

Autumn Raptor Migration Summary 2010

Laurie Goodrich

The 2010 Pennsylvania Autumn raptor counts increased over 2009 for 14 of the 16 regularly occurring species. Bald Eagle counts showed the strongest upturn with five sites setting new records. The statewide total of 2510 eagles represented a 49% increase over 2009. Raptor counts statewide were up 17% for a total of 138,469 migrants (Table 2). Raptor flights were particularly notable at sites along the central and western extents of the Kittatinny Ridge, as persistent northwest winds funneled migrants out of the northeast along its slopes. Piedmont sites enjoyed spectacular Broad-winged Hawk flights, reaffirming the Broad-wing's penchant for moving south of the ridges.

Three new autumn watchsites were established in 2010 in southeastern Pennsylvania, all in Chester (Westtown School, Bucktoe Preserve, and Hibernia Park). Sites within the southeastern region's *Broadwing SEPT* line did not report counts in 2010 but their absence was aptly filled by Chester's new contributors. Tussey Mountain in Centre, a well-established spring site, was manned more consistently in autumn 2010 providing an additional snapshot of flights in the northern ridges (Figure 1).

Weather, as usual, set up migration patterns in 2010 as cold fronts paraded across the state regularly in September and October. These produced steady migration along the ridges through early autumn. In November, storms stalled in the northeast and brought unsettled conditions and lackluster raptor flights. November also was less busy as a stalwart November migrant, the Red-tailed Hawk, moved through earlier than usual. Back-to-back cold fronts swept an impressive Red-tailed movement south in late October followed by lower numbers in November. Rare migrants in 2010 included four Swainson's Hawks (at least one light, one dark), observed at Allegheny Front, Hawk Mountain, Militia Hill, and Second Mountain, two Mississippi Kites (both juvenile) at Militia Hill, and one Gyrfalcon (pale gray) seen in December at Waggoner's Gap (Table 2).

With four new sites contributing, hours were up 14% in 2010 to 8409,

compared with 7370 in 2009, and days of coverage increased from 1132 in 2009 to 1213 in 2010. The average passage rate for 2010 was 16.6 birds per hour statewide, compared with 16.0 in 2009 (Table 2). Turkey Vulture increased 25% compared to 2009, Osprey 18%, Bald Eagle 49%, Northern Harrier 38%, Sharp-shinned Hawk 34%, Cooper's Hawk 11%, Northern Goshawk 47%, Red-shouldered Hawk 28%, Red-tailed Hawk 39%, Broad-winged Hawk 2%, Rough-legged Hawk 44%, Golden Eagle 26%, American Kestrel 20%, and Merlin 24%. State-wide decreases were seen only for Peregrine Falcon (11%). Some of the increases reflect the increased number of sites and hours; however some individual sites showed increases in some species as well.

Bald Eagles generated excitement during the 2010 migration with especially large flights in early autumn. At Allegheny Front, 30 Bald Eagles passed on 11 September, Hawk Mountain recorded 36 on 26 August, and Waggoner's Gap had 25 on 13 and 17 September (Table 1). The 36 Bald Eagles in one day at Hawk Mountain was the second highest one-day count in the 76-year history of the site. The only higher one-day count (48) occurred 4 September 1950, prior to the declines of the DDT era. Waggoner's Gap recorded the highest season total: 511 in 1215 hours of counts.

Pennsylvania's most abundant raptor migrant, the Broad-winged Hawk, was seen largely south of the ridges during mid-September. The highest one-day count was recorded at Militia Hill: 10,146, on 21 September. Counter Andy Fayer reported they had 14 different kettles in view at the same time! Rose Tree Park recorded the edge of that flight the day prior, tallying the second highest one-day count for the state: 1,939 on 20 September. Counters at a new site, Chester County Hibernia Park, spotted 1366 Broad-wings on 17 September, cementing the Piedmont's reign in Broad-winged Hawk totals. Despite new sites adding significant numbers, the state totals for Broad-winged Hawk were barely above 2009 totals and many sites showed below average counts.

One of our more abundant migrants in the autumn is the Sharp-shinned Hawk. In the 1980s numbers

of this species were much higher than recent years, possibly due in part to boreal forest cycles of spruce budworm and warblers. In 2010, some sites reported some of the highest counts seen since that period. Many of the peak flights occurred along the Kittatinny Ridge, as northwest winds created abundant updrafts during their peak migration period in October. One-day counts surpassed 500 hawks per day for five days at Waggoner's Gap, and three days at Hawk Mountain during October. Waggoner's Gap led the state with a peak one-day count of 837 Sharp-shinned Hawks on 8 October. Hawk Mountain recorded 682 and Little Gap 569, both on 7 October, and most other ridge sites had several days of several hundred hawks during that same period (Table 1).

Two late October cold fronts carried large numbers of Red-tailed Hawks out of the northeast with peak flights occurring around or on Halloween. The eastern Kittatinny sites recorded the highest counts as Little Gap led with 483 Red-tailed Hawks on 29 October followed, by Bake Oven Knob and Hawk Mountain with 394 and 438 on 31 October (Table 1). November flights were below average across the state, but Red-tailed Hawk counts were still above average for several watchsites, and state-wide totals increased 39% above 2009 tallies.

Allegheny Front (Somerset/Bedford) – Allegheny Front tallied 6660 hawks in 104 days and 801 hours of counting from 14 August through 11 December, averaging 8.3 birds per hour (Table 2). The highest count of the early season occurred on strong east-southeast winds when 41 Osprey and 30 Bald Eagles soared south, setting new one-day records for the site. Counters recorded the rarest migrant on 19 September, a Swainson's Hawk circling south within a small kettle of Broad-wings. Total counts were 26% below average partly due to low counts of Broad-winged Hawk, which totaled 2896, 32% below average (Table 2).

Bake Oven Knob (Lehigh) – Bake Oven Knob celebrated its 50th year of counting in 2010, an effort begun by Dr. Donald Heintzelman in 1961 and maintained today by the Lehigh Gap Nature Center. Congratulations to

everyone involved! Bake Oven counters recorded 11,469 hawks in 786 hours over 99 days from 15 August through 29 November, at a rate of 14.6 birds per hour. Sharp-shinned Hawk counts were slightly above average, 3275 compared with 3213 last year. Most species, however, showed below-average counts, and the overall total was 24% below the 10-year average (Table 2). Bake Oven Knob recorded 394 Red-tailed Hawks on 31 October, the third-highest one-day total for this species in the state (Table 1), and tallied its second-highest season count of Bald Eagles in 50 years: 226. Best was 236 in 2008.

Blue Mountain-Route 183 (Berks/Schuylkill) – In the third year of consecutive counts from this re-established site on the Kittatinny Ridge, counters recorded the site's highest recent count, 5857 hawks in 224 hours and 33 days of counts between 21 August and 27 November. Nearly every species showed higher counts compared to the past two years (Table 2). Blue Mountain recorded its highest one-day count on 19 September with 868 Broad-winged Hawks, 37 Sharp-shinned Hawks, 6 Osprey, and singles of American Kestrel and Peregrine Falcon.

Bucktoe Preserve (Chester) – One of southeastern Pennsylvania's newest hawk-watching sites, located south of Kennett Square and just north of the Delaware state line, tallied 2953 hawks in its 2010 season. Coverage extended from 31 August through 24 November and included 302 hours over 55 days.

Counters tallied 9.8 birds per hour for the period with noteworthy counts of Bald Eagle (104), American Kestrel (116), and Broad-winged Hawk (1729) (Table 2). We welcome this new southern site and hope it will host many great hawk-watching days ahead.

Chester County – Hibernia Park (Chester) – This second new Chester site is situated just north of Coatesville in Wagontown, Pennsylvania. It reported 3431 hawks in 360 hours over 55 days. The site recorded the third highest one-day total for Broad-winged Hawks (1366), suggesting it may be a place to watch next September (Table 1). A late push of Broad-wings was recorded on 26 September (1172). Broad-winged Hawks comprised 84% of the flight, with 2894 for the season, although most the count effort at this site occurred during September (Table 2). Osprey and Bald Eagle totals were fairly high despite the limited coverage, with counters spotting 138 and 100 respectively.

Council Cup (Luzerne) – Along the Susquahanna River, hawkwatchers tallied 962 migrant raptors in 139 hours and 25 days of counts from 9 August through 9 November. Coverage has remained fairly steady in the last three years, and past counts have proven the potential of the site. Daily counts ranged from 3 to 148 total migrants in 2010, at 6.92 birds per hour. Total count was below average, predominantly due to lower counts of Broad-winged and Red-tailed hawks

(Table 2). Despite the dip, Broad-winged Hawks (310) remained the most numerous migrant, representing 32% of the migrants (Table 2). Bald Eagles were seen regularly at this riverfront site with 95 total migrants and a peak day of 16 passing on 13 September (Table 1). Ten or more Bald Eagle were recorded on three additional days during mid-September.

Hawk Mountain Sanctuary (Berks/Schuylkill) – Counters here recorded an above average hawk flight in 2010, with 20,525 migrants counted from 31 July through 21 December, in 123 days and 1103 hours. New 76-year records were set for Turkey Vulture (650), and Bald Eagle (413; 406 during official count period). The total count was 24% above the 10-year average of 18,102 raptors. In addition to the new records, above-average counts were tallied for Black Vulture (135), Sharp-shinned Hawk (6440), Golden Eagle (140), American Kestrel (565), Merlin (228), and Peregrine Falcon (68). A cold front on 26 August ushered a Bald Eagle parade with as many as 14 in one hour, resulting in a one-day tally of 36 Bald Eagles, the second highest in sanctuary history. The highest one-day count for the 2010 season came on 1 September when an impending rain storm chased kettles south, resulting in a final count of 1282 Broad-wings passing before the cloud ceiling lowered. Counters that day also recorded a lone dark morph Swainson Hawk amid the Broad-wings in the mist.

Jack's Mountain (Mifflin) – This site recorded 31 migrating hawk within 207 hours and 40 days of counts. Broad-winged Hawk comprised 73% of the flight, with 23 recorded. Highlights included 71 Bald Eagles, 95 Osprey and 3 Peregrine Falcons for the season. Total counts were 38% below the ten-year average, although above the most recent ten-year's counts (Table 2). Jack's Mountain is one of seven

Table 1. Peak count dates for selected species at all Pennsylvania watch sites.

| Site | Bald Eagle | | Sharp-sh. Hawk | | Br.-winged Hawk | | Red-tailed Hawk | |
|--------------------|------------|----------|----------------|-------|-----------------|------|-----------------|-------|
| | Count | Date | Count | Date | Count | Date | Count | Date |
| Allegheny Front | 30 | 9/11 | 87 | 10/13 | 1012 | 9/20 | 194 | 10/31 |
| Bake Oven Knob | 17 | 9/14 | 359 | 10/7 | 1127 | 9/16 | 394 | 10/31 |
| Blue Mtn./Rte. 183 | 9 | 9/14 | 409 | 10/9 | 868 | 9/19 | 235 | 10/31 |
| Bucktoe Preserve | 9 | 10/28 | 35 | 10/10 | 869 | 9/21 | 47 | 11/10 |
| Ches-Hibernia Pk. | 13 | 9/17 | 39 | 9/17 | 1366 | 9/17 | 1 | many |
| Council Cup | 16 | 9/13 | 26 | 10/7 | 123 | 9/10 | 117 | 10/29 |
| Hawk Mountain | 36 | 8/26 | 682 | 10/7 | 1282 | 9/16 | 438 | 10/31 |
| Jack's Mountain | 6 | 9/4 | 76 | 10/10 | 436 | 9/18 | 43 | 11/3 |
| Little Gap | 19 | 9/14 | 569 | 10/7 | 1101 | 9/19 | 483 | 10/29 |
| Militia Hill | 8 | 9/17 | 128 | 10/3 | 10146 | 9/21 | 24 | 10/21 |
| Rose Tree Park | 9 | 9/15 | 71 | 9/29 | 1939 | 9/20 | 45 | 11/1 |
| Second Mountain | 11 | 9/14, 15 | 221 | 10/8 | 795 | 9/13 | 149 | 10/30 |
| Stone Mountain | 8 | 9/13 | 79 | 10/7 | 157 | 9/13 | 179 | 10/29 |
| Tuscarora Summit | 7 | 9/13 | 61 | 10/10 | 14 | 9/18 | 84 | 10/30 |
| Tussey Mountain | 7 | 9/9 | 84 | 10/7 | 56 | 9/14 | 183 | 10/29 |
| Waggoner's Gap | 25 | 9/13, 17 | 837 | 10/8 | 1158 | 9/14 | 327 | 10/31 |
| Westtown School | 2 | 10/7, 11 | 9 | 10/11 | 34 | 9/14 | 5 | 9/21 |

Bolded count numbers indicate the top three counts for a hawk species.

Pennsylvania sites that could use additional volunteer help to cover the skies. In 2001 with full season coverage, more than 15,000 hawks were recorded. If you are interested in training or helping to count, contact this author or the site leaders—your time will help track raptors regionally.

Little Gap (Northampton) – Representing the eastern-most ridge site covered consistently during autumn migration, counters at Little Gap logged 13,534 total hawks in 483 hours over 72 days (Table 2). Although the 2010 count was 6% below average, above average counts were recorded for Black Vulture (82), Sharp-shinned Hawk (4138), Red-tailed Hawk (2419), Merlin (89), and Peregrine Falcon (43) (Table 2). A new season record was set for Turkey Vulture (755) and Bald Eagle (180). Little Gap had one of its best days of the season on 7 October when a cold front stirred 569 Sharp-shinned Hawks, 44 Cooper's Hawks, 13 American Kestrels, 9 Merlin, and 3 Peregrine Falcons past the lookout. An impressive 483 Red-tailed Hawks were tallied 29 October as well, one of the highest one-day counts across the state.

Militia Hill (Montgomery) – Counters tallied 22,070 raptors in 2010, during 462 hours over 60 days for an impressive 47.8 birds per hour and a new season total record. They surpassed their 10-year average of 10,409 hawks by nearly 10,000 birds. Broad-winged Hawks comprised 83% of the flight and represented the main reason for the jump in total raptors in 2010. The amazing Broad-winged parade began on 16 September with 1937 migrants, and culminated with 10,146 on 21 September, pushing the species to a new site record. In addition to Broad-wings, counters recorded a new season records for Turkey Vulture (886), Bald Eagle (109), Northern Harrier (132), and Sharp-shinned Hawk (1403). Militia Hill also tallied above-average counts for Osprey, Red-shouldered Hawk, American Kestrel, Merlin, and Peregrine Falcon to result in a fantastic 2010 (Table 2). Adding variety to the volume, counters recorded several rarities including 2 Mississippi Kites on 11 and 13 September, a light-morph Swainson's Hawk on 22 October, and a Rough-legged Hawk on 25 October.

Rose Tree Park (Delaware) – Hawk-watchers at this site recorded 6771

migrant hawks in 417 hours over 86 days of counts in 2010, only 4% below the 10-year average of 7039 and representing 16.2 hawks per hour (Table 2). The 2010 Broad-winged Hawk count of 3990 was 25% above the 10-year average of 3184, again reflecting the path through the Piedmont taken by this September migrant. This upswing was particularly notable considering the dip in hours of coverage compared to average: 417 compared to 642. 15 September brought one of the best flights of the season with 11 Osprey, 9 Bald Eagles, 29 Sharp-shinned Hawks, 716 Broad-winged Hawks, 5 American Kestrels and one Peregrine Falcon. The highest one-day count occurred five days later when 1939 Broad-wings swirled south along amid 1986 total raptors.

Second Mountain (Lebanon) – A total of 8820 hawks were tallied by counters in 2010 during 1041 hours and 132 days of counts, for 8.5 birds per hour. Counts occurred from 27 August to 6 December. A new record was set for Bald Eagle at 218, and above-average counts were tallied for Black Vulture (487), Turkey Vulture (670), Sharp-shinned Hawk (2786), and Golden Eagle (117). Mid-September brought an exciting few days. On 13 September the peak one-day count of 795 Broad-winged Hawks flew past amid 877 total migrants. The flight included a one-day peak of 33 Osprey, 24 Sharp-shinned Hawks, 7 Bald Eagles, and 2 Merlin. The next two days brought back-to-back 11-Bald Eagle days, helping vault the count to record levels. 18 September brought the rarest migrant for the season, a juvenile light-morph Swainson's Hawk. Golden Eagles were seen nearly daily through late October and November and reached a peak of 10 migrants on 24 November.

Stone Mountain (Huntingdon) – Counters at one of the northernmost hawk-watches in the state counted 3288 hawks amid 413 hours and 74 days of counts in 2010. Season counts were 29% below ten-year average of 4648. Despite this, Stone Mountain set a new record for Bald Eagle at 112, and tallied above-average counts for the Turkey Vulture at 178. The new vulture record was boosted in part by a peak one-day count of 108 Turkey Vultures on 13 October. Stone recorded one of its highest one-day counts on 29 October. A peak count of 179 Red-tailed Hawks were accompanied by 43 Sharp-

shinned Hawks, 30 Turkey Vultures, 7 Northern Harriers, 5 Golden Eagles, and a late Peregrine Falcon and Merlin. Stone finished their season with 19 Golden Eagles over a three-day period from 4 to 6 December.

Tuscarora Summit (Fulton) – Hawkwatchers at this site recorded 2820 hawks in 358 hours and 64 days of counts from 7 September to 21 November. This was their 38th year of counts. The most numerous migrant was the Broad-winged Hawk which comprised 34% of the migrants (955) (Table 2). A new season record was set for Black Vulture with 69 tallied for the season, 44 of which were counted on 20 October. Bald Eagle counts were above-average, with 50 counted compared to an average of 39 in the past 10 years. Overall, season counts were below-average, 2820 compared to an average of 4192. 13 September brought one of the highest one-day counts of 192, including 11 Osprey, 7 Bald Eagles, 21 Sharp-shinned Hawks, 135 Broad-winged Hawks, and 3 American Kestrels. October highlights included the flight on 29 October with 84 Red-tailed Hawks, 18 Sharp-shinned Hawks, 3 Bald Eagles, and 2 Golden Eagles.

Tussey Mountain (Centre) – Known more as a traditional spring site, coverage increased at Tussey during autumn 2010 to 86 hours and 32 days, with counts spanning from 9 September through 15 December. The more than doubling of prior autumn effort was rewarded with a season total of 1310 raptors, at a rate of 15.3 hawks per hour. In contrast to most sites, the most numerous migrant at Tussey Mountain was the Red-tailed Hawk (738), and counts of Sharp-shinned Hawks (221) and Turkey Vulture (95) surpassed counts of Broad-winged Hawks (69). Known for its Golden Eagles in spring, Tussey recorded 30 in autumn 2010 with a peak count of 8 on 24 November. Hawkwatchers tallied their peak autumn day on 29 October with 211 hawks, including 183 Red-tailed Hawks, 13 Sharp-shinned Hawks, 7 Turkey Vultures, 3 Golden Eagles, one Bald Eagle and one Peregrine Falcon. One of the few Rough-legged Hawks seen in the state this autumn was recorded on 5 December (Table 2).

Waggoner's Gap (Cumberland) – Watchers here spent more time

counting than any other site and tallied the highest raptor count in the state, 24,212 in 1215 hours over 142 days beginning on 1 August and ending on 31 December. Raptors per hour of effort finished at 19.9, and the total surpassed the ten-year average of 21,937 hawks. New records were set for Bald Eagle (511) and Sharp-shinned Hawk (10,121). Above-average counts were tallied for Cooper's Hawk (891), Golden Eagle (265), Merlin (142), and Peregrine Falcon (68). The rarest migrant was recorded at 12:20 pm on 6 December, a pale gray Gyrfalcon! Watchers were able to view the bird from above and below as it flew along the north slope. Bald Eagles surpassed 20 per day on three dates: 13 September with 25 eagles, 14 September with 22, and 17 September with 25. Waggoner's Gap counters enjoyed more than 1000 raptors per day on three occasions. The peak one-day flight occurred on 13 September with 1365 total hawks including 1158 Broad-winged Hawks, 103 Sharp-shinned Hawks, and 25 Bald Eagles (Table 1, 2). Another 887 Broad-wings

on 19 September contributed to a daily total of 1055 hawks. On 8 October, 837 Sharp-shinned Hawks filled the skies, part of 1017 total raptors including 96 Turkey Vultures, 42 Cooper's Hawks, and 5 Bald Eagles. A lone Red-tailed Hawk on 31 Dec closed Waggoner's Gap autumn count.

Westtown School (Chester) – One of the new sites for 2010 was established by veteran hawkwatcher Lance Tanino at the school where he taught, Westtown. The count hours were brief, but the birds per hour (10.9) suggest that with additional effort, the students might make a significant contribution to our understanding of southeastern migration patterns. The team recorded 164 hawks in 15 hours and 13 days of counts. Sharp-shinned and Broad-winged Hawks were the most abundant migrants, 42 and 35 respectively. The school tallied 6 Bald Eagles, 7 Osprey, 15 Red-tailed Hawks, and 14 American Kestrels. The highest one-day count occurred on 14 September with 39 migrants, including 34 Broad-winged Hawks, 2 Osprey, one

Bald Eagle, one American Kestrel, and one unidentified raptor. We hope the students will continue their pioneer schoolyard watch in 2011.

Acknowledgments

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*Acopian Ctr. for Conservation Learning
Hawk Mountain Sanctuary Association
410 Summer Valley Road
Orwigsburg, Pennsylvania 17961*

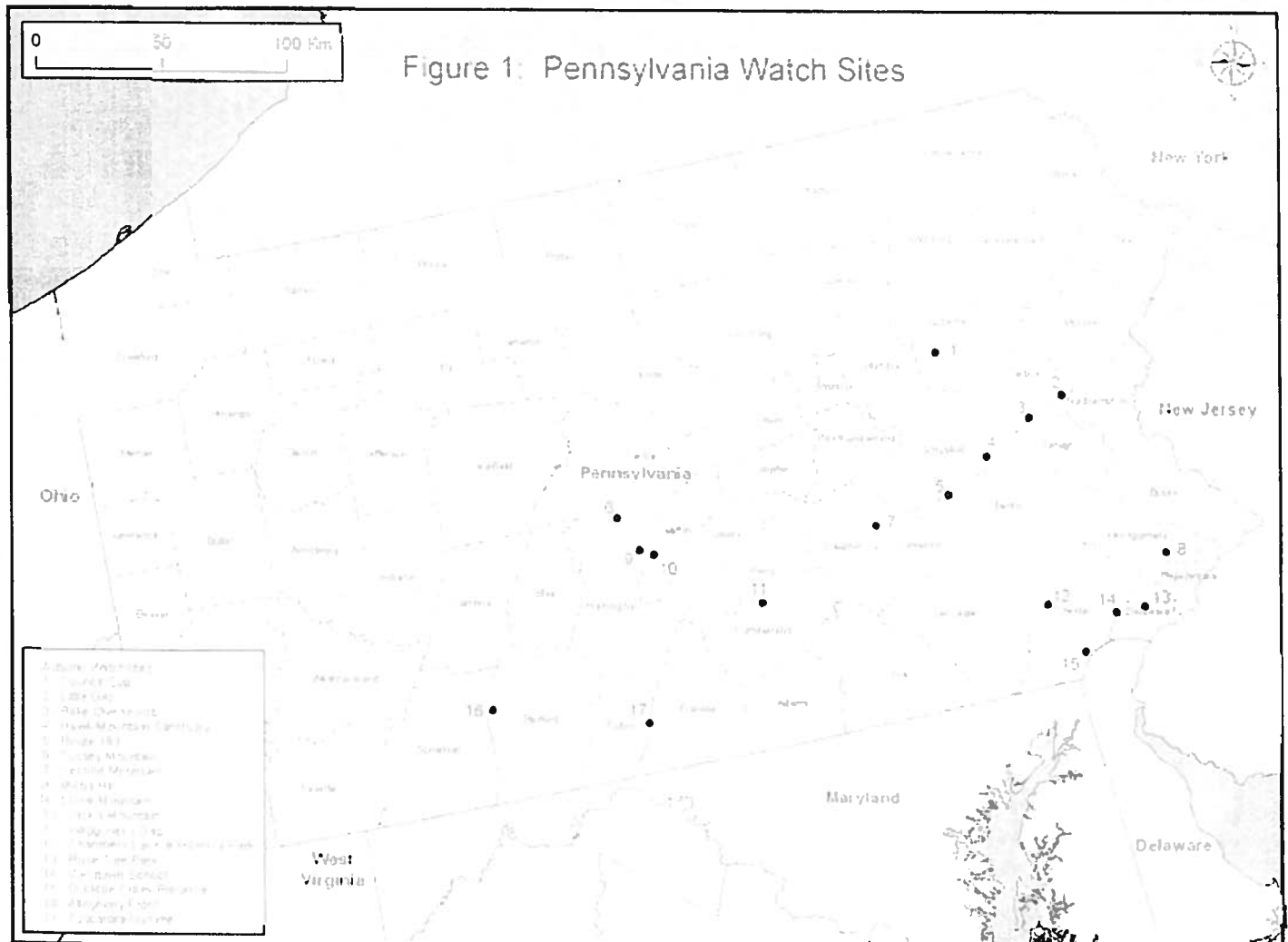


Table 2. Autumn 2010 count results for Pennsylvania watchsites.

ALLEGHENY FRONT (Bedford/Somerset) - Che Mincone, 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 | 127 | 5 | 3 | 21 | 13 | 2 | 20 | 17 | 0 | 0 | 288 | 48 | 0 | 0 | 12 | 2 | 0 | 0 | 15 | 427 |
| September | 27 | 220 | 5 | 22 | 83 | 58 | 31 | 236 | 103 | 1 | 1 | 2622 | 131 | 0 | 0 | 44 | 8 | 11 | 1 | 74 | 3431 |
| October | 29 | 224 | 13 | 234 | 12 | 8 | 27 | 496 | 104 | 2 | 81 | 6 | 790 | 0 | 10 | 22 | 29 | 9 | 0 | 108 | 1930 |
| November | 25 | 100 | 0 | 21 | 0 | 5 | 17 | 32 | 9 | 7 | 29 | 0 | 578 | 1 | 135 | 0 | 0 | 0 | 0 | 30 | 354 |
| December | 5 | 39 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 8 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 18 |
| Total | 104 | 801 | 23 | 281 | 116 | 86 | 77 | 774 | 233 | 11 | 91 | 2896 | 1565 | 1 | 160 | 78 | 38 | 20 | 1 | 229 | 6860 |
| Total per hr | | | 0.03 | 0.35 | 0.14 | 0.11 | 0.10 | 0.07 | 0.20 | 0.01 | 0.11 | 3.62 | 1.94 | 0.00 | 0.19 | 0.10 | 0.05 | 0.02 | 0.00 | 0.29 | 8.32 |
| % of flight | | | 0.3 | 4.2 | 1.7 | 1.3 | 1.2 | 11.6 | 3.5 | 0.2 | 1.4 | 43.5 | 23.3 | 0.0 | 2.3 | 1.2 | 0.6 | 0.3 | 0.0 | 3.4 | 100.0 |
| Average last 10 yrs | 111.4 | 804.8 | 23.6 | 543.3 | 117.7 | 88.2 | 70.7 | 1145.2 | 290.0 | 10.7 | 97.5 | 4233.8 | 1987.7 | 4.2 | 166.9 | 78.2 | 34.1 | 33.4 | 0.0 | 246.0 | 8972.4 |

BAKE OVEN KNOB (Lehigh) - Dan Kunkle, 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 | 129 | 26 | 132 | 23 | 41 | 11 | 38 | 6 | 0 | 0 | 186 | 68 | 0 | 0 | 20 | 4 | 0 | 0 | 45 | 600 |
| September | 28 | 233 | 78 | 279 | 237 | 104 | 50 | 757 | 56 | 0 | 9 | 3442 | 95 | 0 | 2 | 87 | 19 | 6 | 0 | 129 | 5350 |
| October | 28 | 229 | 66 | 360 | 67 | 64 | 42 | 2454 | 158 | 6 | 68 | 25 | 1149 | 0 | 25 | 90 | 52 | 25 | 0 | 51 | 4702 |
| November | 26 | 195 | 34 | 100 | 0 | 17 | 7 | 26 | 20 | 14 | 26 | 0 | 504 | 0 | 48 | 0 | 0 | 0 | 0 | 21 | 817 |
| Total | 99 | 786 | 204 | 871 | 327 | 226 | 110 | 3275 | 240 | 20 | 103 | 3853 | 1816 | 0 | 75 | 197 | 75 | 31 | 0 | 246 | 11469 |
| Total per hr | | | 0.26 | 1.11 | 0.42 | 0.29 | 0.14 | 4.17 | 0.31 | 0.03 | 0.13 | 4.65 | 2.31 | 0.00 | 0.10 | 0.25 | 0.10 | 0.04 | 0.00 | 0.31 | 14.59 |
| % of flight | | | 1.8 | 7.6 | 2.9 | 2.0 | 1.0 | 28.6 | 2.1 | 0.2 | 0.9 | 31.9 | 15.8 | 0.0 | 0.7 | 1.7 | 0.7 | 0.3 | 0.0 | 2.1 | 100.0 |
| Average last 10 yrs | 101.1 | 798.7 | 276.4 | 885.7 | 629.6 | 188.1 | 166.2 | 3212.6 | 392.6 | 35.1 | 147.7 | 5773.2 | 2552.7 | 2.4 | 93.6 | 204.7 | 93.4 | 53.7 | 0.1 | 293.8 | 15035.9 |

BLUE MOUNTAIN Rte. 183 (Schuylkill/Berks) - Scott Fisher, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|--------------------|-----------|------------|------------|------------|------------|-----------|-----------|-------------|------------|-----------|-----------|-------------|------------|----------|-----------|-----------|-----------|-----------|----------|-----------|-------------|
| August | 3 | 15 | 3 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 17 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 32 |
| September | 13 | 94 | 49 | 83 | 67 | 37 | 17 | 619 | 36 | 0 | 3 | 1782 | 56 | 0 | 0 | 57 | 8 | 4 | 0 | 17 | 2815 |
| October | 12 | 82 | 57 | 72 | 47 | 28 | 21 | 1513 | 141 | 4 | 28 | 5 | 729 | 1 | 17 | 32 | 7 | 6 | 0 | 25 | 2734 |
| November | 5 | 34 | 4 | 11 | 0 | 5 | 3 | 14 | 7 | 0 | 6 | 0 | 199 | 0 | 12 | 0 | 1 | 1 | 0 | 2 | 278 |
| Total | 33 | 224 | 113 | 166 | 114 | 70 | 43 | 2149 | 185 | 13 | 39 | 1785 | 887 | 1 | 29 | 91 | 16 | 11 | 0 | 45 | 6867 |
| Total per hr | | | 0.51 | 0.74 | 0.51 | 0.31 | 0.19 | 6.60 | 0.89 | 0.08 | 0.17 | 7.98 | 4.41 | 0.00 | 0.13 | 0.41 | 0.07 | 0.05 | 0.00 | 0.20 | 26.18 |
| % of flight | | | 1.9 | 2.8 | 1.9 | 1.2 | 0.7 | 36.7 | 3.2 | 0.2 | 0.7 | 30.5 | 16.9 | 0.0 | 0.5 | 1.5 | 0.3 | 0.2 | 0.0 | 0.8 | 100.0 |
| Average last 3 yrs | 35.0 | 208.1 | 67.0 | 150.3 | 81.0 | 49.2 | 24.7 | 1228.3 | 144.0 | 8.0 | 29.0 | 1213.0 | 571.0 | 0.3 | 28.0 | 80.3 | 18.7 | 9.0 | 0.0 | 34.3 | 4256.7 |

BUCKTOE PRESERVE (Chester) - Larry Lewis, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|--------------|-----------|------------|----------|-----------|-----------|------------|-----------|------------|------------|----------|-----------|-------------|------------|----------|----------|------------|-----------|----------|----------|----------|-------------|
| August | 1 | 9 | 0 | 0 | 2 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 9 |
| September | 19 | 105 | 0 | 0 | 37 | 42 | 6 | 119 | 46 | 0 | 1 | 1706 | 4 | 0 | 0 | 71 | 2 | 0 | 0 | 0 | 2035 |
| October | 20 | 105 | 0 | 3 | 25 | 28 | 17 | 185 | 55 | 0 | 14 | 23 | 63 | 0 | 1 | 42 | 16 | 2 | 0 | 2 | 467 |
| November | 16 | 82 | 0 | 63 | 1 | 30 | 6 | 67 | 25 | 1 | 34 | 0 | 208 | 0 | 1 | 11 | 2 | 0 | 0 | 0 | 441 |
| Total | 55 | 302 | 0 | 66 | 66 | 104 | 31 | 372 | 128 | 1 | 49 | 1729 | 265 | 0 | 2 | 116 | 20 | 2 | 0 | 2 | 2963 |
| Total per hr | | | 0.00 | 0.22 | 0.22 | 0.34 | 0.10 | 1.23 | 0.42 | 0.00 | 0.16 | 5.72 | 0.88 | 0.00 | 0.01 | 0.36 | 0.07 | 0.01 | 0.00 | 0.01 | 9.77 |
| % of flight | | | 0.0 | 2.2 | 2.2 | 3.5 | 1.0 | 12.6 | 4.3 | 0.0 | 1.7 | 56.6 | 9.0 | 0.0 | 0.1 | 3.9 | 0.7 | 0.1 | 0.0 | 0.1 | 100.0 |

CHESTER COUNTY HIBERNIA PARK (Chesfer) - Larry Lewis, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|--------------|-----------|------------|----------|----------|------------|------------|-----------|------------|-----------|----------|----------|-------------|----------|----------|----------|-----------|-----------|----------|----------|----------|-------------|
| August | 28 | 211 | 0 | 0 | 32 | 33 | 1 | 2 | 5 | 0 | 1 | 11 | 1 | 0 | 0 | 8 | 4 | 0 | 0 | 0 | 98 |
| September | 26 | 144 | 0 | 0 | 102 | 64 | 11 | 116 | 39 | 0 | 1 | 2883 | 1 | 0 | 0 | 47 | 27 | 6 | 0 | 3 | 3300 |
| October | 1 | 5 | 0 | 0 | 4 | 3 | 1 | 14 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 33 |
| Total | 55 | 360 | 0 | 0 | 138 | 100 | 13 | 132 | 47 | 0 | 3 | 2894 | 4 | 0 | 0 | 59 | 32 | 6 | 0 | 3 | 3431 |
| Total per hr | | | 0.00 | 0.00 | 0.38 | 0.28 | 0.04 | 0.37 | 0.13 | 0.00 | 0.01 | 8.05 | 0.01 | 0.00 | 0.00 | 0.16 | 0.09 | 0.02 | 0.00 | 0.01 | 9.54 |
| % of flight | | | 0.0 | 0.0 | 4.0 | 2.9 | 0.4 | 3.8 | 1.4 | 0.0 | 0.1 | 84.3 | 0.1 | 0.0 | 0.0 | 1.7 | 0.9 | 0.2 | 0.0 | 0.1 | 100.0 |

COUNCIL CUP (Luzerne) - Donald Kapral, Compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|--------------------|-----------|------------|----------|------------|-----------|-----------|----------|------------|-----------|----------|----------|------------|------------|----------|----------|-----------|----------|----------|----------|-----------|------------|
| August | 1 | 6 | 0 | 0 | 1 | 4 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 12 |
| September | 11 | 71 | 0 | 3 | 17 | 77 | 2 | 13 | 1 | 0 | 0 | 308 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 12 | 449 |
| October | 7 | 33 | 3 | 114 | 16 | 13 | 1 | 89 | 10 | 0 | 0 | 1 | 136 | 0 | 0 | 20 | 0 | 0 | 0 | 3 | 406 |
| November | 6 | 28 | 0 | 8 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 95 |
| Total | 25 | 139 | 3 | 125 | 34 | 95 | 5 | 106 | 13 | 0 | 0 | 310 | 217 | 0 | 0 | 36 | 0 | 0 | 0 | 17 | 962 |
| Total per hr | | | 0.02 | 0.90 | 0.25 | 0.68 | 0.04 | 0.76 | 0.09 | 0.00 | 0.00 | 2.23 | 1.56 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 | 0.12 | 6.93 |
| % of flight | | | 0.3 | 13.0 | 3.5 | 9.9 | 0.5 | 11.0 | 1.4 | 0.0 | 0.0 | 32.2 | 22.6 | 0.0 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 1.8 | 100.0 |
| Average for 10 yrs | 42.6 | 164.6 | 2.8 | 231.7 | 59.2 | 43.9 | 18.9 | 227.3 | 27.0 | 2.6 | 8.1 | 1156.0 | 853.2 | 0.6 | 3.1 | 49.8 | 2.9 | 3.0 | 0.0 | 39.9 | 2730.0 |

HAWK MOUNTAIN (Berks/Schuylkill) - Laurie Goodrich, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|---------------------|------------|-------------|------------|------------|------------|------------|------------|-------------|------------|-----------|------------|-------------|-------------|----------|------------|------------|------------|-----------|----------|------------|--------------|
| August | 19 | 169 | 0 | 15 | 70 | 85 | 7 | 55 | 17 | 0 | 3 | 319 | 73 | 0 | 0 | 65 | 4 | 1 | 0 | 13 | 723 |
| September | 26 | 301 | 35 | 56 | 411 | 171 | 54 | 1094 | 130 | 0 | 7 | 6354 | 173 | 0 | 0 | 277 | 57 | 21 | 1 | 38 | 8969 |
| October | 30 | 285 | 40 | 431 | 172 | 90 | 88 | 5230 | 595 | 10 | 102 | 45 | 1912 | 0 | 34 | 222 | 159 | 45 | 0 | 86 | 9230 |
| November | 28 | 234 | 58 | 148 | 5 | 29 | 23 | 66 | 46 | 36 | 56 | 0 | 859 | 0 | 70 | 1 | 7 | 1 | 0 | 11 | 1530 |
| December | 18 | 115 | 2 | 0 | 1 | 37 | 3 | 1 | 0 | 8 | 3 | 0 | 68 | 0 | 30 | 0 | 1 | 0 | 0 | 0 | 158 |
| Total | 123 | 1103 | 136 | 650 | 659 | 413 | 183 | 6440 | 768 | 52 | 171 | 6709 | 3185 | 0 | 140 | 565 | 228 | 68 | 1 | 168 | 20525 |
| Total per hr | | | 0.12 | 0.59 | 0.60 | 0.37 | 0.17 | 5.64 | 0.69 | 0.05 | 0.15 | 6.99 | 2.69 | 0.00 | 0.13 | 6.51 | 0.21 | 0.06 | 0.00 | 0.15 | 18.62 |
| % of flight | | | 0.7 | 3.2 | 3.2 | 2.0 | 0.9 | 31.4 | 3.7 | 0.3 | 0.8 | 32.7 | 15.5 | 0.0 | 0.7 | 2.8 | 1.1 | 0.3 | 0.0 | 0.8 | 100.0 |
| Average last 10 yrs | 124.0 | 1098.0 | 85.0 | 409.0 | 586.0 | 255.0 | 211.0 | 4385.0 | 743.0 | 47.0 | 225.0 | 7092.0 | 3111.0 | 5.0 | 117.0 | 453.0 | 154.0 | 55.0 | 0.1 | 171.0 | 18102.0 |

JACK'S MOUNTAIN (Mifflin) - Ron Singer, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|---------------------|----------|------------|----------|----------|-----------|-----------|-----------|------------|-----------|----------|----------|-------------|------------|----------|----------|-----------|-----------|----------|----------|-----------|-------------|
| 1* | 19 | 4 | 0 | 0 | 31 | 25 | 1 | 14 | 1 | 0 | 7 | 775 | 48 | 0 | 1 | 12 | 3 | 1 | 0 | 8 | 1044 |
| October | 62 | 0 | 0 | 0 | 33 | 0 | 0 | 1 | 0 | 0 | 2 | 773 | 52 | 0 | 1 | 15 | 4 | 1 | 0 | 9 | 1129 |
| November | 31 | 0 | 0 | 0 | 31 | 0 | 0 | 24 | 0 | 0 | 3 | 773 | 63 | 0 | 1 | 20 | 5 | 1 | 0 | 9 | 3183 |
| Total | 4 | 207 | 0 | 0 | 95 | 71 | 16 | 364 | 55 | 0 | 7 | 2321 | 164 | 0 | 3 | 47 | 12 | 3 | 0 | 26 | 3183 |
| Total per hr | | | 0.00 | 0.00 | 0.44 | 0.34 | 0.7 | 1.1 | 0.27 | 0.00 | 0.03 | 11.23 | 0.79 | 0.00 | 0.01 | 0.33 | 0.05 | 0.01 | 0.00 | 0.13 | 15.40 |
| % of flight | | | 0.0 | 0.0 | 3.0 | 2.0 | 4.5 | 17.0 | 0.7 | 0.0 | 0.1 | 15.5 | 5.2 | 0.0 | 0.1 | 1.5 | 0.4 | 0.1 | 0.0 | 0.8 | 1 |
| Average last 10 yrs | 1.1 | 324.3 | 0.0 | 1.26 | 115.8 | 87.0 | 18.0 | 105.0 | 10.0 | 0.0 | 0.0 | 1946.7 | 656.6 | 0.5 | 25.2 | 47.2 | 17.2 | 10.7 | 0.1 | 30.8 | 162.1 |

LITTLE GAP (Northampton) - Michael Schall, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|---------------------|-----------|------------|-----------|------------|------------|------------|------------|-------------|------------|-----------|------------|-------------|-------------|----------|-----------|------------|-----------|-----------|----------|------------|--------------|
| August | 3 | 10 | 0 | 0 | 2 | 2 | 0 | 8 | 0 | 0 | 1 | 11 | 3 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 32 |
| September | 20 | 139 | 0 | 64 | 203 | 89 | 36 | 735 | 83 | 0 | 3 | 4545 | 137 | 0 | 0 | 60 | 20 | 12 | 0 | 28 | 5024 |
| October | 25 | 188 | 56 | 630 | 77 | 64 | 66 | 3358 | 330 | 20 | 26 | 14 | 1285 | 1 | 25 | 51 | 64 | 3 | 0 | 63 | 6618 |
| November | 30 | 123 | 26 | 61 | 1 | 19 | 5 | 36 | 19 | 13 | 27 | 0 | 574 | 1 | 25 | 0 | 4 | 0 | 0 | 14 | 831 |
| December | 4 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 29 |
| Total | 72 | 483 | 82 | 755 | 283 | 180 | 111 | 4138 | 411 | 34 | 117 | 4573 | 2419 | 2 | 51 | 141 | 89 | 43 | 0 | 105 | 13534 |
| Total per hr | | | 0.17 | 1.56 | 0.59 | 0.37 | 0.23 | 8.59 | 0.85 | 0.07 | 0.24 | 9.48 | 5.01 | 0.00 | 0.11 | 0.29 | 0.16 | 0.09 | 0.00 | 0.22 | 28.05 |
| % of flight | | | 0.6 | 5.6 | 2.1 | 1.3 | 0.8 | 30.5 | 3.0 | 0.3 | 0.9 | 33.9 | 17.9 | 0.0 | 0.4 | 1.0 | 0.7 | 0.3 | 0.0 | 0.8 | 100.0 |
| Average last 10 yrs | 92.5 | 550.4 | 63.9 | 419.9 | 427.4 | 137.4 | 135.0 | 3183.0 | 433.1 | 32.1 | 114.6 | 6611.1 | 2260.0 | 2.2 | 64.4 | 229.7 | 69.0 | 36.9 | 0.3 | 131.3 | 14331.5 |

MILITIA HILL (Montgomery) - Andy Fayer, Lyn Jackson, Rich Courroy, co-compilers

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|---------------------|-----------|------------|-----------|------------|------------|------------|------------|-------------|------------|----------|-----------|--------------|------------|----------|----------|------------|-----------|-----------|----------|-----------|--------------|
| September | 30 | 237 | 0 | 10 | 192 | 54 | 54 | 347 | 38 | 2 | 7 | 18159 | 0 | 0 | 0 | 181 | 15 | 23 | 0 | 28 | 19126 |
| October | 30 | 225 | 26 | 675 | 93 | 45 | 76 | 1066 | 104 | 1 | 83 | 174 | 134 | 1 | 4 | 191 | 14 | 14 | 1 | 44 | 2644 |
| Total | 60 | 462 | 26 | 886 | 285 | 109 | 132 | 1403 | 147 | 3 | 90 | 18332 | 140 | 1 | 4 | 372 | 29 | 37 | 1 | 73 | 22070 |
| Total per hr | | | 0.06 | 1.92 | 0.62 | 0.24 | 0.29 | 3.04 | 0.32 | 0.01 | 0.20 | 39.72 | 6.30 | 0.00 | 0.01 | 0.81 | 0.06 | 0.08 | 0.00 | 0.16 | 47.82 |
| % of flight | | | 0.1 | 4.0 | 1.3 | 0.5 | 0.6 | 5.4 | 0.7 | 0.0 | 0.4 | 83.1 | 0.6 | 0.0 | 0.0 | 1.7 | 0.1 | 0.2 | 0.0 | 0.3 | 100.0 |
| Average last 10 yrs | 59.8 | 450.3 | 37.5 | 380.7 | 265.1 | 64.7 | 69.9 | 1010.0 | 143.9 | 1.7 | 45.6 | 7841.4 | 189.3 | 0.1 | 2.4 | 244.6 | 20.4 | 18.7 | 0.1 | 71.3 | 10408.5 |

*two Mississippi Kites in September

ROSE TREE PARK (Delaware) - Chris Pugliese, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|---------------------|-----------|------------|-----------|------------|------------|------------|-----------|-------------|------------|----------|------------|-------------|------------|----------|----------|------------|-----------|-----------|----------|-----------|-------------|
| September | 29 | 137 | 0 | 2 | 144 | 65 | 23 | 310 | 31 | 0 | 11 | 3837 | 7 | 0 | 0 | 67 | 11 | 6 | 0 | 12 | 4491 |
| October | 30 | 190 | 7 | 58 | 42 | 35 | 48 | 821 | 65 | 0 | 51 | 183 | 101 | 0 | 1 | 84 | 18 | 5 | 0 | 34 | 1907 |
| November | 27 | 114 | 32 | 153 | 0 | 17 | 12 | 119 | 28 | 0 | 34 | 0 | 197 | 0 | 4 | 2 | 5 | 3 | 0 | 6 | 673 |
| Total | 86 | 417 | 39 | 213 | 186 | 117 | 83 | 1249 | 148 | 0 | 186 | 3990 | 305 | 0 | 6 | 148 | 34 | 14 | 0 | 64 | 6771 |
| Total per hr | | | 0.09 | 0.51 | 0.45 | 0.29 | 0.20 | 3.00 | 0.36 | 0.00 | 0.45 | 9.57 | 0.73 | 0.00 | 0.01 | 0.36 | 0.08 | 0.03 | 0.00 | 0.15 | 16.25 |
| % of flight | | | 0.6 | 3.1 | 2.7 | 1.7 | 1.2 | 16.4 | 2.2 | 0.0 | 2.7 | 56.9 | 4.5 | 0.0 | 0.1 | 2.2 | 0.5 | 0.2 | 0.0 | 0.9 | 100.0 |
| Average last 10 yrs | 95.5 | 542.0 | 134.2 | 446.4 | 259.2 | 158.9 | 60.5 | 1504.3 | 240.5 | 5.9 | 180.1 | 3183.9 | 477.4 | 0.2 | 4.5 | 251.5 | 46.1 | 18.9 | 0.7 | 67.9 | 7038.6 |

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 | 23 | 155 | 0 | 0 | 14 | 11 | 3 | 76 | 11 | 0 | 2 | 65 | 51 | 0 | 0 | 11 | 3 | 0 | 0 | 5 | 192 |
| September | 28 | 234 | 20 | 5 | 129 | 81 | 31 | 631 | 92 | 5 | 12 | 2410 | 139 | 0 | 2 | 62 | 11 | 16 | 1 | 25 | 3679 |
| October | 29 | 267 | 278 | 506 | 50 | 75 | 69 | 2111 | 162 | 17 | 56 | 6 | 578 | 0 | 38 | 32 | 27 | 7 | 0 | 16 | 4034 |
| November | 27 | 215 | 151 | 157 | 1 | 31 | 15 | 29 | 11 | 17 | 22 | 0 | 297 | 1 | 59 | 0 | 0 | 0 | 0 | 6 | 759 |
| December | 27 | 172 | 37 | 2 | 0 | 16 | 4 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 119 |
| Total | 132 | 1041 | 487 | 670 | 194 | 218 | 122 | 2786 | 276 | 40 | 92 | 2490 | 1103 | 3 | 117 | 106 | 41 | 23 | 1 | 62 | 8820 |
| Total per hr | | | 0.47 | 0.64 | 0.19 | 0.21 | 0.12 | 2.58 | 0.77 | 0.04 | 0.09 | 2.39 | 1.06 | 0.00 | 0.11 | 0.10 | 0.04 | 0.02 | 0.00 | 0.05 | 6.47 |
| % of flight | | | 5.5 | 7.6 | 2.2 | 2.5 | 1.4 | 31.0 | 3.1 | 0.5 | 1.0 | 28.2 | 12.5 | 0.0 | 1.3 | 1.2 | 0.5 | 0.3 | 0.0 | 0.6 | 100.0 |
| Average last 10 yrs | 139.6 | 1022.6 | 339.0 | 606.6 | 212.7 | 105.6 | 145.5 | 2200.4 | 267.7 | 56.2 | 142.8 | 3611.5 | 1417.9 | 3.1 | 61.5 | 129.9 | 46.5 | 28.5 | 0.7 | 74.3 | 9481.0 |

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 | 3 | 13 | 0 | 0 | 3 | 12 | 1 | 3 | 0 | 0 | 1 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| September | 23 | 131 | 0 | 0 | 48 | 54 | 16 | 18 | 37 | 0 | 3 | 95 | 51 | 0 | 1 | 50 | 7 | 4 | 0 | 17 | 1105 |
| October | 22 | 138 | 6 | 162 | 20 | 27 | 33 | 525 | 59 | 5 | 32 | 2 | 705 | 0 | 17 | 26 | 10 | 9 | 0 | 14 | 1052 |
| November | 21 | 102 | 0 | 16 | 0 | 14 | 9 | 11 | 1 | 0 | 20 | 0 | 259 | 0 | 44 | 0 | 0 | 0 | 0 | 1 | 381 |
| December | 5 | 30 | 0 | 0 | 0 | 5 | 1 | 0 | 1 | 0 | 1 | 0 | 19 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 48 |
| Total | 74 | 413 | 6 | 178 | 69 | 112 | 60 | 723 | 98 | 11 | 57 | 715 | 1038 | 0 | 83 | 76 | 17 | 13 | 0 | 32 | 3288 |
| Total per hr | | | 0.01 | 0.43 | 0.17 | 0.27 | 0.15 | 1.75 | 0.24 | 0.03 | 0.14 | 1.73 | 2.51 | 0.00 | 0.20 | 0.18 | 0.04 | 0.03 | 0.00 | 0.08 | 7.95 |
| % of flight | | | 0.2 | 5.4 | 2.1 | 3.4 | 1.8 | 27.0 | 3.9 | 0.3 | 1.7 | 21.7 | 31.6 | 0.0 | 2.5 | 2.3 | 0.5 | 0.4 | 0.0 | 1.0 | 100.0 |
| Average last 10 yrs | 62.8 | 355.2 | 16.5 | 87.0 | 65.4 | 94.1 | 77.6 | 860.2 | 213.4 | 13.5 | 63.7 | 1580.8 | 1246.7 | 2.2 | 111.0 | 95.2 | 33.7 | 24.7 | 0.2 | 63.3 | 4648.1 |

TUSCARORA SUMMIT (Fulton) - Dale Gearhart, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|---------------------|-----------|------------|-----------|------------|-----------|-----------|-----------|------------|-----------|----------|-----------|------------|------------|----------|-----------|-----------|----------|----------|----------|-----------|-------------|
| September | 22 | 135 | 0 | 2 | 60 | 31 | 22 | 41 | 1 | 1 | 2 | 962 | 3 | 0 | 5 | 22 | 1 | 2 | 0 | 38 | 1477 |
| October | 27 | 157 | 57 | 273 | 9 | 17 | 20 | 41 | 1 | 1 | 16 | 3 | 254 | 0 | 15 | 13 | 2 | 5 | 0 | 38 | 1171 |
| November | 15 | 67 | 12 | 31 | 1 | 2 | 2 | 1 | 1 | 1 | 5 | 0 | 98 | 1 | 5 | 1 | 0 | 0 | 0 | 2 | 172 |
| Total | 64 | 358 | 69 | 306 | 70 | 50 | 69 | 713 | 64 | 3 | 23 | 966 | 365 | 1 | 28 | 36 | 3 | 7 | 0 | 78 | 2820 |
| Total per hr | | | 0.16 | 0.85 | 0.20 | 0.14 | 0.19 | 1.99 | 0.1 | 0.01 | 0.06 | 0.1 | 0.93 | 0 | 0.10 | 0.10 | 0.02 | 0.00 | 0.00 | 0.2 | 7.89 |
| % of flight | | | 2.4 | 10.8 | 2.5 | 1.6 | 5.3 | 5.3 | 0.1 | 0.1 | 0.8 | 33.9 | 12.6 | 0 | 1 | 1.3 | 1 | 0.2 | 0.0 | 1.8 | 100.0 |
| Average last 10 yrs | 68.5 | 366.4 | 30.1 | 352.1 | 99.9 | 39.5 | 1.4 | 1.4 | 1 | 1 | 1 | 1300.8 | 1 | 1 | 1 | 1 | 1 | 15.5 | 0.0 | 3.9 | 4152.3 |

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 | SWHA | Unid | Total |
|---------------------|-----------|-----------|----------|-----------|----------|-----------|----------|------------|-----------|----------|----------|-----------|------------|----------|-----------|-----------|----------|----------|----------|-----------|-------------|
| September | 4 | 12 | 0 | 0 | 8 | 13 | 0 | 5 | 1 | 0 | 0 | 69 | 3 | 0 | 0 | 14 | 0 | 0 | 0 | 6 | 24 |
| October | 10 | 43 | 7 | 93 | 1 | 15 | 1 | 215 | 12 | 0 | 1 | 0 | 504 | 0 | 4 | 27 | 3 | 4 | 0 | 3 | 994 |
| November | 10 | 23 | 2 | 2 | 0 | 8 | 2 | 1 | 3 | 2 | 3 | 0 | 107 | 0 | 22 | 0 | 1 | 0 | 0 | 4 | 157 |
| December | 8 | 9 | 0 | 0 | 0 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 19 | 1 | 4 | 0 | 0 | 0 | 0 | 2 | 35 |
| Total | 32 | 86 | 9 | 95 | 9 | 42 | 9 | 221 | 17 | 2 | 4 | 69 | 738 | 1 | 30 | 41 | 4 | 4 | 0 | 15 | 1310 |
| Total per hr | | | 0.11 | 1.11 | 0.11 | 0.49 | 0.11 | 2.58 | 0.20 | 0.02 | 0.05 | 0.61 | 5.63 | 0.01 | 0.55 | 0.48 | 0.05 | 0.05 | 0.00 | 0.18 | 15.32 |
| % of flight | | | 0.7 | 7.3 | 0.7 | 3.2 | 0.7 | 16.9 | 1.3 | 0.2 | 0.3 | 5.3 | 56.3 | 0.1 | 2.3 | 3.1 | 0.3 | 0.3 | 0.0 | 1.1 | 100.0 |
| Average last 10 yrs | 25.6 | 2.9 | 24.2 | 3.4 | 6.7 | 2.6 | 4.7 | 4.7 | 7.4 | 0.3 | 1.7 | 73.0 | 229.8 | 0.1 | 9.9 | 10.4 | 0.4 | 1.4 | 0.0 | 6.5 | 432.6 |

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 | 30 | 212 | 0 | 0 | 56 | 85 | 22 | 18 | 25 | 0 | 9 | 246 | 73 | 0 | 0 | 49 | 0 | 1 | 0 | 13 | 657 |
| September | 27 | 282 | 0 | 0 | 315 | 236 | 55 | 2027 | 201 | 0 | 6 | 5628 | 196 | 0 | 0 | 198 | 50 | 31 | 0 | 57 | 9003 |
| October | 29 | 281 | 46 | 1107 | 103 | 92 | 136 | 7933 | 627 | 21 | 167 | 23 | 1836 | 1 | 62 | 91 | 59 | 33 | 0 | 91 | 12457 |
| November | 25 | 238 | 28 | 192 | 0 | 45 | 36 | 80 | 36 | 44 | 79 | 0 | 1075 | 1 | 121 | 1 | 3 | 0 | 26 | 1770 | |
| December | 30 | 225 | 19 | 2 | 0 | 53 | 9 | 3 | 2 | 12 | 3 | 0 | 130 | 1 | 82 | 0 | 0 | 0 | 0 | 5 | 325 |
| Total | 142 | 1215 | 93 | 1301 | 474 | 511 | 289 | 10121 | 691 | 77 | 267 | 5897 | 3311 | 3 | 265 | 339 | 142 | 68 | 0 | 193 | 24212 |
| Total per hr | | | 0.05 | 1.07 | 0.39 | 0.42 | 0.21 | 4.33 | 0.73 | 0.08 | 0.22 | 4.85 | 2.73 | 0.00 | 0.72 | 0.28 | 0.12 | 0.06 | 0.00 | 0.16 | 19.93 |
| % of flight | | | 0.4 | 5.4 | 2.0 | 2.1 | 1.1 | 41.9 | 3.7 | 0.3 | 1.1 | 24.4 | 13.7 | 0.0 | 1.1 | 1.4 | 0.6 | 0.3 | 0.0 | 0.9 | 100.0 |
| Average last 10 yrs | 141.9 | 1134.0 | 105.2 | 1366.0 | 500.0 | 267.0 | 302.0 | 6586.3 | 678.0 | 79.0 | 290.0 | 6227.0 | 4050.0 | 7.0 | 256.0 | 341.0 | 104.0 | 59.0 | 0.0 | 184.0 | 21637.0 |

WESTTOWN SCHOOL (Chester) Lance Tanino, compiler

| Month | Days | Hours | BLVU | TUVU | OSPR | BAEA | NOHA | SSHA | COHA | NOGO | RSHA | BWHA | RTHA | RLHA | GOEA | AMKE | MERL | PEFA | SWHA | Unid | Total |
|--------------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| September | 5 | 5 | 0 | 0 | 5 | 1 | 0 | 7 | 3 | 0 | 0 | 34 | 5 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 60 |
| October | 5 | 0 | 0 | 23 | 1 | 5 | 5 | 25 | 5 | 0 | 4 | 1 | 5 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 89 |
| November | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Total | 13 | 16 | 0 | 25 | 7 | 6 | 5 | 42 | 8 | 0 | 5 | 36 | 15 | 0 | 0 | 14 | 0 | 0 | 0 | 2 | 164 |
| Total per hr | | | 0.00 | 1.67 | 0.47 | 0.40 | 0.33 | 2.80 | 0.33 | 0.00 | 0.33 | 2.33 | 1.00 | 0.00 | 0.00 | 0.93 | 0.00 | 0.00 | 0.00 | 0.13 | 10.93 |
| % of flight | | | 0.0 | 15.2 | 4.3 | 3.7 | 3.0 | 25.5 | 4.9 | 0.0 | 3.0 | 21.3 | 9.1 | 0.0 | 0.0 | 6.5 | 0.0 | 0.0 | 0.0 | 1.2 | 100.0 |

2010 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 | 145 | 1050 | 24 | 150 | 224 | 289 | 51 | 230 | 94 | 0 | 17 | 1132 | 324 | 0 | 0 | 174 | 18 | 2 | 0 | 105 | 2835 |
| September | 306 | 2572 | 0 | 372 | 505 | 1214 | 414 | 7550 | 926 | 7 | 88 | 58182 | 1092 | 0 | 11 | 287 | 239 | 143 | 3 | 940 | 72839 |
| October | 347 | 2495 | 33 | 404 | 7 | 939 | 679 | 28540 | 2475 | 87 | 802 | 1283 | 10725 | 4 | 255 | 974 | 494 | 193 | 1 | 564 | 52115 |
| November | 293 | 1678 | 347 | 965 | 0 | 243 | 154 | 677 | 230 | 150 | 407 | 773 | 5204 | 5 | 550 | 28 | 28 | 12 | 0 | 135 | 9946 |
| December | 93 | 606 | 58 | 5 | 1 | 125 | 18 | 5 | 4 | 23 | 10 | 0 | 202 | 4 | 185 | 0 | 1 | 0 | 0 | 9 | 732 |
| Total | 1209 | 8403 | 1289 | 6508 | 3126 | 2510 | 1317 | 36008 | 3719 | 267 | 1304 | 59363 | 17617 | 13 | 982 | 2461 | 780 | 360 | 4 | 1779 | 134467 |
| Total per hr | | | 0.15 | 0.79 | 0.27 | 0.30 | 0.18 | 4.19 | 0.44 | 0.03 | 0.16 | 7.09 | 2.10 | 0.00 | 0.12 | 0.29 | 0.09 | 0.04 | 0.00 | 0.21 | 18.47 |
| % of flight | | | 0.0 | 8.0 | 2.3 | 1.8 | 1.0 | 25.3 | 2.7 | 0.2 | 0.9 | 42.9 | 12.7 | 0.0 | 0.7 | 1.8 | 0.6 | 0.3 | 0.0 | 1.3 | 100.0 |
| 2009 totals | 1132 | 7370 | 1298 | 3200 | 2665 | 1888 | 867 | 28152 | 3351 | 182 | 1018 | 8182 | 12200 | 9 | 780 | 2056 | 927 | 367 | 6 | 1054 | 117624 |
| % change fr | 6.8 | 14.1% | -0.1% | -3.3% | 17.7% | -8.6% | 38.3% | 33.9% | 11.0% | 48.7% | 28.1% | 2.0% | 41.4% | 41.4% | 25.0% | 19.7% | 24.4% | -9.8% | -33.3% | 88.5% | 17.5% |

includes Mississipi Kites at Griffith

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 | Swanson's Hawk |
| RSHA | Red-shouldered Hawk | Unid | Unidentified |