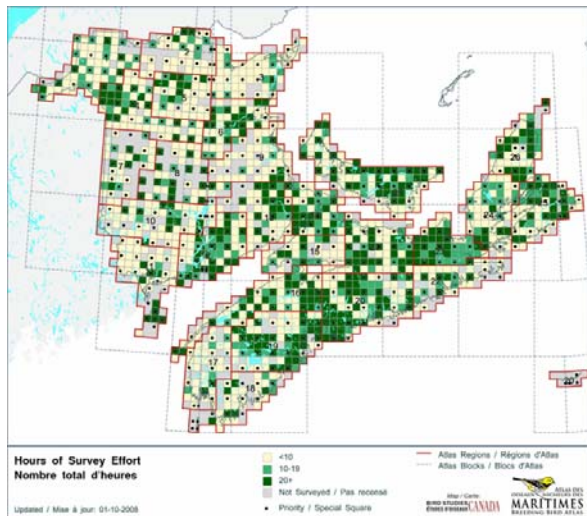


### Three down, two to go!

By Becky Stewart, *Coordinator*

While many atlases run out of “steam” in their third year, that’s certainly not the case in the Maritimes—in fact, many of us are beginning to think our third year was our most productive so far! We began the season with clear objectives: to cover habitats not yet visited, search out underrepresented species, do more point counts and “bump-up” breeding evidence for species recorded as “possible”. Although all the data isn’t in (don’t worry, you have until January 31 to enter your data online), it is apparent that we took great strides towards achieving these goals! Already 27% of squares (a total of 416 squares, including 176 priority squares) have 20 or more survey hours. Also, 2,934 point counts have been entered for 2008—that’s more point counts than in either 2006 (1055) or 2007 (2169)! Plus it is clear from the online maps, many atlasers spent time in squares not previously surveyed.



Hours of survey effort by square. Dark green squares have 20 or more survey hours.



A Maritimes first: Tufted Titmouse confirmed in St. Andrews, NB, photo by Mary Alice Bowles.

Despite being the third year of data collection, it was also a year of many “firsts”. It was the first year that atlasers were asked to record additional information for four newly-listed species at risk (Canada Warbler, Chimney Swift, Common Nighthawk and Olive-sided Flycatcher). Volunteers rose to the challenge and 347 forms have already been submitted for these species. It was also the first year that atlasers gained access to several industrial landholdings and atlased in areas that weren’t covered at all during the first Atlas. Another first, in May, the Atlas and JustUs! Coffee launched a co-marketing campaign to raise funds for the project. The first two batches of

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Atlas coffee (1000 bags) sold out! Lastly, we had some breeding firsts including: Tufted Titmouse in St. Andrews and Lesser Scaup in Tintamarre.

With all the effort that went into our third season and valuable breeding information that came out of it, without a doubt, this year was a banner year. Thank-you everyone who worked so hard!

## Regional Updates

### Restigouche, Region 2

Since early spring, Jim Clifford and I have been gathering data on birds in some 21 squares in Restigouche County. This summer we decided to concentrate on the priority squares and, with the exception of Heron Island West, I am satisfied with our results. As far as that square went, we have to kayak out to the island and every time I considered it, the weather precluded it. Now it is a top priority for next year. Most of our squares are in the “Upsalquitch Licence” area that had been controlled and harvested by Bowater Pulp and Paper. Consequently, most species we encountered are those one would expect in various forest habitats. Several squares have limited access and some of the roads that we do dare to venture on are rather challenging. I am grateful for an old, beat-up, but very reliable four wheel drive pickup.

I have not yet taken the time to analyse our data for this summer, but I can say that swallows - of all species - were alarmingly low in numbers in this part of the province, and the same might be said in general for the flycatchers. On the other hand, warblers seem to have had a pretty good summer and the northern populations of finches seem to have escaped the virus that was attacking birds further south this summer (see article on p. 12).

After three summers, Jim and I are getting a pretty good sense of where to go, and what to expect. Already we have begun to plan for next year and to try to figure out ways of surveying that don't use as much gasoline. After all, environmental ethics should be a part of what we do, not just what we say.

--Mike Lushington, *Atlasser*

### Tobique – Renous, Region 4

While region 4 atlassers continue to be low in number, results are very encouraging! Point counts in all 18 priority squares are complete thanks in part to the assistance of Becky and her helpers. Point counts have also been completed in another 12 squares and started in 13 other squares for a total of 534 counts once all data are entered. This is 53% of the total region coverage.



Red-breasted Merganser, photo by Ralph Hocken

Atlassing effort now stands at just over 820 hours. Eleven priority squares and 7 others exceed 20 hours, although only 13 squares (7 priority) are considered adequately covered. Total effort after removing excess time spent in some squares stands at about 47% for the region. Breeding has been confirmed for 119 species in the region, while 18 species are noted as probable and 17 as possible breeders. Three additional species have been observed in the region. New species added this season were Turkey Vulture, Northern Mockingbird and a very noisy Whip-poor-will that kept this atlasser awake several nights. It did however make a great alarm clock for early morning starts. An interesting find was a dozen pairs of Red-breasted Mergansers on Sisson Lake. Two adult females were eventually seen with fledged young in tow, one with 21 of the little balls of fluff. This species was not detected in region 4 in the first atlas. A big thanks to all contributors.

--Roy LaPointe, *RC*

### Miramichi, Region 6

The 2008 atlas season proved to be our most successful season to date - so far 116 breeding cards have been submitted for 44 squares, and



87 point counts were conducted – and I know that there is still more data to come! Ten (out of 15) of our priority/special squares have received 20 or more hours of atlassing effort. Our region has recorded breeding evidence for 149 species. Some of the species recorded during this atlas, but not found during the first atlas, include Pied-billed Grebe, Willet, Solitary Sandpiper, House Wren and Pine Warbler (and of course, Canada Goose!). Some species which are still eluding us include Virginia Rail, Pine Grosbeak and Wood Thrush.

We held successful square bashes on priority square 20KT70 by going out one day in June, and then returning in July to increase breeding observations. Six atlassers walked, canoed and drove through the square putting in 22 hours and finding 77 species. Highlights of the outings not only included great sightings of a Scarlet Tanager and Pine Warbler, but also many mammal species including bears, moose and a bobcat, and interesting plant species such as Showy Lady's-slipper and Round-leaved Hepatica (this was the first record for this species for the Miramichi watershed). Looking forward to next year!

--Pam Watters, RC



Male Eurasian Wigeon, photo by Richard Stern

### **Fredericton, Region 10**

With 3 of 5 field seasons behind us, lots of interesting data is rolling in from Region 10. In 2008, there have been 50 data cards submitted thus far, representing 115 hours of atlassing in 33 squares. The overall completion statistics are a bit disconcerting, however. Of 19 priority and special squares, only 2 squares meet the criteria for completion. Another 3 tertiary squares are

considered completed. Unfortunately, there are still 3 unassigned priority squares which have had little or no incidental data collection. The point count situation is better: a concerted effort by several atlassers this past summer resulted in 264 completed point counts, bringing the regional total to 343 completed point counts. Of these, 191 are in priority and special squares. This represents 67% of the required points on these squares, putting us just ahead of the target for this stage in the atlas.

Among the many valuable records received so far for 2008, there are some highlights of particular interest. Two uncommon sparrows, Clay-coloured and Field, were found singing on territory by Leon Vietinghoff and Jonathan Cormier. In August, Ron & Heather Wilson and Peter Pearce found a Northern Mockingbird nest at the Agriculture Research Station near Fredericton. The nesting was successful, and conversations with staff at the station indicated that there may have even been a second pair nesting elsewhere on the grounds. In the rich wetlands along the Saint John River in the Gagetown area, Scott Makepeace found pairs of two very interesting species: Wilson's Phalarope and Eurasian Wigeon.

Some 2008 data is yet to be submitted, and there is even data from previous years yet to come in, so the situation will change somewhat before the 2009 field season. Nonetheless, it appears that we have a fair bit of work ahead of us over the next two years. I am confident that the situation will improve dramatically as we make the final push!

--Dwayne Sabine, RC

### **Tintamarre, Region 14**

Tintamarre region had a great 3<sup>rd</sup> season. Data have now been returned for each of the 45 squares in the region. Nineteen of these 45 squares have 20 or more survey hours (up from 13 in 2007), and ten out of 45 squares have 15 or more point counts completed (up from 3 in 2007). Three priority squares have been completed, and the remaining 10 are well underway. In terms of effort, total hours atlassed in the region went up from 803 in 2007 to near 1070 in 2008, and total point counts went



up from 158 in 2007 to 305 in 2008. Highlights this season include records for Vesper Sparrow, Lesser Scaup, Ruddy Duck, Northern Mockingbird and Olive-sided Flycatcher.

--Julie Paquet, RC

### **Chignecto Peninsula, Region 15**

Region 15 had both good luck and bad luck in year 3. The good luck was that Stuart Tingley made a couple of visits and did point counts. A couple of "new to our region" birds, including Willow Flycatcher, were added. Regional co-coordinator Joan Czapalay had a bad fall in June at Cape D'Or and broke her leg, and co-coordinator Dave Harris was also injured fighting the forest fire at Porter's Lake. The good news is that each did some atlassing prior to their injuries, and have atlassed from their vehicles since. We have upgraded some of our breeding evidence, and will add it soon to the database. We had to cancel an atlassers' party and some square bashes, but hope to revisit these events next spring.

-- Joan Czapaly and Dave E. Harris, RCs

### **Mersey – LaHave, Region 19**

Good progress was made all over our region this year. Five new volunteers joined in our efforts while five experienced atlassers from elsewhere added data in a number of squares. Seven of our regular contributors took on extra squares as well as continuing with their previous ones. All of these efforts meant that nine new squares were at least partly surveyed, including work in remote areas and on offshore islands. James Hirtle arranged boat trips offshore this year and promises more for next year - anyone is welcome to join him. At least four priority squares had their point counts completed this summer and several others were worked on. This now means that very few point counts remain undone in our 20 priority squares. This year a point count surveyor from atlas headquarters worked on one of our remote priority squares.

In summary, it appears of our 85 squares, that all 20 priority squares have been worked upon. In addition, Pearl Island, which is designated as a special square, was surveyed by CWS biologist Brad Toms this year. Forty-seven non-priority squares have been at least partially surveyed.

A number of squares have enough data gathered to already be considered finished. I would like to thank everyone who has contributed in any way - please try to keep it up over two more years. In particular it is wonderful to recognize Nellie Snyder, who turned 90 a year ago, and continued atlassing work on her square.

--Peter Hope and James Hirtle, RCs



Cape May Warbler, by Brandon Holden

### **Chebucto – Musquodoboit, Region 20**

Region 20 progressed by leaps and bounds in this third year of the Atlas. Of the 91 squares, (not counting Sable Island), 5 are currently shown as having no data. Two of those have data coming in soon, and the other three squares have atlassers ready to work in them next year. Some people have passed the 100 species mark: Andy Horn and Duncan Rand in Halifax/Dartmouth (20MQ54); Roslyn MacPhee in Shubenacadie (20MQ69); Susann Myers in Three Fathom Harbour (20MQ74); Arthur and Myrna West in Milford Station (20MQ68); and Rob Woods in Georgefield (20MR50). Several others have tallies in the nineties and may well pass this milestone once all the data are entered. Some atlassers have turned their square "green" this year, while others have completed theirs by spending (way more than) 20 hours, tallying approximately 95% of the species seen on the 1st atlas and doing the required point counts as listed on the Square Summary Sheet. These atlassers have turned their efforts to other squares and other regions. New participants are still signing up, but since I have no squares to assign, they are concentrating on parts of squares: a trail, a piece of coastline, a park or campsite. Since they visit these areas frequently and know them well, their additions to square



data are extremely valuable! Some of the more interesting species noted in region 20 this year include: Scarlet Tanager, Warbling Vireo, Philadelphia Vireo, Olive-sided Flycatcher, Cape May Warbler, Tennessee Warbler, Ipswich Sparrow and a Sora! Thanks to everyone for all their hard work!

--Suzanne Borkowski, RC



Bluebird carrying food to fledged young, photo by Wendeline Price

### **Cobequid, Region 21**

Is it the end of year three already? As of November 24, Region 21 atlassers have tallied 1595 hours, entered 5548 records and completed 162 point counts. We have encountered 155 species. These numbers will continue to increase as much 2008 data remains to be entered. Square coverage is proceeding well. A few atlassing stars are now working on second and third squares. At the start of 2009 we will reassess and redirect effort to where it is needed. Our point count numbers are down a bit and we will attempt point count completion in the priority squares. All birders are nice but we have a great bunch of people here in Region 21. One example of interesting bird breeding evidence is finding Eastern Bluebirds using nesting boxes in two different squares, one in Pictou and the other in Colchester County.

--Ross Hall, RC

### **Antigonish, Region 23**

Atlas year 3 has gone very well in the Antigonish region. In June, a lot of concentration was placed on completing point counts and luckily this June had much better weather for doing point counts bringing our 3 year total to 295. At this stage, 16/43 squares have the minimum required number of on-road point counts; however only 8/43 squares are considered adequately covered for breeding evidence. Fortunately, we now have great coverage as far as species per square with most squares near the target and most near or over the minimal time. A few species that were hard to find the first 2 years such as Virginia Rail, Northern Mockingbird and Spruce Grouse were added. A few Cape May Warblers were also found in some areas of mature conifer particularly in the eastern squares. The area is also proving to have a good many of the species of special concern and in reasonable numbers. This includes Rusty Blackbird, Canada Warbler, and Olive-sided Flycatcher. A few surprise species were found singing this year including Scarlet Tanager, Indigo Bunting and Wood Thrush. A number of people stepped up their effort this year and the results can be seen in the very green maps for Area 23. Thank-you all.

--Ken McKenna, RC

### **East Cape Breton Island, Region 25**

Eastern Cape Breton is progressing quite well. The point counts are well underway with Laura Saunders, Bill Devoe, Bev Sarty and Susann Myers joining Dave McCorquodale and myself in this activity. All the squares have some data and the next two years will be spent upgrading breeding evidence and filling in the hours in those out-of-the-way squares. A highlight of my own season was spending two days atlassing on Scatarie Island with Dave McCorquodale. Thanks to Kevin Spencer for the taxi service and accommodations on the island.

--Dave Harris, RC

### **Cape Breton Island Highlands, Region 26**

Region 26 added at least 1137 observations and identified 124 species in the 35 squares that were visited this year. There are still a number of observations that have not been uploaded into the system so the numbers are preliminary. We



were able to reach two of the five remaining unsurveyed squares and I am sure all the rest will be surveyed, at least once, in the next two seasons. Poor weather and mid survey blahs (it's year three of five) contributed to a slight drop in participation and observations. We haven't gone over the results so I have no rare sightings to report as of yet. Thanks to Ivy Austin and staff of the High Elevation Landbird Program there was an uptick in the number of point counts completed, especially in the area north of the park. Another highlight was a workshop and field trip in which the MBBA joined with the Nova Scotia Bird Society and Cape Breton Highlands National Park. It was well attended and we were able to promote all three organizations while having a great time.

--Fritz McEvoy, RC

### Prince Edward Island, Region 27

Waiting for atlas data to arrive is a hard thing for me. I don't have much patience and I find my moods can be affected. Of course the bad news to start with is that we had a cold rainy June and a despicable rainy August which deterred birders from their duties. (The good news is that some people went out anyway and their data are entered on-line). As well, some birders who came to PEI on the Canada Day weekend got stuck with rain and high winds, but atlased anyway. The bad news is that some of these results and the works of others are not yet entered on-line. And yes, wind energy projects requiring bird surveys have supplied good data, and there is more to come. Overall, data entries might be down, but I know this opinion could be modified in November or December when Trevor finishes unpacking at his new house and finds his notebook! In the priority square arena, there are 27 on PEI and 12 are known to be completed. Most of the remaining squares are partially completed while two have not been touched. Only two more years to get 'em done.

Good news and bad news: this summer the Atlas Office sent a point-counter to PEI who worked in 10 squares (data not yet entered) but even with this effort we know that very few point counts have been completed in our region and much more work is needed. While I was on vacation in September I read a self-help book about how to be more positive. So thanks to all

atlassers who have submitted data, and in January we will reassess our progress. I am looking forward to 2009 when CWS will conduct gull and tern surveys on PEI. More grist for the mill!

-- Rosemary Curley, RC

## Travel grants for Atlassers and results

By Ivy Austin, Assistant Coordinator



On the way to Sambro Island, photo by Richard Stern

In 2008, Bird Studies Canada's James L. Memorial Baillie Fund provided funding for Volunteer Travel Grants. The goal: to facilitate and encourage Atlas volunteers to survey remote or unpopulated areas that might not be otherwise covered during the five-year period. In May, five applications were submitted and all were successful. Each applicant set high coverage targets for themselves and were willing to travel many kilometres either by car or boat to get the job done. To no one's surprise, not only were applicants successful in reaching their targets, they often surpassed them. Peter Hope and James Hirtle made 27 atlassing trips to priority and remote squares in Region 19, submitted data for 26 squares, and made their way over to neighbouring Region 18 to do some more atlassing. Roy LaPointe made 36 atlassing trips to 55 squares in Regions 1 and 4. He had hoped to complete 300 point counts—and in the end Roy's final tally was a whopping 311 point counts. Hans Toom, along with 8 other birders, boated to Sambro Island, NS. They had a great visit, observed many species and confirmed several colonial breeders including plenty of Arctic Terns, Common Eiders, Great Black-

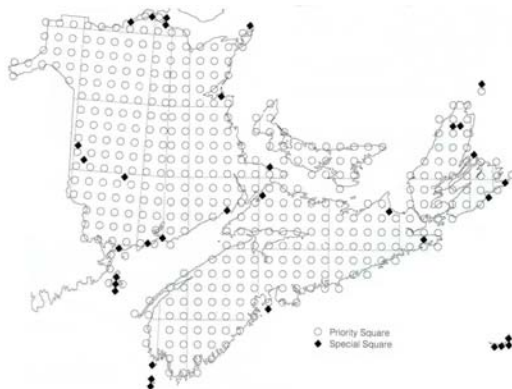


backed Gulls, Double-crested Cormorants and Herring Gulls. Last, but not least, Fritz McEvoy visited 18 squares in the Cape Breton Highlands. We encourage all volunteers that are planning to travel large distances and would like their atlas costs subsidized, to apply in 2009.

## Special squares are priority squares

By Ivy Austin, Assistant Coordinator

In the first Atlas, some squares were designated as “special” because of the rare species or habitats they contained and they were given the same “priority” as priority squares (they were the squares to be worked first). To make the second Atlas’ results comparable to the first, we need to give these “special” squares the same attention. Below is a map and list of special squares that have not been assigned. Please contact your RC if there is a special square that you want to cover.



Special squares indicated by diamonds (◆). Map from 1<sup>st</sup> MBBA.

Table 1. Unassigned special squares.

<u>Region</u>	<u>Square</u>
2	19GP12
6	20LT41
11	19FK73
17	19GJ33
18	19GJ30
18	19GJ31
19	20MQ11
22	20PR31
26	20PS87

## What’s the difference? Comparing the 1<sup>st</sup> and 2<sup>nd</sup> Maritimes Atlas

By Becky Stewart, Coordinator

As data are submitted and maps are updated, the question on everyone’s mind is “have there been changes between the 1<sup>st</sup> and 2<sup>nd</sup> Atlas?” At last, we are beginning to have some answers. One area where we can see changes between the two Atlases is in the probability of observing a particular species when atlasing a square. Changes in a species’ probability of observation can be indicative of distributional or population changes (e.g., if a species population has increased, you may be more likely to observe the species, whereas if the population has decreased you may be less likely to observe it).



Canada Goose is one species being observed more frequently in all regions, photo by John Chardine

The probability of observation for Maritime breeding birds was calculated by dividing the number of squares in which each species was observed by the total number of squares with survey effort. Not surprisingly, the probability of observation increased for some species, decreased for others and for some, stayed the same. Table 1 lists species for which the probability of observation increased between the first and second Atlas periods. For species like the Bald Eagle and Merlin increased observation rates are good news. Many raptor populations declined severely between the 1950s and early 70s because of extensive DDT use in forestry and agriculture. Once DDT use was restricted and eventually banned, raptor populations began



to rebound. This rebound was evident by the end of the first Maritimes Atlas and, given the continued increase in observation rates for these species during the second atlas, it is clear this trend has continued.

Table 1. Maritimes breeding bird species for which the probability of observation has increased since the first MBBA.

Species	% increase in probability of observation <sup>1</sup>
Mourning Dove	22
Canada Goose	20
Bald Eagle	16
Black-throated Blue Warbler	12
Eastern Palm Warbler	11
Blue-headed Vireo	11
Merlin	10
Mallard	9
Turkey Vulture	6

<sup>1</sup>Change in probability of observation = (squares in which detected in 2<sup>nd</sup> Atlas/squares surveyed in 2<sup>nd</sup> Atlas) – (squares in which detected in 1<sup>st</sup> Atlas/squares surveyed in 1<sup>st</sup> Atlas).

Another species observed more often the second time around is the Black-throated Blue Warbler, and Atlassers aren't the only ones detecting it more frequently. The Breeding Bird Survey (BBS) also shows increases in Black-throated Blue Warbler populations in the Atlantic Region (3.4% per year from 1968 to 2007, and 8.3% per year from 1997 to 2007). Similarly, the Ontario Atlas found an increase in the probability of observing Black-throated Blue Warbler between their first and second Atlas (1981-1985 and 2001-2005, respectively). These increased observation rates may reflect an increase in suitable Black-throated Blue Warbler breeding habitat in the Atlantic region, as well as Ontario.

However there are also several species, listed in Table 2, for which the probability of observation appears to have decreased between the first and second MBBA. For many, these apparent declines are, sadly, no surprise. Declines in aerial foragers like the Barn Swallow, Bank Swallow and Chimney Swift have been seen across North America and seem especially

intense in Canada and the northern parts of these species' ranges. For example, for the Barn Swallow, the Ontario Atlas found a 35% decline in the probability of observation between the first and second Atlas. The BBS also shows annual declines in Barn Swallow populations in NS, NB and across Canada. In NB, in particular, BBS data indicate Barn Swallow populations have declined by 15% per year since 1987. There may be many factors influencing these declines including: aerial insect population levels, insect emergence patterns, and/or degradation of aerial foragers' breeding or wintering habitats.

Table 2. Maritimes bird species for which the probability of observation has declined between the first and second MBBA.

Species	% decline in probability of observation
Tennessee Warbler	35
Brown-headed Cowbird	32
Bank Swallow	31
Barn Swallow	30
House Sparrow	30
Rose-breasted Grosbeak	28
Killdeer	26
Eastern Kingbird	23
Cliff Swallow	23
Bobolink	22
Canada Warbler	21
Chipping Sparrow	19
Chimney Swift	17
Red-winged Blackbird	16
Spotted Sandpiper	16

Several species showing declines in their probability of observation are listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as "Threatened" (Canada Warbler and Chimney Swift), or have been identified as candidates for future COSEWIC assessments (Barn Swallow, Bank Swallow, Eastern Kingbird, Bobolink). MBBA data will be incorporated into upcoming species assessments to help determine if these species are at risk of further declines, identify areas and habitats of conservation importance and, to assign stewardship responsibility.

Somewhat surprising is the decline in the probability of observing Killdeer between the first and second Atlas. Although many birders consider the Killdeer “common” (and it is listed as “common in the Canadian Shorebird Conservation Plan), the Maritimes Atlas isn’t the only study to indicate possible declines for this species. In Ontario, the probability of observation for Killdeer declined between atlases and BBS data also indicate significant declines in Killdeer populations across Canada (4% per year over the past 20 years) and in the Maritimes (9% per year over the past 20 years). The Spotted Sandpiper is another surprise on the list. BBS data indicate a significant annual decline of 14% per year for Spotted Sandpipers between 1987 and 2007 in NB, but population trends are not as clear cut in other provinces. If these trends, detected by the Atlas and BBS are real, there is cause for alarm because we don’t know what factors are influencing this decline.



Spotted Sandpiper, photo by Richard Stern

Lastly, there are several species that are, so far, showing little change in detection rates between the first and second MBBA (Table 3). This may indicate that, for these species, the amount and quality of breeding habitat has remained more or less stable in the Maritimes over the past twenty years.

Of course, the heart of the Atlas results are the maps that will be produced at the project’s end and these will provide us with the distribution and abundance information needed to more fully assess the status of our breeding birds. Over the course of the year, Atlas staff will be working to create some preliminary abundance maps to give you an even better taste of results to come.

Table 3. Maritimes breeding bird species for which there does not appear to be a change in the probability of observation between the first and second MBBA.
Red-breasted Merganser
Pileated Woodpecker
Hairy Woodpecker
Hermit Thrush
Black-capped Chickadee
Red-eyed Vireo
Magnolia Warbler
Chestnut-sided Warbler
Black-throated Green Warbler
Wood Duck
Northern Parula
Common Loon
Ruby-throated Hummingbird

## Species at Risk Update

By Becky Whittam, BSC Atlantic Program Manager

There’s something thrilling about finding a Species at Risk in your Atlas square – it makes you feel a little special, knowing that your square is “good enough” to support Rusty Blackbird, Chimney Swift, or even Least Bittern or Bicknell’s Thrush. At the same time, some Atlassers (me included!) might find something a little annoying about having to fill out yet another form for Canada Warbler, or Common Nighthawk – species that may not seem all that “rare” in the Maritimes, yet. I’m here to reassure you that it doesn’t have to be a chore – and the benefits are well worth the effort.

A quick glance at Table 1 (next page) gives the number of rare bird forms submitted to date for those species listed by COSEWIC as well as the number of squares in which those species were found in 2008 and in total over the past three field seasons. Atlassers have submitted 518 forms for Species at Risk in the first three years of the Atlas. For four species (Canada Warbler, Chimney Swift, Common Nighthawk and Olive-sided Flycatcher) atlassers were not asked to provide additional documentation until 2008, shortly after all four were designated as “Threatened”. You can see that for almost all species (the exception is the Bicknell’s Thrush)



the number of squares reporting the species is somewhat higher than the number of rare bird forms submitted. One would expect that if everyone were submitting a rare bird form each time one of these species is detected in a square, that these numbers would be at least equal. Of course, in fairness, we're still a few months from the data entry deadline, so many atlasers may not yet have had a chance to submit their rare forms (hint...hint). Plus, many atlasers have submitted forms for the 4 newly listed species at risk in 2008 – more than 68% of these observations have been documented! That said, there are several observations of very rare species (e.g., Least Bittern, Short-eared Owl and Yellow Rail) that have not yet been fully documented; unfortunately, without forms, those records may end up being rejected. So for those of you who haven't yet filled out your rare bird forms, please do so by January 31, 2009.

Table 1. Number of rare bird forms submitted, plus the number of squares in which species at risk were detected in 2008 and in total since 2006. Recently listed species, for which forms have been required since 2008, are starred (\*).

Species	Rare Forms	Sq. 2008	Total Sq.
Bicknell's Thrush	37	16	33
Canada Warbler*	101	157	370
Chimney Swift*	51	52	159
Common Nighthawk*	74	116	319
Harlequin Duck	3	3	8
Olive-sided Flycatcher*	121	186	443
Piping Plover	44	11	54
Rusty Blackbird	92	53	149
Short-eared Owl	12	2	18
Least Bittern	2	0	5
Yellow Rail	0	0	1

*What does a rare bird form do that a breeding evidence form does not?* It provides precision, and in the world of research and management (be it wildlife, forestry, watershed, or industrial), precision is very important. Knowing exactly where Canada Warblers were found in the Maritimes allows researchers to ask and answer specific questions about habitat, such as what forest type do they use? How close were they to the nearest waterway? And, what is the state of

the surrounding forest? It also allows managers to plan their work around these rare species. For example, forest managers will eventually need to consider Canada Warbler in their management planning; knowing where they have been found in the past will help them to know what forest habitat to protect and supply for this species into the future. The Atlantic Canada Conservation Data Centre, which supplies rare species information for all types of wildlife (plant and animal) across the region to consultants, government agencies, and researchers, will be updating their species at risk database with the Atlas data. Rare bird data from the Atlas will be used (and in the case of Least Bittern, is already being used) to help recovery teams delineate critical habitat for Species At Risk. And Atlasers can rest assured that this sensitive information will not be available online or given out without a substantive multi-jurisdictional approval process in place.

My advice (which I didn't always take, though I now wish I had) is to fill in the rare bird forms at the same time as you're filling in the breeding evidence forms. That way, you don't forget the details when, months later, the reminder emails from your RC finally hit home and you sit down with your notebook and a coffee (or two). It doesn't take long. The two most important pieces of information to supply are the location of the rare bird, and a description of its habitat. If you take your BE card into the field, the "notes" space on the front of the card is perfect for jotting down observation and habitat details and UTM coordinates.



Canada Warbler, photo by Jerry DeBoer

If you didn't enter your rare bird information at the same time as you entered breeding evidence, it's not too late! You can generate a list of all species (and their squares) for which further documentation is required by logging in for data entry, checking the little box at the beginning saying "check this box to summarize only your own data" then choosing data **summaries** under "Browse Results". The last option in this menu is "Show me the list of significant species reported by yourself and their review status". By selecting this option for either the entire Maritimes or a single square, you can see what species still require further documentation.

## Frequently Asked Questions

By **Becky Stewart and Ivy Austin**, *Coordinators*

**How do I estimate abundance?** To estimate abundance, make your best educated guess of how many pairs of birds of each species are breeding in your square. Then, use the abundance indices (below) to see into which category your estimate falls. This index number goes in the last column on your BE form.

Index	Abundance
0	0 pair
1	1 pair
2	2 to 10 pairs
3	11 to 100 pairs
4	101 to 1,000 pairs
5	1001 to 10,000 pairs

For example, let's say you thoroughly atlased a coniferous forest patch that, on your square map, is about the size of a loonie. Let's also say that you found 2 pairs of Spruce Grouse in that patch. To estimate the abundance of Spruce Grouse, look at how many "loonies" of that forest-type are on your map and multiply your 2 pairs by that number—you now have an estimate of how many Spruce Grouse bred in your square.

### When should I make abundance estimates?

Before estimating abundance for a particular species, you need a good knowledge of your square, the habitats it contains and the number of birds that are breeding there. One approach is to

estimate abundance once you've completed, or nearly completed, covering your square (after 20 hours). Another approach is to estimate abundance, as you cover different habitat types. For example, if you have already spent a considerable amount of time atlasing around rivers, wetlands and lakes, you probably have a good handle on the species and numbers breeding in those areas (e.g., ducks, geese, grebes etc...), so you should feel confident to make estimates for those species before you move on to other habitat types.



Spruce Grouse, photo by Rod O'Connell

**What if I enter different abundance codes for the same species in different years (e.g., Crossbills were abundant one year and not the next), or, if different atlasers enter different abundance estimates for the same species in the same square?** Not a problem. At the end of the project, the different abundance estimates, for the same species in the same square, will be accounted for and in many cases averaged together to get a mean abundance estimate.

**What if I would like to enter abundance estimates for a species seen in a previous year but not the current year?** Atlasers who heed the advice of their Atlasser guide, and wait until their square is complete before they estimate abundance are likely to run into this "problem". Why? You may not see every species every year—possibly because it is less abundant or maybe you focused on different habitat types from one year to the next. Either way, it is not a problem. Although the online system won't accept an abundance estimate without a visit



number and breeding evidence code, we will. Just email, call or mail your abundance estimate to the Atlas office and we'll make sure it gets in.

### **If I am doing point counts in my square should I still make abundance estimates?**

Yes, for three reasons:

- 1) point counts are biased towards landbirds and can not always provide good abundance estimates for owls, ducks, grouse etc...;
- 2) it will make our results comparable to the first atlas (during which volunteers made abundance estimates);
- 3) there are several squares that won't receive point count attention (e.g., secondary and tertiary squares) so your estimate will be the only abundance information we have for that square.

### **If I spend five hours in a square that is not assigned to me and to which I will never return, should I still make an abundance estimate?**

Yes, please estimate abundance for any species for which you feel comfortable doing so. For example, if you spend five hours atlassing in hardwood/mixed wood forest in a square you probably have a good idea how many Ovenbirds, Black-throated Blue Warblers and Red-eyed Vireos are in that square, based on your knowledge of the area you surveyed and how much of that habitat is in the square. If that's the case, then enter abundance estimates for those species which you feel you have a handle on. You may be the only atlasser to enter abundance estimates for them in that square.

## **What's happening to our finches?**

**By Ivy Austin, Assistant Coordinator**

During July and August, reports of sick finches were disturbingly prevalent on several nature listservs in the Maritimes. Many people brought this issue to the attention of the Atlas office so I thought I would provide atlassers with a more in-depth look at the problem and what's been learned since the first reports. Sick finches seems to be more common in NB, although there were some cases reported in NS and in Quebec. Purple Finch appear to be the species most frequently afflicted but there are also reports of

sick American Goldfinch and Pine Siskin. Adults and fledged young of all three species have been observed exhibiting symptoms ranging from crusty, inflamed eyes to weak, lethargic birds with laboured breathing.



A lethargic American Goldfinch suffering from Trichomoniasis, photo by David Christie.

These symptoms are thought to be the effects of two different pathogens. The inflamed and crusted eyes are likely caused by the bacterium *Mycoplasma gallisepticum*. This bacterium, which has long been known to affect domestic turkeys and chickens, was first detected in wild birds in the early 1990s. Infected birds have trouble flying and feeding properly. Researchers do not know exactly how the disease is transmitted but think it is likely by air or by contact with an infected bird or contaminated feeder. The weak and laboured breathing seen in finches is symptomatic of a different pathogen, a parasite known as *Trichomonas gallinae* (TG). This parasite infects the birds' digestive and respiratory tracts and is characterized by lesions (inflammation and ulceration of mucosal surfaces) that appear on the mouth and esophagus. As these lesions increase in size and number they can cause breathing difficulties. TG typically infects doves and pigeons (for which the disease is named canker) or raptors (for which the disease is known as frounce). In feeder birds, like finches, outbreaks of Trichomoniasis are typically seen from late summer to autumn, likely because the parasite can be transmitted: when parents regurgitate food for young or through a contaminated food or water source. Cleaning your feeder regularly



using a 1:10, bleach to water mixture, will help reduce the spread of both diseases.

Only time will tell if these diseases have a significant impact on Maritime finch populations—for now, the answer is unclear. Although the BBS shows an overall significant decline in Purple Finch populations of 3% per annum since 1968, the bulk of this decline occurred between 1968 and 1987 and in more

recent years BBS data show an increase (7% per year) in Purple Finches. As well, our Atlas data does not show a decline in Purple Finch detection rates between the first and second MBBA. So, for now, keep cleaning those feeders and report dead finches to the Canadian Cooperative Wildlife Health Centre at 902-628-4314.



**Help the Maritimes Atlas Publication Committee make some decisions!**

As we finish year three, it is time to think ahead to what the second “Atlas of the Breeding Birds of the Maritime Provinces” will look like. In September, the Publication Committee met to discuss exactly that. But, it soon became clear that a voice was missing from the discussion—yours! If you have an opinion about the final atlas publication, we want to hear it. Please fill out the survey below, indicating your preferences by checking the box provided, and return it by mail (17 Waterfowl Lane, Sackville, NB E4L 1G6), fax (506-364-5062) or email [atlasmaritimes@gmail.com](mailto:atlasmaritimes@gmail.com) by January 31, 2009.

**1. What form would you prefer the final atlas product to take?**

- Hard copy book and website
- Website only

**2. If a hard copy book were produced, would you buy it?**

- Yes
- No

**3. Would you prefer your atlas book to be:**

- Bilingual
- One language (Both an English and French version produced)

**4. If two, single language publications are produced, which would you purchase?**

- English
- French
- Both

**5. What is the maximum that you will pay for a hard copy Atlas publication?**

- 40.00 – 50.00
- 50.00 – 60.00
- 60.00 – 70.00
- 70.00 – 80.00
- Other. Specify \$\_\_\_\_\_

**6. Comments/questions (please attach an additional sheet if required):**

## Thank-you Atlas supporters!

	 Environment Canada Environnement Canada Canadian Wildlife Service Service canadien de la faune	 New Brunswick Nouveau Brunswick Be...in this place • Être...ici on le peut	
			
			
			
			
			

### 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](http://www.mba-aom.ca) or call toll free 1-866-528-5275 (1-866-5ATLAS5).