

Greenlaw Mountain Hawk Watch Season Report - Fall 2024

Our sixteenth season of fall observations and data collection has been completed. It was a challenging season with the most unusual weather conditions we have observed. Of the thirteen regularly occurring species, four were recorded in record low numbers. An additional seven species were recorded in lower-than-average numbers. Only two species, Northern Harrier and Turkey Vulture, were recorded in above average numbers. In addition, we only observed one decent Broad-winged Hawk movement, and it was modest one with a count of 502 for the day. As always, migrating raptors were observed in close, up high, out on the horizon and on occasion, moving below the watch site.

Data was collected on forty days between August 28 and November 12 with a total of 272.75 observation hours logged. Fifty volunteer observers contributed a total of 470.25 hours of their time. The total number of migrating hawks counted for the season was 2,400, our lowest season total to date. A total of fourteen raptor species were observed migrating past the site, representing all the species regularly occurring at Greenlaw Mountain each fall, as well as Rough-legged Hawk, which occur irregularly (species accounts can be found later in the report).

Count Protocols

As in previous seasons, most of this year's counts were conducted on days considered to have favorable winds and lacked significant precipitation. However, an above average number of days with southerly and easterly flows, and/or fog occurred this season requiring more time to be spent collecting data during less than favorable conditions (much like last season). Hawks moving roughly east to west, or on occasion north to south, were considered migrants. The presence of resident raptors required some species to be watched more closely during portions of the season to ensure accuracy of counts. Partial and full-year residents near the site included Bald Eagle, Broad-winged Hawk, Red-tailed Hawk, American Kestrel, Merlin, Osprey, Sharp-shinned Hawk, Northern Goshawk and Turkey Vulture. Eagles and vultures are typically the most difficult to monitor as the daily movements of these resident birds can be great. The official counter used 10x binoculars and 25x wide angle spotting scope for scanning and/or identification.

A Quick Look at the Season

August

Our sixteenth season began on August 28, around mid-afternoon after the passage of a front. Only two migrants were observed. The next observation day occurred the following day under cloudless skies and light northwest winds. Twenty migrants were counted. Favorable conditions were limited during this last week of August. Resident raptors observed near the watch site included Turkey Vultures, Ospreys, Bald Eagle, Sharp-shinned Hawks Broad-winged Hawks, Merlin and American Kestrels. Some of these residents were observed interacting with migrants passing overhead.

Total number of migrant raptors: 22 (15-year average 102)

Observation hours: 10 (15-year average 22).

Observation days: 2 (15-year average 4).

September

Fairly normal counts occurred during the first eleven days of the month. The highlight of this period occurred on the 11th with 502 Broad-winged Hawks counted. Unfortunately, southerly flows soon developed. Temps shot up to well above normal. As the temperatures began to drop back closer to norms, easterly flows followed. Morning fog occurred almost daily (this had been the trend through the summer). This combination resulted in Broad-winged Hawks moving well inland. Similar

movements were documented in New England and the Mid-Atlantic States. At our site, poor conditions continued for the remainder of the month, resulting in few migrants being counted. The season's first significant movement of Turkey Vultures occurred on the 30th. Counts of all species recorded were the second lowest on record for the month of September (the all-time lowest counts occurred during another long period of easterlies in 2018).

Total number of migrant raptors: 1385 (15-year average 4671)

Observation hours: 119 (15-year average 117)

Observation days: 17 (15-year average 17)

October

For the first nine days of the month easterly winds continued, resulting in very modest counts. Finally, on the 10th, morning fog burnt off as favourable winds developed. Conditions weren't perfect, but it was enough to produce a single day record flight of 174 Turkey Vultures. Strong winds kept counts down the following day. The 13th brought a decent flight of birds. Things chugged along for the next week. The last ten days of the month were very slow with very few Red-tailed Hawks spotted. October counts of this species were the second lowest on record (53) and far below the 15-year average (119).

Total number of migrant raptors: 944 (15-year average 861)

Observation hours: 129 (15-year average 117)

Observation days: 19 (15-year average 18)

November

Counts occurred on the 2nd and 3rd of the month during somewhat marginal conditions. Once again, only small numbers of Red-tails were observed. Above normal temperatures occurred during the next few days. Favorable conditions appeared to have occurred on the 7th. Unfortunately, data was not collected on that day (largely due to having run out of funding). Counts from the state of Maine strongly suggest that movements were light. Heavy winds soon followed. A brief attempt to observe occurred on the 12th. No migrants were observed.

Total number of migrant raptors: 49 (15-year average 93)

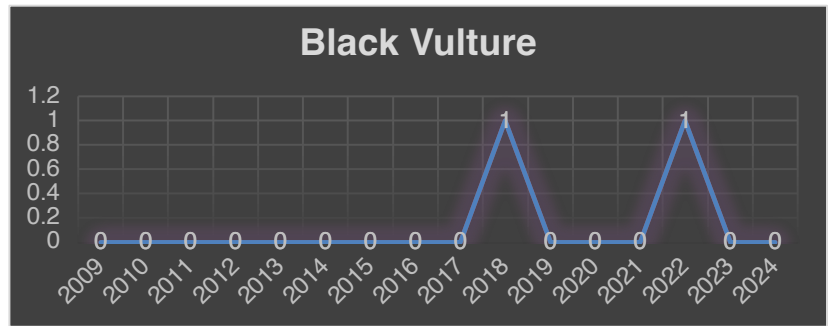
Observation hours: 14.5 (15-year average 24)

Observation days: 3 (15-year average 5)

Species Accounts

Black Vulture

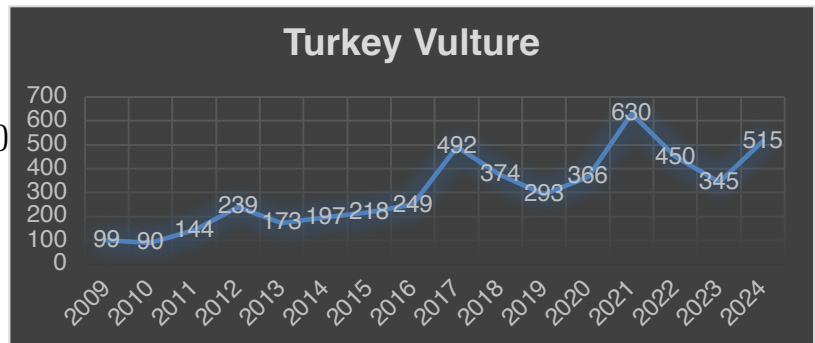
Earliest Observation: None
Latest Observation: None
Single Day High Count: 0
Peak: None
Season Total 0
Fifteen-year average: <1



Black Vultures continue to be rare in NB. During migration, they are most likely to be observed from mid to late season.

Turkey Vulture

Earliest Observation*: September 13
Latest Observation: November 3
Single Day High Count: 174 (October 10)
Peak: October
Season Total: 515
Fifteen-year average: 291

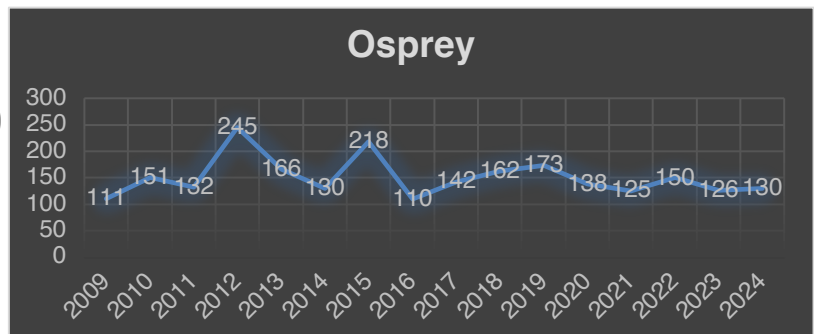


Our data show a very clear upward trend. A warming climate and abundant food sources are likely responsible for increasing numbers of vultures in NB, as well as higher counts at Greenlaw Mountain.

Turkey Vultures are mid to late season migrants. They often move late in the day and can form large flocks, kettling and streaming much like Broad-wings.

Osprey

Earliest Observation: August 29
Latest Observation: October 16
Single Day High Count: 26 (September 2)
Peak: September
Season Total: 130
Fifteen-year average: 138



Over the last ten+ years, we have documented declining numbers of Osprey.

Osprey migrate from early to mid-season. They are strong flyers and have been observed “powering through” under less-than-ideal conditions, including wet weather.

Bald Eagle

Earliest Observation: August 28

Latest Observation: November 2

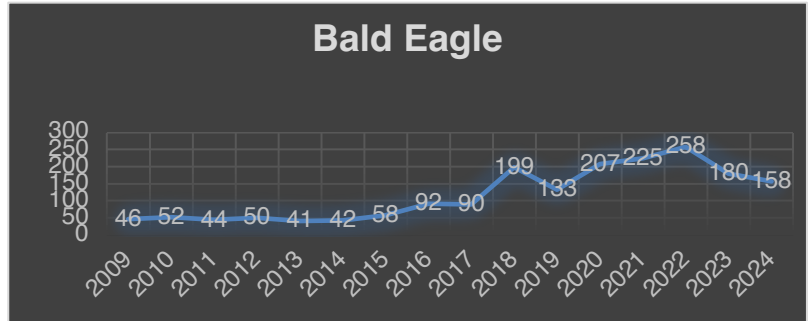
Single Day High Count: 16 (September 9)

Peak: A clear peak did not occur.

Season Total: 158

Fifteen-year average: 115

2016-23 average: 173



Bald Eagles are making a very strong comeback.

Note - For many years, we were intentionally overcautious while counting Bald Eagles. Only high-flying birds moving east to west were deemed migrants. We feel that we now have a better handle on their movements, which is allowing our counts to be more representative of the actual number of eagles passing the site. The spike occurring in 2016 represents the change in counting. Even so, our most recent data suggest a very strong rise in numbers.

Bald Eagles migrate throughout our count season. High wind days can be the most productive.

Northern Harrier

Earliest Observation: August 29

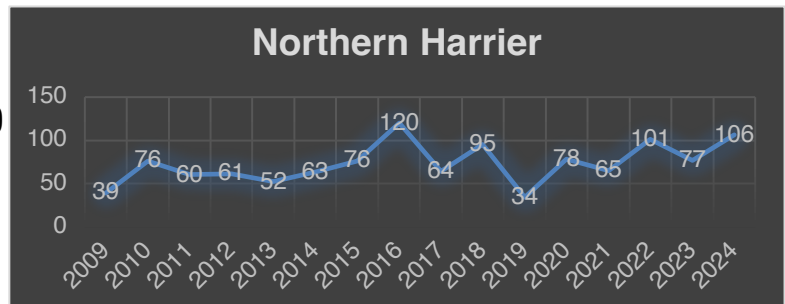
Latest Observation: November 3

Single Day High Count: 14 (September 13)

Peak: September/October

Season Total: 106

Fifteen-year average: 71



Our counts have major highs and lows. Even so, the regional harrier population appears stable.

Northern Harriers are ground nesters. As such, they are likely more susceptible to human disturbance. Ground nesters can also be more susceptible to moist conditions resulting from above average rainfall or major rain events.

Harriers are observed in migration throughout our count season. They have light wing-loading and are often observed late in the day.

Sharp-shinned Hawk

Earliest Observation: August 29

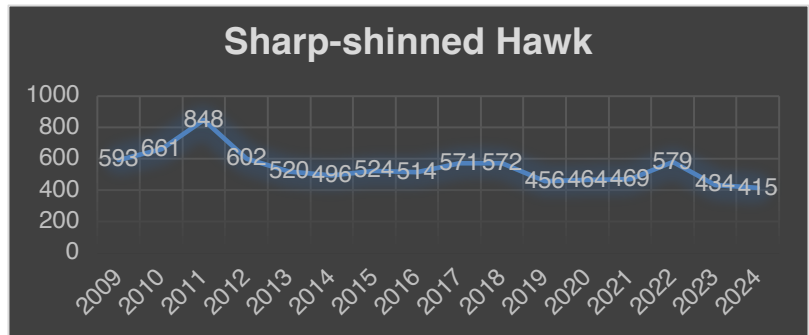
Latest Observation: November 3

Single Day High Count: 44 (October 13)

Peak: September/October

Season Total: 415**

Fifteen-year average: 554



For the second year in a row, a record low count was recorded for this species. The overall trend for the species at our site is clearly downward. Counts from New England are documenting similar declines.

Sharp-shins prey mostly on songbirds, many of which are being reported in diminishing numbers throughout Eastern North America. These small hawks also take insects on the wing.

These small birds of prey, which are sometimes called “Sharpies” tend to favor light wind conditions and can take advantage of very light vertical winds.

Cooper's Hawk

Earliest Observation: September 3

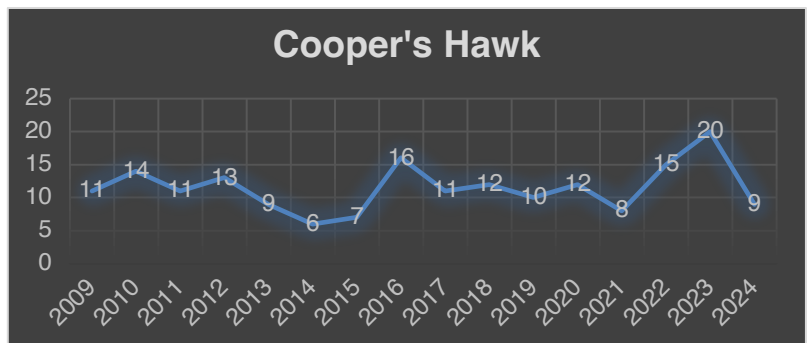
Latest Observation: October 25

Single Day High: 3 (October 13)

Peak: September/October

Season Total: 9

Fifteen-year average: 12



Our data suggest that the small population of these birds in NB is stable, perhaps increasing.

Cooper’s Hawks or “Coop” sightings are most likely to be observed from mid to late season.

American Goshawk

Earliest Observation: September 13

Latest Observation: October 20

(a very early date)

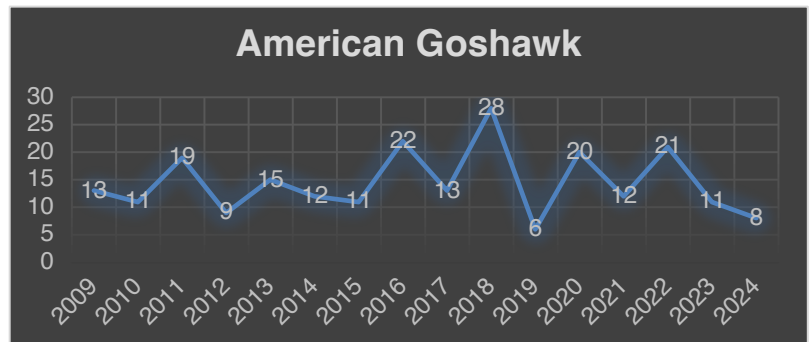
Single Day High Count: 2

(September 13 and October 20)

Peak: No clear peak

Season Total: 8

Fifteen-year average: 15



Significant fluctuations in our annual counts are evident. Even so, long-term numbers appear stable.

This species is a partial migrant (some birds winter in NB, while others leave). Some researchers argue that they are not true migrants. However, significant numbers are observed annually as they head south. Few, if any are observed heading north during the fall months. These birds are considered mid to late season migrants.

Red-shouldered Hawk

Earliest Observation: October 10

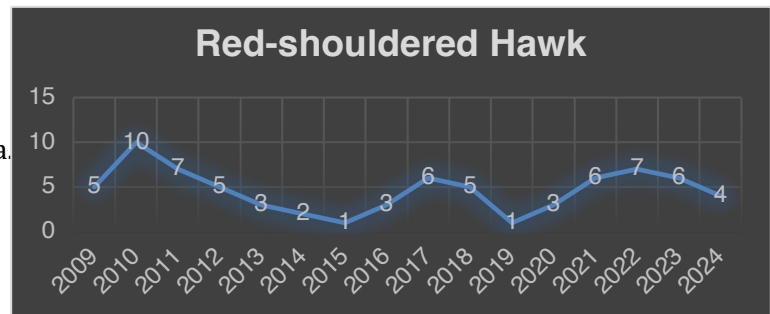
Latest Observation: November 3

Single Day High Count: 1 (multiple)

Peak: A clear peak is not evident in our data.

Season Total: 4

Fifteen-year average: 5



Our data are showing significant ups and downs.

The Red-shouldered Hawk in New Brunswick, Canada is at its northeastern limit. With a warming climate, we might expect to see increasing numbers of this buteo. Our data have yet to indicate such a change. Red-shouldered Hawks or “Shoulders” as they are often called, are a mid to late season migrant.

Broad-winged Hawk

Earliest Observation: August 28

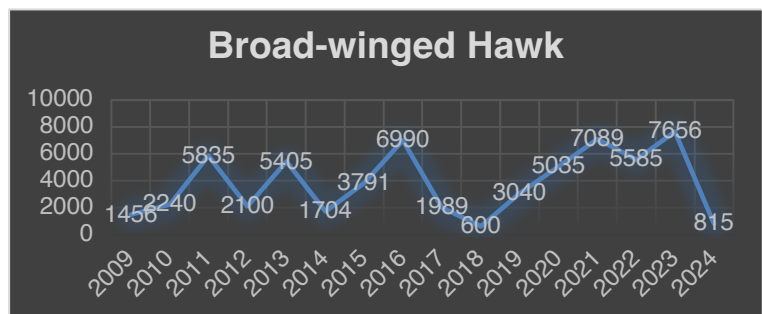
Latest Observation: October 20

Single Day High Count: 502 (September 11)

Peak: early-September

Season Total: 815

Fifteen-year average: 4034



Following strong showings in 2021, 2022 and 2023, counts recorded this season were the second lowest on record. Many eastern North American sites also recorded extremely low numbers, especially sites relatively near the Atlantic Coast. Easterlies were responsible, causing the migrants to move further inland. It appears that the birds might have also moved across a broader front, at lower altitudes, creating detection issues.

Broad-wings are an early season migrant, relying heavily on thermals, updrafts and light to moderate winds during migration. This species forms large flocks during migration. They tend to be the most abundant bird of prey in eastern North American forests.

Habitat loss likely represents the greatest threat to the Broad-winged Hawk. Declining populations of amphibians, insects and birds could present additional stresses.

Red-tailed Hawk

Earliest Observation: September 3

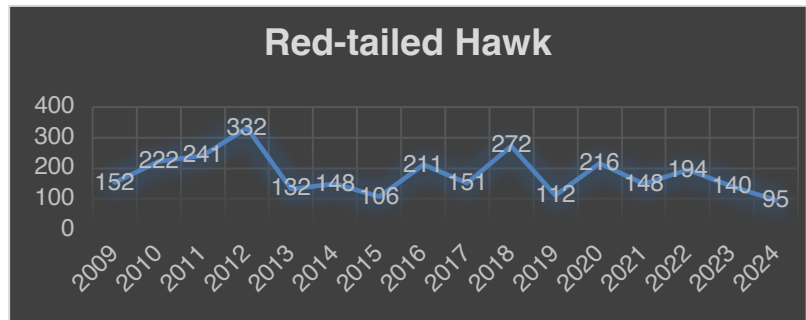
Latest Observation: November 3

Single Day High Count: 15 (November 2)

Peak: None

Season Total: 95**

Fifteen-year average 185



A record low season count was recorded. We expect to see at least one of two days with counts in the 40 to 50 range or higher. This season counts never topped 15, possibly the result of mild weather. Red-tailed Hawks are thought to be “short stopping”, which tends to result in fewer individuals being counted at fall hawk watches (some of the birds might move after the last day of counting).

This species is considered to be very adaptable, allowing them to do well in a quickly changing world. Red-tails favor open areas such as farmland and roadsides. They are a late season migrant. During migration, they can be observed moving under a wide variety of conditions.

Swainson's Hawk

Earliest Observation: None

Latest Observation: None

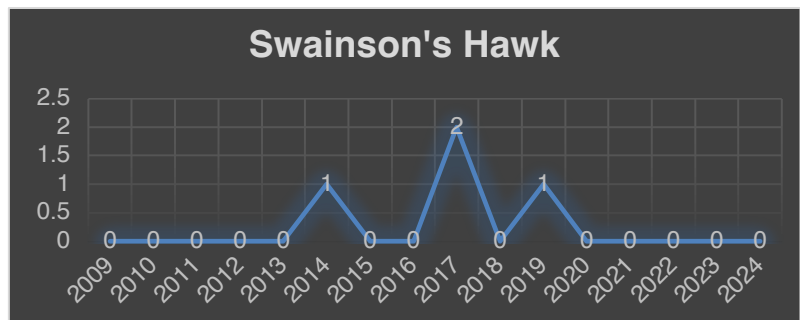
Single Day High Count: 0

Peak: None

Season Total: 0

Fifteen-year average:

<1 (records in 2014, 2017 and 2019)



Swainson's Hawk are native to western North America. Occurrences in Eastern North America happen annually. Even so, sightings at most hawk watch sites east of the Mississippi River are rather rare. We have been quite lucky, documenting several individuals since 2009. At this point in time, our data do not show a clear trend.

In NB, these birds are most likely to be confused with Rough-legged Hawks.

Rough-legged Hawk

Earliest Record: October 20

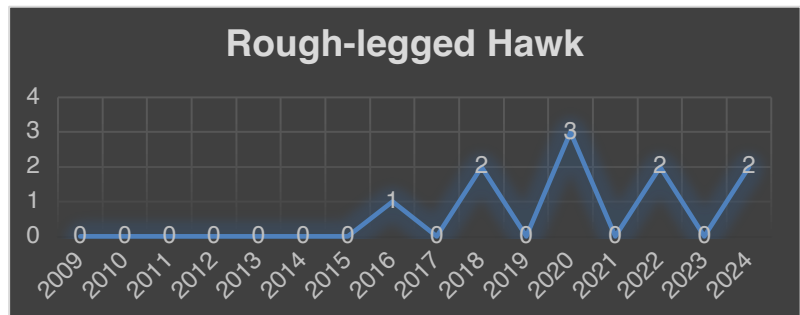
Latest Record: October 20

Single Day High Count: 2

Peak: Late October

Season Total: 2

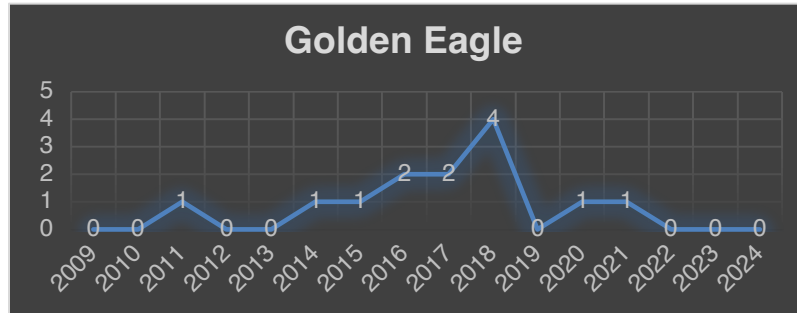
Fifteen-year average: <1



Rough-legs are observed irregularly at our site. In recent decades, sightings have become increasingly uncommon at most Northeastern Hawk Watches. The declining numbers are likely caused by greater numbers of birds wintering north of the US border or “short stopping”. Such changes in behaviour are likely caused by warming temperatures and late snows.

Golden Eagle

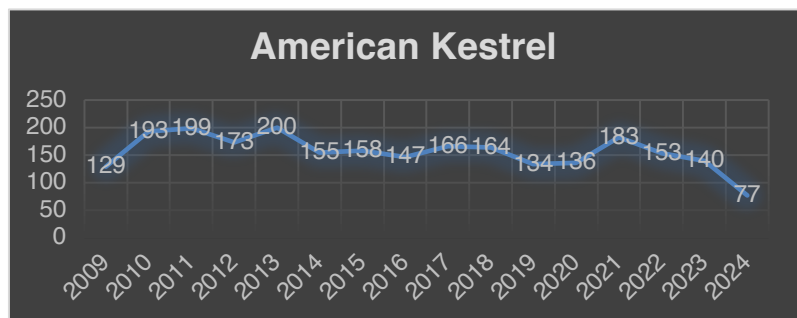
Earliest Observation: None
Latest Observation: None
Single Day High Count: 0
Peak: None
Season total: 0
Fifteen-year average: <1



Golden Eagles are observed irregularly at our site. Those that do pass Greenlaw Mountain are thought to be part of the Gaspé population.

American Kestrel

Earliest Observation: August 29
Latest Observation: October 24
Single Day High Count: 13 (Sept. 14)
Peak: Mid-September
Season Total: 77**
Fifteen-year average: 162



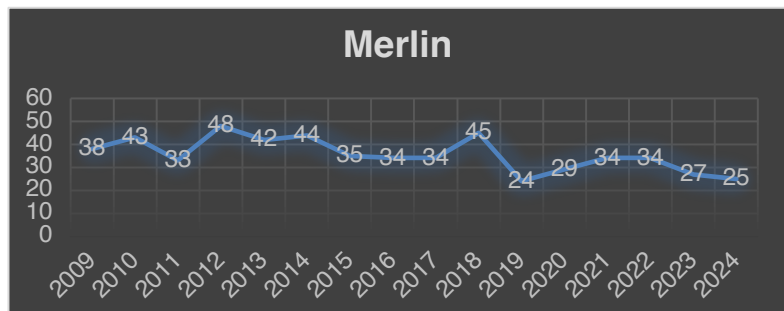
Another record low season count. Easterlies during late September and early October coincided with peak movements of this species, resulting in a shockingly low number of migrants observed.

Declines of American Kestrel are well documented. The causes of the decline are likely complex. However, many other aerial insectivores are in decline, which suggests a loss of prey base. Loss of nest cavities could also be contributing to the decline. This species will occupy nest boxes. Information on construction and placement is available online.

This is an early to mid-season migrant.

Merlin

Earliest Observation: September 3
Latest Observation: October 28
Single Day High Count: 4 (October 13)
Peak: September/October
Season Total: 25
Fifteen-year average: 36



Our counts are showing a downward trend.

Merlin tend to be very direct in-flight and can be quite aggressive. Migrants can appear throughout the count season.

Peregrine Falcon

Earliest Observation: September 17

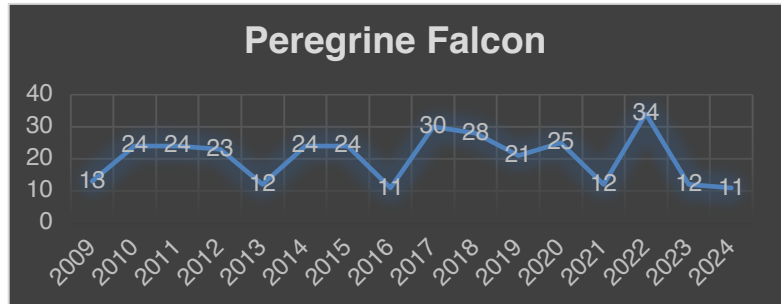
Latest Observation: October 18

Single Day High Count: 3 (October 3)

Peak: October

Season Total: 11**

Fifteen-year average: 21



A record low season count. Like counts of several other species, easterlies were a likely cause.

The species seems to be doing well in its recovery from pesticides and persecution.

Peregrines are exceptionally strong flyers, often “powering through” during less than favorable conditions. Peak flights typically occur during mid-season. Individuals can show up at any time.

Unidentified Accipiter

Season Total: 5

Unidentified Buteo

Season Total: 3

Unidentified Falcon

Season Total: 4

Unidentified Eagle

Season Total: 0

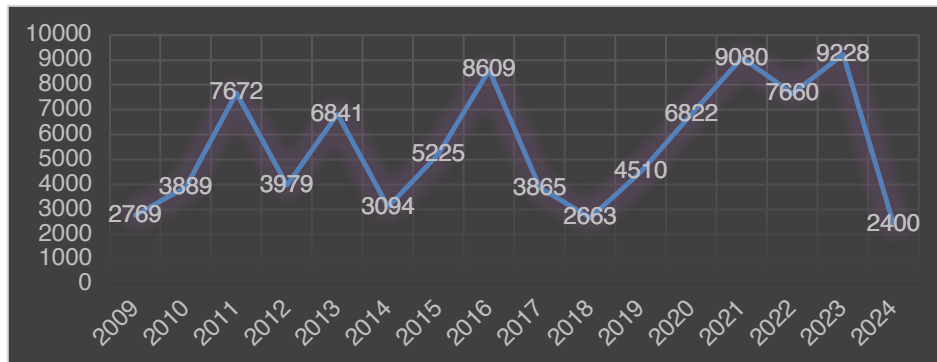
Unidentified Raptor

Season Total: 18

Migrating Raptor Combined Season Total: 2400**

A record low count.

Fifteen-year average: 5727



*Earliest and latest observations, as well as totals refer only to hawks counted as migrants.

** A record high or low count.

Non-raptors

The prevalence of easterlies and very dry conditions resulted in few songbirds observed. Few winter finches were observed as well. Likely the result of good cone crops in other parts of Canada. Perhaps for the first time in our history, no Bohemian Waxwings or shrikes were observed. Waterfowl movements were also light. All in all, it was an unusual season.

Personal Notes

Each season brings new opportunities for learning and to make a difference in an increasingly crowded and badly damaged world. Up in the great blue, we see birds of prey, songbirds, waterfowl, waders, dragonflies and butterflies on their southward journeys. For me, such wonders create an ever-growing passion that rarely wains. My hope is that passion for hawks is contagious and that more people will begin to watch the skies.

See you all on the mountain next year and thank you for your help!

Special thanks to all the volunteers including: Mike Bamford, Richard Blacquiere, Hank Scarth, Dana Sandercock, Laraine Townsend, Gary Lenahan, Dorothy Chase, Ann Simmons, Paul and Rhonda Langelaan, Pat NanceKivell, Vicki Cowen, Monica Armenta, Anna Tran Nguyen, Jasper Soucoup, Judith Dewar, Emily Williams, Gren Graham, Jan and Ray Riddell, Joel Viennean, Monica Armenta, Christine Marchand, Vincent Scully, Don Evens, Kat Highes, Jamie Steel, Gail Cummings, Shea Chin, Cheryl Jamieson, Marilyn Hansay, Karen Miller, Mark Morse, Mark Biddulph, Rebecca Rolo, Kathy and John Robertson, German Garcia, Derek Hogan, Sarah Fensore, Heather Dyble, Jacob Read, Rosie Sperling Funk, Susan Smolly, Kevin Varghees, Sree Kumar, Mari Saukar, Anecsh

Thank you all!

We also thank the landowners who have granted permission for volunteers and the Official Counter to cross their land to reach the summit. As well, we thank Mr. Tom Beckerton for allowing us to locate the watch on his property.

Additional thanks to committee members Hank and Carolyn Scarth, Jim Wilson, Joanne Savage, Don MacPhail, and Joanne McInnis.

Primary support for this season came from the **New Brunswick Wildlife Trust Fund** (NBWTF), private donors and our volunteers. We would also like to recognize the Peskotomukati First Nation for their interest in raptor conservation.

The NBWTF receives its money from the sale of hunting, trapping and fishing licenses as well as conservation license plates. Please consider supporting projects like the Greenlaw Mountain Hawk Watch through the purchase of conservation plates. Thank you!

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