Our third season of fall counts has been completed and it was an exciting year. We recorded 15 species of raptor, and had high season counts for several species and our highest season total ever. We also had an increase in the number of participants and the hours they spent at the watch. A very successful year, thanks to the New Brunswick Wildlife Trust Fund, our volunteers and other supporters.

We counted raptors on 42 days between August 23 and November 8, with a total of 258 observation hours logged. As we did in 2009 and 2010, counts were recorded this year on days with favourable winds (i.e., winds without a southerly component) and a lack of significant precipitation. Hawks moving east to west were generally considered to be migrating. Because of the presence of local raptors at the site, we had to watch those species closely to ensure accuracy of our counts. The year round presence of Bald Eagles and their tendency to repeatedly move over the site as they travelled from Passamaquoddy Bay and Chamcook Lake to the Saint Croix estuary made counting this species particularly challenging. The consistency of our counts through the 3 years suggest that we are doing a good job of meeting this challenge (see table below). Seasonal and full-year resident raptors at Greenlaw Mountain include Turkey Vulture, Bald Eagle, Broad-winged Hawk, Sharp-shinned hawk, Northern Goshawk, Merlin, American Kestrel and Osprey.

Numerous 'season high counts' (i.e. highest ever) were recorded this year for several species including: Broad-winged Hawk, Red-tailed Hawk, Sharp-shinned Hawk, Northern Goshawk, Turkey Vulture, and American Kestrel. Single day high counts were recorded this year for Broad-winged Hawk, Sharp-shinned Hawk, Turkey Vulture, Northern Goshawk, Red-tailed Hawk, Red-shouldered Hawk and Merlin. In addition, the total number of raptors counted this year was the highest since the project began. Of the 15 species of raptor species counted, 5 were recorded at lowers numbers than during 2010.

A Quick Look at the Season

August
Early season counts in August were light. This was due to a relative lack of favourable winds. However, the presence of resident raptors provided many opportunities to study birds of prey. Resident hawks included 4 Sharp-shins’ (family group), 4 Merlins (family group), at least 3 American Kestrels (family group), at least 4 Ospreys (another family group), several Turkey Vultures (adult and immature) and numerous Bald Eagles (adult and immature). Daily interactions between the smaller raptors occurred directly overhead, as well as, around the watch site. These birds remained on-site through the end of the month eventually leaving during the first and second weeks of September.

September
Counts of migrating hawks quickly picked up during the first days of September. Good numbers of hawks continued to be counted throughout the remainder of the early season, perhaps providing a hint as to how the season would progress. A major migration event occurred on September 16-18. This 3-day movement brought a total of 4751 hawks past the
site. Friday the 16th produced 938 hawks, mostly Broad-wings riding in on strong NW winds. Most of the birds were low with hundreds close. The following day brought less powerful winds and 3406 hawks. Streams of Broad-wings stretched across the sky often passing directly overhead. Numerous kettles containing 100 or more hawks were seen. An amazing spectacle that everyone should see. Sunday the 18th brought leftovers riding on a light NE wind that became variable around midday bringing an end to this flight. An additional 407 hawks were counted including our first Gyrfalcon, a very early sighting for this species. It is thought that this bird might have been caught up in the remnants of a hurricane off Labrador, then spit out into the strong winds of the huge high pressure system sitting to its south. This high pressure system, the strong winds preceding it and its timing produced some very impressive raptor flights.

The next strong movement of raptors began as a passing system cleared out on September 25. The following day produced a count of 736 hawks. All the birds counted on this day were spotted and identified by a single observer. Because of this, it is possible, if not highly likely, that many additional hawks would have been observed and counted if there had been more observers on hand. This was a light-wind movement producing many smaller birds of prey including good numbers of Sharp-shinned Hawks and American Kestrels, as well as, over 600 Broad-wings. These birds were surprisingly low, often just over the trees, passing directly overhead, making this quite a sight to see.

**October**

October was another good month producing our highest recorded single day counts for Turkey Vulture, Sharp-shinned Hawk and Northern Goshawk. Our first record ever of Golden Eagle occurred on the 26th. The last good movement of Sharp-shins occurred on October 23. Red-tails began to dominate the counts during the last week of the month. Dozens of raptors were counted on most days with a couple single-day counts topping 100. Two Northern Goshawks took up temporary residence near the watch. These birds were repeatedly observed displaying. Flared coverts, exaggerated flapping and closed-winged dives were observed. On several occasions, the two birds displayed side by side as they patrolled the skies. Courtship behaviour of this type is typically observed only during the spring breeding season. Another interesting late season sighting was a resident Bald Eagle carrying nesting material, also typical of spring behaviour.

**November**

There were only a few days with favourable winds during the early part of the month. Nonetheless, we did count more hawks than during previous Novembers. Our highest single-day count for Red-tails occurred on the 5th. This day also produced 3 Red-shouldered Hawks and a few other late birds. The adult Goshawks first observed in October, continued to display through the first week of this month, providing us with additional opportunities to study these birds. During the last day of observations, several Red-tailed Hawks were hunting near the watch site. This suggests that more Red-tails were ready to move, but they were waiting for more favourable conditions. An attempt will likely be made (weather dependant) to capture some additional data after the writing of this report.

We didn't have any sightings of rare non-raptors this year. However, we did observe some
Snow Geese on September 26. The 27th of September produced 2949 Double-crested Cormorant. The season’s most numerous non-raptor migrant would likely have been the Pine Siskin. Hundreds or even thousands of these birds passed the watch site each day throughout much of the late season. As usual, the trails leading to the site produced a good assortment of migrants during August, September and October.

__________________________________________________________________________

I feel privileged to work on this project and thrilled that we are generating so much knowledge of regional hawk migration and raptor populations in Atlantic Canada. It is my intention to do all that I can to keep the project going and to further develop our regional understanding of and appreciation for birds of prey. Continuing to build our data base will show important trends in raptor populations and their movements.

Special thanks to Laraine Townsand and Richard Tarn for their dedication, to Jim Wilson, Eilene & Roy Pike as well as Roger LeBlanc for helping spot and count on the ‘big day’ and Hank Scarth for his many contributions to the project. Additional thanks to all the other participants, the property owners and our supporters.

We hope to see everyone again next year!

**Species Accounts**

**Turkey Vulture**

_Earliest Observation:_ September 10  
_Latest Observation:_ November 6  
_Single Day High Count:_ 44 (October 7)  
_Peak:_ Early October  
_Seaon Total:_ 144

This year’s count totals were well above the two preceding years, likely reflecting the expansion of its range.

**Osprey**

_Earliest Observation:_ August 26  
_Latest Observation:_ October 26  
_Single Day High Count:_ 20 (September 27)  
_Peak:_ Mid to late September  
_Seaon Total:_ 132

This year’s counts were lower than last year, but higher than 2009.

**Bald Eagle**
Earliest Observation:  August 31
Latest Observation:  November 4
Single Day High Count:  5 (September 10)
Peak:  Early to mid September
Season Total:  44

Resident eagles repeatedly fly over the watch site every day of the count season, making it a challenging bird to count at our site. This year's counts were down a bit from the previous two years.

**Golden Eagle**
*Date of Observation:*  October 26(first on record)
*Season Total:*  1

**Northern Harrier**
*Earliest Observation:*  August 31
*Latest Observation:*  November 4
*Single Day High Count:*  8 (October 26)
*Peak:*  Early September
*Season Total:*  60

This year's counts were lower than last year, but higher than 2009.

**Sharp-shinned Hawk**
*Earliest Observation:*  August 23
*Latest Observation:*  November 8
*Single Day High Count:*  82 (October 11)
*Peak:*  Early September thru Mid October
*Season Total:*  848

Sharp-shins were counted on almost every day of the count season. This year's counts were significantly higher than previous years.

**Cooper's Hawk**
*Earliest Observation:*  September 10
*Latest Observation:*  October 31
*Single Day High:*  1 (numerous dates)
*Peak:*  Early October
*Season Total:*  11

This year's counts were similar to the two preceding years.

**Northern Goshawk**
Earliest Observation: October 17
Latest Observation: November 8
Single Day High Count: 5 (October 23)
Peak: Late October
Season Total: 19

This year’s counts were significantly higher than the two preceding years.

Red-shouldered Hawk
Earliest Observation: September 16
Latest Observation: November 5
Single Day High Count: 3 (November 5)
Peak: Late Season
Season Total: 7

This year’s counts were similar to the two preceding years.

Broad-winged Haw
Earliest Observation: August 23
Latest Observation: October 7
Single Day High Count: 3311 (September 17)
Peak: Mid-September
Season Total: 5835

This year's counts were more than 2.5 times greater than last year. This increase was largely due to excellent weather conditions coinciding with their 'big push'. However, above average numbers were recorded throughout the season suggesting a possibility that this species had a good year, welcome news for this forest bird. Poor forestry practices threaten to negatively effect its population as well as that of other forest-dependent birds of prey and the food base they rely on.

Red-tailed Hawk
Earliest Observation: September 2
Latest Observation: November 8
Single Day High Count: 46 (November 5)
Peak: Late October & Early November
Season Total: 241

This year's counts were slightly higher than last year’s.

Rough-legged Hawk
This raptor has yet to be counted during the fall season. Several have been observed passing during spring migration.
**American Kestrel**  
*Earliest Observation:* September 23  
*Latest Observation:* October 28  
*Single Day High Count:* 31 (September 26)  
*Peak:* Late September  
*Season Total:* 199

This year's counts were similar to last year's, which were significantly higher than 2009.

**Merlin**  
*Earliest Observation:* September 7  
*Latest Observation:* October 27  
*Single Day High Count:* 8 (October 10)  
*Peak:* Early October  
*Season Total:* 33

This year's counts were lower than the two preceding years.

**Peregrine Falcon**  
*Earliest Observation:* September 19  
*Latest Observation:* November 4  
*Single Day High Count:* 4 (October 10)  
*Peak:* Early October  
*Season Total:* 24

Amazingly, we counted the same number this year as last.

**Gyrfalcon**  
*Date of Observation:* September 18 (first on record)  
*Season Total:* 1

**Unidentified Accipiter**  
*Season Total:* 2

**Unidentified Buteo**  
*Season Total:* 4

**Unidentified Falcon**  
*Season Total:* 2

**Unidentified Eagle**  
*Season Total:* 0

**Unidentified Raptor**
**Season Total:** 65

**Combined Season Total:** 7672 (Sightings of partial and full year resident raptor are not included)

*Peaks for each species listed above are for this year. These peaks can vary from one year to the next.*

**Yearly Count Totals**

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<th>Year 2010</th>
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Feedback on this project is being sought. Please let me know your thoughts on the daily reports, flight forecasts, your experiences at the hawk watch or any other aspect of the project. We also welcome letters of support, they help us in our pursuit of funding.

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