

Final Report for Nova Scotia Habitat Conservation Fund Maritimes Breeding Bird Atlas

The Maritimes Breeding Bird Atlas, which was launched in 2006, is a five-year, volunteer based project to determine the distribution, abundance and status of all birds breeding in the Maritimes Provinces. There are currently 445 Nova Scotia volunteers participating in this important environmental initiative and the information they are gathering will be used to identify conservation priorities and protect NS bird biodiversity for years to come.

As we move into the Atlas project's fourth year, our immediate objectives are to:

1. Maintain NS volunteer engagement and participation;
2. Increase coordination of NS volunteer survey efforts and;
3. Increase the number of point counts completed in the NS (point counts are surveys at pre-designated locations, i.e., "points", where the observer records all birds seen and heard within a specified time period; point count data will be used to map species' relative abundance).

Project Activities:

1. Plan the 2009 field season

A RC Strategic Planning Meeting will be held in April to kick-start the planning process. Staff will work with RCs and other volunteers to identify: challenges involved in the implementation of the 2009 field season; areas requiring additional survey coverage; areas requiring additional expertise (either staff or volunteers); and areas requiring permission to access (e.g., private lands). Staff will then work with RCs and other volunteers to: assign staff and/or volunteers to unsurveyed areas; develop solutions to logistical problems; promote cross-regional volunteer participation; and gain access to private lands.

2. Produce volunteer outreach and communication materials

- a. Spring newsletter
- b. Spring mail-out with data forms
- c. Bi-weekly updates to the Atlas website (e.g., latest news, atlassing tips)
- d. 3 presentations for NS naturalist clubs
- e. Articles produced for NS naturalist club newsletters and websites
- f. Online maps (displaying hours surveyed, species detected and point counts conducted by square) updated weekly
- g. Real-time, online data summaries

3. Undertake fourth Atlas season

- a. Staff to conduct point counts and survey in less populated areas of NS
- b. Provide logistical support to volunteers from Sackville office (e.g., answer questions, assign squares, lead or plan field trips).

Results

1. RC Strategic Planning Meeting – a two-day meeting was held in Sackville, NB in April of 2009. The meeting was attended by 12 NS Regional Coordinators.
2. Field Season Planning – Staff and volunteer Regional Coordinators identified gaps in the Atlas database prior to the 2009 field season, with a particular focus on identifying priority squares that required point counts, and assigned those areas to either staff or volunteers to be covered.
3. Volunteer outreach and communication materials produced – A spring newsletter was produced and mailed out to NS volunteers and was made available online (attached). In May, all NS volunteers received a spring mail out that included data forms and a letter to participants. Between April 1 and July 30th, 23 articles appeared on the website's online latest news. Topics ranged from atlassing tips to data collection updates.
4. Undertake 4th Atlas field season – During the past four years volunteers have spent 32,000 hours surveying the Maritimes for breeding birds (just under half of that time has been dedicated to NS) and have gathered 168,600 individual bird records (this surpasses the total of 144, 642 bird records submitted during the first Maritimes Breeding Bird Atlas). As well, over the course of the project volunteers have completed 9,000 point counts in 700 squares. In 2009, volunteers have submitted data for 8,289 hours and nearly 47,844 individual bird records. In NS alone, volunteers contributed 4,265 volunteer hours, submitted 20,772 individual bird records. As well NS volunteers conducted 1,149 point counts in 149 squares and surveyed an additional 506 NS squares. Staff completed an additional 482 point counts in 32 NS squares and surveyed for breeding birds in another 87 NS squares. Staff efforts focused on the southwest and lower south shores, Digby, Cobequid and Guysborough regions. Point counts have now been completed for the entire province. Please see Figures 1, 2 and 3 for species and effort maps demonstrating the project's progress thus far.
5. Data Entry – 2009 data have now been entered online and are in the process of being reviewed by volunteers and Atlas staff.

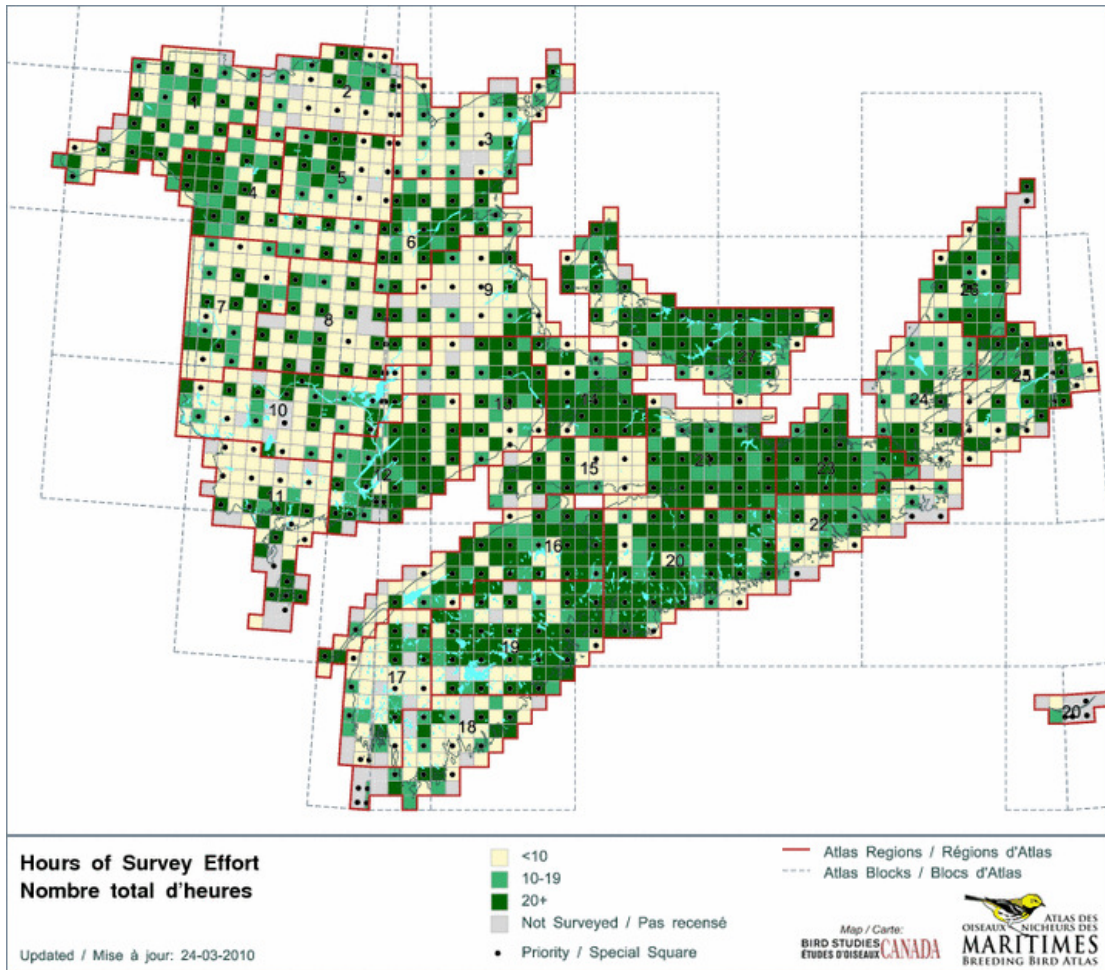


Figure 1. Hours of survey effort submitted to the Atlas online database (www.mba-aom.ca). Square colour indicates the number of hours spent in a 10 x 10 km square surveying for breeding birds. In 2010 we will concentrate staff and volunteer efforts in areas with yellow and gray squares, primarily central as well as south western NB.

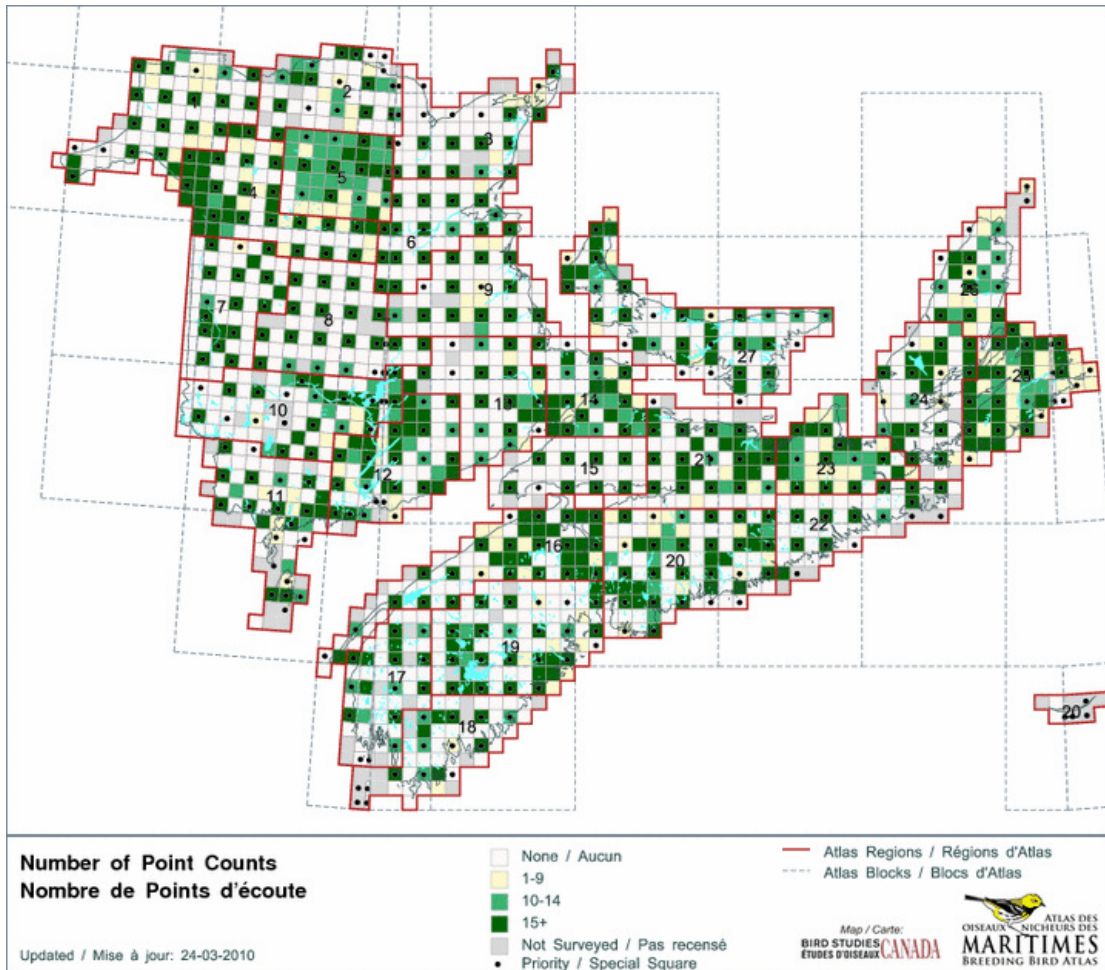


Figure 2. Point counts submitted to the Atlas online database (www.mba-aom.ca). Square colour indicates the number of point counts completed per square.

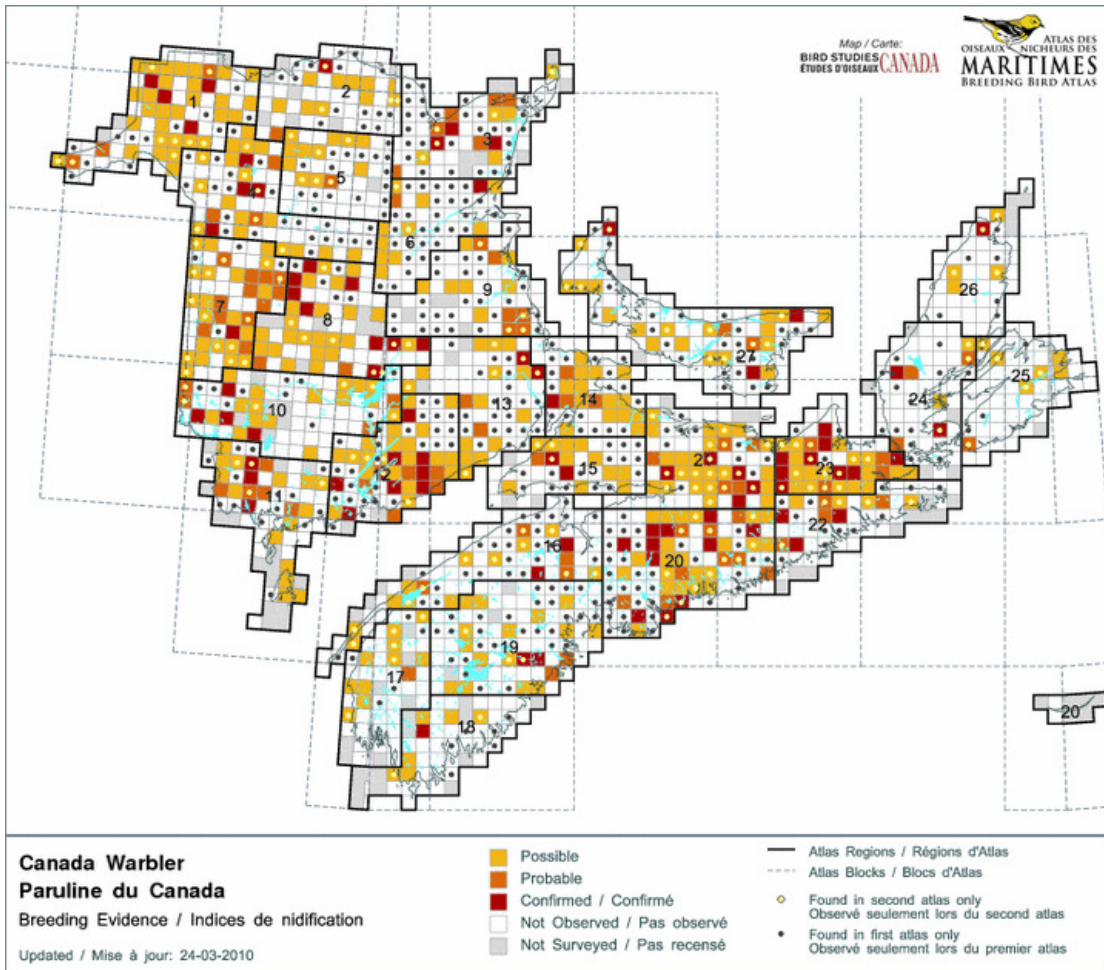


Figure 3. Change map showing Canada Warbler's current distribution, as well as distributional changes since the first Maritimes Breeding Bird Atlas. Black dots indicate squares where Canada Warblers were detected during the first Atlas but have not yet been detected thus far during the second Atlas. Yellow dots indicate squares where Canada Warblers have been found during the second Atlas but where they were not found during the first Atlas effort, despite having been surveyed. The Canada Warbler has been federally listed as *Threatened*. Final Atlas products, including distribution and abundance maps, will help identify "hotspots" and be used to direct conservation efforts and recovery actions.