

The St. Andrews Bird Banding Station completed its eighth full fall migration-monitoring season which proved to be very different from any previous year. Funds from the NBWTF grant were used as budgeted to support volunteers and supervision of the project, and supplement on-site and local transport.

St. Andrews Bird Banding Station 2009 Fall Migration-Monitoring Report

Where did all the birds go? No major migration of songbirds passed through the St. Andrews Bird Banding Station’s net area; there was barely a trickle. The total of 472 birds banded and 19.4 birds/100 net hours was by far the lowest recorded since the Station started daily monitoring of the fall passerine migration in 2001.

The nets were open for 2437 hours, which is lower than usual, but there were days in September when few birds could be heard around the net areas. Never before has the Station experienced daily catches this low. Table 1 illustrates some of the slowest days when all 14 nets were open.

Table 1 – Lowest catch days in 2009

Date	Birds banded HMa	Birds Banded HMb	Total banded	Birds/100net hours
September 2	3	0	3	7.3
September 11	2	1	3	6.3
September 16	1	0	1	4.1
September 28	1	0	1	4.1

Last year there were birds in the woods at the beginning of November. This year the woods were silent. The 46 species captured is low for diversity and no new species were added.

The results pose many questions! What happened to the migrants? Where did they go? Did the cool wet summer conditions allow migrants to stay farther inland instead of coming to the coast? Are the results a sign that bird populations are rapidly declining? Or is 2009 an anomaly? On the many dull banding days it was a struggle to maintain enthusiasm for the project; yet in the end it shows the importance and value of yearly monitoring and long-term data collection projects. We are all curious to see what happens next year!

The net set-up remained the same as previous years. HMa has eight nets in and around a semi-open field surrounded by tall boreal forest trees. Some of the large spruce trees within the field are starting to shade the net lanes. This may affect the number of birds captured, especially in the fall on cool days as birds follow the patches of sun around the field. HMb is a set of six nets in a thicket of willow, alder and aspen by the shore of the St. Croix Estuary. Shrubby vegetation at this site is also starting to fill in the open spaces.

There were no changes to the banding protocol in 2009. The Station continues to follow the Canadian Migration Monitoring Network (CMMN) protocol that it has used in previous years. A standard Canadian Wildlife Service numbered band was put on each bird. All birds were aged, sexed, weighed, measured, fat scored and checked for signs of moult. The date, net number and time of each capture were also recorded. A Banding Log summarizes the number of each species captured in each net area, the time the nets were opened and closed, the weather conditions at opening and closing time was filled out for each day that the nets were open. Daily sightings and migration observations were also recorded.

The best day in September was the 4th, with 24 birds of 10 species banded; and in October the 9th, was the best day with 29 birds of 10 species. These would have been considered average days a few years ago, when best days were closer to 100 birds.

Trends

Appendix A summarizes the 2009 totals by species and compares the results with previous years. Colour has been used to highlight the 2009 results in comparison to the 9-year average for species that are caught every year with a sample size of at least 10 in one year. The colour code used is as follows.

Red	= species below the 9-year average
Yellow	= species above the 9-year average
Blue	= species close to or equal to 9-year average

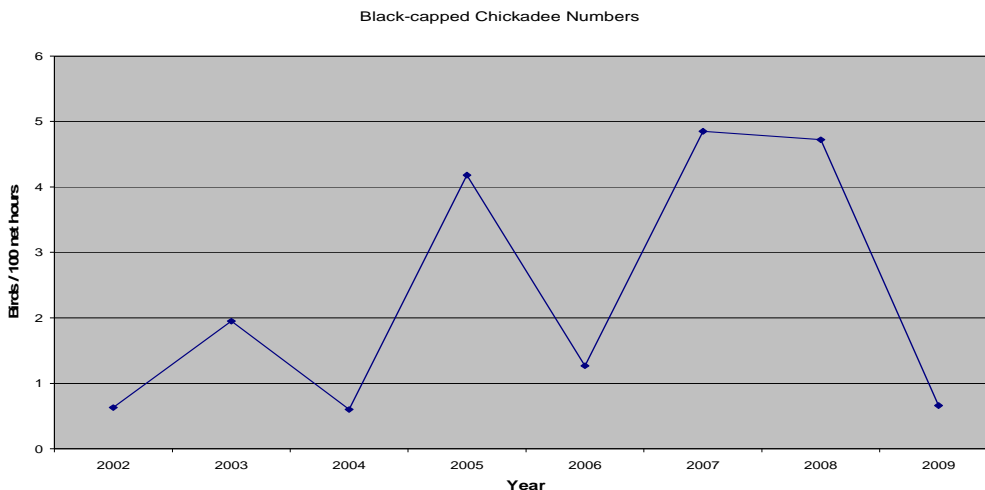
The overall results are not a positive picture. The 19.37 birds/100nh is well below the number of birds/100nh from the last two years and the lowest since daily migration monitoring started in 2001. The number of long-distance migrants – warblers, vireos and flycatchers - was down. Only Northern Waterthrush, Yellow Palm and Canada Warbler numbers were captured in numbers close to the nine-year average. This is heartening news about the Canada Warbler which has been recognized as *threatened* by the national Committee on the Status of Endangered Wildlife in Canada.

Notable in their absence were finches. American Goldfinch's were the lowest since monitoring started with only 0.41/100nh. Purple Finch numbers were also below average and this species may still be recovering from disease reported in 2007/2008.

White-throated and Song Sparrow numbers were down as were Slate-coloured Junco, but Swamp Sparrows, which is never very common in the net area, were slightly above average.

Thrushes provided some of the few positive results with the number of Swainson’s and Hermit Thrush above average.

The graph below illustrates the cyclic fall movements of Black-capped Chickadee through the area. After the expected major movement of 2007 and less expected movement in 2008, large numbers were not expected in 2009. This proved to be the case with only 16 banded or 0.66/100nh.



Top Ten

The most commonly banded species was White-throated Sparrow (Table 3) with 53 banded, a third of what it was two years ago. Notable absent again from the top 10 list is American Goldfinch; only 10 were banded in 2009. There is still plenty of the seed producing knapweed in and around the net areas which has attracted the goldfinches in previous years, but this year the birds were almost absent.

Table 3: The ten most commonly banded fall species 2009 - 2007

2009	2008	2007
53 White-throated Sparrow	148 Black-capped Chickadee	238 American Goldfinch
40 Common Yellowthroat	72 White-throated Sparrow	144 Black-capped Chickadee
34 Song Sparrow	53 Song Sparrow	136 White-throated Sparrow
28 Golden-crowned Kinglet	50 Common Yellowthroat	39 Magnolia Warbler
27 Swainson’s Thrush	50 Golden-crowned Kinglet	37 Red-eyed Vireo
25 Hermit Thrush	44 Magnolia Warbler	37 Ruby-crowned Kinglet
23 Ruby-crowned Kinglet	39 Red-eyed Vireo	35 Golden-crowned Kinglet
22 Magnolia Warbler	37 Hermit Thrush	32 Common Yellowthroat
21 American Redstart	35 American Robin	31 Slate-coloured Junco
16 Swamp Sparrow	32 American Redstart	26 Song Sparrow
16 Black-capped Chickadee		

New additions to the top ten list are Swainson’s Thrush and Swamp Sparrow. The 27 Swainson’s Thrush is the highest number since 2001 and may be a result of the increasing amount of tree cover near the net lanes.

Unbanded Species

Three species were caught but not banded. Fourteen Ruffed Grouse was unusually high as were the nine Ruby-throated Hummingbird, which lingered until mid September with the last one captured September 17th. A Northern Saw-whet Owl on October 1st was unusual capture.

Highlights

There were few highlights in the 2009 season, but the Saw-whet Owl on the first morning round brightened the day on October 1st. An Eastern Phoebe on September 24th was the first fall record in many years.

Recaptures

Five birds were recaptured in the fall see Table 4. All five had originally been banded in the fall and have never been seen in the spring or summer.

Table 4. Birds recaptured in the Fall 2009

Species	Number of Individuals	Year Originally banded
Red-eyed Vireo	1	After-hatch-year (AHY) - 2008
Black-&-White Warbler	2	AHY - 2005; AHY - 2007
Gray Catbird	1	AHY - 2007
Black-capped Chickadee	1	Hatch-year (HY) - 2008
Total	5	

One of the Black-&-White Warbler, a female, was originally banded on August 6th, 2005 and recaptured September 4th, 2009. She is at least five years old.

Public Education

The St. Andrews Bird Banding Station is closely tied to the Huntsman Education Department and students attending courses on campus are invited to see the birds and learn about the banding process. Students from Ashbury College, Bell and South Carleton High Schools, the University of New Brunswick and the University of Western Ontario visited the Station. Public education and banding demonstrations are an important part of the Station’s mandate. These students may be the next generation of scientists who may be using this data to help interpret songbird migration in the future.

Data Sharing

The Station’s banding data is submitted electronically to Canadian Wildlife Service through the Bandit program. A summary of the fall banding project will be sent to Bird Studies Canada as part of the CMMN and will also appear in the Atlantic Flyway Review – Northeast Region article of *North American Bird Bander*.

Acknowledgements

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Thank you to the **Huntsman Marine Science Centre** for all the in-kind support which allowed the Station to successfully complete another fall migration-monitoring season.