

# Pennsylvania Autumn Raptor Migration Summary 2017

## Laurie Goodrich

Hawk-watching is alive and well in Pennsylvania with 15 watch sites reporting in autumn 2017. These included two educational institutions, Freedom Area High School in Butler County and Millersville University in Lancaster County, where watchers were largely students. In September 2017, coastal storms with east winds pushed broad-winged hawk flights to ridges and mild October and November weather delayed short-distance migrants, elongating the migration for some sites and likely allowing some birds to remain north of Pennsylvania altogether. December storms challenged both migrants and watchers and monthly tallies did not compensate for November deficits. Despite the mercurial autumn weather in 2017, total hawks equaled the long-term average, partly due to concentrations of broad-winged hawks at sites in the Appalachian ridges during September.

### Migration Summary

Fifteen autumn raptor migration watch sites recorded a near-average 122,734 hawks statewide in 1221 days and 8052 hours of effort between August 1 and January 5 (Table 1). Total counts were the highest since 2013 when 124,465 hawks were tallied for Pennsylvania sites statewide and hawk counting effort was 5% above the statewide average of 7985 site hours.

As seen in Table 3, season totals statewide in 2017 were above average for turkey vulture, bald eagle, broad-winged hawk, and peregrine falcon. Black vulture statewide totals were below-average along with osprey, northern harrier, sharp-shinned hawk, Cooper's hawk, northern goshawk, red-tailed hawk, golden eagle, American kestrel, and Merlin. For eight species the 2017 totals represent the lowest statewide totals since 2005. Osprey continued a decline statewide heightening concern for their populations in the northeast (Figure 1). Changes may be partly due to increases in regional populations of bald eagles although further investigation seems warranted. Despite declines,

some mid-September days brought banner flights, particularly along the Kittatinny Ridge with Little Gap counting 47 ospreys and Bake Oven Knob 33 in one day for the two highest one-day counts for the state (Table 2).

Rarities in autumn migration 2017 included two Mississippi kites, one each at Militia Hill and Rose Tree Park, and one swallow-tailed kite at Allegheny Front (Table 1). No Swainson's hawks were sighted in 2017.

### Site Highlights

**Allegheny Front (Somerset/Bedford)** – Allegheny Front watchers tallied 6625 hawks in 119 days and 772 hours of coverage between August 15 and December 24. The season total was 15% below the 10-year average of 7768. All species showed average to below-average counts. The largest dip was seen for several October migrants including sharp-shinned hawk (757; 30% below the 10-year average), Cooper's hawk (76; 54% below-average), and red-shouldered hawk (32; 35% below average). In contrast the site set a new record for bald eagle (181) and tallied back-to-back days with 25 bald eagles on August 27th and 28th. Golden eagles were slightly below average (194, compared to a ten-year average of 201) (Table 1). Peak flights of golden eagles included 33 on November 11 and 50 on November 15 with most eagles being adults. September 18 brought the highest one-day count of the season with 1109 broad-winged hawks soaring south along with nine other species (Table 2). Allegheny Front recorded one of the rarest of fall migrants, a swallow-tailed kite that flew 40 feet over the watchers at 10:30 am on August 28 (details in site report on hawkcount.org).

**Bake Oven Knob (Lehigh)** - Bake Oven recorded 14,490 raptors, 9% above the ten-year average of 13,251 hawks, in 104 days and 794 hours of counting between August 15 and November 28. Seasonal totals in 2017 were above-average for bald

eagle and broad-winged hawk but average to below-average for most other species (Table 1). The broad-winged hawk total was 8893, which is 55% above the ten-year average of 5717 birds and the highest season count since 2002. Counters set a new record for bald eagles, the 411 tallied breaking the record of 388 set in 2013. The bald eagle one-day peak count occurred on August 31 with 21 recorded, including 13 adult birds; most days included eagles flying south. Large dips in numbers were seen for both October and November migrants including northern goshawk (8; 65 % below the ten-year average), red-tailed hawk (970; 39% below average), osprey (268; 27% below average), and sharp-shinned hawk (1837; 36% below average). Bake Oven counters recorded three back to back days exceeding 1000 birds from September 17 through 19, with a one-day season peak flight on September 17 of 2678 total hawks, dominated by 2604 broad-wings. Amid the broad-wing rush, Bake Oven watchers recorded the third highest one-day count for Osprey, with 26 on September 18 (Table 2).

**Chester County Hawkwatch at Bucktoe Creek Preserve (Chester)** – Southern Chester County Hawkwatch at Bucktoe counted 14,456 hawks in 100 days and 742 hours setting a new record for the site. Counts of broad-winged hawks totaled 10,649, compared to the average of 3522, partly due to increased seasonal coverage. Broad-wings concentrated at the site later than those on the Kittatinny Ridge, peaking September 22 and 23 when 4423 and 4522 broad-wings were recorded, respectively, along with 19 ospreys, 15 bald eagles, 36 American kestrels, and five Merlins for the two days (Table 2). In a late season highlight, counters tallied 3 golden eagles along with 36 red-tails, 25 red-shoulders and 50 turkey vultures among 134 raptors on November 11.

**Council Cup (Luzerne)** – Council Cup tallied an above-average 1705 migrating hawks in 23 days and 85 hours from early September through early November (Table 1). The count of 1389 broad-winged hawks, compared to a ten-year average of 436, was largely responsible for the overall above-average total count (Table 1). Season totals were the highest recorded since 1998 and the one-day count of 707 hawks on September 15, which included 691 broad-wings, was one of the highest one-day counts in more than 15 years (Table 2). Two days later, another 472 broad-wings soared overhead for the second-highest count of the season. Halloween brought 8 bald eagles, 46 turkey vultures, and 14 sharp-shinned hawks with one almost hitting the counter. A north wind on November 4 brought 53 hawks including 15 red-tailed hawks and 18 turkey vultures. Further coverage of this site could prove intriguing given the 2017 tallies, and I encourage Luzerne birders to consider assisting with coverage of this watch site in 2018.

**Table 2. Peak one-day migration counts for selected species.**

Site Name	Broad-winged Hawk		Osprey		Northern Goshawk	
	Peak Count	Date	Peak Count	Date	Peak Count	Date
<b>Allegheny Front</b>	1109	Sep 18	6	Sep 10	2	Nov 4
<b>Bake Oven Knob</b>	2604	Sep 17	26	Sep 18	1	several
<b>Bucktoe Preserve</b>	4522	Sep 23	14	Sep 22	-	-
<b>Council Cup</b>	691	Sep 15	3	Sep 28	-	-
<b>Freedom Area</b>	-	-	-	-	-	-
<b>Hawk Mountain</b>	4019	Sep 17	33	Sep 22	1	several
<b>Jack's Mountain</b>	1209	Sep 17	9	Sep 19	1	several
<b>Little Gap</b>	<b>5414</b>	<b>Sep 17</b>	<b>47</b>	<b>Sep 18</b>	1	several
<b>Militia Hill</b>	2028	Sep 22	14	Sep 16	1	Oct 12
<b>Millersville</b>	93	Sep 18	1	several	-	-
<b>Rocky Ridge</b>	971	Sep 19	8	Sep 19	-	-
<b>Rose Tree Park</b>	1351	Sep 22	12	Sep 22	-	-
<b>Second Mountain</b>	2178	Sep 18	5	Sep 16	1	several
<b>Stone Mountain</b>	913	Sep 17	8	Sep 7	1	Oct 16
<b>Waggoner's Gap</b>	3859	Sep 18	22	Sep 18	<b>3</b>	<b>Oct 16</b>

Peak one-day count statewide shown in bold type

**Table 3. 2017 Totals**

	Total	10 Year Ave	% of Ave
Days	1,222	1,155	5.8
Hours	8,055	7,639	5.4
BLVU	933	1,242	-24.9
TUVU	7,767	6,839	13.6
OSPR	1,635	2,402	-32.0
BAEA	2,941	2,256	30.4
NOHA	662	898	-26.3
SSHA	15,846	24,762	-36.0
COHA	2,270	2,748	-17.4
NOGO	40	142	-72.0
RSHA	1,084	1,090	-0.6
BWHA	77,997	64,718	20.5
RTHA	7,133	12,017	-40.6
RLHA	11	11	-0.9
GOEA	979	1,074	-8.9
AMKE	1,617	1,829	-11.6
MERL	520	643.8	-19.2
PEFA	383	371	3.0
SWHA	0	3	-100.0
Unid	918	1,097	-16.3
Total	122,737	124,150	-1.1

**Freedom Area Hawk Watch (Butler)** - Pennsylvania welcomed a new hawkwatch to the line-up in the west. Students from Freedom Area High School in Butler County and their professor, Brian Wargo, launched a new hawkwatch in 2017 with coverage spanning mid-October to early November and including 15 days and 15 hours of counting, with daily coverage ranging from half to full hours. Seventy-eight total raptors were tallied, with daily counts ranging from zero to 12 hawks. The most abundant species counted was turkey vulture with 43 followed by red-tailed hawk at 19 (Table 1). Students enjoyed spotting an adult bald eagle on November 20. We hope to see more reports from this and other high school hawkwatches in the future (see [www.lmmana.org](http://www.lmmana.org) for student and youth educational materials).

**Hawk Mountain Sanctuary (Berks/Schuylkill)**

- Hawk Mountain recorded a near-average 17,051 hawks in 124 days and 1015 hours of counting (Table 1). Hours were 7% below average. The broad-winged hawk count of 10,726 was 38% above-average, carrying the season total of all raptors to near-average despite low totals for some common migrants including sharp-shinned and red-tailed hawk, 40% and 44% below the 10-year average, respectively (Table 1). Above-average counts were observed for turkey vulture (701) bald eagle (430) and peregrine falcon (68) (Table 1). Like nearby Kittatinny sites, September 17 brought the peak broad-winged hawk flight at Hawk Mountain with 4019 counted, many passing in a single hour in the afternoon (Table 2). Nearly 9000 broad-wings were tallied in the four days from September 16-19. The highest one-day count for osprey was 33, on September 22. October and November counts were lower than expected although November 10 brought 30 eagles including 16 goldens, along with 302 red-tailed hawks and 14 red-shouldered hawks. The paltry season total of 3 northern goshawks

was the lowest ever in the 80-plus year history of Hawk Mountain, reinforcing questions about the status of this species throughout the northeast.

**Jacks Mountain (Mifflin)** - Jacks counters tallied an above-average 8017 hawks with an above-average effort of 100 days and 625.5 hours of coverage (Table 1). The Broad-winged hawk count was nearly double the 10-year average, with September 17 bringing 1209 broad-wings (Table 2). Above-average counts were tallied for most species excepting osprey (47) and red-tailed hawks (309). A new record was set for bald eagle (153) reflecting both the increase in regional populations and the increase in effort (Table 1). The golden eagle total of 151 nearly tied the record of 152 in 2015. Peak golden eagle numbers came in mid-November with a one-day high of 26 on November 19. Golden eagles flew past nearly daily through December with a late peak of 6 on December 20. Four of the state's 11 rough-legged hawks were spotted by Jack's counters, 2 in November and 2 in December, suggesting this site may be a place to look for this species in late fall.

**Little Gap (Northampton)** - Little Gap recorded an above average 16,420 hawks in 83 days and 548 hours of counts. September was busy for this eastern Kittatinny Ridge site as broad-winged hawks clustered along the ridge using south to southeast wind updrafts. Counters tallied 5414 broad-wings, mostly afternoon birds, on September 17 for the highest one-day peak count statewide (Table 2) followed by another big day September 18 with 4501 broad wings passing, again mostly in afternoon. The same day Little Gap sighted a one-day peak count of osprey (47) leading the state in one-day counts for this species (Table 2). In contrast, the northern goshawk total of 4 was the

lowest on record, as was also the case with red-tails at 674, the lowest total since the 1990s. November 10 brought the best late season day, with counters recording 95 red-tails, 7 golden eagles, 6 bald eagles, a lone goshawk, and an immature rough-legged hawk, one of the few counted in the state in 2017.

**Militia Hill (Montgomery)**- Militia watchers often experience boom or bust in September with broad-winged hawk counts. In 2017, a partial "bust" was experienced with a below-average 3934 tallied compared to the ten-year average of 10,680 for this September/October watch site. Most species were below-average excepting Merlin, of which 40 were tallied, 14% above-average. Broad-winged hawks were 63% below the average, reflecting the poor weather in September. The highest one-day broad-wing count occurred later than the ridge sites, with 2028 swirling past on September 22, among 2090 raptors in total (Table 2). The following day, another 560 broad-wings were counted. On September 16 counters recorded a peak one-day count of osprey (14), and one of the rarest migrants of the season, a Mississippi kite. October raptor totals were lower than average with peak daily numbers occurring in mid-month when 186 and 164 were recorded on October 16 and 17, respectively, dominated by counts of 114 and 111 turkey vultures each day.

**Millersville University (Lancaster)** - Millersville University hawkwatchers, primarily students, counted 286 hawks in 32 days and 118 hours. This watch site is based on top of a science center building and organized by professor Dr. Aaron Haines for his biology students. Students began the counting September 13 and continued through October 27. The highest one-day count occurred on September 18 with 93 broad-winged hawks, 3 Merlins, one osprey, one Cooper's hawk, and one turkey vulture. A high of two bald eagles occurred September 15 and again on October 2. Highest totals recorded were broad-wings, turkey vultures and American kestrels (Table 1). We hope this

**Number of Osprey per Hour at Pennsylvania Watchsites in Autumn Migration**

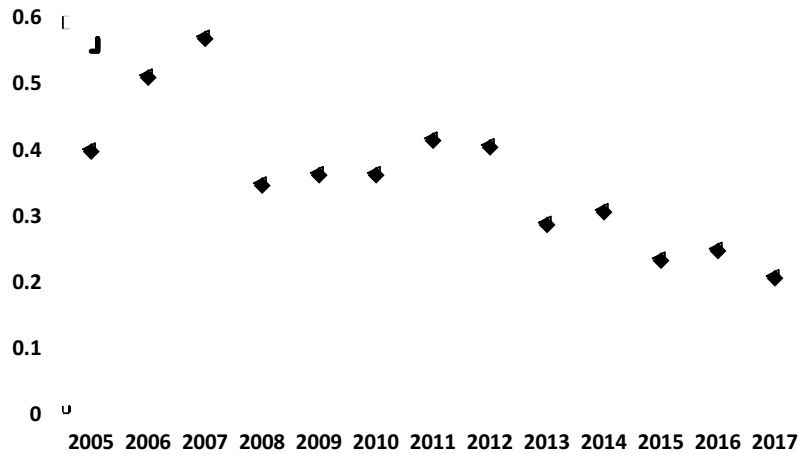


Figure 1. Declines in sightings of Osprey at PA watch sites reflect regional patterns observed in other states and suggest northeastern population declines (see [rpi-project.org](http://rpi-project.org)).

southern Pennsylvania site will continue and expand in the future, and that student watchers will visit other Pennsylvania sites to assist with spotting!

**Rocky Ridge (York)** - Rocky Ridge counters recorded an above-average count 3382 raptors in 84.8 hours among 17 days, mostly in September (Table 1). The peak flight for the site occurred on September 19 with 971 broad-winged hawks, 120 sharp-shinned hawks, 8 ospreys, and 20 American kestrels (Table 2). A rarity was seen near but not at the site, a Mississippi kite on September 16, not included in the total but still notable. The same day brought the second highest count for the season, 834 raptors, which included 799 broad wings. A one-day peak count of 11 bald eagles soared past on September 9, along with 57 other raptors. Counts in October were low although coverage was less consistent than in September (Table 1).

**Rose Tree Park (Delaware)** - Rose Tree Park in Media recorded 4737 raptors in 78 days and 495 hours from September 1 to November 19. Counts were 23% below the ten-year average of 6191 hawks largely because of the broad-wing count of 2343, which was 31% below average (Table 1). Sharp-shinned hawks also were low, 373 compared to ten-year average of 955. Despite lower total counts, several species were above-average including turkey vulture, with 1039 counted compared to the average of 504, and peregrine falcon, with 24 compared to the ten-year average of 18 (Table 1). Bald eagles and American kestrel totals were slightly above-average as well. The one-day peak count for the site was September 22 when 1351 broad-wings, 93 sharp-shins, 37 American kestrels, 12 ospreys, 7 northern harriers, and 4 bald eagles were spotted among a total of 1515 hawks (Table 2). An exceptional late season day occurred November 8 when 194 turkey vultures, 43 red-shouldered hawks, 62 red-tailed hawks, 4 bald eagles, and one peregrine falcon sailed past among 328 raptor migrants. The rarest migrant for the season was sighted on September 20, when an immature Mississippi kite sailed overhead and was photographed before it disappeared to the south.

**Second Mountain (Lebanon)** - Second Mountain watchers tallied 7610 hawks in 739 hours over 127 days of counts. Hawk totals were 19% below average while hours dropped by 15%. The Broad-winged hawk total of 4654 was 3% above-average, partly due to mid-September peak flights. In contrast, late season migrants, including both sharp-shins and red-tails were low, down 42% and 55% compared to the ten-year average (Table 1). Northern goshawk counts were notably low, only 2 in contrast to the average of 17 (Table 1). Some of these deficits are likely due to birds remaining north of central Pennsylvania. Counters tallied 4 rough-legged hawk, compared to an average of 2 in past years.

Broad-winged hawk peak days began on September 16 when 1085 sailed overhead along with a season peak of 5 ospreys. Two days later, on September 18, a one-day season peak count of 2178 broad-wings was recorded (Table 2). A particularly notable flight in late season occurred November 20 when 12 bald and 4 golden eagles and 2 rough-legged hawks were counted among 31 raptors for the day. A late peregrine falcon was observed December 3.

**Stone Mountain (Huntingdon/Mifflin)** - Stone Mountain counted 4627 hawks in 88 days and 514 hours for an above-average season count (Table 1). Effort was the second-highest for the site in the 23 years of counting. Season counts were above-average for bald eagle (158; up 42% compared to ten-year average), and golden eagle (138; up 15% compared to the ten-year average). Other above-average counts included broad-winged hawk (2445), the highest total since 2009 and 43% above the ten-year average. Both vultures, northern harrier, and merlin all showed above-average counts (Table 1) while osprey, sharp-shinned and Cooper's hawks, goshawk, red-tailed hawk, and American kestrel counts were below-average. Stone Mountain watchers note that the lack of cold fronts and strong winds may have diminished numbers in 2017 (Table 1) along with the short-stopping migration patterns for red-tailed hawk and possibly Cooper's hawk and sharp-shinned hawk. A single goshawk represented the lowest count on record for the site, 83% below average (Table 1).

The highest one-day count occurred on September 17 when 913 broad-wings among 933 total raptors sailed overhead (Table 2). Two notable November flights included 28 golden eagles and 77 red-tails on November 10, the second-best day for golden eagles on record, and 20 golden eagles on the November 22, helping to boost the November total to 107 goldens. Seven golden eagles were sighted on the last day of the count, December 13 along with a lone bald eagle bringing the site's final eagle tally to 138 golden and 158 bald eagles.

**Waggoner's Gap (Cumberland)**- Waggoner's Gap tallied a below-average total of 17,568 hawks during 1042 hours and 141 days of counts, 22%

below the ten-year average (Table 1). Donations in 2017 allowed the Pennsylvania Audubon-led site to hire a counter to assist volunteers with coverage for the peak three months of the season. Despite renewed energies, a dearth of late-season migrants and notably lower accipiter counts led to lower raptor totals overall, as was observed at many other watch sites. The total of 545 bald eagles was 12% above the ten-year average. Peregrine falcon, with 75 counted, was up 29%. Although many October and November migrating raptors were lower than average, the low counts of northern goshawk (12; 70% lower than average), and rough-legged hawk (one; 66% lower than average), were most notable. The Osprey total of 238 was 35% below average.

The peak one-day count for the site occurred on September 18 when 3967 hawks migrated past the site including a peak one-day count of osprey (22) and broad-wings (3859). Waggoner's Gap also counted one of the best October flights for the state on October 16, when northwest winds brought 761 migrating raptors to the site for the day including 22 bald eagles, 466 sharp-shins, 53 Cooper's hawks, and 3 northern goshawks, a one-day peak statewide (Table 2). Falcons also concentrated at the site that day with 36 American kestrels, 9 Merlins, and 5 peregrines tallied. Northwest winds on November 10 brought a banner eagle day with 45 golden eagles accompanied by 229 red-tails and 8 bald eagles. The one-day count of 45 golden eagles was the second highest one-day count on record for the site and the second highest one-day count for the state in 2017. Hawks continued to be tallied through December with the season ending with 4 red-tails and 2 golden eagles on New Year's Eve.

**Conclusions**

Warmer than average autumn weather in 2017 along with infrequent cold fronts may have dampened hawk migration for most Pennsylvania sites, particularly in October and November. Local weather patterns favored the broad-winged hawk migration along ridges in September with Kittatinny hawk watch sites observing banner broad-winged migration. Many Pennsylvania sites continued to record very strong bald and golden eagle flights in 2017 with some near record one-day counts and a

**Total migrant raptors per hour at Pennsylvania watchsites**

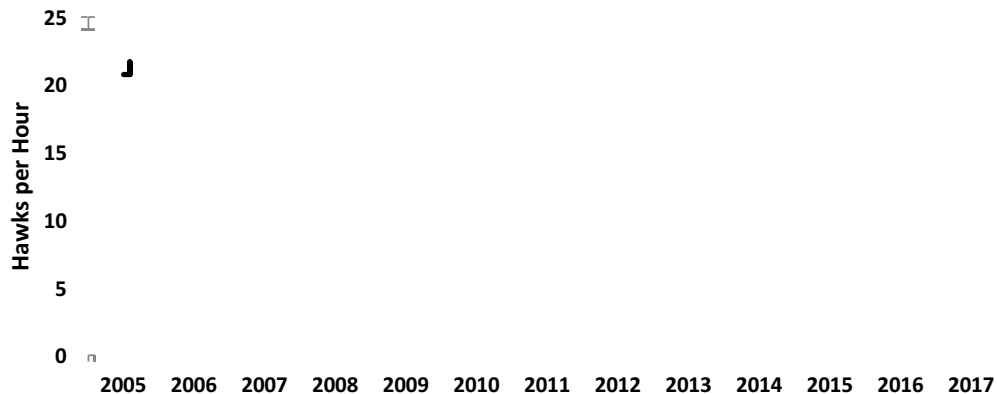


Figure 2. Total migrant raptors per hour sighted in autumn migration at Pennsylvania watchsites, 2005 to 2017.

few new site records set for these species. Southeastern Pennsylvania sites were disappointed by the broad-wing shift to the ridges, but the pendulum will undoubtedly back in the near future.

Despite the widespread disappointment in the lack of fronts and cold weather in 2017, the late autumn migration period did produce some amazing days including 761 hawks on October 16 at Waggoner's Gap and the second-highest golden eagle tally ever recorded at the site on November 10. The following day, Allegheny Front tallied 33 golden eagles and another 50 on November 15. Little Gap led the broad-wing one-day totals with 5414 September 17 and many sites had phenomenal broad-wing one day totals the same day or soon thereafter.

If we examine the season totals for autumn migration statewide and their patterns over time (Figure 2), it is clear that hawk-watching and hawk migration is still alive and well in Pennsylvania. With 15 sites reporting, the active site list is the second highest on record. Moreover, it has only been six years since counters recorded the highest number of hawks in one season ever recorded in Pennsylvania, 171,925, a rate of 21.6 birds per hour statewide (Figure 2). And although many watchers long for more mid- and late season excitement, it is important to note that in 2016 Pennsylvania watchers tallied an above-average 12,316 red-tails migrating past the lookouts, so late season migration thrills are not over and we may expect a return of several hundred red-tails and sharp-shins at a site near you in the future.

### Acknowledgments

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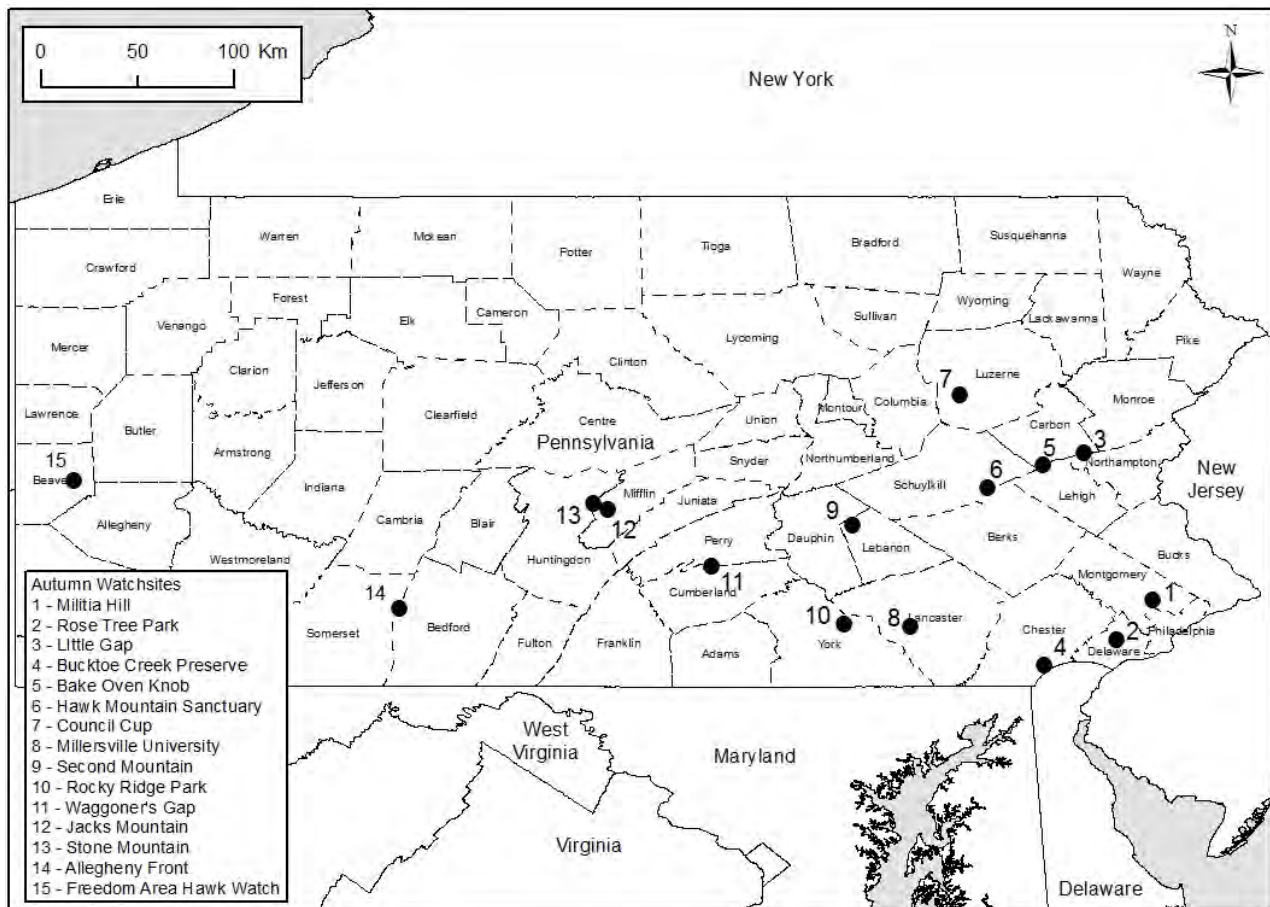


Table 1. Autumn 2017 count results for Pennsylvania watchsites.

**ALLEGHENY FRONT (Bedford/Somerset) - Bob Stewart, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GAEA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	17	123.5	0	1	23	57	3	17	6	0	0	228	68	0	0	2	2	2	0	11	421
September	30	213.5	15	9	43	77	11	128	25	2	16	3348	154	0	0	14	7	9	0	26	3884
October	31	211.3	8	214	5	31	8	576	37	0	0	505	0	31	10	17	16	0	0	7	1473
November	30	167.3	9	198	0	12	3	33	7	3	4	0	142	0	0	0	1	1	0	0	791
December	11	56.0	0	0	0	4	0	3	1	1	4	0	22	0	0	0	0	0	0	0	56
<b>Total</b>	<b>119</b>	<b>771.5</b>	<b>32</b>	<b>422</b>	<b>71</b>	<b>181</b>	<b>25</b>	<b>757</b>	<b>66</b>	<b>6</b>	<b>32</b>	<b>3576</b>	<b>1121</b>	<b>0</b>	<b>194</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>0</b>	<b>50</b>	<b>6625</b>
Total per hr		0.04	0.55	0.09	0.23	0.03	0.03	0.98	0.10	0.01	0.04	4.64	1.45	0.00	0.25	0.03	0.03	0.04	0.00	0.06	8.59
% of flight		0.5	6.4	1.1	2.7	0.4	11.4	11.4	1.1	0.5	54.0	16.9	0.0	2.9	0.4	0.4	0.4	0.0	0.0	0.8	100.0
Average last 10 yrs	113.6	797.0	34.2	418.9	91.5	115.3	44.1	1080.3	167.0	7.1	49.5	3938.9	1382.3	1.9	201.4	56.7	28.8	27.1	0.0	122.9	7768.0

\*Includes (1) Swallow-Tailed Kite 8/28/17

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**BAKE OVEN KNOB (Lehigh) - Bob Hoopes, Dan Kunkle, co-compilers**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GAEA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	17	134.8	48	152	56	65	4	8	4	0	6	226	46	0	0	7	3	1	0	39	665
September	30	239.0	91	207	173	144	17	350	52	2	7	8664	71	102	0	72	12	12	0	102	9976
October	31	235.3	91	371	36	131	42	1392	169	4	39	3	274	0	22	32	40	35	0	101	2782
November	26	184.8	61	112	3	71	6	87	13	2	46	0	579	0	40	0	3	0	0	44	1067
<b>Total</b>	<b>104</b>	<b>793.8</b>	<b>291</b>	<b>842</b>	<b>268</b>	<b>411</b>	<b>69</b>	<b>1837</b>	<b>238</b>	<b>8</b>	<b>98</b>	<b>8893</b>	<b>970</b>	<b>0</b>	<b>62</b>	<b>111</b>	<b>58</b>	<b>48</b>	<b>0</b>	<b>286</b>	<b>14490</b>
Total per hr		0.37	1.06	0.34	0.52	0.09	0.23	2.31	0.30	0.01	0.12	11.20	1.22	0.00	0.08	0.14	0.07	0.06	0.00	0.36	18.26
% of flight		2.0	5.8	1.8	2.8	0.5	12.7	12.7	1.6	0.1	0.7	61.4	6.7	0.0	0.4	0.8	0.4	0.3	0.0	2.0	100.0
Average last 10 yrs	103.2	807.7	293.5	962.3	365.1	269.5	91.3	2887.3	252.0	22.6	116.2	5717.7	1592.7	0.4	99.5	146.7	88.5	51.7	0.0	273.9	13251.3

**BUCKTOE CREEK PRESERVE(Chester) - Larry Lewis, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GAEA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	9	67.0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
September	30	238.5	0	0	111	98	20	291	105	0	8	10635	7	0	0	111	18	1	0	8	11413
October	31	232.0	0	268	12	153	13	497	167	0	38	14	128	0	1	74	5	5	0	3	1378
November	30	204.0	0	651	1	91	20	295	72	0	225	0	287	0	5	7	1	1	0	0	1656
<b>Total</b>	<b>100</b>	<b>741.5</b>	<b>0</b>	<b>919</b>	<b>124</b>	<b>346</b>	<b>53</b>	<b>1083</b>	<b>344</b>	<b>0</b>	<b>271</b>	<b>10649</b>	<b>422</b>	<b>0</b>	<b>6</b>	<b>195</b>	<b>26</b>	<b>7</b>	<b>0</b>	<b>11</b>	<b>14456</b>
Total per hr		0.00	1.24	0.17	0.47	0.07	0.14	1.46	0.46	0.00	0.37	14.36	0.57	0.00	0.01	0.26	0.04	0.01	0.00	0.01	19.50
% of flight		0.0	6.4	0.9	2.4	0.4	7.5	7.5	2.4	0.0	1.9	73.7	2.9	0.0	0.0	1.3	0.2	0.0	0.0	0.1	100.0
Average for 4 yrs	60.5	420.7	0.0	354.8	84.5	188.3	32.0	634.0	205.5	0.5	137.0	3522.3	343.5	0	4.3	112.3	17.8	5.0	0.0	5.7	4910.0

**COUNCIL CUP (Luzerne) - Donald Kapral, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GAEA	AMKE	MERL	PEFA	SWHA	Unid	Total
September	12	48.5	0	0	4	16	6	26	0	0	0	1389	0	0	0	18	0	0	0	2	1461
October	6	18.0	0	102	0	12	2	39	3	0	0	5	0	0	0	7	0	0	0	0	170
November	5	18.5	0	20	0	3	4	19	4	0	0	0	24	0	0	0	0	0	0	0	74
<b>Total</b>	<b>23</b>	<b>85</b>	<b>0</b>	<b>122</b>	<b>4</b>	<b>31</b>	<b>12</b>	<b>84</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1,389</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1,705</b>
Total per hr		0.00	1.44	0.05	0.36	0.14	0.99	0.08	0.00	0.00	0.00	16.34	0.34	0.00	0.00	0.29	0.00	0.00	0.00	0.02	20.06
% of flight		0.0	7.2	0.2	1.8	0.7	4.9	4.9	0.4	0.0	0.0	81.5	1.7	0.0	0.0	1.5	0.0	0.0	0.0	0.1	100.0
Average for 10 yrs	20.0	90.5	1.1	132.9	15.6	34.8	6.6	92.9	9.3	0.0	0.6	436.1	183.3	0.0	0.6	23.0	0.1	0.9	0.0	21.5	960.4

**FREEDOM AREA (Butler) Brian Wargo, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GAEA	AMKE	MERL	PEFA	SWHA	Unid	Total
October	7	6.8	0	36	0	0	0	1	0	0	1	0	7	0	0	0	0	0	0	1	46
November	6	5.0	0	7	0	1	0	1	2	0	0	0	8	0	0	0	0	0	0	5	24
December	2	3.0	0	0	0	0	0	1	0	0	1	0	4	0	0	0	0	0	0	2	8
<b>Total</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>78</b>
Total per hr		0.00	2.92	0.00	0.07	0.00	0.00	0.20	0.14	0.00	0.14	0.00	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.54	5.29
% of flight		0.0	55.1	0.0	1.3	0.0	3.8	3.8	2.6	0.0	2.6	0.0	24.4	0.0	0.0	0.0	0.0	0.0	0.0	10.3	100.0
Average for 10 yrs																					

**HAWK MOUNTAIN (Berks and Schuylkill) - Laurie Goodrich, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GEOA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	18	144.4	0	10	55	44	6	19	5	0	0	316	25	0	0	13	3	2	0	10	508
September	29	279.8	1	5	188	109	18	550	52	0	9	10394	50	0	0	146	40	14	0	33	11609
October	29	261.6	18	579	33	107	30	1763	252	0	44	16	228	0	20	71	65	47	0	102	3375
November	29	214.4	24	105	1	108	22	121	44	3	107	0	745	1	139	4	11	3	0	24	1393
December/January	19	115.0	1	2	0	62	3	0	5	0	2	0	74	0	14	0	1	2	0	0	166
<b>Total</b>	<b>124</b>	<b>1015.2</b>	<b>44</b>	<b>701</b>	<b>277</b>	<b>430</b>	<b>79</b>	<b>2453</b>	<b>358</b>	<b>3</b>	<b>162</b>	<b>10726</b>	<b>1122</b>	<b>1</b>	<b>104</b>	<b>234</b>	<b>120</b>	<b>68</b>	<b>0</b>	<b>169</b>	<b>17051</b>
Total per hr			0.04	0.69	0.27	0.42	0.08	2.42	0.35	0.00	0.16	10.57	1.11	0.00	0.10	0.23	0.12	0.07	0.00	0.17	16.80
% of flight			0.3	4.1	1.6	2.5	0.5	14.4	2.1	0.0	1.0	62.9	6.6	0.0	0.6	1.4	0.7	0.4	0.0	1.0	100.0
Average last 10 yrs	124.0	1093.8	133.2	581.9	421.4	362.5	139.4	4154.6	510.7	30.8	156.9	7768.2	2028.3	1.1	133.6	360.1	164.2	61.7	0.3	192.0	17495.4

**JACK'S MOUNTAIN (Milflin) - Darrell Smith, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GEOA	AMKE	MERL	PEFA	SWHA	Unid	Total
September	30	191.8	9	0	41	76	17	95	27	1	6	6088	23	0	0	34	5	2	0	4	6428
October	31	179.5	10	128	5	39	29	693	63	1	5	0	164	0	19	19	8	20	0	1	1204
November	26	171.0	9	5	1	34	9	25	3	1	16	0	112	2	109	0	0	0	0	2	328
December	13	83.3	13	0	0	4	2	0	0	0	3	0	10	2	23	0	0	0	0	0	57
<b>Total</b>	<b>100</b>	<b>625.5</b>	<b>41</b>	<b>133</b>	<b>47</b>	<b>153</b>	<b>57</b>	<b>813</b>	<b>93</b>	<b>3</b>	<b>30</b>	<b>6088</b>	<b>309</b>	<b>4</b>	<b>151</b>	<b>53</b>	<b>13</b>	<b>22</b>	<b>0</b>	<b>7</b>	<b>8017</b>
Total per hr			0.07	0.21	0.08	0.24	0.09	1.30	0.15	0.00	0.05	9.73	0.49	0.01	0.24	0.08	0.02	0.04	0.00	0.01	12.82
% of flight			0.5	1.7	0.6	1.9	0.7	10.1	1.2	0.0	0.4	75.9	3.9	0.0	1.9	0.7	0.2	0.3	0.0	0.1	100.0
Average last 10 yrs	69.9	396.3	31.6	132.3	57.4	89.3	33.5	589.0	68.8	2.3	16.6	3088.5	444.0	0.4	77.2	48.9	12.6	13.3	0.0	14.8	4719.2

**LITTLE GAP (Northampton) - Michael Schall, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GEOA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	7	37.5	0	0	12	13	0	9	3	0	0	40	6	0	0	6	1	0	0	4	94
September	28	175.8	0	15	200	112	14	335	29	0	6	12234	28	0	0	92	29	10	0	38	13142
October	29	208.3	10	401	17	80	36	1068	202	1	32	0	218	0	26	28	28	29	0	28	2194
November	19	126.8	5	146	0	62	13	168	49	3	38	0	422	1	53	0	6	3	0	21	990
December	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>83</b>	<b>548.3</b>	<b>15</b>	<b>562</b>	<b>229</b>	<b>267</b>	<b>63</b>	<b>1570</b>	<b>283</b>	<b>4</b>	<b>76</b>	<b>12274</b>	<b>674</b>	<b>1</b>	<b>79</b>	<b>126</b>	<b>64</b>	<b>42</b>	<b>0</b>	<b>91</b>	<b>16420</b>
Total per hr			0.03	1.03	0.42	0.49	0.11	2.86	0.52	0.01	0.14	22.39	1.23	0.00	0.14	0.23	0.12	0.08	0.00	0.17	29.95
% of flight			0.1	3.4	1.4	1.6	0.4	9.6	1.7	0.0	0.5	74.8	4.1	0.0	0.5	0.8	0.4	0.3	0.0	0.6	100.0
Average last 10 yrs	89.6	582.1	89.1	461.2	309.9	236.8	91.1	2941.4	319.5	18.7	92.9	7296.9	1504.0	0.8	79.4	173.9	97.3	42.2	0.0	94.3	13849.6

**MILITIA HILL (Montgomery) - Andy Fayer, Lynne Jackson, Rich Conroy, co-compilers**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GEOA	AMKE	MERL	PEFA	SWHA	Unid	*Total
September	30	233.2	0	0	120	51	20	152	29	0	8	3907	0	0	0	114	17	8	0	20	4447
October	31	222.8	15	519	17	32	12	313	68	1	17	27	15	0	0	53	23	19	0	38	1168
<b>Total</b>	<b>61</b>	<b>455.9</b>	<b>15</b>	<b>519</b>	<b>137</b>	<b>83</b>	<b>32</b>	<b>465</b>	<b>97</b>	<b>1</b>	<b>25</b>	<b>3934</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>40</b>	<b>27</b>	<b>0</b>	<b>58</b>	<b>5615</b>
Total per hr			0.03	1.14	0.30	0.18	0.07	1.02	0.21	0.00	0.05	8.63	0.03	0.00	0.00	0.37	0.09	0.06	0.00	0.13	12.32
% of flight			0.3	9.2	2.4	1.5	0.6	8.3	1.7	0.0	0.4	70.1	0.3	0.0	0.0	3.0	0.7	0.5	0.0	1.0	100.0
Average last 10 yrs	59.8	448.7	22.2	695.0	243.5	107.3	68.8	998.2	132.2	1.3	61.0	10679.7	101.3	0.3	3.2	253.2	34.5	29.7	0.4	64.2	13496.5

\*Including Mississippi Kite on 09/24/2016

**MILLERSVILLE (Lancaster) - Aaron Haines, compiler**

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GEOA	AMKE	MERL	PEFA	SWHA	Unid	Total
September	13	44.0	9	22	4	6	0	1	2	0	1	110	5	0	0	43	5	0	0	5	212
October	19	73.8	17	22	1	4	1	5	7	0	1	9	0	0	0	1	2	0	0	3	74
<b>Total</b>	<b>32</b>	<b>117.8</b>	<b>26</b>	<b>44</b>	<b>5</b>	<b>10</b>	<b>1</b>	<b>6</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>111</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>286</b>
Total per hr			0.22	0.37	0.04	0.08	0.01	0.05	0.08	0.00	0.01	0.94	0.12	0.00	0.00	0.37	0.06	0.00	0.00	0.07	2.43
% of flight			9.1	15.4	1.7	3.5	0.3	2.1	3.1	0.0	0.3	38.8	4.9	0.0	0.0	15.4	2.4	0.0	0.0	2.8	100.0
Average for 10 yrs																					

ROCKY RIDGE (York) - Randy Phillips, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	SWHA	Unid	Total	
September	9	71.0	0	0	32	14	3	354	5	0	1	2862	0	0	0	66	1	0	0	0	1	3339
October	4	13.8	0	0	0	2	3	32	0	0	0	0	0	0	0	5	0	0	0	0	0	43
<b>Total</b>	<b>13</b>	<b>84.8</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>	<b>6</b>	<b>386</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>2862</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>71</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3382</b>
Total per hr			0.00	0.00	0.38	0.19	0.07	4.65	0.06	0.00	0.01	33.77	0.01	0.00	0.00	0.84	0.01	0.00	0.00	0.00	0.01	39.91
% of flight			0.0	0.0	0.9	0.5	0.2	11.4	0.1	0.0	0.0	84.6	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	100.0
Average last 10 yrs	13.5	71.3	0.5	14.8	28.3	48.8	7.3	256.8	6.3	0.0	0.8	2243.8	8.0	0.0	0.5	49.5	2.0	1.5	0.0	2.0	2635.8	

ROSE TREE PARK (Delaware) - Holly Merker, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	SWHA	Unid	Total
September	30	199.5	0	0	77	61	16	160	26	0	7	2336	1	0	0	99	14	13	0	10	2820
October	30	190.0	3	465	18	39	11	153	81	0	21	7	24	0	0	58	9	9	0	11	909
November	18	105.3	5	574	1	25	12	60	21	0	101	0	181	0	1	3	3	2	0	21	1008
<b>Total</b>	<b>78</b>	<b>494.8</b>	<b>8</b>	<b>1039</b>	<b>96</b>	<b>125</b>	<b>39</b>	<b>373</b>	<b>128</b>	<b>0</b>	<b>129</b>	<b>2343</b>	<b>206</b>	<b>0</b>	<b>1</b>	<b>158</b>	<b>26</b>	<b>24</b>	<b>0</b>	<b>42</b>	<b>4737</b>
Total per hr			0.02	2.10	0.19	0.25	0.08	0.75	0.26	0.00	0.26	4.74	0.42	0.00	0.00	0.32	0.05	0.05	0.00	0.08	9.57
% of flight			0.2	21.9	2.0	2.6	0.8	7.9	2.7	0.0	2.7	49.5	4.3	0.0	0.0	3.3	0.5	0.5	0.0	0.9	100.0
Average last 10 yrs	83.3	504.1	49.1	504.1	172.3	123.1	60.7	954.6	144.8	0.9	163.9	3463.6	300.2	0.1	3.0	154.7	30.8	18.2	0.2	46.6	6191

\*Includes (1) Mississippi Kite on 09/20/2017

SECOND MOUNTAIN (Lebanon) - David Schwenk, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	SWHA	Unid	Total	
August	17	64.5	15	0	5	9	1	2	2	0	0	27	16	0	0	2	0	0	1	0	0	80
September	30	213.8	0	0	46	51	17	181	28	0	2	4624	25	0	2	38	4	5	0	7	5030	
October	31	203.0	198	241	3	48	19	874	153	2	31	3	136	1	13	40	13	18	0	9	1802	
November	30	185.3	116	88	1	64	7	62	9	0	48	0	186	3	34	5	5	0	0	2	630	
December	19	72.5	28	4	0	11	1	3	0	0	1	0	12	0	7	0	0	1	0	0	68	
<b>Total</b>	<b>127</b>	<b>739.0</b>	<b>357</b>	<b>333</b>	<b>55</b>	<b>183</b>	<b>45</b>	<b>1122</b>	<b>192</b>	<b>2</b>	<b>82</b>	<b>4654</b>	<b>375</b>	<b>4</b>	<b>56</b>	<b>85</b>	<b>22</b>	<b>25</b>	<b>0</b>	<b>18</b>	<b>7610</b>	
Total per hr			0.48	0.45	0.07	0.25	0.06	1.52	0.26	0.00	0.11	6.30	0.51	0.01	0.08	0.12	0.03	0.03	0.00	0.02	10.30	
% of flight			4.7	4.4	0.7	2.4	0.6	14.7	2.5	0.0	1.1	61.2	4.9	0.1	0.7	1.1	0.3	0.3	0.0	0.2	100.0	
Average last 10 yrs	127.6	870.6	363.7	695.1	128.1	184.2	85.7	1964.0	212.8	16.8	105.6	4526.7	849.8	2.2	88.7	98.6	34.8	24.7	0.3	53	9436.1	

STONE MOUNTAIN (Huntingdon) - Greg Grove, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	SWHA	Unid	*Total
August	5	20.0	0	0	6	16	2	4	1	0	1	33	3	0	0	7	1	0	0	0	74
September	24	151.8	0	0	42	30	10	92	17	0	5	2410	19	0	0	35	5	3	0	8	2676
October	27	159.5	18	331	4	59	22	486	52	1	18	2	232	0	16	22	31	14	0	8	1316
November	24	141.3	19	35	0	46	17	32	10	0	29	0	215	0	107	2	2	0	0	4	518
December	8	41.5	0	9	0	7	3	0	0	0	1	0	8	0	15	0	0	0	0	0	43
<b>Total</b>	<b>88</b>	<b>514.0</b>	<b>37</b>	<b>375</b>	<b>52</b>	<b>158</b>	<b>54</b>	<b>614</b>	<b>80</b>	<b>1</b>	<b>54</b>	<b>2445</b>	<b>477</b>	<b>0</b>	<b>138</b>	<b>66</b>	<b>39</b>	<b>17</b>	<b>0</b>	<b>20</b>	<b>4627</b>
Total per hr			0.07	0.73	0.10	0.31	0.11	1.19	0.16	0.00	0.11	4.76	0.93	0.00	0.27	0.13	0.08	0.03	0.00	0.04	9.00
% of flight			0.8	8.1	1.1	3.4	1.2	13.3	1.7	0.0	1.2	52.8	10.3	0.0	3.0	1.4	0.8	0.4	0.0	0.4	100.0
Average last 10 yrs	72.3	408.0	26.6	259.3	69.2	111.2	45.9	789.4	114.5	6.1	47.2	1714.2	644.2	0.8	120.5	81.7	31.8	19.2	0	26.7	4048.8

\*Total includes one Mississippi Kite on September 22

WAGGONER'S GAP (Cumberland) - David Grove, compiler

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	29	150.5	0	0	37	46	6	6	6	0	3	137	68	0	0	15	0	2	0	5	331
September	28	261.3	0	0	162	211	15	1000	54	0	2	7909	111	0	3	177	17	12	0	68	9741
October	29	254.8	52	1397	38	137	68	3097	255	7	36	7	355	0	26	64	52	56	0	54	5701
November	28	225.5	9	268	0	112	33	1072	36	4	76	0	756	0	141	0	7	5	0	14	1633
December	28	150.0	6	5	1	39	5	3	5	1	3	0	74	1	18	0	1	0	0	0	162
<b>Total</b>	<b>142</b>	<b>1042.0</b>	<b>67</b>	<b>1670</b>	<b>238</b>	<b>545</b>	<b>127</b>	<b>4278</b>	<b>356</b>	<b>12</b>	<b>120</b>	<b>8053</b>	<b>1364</b>	<b>1</b>	<b>188</b>	<b>256</b>	<b>77</b>	<b>75</b>	<b>0</b>	<b>141</b>	<b>17568</b>
Total per hr			0.06	1.60	0.23	0.52	0.12	4.11	0.34	0.01	0.12	7.73	1.31	0.00	0.18	0.25	0.07	0.07	0.00	0.14	16.86
% of flight			0.4	9.5	1.4	3.1	0.7	24.4	2.0	0.1	0.7	45.8	7.8	0.0	1.1	1.5	0.4	0.4	0.0	0.8	100.0
Average last 10 yrs	139.4	1100.8	70.2	1626.9	367.6	488.3	191.4	7203.7	620.7	39.4	217.5	8080.4	2678.8	2.9	234.5	290.0	103.0	58.3	0.1	142.2	22415.9

2017 TOTALS FOR ALL WATCHSITES

Month	Days	Hours	BLVU	TUVU	OSPR	BAEA	NOHA	SSHA	COHA	NOGO	RSHA	BWHA	RTHA	RLHA	GOEA	AMKE	MERL	PEFA	SWHA	Unid	Total
August	119	742	63	163	194	254	22	65	27	0	10	1,007	232	0	0	55	12	8	0	69	2,182
September	353	2,561	125	258	1,243	1,056	184	3,715	451	5	77	76,910	494	1	5	1,059	174	89	0	332	86,178
October	366	2,470	440	5,074	189	874	296	10,979	1,509	17	291	80	2,301	0	174	484	293	268	0	365	23,635
November	271	1,749	257	2,209	8	629	146	1,075	270	16	690	0	3,887	7	702	19	39	15	0	143	10,112
December	113	533	48	63	1	128	14	12	13	2	16	0	219	3	98	0	2	3	0	8	630
<b>Total</b>	<b>1,222</b>	<b>8,055</b>	<b>933</b>	<b>7,767</b>	<b>1,635</b>	<b>2,941</b>	<b>662</b>	<b>15,846</b>	<b>2,270</b>	<b>40</b>	<b>1,084</b>	<b>77,997</b>	<b>7,133</b>	<b>11</b>	<b>979</b>	<b>1,617</b>	<b>520</b>	<b>383</b>	<b>0</b>	<b>918</b>	<b>122,737</b>
Total per hr			0.12	0.96	0.20	0.37	0.08	1.97	0.28	0.00	0.13	9.68	0.89	0.00	0.12	0.20	0.06	0.05	0.00	0.11	15.24
% of flight			0.8	6.3	1.3	2.4	0.5	12.9	1.8	0.0	0.9	63.5	5.8	0.0	0.8	1.3	0.4	0.3	0.0	0.7	100.0
Average of last 10 yrs	1,155.1	7,639.5	1,242	6,839.9	2,402.7	2,256	898.6	24,762.4	2,748.8	142.7	1,090.7	64,718.4	120,17.8	11.1	1,074.8	1829.5	643.8	371.7	3.5	1,097	124,150.6
% compared to average	5.8	5.4	-24.9	13.6	-32.0	30.4	-26.3	-36.0	-17.4	-72.0	-0.6	20.5	-40.6	-0.9	-8.9	-11.6	-19.2	3.0	-100.0	-16.3	-1.1

<sup>1</sup>Includes two Mississippi Kites & one Swallow-tailed Kite

\*Total includes two Mississippi Kites

KEY TO TABLE HEADERS

BLVU	Black Vulture	RSHA	Broad-winged Hawk
TUVU	Turkey Vulture	BWHA	Red-tailed Hawk
OSPR	Osprey	RTHA	Rough-legged hawk
BAEA	Bald Eagle	RLHA	Golden Eagle
NOHA	Northern Harrier	GOEA	American Kestrel
SSHA	Sharp-shinned Hawk	AMKE	Merlin
COHA	Cooper's Hawk	PEFA	Peregrine Falcon
NOGO	Northern Goshawk	SWHA	Swainson's Hawk
RSHA	Red-shouldered Hawk	Unid	Unidentified