in terms of the species and breeding evidence we target. Although there is some coverage in most squares, many only have a few survey hours. As well, certain groups of species, particularly nocturnal and crepuscular species, are underrepresented, and a large number of species detected have only been recorded as “possible” breeders. So if you have already spent 10 or 15 hours in your square, take a look at your square summary sheet (available online) to see which species need a higher level of breeding evidence. If you are able to do point counts but haven’t started yet, now is definitely the time. If you have already spent well over twenty hours in your square, have found most of the expected species (the square summary sheet provides a list of what was found in the first atlas), and are thirsty for more atlasing, talk to your RC to see if there’s another square that could use your help.

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Remembering Gareth Akerman

Gareth worked for the Atlas in the summer of 2007; surveying for breeding birds in some of the more remote regions of northern New Brunswick. He recently completed his Master's research on the role of riparian forest and riparian buffer strips in avian conservation in the Acadian forest. Gareth also worked with the Bluenose Coastal Action Foundation in N.S. on the Roseate Tern Recovery Project, and volunteered for several other conservation initiatives.



Gareth atlassing on Bald Peak, NB, in June 2007, photo by Gareth Akerman

Gareth had a real knack for finding Scarlet Tanagers, picking the perfect driving tune and making others laugh. He was also an incredible field researcher, a dedicated conservationist and a valued friend. Gareth is greatly missed by all who knew him.

Species Highlights of 2007

- LeConte's Sparrow singing near Sussex
 - Eastern Meadowlark carrying food near Saint John
 - Northern Rough-winged Swallow along the Saint John River
 - A pair of American Coots observed moving in and out of the bullrushes on more than one occasion in Region 20 (Coots were not found in this region in the 1st Atlas)
 - At least three Turkey Vulture nests found
 - A very agitated Lesser Yellowlegs was seen (and heard) in Guysborough County
 - Several breeding Solitary Sandpipers
 - Indigo Bunting confirmed
- ### How I plan to finish my square(s)
- By Peter Hope, RC for Region 19
- After the first two years of Atlas surveying many of us have squares with a lot of species detected. There is still more to be done to gather data on enough species to complete the task for those squares. Here is a list of what I'm going to do to complete my squares:
- Print a paper copy of the list of species reported for each of my squares (available on the Atlas website). This will tell me if other people have reported some birds and shows me the species I must focus on to find or to upgrade their breeding status.
- Read up on the species I'm looking for - my target species - and actively search them out in their preferred habitats – i.e. off trails and roads.
- Determine if there are other accessible areas of my square and possibly other habitats I can spend more time in seeking new bird observations - possibly buying the latest topographic map to help with this or using the Atlas website maps.
- Visit my squares at different times - earlier in the season for some species (check the breeding

- Clay-colored Sparrow singing in Regions 4 and 24 (this sparrow wasn't detected in either of these regions during the first Atlas)
- Boreal Owl nest with young in Cape Breton
- Least Bittern fledged young in Madawaska
- Green Heron fledged young also in Madawaska
- Harlequin Duck in Regions 17 and 26



season info for certain species on the Atlas website) and at different times of the day.

Make specific owl outings and use recorded owl calls.

Possibly camp for a couple of nights in squares that are an hour or more travel from home - this will give me more time there plus coverage during hours when I'm not in the square.

Use a limited amount of taped calls for target bird species but will use this with caution and spread it around so that no specific breeding pair is jeopardized.

Keep specific site location notes for hard to find species and go back to that spot later and try to determine increased breeding status (at least territorial) for those species.

Keep my home bird feeders stocked with food until late July hoping some species will bring their recently fledged young to the feeder.

Keep several hummingbird feeders filled at well separated locations so an aggressive male won't scare away young juveniles.

Meet and talk with other people living and working in my squares to gather any reports of birds they find.

Invite other birders especially highly knowledgeable ones, to join in an outing to my square or to contribute their sightings during their own field visits (this includes asking the RC for help, ideas or training).

I will maximize my volunteer time on the Atlas from mid June until the end of July as that is the best time for high level returns.

2008...the year to begin point counts (if you haven't already)

By Becky Stewart, Coordinator

A substantial addition to the second Maritimes Breeding Bird Atlas survey protocol is point counts. The data collected from these counts

will provide us with valuable insight into how a species is distributed within its range.

In 2006, volunteers completed 1055 point counts in 127 squares. In 2007, the number of point counts completed was almost double the 2006 figures—2059 point counts done in 205 atlas squares! Let's keep this exponential rate of growth going. Our goal is to complete point counts in all priority squares by 2010.



Black and White Warbler, photo by Hans Toom

If you are able to identify birds by sound, please join the point counting effort and/or if you have already completed point counts in your assigned square, please consider conducting point counts in a neighboring square. Remember that point counts are not an atlassing requirement—just let your RC know if you'd like someone else to help out with the point counts in your square.

Potential New Breeding Species during the 2nd MBBA

By Scott Makepeace and Dwayne Sabine, RCs for Regions 11 and 10

An exciting component of atlassing and birding in general is the discovery of rare or little known species. Because of the very nature of an atlas, birders spend more time in favorite places, and also visit areas they would otherwise never get to. The nature of bird populations is one of change, both shifting breeding ranges and



abundances. All of these factors increase a birder's chance of finding rare, or little known breeding bird species.

During the first Maritimes Atlas, first-time breeding was confirmed for a number of species. Some were expected (such as Greater Scaup, Wilson's Phalarope, and House Finch) and others were probably considered long shots or were unexpected (such as Solitary Sandpiper, Glossy Ibis, Blue-gray Gnatcatcher). The second atlas has already seen the discovery of new breeding species, including: Yellow-throated Vireo in PEI (and probably also NB and NS), and Red-bellied Woodpecker in NS (not yet reflected in the atlas data, but published in NS Birds).

So, what are the probable and long-shot new breeding birds for this atlas? Based on trends and observations from surrounding areas there are quite a few species we should be on the look-out for. Table 1 is a list of species that are probably nesting somewhere in the Maritimes. They have either already bred here once or twice, or have bred in nearby areas and their numbers have increased considerably in recent years. Table 2 is a list of potential breeders that are known to nest nearby, but are not known to occur regularly in the Maritimes. Because of the distribution of most of these species, the obvious places to concentrate effort are the southwestern corners of the Maritimes; closest to their current known ranges, but anywhere is possible.

Although many of these species may seem speculative, the very rarest species are, by definition, hard to locate. Even a seemingly conspicuous species such as the Sandhill Crane might be lurking somewhere. Although a large bird, it is surprisingly hard to detect during nesting and chick rearing. Sandhill Crane have been increasing over the last 20 or so years in the eastern part of their North American range. They have been found breeding in southwestern Quebec, Maine, and elsewhere in the New England states just within the past decade. Sandhill Cranes have been observed annually in NB for 7-8 years, at multiple locations over the past 2-3 years, and lately are turning up more

frequently in NS as well. This species nests in areas dominated by

Table 1. Bird species suspected of breeding because they have recently increased in abundance and are known to nest in nearby jurisdictions, or have already bred here occasionally.

Species (known breeding location)	May Occur	Habitat
Sandhill Crane (ME, QC)	NB, NS	Extensive areas of open wetlands
Yellow-billed Cuckoo (ME, QC)	NB, NS	Shrub-dominated areas
Eastern Towhee (ME, QC)	NB, NS	Shrub-dominated areas
Tufted Titmouse (ME, QC)	NB, NS	Mostly hardwood forest, parks, suburban areas
Black-headed Gull (Magdalen Is, NL)	NB, NS, PEI	Marshy coastal areas, colonial, islands
Sedge Wren (ME, QC, NB?)	NB, NS	Sedge-dominated wetlands
Carolina Wren (ME, QC, NB 2002)	NB	Suburban treed/scrub areas
Harlequin Duck (QC, NB)	NB, NS	Turbulent rivers
Yellow-throated Vireo (ME, QC)	NB, NS, PEI	Hardwood forest, esp. oak and/or riparian sites
Red-bellied Woodpecker (ME, QC)	NS, NB	Hardwood forest, wooded swamps

Table 2. Bird species suspected of breeding because they are known to nest in nearby jurisdictions but occurrence in the Maritimes is poorly known.

Species (known breeding location)	May Occur	Habitat
Eastern screech Owl (ME, QC)	NB, NS	Open hardwood woodlands, esp. riparian
Grasshopper Sparrow (ME, QC)	NB	Extensive short grass areas, blueberry barrens
Clay-colored Sparrow (QC)	NB, NS	Shrub-dominated areas, edges
Fish Crow (ME)	NB, NS	River valleys and coastal
Prairie Warbler (ME)	NB, NS	Shrub-dominated areas



bogs, fens and other open marshes. If your atlas square has extensive areas of open wetlands or bogs, a couple of visits during June and July might be well rewarded.

In addition to these potential new-to-the-Maritimes species, there are also a number of birds that are currently known to breed in parts of the Maritimes, but that would be worth looking for in provinces where they are seemingly absent. Check the maps from the first atlas to look for worthy candidates in your area, e.g., American Oystercatcher in New Brunswick. This species was found breeding in NS subsequent to the first atlas; the lower Bay of Fundy in NB, where summering birds have been noted in recent years, would seem to have potential. Greater Yellowlegs, which breed in Cape Breton and eastern NS, might also be looked for in NB, particularly the extensive bogs in the northeast of the province.

In NS, Ring-billed Gulls seem a very likely candidate for a first breeding record, given their extensive distribution in both NB and PEI. A thorough search of gull and tern colonies might turn up this species. Red-shouldered Hawks also seem likely (and should be looked for soon: in NB they are back on territory by mid-late March, and sitting on eggs by mid-April). As well, Pine Warblers are almost certainly breeding in NS, and probably have been for some time. This species is very easy to overlook, with its simple trilling song, very specific habitat requirements, and its habit of staying in the high canopy. It appears to be present in almost every stand of mature pine in southern NB (sometimes even groups of only 5-6 trees). Mature white pine stands in the warmer parts of NS, especially the Annapolis valley, and Lunenburg and Queens Counties, would be good places to try.

In PEI the list of potential new, rare breeding species, based on absence in the first atlas, is much larger. Among the more promising candidates are Broad-winged Hawk, Cooper's Hawk, and Scarlet Tanager for forested areas, Warbling Vireo in riparian sites, Brown Thrasher and Indigo Bunting in shrub-dominated habitats, and Eastern Phoebe and Northern

Cardinal in settled areas. And, of course, Pine Warblers – the Murray River Pines would be among the first places we'd try.

Any of the species discussed above would be exciting finds. The best way to find them is to be aware of the chance they could occur in your area, and learn how to identify them and their breeding habitat. Sometimes it may take a special effort to visit a potential area where one of these species may occur. There are only three field seasons left in the atlas, so there's no time like the present to start looking!

Atlasser challenge: Differentiating between Yellow-bellied and Least Flycatchers

By Ivy Austin and Becky Stewart, *Coordinators*

There are always some species that are more challenging than others to identify in the field — possibly because family members appear similar, or sometimes the light just isn't quite right, or sometimes the particular song you are hearing doesn't sound quite right. Empidonax flycatchers can often be difficult, particularly in the case of the Yellow-bellied and Least Flycatchers. Although their appearance is fairly different (at least as far as flycatchers go), like most birds they are more often heard than seen and their song can sound quite alike. Here are some tips to help you distinguish between the two species while you are atlassing.



Least Flycatcher, photo by Becky Stewart



The Yellow-bellied Flycatcher sings two distinct songs. The first is a two-part “per-WEE” in which the “wee” part is a distinct uprising whistle, similar to what you might hear from an eastern Wood-Pewee but sounds nothing like the Least Flycatcher song. So if you hear “per-WEE” you are in the clear and can confidently mark down a Yellow-bellied singing. It is the Yellow-bellied’s other song – often written as “che-lek”—that can cause some confusion and is sometimes mistaken for the Least Flycatcher’s two-part “che-bek”. Sure enough those two songs do sound alike but there are some differences. The Least Flycatcher’s “che-bek” is crisp and is often rapidly repeated in series. As well, the second syllable (bek) is usually accentuated (so much so that it is almost hard to distinguish the first syllable because it happens so fast). The Yellow-bellied Flycatcher’s song is much more “slurry” (i.e., lacks crispness) and the second syllable isn’t emphasized. Now if you are reading this and thinking, “are they kidding!?”, have a listen to your Stokes or Peterson’s CD and see if you can’t hear the difference. It takes some practice but over time these two species can be distinguished from one another (at least most of the time).



Yellow-bellied Flycatcher, photo by Matthew Sadowski

Often what provides you with the best clue about whether you are listening to a Least or a Yellow-bellied is the **habitat** from which the song is being sung. The Yellow-bellied Flycatcher is usually associated with peat lands, swamps or damp boreal forest (coniferous), especially habitats that are predominantly composed of spruce. The trees should be tall (around 4 to 5 meters) and the shrubs and ground cover shouldn’t be dense. They usually

nest on the ground, or close to it, in a cup made and built on a thick moss mat. On the other hand, the Least Flycatcher is most often associated with deciduous, open forests but can also be found in mixed forests and even pine plantations. However, while you can rely on habitat to help distinguish between these two flycatchers, remember that birds don’t always follow the “rules”. If you are not sure which flycatcher you are hearing the best thing to do is go and look for it.

Confirming Barn Swallows in Forested Areas

By Brian Dalzell, *Atlasser*

During the summers of 1989 and 1990, I was employed by the Maritimes Breeding Bird Atlas to survey large forested areas of northwestern New Brunswick. Many surprises were found, such as Common Grackles nesting at the edge of clear-cuts adjacent to wetlands far from human habitation, and Eastern Bluebirds nesting in woodpecker holes in these same clear-cuts. However, the most interesting discovery that still sticks in my mind after 15+ years was finding Barn Swallows nesting in clear-cuts where no bridges or buildings existed.

At first I ignored the presence of single Barn Swallows in these vast clear-cuts (many over 50 hectares in size), and passed them off as simply late migrants passing through. However, after returning to these same areas at two-week intervals and still finding Barn Swallows present (usually one, but sometimes two) I became curious and determined to find out what was going on. To this end I sat in my rented van one morning in late June and followed the foraging activities of once such bird. On several occasions the bird disappeared on me, and I had no idea where it had gone. Finally, I clued in to what was actually going on.

As you can see from the accompanying photos, the birds were nesting in galvanized steel culverts under the roadbed, but it took me some time to find them. When I eventually did wander down and crawl into the culvert with a flashlight, I was quite astounded to find single



nests (usually with young) in each instance. Some were so low (only a foot!) off the bottom of the culvert that they surely would have been washed away in a flood. Others were placed in cracks in the joints of the pipe sections so narrow one would not have imagined a nest could have been built in such cramped circumstances. How the swallows ever found these spots is a mystery to me.



Barn Swallow nest in culvert, photos by Brian Dalzell

Previously, the only other place I have found Barn Swallows nesting, other than in human constructs, was in sea caves at St. Martins, and Grand Manan, NB. I suppose I would not have been surprised to find the swallows nesting in large culverts (say two meters or more in diameter), but to find them in such confined spaces, and so low to the ground, was truly astounding. I eventually documented more than a dozen nests in such situations, and not one was ever predated. Considering that mink, raccoons, weasels, etc., probably use these culverts regularly in their travels, it was doubly amazing

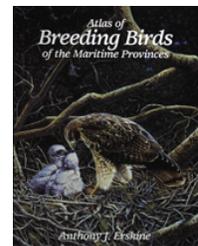
that this nesting strategy was working (and being passed on to subsequent generations).

If you happen to be in a forested area anywhere in the Maritimes this summer, especially in large areas of cleared forest, keep an eye out for Barn Swallows, and take the time to follow their activities for awhile. You may be surprised, as was I, at just how adaptable these confiding creatures can be. One note of caution however (as with investigating any nest site), try not to leave a scent trail right up to the nest that predators can follow. Raccoons habitually follow human scent trails looking for whatever they can find, and I have seen too many nests predated in this way.

While on the subject of birds nesting under roadways, I should mention that Eastern Phoebe It is ridiculously easy to confirm in NS and NB. is usually as simple as taking a topographic map of your square and circling all the spots where streams intersect roads. Listening at each site is usually enough to confirm their presence or absence. And don't risk life and limb to clamber down under some of these high bridges. The code "AE" will be sufficient in most instances.

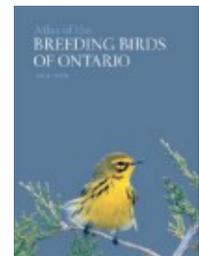
Copies of the first Maritimes Breeding Bird Atlas are available!

The NS Museum has generously given us the remaining copies of the first Atlas. If you don't already have a copy and would like one, please contact the Atlas office either by email atlasmaritimes@gmail.com or by phone 1-866-5ATLAS5.



Ontario Atlas Now Available!

To purchase your copy go to the Ontario Atlas website (www.birdsontario.org) or call Nature Ontario at 1-800-440-2366. The cost is CA\$92.50 + GST, including shipping within Canada.



Olive-sided Flycatcher, Chimney Swift and Common Nighthawk are at risk

By Becky Stewart, *Coordinator*

A growing number of wildlife species are in decline and may be “at risk” of disappearing if nothing is done to reverse the factors leading to their extirpation or extinction.

Because of its immense volunteer base, the Atlas is in a great position to gather valuable location and habitat information on species at risk. In 2007, a guide to “Atlassing for Species at Risk in the Maritime Provinces” was produced to help increase atlassers detections of these species.

Since the guide was produced, three additional bird species—**Olive-sided Flycatcher, Chimney Swift and Common Nighthawk**—have been designated at risk by COSEWIC (the Committee on the Status of Endangered Wildlife in Canada). For each of these species, new and updated breeding records, identification key breeding habitat characteristics and an assessment of their Maritimes status, are required steps in development of a conservation plan. To assist in the gathering of this important information, we are asking atlassers to fill in rare bird forms when these species are detected. The most important sections to fill out are the location and habitat descriptions as well as the breeding evidence encountered.



Olive-sided Flycatcher, photo by Ted Ardley

Quick Facts for Newly-listed Species at Risk

Olive-sided Flycatcher

- 79% population decline since 1968
- Habitat: open areas - including bogs, logged or burnt forest - with tall trees or snags for perching (nesting success may be lower in harvested habitats than in natural openings)
- Threats: habitat loss and degradation
- Detected in 671 squares during the first Atlas, thus far detected in 316 squares

Chimney Swift

- Degree of decline unknown in Maritimes
- Habitat: near water where insects are abundant, historically associated with old growth forests and used hollow trees as nesting sites, now found in urban and rural areas with chimneys for nesting and roosting
- Threats: loss of nesting and roosting sites
- Detected in 471 squares during the first Atlas, thus far detected in 115 squares

Common Nighthawk

- 49% population decline over the past three generations
- Habitat: open and varied habitats where the ground is devoid of vegetation (e.g., sand dunes, logged or burnt areas, forest clearings, rock outcrops and pastures)
- Threats: Likely include declines in food sources as well as habitat loss and alteration in forest, agricultural and urban areas
- Detected in 539 squares during the first Atlas, thus far detected in 232 squares

Who’s been atlassing in my square?!

By Becky Stewart, *Coordinator*

As some of you are all too aware, the age of the internet has brought about some major changes in the way we atlas and track our project’s progress. During the first Maritimes Atlas, volunteers sent all their data into the office on paper forms and didn’t see results until the final publication. Now, thanks to the online Atlas database, up-to-date species distribution maps and data summaries are only a mouse-click away. This system facilitates a more “communal” approach to atlassing where anyone can readily see which species and what level of



breeding evidence have been detected thus far for any given square.

While this system is incredibly helpful for planning survey efforts, it has led to some “grumblings”, particularly when atlasers discover that someone else has submitted data for their assigned square. However, observations from participants other than the square assignee are often “casual” (e.g., someone may have been in the area for a day or two and recorded what they saw) and should be looked upon positively. No doubt there are still many habitats to visit and many species to record before the square is complete. So, if this happens in your square, don’t be discouraged. That casual observer may have stumbled across the one and only Black-backed Woodpecker nest in your region, or, they may have saved you the trouble of confirming breeding for one or more common species (giving you time to focus on finding the Black-backed).

On the flipside, for those of you travelling throughout the Maritimes this field season, if you are going to be in a new region for a considerable amount of time, please be sure to contact the local RC to find out what squares are not yet assigned and where your skills can be best put to use (squares that look incomplete on the map may be assigned or the data may not yet be entered so it is best to double check).

With more than 700 volunteers, there will likely be a few mix-ups and possibly the occasional duplication of effort but in the end, the data will be that much better with everyone trying to gather as much information as they can on our Maritime breeding birds.

Breeding Evidence for Raptors

By **Becky Stewart**, *Coordinator*

Over the past year we received several questions about what constitutes breeding evidence (BE) for raptors. Most BE codes apply to raptors in the same way they do to other bird species and, like with any species, determining which code to use is a matter of interpreting the behaviour you observe.

When can you call two raptors a pair? For most raptor species (the only Maritime exceptions are the Northern Harrier, the Merlin and the American Kestrel), males and females look alike so look for other clues to indicate whether two birds are a pair. For example, the proximity of individual birds may be indicative of their relationship. During the breeding season most raptor species are highly territorial and chase or attack intruders. Thus, two Bald Eagles sitting on the same branch are likely a pair. Also, during courtship, most raptor species display some sort of “courtship flight” involving various aerial maneuvers, often including circling, diving and even talon interlocking. If two birds are present and such a display is witnessed, record the observation as “D”.



Bald Eagle, photo by Alan Dorey

What about distraction displays or agitated behaviour? Although raptors do not typically perform distraction displays, this is not an absolute so watch for (and document) any attempts to lure an intruder away from the nest. More often raptors will exhibit agitated behaviour (“A”) when an observer approaches the nest. Aggression/agitation may be indicated by a circling flight and scream calls, or simply by erecting the head, neck and breast feathers while in a sitting posture.

When to use the code “H” for a soaring raptor? Likely the two species where some interpretation is involved are the Bald Eagle and Red-tailed Hawk because both are often seen soaring over a large area. Soaring during the breeding season may have several functions



including territorial advertisement, courtship and foraging. A good rule of thumb is that if you see a raptor soaring and there is suitable breeding habitat for that species in the square, record the sighting as “H” and continue to search for a higher level of breeding evidence. Along the same line, if you encounter a raptor in the same location more than once and more than a week apart, it is appropriate to record the observation as “T”. Although some raptor species have large home ranges we would be biasing our results against raptor species if we applied stricter rules to their behaviour than we do to other bird species’ behaviour.

What about “FS” and “CF”? These two codes generally don’t apply to raptors. “FS” is invalid because raptor chicks void over the edge of the nest. “CF” is usually considered invalid because adults carry food for their own consumption (other codes such as FY or NY are more appropriate if raptor brings food to young). However, this code may be used if you see a raptor carrying a “processed” prey item, i.e., the prey item has already been plucked or butchered and is likely on its way to the nest or chicks.

Nest Boxes for Raptors

By **Randy Lauff**, *Biologist and atlaser*

Nest boxes can be a productive way to document the breeding of American Kestrels as well as some of our owls. Up to now, all of the confirmed nestings of the Northern Saw-whet and Boreal Owls in NS for this atlas have come from birds in nest boxes. This brief article should get you on the right track to documenting these sometimes elusive birds.

Habitats: Northern Saw-whet Owls nest in a diversity of forest types, from mixed to deciduous woods; they do not seek out conifer woods for nesting. The Boreal Owl is widely distributed in boreal forests of the north, and is an uncommon breeder in the Maritimes. Barred Owls and Eastern Screech-Owls prefer deciduous woods; Screech-Owls will likely only be documented in southern NB...though perhaps a pair is nesting somewhere along the Fundy shore of NS as well? Screech-Owls are also the

most human-tolerant of owls...they can be found nesting in parks and even suburban yards. American Kestrels normally nest in trees within, or relatively near, open areas.

The box: Although you can find species-specific plans for all of these birds, I use one design and have had Boreal Owl, Northern Saw-whet Owl and American Kestrel as occupants. Please visit my [site \(\[http://people.stfx.ca/rlauff/research/nestboxes_files/NestBox1.html\]\(http://people.stfx.ca/rlauff/research/nestboxes_files/NestBox1.html\)\)](http://people.stfx.ca/rlauff/research/nestboxes_files/NestBox1.html) for the plans, mounting techniques and equipment list. The most thorough Barred Owl nest box plan that I’ve come across can be found at http://www.bioweb.uncc.edu/Bierregaard/nest_box_plan.htm. Put the boxes 4 m or more off the ground, with the hole facing between south and east. This helps keep precipitation out of the box when the westerly or cold northern winds blow; as well, placing the box deep in sheltered woods also helps but is less of a concern. Canopy cover is important – none of the owls like the heat. I select a patch of woods that I can walk through easily, then, when I have chosen a potential tree, I climb my ladder and look for a clear flight path to the box.



Side mounting the nest boxes is more difficult, but makes box maintenance easier, photo by Randy Lauff

Confirming breeding: An owl in a cavity during the nesting season is likely breeding there, but, males may toot from a cavity to court a female, and in this case, a designation of *possible* would be more appropriate. Check/watch the nest box from a distance for food deliveries (near or right after dusk for owls) and listen for chicks’ begging calls. Come back in a few days to see if the birds are still there. I



do not recommend that anyone open a nest box because abandonment is a real possibility and secondly and it's illegal to disturb a raptor nest.

Final cautionary notes: All of these birds can dive bomb you at the nest, and Barred Owls can pack a particularly damaging wallop...biologists wear body armor to help prevent injury during nest inspections. Don't approach these nests! Secondly, wasps seem to think these boxes are just the right place for their nests...be(e) forewarned! Don't hesitate to email or call me with any questions (rlauff@stfx.ca; 902-867-2471).

The Conversion Tool

By Ivy Austin, Assistant Coordinator

These days, a lot of people have a GPS unit, either a hand-held one or one in their car. GPS units are great for figuring out exactly where you are and how to return to that location at a different time (this information is especially useful when returning to a specific location to increase breeding evidence for a rare or uncommon species). Did you know there is an online tool that enables you to enter location coordinates and then provides you with the square number within which those coordinates fall?

The next time you're in the woods and you see something that you'd like to enter in the Atlas database, but aren't sure which square you are in, simply use your GPS to record your location. Once at home, go to the website's "Atlas Geographic Conversion Tool" page (<http://www.mba-aom.ca/jsp/atlastools.jsp?lang=en>); there's a link under the "Data and Maps" drop-down menu. Here you can specify the type of coordinates recorded (e.g., NAD83), type them in the space provided and hit the "perform conversion" button. The tool will then tell you in which square you were in when you made your observation as well as provide you with links to other information including the square map and square information sheet. This tool is fast, easy to use and a great help when you are keeping track of your observations using a GPS unit.

Colonial Bird Documentations—A Gentle Reminder

By Rosemary Curley, RC for Region 26

When is the best time to write these documentations? Right away of course. When you enter your data, or fill in your paper breeding evidence card, you will notice the colonial species are marked with a special symbol "S". If entering data online, once you press "finish form" colonial species for which documentation is required appear as a list. Remember that all **confirmed** colonial records, including Bank Swallows and Cliff Swallows, require an additional form.



Great Black-backed Gull, photo by Denis Doucet

Funding Support for Atlassers

Bird Studies Canada's Baillie Fund will once again be providing support for volunteers willing to travel to remote or difficult-to-access areas to survey in squares that might not otherwise be covered (e.g., islands that require a boat rental; squares that require a 4-wd vehicle and/or are 150km or more from the nearest town). Trips must be long enough (or repeated) to obtain full atlas coverage (i.e., 20 survey hours and 95% of expected species detected).

To take advantage of this support, please send a trip description including:

- Atlasser name(s)
- List of priority squares to be covered
- Expected expenses (max. \$500)
- If you plan to do point counts

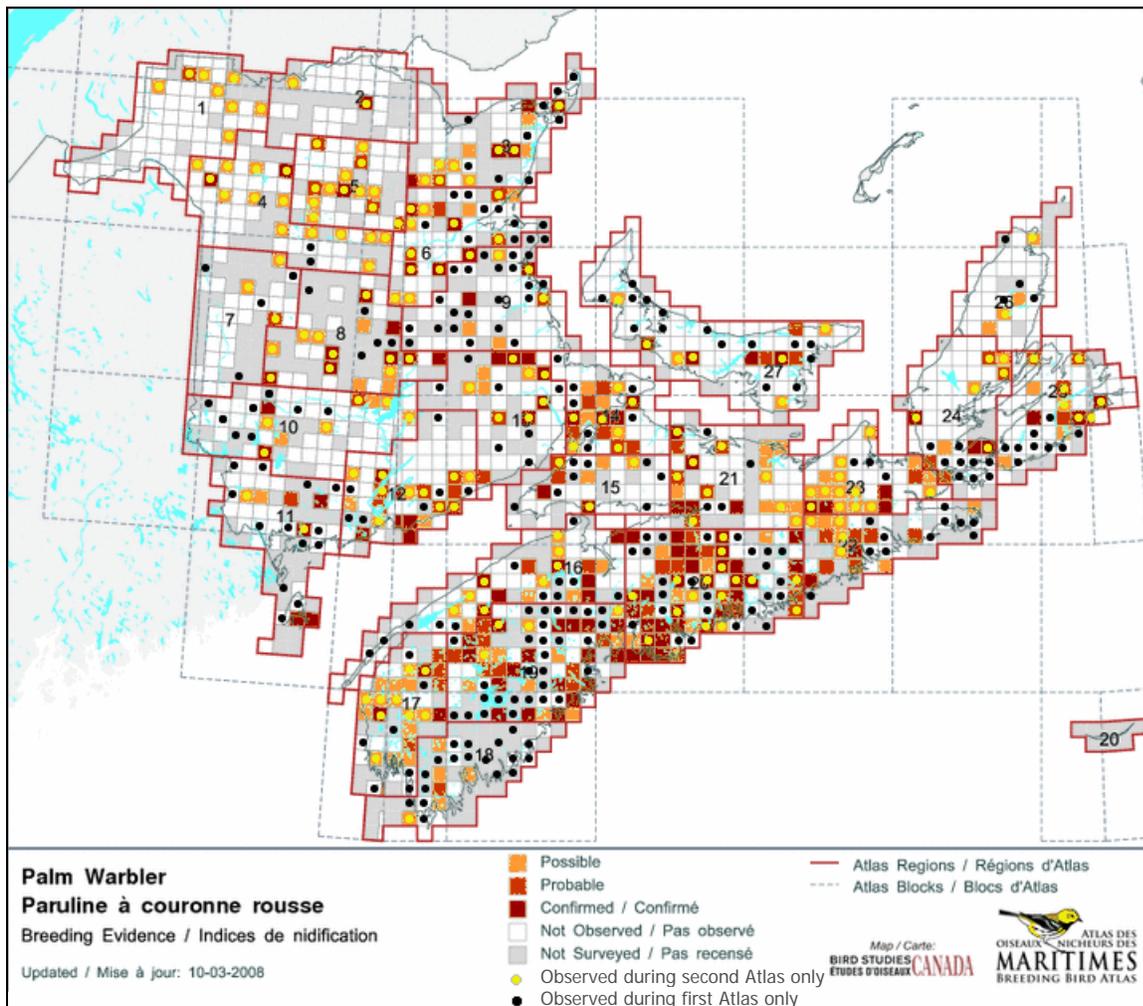
to atlasmaritimes@gmail.com or, Maritimes Breeding Bird Atlas, 17 Waterfowl Lane, Sackville, NB E4L 1G6. Requests need not be longer than a page. For more complete details visit the website www.mba-aom.ca.



Comparing the first and second Maritimes Atlas using maps

By Ivy Austin, Assistant Coordinator

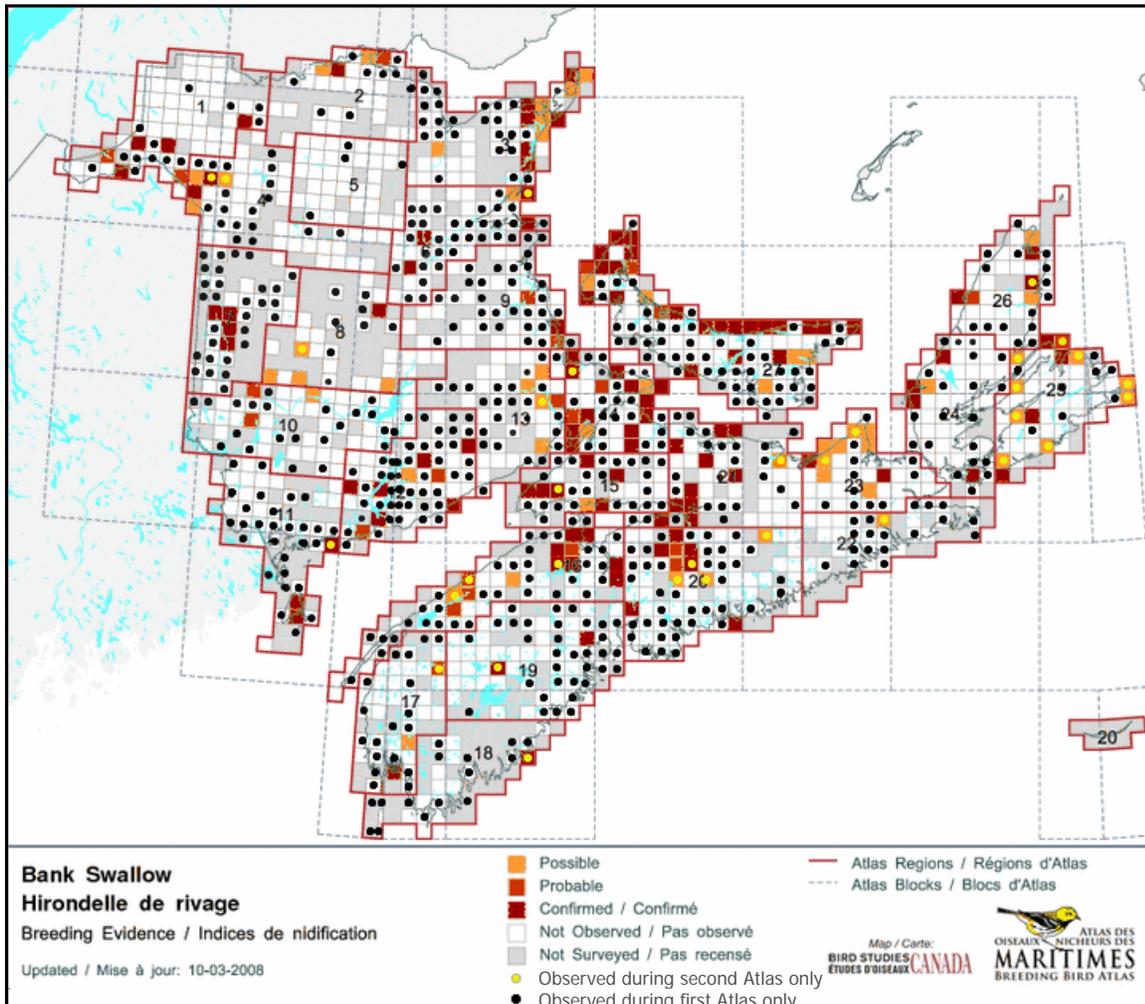
“Change maps”, similar to those presented below for the Palm Warbler and Bank Swallow, were recently produced for the *Atlas of the Breeding Birds of Ontario, 2001 -2005*. These maps represent the breeding evidence found thus far during the second Maritimes Atlas and denote the squares in which each species was detected during the first and second Atlas. Change maps like these can give us a sense how a species’ distribution has changed over time. Keep in mind that these maps only present two years of data—maps produced at the end of the project may tell a very different story. However, we thought an initial look might peak your interest for what’s to come...



The level of breeding evidence (possible, probable or confirmed) reported in each square is shown using three shades, with the darker shade indicating the higher level of breeding evidence observed. The dots represent changes between the first and second Atlas. Black dots indicate that the species was detected in that square during the first atlas but not the second. Yellow dots indicate that the species was detected during the second atlas but not the first. “Dot-less” squares indicate that the result was the same in both atlases (i.e., white squares = surveyed but not observed in either atlas; colored squares = detected during both atlases). From the Palm Warbler distribution map, we can clearly see that this species has spread to



the northwestern NB (every colored square has a yellow dot in the northwest). It will be interesting to see how many more squares they'll be found in from now until the end of the project!



The Bank Swallow has also been detected in a number of new squares (particularly in Cape Breton) but there are also several other squares where they have yet to be found. In Ontario, both the Atlas and Breeding Bird Survey data have shown serious declines in Bank Swallow detections. This colonial species nests in banks along shorelines and roadsides as well as in sand and gravel pits.

About the Atlas

The Maritimes Breeding Bird Atlas is a cooperative project of Bird Studies Canada, Environment Canada, the provincial governments of New Brunswick, Nova Scotia and Prince Edward Island, Nature NB, the NS Bird Society, the PEI Natural History Society and hundreds of volunteer bird watchers. The project will determine the distribution, abundance and status of all birds breeding in the Maritimes. For more information, to join the effort, or to donate to the project, please visit our website www.mba-aom.ca or call toll free 1-866-528-5275 (1-866-5ATLAS5).

Thank you to our Century Club!

Atlassers who have contributed over 100 field hours:

Roy D LaPointe (523), Ken McKenna (427), Sean Blaney, David B McCorquodale, Fritz McEvoy, Karen Chiasson, Blake Maybank, Becky Lori May Stewart, Gareth Akerman, Susann E Myers, Roger T. Burrows, Denis A Doucet, Michael Lushington, Donald G Gibson, Andrew Horn, Cathleen A Gallant, Rosemary Curley, Greg Campbell, Scott Makepeace, Martin N. Turgeon, Steve G. Vines, Bill Winsor, Peter Hope, Marie Ellen Stradeski, Lucas Emmett Berrigan, Sylvia J. Fullerton, Merv J Cormier, Anthony J Erskine, Isabelle Robichaud, Dorothy M. Poole, Jeff B Ogden, Patrick M. Kelly, Roslyn MacPhee, Harold Stewart, Kathy Bunker-Popma, Richard Blacquiere, Rob Woods, Emily A. McKinnon, Suzanne Borkowski, Jim D Cameron, Tracey H Dean, Jim A Elliott, David Johnston

Atlassers who have completed over 100 point counts

David B McCorquodale (330), Karen Chiasson (213), Ken McKenna, Emily McKinnon, Becky Stewart, Gareth Akerman, Scott Makepeace, Megan Crowley, Roy D LaPointe, Greg Campbell

Atlassers who have observed a 100 species or more

Scott Makepeace (158), Dwayne Sabine (150), Roy D LaPointe, Ivy Austin, Ken McKenna, Sean Blaney, Karen Chiasson, Becky Lori May Stewart, Emily A. McKinnon, Cathleen A Gallant, Martin N. Turgeon, David B McCorquodale, Denis A Doucet, Gareth Akerman, Blake Maybank, Roger T. Burrows, Ted L Sears, Steve G. Vines, Isabelle Robichaud, Stephen Gullage, Donald G Gibson, Richard Blacquiere, Tracey H Dean, Susann E Myers, Michael Lushington, Merv J Cormier, Bill Winsor, Kathy Bunker-Popma, James G. Wilson, Pamela J Watters, Rosemary Curley, Andrew Horn, Randy F. Lauff, Jeff B Ogden, Julie B Singleton, Raymond H Cooke, Fritz McEvoy, Patrick M. Kelly, Richard D Elliot, Henrik Deichmann, Sharon Charlene Hawboldt, Brian Dalzell, Greg Campbell, Jim D Cameron, Roslyn MacPhee, Ross A Hall, Chris A Field, Leonel Richard

Thank-you to Junco Technologies who have provided the two volunteers with the most hours and point counts with a nestbox each for their great contribution to the Atlas project. For more information on Junco Technologies, visit their website (www.nichoirs-junco.com).
Congratulations to all of the Atlas volunteers for their hard work and dedication!



Thank-you to all those supporting the Atlas project

