

Raptor Migration Summary – Spring 2013

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Four new statewide species records and a new statewide total raptor record were set by Pennsylvania's hawkwatches in spring 2013 (Table 1, 3). The hub for spring hawk-watching in the state has diverged from the central ridges to the lakeshore and ridges in recent years. Expanded coverage from the Lake Erie shoreline has revealed a new understanding of the spring migration. Efforts by Presque Isle watchers in 2013 confirm a consistent flow of migrating raptors moving along the Lake Erie shoreline with counts rivaling well-known sites in nearby New York with some of the highest spring counts in the East.

Migration Summary

Five Pennsylvania watchsites tallied a record total of 29,783 hawks in 206 days and 1,131 hours of counting from early February to late May, a rate of 26.3 raptors per hour (Table 1). A traditional fall migration watchsite, Militia Hill, contributed a welcome single day of counts in April as part of a fund-raising event (Table 1). Although effort increased at Presque Isle and Hawk Mountain, effort decreased at Tussey Mountain and Allegheny Front, leading to a statewide decrease in total hours of 1131, compared to a ten-year average of 1266 (Table 1) and a dip from the record of 1502 set in 2012.

Table 1: Pennsylvania watch-sites reporting for spring 2013

Site	Hrs.	Total	per hr.
Allegheny Fr.	288	994	3.5
Hawk Mtn.	266.1	1411	5.3
Militia Hill	6	60	10.0
Presque Isle	282.5	26425	93.5
Tussey Mtn.	288.4	893	3.1
Total	1131	29783	26.3

Storms in February challenged early-season watching; later, daily balmy weather in April appeared to disperse Broad-winged Hawk flights and keep one-day peak counts lower than usual for all sites (Table 2). Mid-March brought a Golden Eagle parade along the central ridges with 53 and 16 respectively 10 and 11 March at Tussey Mountain, and 9 and 9 for the same two days at Allegheny Front. Bald Eagles continued their upswing in Pennsylvania with consistent sightings at all the sites. The largest one-day counts for Bald Eagles soared north in late May with 19 at Presque Isle on both 19 and 31 May.

Statewide records were set for four species: 17,880 Turkey Vultures (previously 14,520 in 2011), 250 Bald Eagles (236 in 2012), 603 American

Kestrels (563 in 2011), and 25 Peregrine Falcons (23 in 2011) (Table 3). Above-average counts were observed for most species except Osprey which was 23% below average, Northern Goshawk at 40% below average, and Golden Eagle at 19% below average (Table 3).

Turkey Vultures dominated the migration count in 2013 comprising 60% of the raptors counted statewide. Large flights at Presque Isle largely contributed to this total, with four days surpassing 1000 vultures. Rare birds were few, and included a Swallow-tailed Kite gliding northeast over Hawk Mountain 28 April and a high-flying Short-eared Owl spotted at Presque Isle 7 April.

Site Highlights

Allegheny Front (Somerset/Bedford) – Allegheny Front hawkwatchers tallied 994 raptors in 288 hours and 47 days of counts from 24 February through 7 May. Red-tailed Hawks comprised 20.5% of the migrants with Turkey Vultures representing 18.4% and Broad-winged Hawks 16.8% (Table 3). Season totals were below average for most species, possibly due to less coverage compared to prior years (Table 1, 3). A peak one-day count of 92 raptors was recorded 6 April with 26 Turkey Vultures, 11 Osprey, 39 Red-tailed Hawks, and 6 American Kestrels leading the numbers, along with the highlights of a lone Golden Eagle and Merlin. Other season highlights included back-to-back nine-Golden Eagle days 10 and 11 March, including a noteworthy sighting of a Golden Eagle attacking a migrating Sharp-shinned Hawk. West winds and snow greeted counters the same day as the season one-day high count of 29 Turkey Vultures 2 April (Table 2). A warmer day with east winds 23 April ushered the peak count of 54 Broad-winged Hawks overhead, along with 7 Ospreys (Table 2). One Osprey repeatedly dove on an immature Golden Eagle as it flew north. Seven Osprey and a lone Cooper's Hawk glided north 5 May, the site's last day for the season.

Hawk Mountain Sanctuary (Berks/Schuylkill) – Hawk Mountain conservation science trainees, volunteers, and staff recorded 1411 raptors in above-average coverage of 266 hours and 45 days from 27 March 27 to 15 May (Table 1, 3). Broad-winged Hawks dominated the flight with 32.5% of migrants, and Red-tailed and Sharp-shinned hawks represented 10.9% and 9.6% of the flight respectively (Table 3). A new season record was set for 92 Cooper's Hawk, and a record set in 2000 for the Peregrine Falcon was tied

with six sighted. Most species showed above-average counts, except Osprey which dipped by 8%. Overcast skies on 23 April brought the season's one-day peak count of 89 raptors, including the peak count of 64 Broad-winged Hawks (Table 2). Six Osprey, 7 Sharp-shinned Hawks, and 4 Cooper's Hawks also were sighted moving north. Light south winds and overcast skies 28 April brought the Mountain's rarest sighting, a high-flying Swallow-tailed Kite seen by several observers directly over the Lookout flying northeast along the ridge. It was a first for the spring season at this site. On the last count day, 15 May, 12 migrants were tallied including 4 Northern Harriers.

Militia Hill (Montgomery) – On 27 April, Militia Hill volunteers conducted a one day Raptorthon to support HMANA's hawkcount.org database and website. They tallied 60 migrants including 23 Turkey Vultures, one Bald Eagle, one Northern Harrier, 6 Sharp-shinned and 7 Cooper's hawks, one Red-shouldered Hawk, 16 Broad-winged Hawks, 3 Red-tailed Hawks, one American Kestrel and one unidentified buteo in six hours of coverage (Table 1, 3). This welcome addition to the spring hawk count reports was a reminder that notable spring flights occur widely across the state, particularly in April.

Presque Isle (Erie) – Presque Isle counters increased coverage and totals of migrants in 2013, recording 26,425 hawks in 71 days and 282.5 hours (Table 1) between 1 March and 31 May. New records or above-average counts were recorded for most species (Table 3). Turkey Vulture and Broad-winged Hawk comprised most the flight with 66% and 17.4% of the total respectively. Most the migrants were observed in April with 14,489 recorded. The best one-day count was 15 April when southerly winds ushered 2526 raptors along the lakeshore including 1534 Turkey Vultures, 527 Broad-winged Hawks, 104 American Kestrels, and 271 Sharp-shinned Hawks, along with rarer birds such as 5 Bald Eagles and a lone Peregrine Falcon. One of the Turkey Vultures showed leucistic plumage. Counts were strong through April and dwindled slightly during May. A late surge was noted for 19 May when 685 Turkey Vultures, 479 Broad-winged Hawks, 19 Bald Eagles, and 10 Osprey were tallied. On 31 May, the last day for the count, another 19 Bald Eagles soared past along with 82 Turkey Vultures, 26 Broad-winged Hawks and four Ospreys (Table 2). A lone Short-eared Owl flew high overhead 7 April.

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

Site	Turkey Vulture		Br-winged Hawk	
	Count	Date	Count	Date
Allegheny Front	29	4/2	52	4/23
Hawk Mountain	15	4/5	64	4/23
Militia Hill	23	4/27	16	4/27
Presque Isle	1921	4/4	832	4/30
Tussey Mountain	20	3/11	63	4/20

Tussey Mountain (Centre) – Tussey Mountain hawkwatchers tallied 893 hawks in 288.4 hours and 42 days of counts from 24 February to 21 April (Table 1). Hawk totals and coverage were below-average overall although March days were well covered. Red-tailed Hawks were the most numerous migrant representing 22.6% of the flight, followed by Golden Eagles with 19.8%, and Turkey Vultures with 19.5%. The highest one-day count was made 10 March when strong southeast winds carried 53 Golden Eagles, mostly adult, and 28 Red-tailed Hawks, 15 Turkey Vultures, 2 Bald Eagles among a total of 11 species of raptors. Continued southeast winds 11 March ushered another 16 Golden Eagles past the Mountain along with 6 Bald Eagles. The 53 Golden Eagles was noteworthy, since the site record is 62 Golden Eagles in 2008. The peak Broad-winged Hawk day occurred on

20 April with 63 birds flying ahead of snow squalls.

the state, with new records set for several raptors. In the spring of 2013, the Tussey Mountain (*Centre*) and Allegheny Front (*Somerset/Bedford*) sites continued to report impressive Golden Eagle flights, while Presque Isle (*Erie*) led with numbers for most other species, together bringing the total spring raptor count statewide to a mark just shy of 30,000. Southeast sites, Hawk Mountain (*Berks/Schuylkill*) and Militia Hill (*Montgomery*) recorded a variety of migrants consistently in April and early May providing good sightings on most days in late season.

Most state hawkwatches record other migrants as well as raptors including loons, gulls, herons, swallows, blackbirds, and other diurnal migrants. For example, Tussey Mountain reported 57 Tundra Swans, 107 Ring-billed Gulls, and 25 Red-winged Blackbirds on the peak Golden Eagle day of 10 March. Presque Isle

recorded thousands of other migrants through the spring with sightings of Common Loon, Sandhill Crane, Northern Flicker, and Eastern Meadowlark on their peak raptor day of 15 April. Counts of other species recorded at hawkwatches are summarized and archived at www.hawkcount.org.

Conclusion

Spring raptor counts continued to bring excitement to spring birding possibilities across

possibilities across

Acknowledgements

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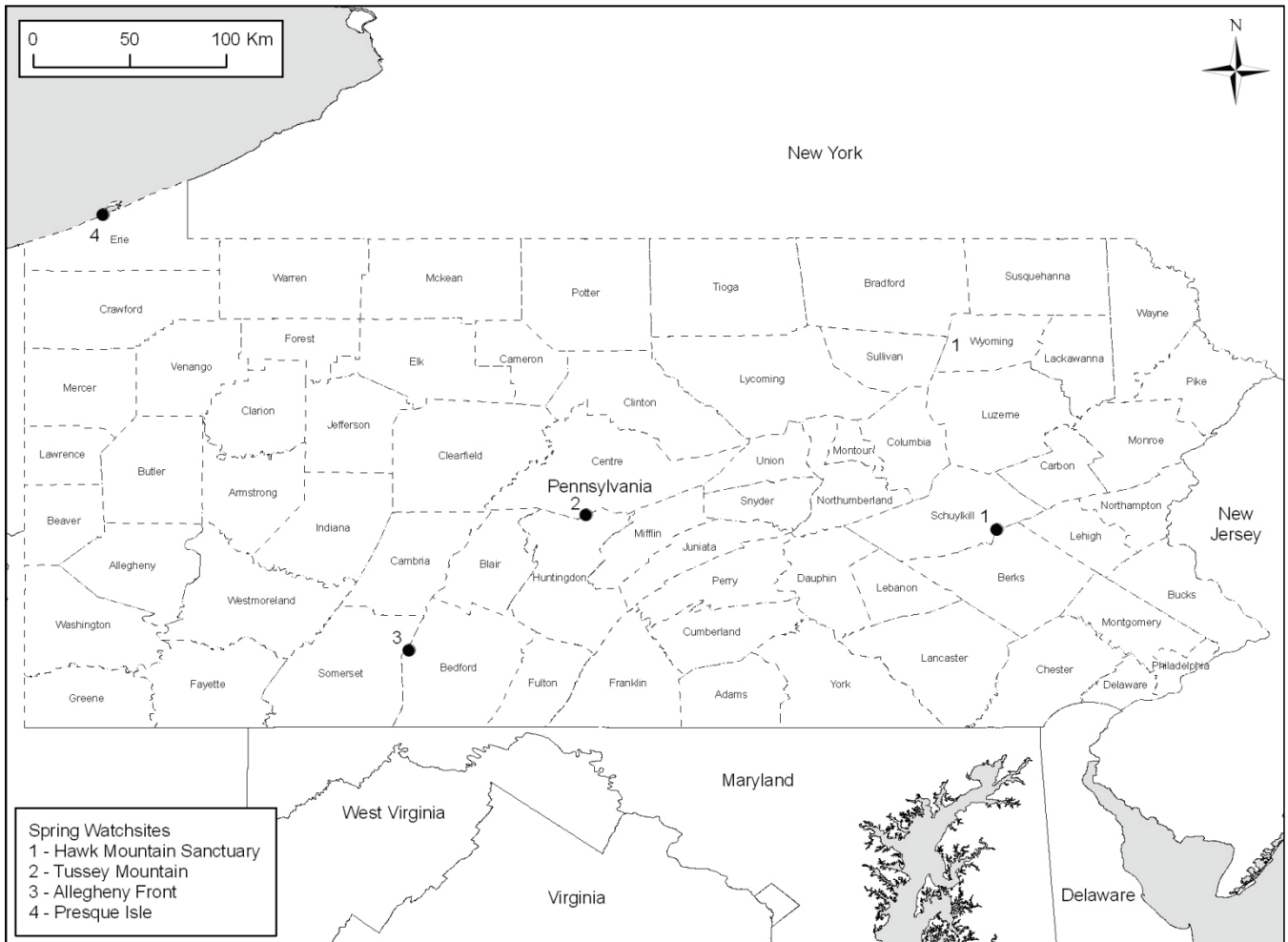


Table 3. Spring 2013 count results for Pennsylvania watch sites.

ALLEGHENY FRONT (Bedford) - Bob Stewart, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	STKI	MIKI	UNID.	TOTAL
February	2	11.5	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4
March	16	87.0	0	80	0	7	3	13	5	0	27	0	56	1	38	0	1	0	0	0	0	4
April	29	189.5	16	100	38	7	8	78	24	4	14	167	147	0	7	17	2	2	0	0	34	665
Total	47	288.0	16	183	38	14	11	91	29	4	41	167	204	1	45	17	3	2	0	0	38	994
Total/hr.			0.06	0.64	0.13	0.05	0.04	0.32	0.10	0.01	0.14	0.58	0.71	0.00	0.16	0.06	0.01	0.00	0.00	0.00	0.13	3.45
% flight			1.61	18.41	3.82	1.41	1.11	9.15	2.92	0.40	4.12	16.80	20.52	0.10	4.53	1.71	0.30	0.20	0.00	0.00	3.82	100.00
Average	64.7	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	72.7	24.6	5.5	3.6	0.0	0.0	88.0	1833.9

HAWK MOUNTAIN (Berks/Schuylkill) - Laurie Goodrich and Marta Sendra, compilers

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	STKI	MIKI	UNID.	TOTAL
March	2	2.0	0	14	0	0	1	0	0	0	1	0	3	0	0	0	0	0	0	0	0	19
April	29	182.0	76	38	76	33	27	127	67	1	11	381	114	1	0	25	2	6	1	0	159	1145
May	14	82.1	23	2	19	7	18	8	25	1	1	77	37	0	0	3	3	0	0	0	23	247
Total	45	266.1	99	54	95	40	46	135	92	2	13	458	154	1	0	28	5	6	1	0	182	1411
Total/hr.			0.37	0.20	0.36	0.15	0.17	0.51	0.35	0.01	0.05	1.72	0.58	0.00	0.00	0.11	0.02	0.02	0.00	0.00	0.68	5.30
% flight			7.02	3.83	6.73	2.83	3.26	9.57	6.52	0.14	0.92	32.46	10.91	0.07	0.00	1.98	0.35	0.43	0.07	0.00	12.90	100.00
Average	44.5	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

Militia Hill (Montgomery) - Andy Dayer, Rich Conroy, and Lynn Jackson, compilers

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	STKI	MIKI	UNID.	TOTAL
April	1	6.0	0	23	0	1	1	6	7	0	1	16	3	0	0	1	0	0	0	0	1	60
Total	1	6.0	0	23	0	1	1	6	7	0	1	16	3	0	0	1	0	0	0	0	1	60
Total/hr.			0.00	3.83	0.00	0.17	0.17	1.00	1.17	0.00	0.17	2.67	0.50	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.17	10.00
% flight			0.00	38.33	0.00	1.67	1.67	10.00	11.67	0.00	1.67	26.67	5.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	1.67	100.00

PRESQUE ISLE (Erie) - Jerry McWilliams, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	STKI	MIKI	UNID.	TOTAL
March	21	81.0	0	6889	1	24	26	74	45	0	419	0	402	17	0	58	4	0	0	0	14	7773
April	27	130.5	1	8728	93	71	64	1224	69	0	49	3251	419	7	1	467	12	10	0	0	22	14489
May	23	71.0	0	2029	90	77	32	441	15	0	0	1340	104	0	0	12	6	0	0	0	0	4163
Total	71	282.5	1	17446	184	172	122	1739	129	0	468	4591	925	24	1	537	22	16	0	0	36	26425
Total/hr.			0.00	61.80	0.70	0.60	0.40	6.20	0.50	0.00	1.70	16.30	3.30	0.10	0.00	1.90	0.10	0.10	0.00	0.00	0.10	93.50
% flight			0.00	66.02	0.70	0.65	0.46	6.58	0.49	0.00	1.77	17.37	3.50	0.09	0.00	2.03	0.08	0.06	0.00	0.00	0.14	100.00
Average	49.2	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	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	STKI	MIKI	UNID.	TOTAL
February	4	26.8	7	16	0	2	0	0	0	0	1	0	7	0	4	0	0	0	0	0	1	38
March	28	206.2	16	156	4	13	8	25	14	0	28	0	123	5	156	11	0	1	0	0	9	569
April	10	55.5	0	2	13	8	2	44	3	0	3	107	72	0	17	9	4	0	0	0	2	286
Total	42	288.4	23	174	17	23	10	69	17	0	32	107	202	5	177	20	4	1	0	0	12	893
Total/hr.			0.10	0.60	0.10	0.10	0.00	0.20	0.10	0.00	0.10	0.40	0.70	0.00	0.60	0.10	0.00	0.00	0.00	0.00	0.00	3.10
% flight			2.58	19.48	1.90	2.58	1.12	7.73	1.90	0.00	3.58	11.98	22.62	0.56	19.82	2.24	0.45	0.11	0.00	0.00	1.34	100.00
Average	58.7	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

2013 TOTAL FOR ALL PENNSYLVANIA WATCHSITES

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	STKI	MIKI	UNID.	TOTAL
February	6	38.3	7	19	0	2	0	0	0	0	1	0	8	0	4	0	0	0	0	0	1	42
March	67	376.2	16	6939	5	44	38	112	64	0	475	0	584	23	194	69	5	1	0	0	27	8686
April	96	563.5	93	8891	220	120	102	1479	170	5	78	3922	755	8	25	519	20	18	1	0	218	16645
May	37	153.1	23	2031	109	84	50	449	40	1	1	1417	141	0	0	15	9	6	0	0	23	4410
Total	206	1131.0	139	17880	334	250	190	2040	274	6	555	5339	1488	31	223	603	34	25	1	0	269	29783
Total/hr.			0.12	15.81	0.30	0.22	0.17	1.80	0.24	0.01	0.49	4.72	1.32	0.03	0.20	0.53	0.03	0.02	0.00	0.00	0.24	26.33
% flight			0.47	60.03	1.12	0.84	0.64	6.85	0.92	0.02	1.86	17.93	5.00	0.10	0.75	2.02	0.11	0.08	0.00	0.00	0.90	100.00
Average	216.9	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	12254.7