

Raptor Migration Summary – Spring 2012

Laurie Goodrich

January and February were warmer than usual, and were followed by a warm spring that saw an early leaf-out across Pennsylvania forests, and early arrivals for some songbirds in spring 2012. Despite these patterns, raptor migration appeared to be right on schedule. Peak flight dates were similar to prior years and none of the sites reported unusually early dates. Rain and northerly winds occurred more often than usual throughout the season, possibly dispersing migrants and reducing daily and season totals below those of recent years at some sites.

Migration Summary

Four Pennsylvania watchsites tallied 21,164 hawks during 1502 hours of counting between mid-February and late May (Table 1). Two Mississippi Kites were recorded, an adult at Hawk Mountain in *Berks/Schuylkill* 15 April and a sub-adult at Presque Isle in *Erie* 24 May. A Swainson's Hawk at Tussey Mountain, *Centre* 14 April was the only other rarity spotted this spring.

Despite counts dropping at three of the four sites compared to 2011, the total number of raptors counted in 2012 was the second highest total recorded for the spring in more than a decade (Table 1). Prior to the beginning of coverage at Presque Isle in 2009, total counts of spring raptors in the state ranged from 6000 to 13,000, and often included more sites reporting than in recent years. The largest boost in counts from Presque Isle has been in tallies of Turkey Vulture, now exceeding 6000 birds each spring, when earlier statewide counts ranged from 600 to 2100 birds.

Table 1: Pennsylvania watch-sites reporting for spring 2012

Site	Hours	Total
Allegheny Front	492	1527
Hawk Mountain	259	1131
Presque Isle	263	16290
Tussey Mountain	489	2216
Total	1502	21164

In 2012, the total hours of effort increased to 1502 compared with 1250 hours in 2011, and the number of days of coverage increased to 245 compared to 210. This welcome increase in coverage at the four count sites, however, led to a slight dip in birds per hour, with sites averaging 14.1 migrants per hour of effort in 2012, compared to 22.3 migrants per hour in 2011. Presque Isle led with 62 birds per hour of effort in 2012, while Allegheny Front (*Bedford/Somerset*) and

Tussey Mountain led with 492 and 489 total hours, respectively (Table 1).

Pennsylvania set a new record for Bald Eagles in spring with 236 spotted among the four sites. The two Mississippi Kites tied the 2004 record of two sighted for spring watchsites, and the lone Swainson's Hawk matched the 2003 spring count. Presque Isle recorded the highest one-day count for Bald Eagle with 17 on 2 May. Other peak counts of this species were scattered throughout the season, underscoring the broad migration period for this species.

March was the best month to spot Golden Eagles in Pennsylvania. Tussey Mountain led the Golden Eagle parade with 32 on 1 March, and Allegheny Front had its peak Golden Eagle flight of 10 on 17 March. The most numerous migrant statewide was the Turkey Vulture, with 10,848 total birds representing 51% of all migrating raptors observed, and Broad-winged Hawk at 5089, representing 24% of all migrants (Table 3). Vultures peaked in late March with 1400 on 28 March at Presque Isle, and 89 Turkey Vultures at Allegheny Front 18 March. Tussey recorded 21 on both 22 and 23 March as well. Hawk Mountain had minimal coverage in March but recorded a peak of 8 Turkey Vultures 3 April.

Site Highlights

Allegheny Front (*Somerset/Bedford*) – Watchers at Allegheny Front recorded 1527 hawks in 492 hours of counts from 22 February through 7 May, at a rate of 3.1 hawks per hour (Table 3). The peak one-day tally occurred 18 March with 142 total hawks including 89 Turkey Vultures, 24 Red-tailed and 19 Sharp-shinned hawks. Lower than usual counts of Broad-winged Hawk disappointed observers, with a peak one-day count of just 42 on 14 April. In contrast, 67 Osprey flew past 30 April, setting a new one-day site record for this migrant. Six Bald and three Golden eagles were spotted that same day, making for a especially memorable time at the mountain (Table 2). The last day of counting 7 May resulted in 19 migrants including 9 Osprey and 2 Golden Eagles, a respectable ending. A new spring record was set in 2012 for Cooper's Hawk with 108 counted, and Osprey, Northern Goshawk, and Sharp-shinned Hawk were all above the 10-year average.

Hawk Mountain Sanctuary (*Berks/Schuylkill*) – Hawk Mountain counters recorded an above-average 1131 raptors in 259 hours of counts from 10 March through 13 May, at a rate of 4.4 birds per hour (Table 1). New season

records were set for both Bald Eagle (46) and Black Vulture (121). A new one-day spring record also was set for Black Vulture with 11 migrating north above North Lookout 4 May. Frequent windy days in April and May might have increased slope-soaring migrants in 2012, as Hawk Mountain recorded total counts 25% above the ten-year average.

The rarest migrant was sighted 15 April, an adult Mississippi Kite heading north along the mountain. The peak one-day count of 92 hawks swirled past 16 April, including 72 Broad-winged Hawks. Several other days saw more than 50 migrants, but kettles of Broad-winged Hawks were rarely observed. Early May counters were challenged by rain, but on 12 May, Hawk Mountain sighted six Bald Eagles (two adult and four immatures) for the peak one-day count for the season (Table 2). The count ended early on May 13 as the lookout was shrouded in fog and drizzle for 14 and 15 May.

Presque Isle (*Erie*) – In the fourth season of counts at Presque Isle, watchers tallied 16,290 migrants in 263 count hours, a rate of 62 birds per hour across 66 days between 1 March and 26 May. The total was above average but below the 2011 total of 23,417 (Table 3). The peak day in March occurred on the 28th with 1429 migrating hawks including 1400 Turkey Vultures and 16 Red-tailed Hawks. In April the best count day occurred 15 April with 585 migrants including 355 Broad-winged Hawks. 2 May brought the highest count for the season with 1999 Broad-winged Hawks, 20 Osprey, 17 Bald Eagles, and 59 Sharp-shinned Hawks among the 2255 raptor migrants (Table 2). The rarest migrant for the season was spotted 24 May when a sub-adult Mississippi Kite glided into view while watchers were observing an approaching Bald Eagle.

Tussey Mountain (*Centre*) – Tussey counters tallied 2216 hawks in 489 hours from 21 February through 25 April, for 4.5 birds per hour (Table 1). Totals were slightly below the ten-year average of 2341. Golden Eagles concentrated at the site during early March with 32 spotted 1 March, 19 on 2 March, and 21 on 7 March. Golden Eagles were seen nearly daily throughout March, and the season total of 212 was average for the site, but the highest for Pennsylvania. A peak one-day count of four Bald Eagles also sailed past 7 March. The rarest migrant of the season, a Swainson's Hawk, was observed heading north on the afternoon of 14 April. Broad-winged Hawk numbers peaked 26 April, with 278 high-flying birds swirling past,

Table 2. Peak count dates for selected species at selected Pennsylvania watch sites.

Site	Bald Eagle		Golden Eagle	
	Count	Date	Count	Date
Allegheny Front	6	4/30	10	3/17
Hawk Mountain	6	5/12	2	4/9
Presque Isle	17	5/2	1	many
Tussey Mountain	4	3/7	32	3/1

among a total of 323 migrants for the day. Above-average season counts were recorded for Bald Eagle, Sharp-shinned and Broad-winged hawks.

Conclusion

In spring 2012, migrants appeared to be more dispersed than in past spring seasons. Although vultures passed by in impressive flocks at Presque Isle in March, Broad-winged Hawks rarely surpassed 100 birds at any of the sites.

Eagles continued to amaze Pennsylvania spring observers, with 291 Golden and 236 Bald eagles tallied among the four sites. Most Golden Eagles were seen at Tussey Mountain and Allegheny Front (284), whereas Bald Eagles were observed in good numbers at all watchsites, although the lake shore site, Presque Isle, observed twice as many as the other three locations (128).

consistently records the fourth highest spring count for Golden Eagle across the continent, and autumn totals at both Allegheny Front and Waggoner’s Gap are some of the highest in the east. Presque Isle is fast becoming a key spring site for vultures, where their season counts have been among the highest recorded at any spring site in the past two years.

Trends in numbers of eagles and other raptors sighted at Pennsylvania sites, for any watchsite with at least 10 years of hourly data are available at <www.rpi-project.org>. I encourage all Pennsylvania birders to assist your local hawkwatch in covering their location in either spring or autumn and to see the fruits of their labor at the above website. You only have to read the daily reports (archived on <www.hawkcount.org>) to realize how much fun these observers are having, and how many other migrants they are seeing.

Despite the lowering number of spring sites covered in recent years, Pennsylvania plays a key role in eastern eagle monitoring in spring and in autumn. Tussey Mountain consistently

Acknowledgements

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*Acopian Ctr. for Conservation Learning
Hawk Mountain Sanctuary Association
410 Summer Valley Road
Orwigsburg, PA 17961
goodrich@hawkmtn.org*

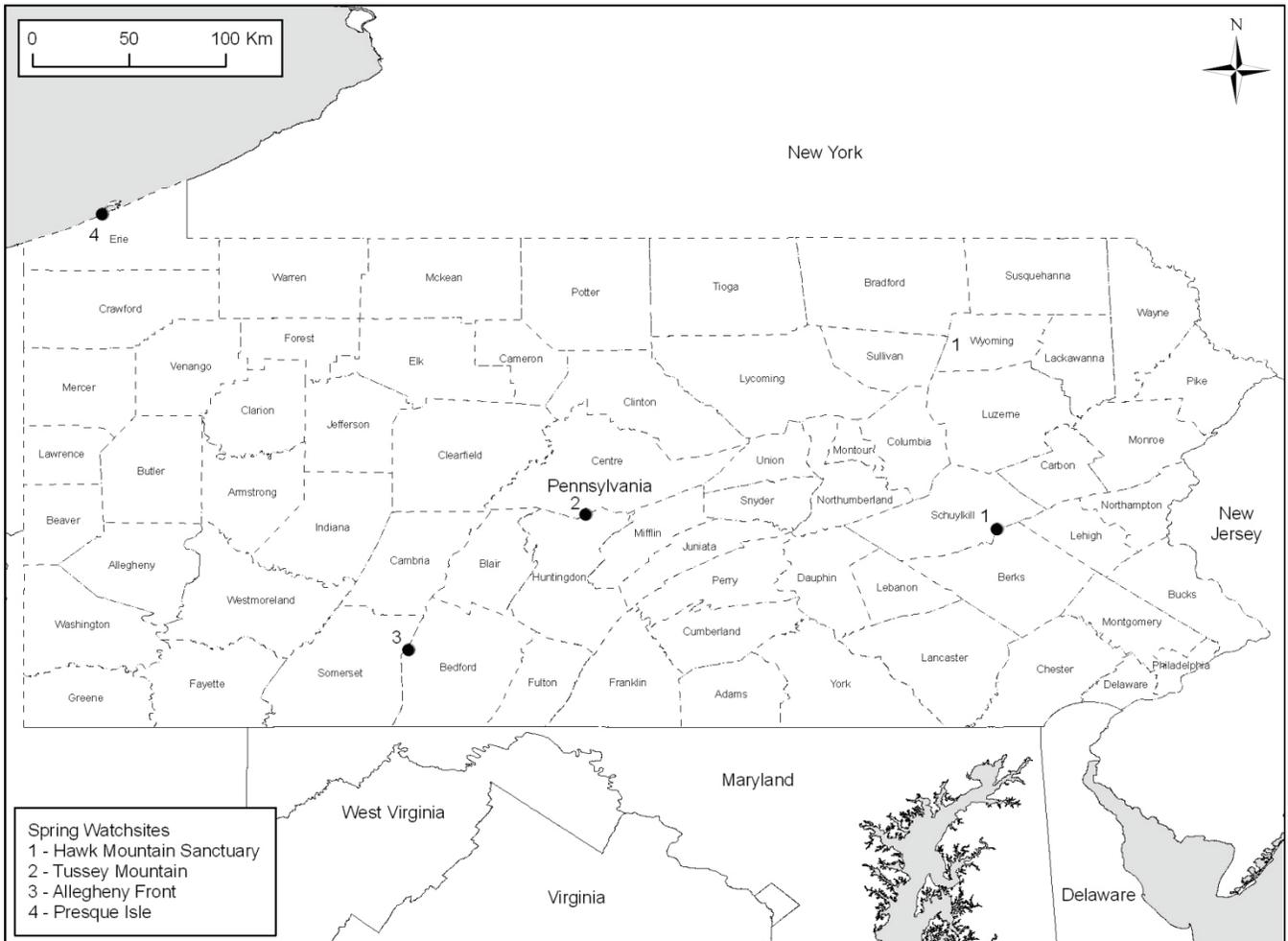


Table 3. Spring 2012 count results for Pennsylvania watch sites.

ALLEGHENY FRONT (Bedford) - Bob Stewart, compiler

Month	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	SWHA	GOEA	AMKE	MERL	PEFA	UNID.	MK	TOTAL
February	42.0	0	36	0	0	0	0	1	2	5	0	32	0	0	12	0	0	0	4	0	92
March	208.3	9	249	1	6	11	114	61	2	45	0	223	2	0	47	10	1	1	25	0	807
April	195.5	2	7	95	7	10	56	38	8	4	207	83	0	4	11	4	0	2	26	0	560
May	46.5	0	0	25	1	1	7	8	0	0	13	9	0	0	2	1	0	0	1	0	68
Total	492.3	11	292	121	14	22	177	108	12	54	220	347	2	0	72	15	1	3	56	0	1527
Total/hr.	0.02	0.59	0.25	0.03	0.04	0.04	0.36	0.22	0.02	0.11	0.45	0.70	0.00	0.00	0.15	0.03	0.00	0.01	0.11	0.00	3.10
% flight	0.72	19.12	7.92	0.92	1.44	11.59	7.07	3.54	14.41	22.72	0.13	0.00	4.72	0.98	0.07	0.20	3.67	0.00	3.67	0.00	100.00
Average	414.4	12.9	327.9	103.3	19.0	28.6	172.6	72.0	6.1	57.9	399.7	437.1	2.2	0.0	72.7	24.6	5.5	3.6	88.0	0.0	1833.9

HAWK MOUNTAIN (Berks/Schuylkill) - Adam Carter, compiler

Month	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	SW	GOEA	AMKE	MERL	PEFA	UNID.	MK	TOTAL
March	14.0	3	1	1	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	12
April	185.0	87	45	86	25	30	100	35	0	5	276	84	0	0	4	18	2	2	58	1	858
May	59.5	31	8	35	21	7	31	9	0	1	60	21	0	0	0	2	0	0	35	0	261
Total	258.5	121	54	122	46	38	133	45	0	6	336	108	0	0	4	20	2	2	93	1	1131
Total/hr.	0.47	0.21	0.47	0.18	0.15	0.15	0.51	0.17	0.00	0.02	1.30	0.42	0.00	0.00	0.02	0.08	0.01	0.01	0.36	0.00	4.38
% flight	10.70	4.77	10.79	4.07	3.36	11.76	3.98	0.00	0.53	29.71	9.55	0.00	0.00	0.00	0.35	1.77	0.18	0.18	8.22	0.09	100.00
Average	235.5	25.6	26.9	104.0	19.2	24.0	106.4	38.2	0.6	8.3	336.9	111.3	0.2	0.0	1.8	23.7	3.9	1.3	62.8	0.5	897.1

PRESQUE ISLE (Erie) - Jerry McWilliams, compiler

Month	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	SW	GOEA	AMKE	MERL	PEFA	UNID.	MK	TOTAL
March	100.0	0	5947	0	15	11	57	33	0	192	0	394	7	0	0	42	3	0	17	0	6718
April	108.0	0	3438	41	50	53	573	25	0	3	1523	186	9	0	2	160	2	8	20	0	6093
May	54.5	0	948	38	63	10	85	13	0	0	2260	42	0	0	1	7	0	2	9	1	3479
Total	262.5	0	10333	79	128	74	715	71	0	195	3783	622	16	0	3	209	5	10	46	1	16290
Total/hr.	0.00	39.36	0.30	0.49	0.28	2.72	0.27	0.00	0.00	0.74	14.41	2.37	0.06	0.00	0.01	0.80	0.02	0.04	0.18	0.00	62.06
% flight	0.00	63.43	0.48	0.79	0.45	4.39	0.44	0.00	0.00	1.20	23.22	3.82	0.10	0.00	0.02	1.28	0.03	0.06	0.28	0.01	100.00
Average	169.1	0.8	7738.2	67.6	69.6	60.2	830.2	73.4	1.4	175.4	3691.4	511.6	21.8	0.0	1.4	248.6	10.6	6.6	45.4	0.2	13555.2

TUSSEY MOUNTAIN (Centre) - Dan Ombalski, compiler

Month	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	SW	GOEA	AMKE	MERL	PEFA	UNID.	MK	TOTAL
February	45.0	0	21	0	5	1	1	1	1	4	0	28	0	0	18	0	0	0	3	0	83
March	248.3	7	122	9	25	15	127	23	1	36	0	324	4	0	176	26	3	1	9	0	908
April	195.5	9	26	76	18	13	117	17	1	3	750	154	0	1	18	14	1	0	7	0	1225
Total	488.8	16	169	85	48	29	245	41	3	43	750	506	4	1	212	40	4	1	19	0	2216
Total/hr.	0.03	0.03	0.35	0.17	0.10	0.06	0.50	0.08	0.01	0.09	1.53	1.04	0.01	0.00	0.43	0.08	0.01	0.00	0.04	0.00	4.53
% flight	0.72	7.63	3.84	2.17	1.31	11.06	1.85	0.14	0.14	1.94	33.84	22.83	0.18	0.05	9.57	1.81	0.18	0.05	0.86	0.00	100.00
Average	409.4	30.2	246.3	95.0	30.2	44.7	203.6	86.0	2.5	54.4	718.0	535.2	5.9	0.2	214.0	47.8	4.5	1.5	45.5	0.0	2341.3

2012 TOTAL FOR ALL PENNSYLVANIA WATCHSITES

Month	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	SW	GOEA	AMKE	MERL	PEFA	UNID.	MK	TOTAL
February	87.0	0	57	0	5	1	1	2	3	9	0	60	0	0	30	0	0	0	7	0	175
March	570.5	19	6319	11	46	38	300	118	3	273	0	944	13	0	223	78	7	2	51	0	8445
April	684.0	98	3516	298	100	106	846	115	9	15	2756	507	9	1	35	196	5	12	111	1	8736
May	160.5	31	956	98	85	18	123	30	0	1	2333	72	0	0	3	10	0	2	45	1	3808
Total	1502.0	148	10848	407	236	163	1270	265	15	298	5089	1583	22	1	291	284	12	16	214	2	21164
Total/hr.	0.10	0.70	7.22	0.27	0.16	0.11	0.85	0.18	0.01	0.20	3.39	1.05	0.01	0.00	0.19	0.19	0.01	0.01	0.14	0.00	14.09
% flight	0.70	51.26	1.92	1.12	0.77	6.00	1.25	0.07	0.07	1.41	24.05	7.48	0.10	0.00	1.37	1.34	0.06	0.08	1.01	0.01	100.00
Average	1265.5	104.1	4316.3	423.8	127.4	147.5	947.3	258.7	10.8	207.5	3600.9	1336.5	17.4	0.2	274.9	266.5	23.2	11.7	238.6	0.5	12264.7