

The <u>Birding Club of Delaware County (BCDC)</u> established the **Rose Tree Park Hawkwatch (RTPHW)**, the county's first and only hawkwatch, in 1999. Located along the Atlantic flyway, Rose Tree Park, in Media PA, features an expansive open landscape and raptors soaring on steady winds.

Each autumn, volunteer counters spend hundreds of person-hours at Rose Tree Park, scanning skies daily for nearly 3 months, tallying migrating hawks, falcons, eagles, and vultures. Myriad information is collected and contributed to the <u>Hawk Migration Association of North America (HMANA)</u>, a global database committed to avian conservation and science.

In Fall 2022, the team decided to host a pilot hawkwatching station at Smedly Tract, Middletown Township, in addition to the regular daily schedule at Rose Tree Park. It was a challenge to cover both locations, but it gleaned some interesting insights.

BCDC extends deep gratitude and appreciation to all the dedicated 2022 RTPHW hawkwatchers: Debbie Beer, Tom Bush, Bruce Childs, Mike Coll, Dave Eberly, Sheryl Johnson, Bob Kelly, John Mercer, Chris Pugliese, Chuck Root, and Alan Simon. **Special thanks to Chris Pugliese** for leading the initiative and organizing counters, and to **Dave Eberly and John Mercer** for submitting data to HMANA.

Chris Pugliese provided the 2022 season summary below (light editing by Debbie Beer).

# Rose Tree Park Hawkwatch 2022 Summary

By Chris Pugliese, December 2022

2022 was an exceptional season, in part because we took on the arduous task of covering two sites:

Rose Tree Park (RTP) has been our home for 20+ years, however, our main sight line to the southeast is growing increasingly obscured, due to maturing trees. In 2021, we learned about the Smedley Tract Park in Middletown Township. Located just 2 miles south of RTP, it's a higher location with broad views in all directions. We decided to do a "trial" count there this fall. The objective was to try to count an equal number of hours at both locations but giving RTP a slight preference as this was our "official" site.

Fortunately, everyone was eager to try out the new location and by season's end, we logged a combined total of **674** hours (**357** at RTP and **317** at Smedley Tract.)

We opted to use <u>ebird to tally our Smedley Tract raptors</u>. Our crack compiler, Dave Eberly kept tabs throughout the season comparing numbers at both sites to determine what, if any correlation we might have with the migrating raptors.

# On to the hawks -

As always, September can be a boom or bust month, depending on the Broad-winged Hawk ("BW's") flight. Although we have had a string of disappointing years for this species, we finally hit the jackpot, thanks to a good number of early cold fronts, which got this hawk moving south. Turned out it was our best count for BW's since 2013; we tallied **3,176** at RTP while counting **3,344** at Smedley Tract! It was an encouraging start; we put in **329** hours between both sites and many of us were exhausted by the end of the month.

## Where are the sharpies?

Elated about our September Broad-winged Hawk count, we went into October feeling pretty confident. This is the month when Sharp-shinned Hawks ("sharpies") peak. Historically, Sharp-shinned Hawks are our second-most abundant fall migrant, although in recent years the population has been trending downward throughout the East. This trend was never more evident than in 2022, as we experienced exceptionally-low sharpie counts at both locations. Our numbers at RTP were an all-time low of **275** - compared to **719** in 2021, a steep decline.

Unfortunately, the downward trend continued in 2022; we were down across the board with nearly all raptor species. Besides Broad-winged Hawks, the only other species that did not decline from 2021 were Red-tailed Hawks and Merlins.

## Comparing the two locations-

Although the Smedley Tract site seemed to be more productive early on, as we got into the second half of the season the numbers seemed to gradually balance between that and our primary location at Rose Tree Park (RTP).

It's hard to evaluate data, as it can be sliced up in a number of ways in the analysis process. For comparison purposes, we used the metric of <u>"birds per hour"</u> (bph) which helps account for varying amounts of time counting at the two sites. For all hawk species, Smedley Tract's birds per hour were **13.41**, while RTP's were **11.73**. Although that might seem to give an edge to Smedley Tract- if you subtract the Broad Wing numbers – which can skew the data- the birds per hour number was even – at **2.04** "bph" for both locations.

As far as correlation between the two locations- the respective counters were vigilant in September in communicating regularly on the Broad Wing hawk flight- and when large groups appeared at RTP- we were given the notice at Smedley Tract. More often than not, we had similar counts throughout their peak. However, after the Broad Wings eventually ceased, it was harder to determine correlation. The early, long distance migrant species tend to fly directly and with more purpose. On the other hand, the later, shorter-distance migrants will deviate and/or stall during migratory flight as they will hunt along the way.

# Future of our hawk watch-

The decision at to which site to conduct the count from in 2023 is still being discussed. The overall numbers did not really produce a clear-cut "winner". There is still some speculation with the Smedley Tract due to the fact that it will not "officially" open for active recreation until 2023, so we really don't know what to fully expect.

Thanks to all the BCDC birders who stopped by and helped out with the count and also just came by to occasionally "check in", the counters always welcome the company. John Mercer provided guidance and instruction to multiple school groups that come to RTP for class outings. Special thanks to **Dave Eberly** and **John Mercer** for compiling the data and reporting daily to <u>Hawk Migration Association of North America (HMANA)</u>. We are proud to be a part of this renowned community science project.

| ROSE TREE PARK HAWKWATCH (stats this site only)<br>September 1 - November 18, 2022. Observation Hours: 378.5 |       |  |                     |       |
|--|-------|--|---------------------|-------|
| Species  | Count |  | Species             | Count |
| Turkey Vulture   | 238   |  | Red-shouldered Hawk | 68    |
| Osprey   | 81    |  | Broad-winged Hawk   | 3194  |
| Northern Harrier   | 14    |  | Red-tailed Hawk     | 91    |
| Bald Eagle   | 80    |  | Golden Eagle        | 2     |
| Sharp-shinned Hawk   | 275   |  | American Kestrel    | 79    |
| Cooper's Hawk  | 48    |  | Merlin              | 17    |
|  |       |  | Peregrine Falcon    | 8     |