

Final Report

Greenlaw Mountain Hawk Watch – 2010 A Project of the Saint John Naturalists' Club

The second season at the Greenlaw Mountain Hawk Watch has been completed. Much was learned, another full season's worth of data is available to researchers and decision makers in government, last year's database has been backed up, and many people have been introduced to the beauty and challenges of identifying hawks in flight. The Bay of Fundy coast is now recognized as a major regional hawk migration corridor.

Observations were conducted on 48 days between August 21 and November 14. During that period 266.25 hours of observation were logged. Thirteen species of hawks were observed migrating past the project site. A total of 3,889 migrating hawks were counted during the migration season, an increase of 1,120 over 2009.



A Sharp-shinned Hawk pursues an American Kestrel over the Greenlaw Mountain Hawk Watch

Prior to the start of this season, a call for volunteers was sent out through the NatureNB list-serve, the Saint John Naturalists' Club website, the Saint Croix Courier, the Telegraph Journal and through the posting of a flyer in the town of Saint Andrews. An interview was conducted with CBC TV. Emails and phone calls quickly came in from people interested in taking part in the project. Most of these people knew little about raptors but were eager to learn. All persons that expressed interest were welcomed into the project and were given an opportunity to participate. The contribution of the NBWTF was noted in all public communications.

Twenty-one volunteers actively participated in the project as observers. An additional 18 people expressed interest in taking part as observers, but were not able to participate because of bad weather or unexpected events. The total volunteer hours were 461.25, which surpassed our goal of 360. This figure includes 95 hours involved in project administration (Steering Committee, fundraising, financial management, etc) but not an additional 80 hours volunteered by the Official Counter.

The individuals and the hours they donated were a very important part of the project. The primary function of volunteer participants was to assist in spotting the hawks as they moved past the observation point on Greenlaw Mountain. However, the project's emphasis on education and public awareness was also well served as much information on hawks was shared with everybody that visited the site. This included information on hawk migration, count protocols, raptor behaviour, habitat requirements, current efforts to protect birds of prey, as well as many tips on raptor identification. Several field guides were always close at hand and all visitors were encouraged to look through the books and learn about birds of prey. A free hawk ID chart was offered to all volunteers.

This project has certainly helped to improve awareness of hawks and their presence in the province. People from all walks of life were interested to hear of the number of hawks being counted at Greenlaw Mountain. There is something about birds of prey that draws the interest of a wide group of people. Some people heard of the project late in the season and expressed great interest in participating in next year's counts.

Regular reports on the days' observations were uploaded onto the NatureNB list-serve. Additional information was also posted on the list-serve in an attempt to encourage learning and participation in

the project. A season-end report containing count numbers and highlights of the count season was also placed on the list-serve. The contribution of the NBWTF was noted in all postings.

The database containing the data collected at Greenlaw Mountain has been built. The database is freely available to international researchers and the public and can be viewed at www.hawkcount.org. Data was entered into this site at the end of each observation day.



A Sharp-shinned Hawk wheels to investigate the owl decoy

The 3,889 hawks observed migrating past the observation point were comprised of thirteen species of raptor. Broad-winged Hawks were the most numerous. The season total for this species was 2,240. The next most numerous species was the Sharp-shinned Hawk with a season total of 661, followed by Red-tailed Hawk (222) and American Kestrel (193).

Flight-paths of the migrating hawks were observed to follow seasonal trends. Early to mid-season migrant hawks were often seen hugging the coast and flying past the south side of the observation point. As the season progressed, fewer birds were observed in the skies south of the 'watch'. By late October very few hawks were seen in this part of the sky. Daily weather conditions also influenced the flight paths taken by the migrating raptors.

Counts in August recorded a good mix of early season migrants and locally nesting raptors..

September brought increasing numbers of hawks that peaked around mid-month. The big event for the month occurred on September 16. On that day, 1,037 hawks were counted, including a total of 960 Broad-winged Hawks. This is very significant because the next closest hawk watch at Cadillac Mountain, Maine does not record large numbers of this species. During the same day only one Broad-winged Hawk was counted at that location. This demonstrates one of the ways in which the Greenlaw Mountain Hawk Watch is producing important data that is not captured elsewhere.

In October, peak movements occurred during the first few days, then again around mid-month. On the 13th, 11 species of raptor passed the 'watch' included all three accipiters (Sharp-shinned Hawk, Coopers Hawk and Northern Goshawk). The following day brought a sighting of 3 Greater White-fronted Geese. These are rarely sighted birds in New Brunswick. Their sightings help to demonstrate how our data will increase knowledge of non-raptor movements within the province and region.

November was relatively slow, although raptors were seen moving during every day of observation. In addition, 2 adult Sandhill Cranes were observed migrating past the watch site.

This year's observations once again strongly demonstrated the existence of a major raptor migration corridor along the Fundy Coast. Our data is showing us how many hawks migrate along the bay and what species of hawk they represent. Continuing counts at Greenlaw Mountain can help us to better understand hawk movement through this part of the world. Repeating these counts on a yearly basis will help alert us to any changes in raptor populations. Comparison of these yearly counts will show trends in raptor numbers. Such counts and their comparison can give early warnings to declines in populations that would otherwise go undetected. **This is a very important aspect of this hawk monitoring project.** In rural areas, such as New Brunswick and Atlantic Canada in general, there is no better way to monitor raptor populations. Additionally, monitoring raptor populations can also help us calculate the overall ecological health of the region.

Our knowledge of hawk migration tells us that the majority of the hawks seen moving past Greenlaw Mountain are residents of Atlantic Canada. Hawks follow predictable paths, moving south in the fall along coastlines and mountain ridges. Based on New Brunswick's topography, we can be fairly certain that most of the hawks we counted this year are summer residents of New Brunswick. We expect that there are also hawks arriving from the Gaspé Peninsula, PEI and possibly a few from Cape Breton and Newfoundland. Because so many of these migrating birds of prey are summer residents and potential breeders of the province, data from this project is particularly useful in understanding local populations. Future projects conducted in other parts of New Brunswick and/or Atlantic Canada will help us better understand the percentage of these migrating hawks that originate in NB.

Reflection on this season's successes and challenges shows that even though the project was once again very successful, improvements can be made. Additional volunteer training, such as the onsite pre-season training might help volunteer participants improve their identification skills. Such training sessions can also help the participants work as a team by fostering a more clear understanding of hawk watch protocols.



Official Counter – Todd Watts scans for migrating raptors

The role of our official counter of this project is particularly important. This person helps volunteers develop the skills needed to identify hawks at a distance, assures that proper count protocols are followed, in addition to assuring that the 'watch' will be staffed during all periods of significant hawk movements. An accurate count of migrating hawks could not be conducted without such a person.

Our official counter (Todd Watts) played a pivotal role in this project. His responsibilities not only included identifying and counting all of the migrating raptors, he also recruited and trained volunteers, scheduled participants, wrote daily reports, conducted daily data entry, wrote the season end reports, maintained the hawkcount.org account, handled access issues and project site maintenance. Mr. Watts is very committed to the project and its success would not be possible without him. During future count seasons we hope to be able to pay him for a greater percentage of his time.