

# Pack Monadnock Raptor Migration Observatory

## 2011 Season Report



Prepared by Ken Klapper and Julie Brown  
December, 2011



## **Introduction**

The Pack Monadnock Raptor Migration Observatory was founded in 2005 by Iain MacLeod and New Hampshire Audubon as a daily-staffed September-October watch site. The 2011 season marks the seventh year of operation of this regionally significant location – past years' data indicates it is one of the most productive places in New England for observing southbound migratory raptors. The long term scientific goal of this project is to collect 10 year's worth of standardized data, so that we may begin to examine raptor population trends with statistical confidence. Another major goal of this project is to educate visitors about raptor biology, habitat, and the relationship between humans and birds-of-prey – all of which contributes to New Hampshire Audubon's mission "*to protect New Hampshire's natural environment for wildlife and for people*".

The full time Seasonal Counter/Interpreter for 2011 was Ken Klapper, who managed the site Wednesdays through Sundays. Iain MacLeod took over counting duties on Mondays, and Site Coordinator, Julie Brown, counted on Tuesdays. Phil Brown served as the Raptor Observatory Coordinator for NH Audubon, where he directed operations at both the Pack Monadnock and Carter Hill Raptor Observatories.

## **Education and Events**

Pack Monadnock attracted many visitors in this season. A total of 4,593 visitors stopped by the Observatory at some point and included experienced hawkwatchers, eager novices (both old and young), and visitors who were new to both the idea and practice of counting raptors. Supplied with great questions, and often a pair of our "loaner" binoculars, many of these individuals left Pack with a newfound appreciation for a natural spectacle that many didn't know was taking place right over their heads in their own backyards. Nineteen school groups, ranging from second-graders through graduate students, visited and received an onsite lesson on raptor biology and migration, and often had the opportunity to see some raptors – which makes the experience real to them.

Two popular events continued this year, as well. Pack's annual hawk release on September 17 attracted over 400 individual visitors, including many families, in what has become our busiest day of the season each year. This year's release was extra special as it was the first of two consecutive Broad-winged Hawk migration days that smashed all previous daily and seasonal records at Pack!

Despite unseasonable warmth (peaking in the 70's), the second annual "Big Soup/Bit Sit" on October 9 was another success, attracting 300 visitors who saw many great raptors and other avian species (26 total – two more than 2010's inaugural Big Sit) in addition to breathtaking foliage on the mountains and hills surrounding Pack. Plus, many visitors indulged in several fantastic soup recipes that were developed with a day 30 degrees colder in mind. This friendly competition highlights the community aspect that the hawk watch has developed over the years amongst its regular volunteers and visitors.

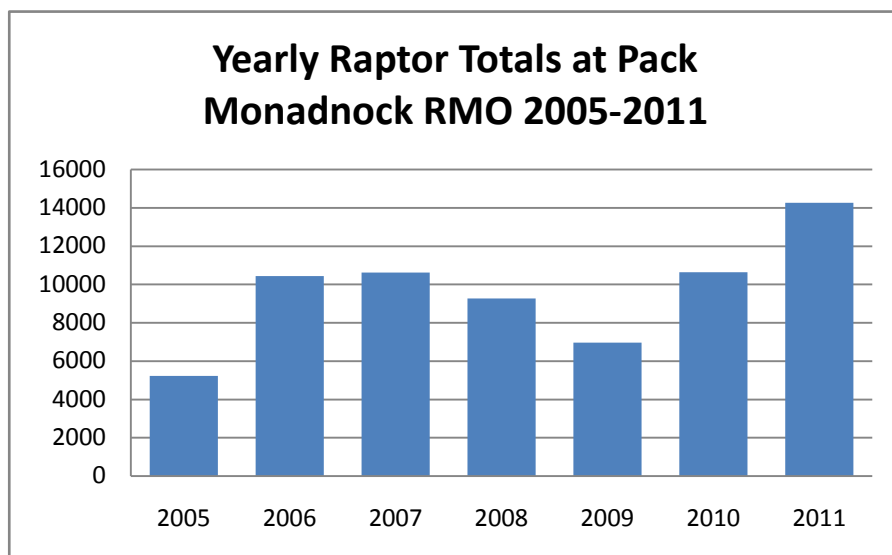
## Methods

Hourly totals for raptor species are recorded during each count day in September and October, along with weather data including temperature, wind speed and direction, cloud cover, and visibility. This data is submitted to a database administered by the Hawk Migration Association of North America (HMANA) and is available for public browsing at [www.hawkcount.org](http://www.hawkcount.org). Non-raptor bird species were also recorded and are listed in Table 1.

## Results

Full site coverage was maintained daily from 9AM to 5PM, from September 1 to October 31, (except in the case of extreme weather) accounting for 368 hours of observation time. Weather patterns brought fairly mild weather to Pack this fall, but also many days of poor visibility and several complete rainouts (three days in September, which includes two named, back-to-back tropical systems that dumped several inches of rain throughout the region, and seven days in October). A strong southern flow was typical of the overall weather pattern this fall, but there were also many days with favorable winds and considerable numbers of migrant raptors. An historic late October storm brought two feet of snow to Pack on October 29-30, making counting impossible on the latter day. Despite this, counters snow-shoed up the mountain the following day for a beautiful finale to an exciting season.

Thirteen raptor species and 57 additional bird species were observed at Pack Monadnock during the period from September 1 through October 31, 2011. Overall, 14,256 individual migratory raptors were recorded – a new record by several thousand (Pack has never had more than 11,000 raptors in a season). Of this number, 93 individual raptors were not identified (less than 1% of the total). This year's record total number of raptors can be largely attributed to an unprecedented Broad-winged Hawk migration. Broad-winged hawks peaked on the weekend of September 17-18, which alone accounted for 8,752 birds (only six birds below the 2005-2010 average TOTAL for all raptors at Pack in September and October).

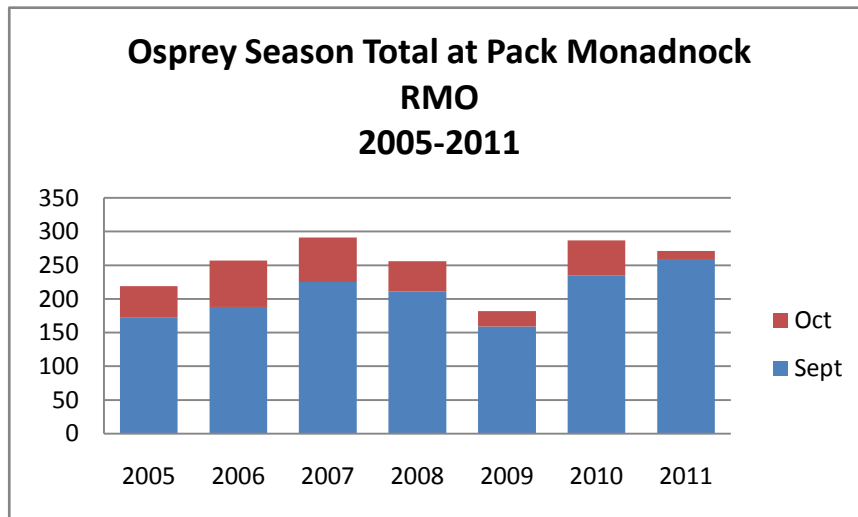


## Species Reports

The seasonal total charts below reflect raptors counted during the official count season, September 1-October 31, 2010. The one exception is for Golden Eagle when November totals were included.

### Osprey (*Pandion haliaetus*)

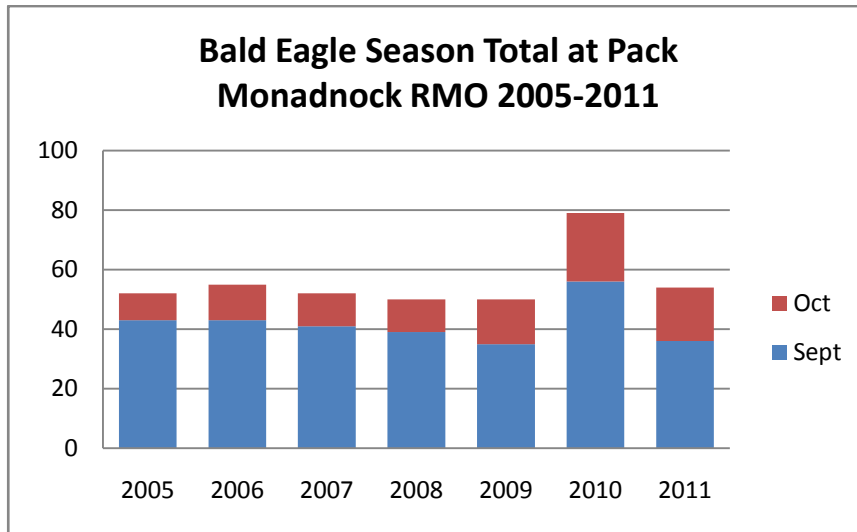
2011 Season Total: 271



The Osprey is a species making a great comeback after severe population declines in the 1950's through the 1970's, caused by DDT and related pesticides. The 2011 season was witness to a new single-day record for Osprey, 75 counted on September 28. This proved to be the peak of an amazing four day run starting on September 27, which had 28 Osprey (including a new record of 21 in a single hour!). While rainy weather prevented any counting on September 29, the following day tallied 32 more "Fish Hawks". This burst of Osprey migration concluded an incredible September count of 258, a new site record for this month, as well. Oddly enough, this species proved elusive in October with only 13 recorded during the month (the lowest October count since regular counting began in 2005). However, the season total of 271 still remains well above Pack's six-year average of 249.

### Bald Eagle (*Haliaeetus leucocephalus*)

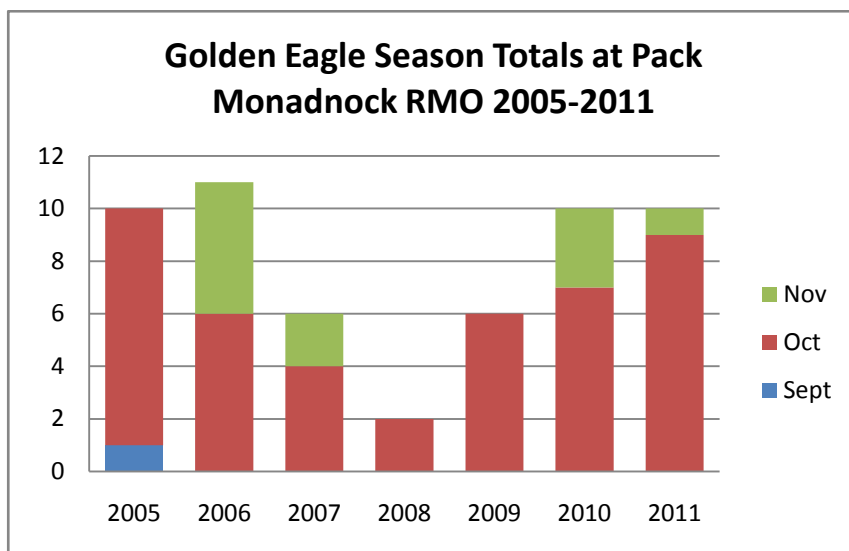
2011 Season Total: 54



Another testament to the effectiveness of the banning of DDT, the decrease of persecution by humans, and the restoration efforts of raptor biologists, the Bald Eagle is the species most visitors to Pack wish to see. On the right day, Pack does not disappoint – the season high total of seven occurred on September 10, during the first big wave of Broad-winged Hawks. While numbers paled compared to the amazing 2010 season total (79 in the regular season, 85 if including count days in August and November), the 54 Bald Eagles counted this year represent a “return to the norm” of 50 to 55 birds - seen every year from 2005 through 2009. Pack’s six-year average of 56 was bumped up by the 2010 season – previously the average was 52.

### **Golden Eagle (*Aquila chrysaetos*)**

2011 Season Total: 9 (plus 1 in November)



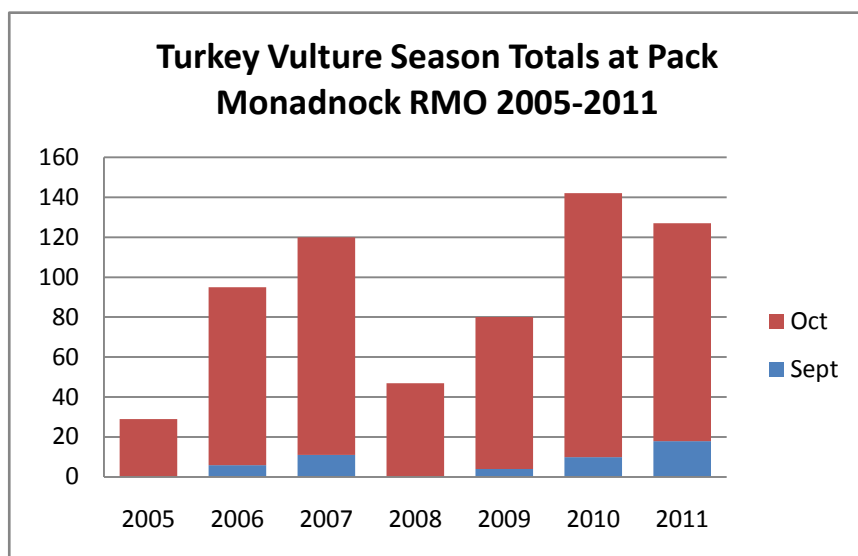
One of the target species of late-season hawkwatchers, the Golden Eagle has a small, but expanding, population in Eastern Canada. These birds, and perhaps some from

Greenland, pass through northeastern raptor lookouts on their way to wintering grounds in the southeastern United States. The golden feathers on the nape and neck, which give this species its name, can be seen in any plumage and have an indescribable glow in decent lighting conditions – a glow that seems to lift the spirit of anyone witnessing this regal bird. The nine spotted this season at Pack are both a new October and a regular season record, and account for almost double the regular season six-year average of five birds. Of these, one was a confirmed adult, seven were juvenile birds, and one was too distant to age – perhaps these proportions reflect a good breeding year for this species.

Although the official count season is September-October, Golden Eagles also pass through New England in November, possibly in even greater numbers. Several volunteers spent many hours in November looking for goldens this year, and an immature bird was spotted on November 18 by Tom Delaney. This sighting (#10) is included in the graph above.

### **Turkey Vulture (*Cathartes aura*)**

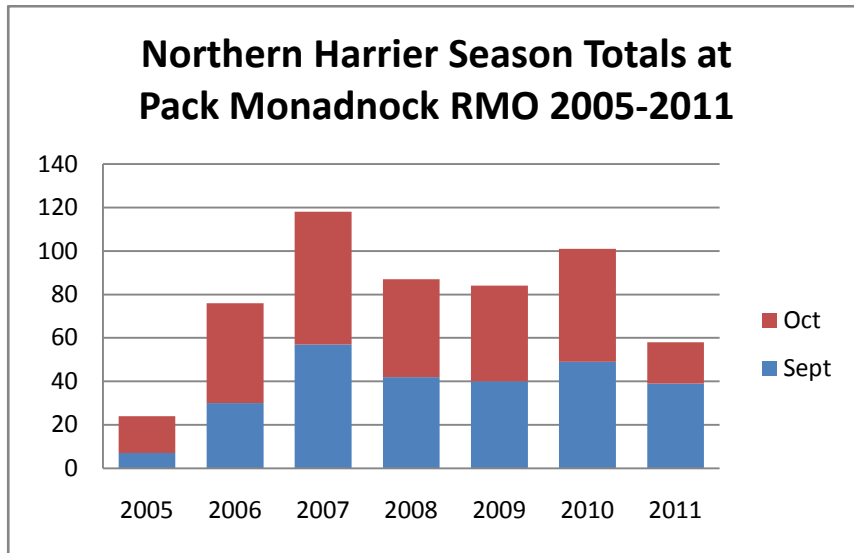
2011 Season Total: 127



One of the most visible large birds in the east, rare is the day a Turkey Vulture is not seen at Pack September through late-October. This species generally does not start migrating until October, when the possibility of snow threatens to cover the sight and smell of their carrion prize. The 127 of this scavenging species seen this year was almost 50 percent higher than the six-year average of 86 and the second highest season total after last year's 142. What's more, the 26 counted on October 12 was just one bird behind Pack's single day record set on October 16, 2009. All-in-all, these numbers seem to signal the continued population growth of this species in northern New England.

### **Northern Harrier (*Circus cyaneus*)**

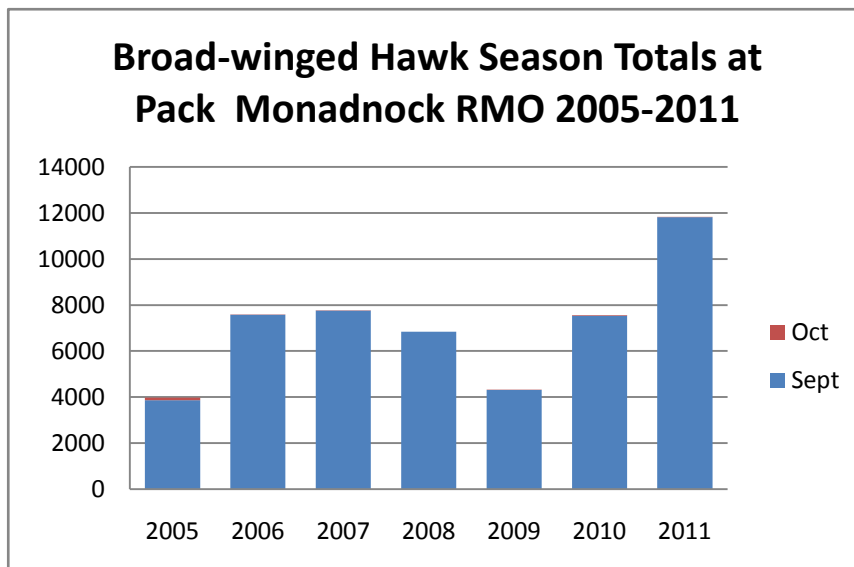
2011 Season Total: 58



The “Marsh Hawk” - notable for its long wings and tail, distinct flight style, and white-rump patch, is often seen late in the day at Pack. Although mountain ridges are not the choice habitat of this field and fen loving raptor during the non-migratory season, Pack sees 82 migrant harriers during an average year. The 2011 season total of 58 is certainly a low total (the lowest since 24 were counted during Pack’s inaugural year), but does not seem to be part of any trend so far. However, ongoing population monitoring is warranted, especially as this raptor appears to be declining from many parts of the northeast as a breeding species. The peak flight day this year was September 28, when seven were counted - the same day as the record setting Osprey flight.

### **Broad-winged Hawk (*Buteo platypterus*)**

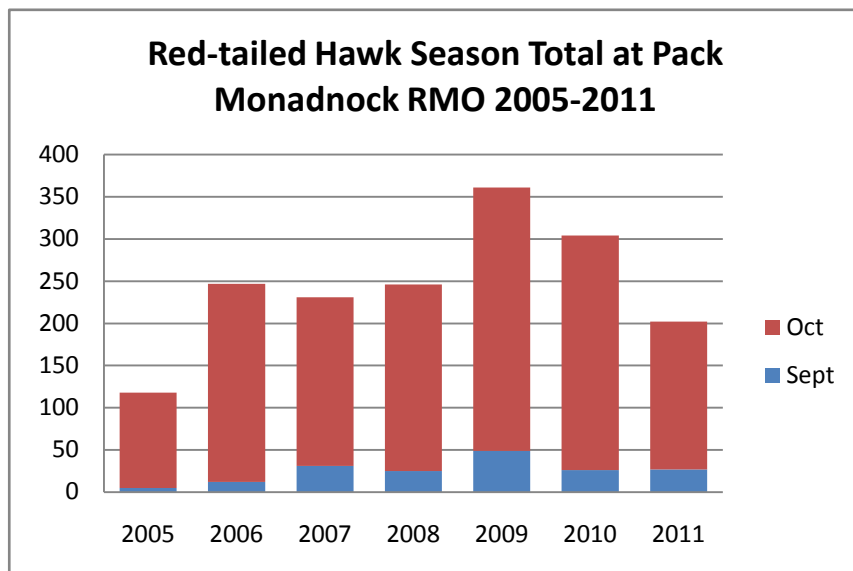
2011 Season Total: 11,831



The 2011 season will probably best be remembered for the incredible flight of Broad-winged Hawks seen on the weekend of September 17-18. Saturday the 17<sup>th</sup> was the annual hawk-release event – the rehabilitated Broad-winged Hawk surely found many travelling companions for the journey to South America, as a new single-day record of 3,544 Broad-wings was set. This rather late-afternoon event tallied 2,654 Broad-wings between 4:00 PM and 5:00 PM, and included an incredible single kettle of 1,270 birds (yet another Pack record!). The single day record fell the following day, when another astounding afternoon flight took place – the 5,208 total for the day included an amazing run from 3:10 PM to 4:30 PM when 3,700 were tallied. As is typical, by late September, this species was all but absent – only nine more were tallied during the first week of October. Oddly enough, the unbelievable counts of this species seen at NH Audubon’s Raptor Observatories at Pack Monadnock and Carter Hill this fall were not shared by nearby sites in Vermont or Massachusetts. NH Audubon’s Phil Brown offers some explanation: rather than witnessing a massive population explosion of this species, we instead experienced a sort of “perfect storm” of weather and wind conditions, which concentrated and directed all these Broad-wings within sight of the two NH Audubon Raptor Observatories. Just how widespread this event was will probably never be known, but what we have observed highlights the importance of raptor monitoring across many landscapes and longitudes. The Broad-winged Hawk season total from this unprecedented year is over 5,000 birds greater than the six-year average of 6,344.

### **Red-tailed Hawk (*Buteo jamaicensis*)**

2011 Season Total: 202

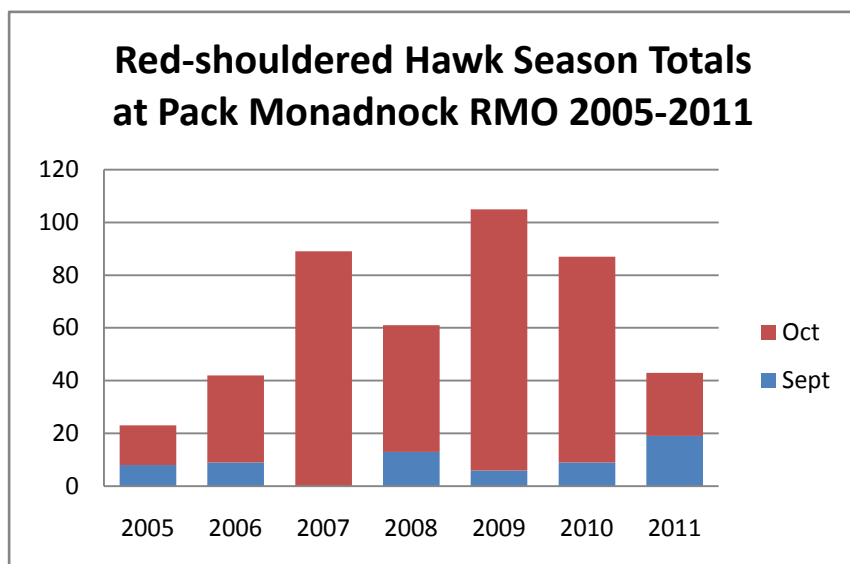


The Red-tailed Hawk is a familiar species at Pack. All through the regular season, “local” birds can be observed soaring, hunting, and even “playing” on all but the foggiest days. Red-tailed Hawk migration does not begin in earnest until mid-October, however, Tuesday counter and Site Coordinator Julie Brown had a great early count of 15 migrants on September 27. However, this day was somewhat of an anomaly and wasn’t a harbinger of things to come for this species. October proved to have lower than

average numbers of this buteo compared with previous years (only 175 counted, over 50 fewer than the six-year average). However, the season ended on a high note: Phil and Julie Brown, Katrina Fenton, and Ken Klapper hiked Pack in two feet of snow left by the historic weekend snowstorm to witness several hours of spectacular Red-tailed migration (44 were counted between arrival at 1:00 PM and our departure at 5:00 PM). This was the third highest single day count for this species, and we almost certainly would have broken the record of 53 (set October 27, 2006) if we arrived a little earlier. This late October push suggests that redtails may have moved through later in November this year.

### **Red-shouldered Hawk (*Buteo lineatus*)**

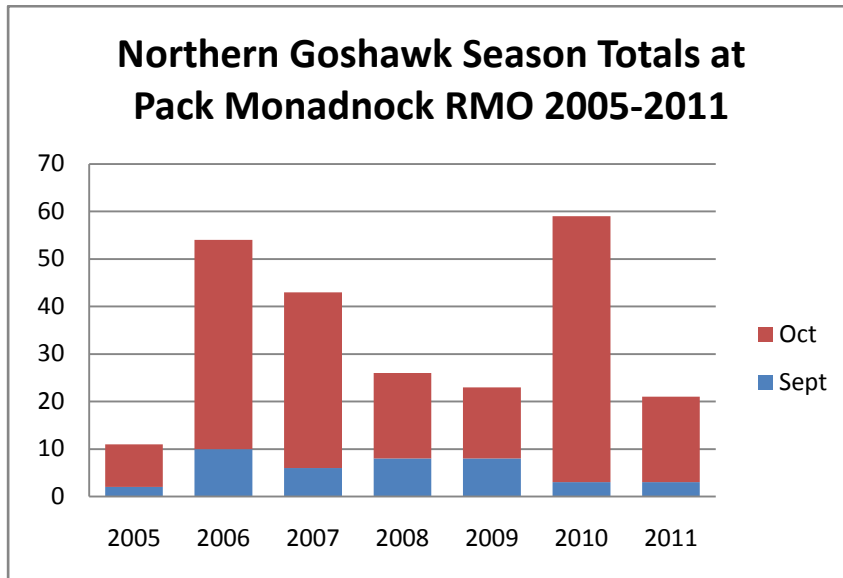
2011 Season Total: 43



The Red-shouldered Hawk is, along with the Red-tailed, the other expected October buteo. While much is spoken and written of the difficulties in field identification of accipiters, separating these two species at a distance can call upon all the resources of a master hawkwatcher. Pete Dunne, in [Hawks in Flight](#), describes the Red-shoulder as “accipiter-like” – a bit slighter in build than the Red-tail, with narrower wings and a longer tail. Wing position, tail-length, “wing-crescents”, coloration, and flight/flapping characteristics are, indeed, all important clues – but as with accipiters, no one characteristic can cinch the ID. However, there was no doubt as to the ID on October 11, when Julie Brown, Katrina Fenton, and other visitors watched in disbelief as an adult Red-shouldered Hawk dove on Gina, the hardest working plastic owl decoy of any raptor observatory! The very next day, observers witnessed the best Red-shouldered migration day for the season, a total of 11 birds. Pack ended the season well below the six-year average of 68.

### **Northern Goshawk (*Accipiter gentilis*)**

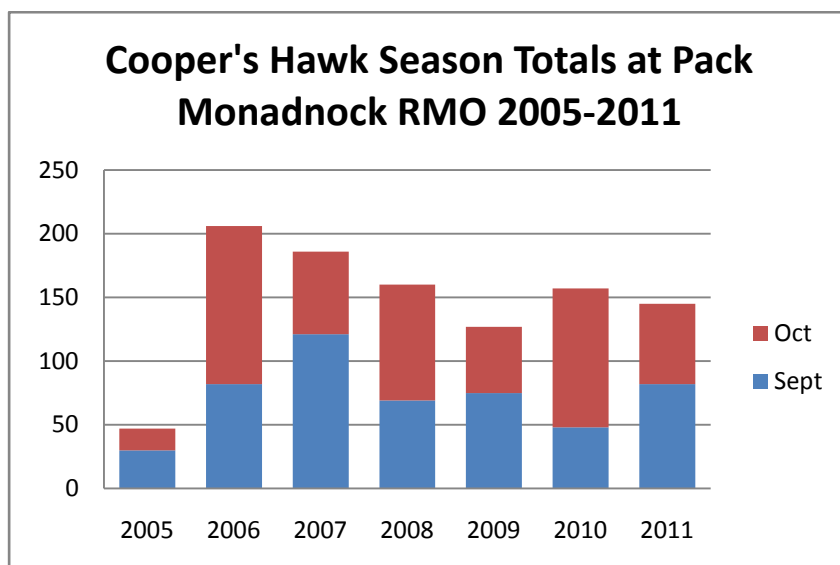
2011 Season Total: 21



At Pack, we brave cold harsh winds in the latter part of October, often for relatively few raptor sightings. However, two species whose peak migration occurs in late autumn can make us forget about cold-toes and chattering teeth. One is the Golden Eagle. The other is the Northern Goshawk, our largest accipiter, and a species many at Pack have proposed to be our official mascot. Why? Simply stated, on a good flight year Pack rivals or exceeds any eastern hawkwatch for migrant Goshawks counted. However, some Goshawks are often seen in September at Pack (three migrants this year plus one or two “local” birds). Yearly counts vary – this may be due to the success of the population during the breeding season and prey availability (snowshoe hares, whose population goes through annual cycles of high and low numbers, may affect Goshawk populations and their need to move south to find food). Although 2011 proved to be a “low” year for Goshawks at Pack, most other eastern hawkwatches would have been proud to count 21 Goshawks in September and October. Again, it is worth pondering whether the wet October weather was to blame for the low count. The top days this season were October 12 and October 22 - four migrant Goshawks were seen each of those days.

### **Cooper’s Hawk (*Accipiter cooperii*)**

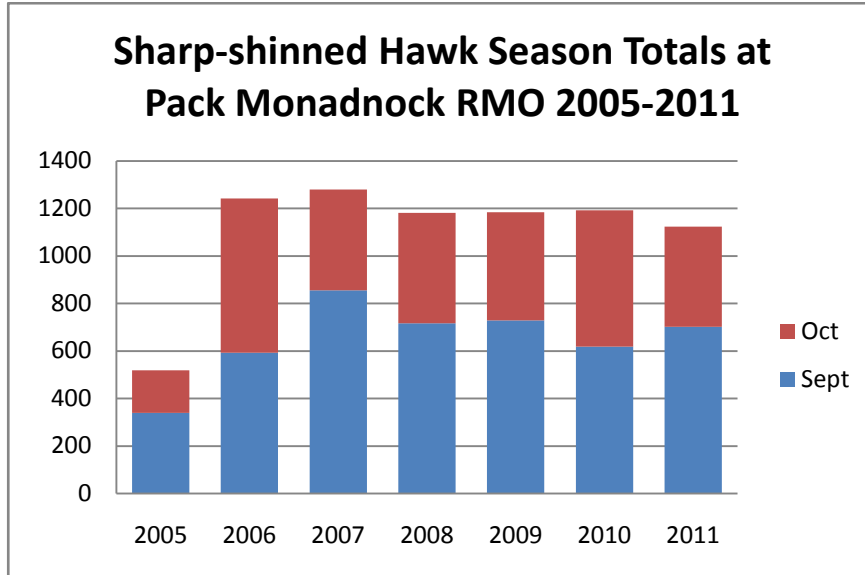
2011 Season Total: 145



The Cooper's Hawk, a mid-sized accipiter which specializes in avian prey, is a favorite of visitors who admire the dramatic fan-tailed, backlit immature bird featured on our site-display. In general, this bird is actually a bit more low key as a migrant – neither as feisty as its smaller cousin, the Sharp-shinned Hawk, nor as famously aggressive at defending its breeding territory as the Goshawk. The true drama of this species was the persecution it received as the perceived “chicken hawk”. Loss of woodland habitat, population reduction by nervous farmers, and eggshell thinning from DDT sent this species into a population decline in the East that is just now being overcome. Pack saw a fairly average movement of Cooper's Hawk in 2011: 145 spotted through September and October, just a hair below the six-year average of 147. Quite impressive, however, was the accipiter flight of September 25, the site's best day for both Cooper's Hawk (16 were counted, tying our 2<sup>nd</sup> best single day record set October 19, 2006), as well as Sharp-shinned Hawk (90 birds counted). While September numbers were high for both of the smaller accipiter species, October remained below average – perhaps again because of the extensive wet and foggy weather.

### **Sharp-shinned Hawk (*Accipiter striatus*)**

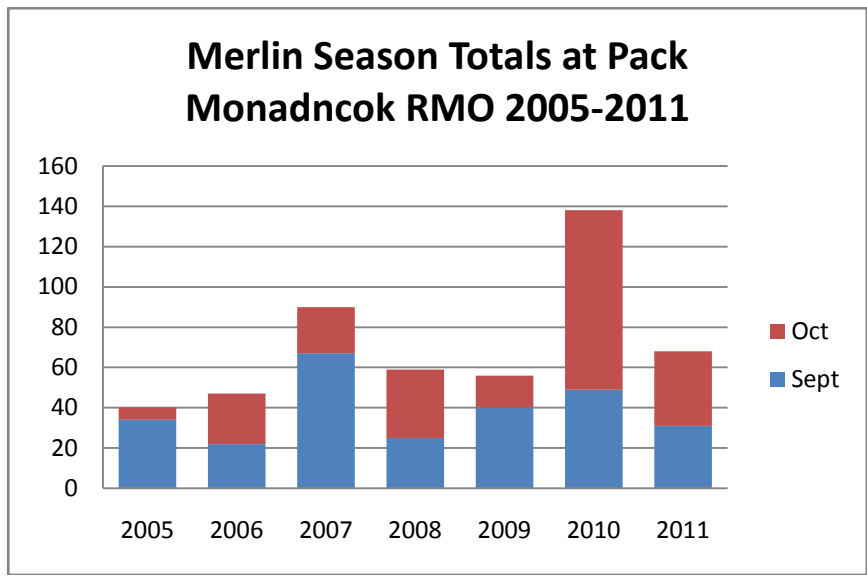
2011 Season Total: 1,124



The smallest accipiter, the Sharp-shinned Hawk is a well known bird at feeding stations – to the joy or possibly consternation of many a songbird lover! This species specializes in hunting small songbirds (sparrows are a particular favorite). Generally more northern-nesting than the Cooper’s Hawk, this species favors coniferous forest in the breeding season. However, like the Cooper’s Hawk, it is becoming increasingly suburban in habit during the winter months, as songbird prey is more readily available. At raptor observatories such as Pack, many “Sharpies” are found by detecting larger species, such as Red-tailed Hawks, then observing the smaller bird that is energetically attacking it. This species is also the most readily observed attacker of Gina, our decoy owl. This proved to be a boon on foggy weather days such as September 22-23, when nine of the 10 raptors counted were Sharpies, undoubtedly drawn a little closer by Gina. The season total of 1,124 is a bit higher than the six-year average of 1,100 and demonstrates that Pack Monadnock is situated along a very significant pathway for migrant accipiters.

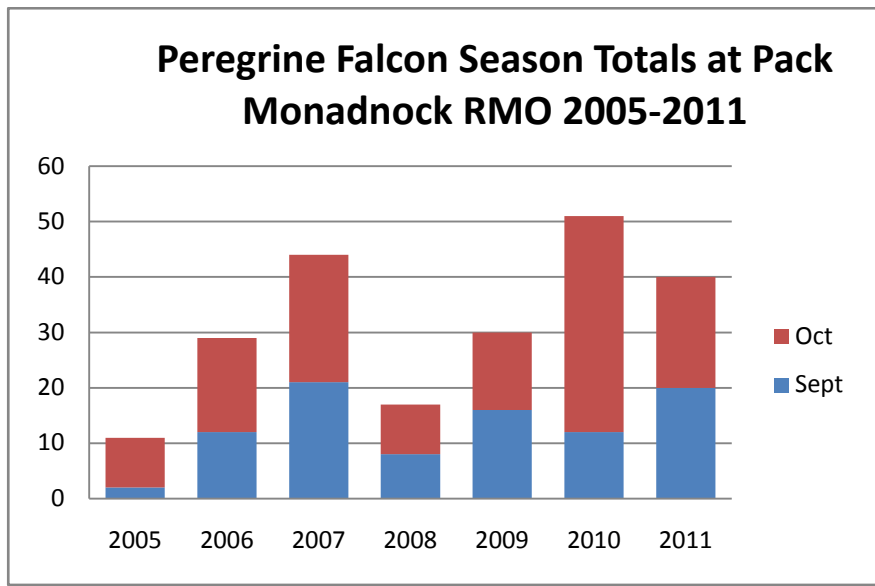
**Merlin (*Falco columbarius*)**

2011 Season Total: 68



The Merlin – a small, dark, aggressive falcon that often stays low over the trees, is another Pack favorite. Perhaps it’s the tendency of Merlins to nearly always attack Gina, giving counters, photographers, and visitors an unprecedented display of power and grace. Perhaps it’s the bullet-like speed and no-nonsense direct flight of this species. Or perhaps it’s even the air of toughness the Merlin projects, which outmatches raptors many times its size. Regardless of the reason, Pack was treated to 68 of this species in 2011, just under the six-year average of 72, but nowhere near the record season total of 147 in 2010. The best single-day this season was October 5, when six passed at close distance, all between 4:00 PM and 5:00 PM, truly a “falcon hour”.

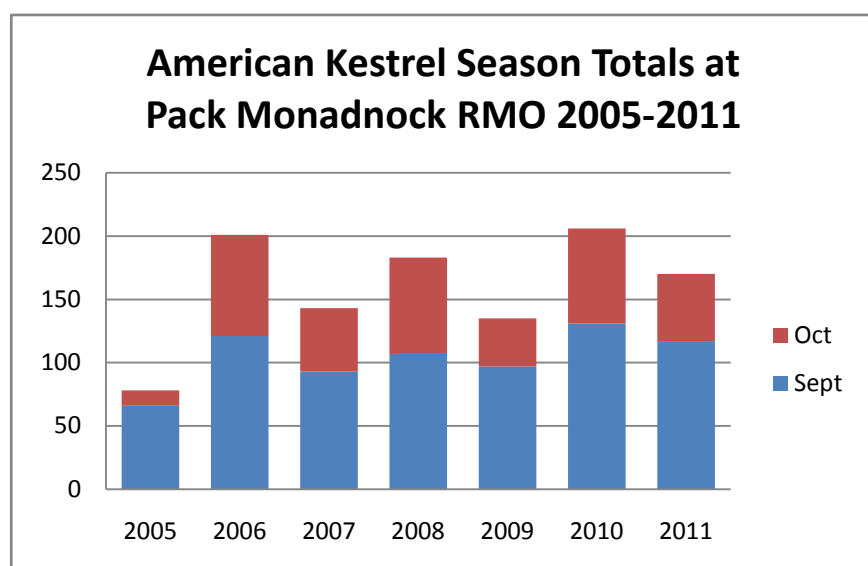
**Peregrine Falcon (*Falco peregrinus*)**  
2011 Season Total: 40



The fastest creature on earth, the Peregrine Falcon can travel at speeds of over 200 MPH during its dramatic hunting stoops. This species was particularly hard hit by the use of the pesticide DDT in the mid-twentieth century. The efforts of conservation biologists helped bring it back from the brink of extinction – it is now well represented at raptor observatories throughout the continent, particularly along coasts. Pack’s 40 Peregrines observed during the regular season was significantly higher than the site’s six-year average of 30 birds per season. Pack’s two best days in 2011 for Peregrines were September 11 and October 11, with seven peregrines seen each day, tying the single-day record set on October 3, 2007. What is most interesting is that Julie “Peregrine-eyes” Brown was the counter on both of those days. Perhaps her previous experiences watching world-record numbers of Peregrines at Kekoldi Hawkwatch in Costa Rica helped out!

### **American Kestrel (*Falco sparverius*)**

2011 Season Total: 170



The smallest raptor at Pack, the American Kestrel, may arguably be the most beautiful - the male is simply resplendent in his blue and orange plumage. The Kestrel’s varied diet includes a large number of insects (especially dragonflies in migration), supplemented by small rodents, snakes, and songbirds. A bird of open field and farmland, populations of this species have significantly declined in recent decades – most likely due to the loss of such habitats. The 170 birds counted at Pack this year were above the six-year average of 158 – and gives us encouragement that this species may be holding its own in the East despite declining locally as a breeder. The best flight day this season was September 28, when 30 were seen – the third highest day in Pack history. Coincidentally, this was also the day of the unprecedented Osprey flight at Pack. Additionally, 22 of these “Sparrow Hawks” were seen the day before – making for a fantastic two day run of 52.

## **Acknowledgements**

The seventh season of data collection and education at Pack Monadnock could not have been achieved without the enthusiastic support of volunteers and visitors, many of whom purchased a membership in New Hampshire Audubon, bought a raptor observatory hat or t-shirt, made a donation, helped clear brush and trees, or helped count hawks or educated the general public. We are so thankful for the dedication from the local community. Generous grant funding support in 2011 came from the Kingsbury Foundation and the Gilbert Verney Foundation. The Jack Daniels Motor Inn in Peterborough provided in-kind gifts to be raffled or purchased, and was, once again, a strong supporter of the hawk watch in 2011. All of these sources of monetary or in-kind support were instrumental in helping to meet the staffing and programming expenses incurred by the Observatory.

Thank you to the New Hampshire Division of Parks and the staff of Miller State Park who again provided willing assistance, without which this project would not have been possible. Pack Monadnock has proven to be a great success in both raptor research and connecting people with nature, making it one of NH Audubon's most successful outreach projects. Mutual benefit was again derived by both the State Park and NH Audubon through this successful partnership.

Boy Scout Troop 8 from Peterborough continued in their long-standing and much appreciated service to Miller State Park and the Pack Monadnock Raptor Migration Observatory. Led by scouting volunteer, Rich Frechette, a group of volunteer scouts improved the view from the raptor observatory platform by removing over a dozen large trees. Their annual efforts heighten the enjoyment for thousands of year-round visitors to Pack, who, on a clear day, are able to see vistas as far away as Mount Washington and Maine. In addition, the scouts' work makes it possible to record migrant raptors consistently from year-to-year.

Getting the word out is surely a part of the success. Of the more than four-thousand visitors who came to the Observatory this fall, many received their information from media sources which highlighted the excitement of migration at Pack Monadnock. A special thank you to Francie Von Mertens, Pack's top cheerleader, is in order.

Last, but not least, the counters were assisted greatly by a well-seasoned team of volunteers, including: Tom Ballio, David Baum, Alan Bostick, Janet & Tom Delaney, Katrina Fenton, David Fenton, Ginny & Jerry Gonville, Al Grimstad, Iain MacLeod, Eric Masterson, Joann Matthews, Francie Von Mertens, Katie Murphy, Cliff Otto, David Ross, Jim Samdahl, Donald & Lillian Stokes, Henry Walters, Tom Warren, and many others. Of special note, two volunteers, Katrina Fenton and Tom Baillio, were honored with the NH Audubon's President Award at the organization's 2011 Annual Meeting for their dedication and enthusiasm for the project during the 2010 fall season. Thank you to ALL of the volunteers for making the 2011 season another successful one.

**Table 1.** Non-raptor bird species seen at Pack Monadnock September 1-October 31, 2011, with first and last dates seen, and highest daily count.

<b>SPECIES</b>	<b>SCIENTIFIC NAME</b>	<b>DATES</b>	<b>HIGH COUNT &amp; DATE</b>
Canada Goose	( <i>Branta canadensis</i> )	[Sept. 10-Oct. 29]	(422, 10/6)
Wild Turkey	( <i>Meleagris gallopavo</i> )	[Oct. 9-Oct. 17]	(2)
Common Loon	( <i>Gavia immer</i> )	[Sept. 2-Oct. 29]	(4, 9/17)
Double-crested Cormorant	( <i>Phalacrocorax auritus</i> )	[Sept. 14-Oct. 23]	(14, 9/14)
Great Cormorant	( <i>Phalacrocorax carbo</i> )	[Oct. 23]	(1)
Great Blue Heron	( <i>Ardea herodias</i> )	[Sept. 6-Sept. 18]	(1)
Sandhill Crane	( <i>Grus canadensis</i> )	[Oct. 7]	(4)
Herring Gull	( <i>Larus argentatus</i> )	[Sept. 8-Oct. 19]	(11, 9/25)
Mourning Dove	( <i>Zenaida macroura</i> )	[Sept. 2-Oct. 23]	(1)
Common Nighthawk	( <i>Chordeiles minor</i> )	[Sept. 3]	(71)
Chimney Swift	( <i>Chaetura pelagica</i> )	[Sept. 1-Sept. 14]	(8, 9/3)
Ruby-throated Hummingbird	( <i>Archilocus colubris</i> )	[Sept. 1-Sept. 18]	(7, 9/10)
Downy Woodpecker	( <i>Picoides pubescens</i> )	[Sept. 11-Oct. 17]	(1)
Hairy Woodpecker	( <i>Picoides villosus</i> )	[Sept. 8-Oct. 18]	(1)
Northern Flicker	( <i>Colaptes auratus</i> )	[Sept. 3-Oct. 11]	(2, 10/6)
Pileated Woodpecker	( <i>Drycopus pileatus</i> )	[Sept. 9-Oct. 23]	(1)
Blue-headed Vireo	( <i>Vireo solitarius</i> )	[Sept. 14-Sept. 22]	(1)
Red-eyed Vireo	( <i>Vireo olivaceus</i> )	[Sept. 13-Sept. 15]	(2, 9/15)
Blue Jay	( <i>Cyanocitta cristata</i> )	[Sept. 1-Oct. 31]	(33, 9/25)
American Crow	( <i>Corvus brachyrhynchos</i> )	[Sept. 1-Oct. 31]	(74, 10/29)
Common Raven	( <i>Corvus corax</i> )	[Sept. 1-Oct. 31]	(16, 9/2)
Tree Swallow	( <i>Tachycineta bicolor</i> )	[Sept. 1-Sept. 9]	(4, 9/3)
Barn Swallow	( <i>Hirundo rustica</i> )	[Sept. 2-Sept. 5]	(2, 9/5)
Black-capped Chickadee	( <i>Poecile atricapillus</i> )	[Sept. 1-Oct. 31]	(4, 9/23 & 10/7)
Tufted Titmouse	( <i>Baeolophus bicolor</i> )	[Oct. 6-Oct. 31]	(1)
Red-breasted Nuthatch	( <i>Sitta canadensis</i> )	[Sept. 14-Oct. 17]	(2, 9/21)
White-breasted Nuthatch	( <i>Sitta carolinensis</i> )	[Sept. 8-Oct. 9]	(1)
Winter Wren	( <i>Troglodytes troglodytes</i> )	[Sept. 25]	(1)
Golden-crowned Kinglet	( <i>Regulus satrapa</i> )	[Sept. 1-Oct. 31]	(6, 10/23)
Ruby-crowned Kinglet	( <i>Regulus calendula</i> )	[Sept. 15-Oct. 9]	(2, 9/23)
Veery	( <i>Catharus fuscescens</i> )	[Sept. 21]	(1)
Hermit Thrush	( <i>Catharus guttatus</i> )	[Sept. 23-Oct. 28]	(3, 10/28)
American Robin	( <i>Turdus migratorius</i> )	[Sept. 15-Oct. 29]	(8, 9/21 & 10/23)
American Pipit	( <i>Anthus rubescens</i> )	[Oct. 8-Oct. 9]	(1)
Cedar Waxwing	( <i>Bombycilla cedrorum</i> )	[Sept. 1-Oct. 29]	(18, 9/15)
Black-and-white Warbler	( <i>Mniotilta varia</i> )	[Sept. 8-Sept. 21]	(1)
Tennessee Warbler	( <i>Oriothlypis peregrina</i> )	[Sept. 14]	(1)
Nashville Warbler	( <i>Oriothlypis ruficapilla</i> )	[Sept. 23-Sept. 24]	(1)
Common Yellowthroat	( <i>Geothlypis trichas</i> )	[Sept. 2-Sept. 15]	(1)
American Redstart	( <i>Setophaga ruticilla</i> )	[Sept. 5-Sept. 15]	(2, 9/14)
Cape May Warbler	( <i>Setophaga tigrina</i> )	[Sept. 2-Sept. 8]	(3, 9/2)
Magnolia Warbler	( <i>Setophaga magnolia</i> )	[Sept. 14]	(1)
Blackburnian Warbler	( <i>Setophaga fusca</i> )	[Sept. 5-Sept. 14]	(1)
Blackpoll Warbler	( <i>Setophaga striata</i> )	[Sept. 1-Oct. 11]	(3, 9/15)
Black-throated Blue Warbler	( <i>Setophaga caerulescens</i> )	[Sept. 8]	(2)
Palm Warbler	( <i>Setophaga palmarum</i> )	[Sept. 22-Oct. 12]	(2, 10/12)
Yellow-rumped Warbler	( <i>Setophaga coronata</i> )	[Sept. 2-Oct. 28]	(100, 10/11)
Black-throated Green Warbler	( <i>Setophaga virens</i> )	[Sept. 1-Oct. 11]	(1)
Swamp Sparrow	( <i>Melospiza georgiana</i> )	[Oct. 12]	(1)
White-throated Sparrow	( <i>Zonotrichia albicollis</i> )	[Sept. 22-Oct. 31]	(10, 10/20)
Dark-eyed Junco	( <i>Junco hyemalis</i> )	[Sept. 1-Oct. 31]	(40, 10/15 & 31)
Snow Bunting	( <i>Plectrophenax nivalis</i> )	[Oct. 29]	(2)
Scarlet Tanager	( <i>Piranga olivacea</i> )	[Sept. 21-Sept. 24]	(2, 9/22)
Purple Finch	( <i>Carpodacus purpureus</i> )	[Sept. 10-Sept. 14]	(1)
White-winged Crossbill	( <i>Loxia leucoptera</i> )	[Sept. 22]	(1)
Pine Siskin	( <i>Spinus pinus</i> )	[Oct. 6-Oct. 29]	(62, 10/6)
American Goldfinch	( <i>Spinus tristis</i> )	[Sept. 9-Sept. 22]	(2, 9/9 & 9/22)